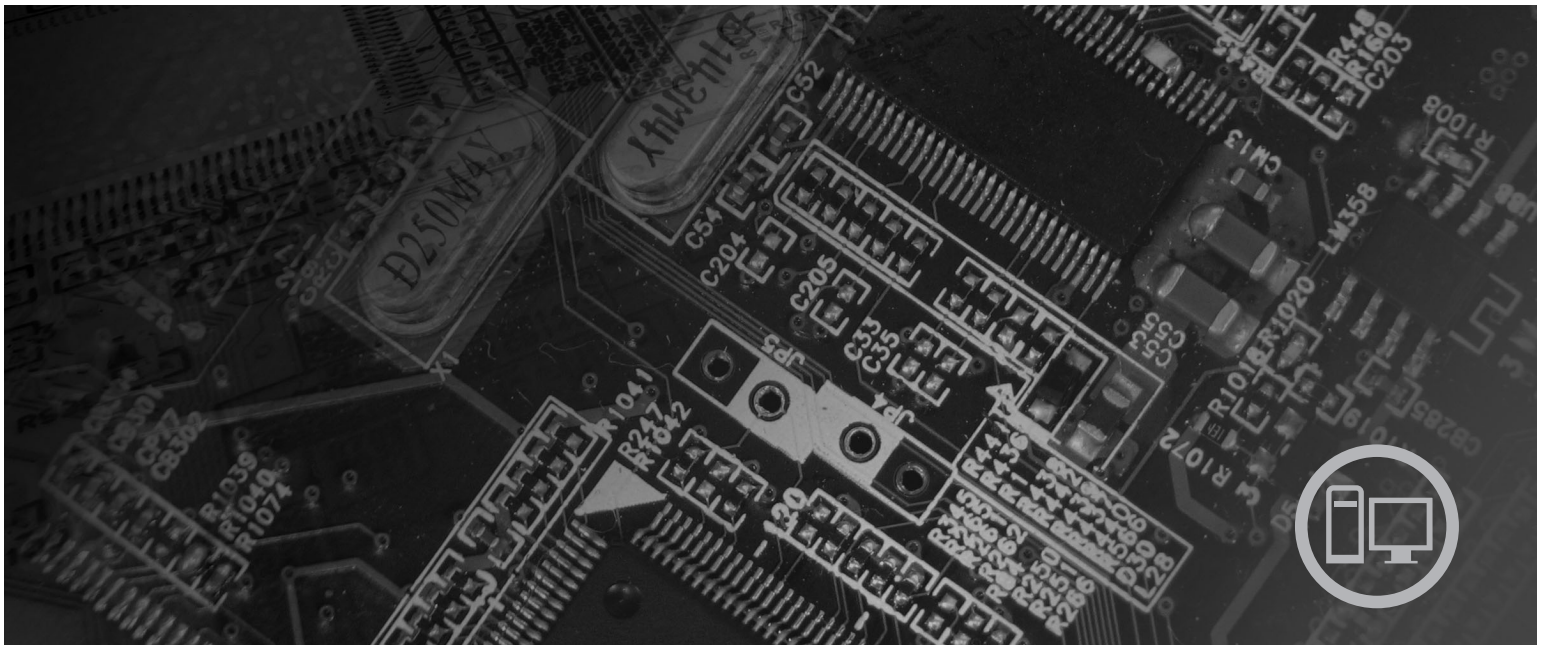




ThinkCentre Hardware Maintenance Manual



Machine Types 6019, 6062, 6064, 6065, 6066, 6067, 6071, 6072, 6073, 6076, 6077, 6078, 6087, 6088, 6089, 9011, 9014, 9071, 9089, 9162, 9181, 9182, 9196, 9303,

lenovo

**ThinkCentre
Hardware Maintenance Manual**

Note: Before using this information and the product it supports, be sure to read the information under “Notices,” on page 271.

Second Edition (September 2007)

© Copyright Lenovo 2006, 2007. All rights reserved.

LENOVO products, data, computer software, and services have been developed exclusively at private expense and are sold to governmental entities as commercial items as defined by 48 C.F.R. 2.101 with limited and restricted rights to use, reproduction and disclosure.

LIMITED AND RESTRICTED RIGHTS NOTICE: If products, data, computer software, or services are delivered pursuant a General Services Administration “GSA” contract, use, reproduction, or disclosure is subject to restrictions set forth in Contract No. GS-35F-05925.

Contents

Chapter 1. About this manual 1

Important Safety Information	1
Important information about replacing RoHS compliant FRUs	2

Chapter 2. Safety information 3

General safety	3
Electrical safety	3
Safety inspection guide	5
Handling electrostatic discharge-sensitive devices	6
Grounding requirements	6
Safety notices (multi-lingual translations)	7

Chapter 3. General information 37

The ThinkVantage Productivity Center program	37
Additional information resources	37
Specifications	38
Types 6019, 6064, 6066, 6067, 6072, 6073, 6077, 6078, 6087, 6088, 9181, and 9196	38
Types 6062, 6065, 6071, 6076, 6089, 9011, 9014, 9071, 9089, 9162, 9182 and 9303.	39

Chapter 4. General Checkout 41

Problem determination tips	41
--------------------------------------	----

Chapter 5. Diagnostics 43

PC-Doctor for Windows	43
PC-Doctor for Windows PE	43
Running diagnostics from the Rescue and Recovery workspace	43
PC-Doctor for DOS	44
Creating a diagnostic CD image	44
Creating diagnostic diskettes	44
Running diagnostics from the CD or diskettes	45
Navigating through the diagnostics programs	45
Running tests.	45
Viewing the test log	47

Chapter 6. Using the Setup Utility 49

Starting the Setup Utility program.	49
Viewing and changing settings	49
Using passwords	49
Password considerations	49
User Password	50
Administrator Password	50
Setting, changing, and deleting a password.	50
Selecting a startup device.	50
Selecting a temporary startup device	50
Selecting or changing the startup device sequence	51
Advanced settings	51
Exiting from the Setup Utility program	51

Chapter 7. Symptom-to-FRU Index 53

Hard disk drive boot error	53
--------------------------------------	----

Power Supply Problems	53
Diagnostic error codes.	54
Beep symptoms	76
POST error codes	77
Miscellaneous error messages	79
Undetermined problems	80

Chapter 8. Replacing FRUs (Types 6019, 6064, 6066, 6067, 6072, 6073, 6077, 6078, 6087, 6088, 9181, and 9196) 83

Locations	84
Front connectors.	84
Rear connectors	85
Computer components	86
System board connectors	87
Opening the cover	88
Accessing system board components and drives	89
Replacing an adapter card	90
Replacing a memory module	91
Replacing the battery	93
Replacing the power supply.	94
Replacing the system board	97
Replacing the microprocessor	100
Replacing the hard disk drive	104
Replacing an optical drive	106
Replacing the diskette drive	108
Replacing the fan assembly.	110
Completing the FRU replacement.	112

Chapter 9. Replacing FRUs (Types 6062, 6065, 6071, 6076, 6089, 9011, 9014, 9071, 9089, 9162, 9182, and 9303) 113

Locations	114
Front connectors	114
Rear connectors	115
Computer components	116
System board connectors	117
Opening the cover.	118
Replacing a memory module	119
Replacing the CMOS battery	121
Replacing the power supply	122
Replacing the system board	125
Replacing the microprocessor	130
Replacing the hard disk drive	136
Replacing an optical drive	139
Replacing the system fan assembly	141
Replacing a PCI adapter.	142
Replacing the internal speaker.	144
Replacing the rear fan bracket assembly	146
Completing the parts replacement	148

Chapter 10. FRU lists 149

Machine Type 6019	149
-----------------------------	-----

Machine Type 6062	155
Machine Type 6064	163
Machine Type 6066	167
Machine Type 6067	174
Machine Type 6071	180
Machine Type 6072	187
Machine Type 6073	196
Machine Type 6076	202
Machine Type 6077	207
Machine Type 6078	212
Machine Type 6087	216
Machine Type 6088	223
Machine Type 6089	228
Machine Type 9011	235
Machine Type 9071	241
Machine Type 9089	247
Machine Type 9162	252
Machine Type 9181	257
Machine Type 9196	262

Chapter 11. Additional Service Information	267
Security features	267
Hardware controlled Passwords	267
Operating system password	267
Vital product data	267
BIOS levels	267
Updating (flashing) BIOS from a CD-ROM or diskette	268
Recovering from a POST/BIOS update failure	268
Power management	269
Automatic configuration and power interface (ACPI) BIOS.	269
Automatic Power-On features	269
Appendix. Notices	271
Television output notice	272
Trademarks	272

Chapter 1. About this manual

This manual contains service and reference information for ThinkCentre® computers listed on the cover. It is intended only for trained servicers who are familiar with Lenovo computer products.

Before servicing a Lenovo product, be sure to read the Safety Information. See Chapter 2, "Safety information," on page 3.

The Symptom-to-FRU Index and Additional Service Information chapters are not specific to any machine type and are applicable to all ThinkCentre computers.

This manual includes a complete FRU part number listing for each machine type and model listed on the cover. If you have internet access, FRU part numbers are also available at:

<http://www.lenovo.com/support>

Important Safety Information

Be sure to read all caution and danger statements in this book before performing any of the instructions.

Veillez lire toutes les consignes de type DANGER et ATTENTION du présent document avant d'exécuter les instructions.

Lesen Sie unbedingt alle Hinweise vom Typ "ACHTUNG" oder "VORSICHT" in dieser Dokumentation, bevor Sie irgendwelche Vorgänge durchführen

Leggere le istruzioni introdotte da ATTENZIONE e PERICOLO presenti nel manuale prima di eseguire una qualsiasi delle istruzioni

Certifique-se de ler todas as instruções de cuidado e perigo neste manual antes de executar qualquer uma das instruções

Es importante que lea todas las declaraciones de precaución y de peligro de este manual antes de seguir las instrucciones.

تأكد من قراءة كل التحذيرات الموجودة في هذا الكتاب قبل اتباع هذه التعليمات .

执行任何说明之前，请确保已阅读本书中的所有警告和危险声明。

執行任何指示前，請確實閱讀本書中的所有警告及危險聲明。

ודאו שקראתם את כל הודעות האזהרה והסכנה במסמך זה לפני שתבצעו פעולה כלשהי.

본 사용 설명서에 기재된 내용을 실행하기 전에 모든 주의사항 및 위험사항을 숙지하십시오.

Important information about replacing RoHS compliant FRUs

RoHS, The Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive (2002/95/EC) is a European Union legal requirement affecting the global electronics industry. RoHS requirements must be implemented on Lenovo products placed on the market and sold in the European Union after June 2006. Products on the market before June 2006 are not required to have RoHS compliant parts. If the parts are not compliant originally, replacement parts can also be noncompliant, but in all cases, if the parts are compliant, the replacement parts must also be compliant.

Note: RoHS and non-RoHS FRU part numbers with the same fit and function are identified with unique FRU part numbers.

Lenovo plans to transition to RoHS compliance well before the implementation date and expects its suppliers to be ready to support Lenovo's requirements and schedule in the EU. Products sold in 2005, will contain some RoHS compliant FRUs. The following statement pertains to these products and any product Lenovo produces containing RoHS compliant parts.

RoHS compliant ThinkCentre parts have unique FRU part numbers. Before or after June, 2006, failed RoHS compliant parts must always be replaced using RoHS compliant FRUs, so only the FRUs identified as compliant in the system HMM or direct substitutions for those FRUs can be used.

Products marketed before June 2006		Products marketed after June 2006	
Current or original part	Replacement FRU	Current or original part	Replacement FRU
Non-RoHS	Can be Non-RoHS	Must be RoHS	Must be RoHS
Non-RoHS	Can be RoHS		
Non-RoHS	Can sub to RoHS		
RoHS	Must be RoHS		

Note: A direct substitution is a part with a different FRU part number that is automatically shipped by the distribution center at the time of order.

Chapter 2. Safety information

This chapter contains the safety information that you need to be familiar with before servicing a computer.

General safety

Follow these rules to ensure general safety:

- Observe good housekeeping in the area of the machines during and after maintenance.
- When lifting any heavy object:
 1. Ensure you can stand safely without slipping.
 2. Distribute the weight of the object equally between your feet.
 3. Use a slow lifting force. Never move suddenly or twist when you attempt to lift.
 4. Lift by standing or by pushing up with your leg muscles; this action removes the strain from the muscles in your back. *Do not attempt to lift any objects that weigh more than 16 kg (35 lb) or objects that you think are too heavy for you.*
- Do not perform any action that causes hazards to the customer, or that makes the equipment unsafe.
- Before you start the machine, ensure that other service representatives and the customer's personnel are not in a hazardous position.
- Place removed covers and other parts in a safe place, away from all personnel, while you are servicing the machine.
- Keep your tool case away from walk areas so that other people will not trip over it.
- Do not wear loose clothing that can be trapped in the moving parts of a machine. Ensure that your sleeves are fastened or rolled up above your elbows. If your hair is long, fasten it.
- Insert the ends of your necktie or scarf inside clothing or fasten it with a nonconductive clip, approximately 8 centimeters (3 inches) from the end.
- Do not wear jewelry, chains, metal-frame eyeglasses, or metal fasteners for your clothing.

Remember: Metal objects are good electrical conductors.
- Wear safety glasses when you are: hammering, drilling soldering, cutting wire, attaching springs, using solvents, or working in any other conditions that might be hazardous to your eyes.
- After service, reinstall all safety shields, guards, labels, and ground wires. Replace any safety device that is worn or defective.
- Reinstall all covers correctly before returning the machine to the customer.

Electrical safety



CAUTION:

Electrical current from power, telephone, and communication cables can be hazardous. To avoid personal injury or equipment damage, disconnect the attached power cords, telecommunication systems, networks, and modems before you open the server/workstation covers, unless instructed otherwise in the installation and configuration procedures.

Observe the following rules when working on electrical equipment.

Important: Use only approved tools and test equipment. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents.

Many customers have, near their equipment, rubber floor mats that contain small conductive fibers to decrease electrostatic discharges. Do not use this type of mat to protect yourself from electrical shock.

- Find the room emergency power-off (EPO) switch, disconnecting switch, or electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near equipment that has hazardous voltages.
- Disconnect all power before:
 - Performing a mechanical inspection
 - Working near power supplies
 - Removing or installing Field Replaceable Units
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine and to lock the wall box in the off position.
- If you need to work on a machine that has exposed electrical circuits, observe the following precautions:
 - Ensure that another person, familiar with the power-off controls, is near you.
Remember: Another person must be there to switch off the power, if necessary.
 - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.
Remember: There must be a complete circuit to cause electrical shock. By observing the above rule, you may prevent a current from passing through your body.
 - When using testers, set the controls correctly and use the approved probe leads and accessories for that tester.
 - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

Observe the special safety precautions when you work with very high voltages; these instructions are in the safety sections of maintenance information. Use extreme care when measuring high voltages.

- Regularly inspect and maintain your electrical hand tools for safe operational condition.
- Do not use worn or broken tools and testers.
- *Never assume* that power has been disconnected from a circuit. First, *check* that it has been powered-off.

- Always look carefully for possible hazards in your work area. Examples of these hazards are moist floors, nongrounded power extension cables, power surges, and missing safety grounds.
- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. The surface is conductive; such touching can cause personal injury and machine damage.
- Do not service the following parts with the power on when they are removed from their normal operating places in a machine:
 - Power supply units
 - Pumps
 - Blowers and fans
 - Motor generators
 and similar units. (This practice ensures correct grounding of the units.)
- If an electrical accident occurs:
 - Use caution; do not become a victim yourself.
 - Switch off power.
 - Send another person to get medical aid.

Safety inspection guide

The intent of this inspection guide is to assist you in identifying potentially unsafe conditions on these products. Each machine, as it was designed and built, had required safety items installed to protect users and service personnel from injury. This guide addresses only those items. However, good judgment should be used to identify potential safety hazards due to attachment of features or options not covered by this inspection guide.

If any unsafe conditions are present, you must determine how serious the apparent hazard could be and whether you can continue without first correcting the problem.

Consider these conditions and the safety hazards they present:

- Electrical hazards, especially primary power (primary voltage on the frame can cause serious or fatal electrical shock).
- Explosive hazards, such as a damaged CRT face or bulging capacitor
- Mechanical hazards, such as loose or missing hardware

The guide consists of a series of steps presented in a checklist. Begin the checks with the power off, and the power cord disconnected.

Checklist:

1. Check exterior covers for damage (loose, broken, or sharp edges).
2. Power-off the computer. Disconnect the power cord.
3. Check the power cord for:
 - a. A third-wire ground connector in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and frame ground.
 - b. The power cord should be the appropriate type as specified in the parts listings.
 - c. Insulation must not be frayed or worn.
4. Remove the cover.

5. Check for any obvious alterations. Use good judgment as to the safety of any alterations.
6. Check inside the unit for any obvious unsafe conditions, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
7. Check for worn, frayed, or pinched cables.
8. Check that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

Handling electrostatic discharge-sensitive devices

Any computer part containing transistors or integrated circuits (ICs) should be considered sensitive to electrostatic discharge (ESD). ESD damage can occur when there is a difference in charge between objects. Protect against ESD damage by equalizing the charge so that the machine, the part, the work mat, and the person handling the part are all at the same charge.

Notes:

1. Use product-specific ESD procedures when they exceed the requirements noted here.
2. Make sure that the ESD protective devices you use have been certified (ISO 9000) as fully effective.

When handling ESD-sensitive parts:

- Keep the parts in protective packages until they are inserted into the product.
- Avoid contact with other people.
- Wear a grounded wrist strap against your skin to eliminate static on your body.
- Prevent the part from touching your clothing. Most clothing is insulative and retains a charge even when you are wearing a wrist strap.
- Use the black side of a grounded work mat to provide a static-free work surface. The mat is especially useful when handling ESD-sensitive devices.
- Select a grounding system, such as those listed below, to provide protection that meets the specific service requirement.

Note: The use of a grounding system is desirable but not required to protect against ESD damage.

- Attach the ESD ground clip to any frame ground, ground braid, or green-wire ground.
- Use an ESD common ground or reference point when working on a double-insulated or battery-operated system. You can use coax or connector-outside shells on these systems.
- Use the round ground-prong of the ac plug on ac-operated computers.

Grounding requirements

Electrical grounding of the computer is required for operator safety and correct system function. Proper grounding of the electrical outlet can be verified by a certified electrician.

Safety notices (multi-lingual translations)

The caution and danger safety notices in this section are provided in the following languages:

- English
- Arabic
- Brazilian/Portuguese
- Chinese (simplified)
- Chinese (traditional)
- French
- German
- Hebrew
- Italian
- Korean
- Spanish



DANGER

Electrical current from power, telephone and communication cables is hazardous.

To avoid a shock hazard:

- **Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.**
- **Connect all power cords to a properly wired and grounded electrical outlet.**
- **Connect to properly wired outlets any equipment that will be attached to this product.**
- **When possible, use one hand only to connect or disconnect signal cables.**
- **Never turn on any equipment when there is evidence of fire, water, or structural damage.**
- **Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.**
- **Connect and disconnect cables as described in the following tables when installing, moving, or opening covers on this product or attached devices.**

To Connect	To Disconnect
<ol style="list-style-type: none">1. Turn everything OFF.2. First, attach all cables to devices.3. Attach signal cables to connectors.4. Attach power cords to outlet.5. Turn device ON.	<ol style="list-style-type: none">1. Turn everything OFF.2. First, remove power cords from outlet.3. Remove signal cables from connectors.4. Remove all cables from devices.



CAUTION:

When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- Repair or disassemble

Dispose of the battery as required by local ordinances or regulations.



CAUTION:

When laser products (such as CD-ROMs, DVD-ROM drives, fiber optic devices, or transmitters) are installed, note the following:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.



DANGER: Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following:

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

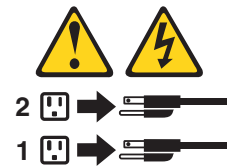
CAUTION:

Use safe practices when lifting.



CAUTION:

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.





خطر

التيار الكهربى الموجود بمصدر الطاقة أو أجهزة التليفون أو أسلاك الإتصالات يشكل خطورة.

لتفادي مخاطر الصدمات الكهربائية:

لا تحاول توصيل أو فصل أي أسلاك أو القيام بعمليات تركيب أو صيانة أو إعادة توصيف لهذا المنتج أثناء وجود عاصفة كهربائية.

يجب توصيل كل أسلاك الكهرباء في مخارج كهرباء ذات توصيلات أسلاك وتوصيلات أرضية صحيحة
يجب توصيل أي جهاز سيتم الحاقه بهذا المنتج في مخارج كهرباء ذات توصيلات أسلاك صحيحة.

وإن أمكن يجب استخدام يد واحدة فقط في توصيل أو فصل أسلاك الإشارة.

لا تحاول تشغيل أي جهاز إذا كان هناك أثر لحرق أو مياه أو تلف بالمكونات

يجب فصل أسلاك الكهرباء وأنظمة الاتصالات وشبكات الاتصال وأجهزة المودم الملحقة قبل فتح أغطية الجهاز، ما لم يتم طلب خلاف ذلك في التعليمات الخاصة بالتركيب والتوصيف.
قم بتوصيل وفصل الأسلاك كما هو موضح في الجدول التالي وذلك عند القيام بعمليات التركيب أو النقل أو فتح أغطية هذا المنتج أو الأجهزة الملحقة.

للتوصيل:

قم بإيقاف كل شيء.

أولاً، قم بتوصيل كل الأسلاك بالأجهزة.

قم بتوصيل أسلاك الإشارة في لموصلات.

قم بتوصيل أسلاك الكهرباء في المخارج.

قم بتشغيل الجهاز.

للفصل:

قم بإيقاف كل شيء.

أولاً، قم بفصل كل أسلاك الكهرباء من المخرج.

قم بفصل أسلاك الإشارة من الموصلات.

قم بفصل كل الأسلاك من الأجهزة.



تنبيه :

عند استبدال البطارية الليثيوم، استخدم فقط رقم الجزء الخاص **Part Number 33F8354** أو نوع آخر يكون على نفس مستوى الكفاءة يحدده لك المصنع.
إذا كان النظام الخاص يستخدم معه بطارية ليثيوم قم باستبدالها بنفس النوع الذي تم صناعته من خلال نفس المصنع. تحتوي البطارية على مادة الليثيوم ويمكن أن تنفجر في حالة عدم استخدامها أو التعامل معها بطريقة صحيحة أو عند التخلص منها بطريقة خطأ.

لا تقم بـ:

- الفاء البطارية أو غمرها في الماء
- تسخينها أعلى من ١٠٠ درجة مئوية و(٢١٢ ° فهرنهايت)
- بتصليحها أو فكها

تخلص من البطارية طبقاً للقانون أو النظام المحلي .



تنبيه :

أثناء تركيب منتجات ليزر (مثل CD-ROMs أو وحدة تشغيل DVD أو أجهزة Fiber Optic أو وحدات الإرسال) يجب مراعاة الآتي:

لا تنزع الأغطية. قد ينتج عن نزع أغطية منتج الليزر انفجار أشعة الليزر شديدة الخطورة.
لا يوجد أجزاء يمكن تغييرها داخل الجهاز. قد ينتج عن استخدام تحكيمات أو تعديلات أو عمل أي تصرفات أخرى تخالف ما هو محدد هنا إلى انفجار أشعة شديدة الخطورة.



خطر

تحتوي بعض منتجات الليزر على الفئة دايود ليزر مدمج من الفئة **Class 3A** أو **Class 3B**. يجب مراعاة الآتي .

أشعة الليزر عند الفتح. لا تحدد إلى الإشعاع و لا تنظر إليه مباشرة بواسطة أي أجهزة مرئية وتجنب التعرض المباشر للإشعاع .



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

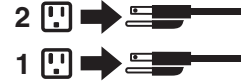


تنبيه :
يجب استخدام ممارسات آمنة عند الرفع



تنبيه :

لا يقرم زر التحكم في التشغيل الموجود على الجهاز والمفتاح الكهربائي الموجود على لوحة التحكم بإيقاف التيار الكهربائي المار بالجهاز. قد يكون للجهاز أكثر من سلك كهربائي واحد. لايقاف التيار الكهربائي المار بالجهاز، تأكد من فصل جميع أسلاك الكهرباء من مصدر الكهرباء .





PERIGO

A corrente elétrica proveniente de cabos de alimentação, de telefone e de comunicações é perigosa.

Para evitar risco de choque elétrico:

- Não conecte nem desconecte nenhum cabo ou execute instalação, manutenção ou reconfiguração deste produto durante uma tempestade com raios.
- Conecte todos os cabos de alimentação a tomadas elétricas corretamente instaladas e aterradas.
- Todo equipamento que for conectado a este produto deve ser conectado a tomadas corretamente instaladas.
- Quando possível, utilize apenas uma das mãos para conectar ou desconectar cabos de sinal.
- Nunca ligue nenhum equipamento quando houver evidência de fogo, água ou danos estruturais.
- Antes de abrir tampas de dispositivos, desconecte cabos de alimentação, sistemas de telecomunicação, redes e modems conectados, a menos que especificado de maneira diferente nos procedimentos de instalação e configuração.
- Conecte e desconecte os cabos conforme descrito na tabela apresentada a seguir ao instalar, mover ou abrir tampas deste produto ou de dispositivos conectados.

Para Conectar:	Para Desconectar:
<ol style="list-style-type: none">1. DESLIGUE Tudo.2. Primeiramente, conecte todos os cabos aos dispositivos.3. Conecte os cabos de sinal aos conectores.4. Conecte os cabos de alimentação às tomadas.5. LIGUE os dispositivos.	<ol style="list-style-type: none">1. DESLIGUE Tudo.2. Primeiramente, remova os cabos de alimentação das tomadas.3. Remova os cabos de sinal dos conectores.4. Remova todos os cabos dos dispositivos.



CUIDADO:

Ao substituir a bateria de lítio, utilize apenas uma bateria com Número de Peça 33F8354 ou um tipo de bateria equivalente recomendado pelo Se o seu sistema possui um módulo com uma bateria de lítio, substitua-o apenas por um módulo do mesmo tipo e do mesmo fabricante. A bateria contém lítio e pode explodir se não for utilizada, manuseada ou descartada de maneira correta.

Não:

- Jogue ou coloque na água
- Aqueça a mais de 100°C (212°F)
- Conserte nem desmonte

Descarte a bateria conforme requerido pelas leis ou regulamentos locais.



PRECAUCIÓN:

Quando produtos a laser (como unidades de CD-ROMs, unidades de DVD-ROM, dispositivos de fibra ótica ou transmissores) estiverem instalados, observe o seguinte:

- Não remova as tampas. A remoção das tampas de um produto a laser pode resultar em exposição prejudicial à radiação de laser. Não existem peças que podem ser consertadas no interior do dispositivo.
- A utilização de controles ou ajustes ou a execução de procedimentos diferentes dos especificados aqui pode resultar em exposição prejudicial à radiação.

PERIGO

Alguns produtos a laser contêm diodo de laser integrado da Classe 3A ou da Classe 3B. Observe o seguinte:

Radiação a laser quando aberto. Não olhe diretamente para o feixe a olho nu ou com instrumentos ópticos e evite exposição direta ao feixe.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

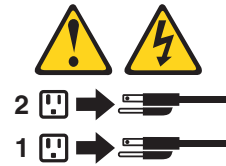
CUIDADO:

Utilize procedimentos de segurança para levantar equipamentos.



CUIDADO:

O botão de controle de alimentação do dispositivo e o botão para ligar/desligar da fonte de alimentação não desligam a corrente elétrica fornecida ao dispositivo. O dispositivo também pode ter mais de um cabo de alimentação. Para remover toda a corrente elétrica do dispositivo, assegure que todos os cabos de alimentação estejam desconectados da fonte de alimentação.





危险

电源、电话和通信电缆中的电流是危险的。

为避免电击危险：

- 请勿在雷电期间连接或断开任何电缆的连接，或者对本产品进行安装、维护或重新配置。
- 将所有电源线连接到正确连线和妥善接地的电源插座。
- 将所有要连接到该产品的设备连接到正确连线的插座。
- 如果可能，请仅使用一只手来连接或断开信号电缆的连接。
- 切勿在有火、水、结构损坏迹象的情况下开启任何设备。
- 在打开设备外盖之前请断开已连接的电源线、远程通信系统、网络和调制解调器，除非在安装和配置过程中另有说明。
- 当安装、移动或打开该产品或连接设备的外盖时，请按照下表所述来连接或断开电缆的连接。

要连接	要断开连接
<ol style="list-style-type: none">1. 切断所有电源。2. 首先将所有电缆连接到设备。3. 将信号电缆连接到接口。4. 将电源线连接到插座。5. 开启设备。	<ol style="list-style-type: none">1. 切断所有电源。2. 首先从插座上拔出电源线。3. 从接口上拔出信号电缆。4. 从设备上拔出所有电缆。



警告：
更换锂电池时，请仅使用部件号为 33F8354 的电池或制造商推荐的同类电池。如果您的系统有包含锂电池的模块，请仅使用同一制造商生产的相同模块类型来替换该模块。该电池中含有锂，如果使用、操作或处理不当，可能会发生爆炸。

切勿：

- 投入或浸入水中
- 加热到 100 °C (212 °F) 以上
- 维修或拆卸

请按照当地法令或条例的要求处理电池。



警告：
安装激光产品（例如 CD-ROM、DVD-ROM 驱动器、光纤设备或发射设备）时，
请注意以下声明：

- 请勿卸下外盖。卸下激光产品的外盖可能导致遭受激光辐射的危险。该设备内没有可维修的部件。
- 如果不按照此处指定的过程进行控制、调整或操作，则有可能导致遭受辐射的危险。



危险

某些激光产品包含嵌入式 3A 类或 3B 类激光二极管。请注意以下声明：

打开后有激光辐射。请勿注视光束，请勿直接用光学仪器查看，并请避免直接暴露在光束中。



≥18 千克 (37 磅) ≥32 千克 (70.5 磅) ≥55 千克 (121.2 磅)

警告：
抬起时请采取安全措施。



警告：
设备上的电源控制按钮和电源上的电源开关不会切断供给该设备的电流。该设备还可能有多条电源线。要切断该设备的所有电流，请确保所有电源线都与电源断开连接。





危險

電源、電話及通訊纜線上的電流都具有危險性。

若要避免觸電危險：

- 請勿在雷雨期間，連接或拔除纜線、執行安裝、維護或重新配置本產品。
- 將所有電源線連接到正確配線及接地的電源插座。
- 任何與本產品連接的設備都必須連接到配線妥當的電源插座。
- 請盡可能用單手連接或拔除信號線。
- 發生火災、水災或結構損害時，絕對不要開啟任何設備。
- 除非在安裝及配置程序中另有指示，否則在開啟裝置機蓋之前，請拔掉連接的電源線、電信系統、網路及數據機。
- 安裝、移動或開啟本產品或附屬裝置的機蓋時，請遵循下列說明連接及拔掉纜線。

連線	切斷連線
<ol style="list-style-type: none">1. 關閉所有開關。2. 首先，連接所有接線到裝置。3. 連接信號線到接頭。4. 連接電源線到插座。5. 開啟裝置。	<ol style="list-style-type: none">1. 關閉所有開關。2. 首先，拔掉插座上的電源線。3. 拔掉接頭上的信號線。4. 拔掉裝置上所有接線。



警告：

更換鋰電池時，請僅使用產品編號 **33F8354** 或製造商所建議的同類型電池。如果您的系統中含有鋰電池模組，請僅使用同一家製造商所生產的相同模組進行更換。如果未以正確方式使用、處理或棄置含鋰的電池，會有爆炸的危險。

請勿：

- 沾溼或浸入水中
 - 置於 **100C (212F)** 以上的高溫環境
 - 修理或拆開
- 請按照各地區有關廢棄電池的法令和規定處理舊電池。



警告：

- 請勿移除機蓋。移除雷射產品的機蓋，可能會導致暴露在危險的雷射輻射中。裝置內部並無可自行維修的零件。
- 利用或執行非本文中所指定的控制、調整及執行程序，可能會導致危險的輻射外洩。



危險

部分雷射產品含有內嵌式 **Class 3A** 或 **Class 3B** 雷射二極體。請注意下列事項：
在開啟光碟機時，會發生雷射輻射。請勿直視光束或用光學儀器直接檢視，並避免直接暴露在光束中。



≥ 18 公斤 (37 磅)



≥ 32 公斤 (70.5 磅)



≥ 55 公斤 (121.2 磅)

警告：
搬運時請注意安全。



警告：
裝置上的電源控制按鈕及電源供應器上的電源開關，無法關閉裝置所產生的電流。
該裝置可能有多條電源線。若要除去裝置流出的所有電流，請確認已切斷所有電源線的電源。





DANGER

Le courant électrique provenant de l'alimentation, du téléphone et des câbles de transmission peut présenter un danger.

Pour éviter tout risque de choc électrique :

- Ne manipulez aucun câble et n'effectuez aucune opération d'installation, d'entretien ou de reconfiguration de ce produit au cours d'un orage.
- Branchez tous les cordons d'alimentation sur un socle de prise de courant correctement câblé et mis à la terre.
- Branchez sur des socles de prise de courant correctement câblés tout équipement connecté à ce produit.
- Lorsque cela est possible, n'utilisez qu'une seule main pour connecter ou déconnecter les câbles d'interface.
- Ne mettez jamais un équipement sous tension en cas d'incendie ou d'inondation, ou en présence de dommages matériels.
- Avant de retirer les carters de l'unité, mettez celle-ci hors tension et déconnectez ses cordons d'alimentation, ainsi que les câbles qui la relient aux réseaux, aux systèmes de télécommunication et aux modems (sauf instruction contraire mentionnée dans les procédures d'installation et de configuration).
- Lorsque vous installez, que vous déplacez, ou que vous manipulez le présent produit ou des périphériques qui lui sont raccordés, reportez-vous aux instructions ci-dessous pour connecter et déconnecter les différents cordons.

Connexion	Déconnexion
<ol style="list-style-type: none">1. Mettez les unités HORS TENSION.2. Commencez par brancher tous les cordons sur les unités.3. Branchez les câbles d'interface sur des connecteurs.4. Branchez les cordons d'alimentation sur des prises.5. Mettez les unités SOUS TENSION.	<ol style="list-style-type: none">1. Mettez les unités HORS TENSION.2. Débranchez les cordons d'alimentation des prises.3. Débranchez les câbles d'interface des connecteurs.4. Débranchez tous les câbles des unités.



ATTENTION:

Remplacer la pile au lithium usagée par une pile de référence identique exclusivement, (référence 33F8354), ou suivre les instructions du fabricant qui en définit les équivalences. Si votre système est doté d'un module contenant une pile au lithium, vous devez le remplacer uniquement par un module identique, produit par le même fabricant. La pile contient du lithium et peut exploser en cas de mauvaise utilisation, de mauvaise manipulation ou de mise au rebut inappropriée.

Ne pas :

- la jeter à l'eau,
- l'exposer à des températures supérieures à 100°C,
- chercher à la réparer ou à la démonter.

Ne pas mettre la pile à la poubelle. Pour la mise au rebut, se reporter à la réglementation en vigueur.



ATTENTION:

Si des produits à laser (tels que des unités de CD-ROM, de DVD-ROM, des unités à fibres optiques, ou des émetteurs) sont installés, prenez connaissance des informations suivantes :

- Ne retirez pas le carter. En ouvrant l'unité de CD-ROM ou de DVD-ROM, vous vous exposez au rayonnement dangereux du laser. Aucune pièce de l'unité n'est réparable.
- Pour éviter tout risque d'exposition au rayon laser, respectez les consignes de réglage et d'utilisation des commandes, ainsi que les procédures décrites dans le présent manuel.



DANGER

Certains produits à laser contiennent une diode à laser intégrée de classe 3A ou 3B. Prenez connaissance des informations suivantes:

Rayonnement laser lorsque le carter est ouvert. Evitez toute exposition directe au rayon laser. Evitez de regarder fixement le faisceau ou de l'observer à l'aide d'instruments optiques.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

ATTENTION:

Soulevez la machine avec précaution.



ATTENTION:

L'interrupteur de contrôle d'alimentation de l'unité et l'interrupteur dubloc d'alimentation ne coupent pas le courant électrique alimentant l'unité. En outre, le système peut être équipé de plusieurs cordons d'alimentation. Pour mettre l'unité hors tension, vous devez déconnecter tous les cordons de la source d'alimentation.





VORSICHT

An Netz-, Telefon- und Datenleitungen können gefährliche Spannungen anliegen.

Aus Sicherheitsgründen:

- Bei Gewitter an diesem Gerät keine Kabel anschließen oder lösen. Ferner keine Installations-, Wartungs- oder Rekonfigurationsarbeiten durchführen.
- Gerät nur an eine Schutzkontaktsteckdose mit ordnungsgemäß geerdetem Schutzkontakt anschließen.
- Alle angeschlossenen Geräte ebenfalls an Schutzkontaktsteckdosen mit ordnungsgemäß geerdetem Schutzkontakt anschließen.
- Die Signalkabel nach Möglichkeit einhändig anschließen oder lösen, um einen Stromschlag durch Berühren von Oberflächen mit unterschiedlichem elektrischem Potenzial zu vermeiden.
- Geräte niemals einschalten, wenn Hinweise auf Feuer, Wasser oder Gebäudeschäden vorliegen.
- Die Verbindung zu den angeschlossenen Netzkabeln, Telekommunikationssystemen, Netzwerken und Modems ist vor dem Öffnen des Gehäuses zu unterbrechen, sofern in den Installations- und Konfigurationsprozeduren keine anders lautenden Anweisungen enthalten sind.
- Zum Installieren, Transportieren und Öffnen der Abdeckungen des Computers oder der angeschlossenen Einheiten die Kabel gemäß der folgenden Tabelle anschließen und abziehen.

Zum Anschließen der Kabel gehen Sie wie folgt vor	Zum Abziehen der Kabel gehen Sie wie folgt vor
<ol style="list-style-type: none"> 1. Schalten Sie alle Einheiten AUS. 2. Schließen Sie erst alle Kabel an die Einheiten an. 3. Schließen Sie die Signalkabel an die Buchsen an. 4. Schließen Sie die Netzkabel an die Steckdose an. 5. Schalten Sie die Einheit EIN. 	<ol style="list-style-type: none"> 1. Schalten Sie alle Einheiten AUS. 2. Ziehen Sie zuerst alle Netzkabel aus den Netzsteckdosen. 3. Ziehen Sie die Signalkabel aus den Buchsen. 4. Ziehen Sie alle Kabel von den Einheiten ab.



CAUTION:

Eine verbrauchte Lithiumbatterie nur durch eine Batterie mit der Teilenummer 33F8354 oder eine gleichwertige, vom Hersteller empfohlene Batterie ersetzen. Enthält das System ein Modul mit einer Lithiumbatterie, dieses nur durch ein Modul desselben Typs und von demselben Hersteller ersetzen. Die Batterie enthält Lithium und kann bei unsachgemäßer Verwendung, Handhabung oder Entsorgung explodieren.

Die Batterie nicht:

- mit Wasser in Berührung bringen.
- über 100 C erhitzen.
- reparieren oder zerlegen.

Die örtlichen Bestimmungen für die Entsorgung von Sondermüll beachten.



ACHTUNG:

Bei der Installation von Lasergeräten (wie CD-ROM-Laufwerken, DVD-aufwerken, Einheiten mit Lichtwellenleitertechnik oder Sendern) Folgendes beachten:

- Die Abdeckungen nicht entfernen. Durch Entfernen der Abdeckungen des Lasergeräts können gefährliche Laserstrahlungen freigesetzt werden. Das Gerät enthält keine zu wartenden Teile.
- Werden Steuerelemente, Einstellungen oder Durchführungen von Prozeduren anders als hier angegeben verwendet, kann gefährliche Laserstrahlung auftreten.



VORSICHT

Einige Lasergeräte enthalten eine Laserdiode der Klasse 3A oder 3B. Beachten Sie Folgendes:

Laserstrahlung bei geöffneter Verkleidung. Nicht in den Strahl blicken. Keine Lupen oder Spiegel verwenden. Strahlungsbereich meiden.



≥18 kg



≥32 kg



≥55 kg

ACHTUNG:

Arbeitsschutzrichtlinien beim Anheben der Maschine beachten.



ACHTUNG:

Mit dem Netzschalter an der Einheit und am Netzteil wird die Stromversorgung für die Einheit nicht unterbrochen. Die Einheit kann auch mit mehreren Netzkabeln ausgestattet sein. Um die Stromversorgung für die Einheit vollständig zu unterbrechen, müssen alle zum Gerät führenden Netzkabel vom Netz getrennt werden.





סכנה

זרם חשמלי המועבר בכבלי חשמל, טלפון ותקשורת הוא מסוכן.

כדי להימנע מסכנת התחשמלות:

- אל תחברו או תנתקו כבלים, ואל תבצעו פעולת התקנה, תחזוקה או שינוי תצורה במוצר זה במהלך סופת ברקים.
- חברו את כל כבלי החשמל לשקע חשמל מחווט ומוארק כהלכה.
- חברו כל ציוד שיחובר למוצר זה לשקעי חשמל מחוטים כהלכה.
- במידת האפשר, השתמשו ביד אחת בלבד לחיבור או לניתוק של כבלי אותות.
- לעולם אל תפעילו ציוד כלשהו כאשר יש עדות לנזק מבני או לנזק כתוצאה מאש או ממים.
- נתקו את כבלי החשמל, מערכות התקשורת, התקני הרשת והמודמים המחוברים לפני פתיחת כיסויי ההתקן, אלא אם הליכי ההתקנה וקביעת התצורה מורים אחרת.
- בעת התקנה, העברה או פתיחת כיסויים במוצר זה או בהתקנים המחוברים, חברו ונתקו את הכבלים כמתואר בטבלה שלהלן.

כדי לחבר	כדי לנתק
1. כבו הכל.	1. כבו הכל.
2. ראשית, חברו את כל הכבלים להתקנים.	2. ראשית, נתקו את כבלי החשמל מהשקעים.
3. חברו את כבלי האותות למחברים.	3. נתקו את כבלי האותות מהמחברים.
4. חברו את כבלי החשמל לשקעים.	4. הסירו את כל הכבלים מההתקנים.
5. הפעילו את ההתקן.	



זהירות:

בעת החלפת סוללת הליתיום, השתמשו רק בסוללה בעלת מק"ט 33F8354 או בסוג תואם שהומלץ על ידי היצרן. אם המערכת כוללת מודול המכיל סוללת ליתיום, החליפו אותו רק במודול מאותו סוג ומתוצרת אותו יצרן. הסוללה מכילה ליתיום, ועלולה להתפוצץ אם לא משתמשים ומטפלים בה או משליכים אותה כראוי.

לעולם:

- אל תטבלו במים

- אל תחממו לטמפרטורה הגבוהה מ-100°C (212°F)

- אל תתקנו או תפרקו

השליכו את הסוללה כנדרש לפי התקנות והחוקים המקומיים.



זהירות:

בעת התקנת מוצרי לייזר (כגון כונני תקליטורים ו-DVD, התקני סיב אופטי או משדרים), שימו לב לאזהרות הבאות:

- אל תסירו את הכיסויים. הסרת הכיסויים של מוצר הלייזר עלולה לגרום לחשיפה לקרינת לייזר מסוכנת. אין חלקים ברי טיפול בתוך ההתקן.

- שינויים, שימוש בבקרות או ביצוע הליכים אחרים מאלה המתוארים כאן, עלולים לגרום לחשיפה לקרינה מסוכנת.



סכנה

מוצרי לייזר מסוימים מכילים דיודת לייזר מסוג Class 3A או Class 3B. שימו לב לאזהרה הבאה:

כאשר הוא פתוח, המוצר פולט קרינת לייזר. אל תביטו ישירות בקרן, אל תביטו ישירות בעזרת ציוד אופטי, והימנעו מחשיפה לקרן.



≤ 18 ק"ג (37 ליב')



≤ 32 ק"ג (70.5 ליב')

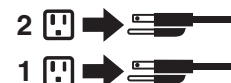


≤ 55 ק"ג (121.2 ליב')

זהירות:
השתמשו בהליכים
הנאותים בעת
הרמת הציוד.



זהירות:
לחצן ההפעלה של ההתקן ומתג ההפעלה של ספק החשמל אינם מפסיקים את זרם החשמל המסופק להתקן.
בנוסף, ההתקן עשוי לכלול יותר מכבל חשמל אחד. כדי לסלק את כל הזרם החשמלי מההתקן,
דאו שכל כבלי החשמל מנותקים ממקור החשמל.





PERICOLO

La corrente elettrica proveniente dai cavi di alimentazione, del telefono e di comunicazione può essere pericolosa.

Per evitare il rischio di scosse elettriche:

- **Non collegare o scollegare qualsiasi cavo oppure effettuare l'installazione, la manutenzione o la riconfigurazione del prodotto durante un temporale.**
- **Collegare tutti i fili elettrici a una presa di alimentazione correttamente cablata e dotata di messa a terra.**
- **Collegare alle prese elettriche appropriate tutte le apparecchiature che verranno utilizzate per questo prodotto.**
- **Se possibile, utilizzare solo una mano per collegare o scollegare i cavi di segnale.**
- **Non accendere assolutamente apparecchiature in presenza di incendi, perdite d'acqua o danno strutturale.**
- **Scollegare i cavi di alimentazione, i sistemi di telecomunicazione, le reti e il modem prima di aprire i coperchi del dispositivo, salvo istruzioni contrarie relative alle procedure di installazione e configurazione.**
- **Collegare e scollegare i cavi come descritto nella seguente tabella quando vengono effettuate operazioni di installazione, spostamento o apertura dei coperchi di questo prodotto o delle unità collegate.**

Per collegarsi	Per scollegarsi
1. SPEGNERE le apparecchiature.	1. SPEGNERE le apparecchiature.
2. Innanzitutto, collegare tutti i cavi alle unità.	2. Innanzitutto, rimuovere i cavi di alimentazione dalla presa.
3. Collegare i cavi di segnale ai connettori.	3. Rimuovere i cavi di segnale dai connettori.
4. Collegare i cavi di alimentazione alla presa.	4. Rimuovere tutti i cavi dalle unità.
5. Accendere l'unità.	



ATTENZIONE:

Quando si sostituisce la batteria al litio, utilizzare solo il Numero parte 33F8354 o un tipo di batteria equivalente consigliato dal produttore. Se sul sistema è presente un modulo che contiene una batteria al litio, sostituirlo solo con un tipo di modulo dello stesso tipo della stessa casa di produzione. La batteria contiene litio e può esplodere se usata, maneggiata o smaltita in modo non corretto.

Non:

- Gettare o immergere la batteria nell'acqua
- Riscaldarla ad una temperatura superiore ai 100 gradi C (212 gradi F)
- Smontarla, ricaricarla o tentare di ripararla

Le batterie usate vanno smaltite in accordo alla normativa in vigore (DPR 915/82 e successive disposizioni e disposizioni locali).



ATTENZIONE:

Quando vengono installati prodotti laser (quali CD-ROM, unità DVD-ROM, unità a fibre ottiche o trasmettenti), tener presente quanto segue:

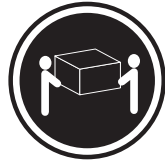
- Non rimuovere gli sportelli. L'apertura di un'unità laser può determinare l'esposizione a radiazioni laser pericolose. All'interno dell'unità non vi sono parti su cui effettuare l'assistenza tecnica.
- L'utilizzo di controlli, regolazioni o l'esecuzione di procedure non descritti nel presente manuale possono provocare l'esposizione a radiazioni pericolose.



PERICOLO

Alcune unità laser contengono un diodo laser di Classe 3A o Classe 3B. Tener presente quanto segue:

Aperto l'unità vengono emesse radiazioni laser. Non fissare il fascio, non guardarlo direttamente con strumenti ottici ed evitare l'esposizione al fascio.



≥18 kg



≥32 kg



≥55 kg

ATTENZIONE:

Prestare attenzione nel sollevare l'apparecchiatura.



ATTENZIONE:

Il pulsante di controllo dell'alimentazione presente sull'unità e l'interruttore dell'alimentatore non disattivano l'alimentazione corrente fornita all'unità. E' possibile che l'unità disponga di più cavi di alimentazione. Per disattivare l'alimentazione dall'unità, accertarsi che tutti i cavi di alimentazione siano scollegati dalla fonte di alimentazione.





위험

전원, 전화, 통신 케이블의 전류는 위험합니다.

감전의 위험을 피하려면 다음과 같이 하십시오.

- 번개가 치는 날에는 케이블을 연결 또는 분리하거나 본 제품을 설치, 보수, 재구성하지 마십시오.
- 모든 전원 코드는 올바르게 접지된 전기 콘센트에 연결하십시오.
- 본 제품에 연결될 장치는 올바르게 배선된 콘센트에 연결하십시오.
- 신호 케이블을 연결 또는 분리할 때 가능하면 한 손만을 사용하십시오.
- 불 또는 물로 인한 손상이나 구조적인 손상이 있을 경우 장치의 전원을 절대 켜지 마십시오.
- 설치 및 구성 과정에 별도의 지시 사항이 없는 경우, 장치의 덮개를 열기 전에 연결된 전원 코드, 원격 통신 시스템, 네트워크, 모뎀을 분리하십시오.
- 본 제품이나 연결된 장치를 설치, 이동하거나 덮개를 열 때 다음 표와 같은 순서로 케이블을 연결하거나 분리하십시오.

연결할 때:	분리할 때:
<ol style="list-style-type: none"> 1. 모든 장치의 전원을 끄십시오. 2. 먼저 모든 케이블을 장치에 연결하십시오. 3. 커넥터에 신호 케이블을 연결하십시오. 4. 콘센트에 전원 코드를 연결하십시오. 5. 장치의 전원을 켜십시오. 	<ol style="list-style-type: none"> 1. 모든 장치의 전원을 끄십시오. 2. 먼저 콘센트에서 전원 코드를 분리하십시오. 3. 커넥터에서 신호 케이블을 분리하십시오. 4. 장치에서 모든 케이블을 분리하십시오.



주의:

배터리를 교환할 때는 Part Number 33F8354 또는 제조업체에서 지정한 동일한 종류의 제품을 사용하십시오. 사용자의 시스템이 리튬 배터리를 포함하는 모듈일 경우, 동일한 제조업체에서 동일한 모듈 유형으로 생산된 제품으로 교체하십시오. 배터리에는 리튬이 함유되어 있어 잘못 사용, 취급 또는 폐기할 경우 폭발의 위험이 있습니다.

사고를 방지하려면 다음 사항을 준수하십시오.

- 배터리를 물 속에 던지거나 침수시키지 마십시오.
- 100℃(212°F) 이상 가열하지 마십시오.
- 수리하거나 분해하지 마십시오.

배터리를 폐기할 때는 법령 또는 회사의 안전 수칙에 따라 폐기하십시오.



주의:

CD-ROM, DVD-ROM 장치, 광섬유 장치 또는 송신 장치와 같은 레이저 제품을 설치할 때, 다음과 같은 취급 주의사항을 참고하십시오.

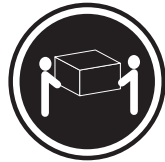
- 덮개를 열지 마십시오. 덮개를 열면 레이저 복사 에너지에 노출될 위험이 있습니다. 장치 내부에는 사용자가 조정하거나 수리할 수 있는 부품이 없습니다.
- 규정된 것 이외의 절차 수행, 제어 조정 등의 행위로 인해 해로운 레이저 복사에 노출될 수 있습니다.



위험

일부 장비에는 임베디드 클래스 3A 또는 클래스 3B 레이저 다이오드가 있습니다. 다음 주의사항에 유의하십시오.

드라이브가 열리면 레이저 복사 에너지가 방출됩니다. 광선이 눈에 직접 쏘이지 않도록 하십시오. 나안 또는 광학 기구를 착용한 상태에서 광선을 직접 바라보지 않도록 하십시오.



≥ 18 kg (37 lbs)



≥ 32 kg (70.5 lbs)



≥ 55 kg (121.2 lbs)

주의:

제품을 들어 올릴 때
안전 규제를 따르십시오.



주의:

장치의 전원 제어 버튼 및 전원 공급 장치의 전원 스위치를 사용하여 장치에 공급되는 전기를 차단하지 마십시오. 장치는 둘 이상의 코드를 가지고 있을 수 있습니다. 장치에서 모든 전원을 차단하려면 콘센트에서 코드가 모두 분리되어 있는지 확인하십시오.





PELIGRO

La corriente eléctrica procedente de cables de alimentación, teléfonos y cables de comunicación puede ser peligrosa.

Para evitar el riesgo de descarga eléctrica:

- No conecte ni desconecte los cables ni realice ninguna tarea de instalación, mantenimiento o reconfiguración de este producto durante una tormenta eléctrica.
- Conecte todos los cables de alimentación a tomas de corriente debidamente cableadas y conectadas a tierra.
- Cualquier equipo que se conecte a este producto también debe conectarse a tomas de corriente debidamente cableadas.
- Siempre que sea posible, utilice una sola mano para conectar o desconectar los cables de señal.
- No encienda nunca un equipo cuando hay señales de fuego, agua o daños estructurales.
- Desconecte los cables de alimentación, los sistemas de telecomunicaciones, las redes y los módems conectados antes de abrir las cubiertas de los dispositivos, a menos que se indique lo contrario en los procedimientos de instalación y configuración.
- Conecte y desconecte los cables, como se describe en la tabla siguiente, cuando instale, mueva o abra las cubiertas de este producto o de los dispositivos conectados.

Para conectar	Para desconectar
<ol style="list-style-type: none">1. APÁGUELO todo.2. En primer lugar, conecte todos los cables a los dispositivos.3. Conecte los cables de señal a los conectores.4. Enchufe los cables de alimentación a las tomas de corriente.5. Encienda el dispositivo.	<ol style="list-style-type: none">1. APÁGUELO todo.2. En primer lugar, desenchufe los cables de alimentación de las tomas de corriente.3. Desconecte los cables de señal de los conectores.4. Desconecte todos los cables de los dispositivos.



PRECAUCIÓN:

Cuando sustituya una batería de litio, utilice solamente una batería número de pieza 33F8354 u otra de tipo equivalente recomendada por el fabricante. Si su sistema dispone de un módulo que contiene una batería de litio, reemplácelo sólo con el mismo tipo de módulo, del mismo fabricante. La batería contiene litio y puede explotar si no se utiliza, manipula o desecha correctamente.

No debe:

- Arrojarla al agua o sumergirla en ella
- Exponerla a temperaturas superiores a 100°C (212°F)
- Repararla o desmontarla

Deshágase de la batería según especifiquen las leyes o normas locales.



PRECAUCIÓN:

Cuando haya productos láser (como unidades de CD-ROM, unidades de DVD, dispositivos de fibra óptica o transmisores) instalados, tenga en cuenta lo siguiente:

- No quite las cubiertas. Si quita las cubiertas del producto láser, podría quedar expuesto a radiación láser peligrosa. Dentro del dispositivo no existe ninguna pieza que requiera servicio técnico.
- Si usa controles o ajustes o realiza procedimientos que no sean los especificados aquí, podría exponerse a radiaciones peligrosas.



PELIGRO

Algunos productos láser tienen incorporado un diodo láser de clase 3A o clase 3B. Tenga en cuenta lo siguiente:

Cuando se abre, queda expuesto a radiación láser. No mire directamente al rayo láser, ni siquiera con instrumentos ópticos, y evite exponerse directamente al rayo láser.



≥18 kg



≥32 kg



≥55 kg

PRECAUCIÓN:

Adopte procedimientos seguros al levantar el equipo.



PRECAUCIÓN:

El botón de control de alimentación del dispositivo y el interruptor de alimentación de la fuente de alimentación no desconectan la corriente eléctrica suministrada al dispositivo. Además, el dispositivo podría tener más de un cable de alimentación. Para suprimir toda la corriente eléctrica del dispositivo, asegúrese de que todos los cables de alimentación estén desconectados de la toma de corriente.



Chapter 3. General information

This chapter provides general information that applies to all machine types supported by this publication.

The ThinkVantage™ Productivity Center program

Use the ThinkVantage Productivity Center program for general information about the use, operation, and maintenance of the computer. The ThinkVantage Productivity Center program also contains information to help solve problems and get repair service or other technical assistance. The ThinkVantage Productivity Center program is preinstalled on most ThinkCentre products.

Additional information resources

If you have Internet access, the most up-to-date information for your computer is available from the World Wide Web.

You can find the following information:

- CRU removal and installation instructions
- Publications
- Troubleshooting information
- Parts information
- Downloads and drivers
- Links to other useful sources of information

To access this information, point your browser to <http://www.lenovo.com/support/>.

Specifications

This section lists the physical specifications for your computer.

Types 6019, 6064, 6066, 6067, 6072, 6073, 6077, 6078, 6087, 6088, 9181, and 9196

This section lists the physical specifications.

Dimensions

Height: 99 mm (3.9 in.)

Width: 317 mm (12.48 in.)

Depth: 341 mm (13.4 in.)

Weight

Minimum configuration: 6.32 kg (13.9 lb)

Maximum configuration: 7.42 kg (16.4 lb)

Environment

Air temperature:

Operating at 0 - 3000 ft (914.4 m): 10° to 35°C (50° to 95°F)

Non-operating: -40° to 60°C (-40° to 140°F)

Humidity:

Operating: 10% to 80% (10% per hour, non-condensing)

Non-operating: 10% to 90% (10% per hour)

Maximum altitude:

Operating: -50 to 10,000 ft (-15.2 to 3048 m)

Non-operating: -50 to 35,000 ft (-15.2 to 10,668 m)

Electrical input:

Input voltage:

Low range:

Minimum: 100V ac

Maximum: 127V ac

Input frequency: 50/60 Hz

Voltage switch setting: 115V ac (some models)

High range:

Minimum: 200V ac

Maximum: 240V ac

Input frequency: 50/60 Hz

Voltage switch setting: 230V ac (some models)

Types 6062, 6065, 6071, 6076, 6089, 9011, 9014, 9071, 9089, 9162, 9182 and 9303

This section lists the physical specifications.

Dimensions

Width: 276 mm (10.9 in.)

Height: 89 mm (3.5 in.)

Depth: 273 mm (10.7 in.)

Weight

Minimum configuration as shipped: 6.3 kg (13.4 lbs)

Maximum configuration: 6.4 kg (14.1 lbs)

Environment

Air temperature:

Operating at 0 - 3000 ft (914.4 m): 10° to 35°C (50° to 95°F)

Non-operating: -40° to 60°C (-40° to 140°F)

Humidity:

Operating: 10% to 80% (10% per hour, non-condensing)

Non-operating: 10% to 90% (10% per hour)

Maximum altitude:

Operating: -50 to 10,000 ft (-15.2 to 3048 m)

Non-operating: -50 to 35,000 ft (-15.2 to 10,668 m)

Electrical input

Input voltage:

Low range:

Minimum: 100V ac

Maximum: 127V ac

Input frequency: 50/60 Hz

Voltage switch setting: 115V ac

High range:

Minimum: 200V ac

Maximum: 240V ac

Input frequency: 50/60 Hz

Voltage switch setting: 230V ac

Chapter 4. General Checkout

Attention

The drives in the computer you are servicing might have been rearranged or the drive startup sequence changed. Be extremely careful during write operations such as copying, saving, or formatting. Data or programs can be overwritten if you select an incorrect drive.

General error messages appear if a problem or conflict is found by an application program, the operating system, or both. For an explanation of these messages, refer to the information supplied with that software package.

Before replacing any FRUs, ensure that the latest level of BIOS is installed on the system. A down-level BIOS might cause false errors and unnecessary replacement of the system board. For more information on how to determine and obtain the latest level BIOS, see “BIOS levels” on page 267.

Use the following procedure to help determine the cause of the problem:

1. Power-off the computer and all external devices.
2. Check all cables and power cords.
3. Set all display controls to the middle position.
4. Power-on all external devices.
5. Power-on the computer.
 - Look for displayed error codes
 - Listen for beep codes
 - Look for readable instructions or a main menu on the display.If you **did not** receive the correct response, proceed to step 6.
If you **do** receive the correct response, proceed to step 7.
6. Look at the following conditions and follow the instructions:
 - If you hear beep codes during POST, go to “Beep symptoms” on page 76.
 - If the computer displays a POST error, go to “POST error codes” on page 77.
 - If the computer hangs and no error is displayed, continue at step 7.
7. Run the Diagnostic programs. See Chapter 5, “Diagnostics,” on page 43.
 - If you receive an error, replace the part that the diagnostic program calls out or go to “Diagnostic error codes” on page 54.
 - If the test stops and you cannot continue, replace the last device tested.

Problem determination tips

Due to the variety of hardware and software combinations that can be encountered, use the following information to assist you in problem determination. If possible, have this information available when requesting assistance from Service Support and Engineering functions.

- Machine type and model
- Processor or hard disk upgrades
- Failure symptom
 - Do diagnostics indicate a failure?

- What, when, where, single, or multiple systems?
- Is the failure repeatable?
- Has this configuration ever worked?
- If it has been working, what changes were made prior to it failing?
- Is this the original reported failure?
- Diagnostics version
 - Type and version level
- Hardware configuration
 - Print (print screen) configuration currently in use
 - BIOS level
- Operating system software
 - Type and version level

Note: To eliminate confusion, identical systems are considered identical only if they:

1. Are the exact machine type and models
2. Have the same BIOS level
3. Have the same adapters/attachments in the same locations
4. Have the same address jumpers/terminators/cabling
5. Have the same software versions and levels
6. Have the same Diagnostic Diskettes (version)
7. Have the same configuration options set in the system
8. Have the same setup for the operating system control files

Comparing the configuration and software set-up between “working and non-working” systems will often lead to problem resolution.

Chapter 5. Diagnostics

Diagnostic programs are used to test hardware components of your computer and report operating-system-controlled settings that can cause hardware failures. There are two diagnostic programs preinstalled on your computer to help you diagnose problems:

- PC-Doctor for Windows (used when diagnosing problems while running the Windows operating system)
- PC-Doctor for Windows PE (used when your Windows operating system will not start)

Notes:

1. You can also download the latest version of the PC-Doctor for Windows and PC-Doctor for DOS diagnostic programs from <http://www.lenovo.com/support/>.
2. If you are unable to isolate and repair the problem yourself by running the applicable version of PC-Doctor, click the Save Button in the PC-Doctor-log-file display. You will need to have all problem-related log files available when you speak to a Lenovo technical support representative.

PC-Doctor for Windows

PC-Doctor for Windows is a diagnostic program that works through the Windows operating system. The PC-Doctor for Windows diagnostic program enables you to view symptoms and solutions for computer problems, access the Lenovo troubleshooting center, update system drivers, and review system information.

To run PC-Doctor for Windows, open the Start menu from the Windows desktop, select **All Programs**, select **PC-Doctor for Windows**, and click **PC-Doctor for Windows**. Follow the instructions on the screen. For additional information about running the diagnostic program, refer to the PC-Doctor for Windows help system.

If you still suspect a problem after PC-Doctor for Windows runs successfully, run PC-Doctor for DOS or PC-Doctor for Windows PE to help you diagnose the computer problem.

PC Doctor for Windows also has problem determination aids that determine software and usage problems.

PC-Doctor for Windows PE

The PC-Doctor for Windows PE diagnostic program is part of the Rescue and Recovery workspace on each Lenovo computer. Use PC-Doctor for Windows PE, if you are unable to start the Windows operating system or if PC-Doctor for Windows has not been successful in isolating a possible problem.

Running diagnostics from the Rescue and Recovery workspace

You can run the PC-Doctor for Windows PE diagnostic program from the Rescue and Recovery workspace. To run diagnostics from the Rescue and Recovery workspace, use the following procedure:

1. Shut down the operating system and turn off the computer.
2. Repeatedly press and release the F11 key as you turn on the computer.
3. When you hear beeps or see a logo screen, stop pressing the F11 key. The Rescue and Recovery workspace opens.
4. From the Rescue and Recovery workspace, select **Diagnose hardware**.
5. The diagnostic program opens automatically. Select the diagnostic test you want to run. Press the F1 key for additional help.
6. Follow the instructions on the screen.

Note: Rescue media includes PC-Doctor for Windows PE. For more information about rescue media, see the *User Guide* for the computer.

PC-Doctor for DOS

Use PC-Doctor for DOS, if you are unable to start the Windows operating system or if PC-Doctor for Windows has not been successful in isolating a possible problem. You can run PC-Doctor for DOS from a diagnostic CD image or diagnostic diskettes that have been created.

Note: It is important to create a diagnostic CD image or diagnostic diskettes in case PC-Doctor for Windows PE cannot be run from the Rescue and Recovery workspace.

Creating a diagnostic CD image

To create a diagnostic CD image, download a self-starting bootable CD image (known as an .iso image) of the diagnostic program from <http://www.lenovo.com/support/>. After you download the image, you can create the CD using any CD burning software.

If the computer does not have a CD burner or you do not have Internet access, see "Creating diagnostic diskettes."

Creating diagnostic diskettes

To create diagnostic diskettes, download the PC-Doctor for DOS diagnostic program from <http://www.lenovo.com/support/> onto two blank, formatted diskettes.

If you do not have Internet access, create the diagnostic diskettes using the following procedure:

Note: You will need a diskette drive on the computer or a USB diskette drive to complete this procedure.

1. Shut down the operating system and turn off the computer.
2. If you are using a USB diskette drive, plug it into the computer.
3. Repeatedly press and release the F11 key as you turn on the computer.
4. When you hear beeps or see a logo screen, stop pressing the F11 key. The Rescue and Recovery workspace opens.

Note: For some models, press the Esc key to enter Rescue and Recovery.

5. From the Rescue and Recovery workspace, select **Create diagnostic disks**.
6. Follow the instructions on the screen.

7. When prompted, insert a blank, formatted diskette into the diskette drive and continue to follow the instructions on the screen.
8. When the operation is complete, remove the diskette and click **Quit**.
9. Insert another blank, formatted diskette into the diskette drive and continue to follow the instructions on the screen.
10. When the operation is complete, remove the diskette and click **Quit**.

Running diagnostics from the CD or diskettes

To run diagnostics from the diagnostic CD image or diagnostic diskettes that you created, use the following procedure:

1. Make sure the computer is turned off.
2. If you are running diagnostics from diskettes using a USB diskette drive, plug in the USB device.
3. Insert the CD into the optical drive or the first diagnostic diskette into the diskette drive.
4. Restart the computer.

Note: If the diagnostic program does not start, you might not have your optical drive or diskette drive set as a startable device. See “Selecting a startup device” on page 50 for instructions on how to change the startup device.

5. When the diagnostics program opens, follow the instructions on the screen.

Note: If you are running diagnostics from a diskette, when prompted, remove the first diskette and insert the second diskette.

6. When the program finishes, be sure to remove the CD or diskette from the drive.
7. Select the diagnostic test you want to run. Press the F1 key for additional help.

Navigating through the diagnostics programs

Use the cursor movement keys to navigate within the menus.

- The **Enter** key is used to select a menu item.
- The **Esc** key is used to back up to the previous menu.
- For online help select **F1**.

Running tests

There are four ways to run the diagnostic tests.

- Using the cursor movement keys, highlight **Run Normal Test** or **Run Quick Test** from the Diagnostics menu and then press **Enter**.

This automatically runs a pre-defined group of tests from each test category.

Run Normal Test runs a more extensive set of tests than does **Run Quick Test** and takes longer to complete.

- Press **F5** to automatically run all selected tests in all categories.
- From within a test category, press **Ctrl-Enter** to automatically run only the selected tests in that category.
- Using the cursor movement keys, highlight a single test within a test category, and then press **Enter**. This runs only that test.

Press **Esc** at any time to stop the testing process.

Test results (N/A, PASSED, FAILED, ABORTED) are displayed in the field beside the test description and in the test log. See “Viewing the test log” on page 47.

To select one or more tests, use the following procedure.

1. Open the corresponding test category.
2. Using the cursor movement keys, highlight the desired test.
3. Press the space bar.
A selected test is marked by >>. Pressing the space bar again de-selects a test and removes the >>.
4. Repeat steps 2 and 3 above to select all desired tests.

Test results

Diagnostics test results produce the following error code format:

Function Code	Failure Type	DeviceID	Date	ChkDigits	Text
---------------	--------------	----------	------	-----------	------

- **Function Code:**
Represents the feature or function within the PC.
- **Failure Type:**
Represents the type of error encountered.
- **DeviceID:**
Contains the component’s unit-ID which corresponds to either a fixed disk drive, removable media drive, serial or parallel port, processor, specific RIMM, or a device on the PCI bus.
- **Date:**
Contains the date when the diagnostic test was run. The date is retrieved from CMOS and displayed using the YYYYMMDD format.
- **ChkDigits:**
Contains a 2-digit check-digit value to ensure the following:
 - Diagnostics were run on the specified date.
 - Diagnostics were run on the specified computer.
 - The diagnostic error code is recorded correctly.
- **Text:**
Description of the error.

Note: See “Diagnostic error codes” on page 54 for error code listings.

Quick and Full erase - hard drive

The diagnostics program offers two hard drive format utilities:

- Quick Erase Hard Drive
- Full Erase Hard Drive

The Quick Erase Hard Drive provides a DOS utility that performs the following:

- Destroys the Master Boot Record (MBR) on the hard drive.
- Destroys all copies of the FAT Table on all partitions (both the master and backup).
- Destroys the partition table.
- Provides messages that warn the user that this is a non-recoverable process.

The Full Erase Hard Drive provides a DOS utility that performs the following:

- Performs all the steps in Quick Erase.
- Provides a DOS utility that writes random data to all sectors of the hard drive.
- Provides an estimate of time to completion along with a visual representation of completion status.
- Provides messages that warn the user about non-recoverable process.

Important: Make sure that all data is backed up before using the Quick or Full Erase functions.
--

To select the Quick Erase or Full Erase Hard Drive utility, use the following procedure:

1. Select the UTILITY option on the toolbar and press **Enter**.
2. Select either the QUICK ERASE or FULL ERASE HARD DISK option and follow the instructions.

Viewing the test log

Errors reported by the diagnostic test will be displayed by the program as a failed test.

To view details of a failure or to view a list of test results, use the following procedure from any test category screen:

1. Press **F3** to activate the log file.
2. Press **F3** again to save the file to diskette or press **F2** to print the file.

Chapter 6. Using the Setup Utility

The Setup Utility program is used to view and change the configuration settings of the computer, regardless of which operating system you are using. However, the operating-system settings might override any similar settings in the Setup Utility program.

Starting the Setup Utility program

To start the Setup Utility program, do the following:

1. If the computer is already on when you start this procedure, shut down the operating system and turn off the computer.
2. Press and hold the F1 key then turn on the computer. When you hear multiple beeps, release the F1 key.

Notes:

- a. If you are using a USB keyboard and the Setup Utility program does not display using this method, repeatedly press and release the F1 key rather than leaving it pressed when turning on the computer.
- b. If a user password or an administrator password has been set, the Setup Utility program menu is not displayed until you type your password. For more information, see “Using passwords.”

The Setup Utility might start automatically when POST detects that hardware has been removed or new hardware has been installed in the computer.

Viewing and changing settings

The Setup Utility program menu lists items that identify system configuration topics. To view or change settings, see “Starting the Setup Utility program.”

When working with the Setup Utility program menu, you must use the keyboard. The keys used to perform various tasks are displayed at the bottom of each screen.

Using passwords

By using the Setup Utility program, you can set passwords to prevent unauthorized persons from gaining access to the computer and data. See “Starting the Setup Utility program.” The following types of passwords are available:

- User Password
- Administrator Password

You do not have to set any passwords to use the computer. However, if you decide to set any passwords, read the following sections.

Password considerations

A password can be any combination of up to twelve characters (a-z and 0-9) and symbols. For security reasons, it is a good idea to use a strong password that cannot be easily compromised. Passwords should adhere to the following rules:

- Have at least eight characters in length
- Contain at least one alphabetic character and one numeric character

- Setup Utility program and hard disk drive passwords are not case sensitive
- Not be your name or your user name
- Not be a common word or a common name
- Be significantly different from your previous password

User Password

When a User Password is set, the computer cannot be used until a valid password is typed from the keyboard.

Administrator Password

When an Administrator Password is set, it deters unauthorized persons from changing configuration settings. If you are responsible for maintaining the settings of several computers, you might want to set an Administrator Password.

After you set an Administrator Password, a password prompt is displayed each time you try to access the Setup Utility program.

If both the user and administrator passwords are set, you can type either password. However, to change any configuration settings, you must use your administrator password.

Setting, changing, and deleting a password

To set, change, or delete a password, do the following:

Note: A password can be any combination of up to twelve characters (A- Z, a-z, and 0-9). For more information, see “Password considerations” on page 49.

1. Start the Setup Utility program (see “Starting the Setup Utility program” on page 49).
2. From the Setup Utility program menu, select **Security**.
3. Select **Set Passwords**. Read the information displayed on the right side of the screen.

Selecting a startup device

If the computer does not start up (boot) from a device such as the CD-ROM, diskette, or hard disk as expected, use one of the following procedures to select a startup device.

Selecting a temporary startup device

Use this procedure to startup from any boot device.

Note: Not all CDs, hard disks, and diskettes are bootable.

1. Turn off the computer.
2. Press and hold the F12 key then turn on the computer. When the Startup Device Menu appears, release the F12 key.

Note: If you are using a USB keyboard and the Startup Device Menu does not display using this method, repeatedly press and release the F12 key rather than leaving it pressed when turning on the computer.

3. Select the desired startup device from the Startup Device Menu and press Enter to begin.

Note: Selecting a startup device from the Startup Device menu does not permanently change the startup sequence.

Selecting or changing the startup device sequence

To view or permanently change the configured startup device sequence, do the following:

1. Start the Setup Utility program (see “Starting the Setup Utility program” on page 49).
2. Select **Startup**.
3. Select **Startup Sequence**. See the information displayed on the right side of the screen.
4. Select the devices for the Primary Startup Sequence, the Automatic Startup Sequence, and the Error Startup Sequence.
5. Select **Exit** from the Setup Utility menu and then **Save Settings** or **Save and exit the Setup Utility**.

If you have changed these settings and want to return to the default settings, select **Load Default Settings** on the Exit menu.

Advanced settings

On some computer models the Advanced settings menu includes a setting to Enable/Disable HyperThreading. This feature works only with HyperThreading-aware operating systems, such as Microsoft Windows XP and Windows Vista™. The default setting for HyperThreading is Enabled. However, if you select **Set Defaults** and are using an operating system other than Windows XP or Windows Vista, the computer performance might be degraded. Therefore, you should always set HyperThreading to Disabled unless you are sure your operating system supports HyperThreading.

Exiting from the Setup Utility program

When you finish viewing or changing settings, press Esc to return to the Setup Utility program menu (you might have to press Esc several times). If you want to save the new settings, select **Save & Exit Setup** before you exit. Otherwise, your changes will not be saved.

Chapter 7. Symptom-to-FRU Index

The Symptom-to-FRU index lists error symptoms and possible causes. The most likely cause is listed first. Always begin with Chapter 4, “General Checkout,” on page 41. This index can also be used to help you decide which FRUs to have available when servicing a computer. If you are unable to correct the problem using this index, go to “Undetermined problems” on page 80.

Notes:

- If you have both an error message and an incorrect audio response, diagnose the error message first.
- If you cannot run the diagnostic tests or you get a diagnostic error code when running a test, but did receive a POST error message, diagnose the POST error message first.
- If you did not receive any error message, look for a description of your error symptoms in the first part of this index.

Hard disk drive boot error

A hard disk drive boot error (error codes 1962 and I999030X) can have the following causes.

Error	FRU/Action
The start-up drive is not in the boot sequence in configuration.	Check the configuration and ensure the start-up drive is in the boot sequence.
No operating system installed on the boot drive.	Install an operating system on the boot drive.
The boot sector on the start-up drive is corrupted.	The drive must be formatted, do the following: <ol style="list-style-type: none">1. Attempt to back-up the data on the failing hard disk drive.2. Using the operating systems programs, format the hard disk drive.
The drive is defective.	Replace the hard disk drive.

Power Supply Problems

If you suspect a power problem, use the following procedures.

Check/Verify	FRU/Action
Check the following for proper installation. <ul style="list-style-type: none">• Power Cord• On/Off Switch connector• On/Off Switch Power Supply connector• System Board Power Supply connectors• Microprocessor(s) connection	Reseat connectors
Check the power cord for continuity.	Power Cord
Check the power-on switch for continuity.	Power-on Switch

Diagnostic error codes

Refer to the following diagnostic error codes when using the diagnostic tests. See “Running tests” on page 45 for the specific type for information about the Diagnostic programs.

In the following index, X can represent any number.

Diagnostic Error Code	FRU/Action
000-000-XXX BIOS Test Passed	No action
000-002-XXX BIOS Timeout	<ol style="list-style-type: none">1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 2682. System board
000-024-XXX BIOS Addressing test failure	<ol style="list-style-type: none">1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 2682. System board
000-025-XXX BIOS Checksum Value error	<ol style="list-style-type: none">1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 2682. System board
000-026-XXX FLASH data error	<ol style="list-style-type: none">1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 2682. System board
000-027-XXX BIOS Configuration/Setup error	<ol style="list-style-type: none">1. Run Setup2. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 2683. System board
000-034-XXX BIOS Buffer Allocation failure	<ol style="list-style-type: none">1. Reboot the system2. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 2683. Run memory test4. System board
000-035-XXX BIOS Reset Condition detected	<ol style="list-style-type: none">1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 2682. System board
000-036-XXX BIOS Register error	<ol style="list-style-type: none">1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 2682. System board

Diagnostic Error Code	FRU/Action
000-038-XXX BIOS Extension failure	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 2. Adapter card 3. System board
000-039-XXX BIOS DMI data error	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 2. System board
000-195-XXX BIOS Test aborted by user	<p>Information only Re-start the test, if necessary</p>
000-196-XXX BIOS test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
000-197-XXX BIOS test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
000-198-XXX BIOS test aborted	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and retest. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
000-199-XXX BIOS test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test 3. Replace component under function test
000-250-XXX BIOS APM failure	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 2. System board
000-270-XXX BIOS ACPI failure	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 2. System board
001-000-XXX System Test Passed	No action
001-00X-XXX System Error	System board
001-01X-XXX System Error	System board

Diagnostic Error Code	FRU/Action
001-024-XXX System Addressing test failure	System board
001-025-XXX System Checksum Value error	<ol style="list-style-type: none"> 1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 2. System board
001-026-XXX System FLASH data error	<ol style="list-style-type: none"> 1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 2. System board
001-027-XXX System Configuration/Setup error	<ol style="list-style-type: none"> 1. Run Setup 2. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 3. System board
001-032-XXX System Device Controller failure	System board
001-034-XXX System Device Buffer Allocation failure	<ol style="list-style-type: none"> 1. Reboot the system 2. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 3. Run memory test 4. System board
001-035-XXX System Device Reset condition detected	System board
001-036-XXX System Register error	System board
001-038-XXX System Extension failure	<ol style="list-style-type: none"> 1. Adapter card 2. System board
001-039-XXX System DMI data structure error	<ol style="list-style-type: none"> 1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 2. System board
001-040-XXX System IRQ failure	<ol style="list-style-type: none"> 1. Power-off/on system and re-test 2. System board
001-041-XXX System DMA failure	<ol style="list-style-type: none"> 1. Power-off/on system and re-test 2. System board
001-195-XXX System Test aborted by user	Information only Re-start the test, if necessary
001-196-XXX System test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file

Diagnostic Error Code	FRU/Action
001-197-XXX System test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
001-198-XXX System test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and retest. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
001-199-XXX System test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test 3. Replace component under function test
001-250-XXX System ECC error	System board
001-254-XXX 001-255-XXX 001-256-XXX 001-257-XXX System DMA error	System board
001-260-XXX 001-264-XXX System IRQ error	System board
001-268-XXX System IRQ1 failure	<ol style="list-style-type: none"> 1. Device on IRQ1 2. System board
001-269-XXX System IRQ2 failure	<ol style="list-style-type: none"> 1. Device on IRQ2 2. System board
001-270-XXX System IRQ3 failure	<ol style="list-style-type: none"> 1. Device on IRQ3 2. System board
001-271-XXX System IRQ4 failure	<ol style="list-style-type: none"> 1. Device on IRQ4 2. System board
001-272-XXX System IRQ5 failure	<ol style="list-style-type: none"> 1. Device on IRQ5 2. System board
001-273-XXX System IRQ6 (diskette drive) failure	<ol style="list-style-type: none"> 1. Diskette Cable 2. Diskette drive 3. System board
001-274-XXX System IRQ7 failure	<ol style="list-style-type: none"> 1. Device on IRQ7 2. System board

Diagnostic Error Code	FRU/Action
001-275-XXX System IRQ8 failure	1. Device on IRQ8 2. System board
001-276-XXX System IRQ9 failure	1. Device on IRQ9 2. System board
001-277-XXX System IRQ10 failure	1. Device on IRQ10 2. System board
001-278-XXX System IRQ11 failure	1. Device on IRQ11 2. System board
001-279-XXX System IRQ12 failure	1. Device on IRQ12 2. System board
001-280-XXX System IRQ13 failure	1. Device on IRQ13 2. System board
001-281-XXX System IRQ14 (hard disk drive) failure	1. Hard disk drive cable 2. Hard disk drive 3. System board
001-282-XXX System IRQ15 failure	1. Device on IRQ15 2. System board
001-286-XXX 001-287-XXX 001-288-XXX System Timer failure	System board
001-292-XXX System CMOS RAM error	1. Run Setup and re-test 2. System board
001-293-XXX System CMOS Battery	1. CMOS Battery 2. System board
001-298-XXX System RTC date/time update failure	1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 2. System board
001-299-XXX System RTC periodic interrupt failure	System board
001-300-XXX System RTC Alarm failure	System board
001-301-XXX System RTC Century byte error	1. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 2. System board
005-000-XXX Video Test Passed	No action
005-00X-XXX Video error	1. Video card, if installed 2. System board

Diagnostic Error Code	FRU/Action
005-010-XXX 005-011-XXX 005-012-XXX 005-013-XXX Video Signal failure	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
005-016-XXX Video Simple Pattern test failure	<ol style="list-style-type: none"> 1. Video Ram 2. Video card, if installed 3. System board
005-024-XXX Video Addressing test failure	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
005-025-XXX Video Checksum Value error	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
005-027-XXX Video Configuration/Setup error	<ol style="list-style-type: none"> 1. Run Setup 2. Video drivers update 3. Video card, if installed 4. System board
005-031-XXX Video Device Cable failure	<ol style="list-style-type: none"> 1. Video cable 2. Monitor 3. Video card, if installed 4. System board
005-032-XXX Video Device Controller failure	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
005-036-XXX Video Register error	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
005-038-XXX System BIOS extension failure	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
005-040-XXX Video IRQ failure	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
005-195-XXX Video Test aborted by user	<p>Information only Re-start the test, if necessary</p>
005-196-XXX Video test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
005-197-XXX Video test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component called out in warning statement 4. Replace the component under test

Diagnostic Error Code	FRU/Action
005-198-XXX Video test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
005-199-XXX Video test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
005-2XX-XXX 005-3XX-XXX Video subsystem error	<ol style="list-style-type: none"> 1. Video card, if installed 2. System board
006-000-XXX Diskette interface Test Passed	No action
006-0XX-XXX Diskette interface error	<ol style="list-style-type: none"> 1. Diskette drive Cable 2. Diskette drive 3. System board
006-195-XXX Diskette interface Test aborted by user	Information only Re-start the test, if necessary
006-196-XXX Diskette interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
006-197-XXX Diskette interface test warning	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
006-198-XXX Diskette interface test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
006-199-XXX Diskette interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test 3. Replace component under function test
006-25X-XXX Diskette interface Error	<ol style="list-style-type: none"> 1. Diskette drive cable 2. Diskette drive 3. System board

Diagnostic Error Code	FRU/Action
011-000-XXX Serial port Interface Test Passed	No action
011-001-XXX Serial port Presence	<ol style="list-style-type: none"> 1. Remove external serial device, if present 2. Run setup, enable port 3. System board
011-002-XXX 011-003-XXX Serial port Timeout/Parity error	System board
011-013-XXX 011-014-XXX Serial port Control Signal/Loopback test failure	System board
011-015-XXX Serial port External Loopback failure	<ol style="list-style-type: none"> 1. Wrap plug 2. System board
011-027-XXX Serial port Configuration/Setup error	<ol style="list-style-type: none"> 1. Run Setup, enable port 2. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. System board
011-03X-XXX 011-04X-XXX Serial port failure	System board
011-195-XXX Serial port Test aborted by user	Information only Re-start the test, if necessary
011-196-XXX Serial port test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
011-197-XXX Serial port test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
011-198-XXX Serial port test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80

Diagnostic Error Code	FRU/Action
011-199-XXX Serial port test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to “Undetermined problems” on page 80 2. Flash the system and re-test. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 3. Replace component under function test
011-2XX-XXX Serial port signal failure	<ol style="list-style-type: none"> 1. External serial device 2. System board
014-000-XXX Parallel port Interface Test Passed	No action
014-001-XXX Parallel port Presence	<ol style="list-style-type: none"> 1. Remove external parallel device, if present 2. Run setup, enable port 3. System board
014-002-XXX 014-003-XXX Parallel port Timeout/Parity error	System board
014-013-XXX 014-014-XXX Parallel port Control Signal/Loopback test failure	System board
014-015-XXX Parallel port External Loopback failure	<ol style="list-style-type: none"> 1. Wrap plug 2. System board
014-027-XXX Parallel port Configuration/Setup error	<ol style="list-style-type: none"> 1. Run Setup, enable port 2. Flash the system. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268 3. System board
014-03X-XXX 014-04X-XXX Parallel port failure	System board
014-195-XXX Parallel port Test aborted by user	Information only Re-start the test, if necessary
014-196-XXX Parallel port test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
014-197-XXX Parallel port test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, “Using the Setup Utility,” on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test

Diagnostic Error Code	FRU/Action
014-198-XXX Parallel port test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
014-199-XXX Parallel port test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
014-2XX-XXX 014-3XX-XXX Parallel port failure	<ol style="list-style-type: none"> 1. External parallel device 2. System board
015-000-XXX USB port Interface Test Passed	No action
015-001-XXX USB port Presence	<ol style="list-style-type: none"> 1. Remove USB device(s) and re-test 2. System board
015-002-XXX USB port Timeout	<ol style="list-style-type: none"> 1. Remove USB device(s) and re-test 2. System board
015-015-XXX USB port External Loopback failure	<ol style="list-style-type: none"> 1. Remove USB device(s) and re-test 2. System board
015-027-XXX USB port Configuration/Setup error	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 2. System board
015-032-XXX USB port Device Controller failure	System board
015-034-XXX USB port buffer allocation failure	<ol style="list-style-type: none"> 1. Reboot the system 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Run memory test 4. System board
015-035-XXX USB port Reset condition detected	<ol style="list-style-type: none"> 1. Remove USB device(s) and re-test 2. System board
015-036-XXX USB port Register error	System board
015-040-XXX USB port IRQ failure	<ol style="list-style-type: none"> 1. Run setup and check for conflicts 2. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. System board
015-195-XXX USB port Test aborted by user	Information only Re-start the test, if necessary

Diagnostic Error Code	FRU/Action
015-196-XXX USB port test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
015-197-XXX USB port test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
015-198-XXX USB port test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
015-199-XXX USB port test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
018-000-XXX PCI Card Test Passed	No action
018-0XX-XXX PCI Card Failure	<ol style="list-style-type: none"> 1. Riser card, if installed 2. System board
018-195-XXX PCI Card Test aborted by user	<ol style="list-style-type: none"> 1. PCI card 2. Information only Re-start the test, if necessary
018-196-XXX PCI Card test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
018-197-XXX PCI Card test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test

Diagnostic Error Code	FRU/Action
018-198-XXX PCI Card test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
018-199-XXX PCI Card test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
018-250-XXX PCI Card Services error	<ol style="list-style-type: none"> 1. PCI card 2. Riser card, if installed 3. System board
020-000-XXX PCI Interface Test Passed	No action
020-0XX-XXX PCI Interface error	<ol style="list-style-type: none"> 1. PCI card 2. Riser card, if installed 3. System board
020-195-XXX PCI Test aborted by user	Information only Re-start the test, if necessary
020-196-XXX PCI test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
020-197-XXX PCI test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
020-198-XXX PCI test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80

Diagnostic Error Code	FRU/Action
020-199-XXX PCI test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
020-262-XXX PCI system error	<ol style="list-style-type: none"> 1. PCI card 2. Riser card, if installed 3. System board
025-000-XXX IDE interface Test Passed	No action
025-00X-XXX 025-01X-XXX IDE interface failure	<ol style="list-style-type: none"> 1. IDE signal cable 2. Check power supply voltages 3. Reseat IDE signal cable 4. IDE device 5. System board
025-027-XXX IDE interface Configuration/Setup error	<ol style="list-style-type: none"> 1. IDE signal cable 2. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Reseat IDE signal cable 4. IDE device 5. System board
025-02X-XXX 025-03X-XXX 025-04X-XXX IDE Interface failure	<ol style="list-style-type: none"> 1. IDE signal cable 2. Check power supply 3. Reseat IDE signal cable 4. IDE device 5. System board
025-195-XXX IDE interface Test aborted by user	Information only Re-start the test, if necessary
025-196-XXX IDE interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
025-197-XXX IDE interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test

Diagnostic Error Code	FRU/Action
025-198-XXX IDE interface test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
025-199-XXX IDE interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
030-000-XXX SCSI interface Test Passed	No action
030-00X-XXX 030-01X-XXX SCSI interface failure	<ol style="list-style-type: none"> 1. SCSI signal cable 2. Check power supply 3. SCSI device 4. SCSI adapter card, if installed 5. System board
030-027-XXX SCSI interface Configuration/Setup error	<ol style="list-style-type: none"> 1. SCSI signal cable 2. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. SCSI device 4. SCSI adapter card, if installed 5. System board
030-03X-XXX 030-04X-XXX SCSI interface error	<ol style="list-style-type: none"> 1. SCSI signal cable 2. Check power supply 3. SCSI device 4. SCSI adapter card, if installed 5. System board
030-195-XXX SCSI interface Test aborted by user	Information only Re-start the test, if necessary
030-196-XXX SCSI interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
030-197-XXX SCSI interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test

Diagnostic Error Code	FRU/Action
030-198-XXX SCSI interface test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
030-199-XXX SCSI interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
035-000-XXX RAID interface Test Passed	No action
035-0XX-XXX RAID interface Failure	<ol style="list-style-type: none"> 1. RAID signal cable 2. RAID device 3. RAID adapter card, if installed 4. System board
035-195-XXX RAID interface Test aborted by user	Information only Re-start the test, if necessary
035-196-XXX RAID interface test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
035-197-XXX RAID interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
035-198-XXX RAID interface test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
035-199-XXX RAID interface test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test

Diagnostic Error Code	FRU/Action
071-000-XXX Audio port Interface Test Passed	No action
071-00X-XXX 071-01X-XXX 071-02X-XXX Audio port error	<ol style="list-style-type: none"> Run Setup Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 System board
071-03X-XXX Audio port failure	<ol style="list-style-type: none"> Speakers Microphone Audio card, if installed System board
071-04X-XXX Audio port failure	<ol style="list-style-type: none"> Run Setup Audio card, if installed System board
071-195-XXX Audio port Test aborted by user	Information only Re-start the test, if necessary
071-196-XXX Audio port test halt, error threshold exceeded	<ol style="list-style-type: none"> Press F3 to review the log file Re-start the test to reset the log file
071-197-XXX Audio port test warning	<ol style="list-style-type: none"> Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 Re-run test Replace the component that is called out in warning statement Replace the component under test
071-198-XXX Audio port test aborted	<ol style="list-style-type: none"> If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 Go to "Undetermined problems" on page 80
071-199-XXX Audio port test failed, cause unknown	<ol style="list-style-type: none"> See "Undetermined problems" on page 80 Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 Replace component under function test
071-25X-XXX Audio port failure	<ol style="list-style-type: none"> Speakers Audio card, if installed System board
080-000-XXX Game Port interface Test Passed	No action

Diagnostic Error Code	FRU/Action
080-XXX-XXX Game Port interface Error	1. Remove the game port device and re-test the system
080-195-XXX Game Port interface Test aborted by user	Information only Re-start the test, if necessary
080-196-XXX Game Port interface test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file
080-197-XXX Game Port interface test warning	1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
080-198-XXX Game Port interface test aborted	1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
080-199-XXX Game Port interface test failed, cause unknown	1. See "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
086-000-XXX Mouse Port interface Test Passed	No action
086-001-XXX Mouse Port interface Presence	1. Mouse 2. System board
086-032-XXX Mouse Port interface Device controller failure	1. Mouse 2. System board
086-035-XXX Mouse Port interface Reset	1. Mouse 2. System board
086-040-XXX Mouse Port interface IRQ failure	1. Run Setup 2. Mouse 3. System board
086-195-XXX Mouse Port interface Test aborted by user	Information only Re-start the test, if necessary
086-196-XXX Mouse Port interface test halt, error threshold exceeded	1. Press F3 to review the log file 2. Re-start the test to reset the log file

Diagnostic Error Code	FRU/Action
086-197-XXX Mouse Port interface test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
086-198-XXX Mouse Port interface test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
086-199-XXX Mouse Port interface test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
089-000-XXX Microprocessor Test Passed	No action
089-XXX-XXX Microprocessor failure	<ol style="list-style-type: none"> 1. Microprocessor(s) 2. System board
089-195-XXX Microprocessor Test aborted by user	Information only Re-start the test, if necessary
089-196-XXX Microprocessor test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
089-197-XXX Microprocessor test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
089-198-XXX Microprocessor test aborted	<ol style="list-style-type: none"> 1. Flash the system. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 2. Go to "Undetermined problems" on page 80

Diagnostic Error Code	FRU/Action
089-199-XXX Microprocessor test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
170-000-XXX Voltage Sensor(s) Test Passed	No action
170-0XX-XXX Voltage Sensor(s) failure	<ol style="list-style-type: none"> 1. Flash system 2. System board
170-195-XXX Voltage Sensor(s) Test aborted by user	Information only Re-start the test, if necessary
170-196-XXX Voltage Sensor(s) test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
170-197-XXX Voltage Sensor(s) test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
170-198-XXX Voltage Sensor(s) test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
170-199-XXX Voltage Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
170-250-XXX 170-251-XXX Voltage Sensor(s) Voltage limit error	<ol style="list-style-type: none"> 1. Power supply 2. System board
170-254-XXX Voltage Sensor(s) Voltage Regulator Module error	<ol style="list-style-type: none"> 1. Voltage Regulator Module (VRM) 2. Microprocessor 3. System board
175-000-XXX Thermal Sensor(s) Test Passed	No action
175-0XX-XXX Thermal Sensor(s) failure	<ol style="list-style-type: none"> 1. Flash system 2. System board

Diagnostic Error Code	FRU/Action
175-195-XXX Thermal Sensor(s) Test aborted by user	Information only Re-start the test, if necessary
175-196-XXX Thermal Sensor(s) test halt, error threshold exceeded	<ol style="list-style-type: none"> 1. Press F3 to review the log file 2. Re-start the test to reset the log file
175-197-XXX Thermal Sensor(s) test warning	<ol style="list-style-type: none"> 1. Make sure the component that is called out is connected and/or enabled. See Chapter 6, "Using the Setup Utility," on page 49 2. Re-run test 3. Replace the component that is called out in warning statement 4. Replace the component under test
175-198-XXX Thermal Sensor(s) test aborted	<ol style="list-style-type: none"> 1. If a component is called out, make sure it is connected and/or enabled 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Go to "Undetermined problems" on page 80
175-199-XXX Thermal Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 80 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268 3. Replace component under function test
175-250-XXX 175-251-XXX Thermal Sensor(s) limit error	<ol style="list-style-type: none"> 1. Check fans 2. Check Power supply voltages 3. Microprocessor 4. System board
185-000-XXX Asset Security Test Passed	No action
185-XXX-XXX Asset Security failure	<ol style="list-style-type: none"> 1. Flash system 2. System board
185-278-XXX Asset Security Chassis Intrusion	<ol style="list-style-type: none"> 1. Assure Asset Security Enabled 2. C2 Cover Switch 3. System board
201-000-XXX System Memory Test Passed	No action
201-XXX-XXX System Memory error	<ol style="list-style-type: none"> 1. Replace the memory module called out by the test 2. System board
202-000-XXX System Cache Test Passed	No action
202-XXX-XXX System Cache error	<ol style="list-style-type: none"> 1. Cache, if removable 2. System board 3. Microprocessor

Diagnostic Error Code	FRU/Action
206-000-XXX Diskette Drive Test Passed	No action
206-XXX-XXX Diskette Drive error	<ol style="list-style-type: none"> 1. Diskette Drive Cable 2. Check power supply voltages 3. Diskette drive 4. System board
215-000-XXX CD-ROM Drive Test Passed	No action
215-XXX-XXX CD-ROM Drive error	<ol style="list-style-type: none"> 1. CD-ROM Drive Cable 2. Check power supply voltages 3. CD-ROM drive 4. System board
217-000-XXX Hard Disk Drive Test Passed	No action
217-25X-XXX 217-26X-XXX Hard Disk Drive (IDE) error	<ol style="list-style-type: none"> 1. Hard Disk Drive Cable 2. Check power supply voltages 3. Reseat the hard disk drive cable 4. Hard Disk drive (IDE) 5. System board
217-28X-XXX 217-29X-XXX Hard Disk Drive (SCSI) error	<ol style="list-style-type: none"> 1. Hard Disk Drive Cable 2. Check power supply voltages 3. Reseat the hard disk drive cable 4. Hard Disk drive (SCSI) 5. SCSI adapter card 6. System board
220-000-XXX Hi-Capacity Cartridge Drive Test Passed	No action
220-XXX-XXX Hi-Capacity Cartridge Drive error	1. Remove the Hi-Capacity Cartridge Drive and re-test the system
301-XXX-XXX Keyboard error	<ol style="list-style-type: none"> 1. Keyboard 2. Check and test mouse 3. System board
301-000-XXX Keyboard Test Passed	No action
302-000-XXX Mouse Test Passed	No action
302-XXX-XXX Mouse error	<ol style="list-style-type: none"> 1. Mouse 2. Check and test Keyboard 3. System board
303-000-XXX Joystick Test Passed	No action
303-XXX-XXX Joystick error	Remove the Joystick and re-test the system
305-000-XXX Monitor DDC Test Passed	No action

Diagnostic Error Code	FRU/Action
305-250-XXX Monitor DDC self test failure	<ol style="list-style-type: none"> 1. Run Setup to enable DDC 2. Cable 3. Monitor 4. Video card 5. System board
415-000-XXX Modem Test Passed	No action
415-XXX-XXX Modem error	Remove the Modem and re-test the system

Beep symptoms

Beep symptoms are tones or a series of tones separated by pauses (intervals without sound) during POST.

The following tables describes beep symptoms.

Beep Symptom	FRU/Action
2 short beeps CMOS setting error	Perform the following actions in order. <ol style="list-style-type: none">1. Start the Setup Utility program and press F10 to Save and exit. See Chapter 6, "Using the Setup Utility," on page 49.2. Start the Setup Utility program and press F7 to load defaults and then press F10 to Save and exit.3. Perform a Boot block recovery. See "Recovering from a POST/BIOS update failure" on page 268.
1 long and 2 short beeps Monitor or video adapter card error	Perform the following actions in order. <ol style="list-style-type: none">1. Make sure the monitor is properly connected to the computer.2. Replace the video adapter card (if present).3. Replace the system board.
1 long and 3 short beeps Keyboard error	Perform the following actions in order. <ol style="list-style-type: none">1. Make sure the keyboard is properly connected to the keyboard connector.2. Replace the keyboard.3. Replace the system board.
1 long and 9 short beeps BIOS ROM error	Perform the following actions in order. <ol style="list-style-type: none">1. Start the Setup Utility program and press F7 to load defaults and then press F10 to Save and exit. See Chapter 6, "Using the Setup Utility," on page 49.2. Perform a Boot block recovery. See "Recovering from a POST/BIOS update failure" on page 268.3. Replace the system board.
Continuos long beeps DRAM memory error	Perform the following actions in order. <ol style="list-style-type: none">1. Make sure the memory module(s) are properly seated in the connector(s).2. Replace the memory module(s).3. Replace the system board.

POST error codes

Each time you power-on the system, it performs a series of tests that check the operation of the system and some options. This series of tests is called the *Power-On Self-Test*, or *POST*. POST does the following operations.

- Checks some basic system-board operations
- Checks the memory operation
- Starts the video operation
- Verifies that the boot drive is working

If the POST detects a problem, an error message appears on the screen. A single problem can cause several error messages to appear. When you correct the cause of the first error message, the other error messages probably will not appear on the screen the next time you turn on the system.

POST Error Message	Description/Action
CMOS battery failed	The CMOS battery is no longer functional. Replace the battery.
CMOS checksum error - defaults loaded	Checksum of CMOS is incorrect. The computer loads the default configuration settings. This error might indicate that CMOS has become corrupt due to a weak CMOS battery.
CPU at nnnn	nnnn is the running speed of the microprocessor.
Press Esc to skip memory test	Pressing Esc skips the full memory test
HARD DISK INSTALL FAILURE	Cannot find or initialize the hard disk drive controller or the drive. Make sure the hard disk drive is correctly installed. If no hard disk drives are installed, make sure the hard disk drive selection in Setup is set to NONE.
Keyboard error or no keyboard present	Cannot initialize the keyboard. Make sure the keyboard is properly connected to the computer and that no keys are held pressed during POST. To purposely configure the computer without a keyboard, set the error halt condition in Setup to HALT ON ALL, BUT KEYBOARD. The BIOS then ignores the missing keyboard during POST.
Memory Test:	This message displays during a full memory test, counting down the memory areas being tested.
Memory test fail	If POST detects an error during memory testing, additional information appears. This information gives specifics about the type and location of the memory error.

POST Error Message	Description/Action
Press TAB to show POST screen	Pressing the TAB key permits the user to toggle between the default POST display screen and a custom POST display screen.
Error: Non-System disk or disk error Replace and press any key when ready	<p>The BIOS was unable to find a suitable boot device.</p> <p>Make sure the boot drive is properly connected to the computer.</p> <p>Make sure you have bootable media.</p>

Miscellaneous error messages

Message/Symptom	FRU/Action
Changing display colors	Display/Monitor
Computer will <i>not</i> power-off. See "Power Supply Problems" on page 53.	<ol style="list-style-type: none"> Power Switch System Board Riser card, if installed
Computer will <i>not</i> RPL from server	<ol style="list-style-type: none"> Ensure that network is in startup sequence as first device or first device after diskette Ensure that network adapter is enabled for RPL Network adapter (Advise network administrator of new MAC address)
Computer will <i>not</i> perform a Wake On LAN [®] (if applicable)	<ol style="list-style-type: none"> Check power supply and signal cable connections to network adapter Ensure that the operating system settings are set to enable Wake on LAN[®] Ensure Wake On LAN feature is enabled in Setup/Configuration (see "Starting the Setup Utility program" on page 49) Ensure network administrator is using correct MAC address Ensure no interrupt or I/O address conflicts Network adapter (advise network administrator of new MAC address)
Dead computer. See "Power Supply Problems" on page 53.	<ol style="list-style-type: none"> Power Supply System Board
Diskette drive in-use light remains on or does not light when drive is active.	<ol style="list-style-type: none"> Diskette Drive System Board Diskette Drive Cable
Flashing cursor with an otherwise blank display.	<ol style="list-style-type: none"> System Board Primary Hard Disk Drive Hard Disk Drive Cable
Incorrect memory size during POST	<ol style="list-style-type: none"> Run the Memory tests Memory Module System Board
"Insert a Diskette" icon appears with a known-good diagnostics diskette in the first 3.5-inch diskette drive.	<ol style="list-style-type: none"> System Board Diskette Drive Cable Network Adapter
Intensity or color varies from left to right of characters and color bars	<ol style="list-style-type: none"> Display Video adapter (if present) System Board
No power or fan not running	<ol style="list-style-type: none"> See "Power Supply Problems" on page 53.

Message/Symptom	FRU/Action
Non-system disk or disk error-type message with a known-good diagnostic diskette.	<ol style="list-style-type: none"> 1. Diskette Drive 2. System Board 3. Diskette Drive Cable
Other display symptoms not listed above (including blank or illegible display)	<ol style="list-style-type: none"> 1. Display 2. System Board
Power-on indicator or hard disk drive in-use light not on, but computer works correctly	<ol style="list-style-type: none"> 1. Power switch/LED assembly 2. System Board
Printer problems	<ol style="list-style-type: none"> 1. Printer 2. System Board
Program loads from the hard disk with a known-good diagnostics diskette in the first 3.5-inch diskette drive	<ol style="list-style-type: none"> 1. Run Setup and check Startup sequence. 2. Diskette Drive 3. Diskette Drive Cable 4. System Board 5. Power Supply
RPL computer cannot access programs from its own hard disk.	<ol style="list-style-type: none"> 1. If network administrator is using LCCM Hybrid RPL, check startup sequence: <ol style="list-style-type: none"> a. First device - network b. Second device - hard disk 2. Hard disk drive
RPL computer does not RPL from server	<ol style="list-style-type: none"> 1. Check startup sequence 2. Check the network adapter LED status
Serial or parallel port device failure (system board port)	<ol style="list-style-type: none"> 1. External Device Self-Test OK? 2. External Device 3. Cable 4. System Board
Serial or parallel port device failure (adapter port)	<ol style="list-style-type: none"> 1. External Device Self-Test OK? 2. External Device 3. Cable 4. Alternate Adapter 5. System Board
Some or all keys on the keyboard do not work	<ol style="list-style-type: none"> 1. Keyboard 2. Keyboard Cable 3. System Board

Undetermined problems

If this computer has a parallel ATA hard disk drive, make sure that the hard disk drive is jumpered as a master and the optical drive is jumpered as a slave.

1. Power-off the computer.
2. Remove or disconnect the following components (if installed) one at a time.
 - a. External devices (modem, printer, or mouse)
 - b. Any adapters

- c. Memory modules
 - d. Extended video memory
 - e. External Cache
 - f. External Cache RAM
 - g. Hard disk drive
 - h. Diskette drive
3. Power-on the computer to re-test the system.
 4. Repeat steps 1 through 3 until you find the failing device or adapter.

If all devices and adapters have been removed, and the problem continues, replace the system board.

Chapter 8. Replacing FRUs (Types 6019, 6064, 6066, 6067, 6072, 6073, 6077, 6078, 6087, 6088, 9181, and 9196)

Important

Before you replace any FRU, read Chapter 2, "Safety information," on page 3. These precautions and guidelines will help you work safely.

FRU replacements are to be done by trained service technicians only.

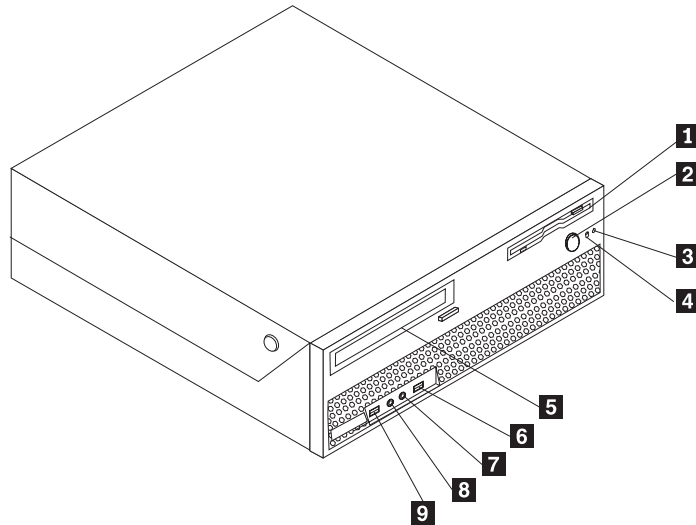
This chapter does not contain a remove and replace procedure for all FRUs. Only the major FRUs are documented.

Locations

This section provides illustrations to help locate the various connectors, controls, and components of the computer.

Front connectors

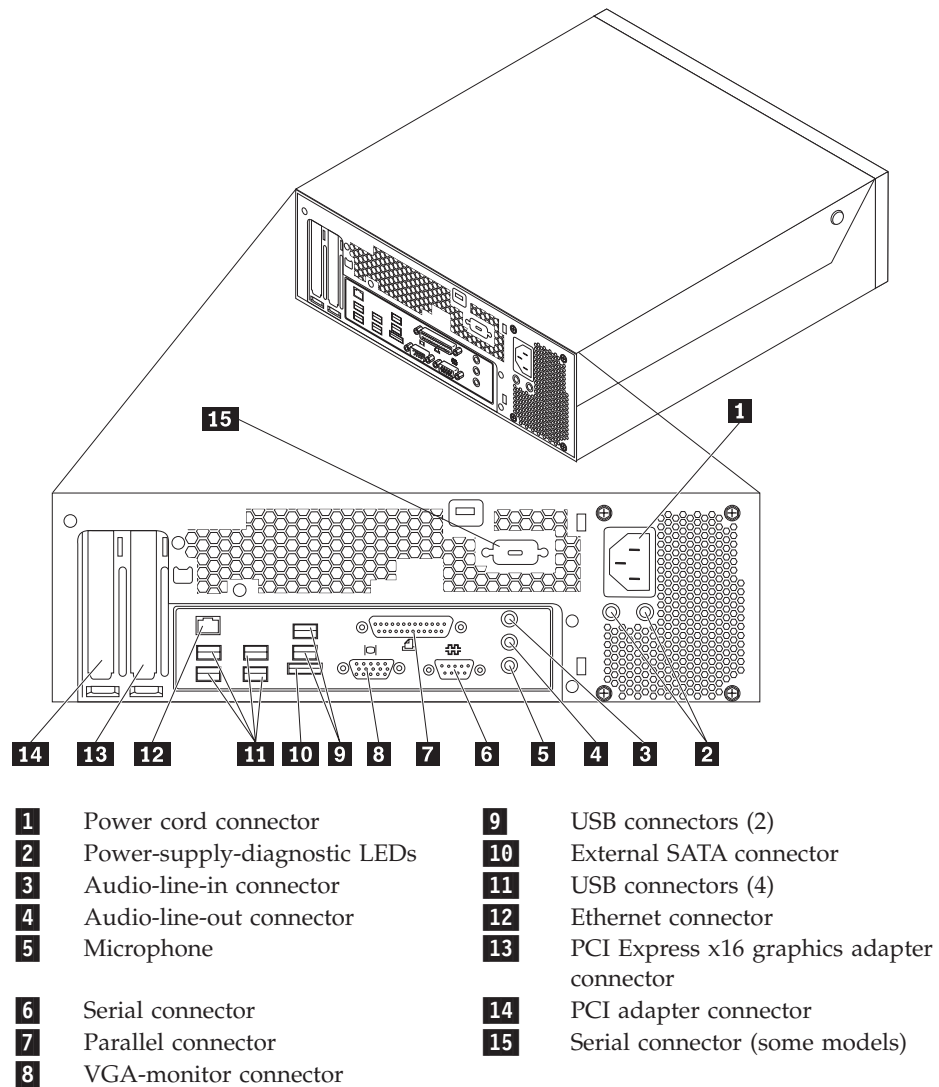
Note: Not all computer models will have the following controls and connections.



- | | | | |
|----------|------------------------------------|----------|----------------------|
| 1 | Diskette drive (some models) | 6 | USB connector |
| 2 | Power button | 7 | Microphone connector |
| 3 | Hard-disk-drive activity indicator | 8 | Headphone connector |
| 4 | Power-on indicator | 9 | USB connector |
| 5 | Optical drive (some models) | | |

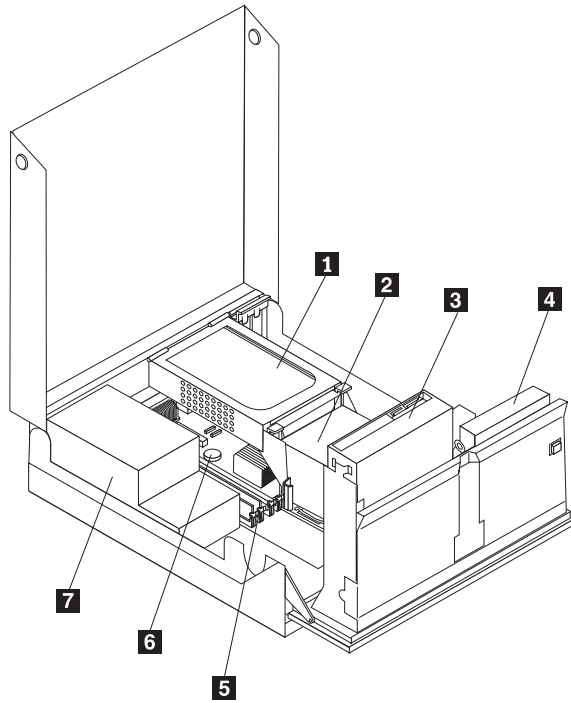
Rear connectors

This illustration shows the location of connectors on the rear of your computer. Some connectors on the rear of your computer are color-coded to help you determine where to connect the cables on your computer.



Computer components

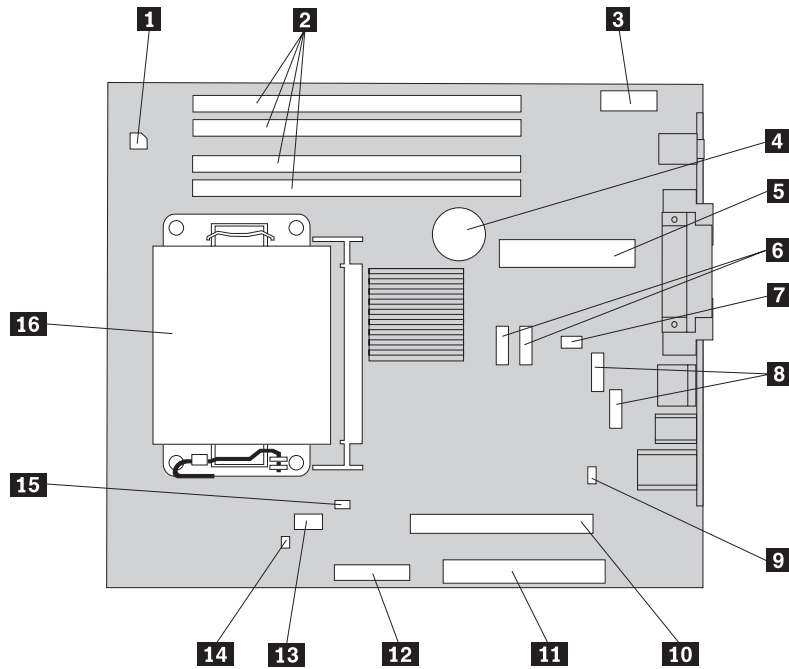
This illustration shows the location of the various components in your computer.



- | | | | |
|----------|---|----------|-----------------------|
| 1 | Hard disk drive | 5 | Memory connectors (4) |
| 2 | Microprocessor and heat sink | 6 | Battery |
| 3 | Optical drive (such as a CD or DVD drive) | 7 | Power-supply assembly |
| 4 | Diskette drive | | |

System board connectors

This illustration shows the location of parts on the system board.



- | | | | |
|----------|-------------------------|-----------|---------------------------------------|
| 1 | 4 - Pin power connector | 9 | Clear CMOS/Recovery jumper |
| 2 | Memory connectors | 10 | PCI-e X16 connector |
| 3 | Front audio connector | 11 | PCI connector |
| 4 | Battery | 12 | Diskette drive connector |
| 5 | 24-Pin power connector | 13 | Microprocessor fan |
| 6 | SATA connector | 14 | Cover presence switch (Tamper switch) |
| 7 | System fan | 15 | Temperature sensor connector |
| 8 | USB connector (front) | 16 | Microprocessor and heat sink |

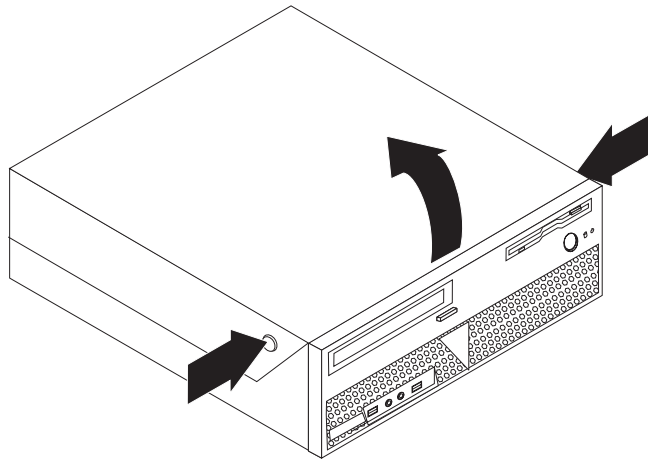
Opening the cover

Important



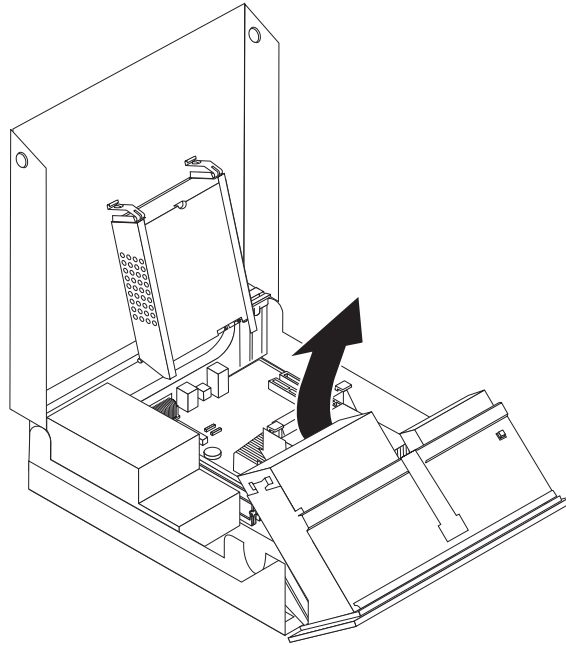
Turn off your computer and wait 3 to 5 minutes to let the computer cool before opening the computer cover.

1. Remove any media (diskettes, CDs, or tapes) from the drives, shut down your operating system, and turn off all attached devices and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect the cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. See “Front connectors” on page 84 and “Rear connectors” on page 85.
4. Remove any locking devices, such as a cable lock that secures the computer cover.
5. Press the buttons on the sides of the computer and pivot the cover upward to open the computer.



Accessing system board components and drives

1. Open the computer cover. See “Opening the cover” on page 88.
2. On some models, you might need to pivot the drive-bay assembly upward and pivot the hard disk drive upward to access the internal components.



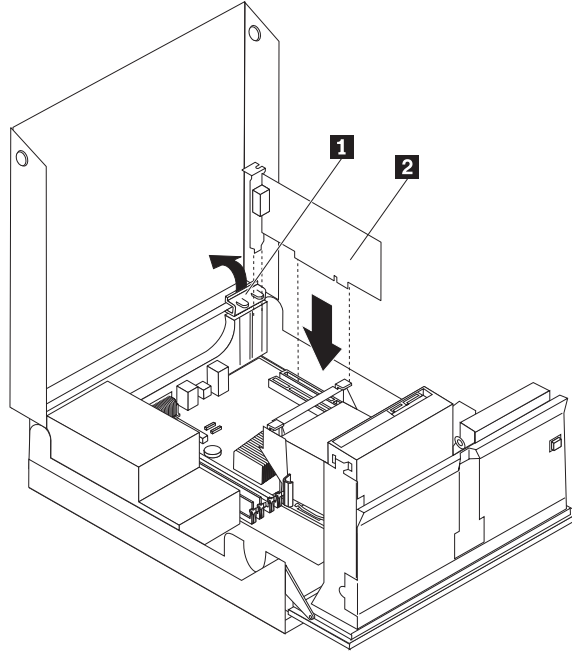
Note: Make sure you note the location of any cables that you disconnect from the drives or the system board.

Attention: You must return the hard disk drive assembly to the latched position before you close the cover to prevent damage to the hard disk drive assembly.

Replacing an adapter card

This section provides instructions on how to replace an adapter card.

1. Open the computer cover. See “Opening the cover” on page 88.
2. Rotate the adapter card retainer **1** to the open position.

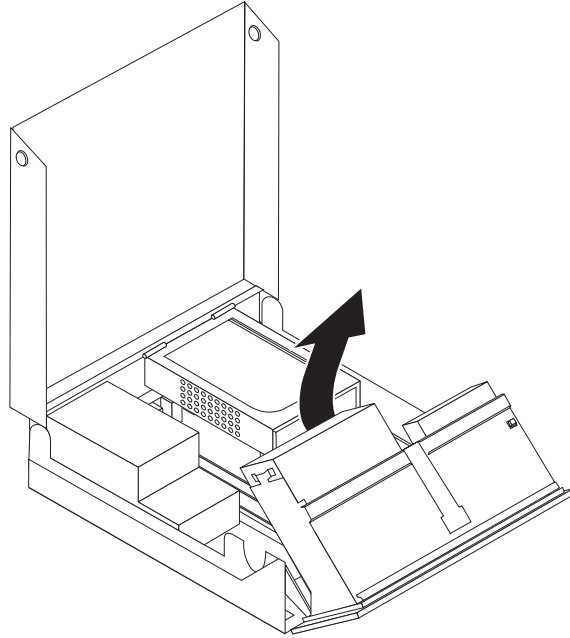


3. Remove the adapter card **2**.
4. Remove the new adapter from its static-protective package.
5. Install the new adapter card in the adapter card connector.
6. Ensure the adapter is fully seated into the adapter connector.
7. Close the adapter card retainer.
8. Go to “Completing the FRU replacement” on page 112.

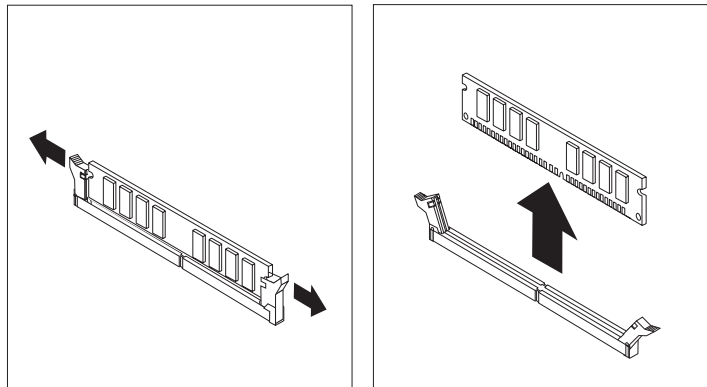
Replacing a memory module

This section provides instructions on how to replace a memory module.

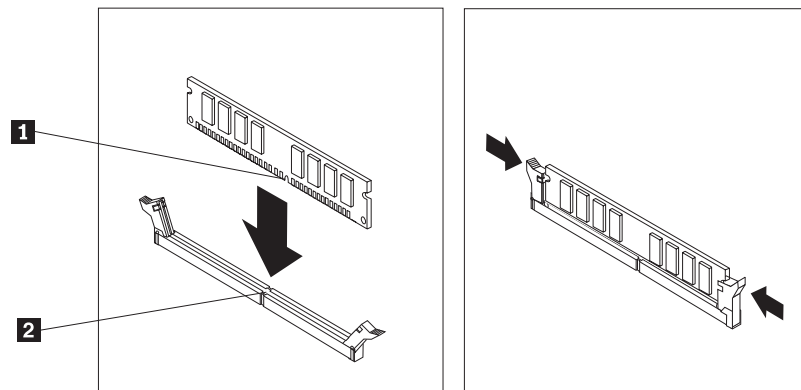
1. Open the computer cover. See “Opening the cover” on page 88.
2. Pivot the drive-bay assembly upward to gain access to the system board.



3. Locate the memory connectors. See “System board connectors” on page 87.
4. Remove the memory module being replaced by opening the retaining clips as shown.



5. Position the replacement memory module over the memory connector. Make sure the notch **1** on the memory module aligns correctly with the connector key **2** on the system board. Push the memory module straight down into the connector until the retaining clips close.



6. Go to “Completing the FRU replacement” on page 112.

Replacing the battery

This procedure describes how to remove and replace the battery.

If the CMOS battery fails, the date, time, and configuration information (including passwords) are lost. An error message is displayed when you turn on the computer.

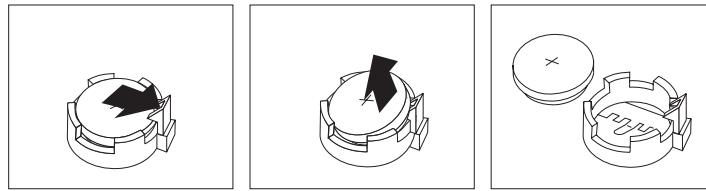
Important

Refer to “Safety notices (multi-lingual translations)” on page 7 for information about replacing and disposing of the battery.

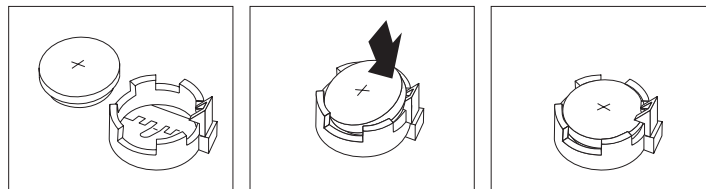
CAUTION:

When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer.

1. Turn off the computer and disconnect the power cord from the electrical outlet and from the computer.
2. Open the computer cover. See “Opening the cover” on page 88.
3. Access the system board. See “Accessing system board components and drives” on page 89.
4. Locate the battery. See “System board connectors” on page 87.
5. Remove the old battery.



6. Install the new battery.



7. Close the computer cover, and connect the cables. See “Completing the FRU replacement” on page 112.

Note: When the computer is turned on for the first time after battery replacement, an error message might be displayed. This is normal after replacing the battery.

8. Use the Setup Utility program to set the date and time and any passwords. See “Starting the Setup Utility program” on page 49.
9. Go to “Completing the FRU replacement” on page 112.

Replacing the power supply

Attention

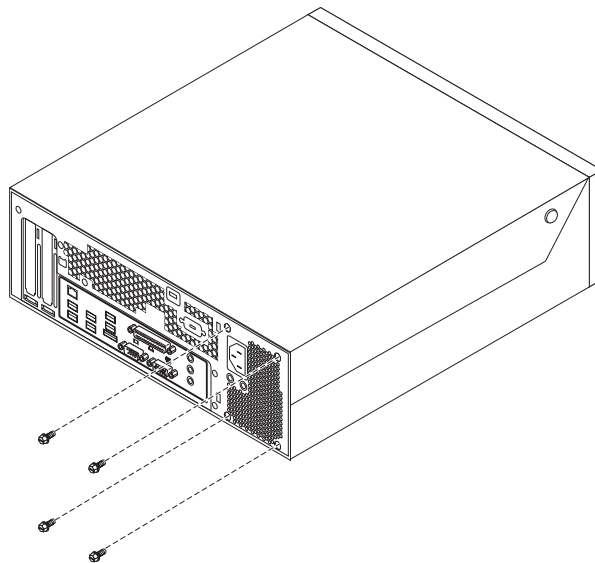
Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no servicable parts inside these components.

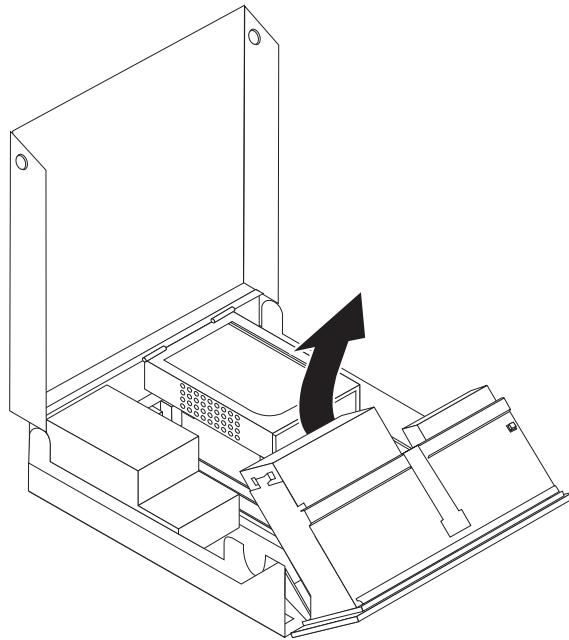
This procedure describes how to remove and replace the power supply.

1. Remove any media (diskettes, CDs, or tapes) from the drives, shut down your operating system, and turn off all attached devices and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect the cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer. See “Front connectors” on page 84 and “Rear connectors” on page 85.
4. Remove the four screws at the rear of the chassis that secure the power supply.

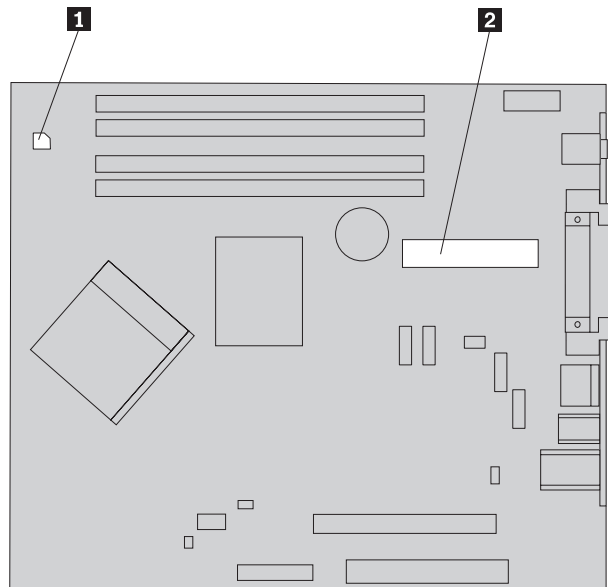


5. Open the computer cover. See “Opening the cover” on page 88.

- Pivot the drive bay assembly upward to gain access to the system board.

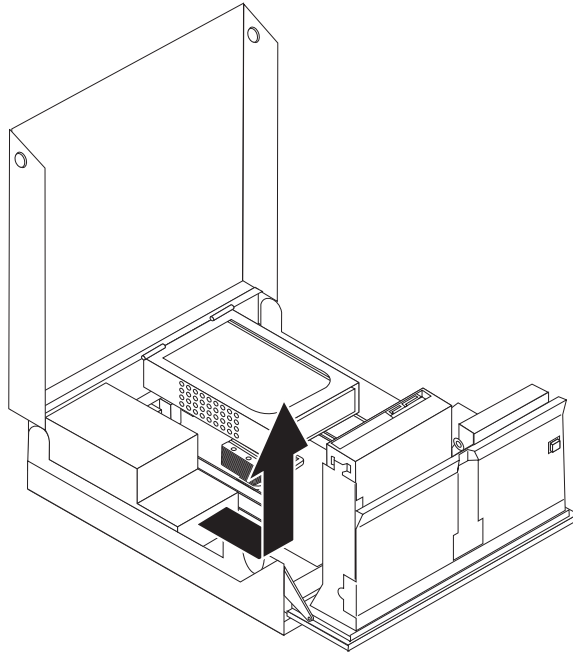


- Locate the power-supply assembly. See “Computer components” on page 86.
- Disconnect the power supply cables **1** and **2** from the system-board connectors and from all drives.



- Remove the power-supply cables from the cable clips and ties.

10. Slide the power-supply assembly toward the front of the chassis and remove it from the computer.



11. Install the new power-supply assembly into the chassis so that the screw holes in the power-supply assembly align with those in the chassis.

Note: Use only the screws provided by Lenovo.

12. Install and tighten the four screws at the rear of the chassis to secure the power-supply assembly.
13. Check the position of the voltage-selection switch on the rear of the computer. Use a ballpoint pen to slide the switch, if necessary.

Note: Some computers do not have a voltage switch. These computers automatically control the voltage.

- If the voltage supply range is 100–127 V ac, set the switch to 115 V.
 - If the voltage supply range is 200–240 V ac, set the switch to 230 V.
14. Reconnect all the power supply cables to the drives and the system board.
 15. Go to “Completing the FRU replacement” on page 112.

Replacing the system board

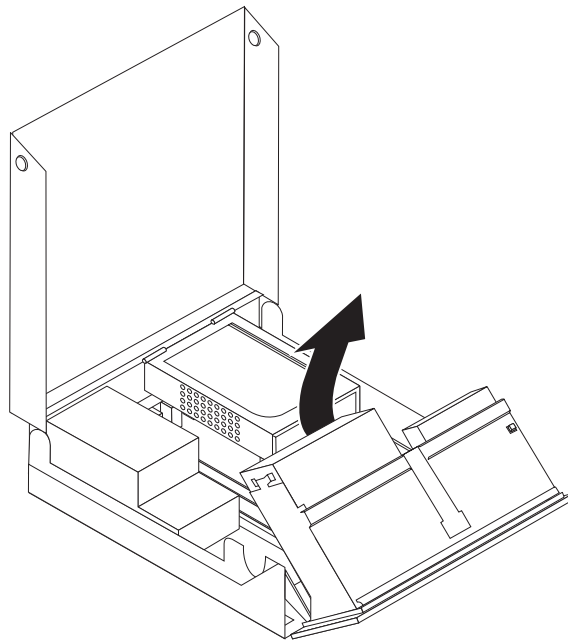
Important

The heat sink and microprocessor might be very hot. Make sure these components are cool enough to safely handle before continuing this procedure.

Note: When replacing the system board you must also order a new retention module for the new system board or remove the retention module from the failing system board and install it on the new system board.

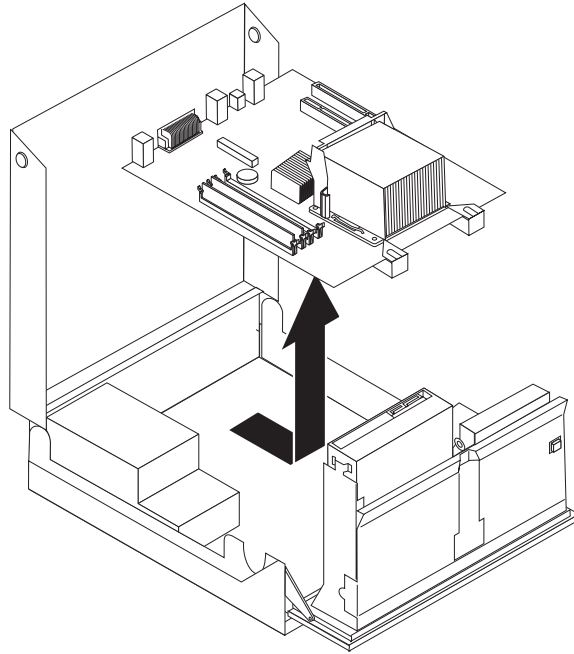
This procedure describes how to remove and replace the system board.

1. Open the computer cover. See “Opening the cover” on page 88.
2. Pivot the drive-bay assembly upward to gain access to the heat sink.



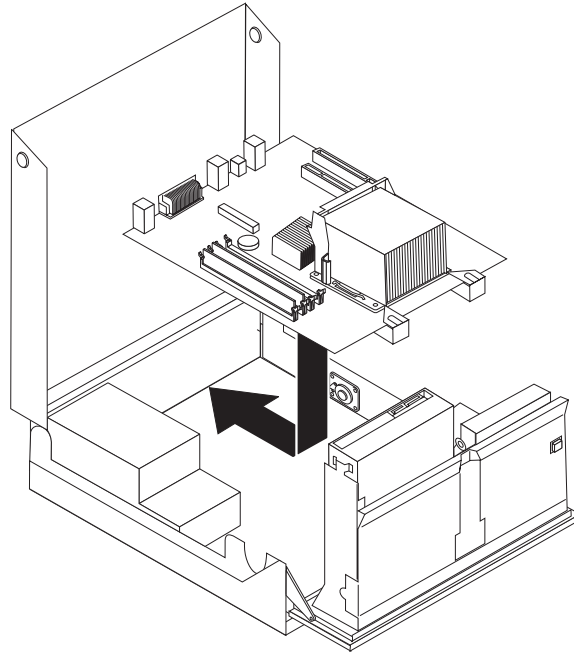
3. Remove the hard disk drive and disconnect it from the system board. See “Replacing the hard disk drive” on page 104.
4. Remove any PCI adapters installed. See “Replacing an adapter card” on page 90.
5. Disconnect all cables connected to the system board. See “System board connectors” on page 87.
6. Pull up on the blue strap at the front of the system board to release it from the chassis.

7. Slide the system board toward the front until it can be lifted out of the chassis.



8. Remove the heat sink and microprocessor from the failing system board and install them on the new system board. See "Replacing the microprocessor" on page 100.
9. Remove the memory modules from the failing system board and install them into the same position on the new system board. See "Replacing a memory module" on page 91.
10. Install a new retention module or move the retention module from the failing system board to the new system board.

11. Position the new system board so that it is aligned with the mounting studs then slide it to the rear of the chassis until it is fully seated.



12. Reinstall any PCI adapters that were removed. See “Replacing an adapter card” on page 90.
13. Reconnect all cables that were disconnected from the system board. See “System board connectors” on page 117.
14. Go to “Completing the FRU replacement” on page 112.

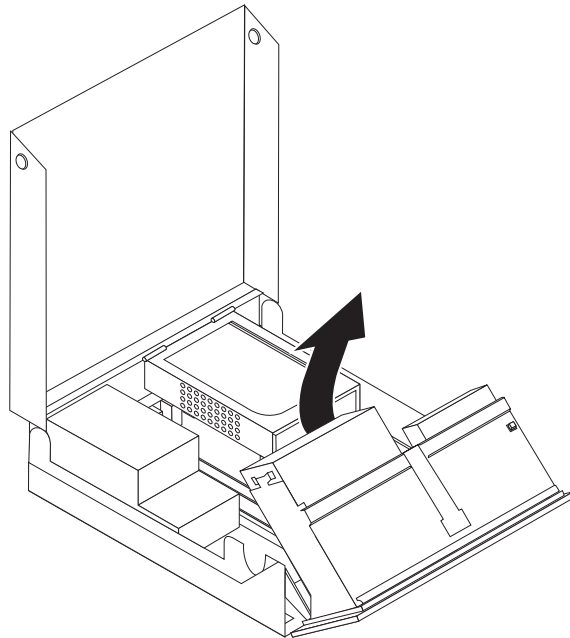
Replacing the microprocessor

Important

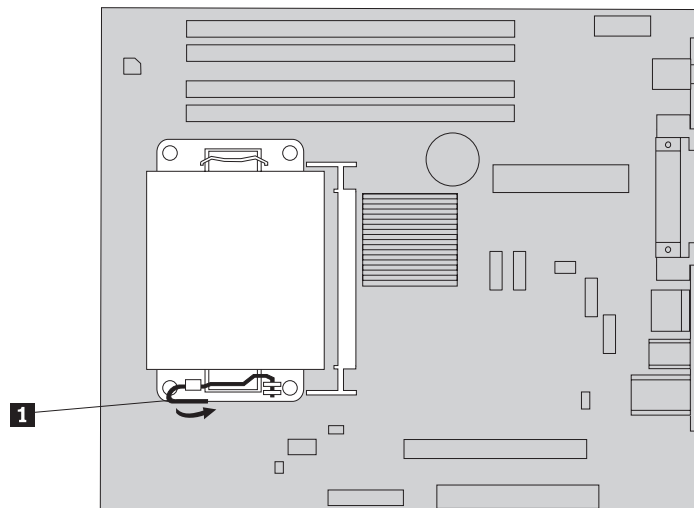
Leave your computer turned off for at least one hour before removing the microprocessor to allow the thermal interface between the microprocessor and the heat sink time to cool down.

This procedure describes how to remove and replace the microprocessor.

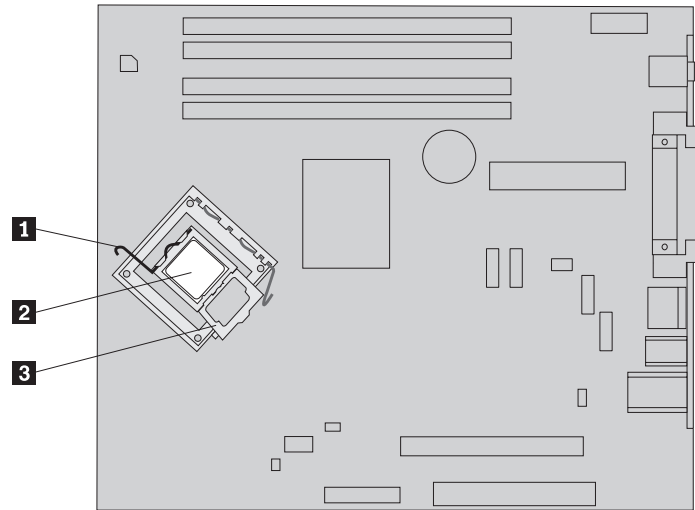
1. Open the computer cover. See “Opening the cover” on page 88.
2. Pivot the drive-bay assembly upward to gain access to the heat sink.



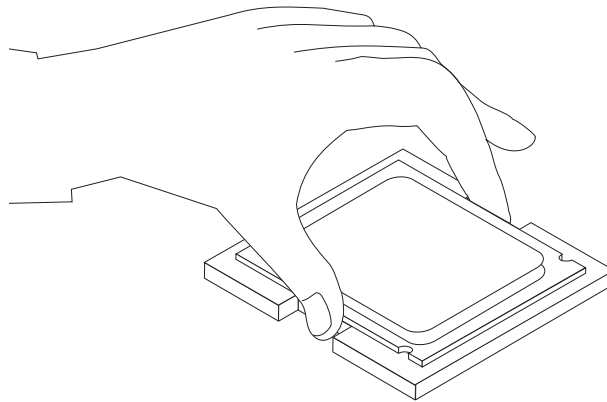
3. Remove the heat sink from the system board by pivoting lever **1** until is in the vertical position.



- To remove the microprocessor from the failing system board, release the lever **1** securing the microprocessor **2** then pivot the microprocessor retainer **3** until it is fully open.



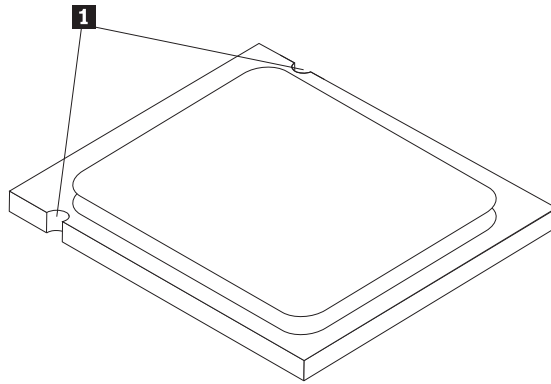
- Remove the microprocessor from the system board socket by lifting it out of the socket.



Important

Do not touch the gold contacts on the bottom of the microprocessor. If you must touch the microprocessor, touch only the sides.

- a. Take notice of the orientation of the notches **1** on the microprocessor. This is important when installing the microprocessor on the system board.

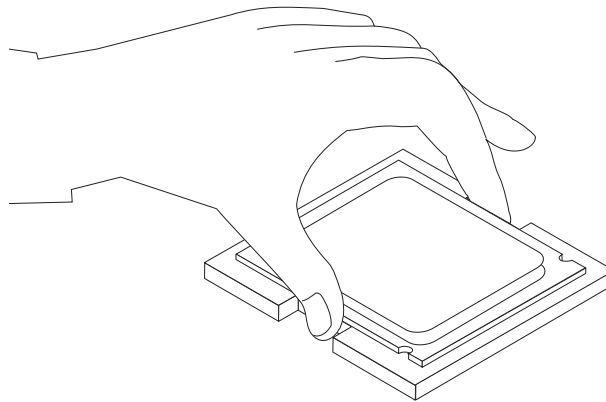


- b. Do not drop anything on the socket while it is open. Keep all contacts as clean as possible.
6. Make sure that the microprocessor retainer is fully open.
 7. Position the microprocessor so that the notches on the microprocessor are aligned with the tabs in the microprocessor socket.

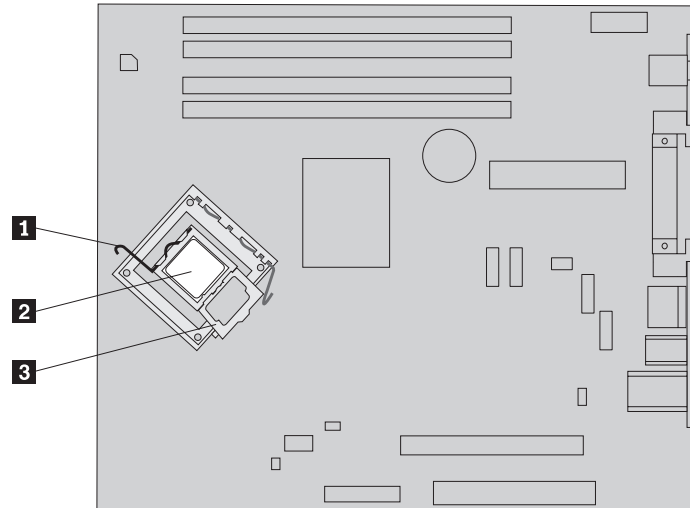
Important

To avoid damaging the microprocessor contacts, do not tilt the microprocessor when installing it into the socket.

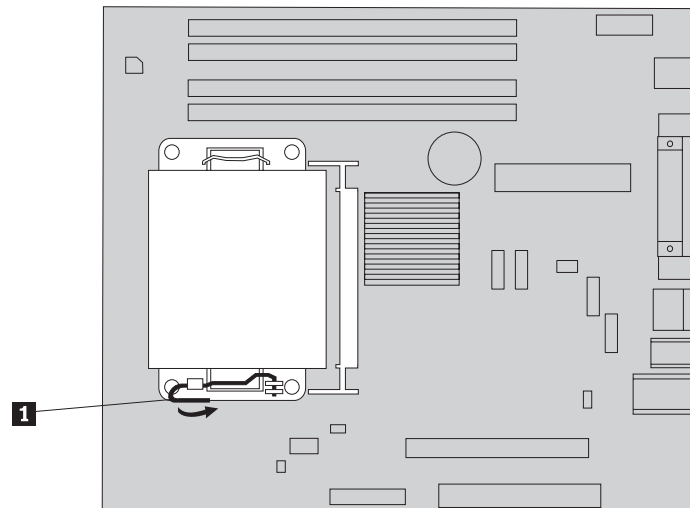
8. Lower the microprocessor straight down into the system board socket.



9. Lower the microprocessor retainer **3** and then lower the lever **1** to secure the retainer. Make sure the lever is securely locked into position.



10. Place the heat sink into position and lower the lever to secure the heat sink.



11. Go to “Completing the FRU replacement” on page 112.

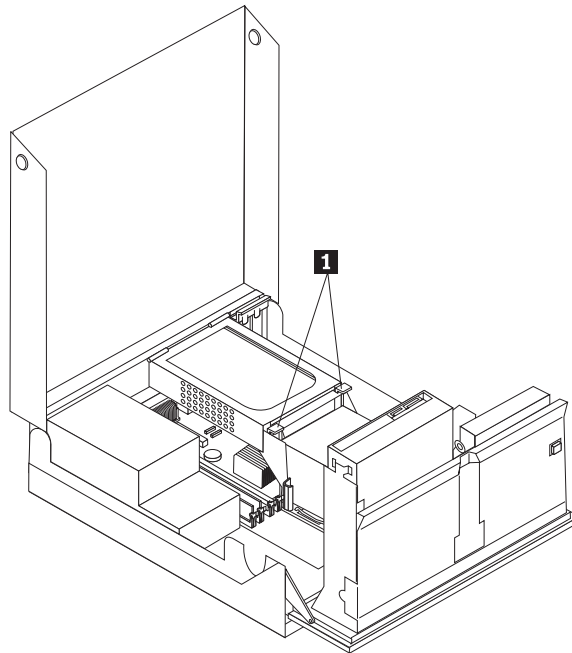
Replacing the hard disk drive

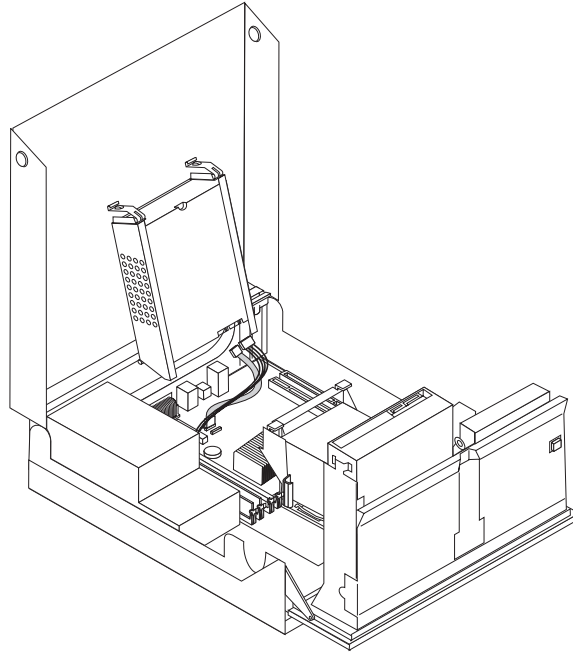
Important

When a new hard disk drive is installed, a set of *Product Recovery* discs might be required. The set of *Product Recovery* discs enable the contents of the hard disk to be restored to the same state as when the computer was originally shipped from the factory. For more information on recovering factory-installed software, refer to "Recovering Software" in the *User Guide*.

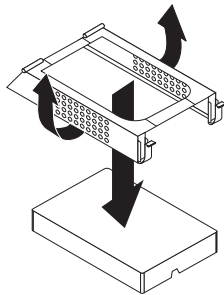
This procedure describes how to remove and replace the hard disk drive.

1. Open the computer cover. See "Opening the cover" on page 88.
2. Locate the hard disk drive.
3. Unlatch the hard disk drive front retainers **1** and rotate the hard disk drive upwards.





4. Disconnect the signal and power cables from the rear of the hard disk drive and remove the hard disk drive from the computer.
5. Remove the failing hard disk drive from the bracket by flexing the bracket as shown.



6. To install the new drive, flex the bracket and align the pins on the bracket with the recesses in the hard disk drive bracket.

Important

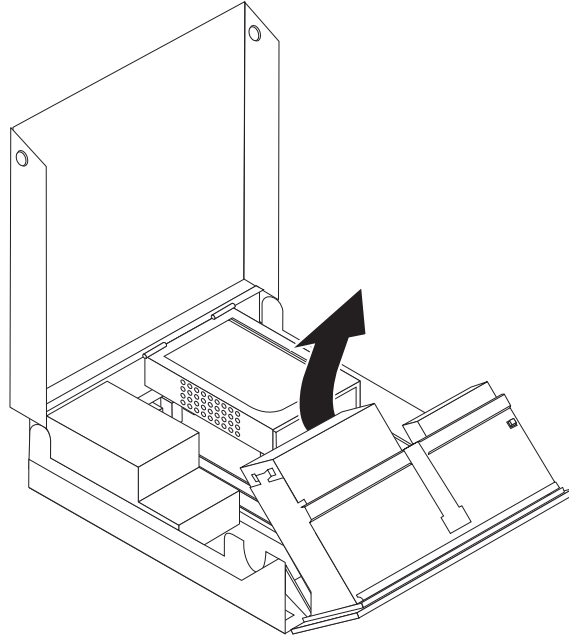
Do not touch the circuit board on the bottom of the hard disk drive.

7. Connect the signal and power cables to the rear of the new hard disk drive.
8. Position the hard disk drive and bracket into the rear pivots and rotate downward until the hard disk drive bracket latches into place.
9. Go to “Completing the FRU replacement” on page 112.

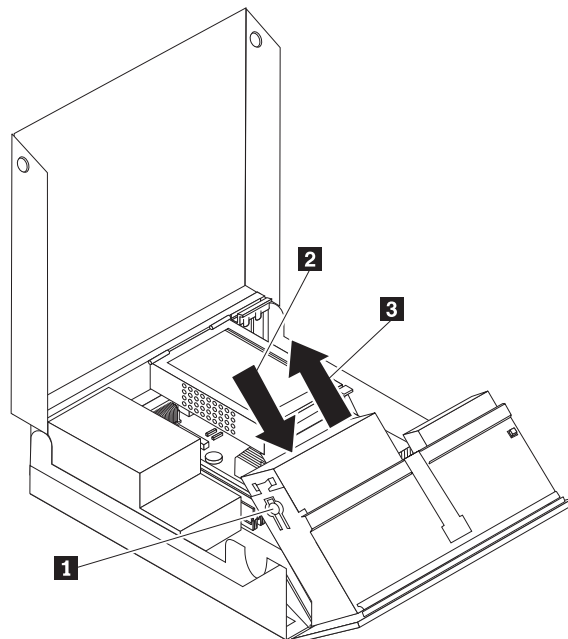
Replacing an optical drive

This procedure describes how to remove and replace the optical drive.

1. Open the computer cover. See “Opening the cover” on page 88.
2. Pivot the drive-bay-assembly upward to gain access to the optical drive.



3. Disconnect the signal and power cables from the rear of the optical drive.
4. Press the optical-drive lock **1** and slide the optical drive up **3** out the drive bay assembly.

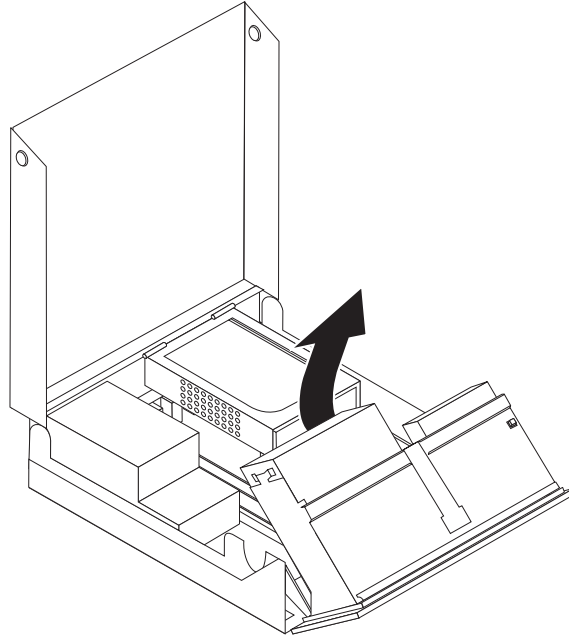


5. Remove the lock bracket from the drive being replaced and install it on the new drive.
6. Install the new optical drive into the bay and slide it to the locked position.
7. Connect the signal and power cables to the rear of the optical drive.
8. Go to “Completing the FRU replacement” on page 112.

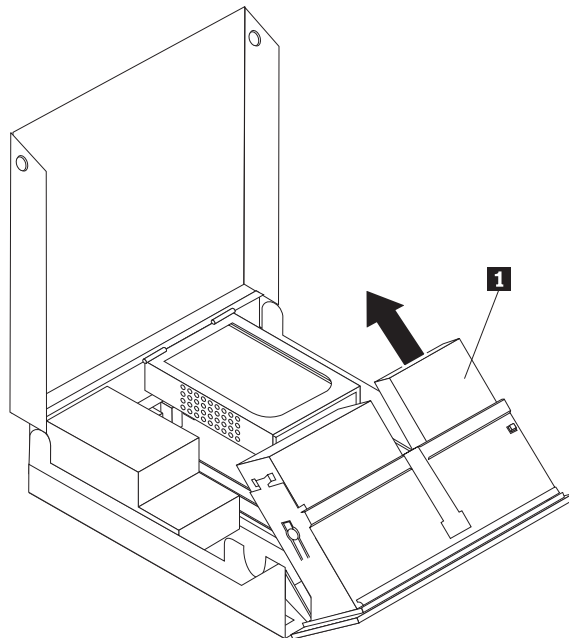
Replacing the diskette drive

This procedure describes how to remove and replace the diskette drive.

1. Open the computer cover. See "Opening the cover" on page 88.
2. Pivot the drive-bay-assembly upward to gain access to the diskette drive.



3. Press the diskette-drive lock **1** at the side of the drive.
4. Slide the diskette drive up and out of the drive bay assembly.

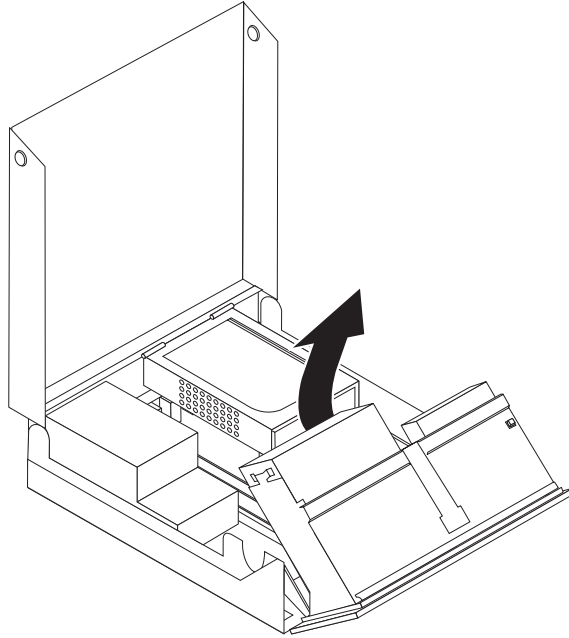


5. Disconnect the flat cable from the rear of the failing diskette drive.
6. Connect the flat cable to the new diskette drive.
7. Remove the lock bracket from the drive being replaced and install it on the new drive.
8. Install the new diskette drive into the bay and slide it to the locked position.
9. Go to “Completing the FRU replacement” on page 112.

Replacing the fan assembly

This procedure describes how to remove and replace the fan.

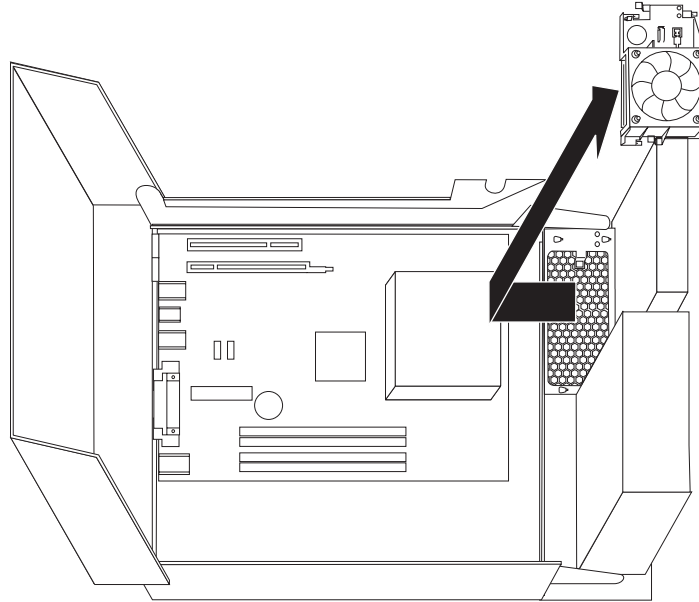
1. Open the computer cover. See “Opening the cover” on page 88.
2. Pivot the drive-bay assembly upward to gain access to the fan assembly.



3. Disconnect the fan cable, power switch/LED cable, and temperature sensor cable from the system board. See “System board connectors” on page 87.

Note: Make sure you note the location of the fan cables when you disconnect the cables from the system board.

4. Remove the plastic fan mount behind the bezel by releasing the retaining tabs with your fingers and sliding the fan mount out of the chassis.



5. The fan assembly is mounted with four rubber mounts that protrude through the plastic mounting bracket and the fan housing. Remove the fan assembly by pulling the rubber mounts back through the holes in the fan housing.
6. Pull the rubber mounts loose from the mounting bracket. New rubber mounts might come with the new fan.
7. Install the rubber mounts back into the mounting bracket.
8. Install the new fan assembly by aligning the rubber mounts in the mounting bracket with the holes in the fan housing and pulling the rubber mounts through the holes with your fingers.
9. Reinstall the fan mounting bracket into the chassis.
10. Reconnect the fan cable, power switch/LED cable, and temperature sensor cable to the system board. See "System board connectors" on page 87.
11. Go to "Completing the FRU replacement" on page 112.

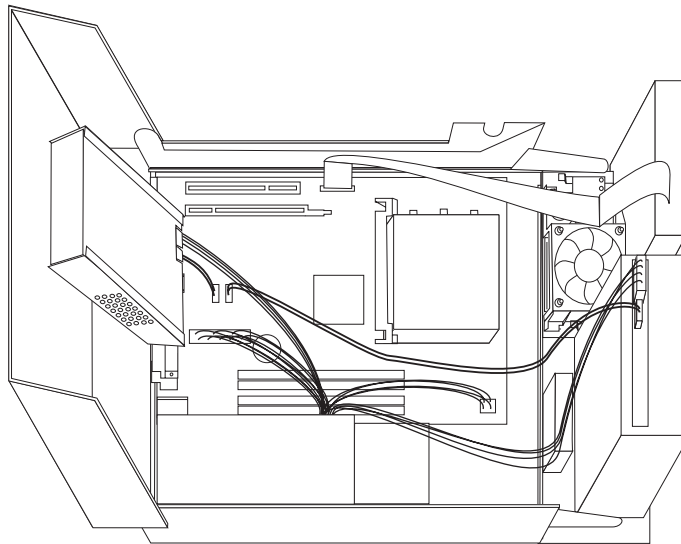
Completing the FRU replacement

After replacing the parts, you need to close the cover and reconnect cables, including telephone lines and power cords. Also, depending on the part that was replaced, you might need to confirm the updated information in the Setup Utility program. Refer to Chapter 6, “Using the Setup Utility,” on page 49.

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer. See “Computer components” on page 86 for the location of various components.
2. Make sure that the cables are routed correctly before lowering the drive-bay assembly.

Important

Correctly route all power supply cables to avoid interference with the drive bay assembly. Keep cables clear of the hinges and sides of the computer chassis.



3. Lower the drive-bay assembly and position the drive locks to the locked position. Otherwise, you cannot close the computer cover.
4. Close the computer cover.
5. If a cover lock is installed, lock the cover.
6. Reconnect the external cables and power cords to the computer. See “Rear connectors” on page 85.
7. If you are replacing the system board or microprocessor, you must update (flash) the BIOS. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268.
8. To update your configuration, see Chapter 6, “Using the Setup Utility,” on page 49.

Chapter 9. Replacing FRUs (Types 6062, 6065, 6071, 6076, 6089, 9011, 9014, 9071, 9089, 9162, 9182, and 9303)

This chapter is for desktop computers of the following machine types: xxxx, xxxx.

Important

Before you replace any FRU, read Chapter 2, "Safety information," on page 3. These precautions and guidelines will help you work safely.

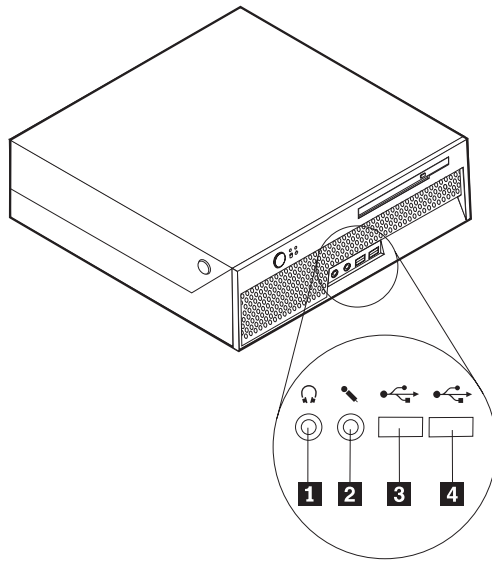
FRU replacements are to be done by trained service technicians only.

This chapter does not contain a remove and replace procedure for all FRUs. Only the major FRUs are documented.

Locations

This section provides illustrations to help locate the various connectors, controls, and components of the computer.

Front connectors

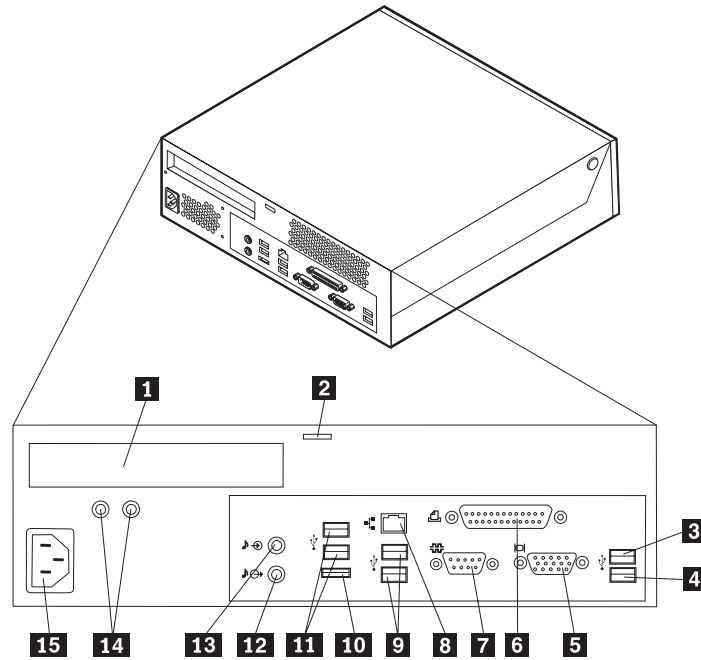


1 Headphone connector
2 Microphone connector

3 USB connectors (1)
4 USB connectors (2)

Rear connectors

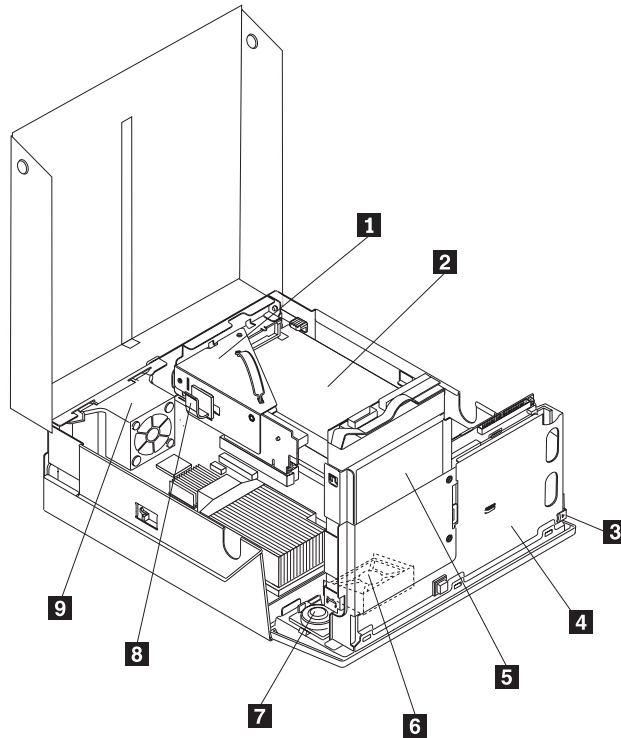
The following illustration shows the location of connectors on the rear of the computer.



- | | | | |
|----------|-----------------------------|-----------|------------------------------|
| 1 | PCI adapter connector | 9 | USB connectors (2) |
| 2 | Integrated cable lock-latch | 10 | ESATA connector |
| 3 | USB connector | 11 | USB connectors (2) |
| 4 | USB connector | 12 | Audio-line-out connector |
| 5 | VGA monitor connector | 13 | Audio-line-in connector |
| 6 | Parallel connector | 14 | Power supply diagnostic LEDs |
| 7 | Serial connector | 15 | Power connector |
| 8 | Ethernet connector | | |

Computer components

The following illustration will help you locate the various components in your computer.

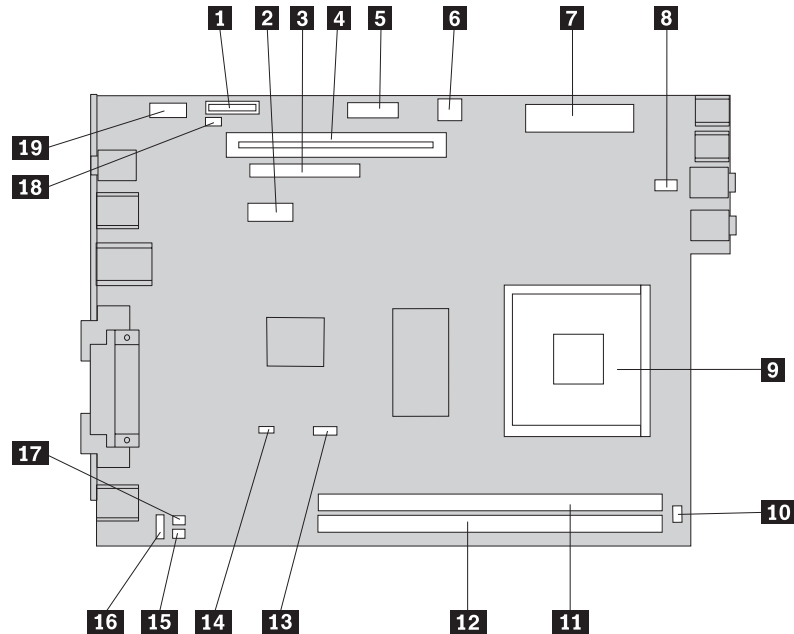


- | | | | |
|----------|----------------------------|----------|---------------------------|
| 1 | PCI riser | 6 | System fan |
| 2 | Power supply assembly | 7 | Internal speaker |
| 3 | Optical drive eject button | 8 | Cable clip |
| 4 | Optical drive | 9 | Rear fan bracket assembly |
| 5 | Hard disk drive | | |

System board connectors

The system board (sometimes called the planar or motherboard) is the main circuit board in your computer. It provides basic computer functions and supports a variety of devices.

The following illustration shows the locations of parts on the system board.



- | | | | |
|-----------|----------------------------|-----------|---------------------------------|
| 1 | Battery | 11 | Memory connector 1 |
| 2 | SATA connector | 12 | Memory connector 2 |
| 3 | Optical drive connector | 13 | Microprocessor fan connector |
| 4 | PCI riser connector | 14 | Clear CMOS/Recovery jumper |
| 5 | Front panel connector | 15 | Temperature sensor connector |
| 6 | 12v power connector | 16 | Rear fan connector |
| 7 | Power connector | 17 | KB and MS connector |
| 8 | System fan connector | 18 | Cover presence switch connector |
| 9 | Microprocessor | 19 | USB connector |
| 10 | Internal speaker connector | | |

Opening the cover

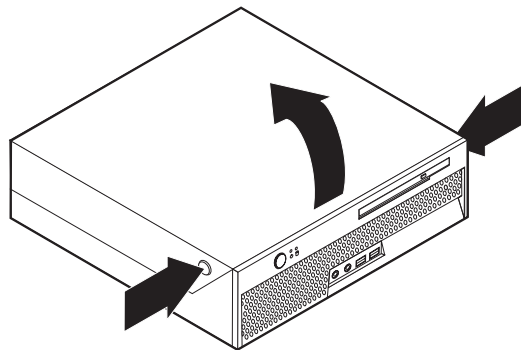
Important



Turn off your computer and wait 3 to 5 minutes to let the computer cool before opening the computer cover.

This procedure describes how to open the cover.

1. Remove any media (diskettes, CDs, or tapes) from the drives, shut down your operating system, turn off all attached devices, and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer.
4. Remove the floor stand, if attached.
5. Remove any locking devices such as a Kensington lock that secure the cover.
6. Press the buttons on the sides of the computer and pivot the cover upward to open the computer as shown.

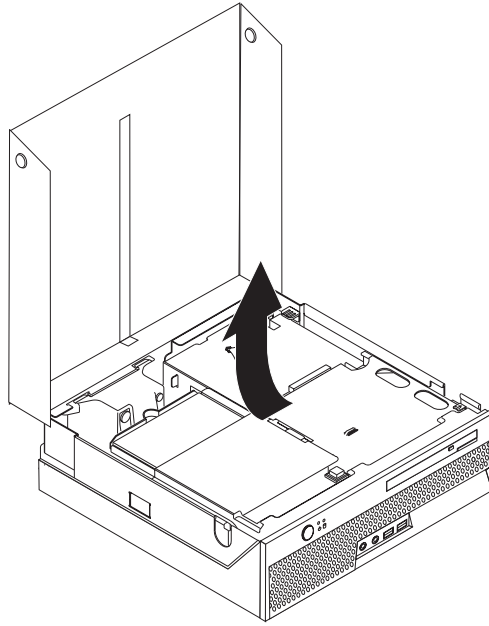


Replacing a memory module

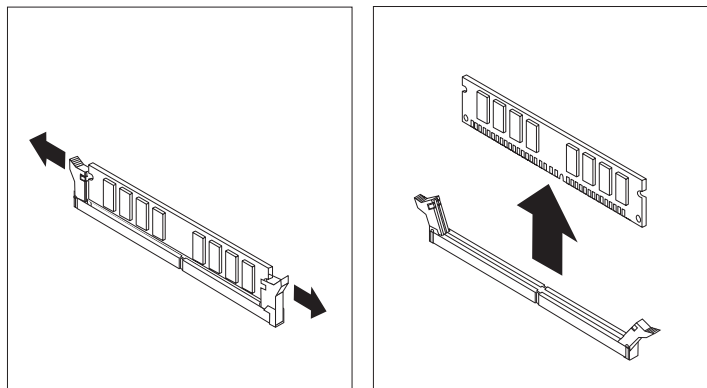
This procedure describes how to remove and replace a memory module.

Note: Your computer has support for two memory modules.

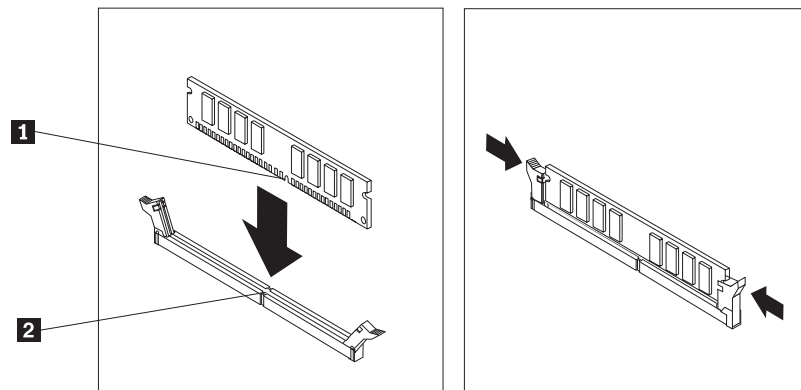
1. Open the computer cover. See “Opening the cover” on page 118.
2. Pivot the drive bay assembly upward to gain access to the system board.



3. Remove any parts that might prevent access to the memory connectors.
4. Remove the memory module being replaced by opening the retaining clips as shown.



5. Position the replacement memory module over the memory connector. Make sure that the notch **1** on the memory module aligns correctly with the connector key **2** on the system board. Push the memory module straight down into the memory connector until the retaining clips close.



6. Go to “Completing the parts replacement” on page 148.

Replacing the CMOS battery

This procedure describes how to remove and replace the CMOS battery.

If the CMOS battery fails, the date, time, and configuration information (including passwords) are lost. An error message is displayed when you turn on the computer.

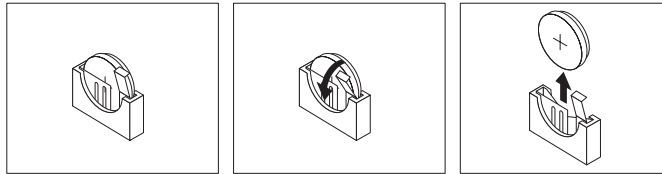
Important

Refer to “Safety notices (multi-lingual translations)” on page 7 for information about replacing and disposing of the battery.

CAUTION:

When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer.

1. Open the computer cover. See “Opening the cover” on page 118.
2. Locate the battery. See the system board illustration for your machine type at “System board connectors” on page 117.
3. You might have to remove any PCI adapters that impede access to the battery.
4. Remove the old battery.



5. Install the new battery.

Note: When the computer is turned on for the first time after battery replacement, an error message might be displayed. This is normal after replacing the battery.

6. Go to “Completing the parts replacement” on page 148.

Replacing the power supply

Attention

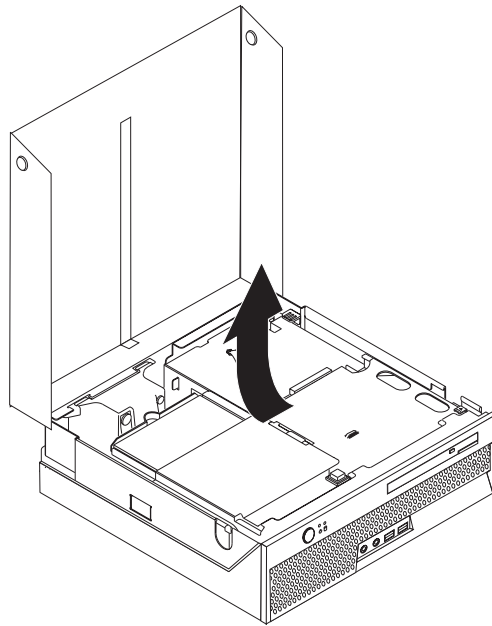
Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no servicable parts inside these components.

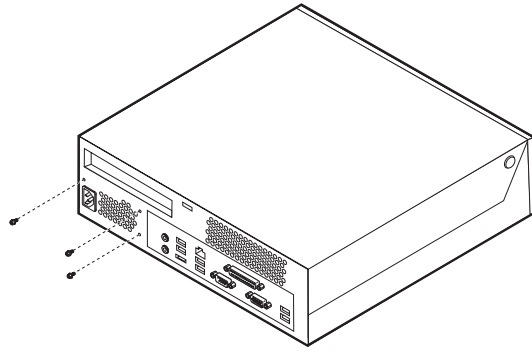
This procedure describes how to remove and replace the power supply.

1. Open the computer cover. See “Opening the cover” on page 118.
2. Pivot the drive bay assembly upward to gain access to the power supply.

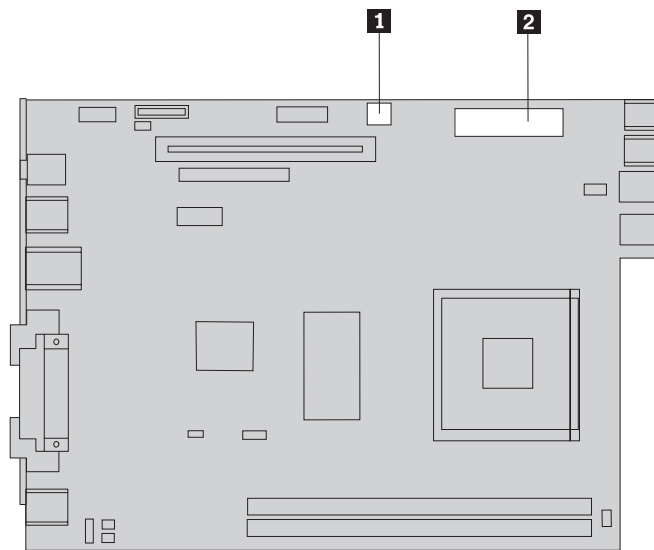


3. Remove the PCI riser. See “Replacing a PCI adapter” on page 142.

4. Remove the three screws at the rear of the chassis securing the power supply.

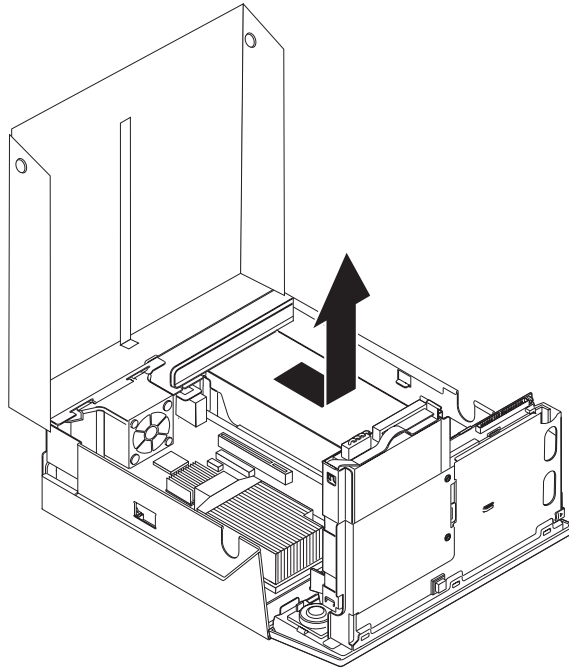


5. Disconnect the power supply cables from the system board connectors **1** and **2** and from all drives.



6. Disconnect the power supply cables from all the drives.

7. Remove the power supply assembly from the computer.



8. Install the new power supply assembly into the chassis so that the screw holes in the power supply assembly align with those in the chassis.

Note: Use only the screws that are provided by Lenovo.

9. Install and tighten the three screws at the rear of the chassis to secure the power supply assembly.
10. Reconnect all the power supply cables to the drives and the system board.
11. Reinstall the PCI riser.
12. Go to “Completing the parts replacement” on page 148.

Replacing the system board

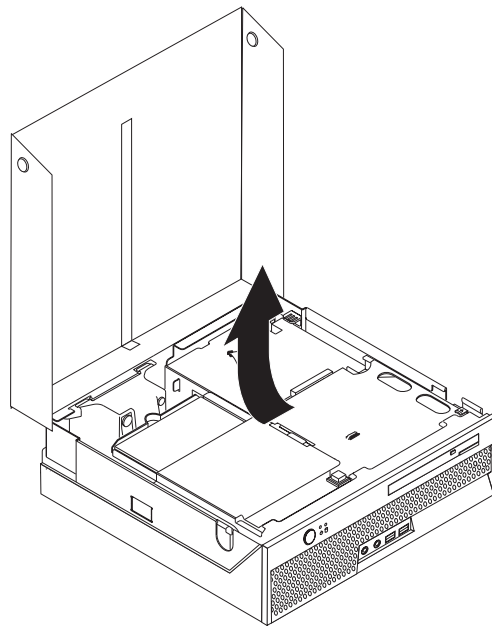
Important

The heat sink and microprocessor might be very hot. Make sure these components are cool enough to safely handle before continuing this procedure.

Note: When replacing the system board you must also order a new retention module for the new system board. Make sure you have a retention module for the new system board before continuing with this procedure.

This procedure describes how to remove and replace the system board.

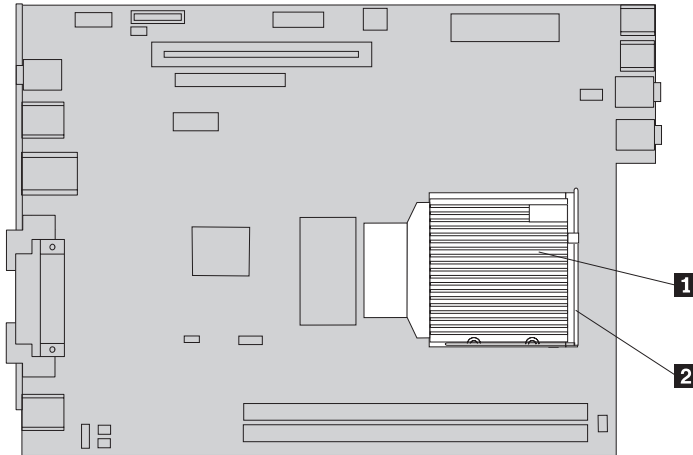
1. Open the computer cover. See “Opening the cover” on page 118.
2. Pivot the drive bay assembly upward to gain access to the system board.



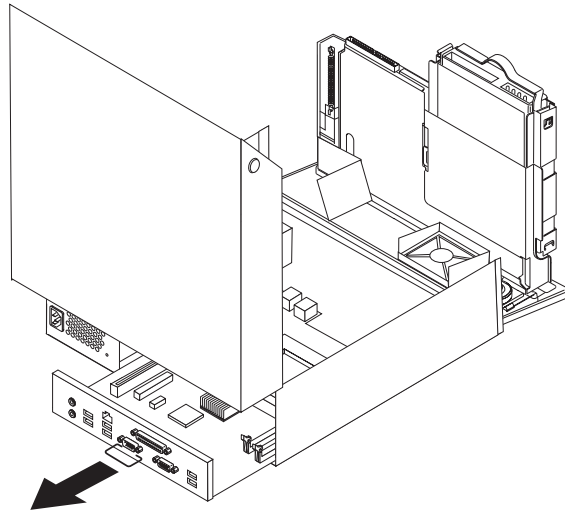
3. Remove the PCI riser. See “Replacing a PCI adapter” on page 142.
4. Locate the rear fan bracket assembly and the rear fan connector. See “Locations” on page 114 and “System board connectors” on page 117.
5. Disconnect the rear fan cable and remove the rear fan bracket assembly by lifting it off the system board.
6. Take note of the location of all cable connections on the system board. It will be necessary to reconnect them properly when installing a new system board.
7. Disconnect all cables connected to the system board. See “System board connectors” on page 117.
8. Take note of the location of the memory modules and remove them from the failing system board. See “Replacing a memory module” on page 119.

9. Remove the heat sink **1** from the system board by pivoting the lever **2** securing the heat sink until it is fully in the up position. Lift the heat sink off of the system board.

Note: Place the heat sink on its side on a clean, flat surface so the thermal interface on the bottom of the heat sink does not touch the surface and become contaminated.

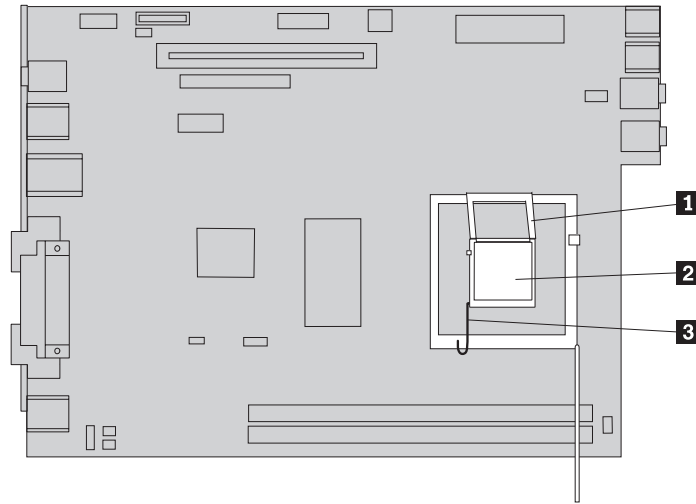


10. Use the handle at the rear of the system board to pull the system board and tray out the rear of the chassis.

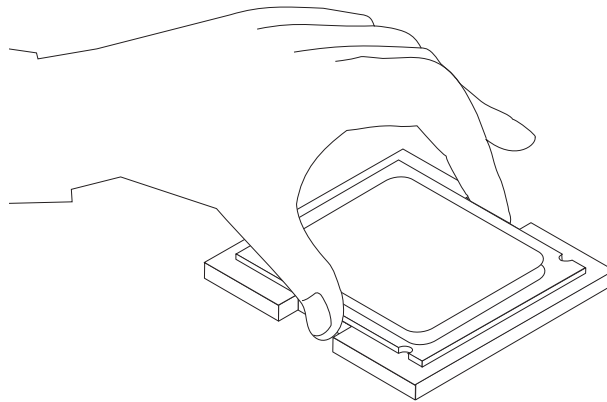


11. Place the failing system board next to the new system board on a clean, flat surface.

12. To remove the microprocessor from the failing system board, release the lever **3** securing the microprocessor **2** then pivot the microprocessor retainer **1** until it is fully open.



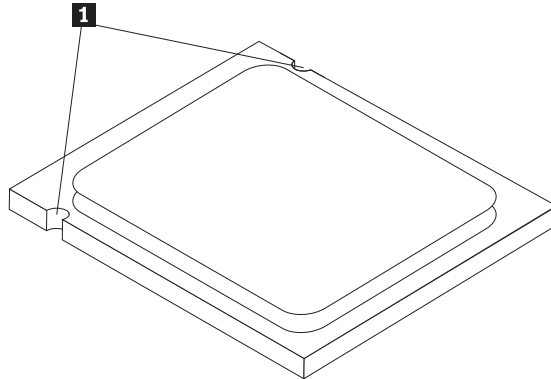
13. Remove the microprocessor from the system board socket by lifting it out of the socket.



Important

Do not touch the gold contacts on the bottom of the microprocessor. If you must touch the microprocessor, touch only the sides.

- a. Take notice of the orientation of the notches **1** on the microprocessor. This is important when installing the microprocessor on the new system board.

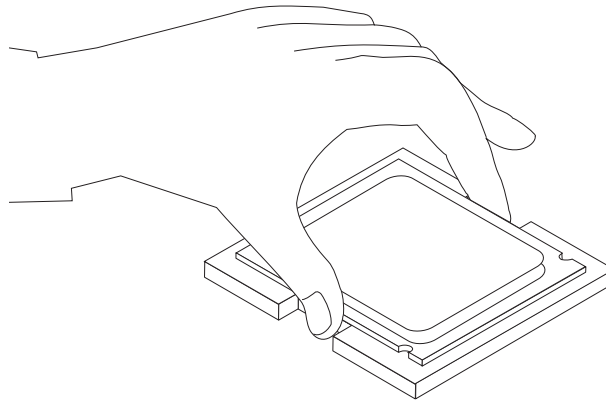


- b. Do not drop anything on the socket while it is open. Keep all contacts as clean as possible.
14. On the new system board, release the lever securing the microprocessor retainer then pivot the retainer until it is fully open.
15. Position the microprocessor so that the notches on the microprocessor are aligned with the tabs in the microprocessor socket.

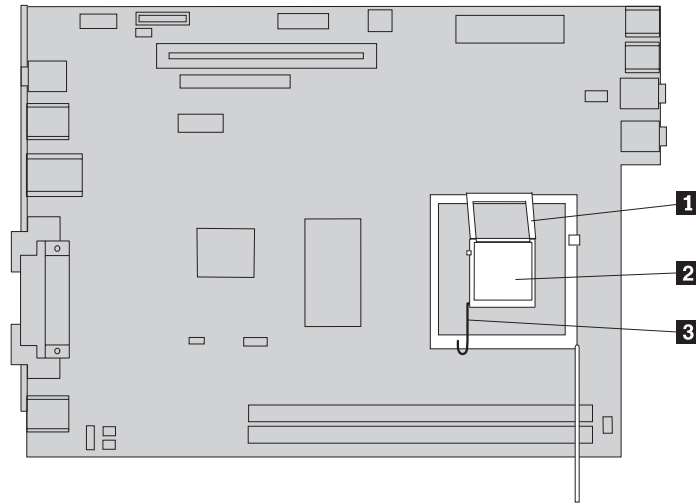
Important

To avoid damaging the microprocessor contacts, do not tilt the microprocessor when installing it into the socket.

16. Lower the microprocessor straight down into the system board socket of the new system board.

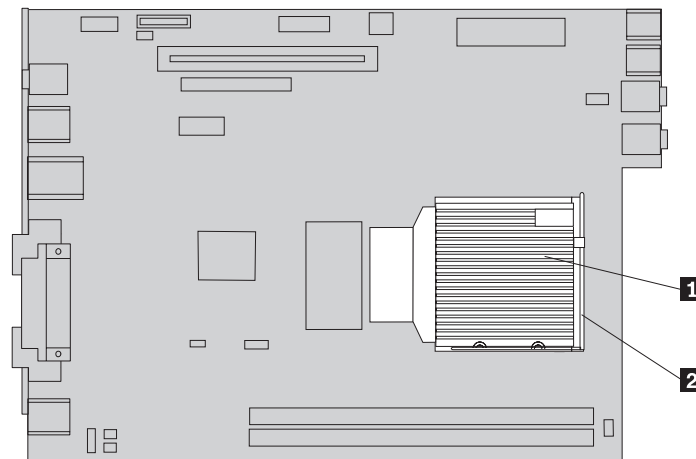


17. Lower the microprocessor retainer **1** and then lower the lever **3** to secure the retainer. Make sure the lever is securely locked into position.



Note: There will be a black plastic cover on the microprocessor retainer to protect the socket on the new system board. When you lock the microprocessor in position, remove the black plastic cover. Place the black plastic cover on the microprocessor retainer of the failing system board.

18. Install the new retention module (if required) on the new system board.
19. Install the new system board into the rear of the chassis until it is fully seated.
20. Place the heat sink **1** into position and lower the lever **2** to secure the heat sink.



21. Reinstall the memory modules on the new system board in the same location as they were on the failing system board. See “Replacing a memory module” on page 119.
22. Reconnect all cables that were disconnected from the system board. See “System board connectors” on page 117.
23. Reinstall the PCI riser.
24. Reinstall the rear fan bracket assembly and connect the fan cable to the system board.
25. Go to “Completing the parts replacement” on page 148.

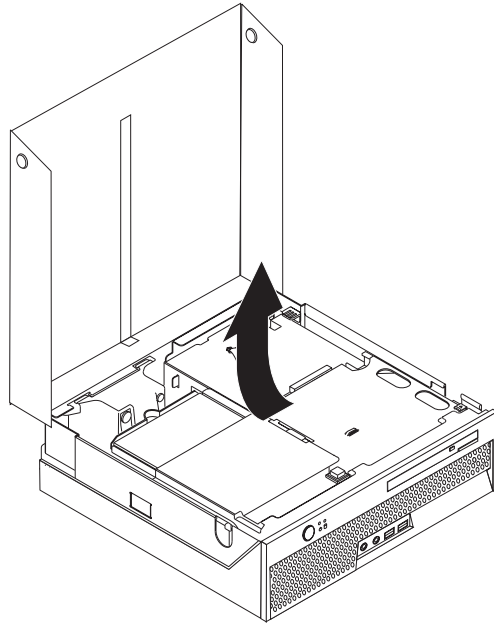
Replacing the microprocessor

Important

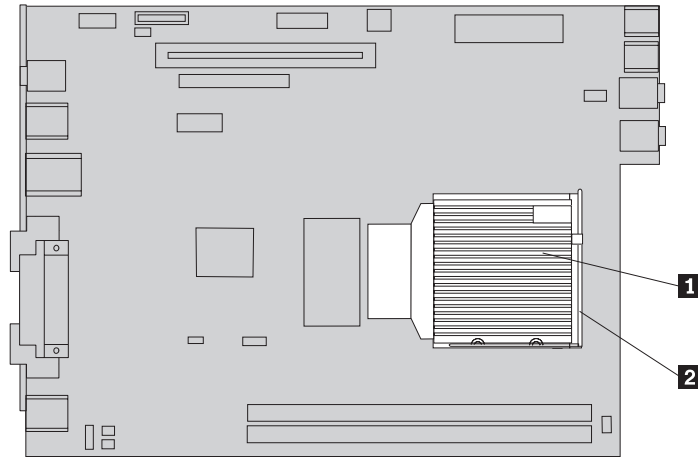
Leave your computer turned off for at least one hour before removing the microprocessor to allow the thermal interface between the microprocessor and the heat sink time to cool down.

This procedure describes how to remove and replace the microprocessor.

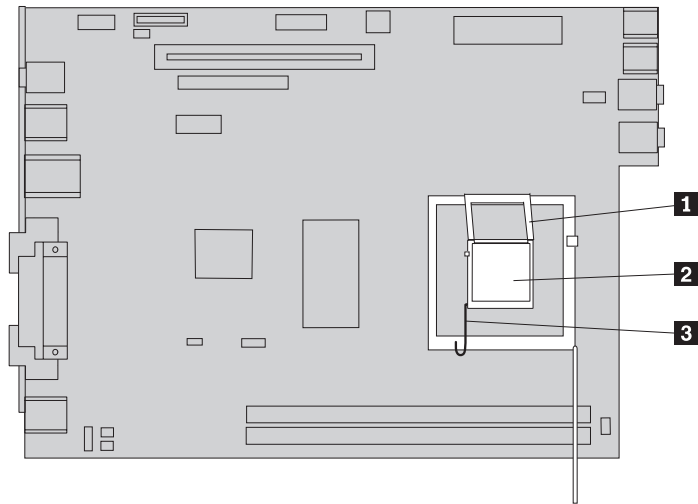
1. Open the computer cover. See “Opening the cover” on page 118.
2. Pivot the drive bay assembly upward to gain access to the system board.



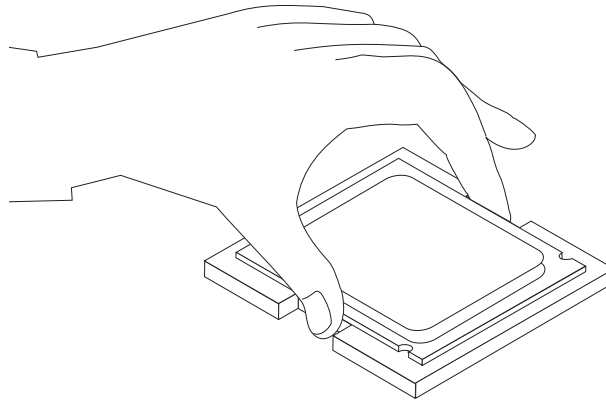
3. Locate the microprocessor fan connector on the system board. See “System board connectors” on page 117.
4. Disconnect the microprocessor fan cable from the system board.
5. Remove the heat sink **1** from the system board by pivoting the lever **2** securing the heat sink until it is fully in the up position. Lift the heat sink off of the system board.



6. Release the lever **3** securing the microprocessor **2** then pivot the microprocessor retainer **1** until it is fully open.



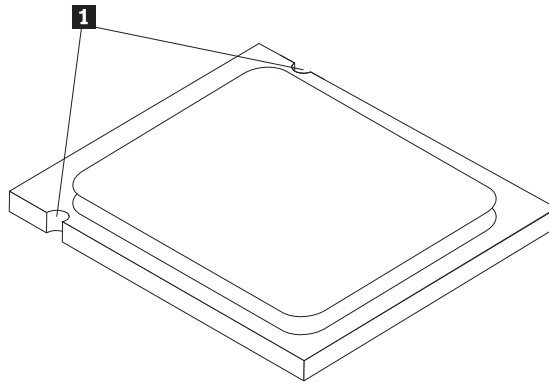
7. Remove the microprocessor from the system board socket by lifting it out of the socket.



Important

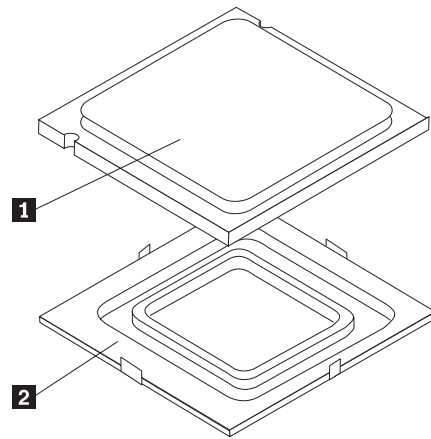
Do not touch the gold contacts on the bottom of the microprocessor. Touch only the sides.

- a. Take notice of the orientation of the notches **1** on the microprocessor. This is important when reinstalling the microprocessor on the system board.



- b. Do not drop anything on the socket while it is open. Keep all contacts as clean as possible.
8. Make sure that the lever on the microprocessor retainer is fully open.

9. Loosen the black cover **2** that protects the gold contacts on the microprocessor **1**, but do not remove it. Pick up the new microprocessor then completely remove the black cover. Place the black cover on the old microprocessor.

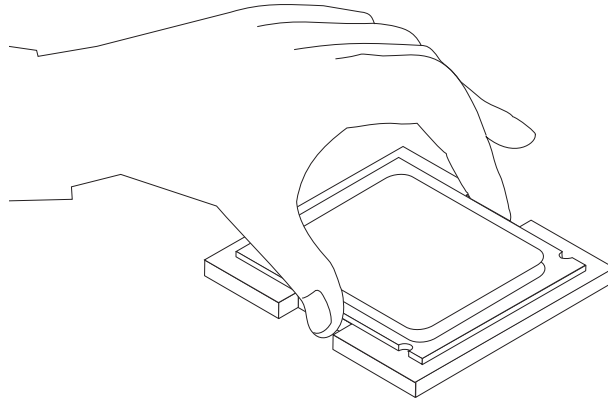


10. Position the microprocessor so that the notches on the microprocessor are aligned with the tabs in the microprocessor socket.

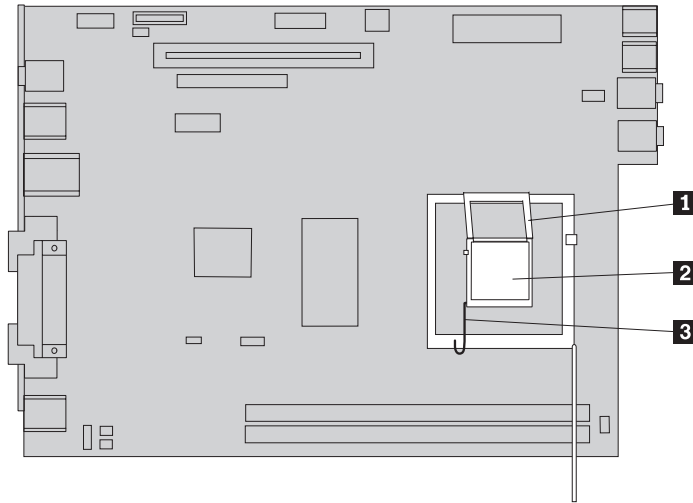
Important

To avoid damaging the microprocessor contacts, do not tilt the microprocessor when installing it into the socket.

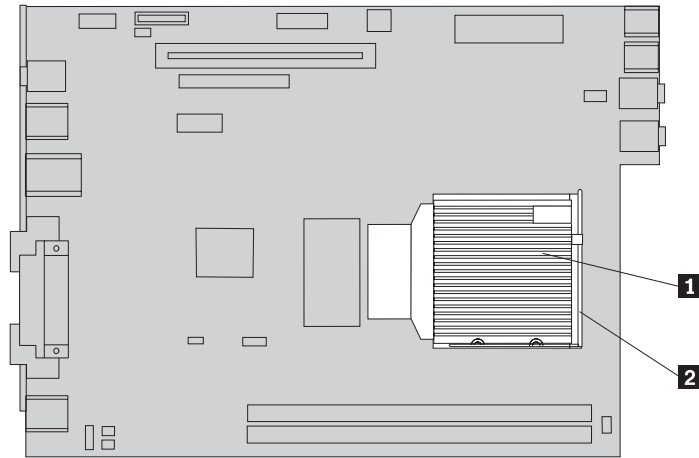
11. Lower the microprocessor straight down into the system board socket.



12. Lower the microprocessor retainer **1** and then lower the lever **3** to secure the retainer. Make sure the lever is securely locked into position.



13. Place the new heat sink **1** into position and lower the lever **2** to secure the heat sink.



14. Reconnect the microprocessor fan cable to the system board. See "System board connectors" on page 117.
15. Go to "Completing the parts replacement" on page 148.

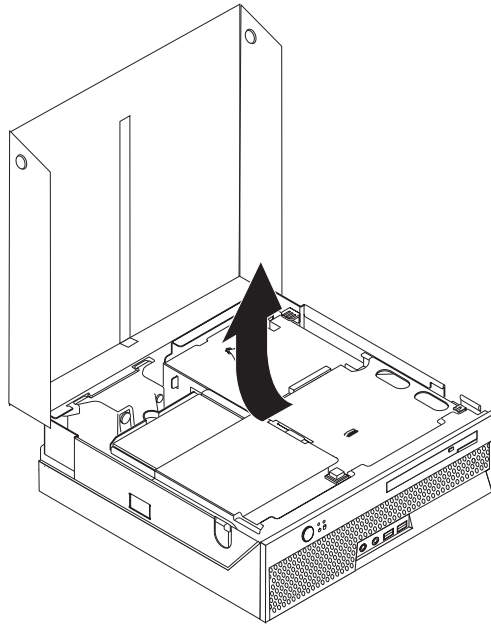
Replacing the hard disk drive

Important

When a new hard disk drive is installed, a set of *Product Recovery* discs might be required. The set of *Product Recovery* discs enable the contents of the hard disk to be restored to the same state as when the computer was originally shipped from the factory. For more information on recovering factory-installed software, refer to "Recovering Software" in the *User Guide*.

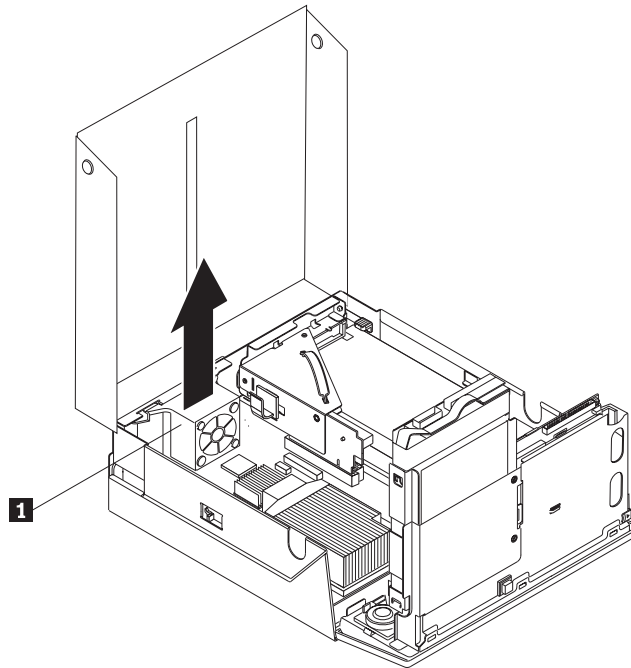
This procedure describes how to remove and replace the hard disk drive.

1. Open the computer cover. See "Opening the cover" on page 118.
2. Pivot the drive bay assembly upward to gain access to the hard disk drive.



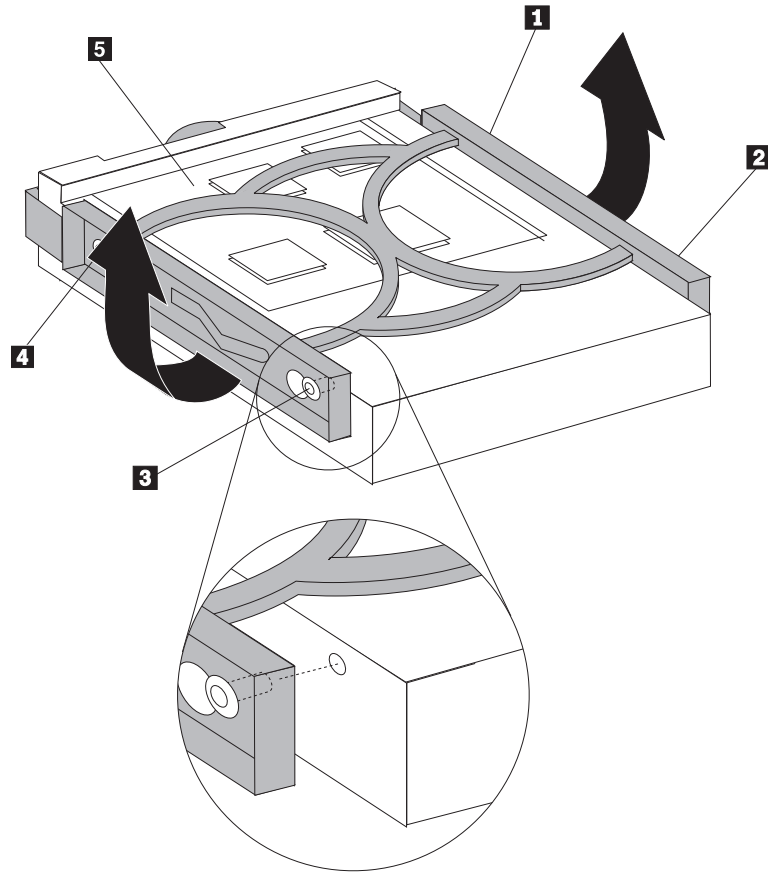
3. Disconnect the signal and power cables from the rear of the hard disk drive.

4. Lift the hard disk drive and bracket up to remove it from the hard drive bay.



5. Remove the failing hard disk drive from the blue bracket by flexing the bracket enough to slide the drive out.

6. To install the new hard disk drive into the blue bracket, flex the bracket and align the pins **1** through **4** on the bracket with the holes in the hard disk drive. Do not touch the circuit board **5** on the bottom of the hard disk drive.

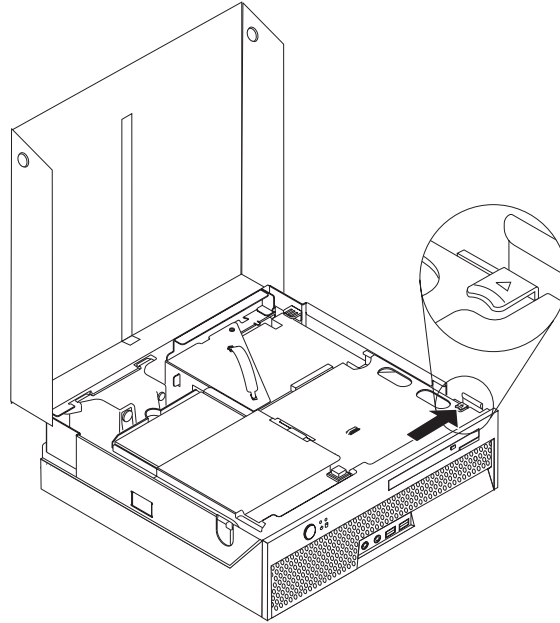


7. Insert the new hard disk drive into the hard drive bay until it snaps into position.
8. Connect the signal and power cables to the rear of the hard disk drive.
9. Go to "Completing the parts replacement" on page 148.

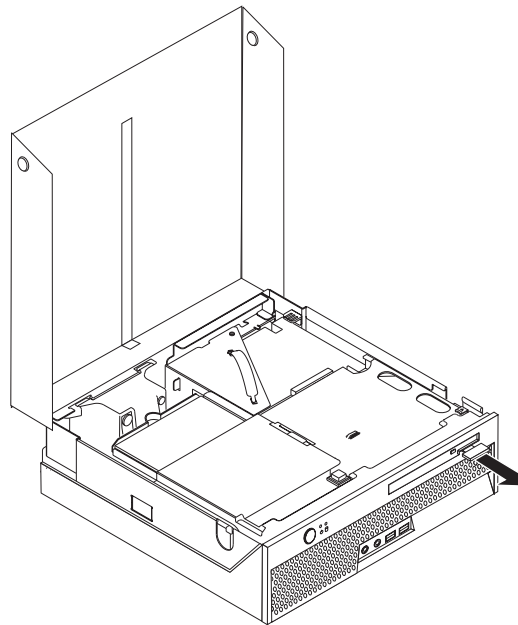
Replacing an optical drive

This procedure describes how to remove and replace the optical drive.

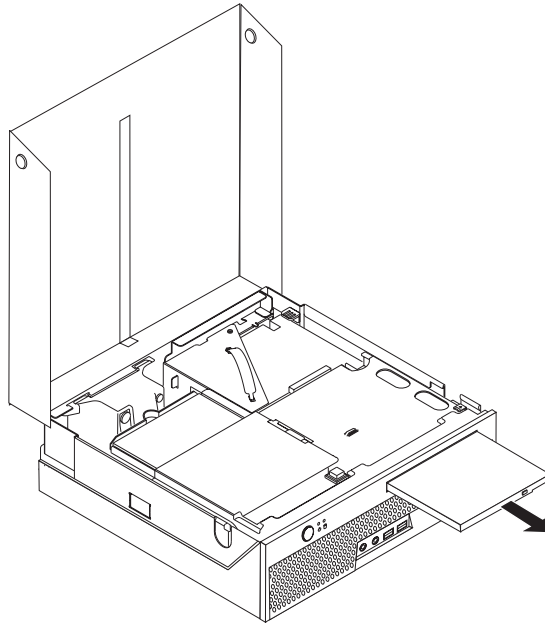
1. Open the computer cover. See “Opening the cover” on page 118.
2. Push the optical drive eject button.



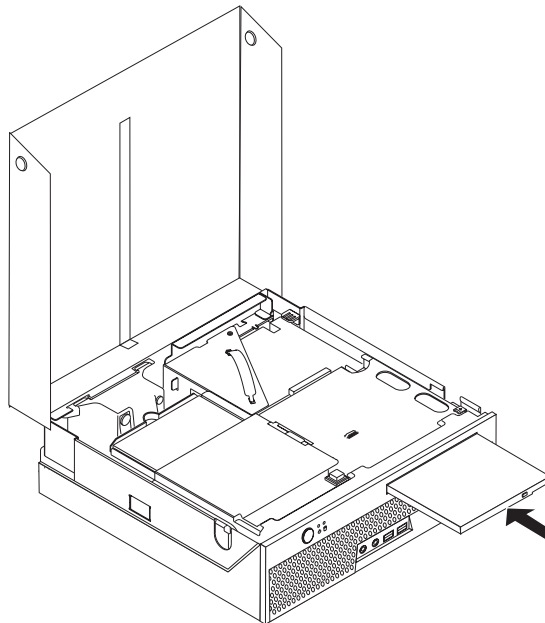
3. Pull the eject bar.



- Slide the optical drive out of the front of the computer.



- Slide the new optical drive into the bay until it locks into position.

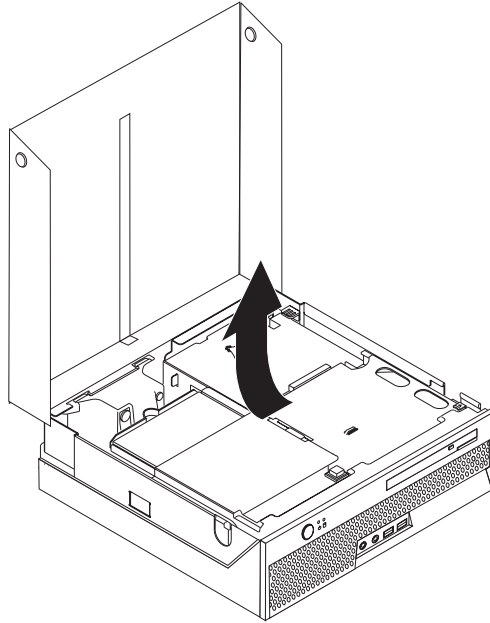


- Go to “Completing the parts replacement” on page 148.

Replacing the system fan assembly

This procedure describes how to remove and replace the system fan assembly.

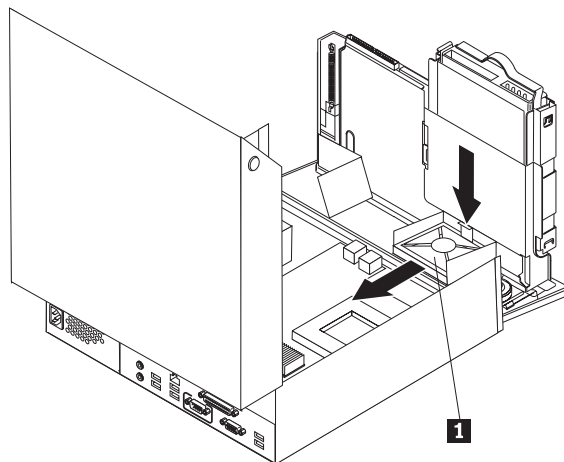
1. Open the computer cover. See “Opening the cover” on page 118.
2. Pivot the drive bay assembly upward to gain access to the system fan.



3. Locate the system fan. See “Locations” on page 114.
4. Disconnect the system fan cable from the system board. See “System board connectors” on page 117.

Note: Make sure you note the location of the system fan cable when you disconnect it from the system board.

5. Press the tab at the top front of the system fan.
6. Remove the system fan **1** by sliding the tabs out of the side slots and lifting out.

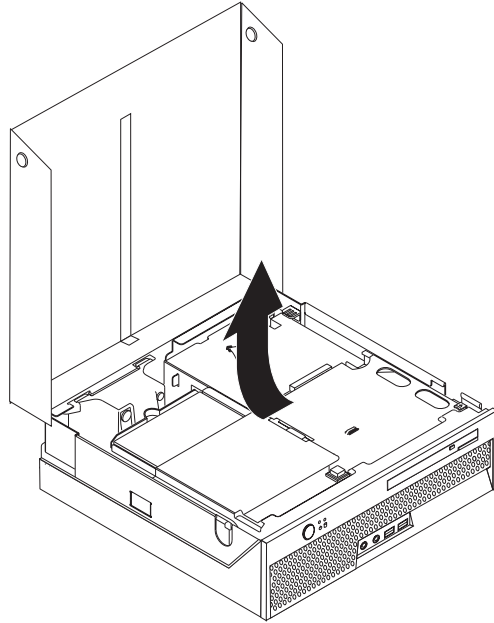


7. Install the new system fan and connect the system fan cable to the system board.
8. Go to “Completing the parts replacement” on page 148.

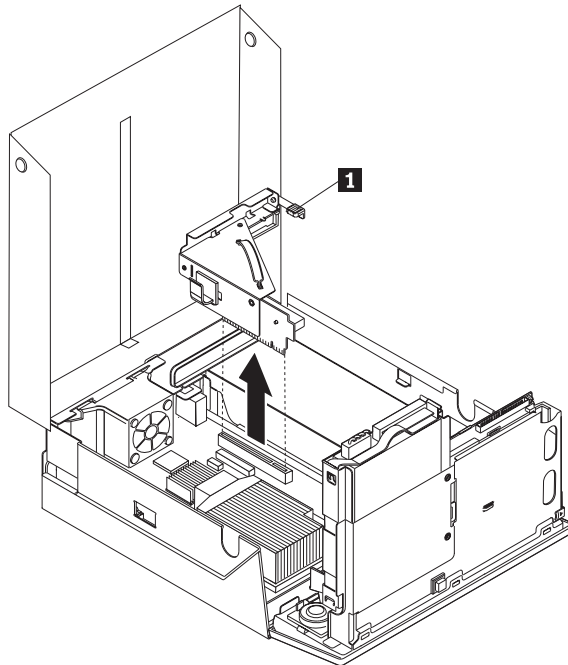
Replacing a PCI adapter

This procedure describes how to remove and replace a PCI adapter.

1. Open the computer cover. See “Opening the cover” on page 118.
2. Pivot the drive bay assembly upward to gain access to the system board.

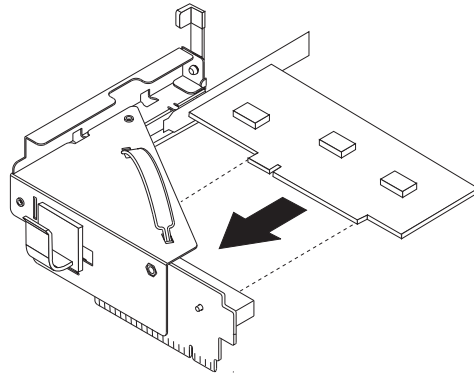


3. Locate the cable clip. See “Locations” on page 114.
4. Remove all cables from the cable clip attached to the PCI riser.
5. Pull upward on the blue handle **1** to remove the PCI riser from the computer.



6. Pivot the adapter latch upward and remove the failing adapter.
7. Remove the new adapter from its static-protective package.

8. Install the new adapter into the expansion connector in the PCI riser.

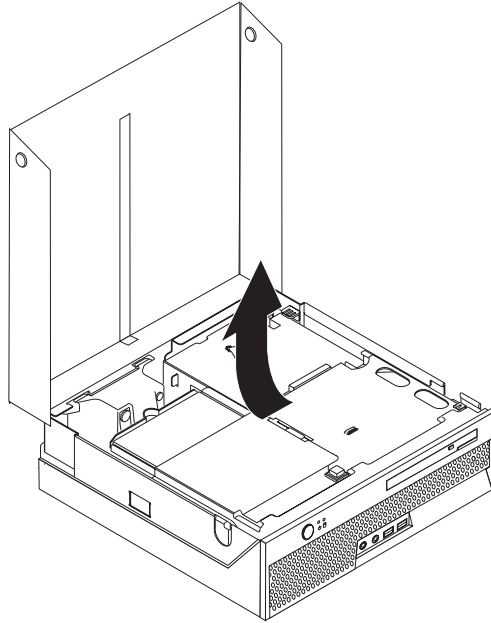


9. Pivot the adapter latch down to retain the adapter.
10. Reinstall the PCI riser into the system board.
11. Go to "Completing the parts replacement" on page 148.

Replacing the internal speaker

This procedure describes how to remove and replace the internal speaker.

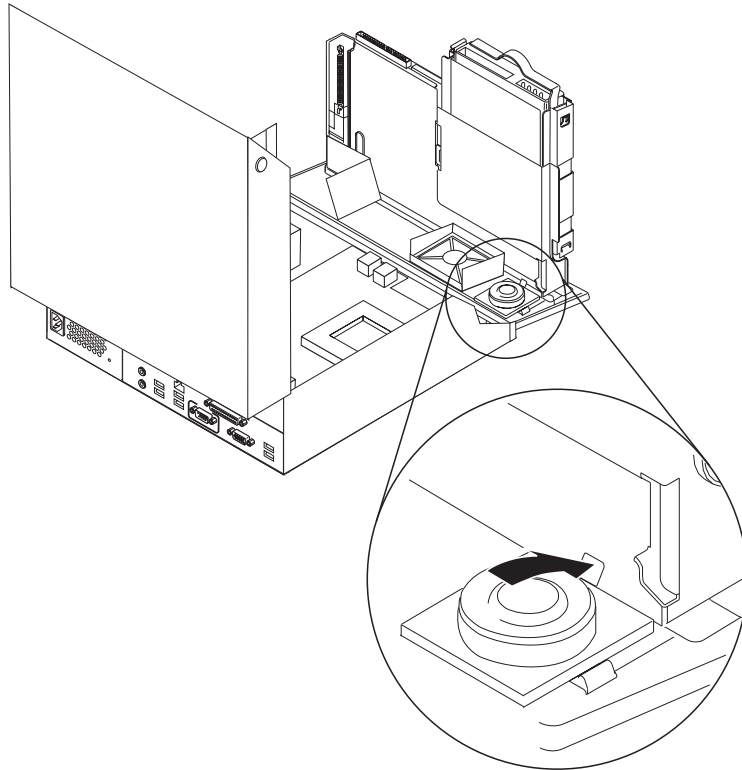
1. Open the computer cover. See “Opening the cover” on page 118.
2. Pivot the drive bay assembly upward to gain access to the speaker connector.



3. Locate the speaker connector on the system board. See “System board connectors” on page 117.
4. Disconnect the speaker cable from the system board.

5. Push downward on the metal tab shown while lifting the speaker out from the computer.

Note: You might need a flat-blade screwdriver to gently pry the speaker from the metal tabs that secure it.

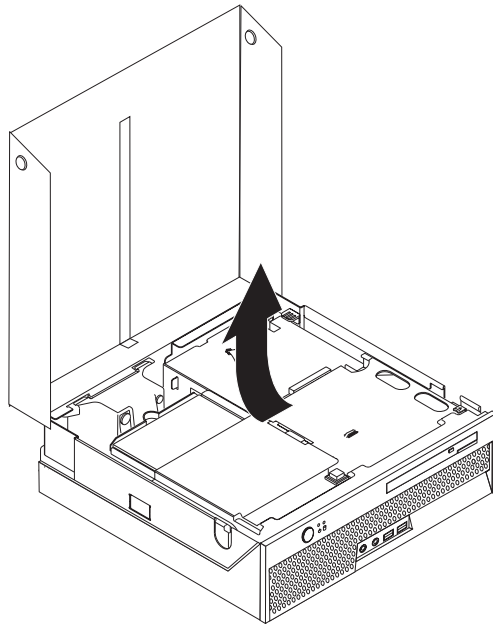


6. Position the bottom of the new speaker into the metal tabs then pivot the top of the speaker downward until it snaps into position.
7. Connect the speaker cable to the system board. See “System board connectors” on page 117.
8. Go to “Completing the parts replacement” on page 148.

Replacing the rear fan bracket assembly

This procedure describes how to remove and replace the rear fan bracket assembly.

1. Open the computer cover. See “Opening the cover” on page 118.
2. Pivot the drive bay assembly upward to gain access to the rear fan bracket assembly.

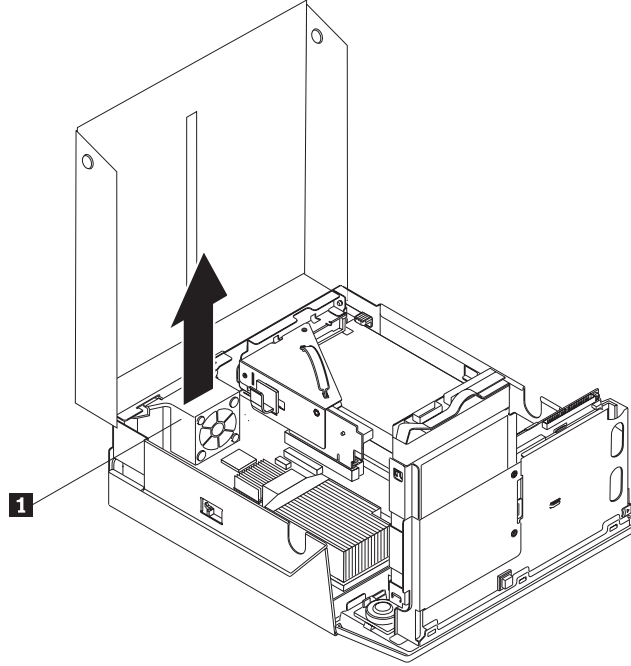


3. Locate the rear fan bracket assembly. See “Locations” on page 114.

4. Disconnect the rear fan cable from the system board. See “System board connectors” on page 117.

Note: Make sure you note the location of the rear fan cable when you disconnect it from the system board.

5. Lift the rear fan bracket assembly out of the slots **1**.

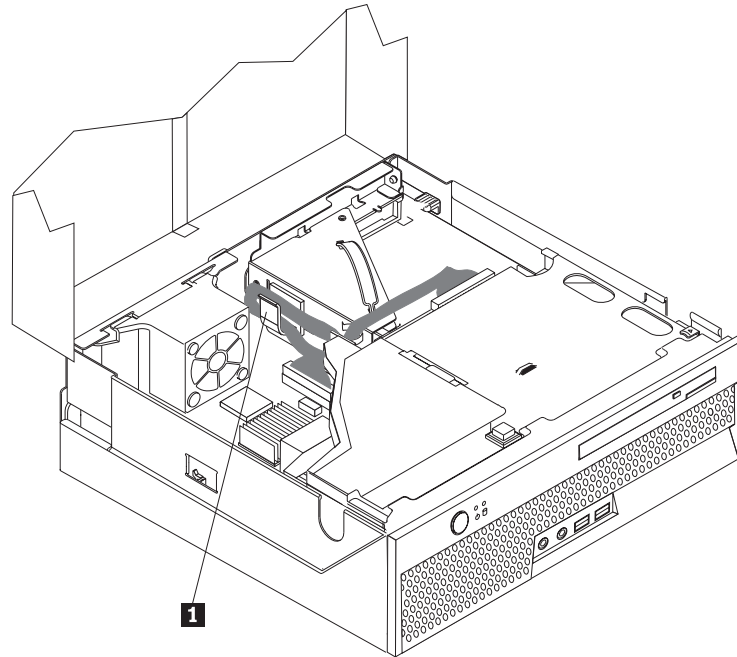


6. Install the new rear fan bracket assembly and connect the rear fan cable to the system board.
7. Go to “Completing the parts replacement” on page 148.

Completing the parts replacement

After working with parts, you need to close the computer cover and reconnect any cables, including telephone lines and power cords. Also, depending on the part that was replaced, you might need to confirm the updated information in the Setup Utility program.

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer.
2. Clear any cables that might impede the replacement of the cover.
3. Lower the drive bay assembly.
4. Make sure all cables are routed correctly through the cable clip **1**.



5. Close the computer cover.
6. If your computer is being placed in the vertical position, attach the floor stand.
Attention: To prevent overheating and possible component damage, always attach the floor stand when placing the computer in the vertical position.
7. Reconnect the external cables and power cords to the computer. See “Rear connectors” on page 115.
8. If you are replacing the system board, you must update (flash) the BIOS. To update the BIOS, see “Updating (flashing) BIOS from a CD-ROM or diskette” on page 268.
9. To update the configuration, see “Using the Setup Utility” in the *User Guide* that was included with your computer.

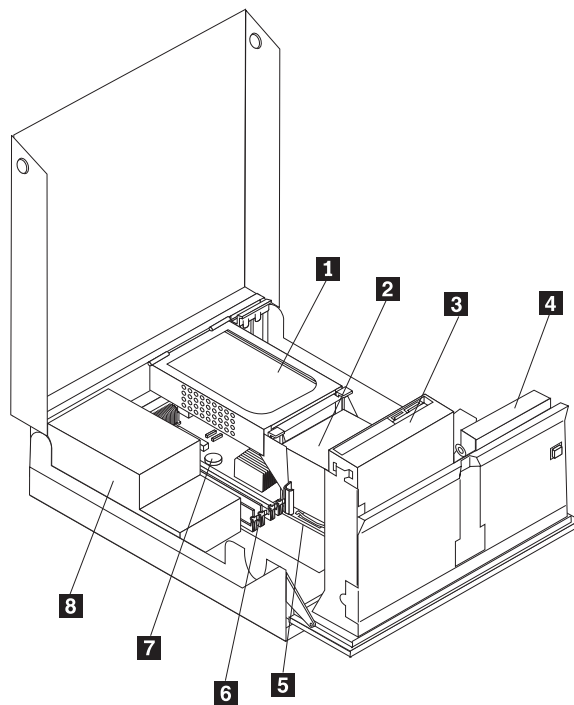
Note: In most areas of the world, Lenovo requires the return of the defective CRU. Information about this will come with the CRU or will come a few days after the CRU arrives.

Chapter 10. FRU lists

Attention: Read "Important information about replacing RoHS compliant FRUs" on page 2 before replacing any FRUs.

Note: In the following tables, A CRU (Customer Replaceable Unit) is identified by either a 1, 2, or N in the CRU column. A "1" means that the part is an external CRU, A "2" means that the part is an internal CRU, and an "N" means that the part is not a CRU.

Machine Type 6019



Item #	6019 FRUs	FRU#	CRU Tier
1	Hard disk drive, 80GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models AAA AAT A2J A3J A5J A6J A7J A8J A9J)	40Y9034	2
1	Hard disk drive, 320 GB 7200rpm SATA (models A9J)	87H4891	2
2	Thermal kit (all models)	41R6039	2
3	Optical drive, DVD-ROM drive - 16x/48x - SATA XP and Vista (models AAA AAT ABM ABA ABQ ABT ABK ABR ABJ A5J A7J A9J A3J)	41N3325	2
3	Optical drive, DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A2J A4J A6J A8J A1K)	43C1042	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models AEJ)	43C3833	N

Item #	6019 FRUs	FRU#	CRU Tier
5	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A1K AFJ)	43C1693	N
5	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models A3J)	43C1967	N
5	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models A2J A4J A5J ADJ)	43C1968	N
5	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models AAA AAT ABM ABA ABQ ABT ABK ABR ABJ)	43C2056	N
5	Microprocessor, Core 2 Duo E4500 Processor 2.2GHz 800MHz FSB 2M L2 (models ACJ)	43C6305	N
5	Microprocessor, Celeron 420 Processor 1.6GHz 800MHz FSB 512K L2 (models A6J A7J A8J A9J)	43C3835	N
6	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A2J A3J A4J A5J A6J A7J A8J A9J)	41X4255	2
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models AAA ATB ABM ABA ABQ ABT ABK ABR ABJ A1K)	41X4256	2
7	System board, Mercury non AMT (GA) (models AAA AAT ABM ABA ABQ ABT ABK ABR ABJ A2J A3J A4J A5J A6J A7J A8J A9J A1K ACJ ADJ AEJ AFJ)	87H5127	N
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models AAM AAA ABM ABA ABQ ABT ABQ ABR ABJ A2J A3J A4J A5J A6J A7J A8J A9J A1K)	41A9701	2
8	Power supply, 280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models AAA AAT A2J ABJ ABR A3J A4J A5J A6J A7J A8J A9J A1K)	41A9717	2

The FRUs listed in the following tables are not illustrated.

6019 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6019 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models AAA ABA ABM ABQ ABR)	41A5289	1
Arabic (models)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models)	41A5292	1
Belgian/UK (models)	41A5293	1
Bulgarian (models)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
French Canadian 445 (models)	41A5301	1
French Canadian 58 (models)	41A5302	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Italian 141 (models)	41A5309	1
Japanese (models ABJ A2J A3J A4J A5J A6J A7J A8J A9J)	41A5310	1
Korean (models ABK)	41A5311	1
Norwegian (models)	41A5313	1
Polish (models)	41A5314	1
Portuguese (models)	41A5315	1
Romanian 096 (models)	41A5317	1
Romanian 446 (models)	41A5316	1
Russian/Cyrillic (models)	41A5318	1
Serbian/Cyrillic (models)	41A5319	1
Slovak (models)	41A5320	1
Spanish (models)	41A5321	1
Swedish/Finn (models)	41A5322	1
Swiss (models)	41A5323	1
Thailand (models AAT ABT)	41A5324	1
Turkish 440 (models)	41A5325	1
Turkish 179 (models)	41A5326	1
UK English (models)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models)	41A5329	1

6019 Keyboards (Fingerprint Reader USB)	FRU#	CRU Tier
Japanese (models A2J)	41A5269	1

6019 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models AAA AAT A2J A3J A5J A6J A7J A8J A9J A1K)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models AAA AAT A2J A3J A5J A6J A7J A8J A9J A1K)	41U3030	1

6019 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models AAA ABA)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models)	89P8581	1
Speaker Power brick - Japan (models ABJ A2J A3J A4J A5J A6J A7J A8J A9J)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models ABM)	89P8579	1
Speaker Brick - Korea (models ABK)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	1
Speaker Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models ABQ)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

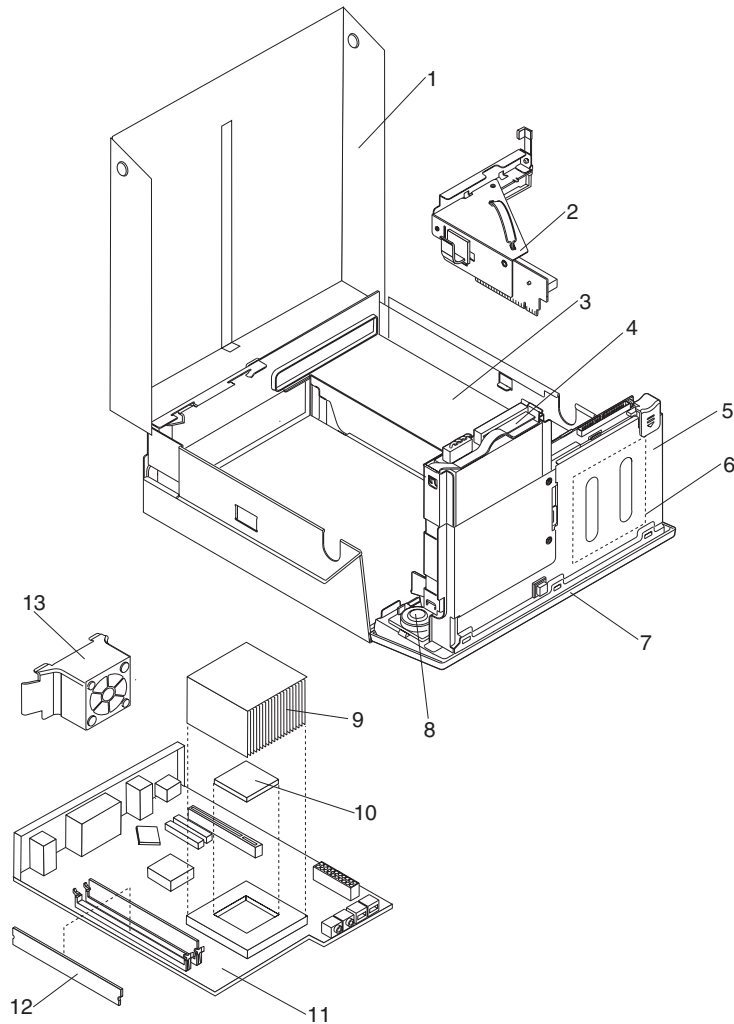
6019 Power Cords	FRU#	CRU
Power cord - US (models AAA AAT ABA ABT)	39M5080	1
Power cord - China (models)	39M5205	1
Power cord - Japan (models ABJ A2J A3J A4J A5J A6J A7J A8J A9J)	39M5193	1
Power cord - Brazil (models)	39M5232	1
Power cord - LA High Volt APU) (models)	39M5067	1
Power cord - Australia / New Zealand (models ABM)	39M5102	1
Power cord - Korea (models AAA ABA ABK ABR A1K)	39M5212	1

6019 Power Cords	FRU#	CRU
Power cord - Hong Kong (models)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models AAA ABM ABA)	39M5150	1
Power cord - Taiwan (models)	39M5246	1
Power cord - Italy (models)	39M5164	1
Power cord - G models (models)	39M5122	1
Power cord - Denmark (models)	39M5129	1
Power cord - Switzerland (models)	39M5157	1
Power cord - Israel (models)	39M5171	1
Power cord - South Africa (models AAA ABM ABA)	39M5143	1
Power cord - India (models ABQ)	39M5004	1

6019 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models AAA ABM ABA ABM ABQ ABR)	45C4191	1
RE (models)	45C4216	1
FR/CF (models)	45C4192	1
GR (models)	45C4193	1
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1
SV (models)	45C4199	1
DK (models)	45C4200	1
FI (models)	45C4203	1
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models ABK A1K)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models A4J A5J A8J A9J ABJ A2J A3J A6J A7J)	45C4197	1
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

6019 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models AAA ABM ABA ABM ABQ ABR)	45C4077	1
FR/CF (models)	45C4079	1
GR (models)	45C4080	1
SP/LA (models)	45C4081	1
BR (models)	45C4082	1
IT (models)	45C4083	1
JP (models ABJ A2J A3J A6J A7J)	45C4084	1
NO (models)	45C4085	1
SV (models)	45C4086	1
DK (models)	45C4087	1
NL (models)	45C4088	1
CZ (models)	45C4089	1
FI (models)	45C4090	1
PL (models)	45C4091	1
RU (models)	45C4092	1
TR (models)	45C4093	1
HU (models)	45C4094	1
GK (models)	45C4095	1
PO (models)	45C4102	1
CS (models)	45C4096	1
Traditional Chinese (models)	45C4097	1
Traditional Chinese (models)	45C4098	1
KR (models ABK A1K)	45C4099	1
SL (models)	45C4100	1
RE (models)	45C4078	1
Romanian (models)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models)	45C4106	1

Machine Type 6062



Item #	6062 FRUs	FRU#	CRU Tier
1	Top Cover (models)	89P6782	1
2	PCI Riser Card Bracket Asm (all models)	41N8276	1
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (all models)	39M0618	1
2	Interposer Card (all models)	41R2902	1
3	Power Supply, 225 Watt (active PFC) - Standard, Robust, JP (models A2M A2A A2T A2K A2J A3J A4J A5J A6J A7J A1M A1A A1T A1Q A1K A1J A8J A9J)	41N3105	2
4	Hard disk drive 250GB 7200rpm Serial ATA (models A2M A2A A2T A2K A2J A3J A4J A5J A6J A7J A1M A1A A1T A1Q A1K A1J A8J A9J)	40Y9036	1
5	Front Rotating Cage assembly (all models)	41R6259	2
6	DVD-RW/CD-RW Rambo 5 - IDE (models A2M A2A A2T A2K A2J A3J A4J A5J A6J A7J A1M A1A A1T A1Q A1K A1J A8J A9J)	43C0053	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A2M A2A A2T A2K A2J A3J A4J A5J A6J A7J A1M A1A A1T A1Q A1K A1J A8J A9J)	42Y3910	1
7	Front Bezel (all models)	41R6260	1
8	Speaker and Cable assembly (all models)	39K5012	1

Item #	6062 FRUs	FRU#	CRU Tier
9	Thermal kit (models)	41A7711	2
10	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A2M A2A A2T A2K A2J A3J A4J A5J A6J A7J A1M A1A A1T A1Q A1K A1J A8J A9J)	43C3833	N
11	System board - Jupiter non AMT (GA) (models A2M A2A A2T A2K A2J A3J A4J A5J A6J A7J A1M A1A A1T A1Q A1K A1J A8J A9J)	87H5131	2
12	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A2M A2A A2T A2K A2J A3J A4J A5J A6J A7J A1M A1A A1T A1Q A1K A1J A8J A9J)	41X4256	1
13	Rear exhaust fan (all models)	39M0551	1

The FRUs listed in the following table are not illustrated.

6062 FRUs	FRU#	CRU Tier
Cable, SATA hard disk drive and optical drive (all models)	39K5061	1
Vertical stand (all models)	89P6792	1
Rear air deflector (all models)	89P6793	1
Under-desk Mounting Kit (all models)	39M0599	1
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1
HSS Tray assembly (includes grommet/pins/bracket/ground springs) (all models)	89P6778	1
Power/LED cable assembly with bracket (all models)	39K5055	2
Chassis and cover assembly (all models)	41R6258	2
Miscellaneous hardware kit (all models)	89P6794	1
Plastic parts kit (all models)	39M0575	2
Battery 3.0V (all models)	33F8354	1
Thermal Sense cable (850 mm) (all models)	41R2511	1
Front fan assembly (850 mm) (all models)	41R6359	1

6062 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1M A1A A1Q)	41A5289	1
Arabic (models)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models)	41A5292	1
Belgian/UK (models)	41A5293	1
Bulgarian (models)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
French Canadian 445 (models)	41A5301	1
French Canadian 58 (models)	41A5302	1
German (models)	41A5303	1

6062 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Italian 141 (models)	41A5309	1
Japanese (models A4J A5J A6J A7J A1J A8J A9J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models)	41A5312	1
Norwegian (models)	41A5313	1
Polish (models)	41A5314	1
Portuguese (models)	41A5315	1
Romanian 096 (models)	41A5317	1
Romanian 446 (models)	41A5316	1
Russian/Cyrillic (models)	41A5318	1
Serbian/Cyrillic (models)	41A5319	1
Slovak (models)	41A5320	1
Spanish (models)	41A5321	1
Swedish/Finn (models)	41A5322	1
Swiss (models)	41A5323	1
Thailand (models)	41A5324	1
Turkish 440 (models)	41A5325	1
Turkish 179 (models)	41A5326	1
UK English (models)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models)	41A5329	1

6062 Keyboards (Fingerprint Reader USB)	FRU#	CRU Tier
US English (models A2M A2A)	41A5248	1
Arabic (models)	41A5249	1
Arabic/French (models)	41A5250	1
Belgian/French (models)	41A5251	1
Belgian/UK (models)	41A5252	1
Brazil/Portuguese (models)	41A5253	1
Bulgarian (models)	41A5254	1
Chinese (models)	41A5255	1
Czech (models)	41A5256	1
Danish (models)	41A5257	1
Dutch (models)	41A5258	1
French (models)	41A5259	1
French Canadian 445 (models)	41A5260	1

6062 Keyboards (Fingerprint Reader USB)	FRU#	CRU Tier
French Canadian 58 (models)	41A5261	1
German (models)	41A5262	1
Greek (models)	41A5263	1
Greek/US (models)	41A5264	1
Hebrew (models)	41A5265	1
Hungarian (models)	41A5266	1
Iceland (models)	41A5267	1
Italian 141 (models)	41A5268	1
Japanese (models A2J A3J A6J A7J)	41A5269	1
Korean (models A2K)	41A5270	1
LA Spanish (models)	41A5271	1
Norwegian (models)	41A5272	1
Polish (models)	41A5273	1
Portuguese (models)	41A5274	1
Romanian 096 (models)	41A5275	1
Romanian 446 (models)	41A5276	1
Russian/Cyrillic (models)	41A5277	1
Serbian/Cyrillic (models)	41A5278	1
Slovak (models)	41A5279	1
Spanish (models)	41A5280	1
Swedish/Finn (models)	41A5281	1
Swiss (models)	41A5282	1
Thailand (models A2T)	41A5283	1
Turkish 440 (models)	41A5284	1
Turkish 179 (models)	41A5285	1
UK English (models)	41A5286	1
US Euro (models)	41A5287	1
Slovenian (models)	41A5288	1

6062 Mice	FRU#	CRU Tier
Mouse, Optical Wheel (400DPI, USB) (models A2M A2A A2T A2J A2K A3J A4J A6J A7J A1M A1A A1T A1K A1J)	41U3013	1
Mouse, Optical Wheel (400DPI, USB) (models A2M A2A A2T A2J A2K A3J A4J A6J A7J A1M A1A A1T A1K A1J)	41U3030	1

6062 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A2A A1A)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1

6062 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - China, Thailand (models A2T A1T)	89P8581	1
Speaker Power brick - Japan (models A2J A3J A4J A5J A6J A7J A1J A8J A9J)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M A2M)	89P8579	1
Speaker Brick - Korea (models A1K A2K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	1
Speaker Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6062 Power Cords	FRU#	CRU Tier
Power Cord (US) (models A2A A2T A1A A1T)	39M5080	1
Power Cord (China) (models)	39M5205	1
Power Cord (Japan) (models A2J A4J A5J A7J A1J A8J A9J)	39M5193	1
Power Cord (Brazil) (models)	39M5232	1
Power Cord (LA), (High Volt) (APU) (models)	39M5067	1
Power Cord (Australia, New Zealand) (models A2M A1M)	39M5102	1
Power Cord (Korea) (models A2K A1K)	39M5212	1
Power Cord (Hong Kong) (models)	39M5151	1
Power Cord (UK, Ireland, Singapore, Malaysia, Brunei) (models A2A A1A)	39M5150	1
Power Cord (Taiwan) (models)	39M5246	1
Power Cord (Italy) (models)	39M5164	1
Power Cord (G models) (models A2A A1A)	39M5122	1
Power Cord (Denmark) (models)	39M5129	1
Power Cord (Switzerland) (models)	39M5157	1
Power Cord (Israel) (models)	39M5171	1
Power Cord (South Africa) (models A2M A2A A1M A1A)	39M5143	1
Power Cord (India) (models A1Q)	39M5004	1

6062 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A2M A2A)	45C4191	1
RE (models)	45C4216	1
FR/CF (models)	45C4192	1

6062 Windows XP Pro Recovery CDs	FRU#	CRU
GR (models)	45C4193	1
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1
SV (models)	45C4199	1
DK (models)	45C4200	1
FI (models)	45C4203	1
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models A2J A4J A6J A3J A5J A7J A8J)	45C4197	1
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

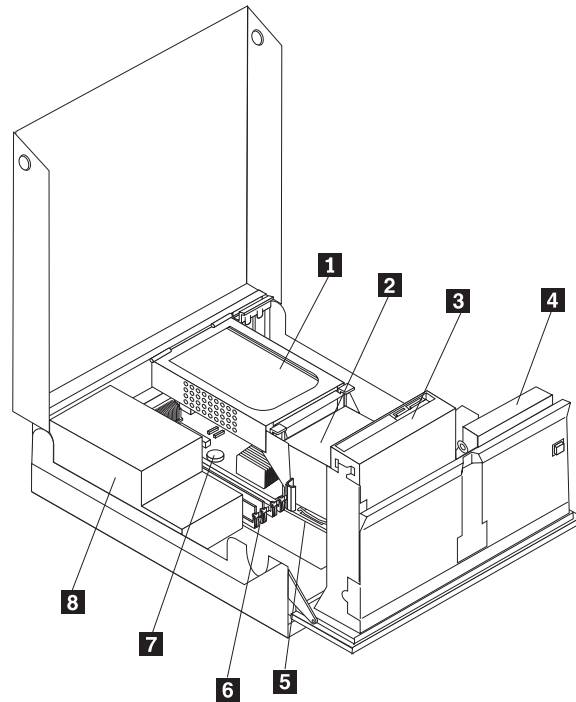
6062 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1Q A1M A1A)	45C4163	1
FR/CF (models)	45C4165	1
GR (models)	45C4166	1
SP/LA (models)	45C4167	1
BR (models)	45C4168	1
IT (models)	45C4169	1
JP (models A1J A9J)	45C4170	1
NO (models)	45C4171	1
SV (models)	45C4172	1
DK (models)	45C4173	1
NL (models)	45C4174	1
CZ (models)	45C4175	1
FI (models)	45C4176	1
PL (models)	45C4177	1
RU (models)	45C4178	1

6062 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
TR (models)	45C4179	1
HU (models)	45C4180	1
GK (models)	45C4181	1
PO (models)	45C4188	1
CS (models)	45C4182	1
TW (models)	45C4183	1
HK (models)	45C4184	1
KR (models A1K)	45C4185	1
SL (models)	45C4186	1
RE (models)	45C4164	1

6062 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	45C4077	1
FR/CF (models)	45C4079	1
GR (models)	45C4080	1
SP/LA (models)	45C4081	1
BR (models)	45C4082	1
IT (models)	45C4083	1
JP (models A3J A5J A7J)	45C4084	1
NO (models)	45C4085	1
SV (models)	45C4086	1
DK (models)	45C4087	1
NL (models)	45C4088	1
CZ (models)	45C4089	1
FI (models)	45C4090	1
PL (models)	45C4091	1
RU (models)	45C4092	1
TR (models)	45C4093	1
HU (models)	45C4094	1
GK (models)	45C4095	1
PO (models)	45C4102	1
CS (models)	45C4096	1
Traditional Chinese (models)	45C4097	1
Traditional Chinese (models)	45C4098	1
KR (models)	45C4099	1
SL (models)	45C4100	1
RE (models)	45C4078	1
Romanian (models)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models)	45C4104	1
Arabic Localized (models)	45C4105	1

6062 Vista Business 32 Recovery DVDs	FRU#	CRU
Hebrew (models)	45C4106	1

Machine Type 6064



Item #	6064 FRUs	FRU#	CRU Tier
1	Hard disk drive, 160GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A2J A3J)	40Y9035	2
1	Hard disk drive, 250 GB 7200rpm SATA (models A1K A4J A5J)	40Y9036	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM drive - 16x/48x - SATA XP and Vista (models A3J A4J)	41N3325	2
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models A3J)	42Y9353	2
3	Optical drive, DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A2J A1K A5J)	43C1042	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models A2J A3J)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models A2J A3J)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A2J A3J A1K)	43C3833	N
5	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 (models A4J A5J)	43C1693	N
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A2J A3J A1K A4J A5J)	41X4256	2
7	System board, Mercury AMT (GA) (models A2J A3J A1K A4J A5J) Note: When ordering the system board you should also order a new Thermal kit.	87H5128	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A2J A3J A1K A4J A5J)	41A9701	2

The FRUs listed in the following tables are not illustrated.

6064 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6064 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Japanese (models A2J A3J A1K)	41A5310	1

6064 Keyboards (Lenovo fingerprint Reader USB)	FRU#	CRU Tier
Japanese (models A4J A5J)	41A5269	1

6064 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (all models A2J A3J A1K A4J A5J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (all models A2J A3J A1K A4J A5J)	41U3030	1

6064 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models)	89P8581	1
Speaker Power brick - Japan (models A2J A3J A4J A5J)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models)	89P8579	1

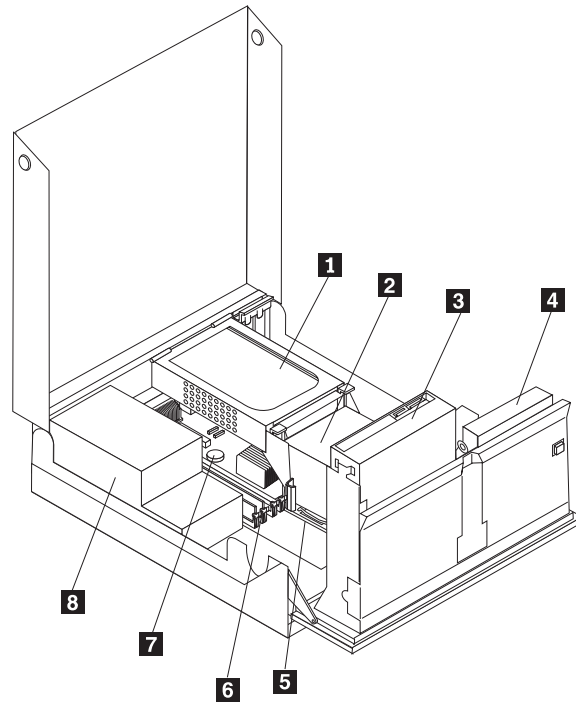
6064 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	1
Speaker Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models A1K)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6064 Power Cords	FRU#	CRU
Power cord - US (models)	39M5080	1
Power cord - China (models)	39M5205	1
Power cord - Japan (models A2J A3J A4J A5J)	39M5193	1
Power cord - Brazil (models)	39M5232	1
Power cord - LA High Volt APU) (models)	39M5067	1
Power cord - Australia / New Zealand (models)	39M5102	1
Power cord - Korea (models A1K)	39M5212	1
Power cord - Hong Kong (models)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models)	39M5150	1
Power cord - Taiwan (models)	39M5246	1
Power cord - Italy (models)	39M5164	1
Power cord - G models (models)	39M5122	1
Power cord - Denmark (models)	39M5129	1
Power cord - Switzerland (models)	39M5157	1
Power cord - Israel (models)	39M5171	1
Power cord - South Africa (models)	39M5143	1
Power cord - India (models)	39M5004	1

6064 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models)	45C4191	1
RE (models)	45C4216	1
FR/CF (models)	45C4192	1
GR (models)	45C4193	1
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1

6064 Windows XP Pro Recovery CDs	FRU#	CRU
SV (models)	45C4199	1
DK (models)	45C4200	1
FI (models)	45C4203	1
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models A2J A3J A4J A5J)	45C4197	1
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

Machine Type 6066



Item #	6066 FRUs	FRU#	CRU Tier
1	Hard disk drive, 160GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A1V A2G A3G A4G A5G A6G)	40Y9035	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM drive - 16x/48x - SATA XP and Vista (models A1V)	41N3325	2
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models A2G A4G A5G)	42Y9353	2
3	Optical drive, DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A3G A6G)	43C1042	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models A1V)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models A1V)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1V A5G)	43C3833	N
5	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A6G)	43C1693	N
5	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models A3G A4G)	43C2056	N
5	Microprocessor, Celeron 420 Processor 1.6GHz 800MHz FSB 512K L2 (models A2G)	43C3835	N
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1V A2G A3G A4G A5G A6G)	41X4256	2
7	System board, Mercury non AMT (GA) (models A1V A2G A3G A4G A5G A6G)	87H5127	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A1V A2G A3G A5G A6G A4G)	41A9701	2

The FRUs listed in the following tables are not illustrated.

6066 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6066 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A2G A3G A5G A6G A4G)	41A5289	1
Arabic (models)	41A5290	1
Arabic/French (models A2G A3G A5G A6G A4G)	41A5291	1
Belgian/French (models A2G A3G A5G A6G A4G)	41A5292	1
Belgian/UK (models A2G A3G A5G A6G A4G)	41A5293	1
Bulgarian (models A2G A3G A5G A6G A4G)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (models A2G A3G A5G A6G A4G)	41A5297	1
Danish (models A2G A3G A5G A6G A4G)	41A5298	1
Dutch (models A2G A3G A5G A6G A4G)	41A5299	1
French (models A2G A3G A5G A6G A4G)	41A5300	1
French Canadian 445 (models)	41A5301	1
French Canadian 58 (models)	41A5302	1
German (models A2G A3G A5G A6G A4G)	41A5303	1
Greek (models A2G A3G A5G A6G A4G)	41A5304	1
Greek/US (models A2G A3G A5G A6G A4G)	41A5305	1
Hebrew (models A2G A3G A5G A6G A4G)	41A5306	1
Hungarian (models A2G A3G A5G A6G A4G)	41A5307	1

6066 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Iceland (models A2G A3G A5G A6G A4G)	41A5308	1
Italian 141 (models A2G A3G A5G A6G A4G)	41A5309	1
Japanese (models	41A5310	1
Korean (models)	41A5311	1
Norwegian (models A2G A3G A5G A6G A4G)	41A5313	1
Polish (models A2G A3G A5G A6G A4G)	41A5314	1
Portuguese (models A2G A3G A5G A6G A4G)	41A5315	1
Romanian 096 (models A2G A3G A5G A6G A4G)	41A5317	1
Romanian 446 (models A2G A3G A5G A6G A4G)	41A5316	1
Russian/Cyrillic (models A2G A3G A5G A6G A4G)	41A5318	1
Serbian/Cyrillic (models A2G A3G A5G A6G A4G)	41A5319	1
Slovak (models A2G A3G A5G A6G A4G)	41A5320	1
Spanish (models A2G A3G A5G A6G A4G)	41A5321	1
Swedish/Finn (models A2G A3G A5G A6G A4G)	41A5322	1
Swiss (models A2G A3G A5G A6G A4G)	41A5323	1
Thailand (models)	41A5324	1
Turkish 440 (models A2G A3G A5G A6G A4G)	41A5325	1
Turkish 179 (models A2G A3G A5G A6G A4G)	41A5326	1
UK English (models A2G A3G A5G A6G A4G)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models A2G A3G A5G A6G A4G)	41A5329	1

6066 Keyboards (Fingerprint Reader USB)	FRU#	CRU Tier
US English (models)	41A5248	1
Arabic (models)	41A5249	1
Arabic/French (models)	41A5250	1
Belgian/French (models)	41A5251	1
Belgian/UK (models)	41A5252	1
Brazil/Portuguese (models)	41A5253	1
Bulgarian (models)	41A5254	1
Chinese (models A1V)	41A5255	1
Czech (models)	41A5256	1
Danish (models)	41A5257	1
Dutch (models)	41A5258	1
French (models)	41A5259	1
French Canadian 445 (models)	41A5260	1
French Canadian 58 (models)	41A5261	1
German (models)	41A5262	1
Greek (models)	41A5263	1
Greek/US (models)	41A5264	1
Hebrew (models)	41A5265	1

6066 Keyboards (Fingerprint Reader USB)	FRU#	CRU Tier
Hungarian (models)	41A5266	1
Iceland (models)	41A5267	1
Italian 141 (models)	41A5268	1
Japanese (models)	41A5269	1
Korean (models)	41A5270	1
LA Spanish (models)	41A5271	1
Norwegian (models)	41A5272	1
Polish (models)	41A5273	1
Portuguese (models)	41A5274	1
Romanian 096 (models)	41A5275	1
Romanian 446 (models)	41A5276	1
Russian/Cyrillic (models)	41A5277	1
Serbian/Cyrillic (models)	41A5278	1
Slovak (models)	41A5279	1
Spanish (models)	41A5280	1
Swedish/Finn (models)	41A5281	1
Swiss (models)	41A5282	1
Thailand (models)	41A5283	1
Turkish 440 (models)	41A5284	1
Turkish 179 (models)	41A5285	1
UK English (models)	41A5286	1
US Euro (models)	41A5287	1
Slovenian (models)	41A5288	1

6066 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (all models A1V A2G A3G A5G A6G A4G)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (all models A1V A2G A3G A5G A6G A4G)	41U3030	1

6066 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models)	89P8581	1
Speaker Power brick - Japan (models)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models)	89P8579	1
Speaker Brick - Korea (models)	41A4903	1

6066 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A2G A3G A5G A6G A4G)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6066 Power Cords	FRU#	CRU
Power cord - US (models)	39M5080	1
Power cord - China (models)	39M5205	1
Power cord - Japan (models)	39M5193	1
Power cord - Brazil (models)	39M5232	1
Power cord - LA High Volt APU) (models)	39M5067	1
Power cord - Australia / New Zealand (models)	39M5102	1
Power cord - Korea (models)	39M5212	1
Power cord - Hong Kong (models)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A2G A3G A5G A6G A4G)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models A2G A3G A5G A6G A4G)	39M5164	1
Power cord - G models (models)	39M5122	1
Power cord - Denmark (models A2G A3G A5G A6G A4G)	39M5129	1
Power cord - Switzerland (models A2G A3G A5G A6G A4G)	39M5157	1
Power cord - Israel (models A2G A3G A5G A6G A4G)	39M5171	1
Power cord - South Africa (models A2G A3G A5G A6G A4G)	39M5143	1
Power cord - India (models)	39M5004	1

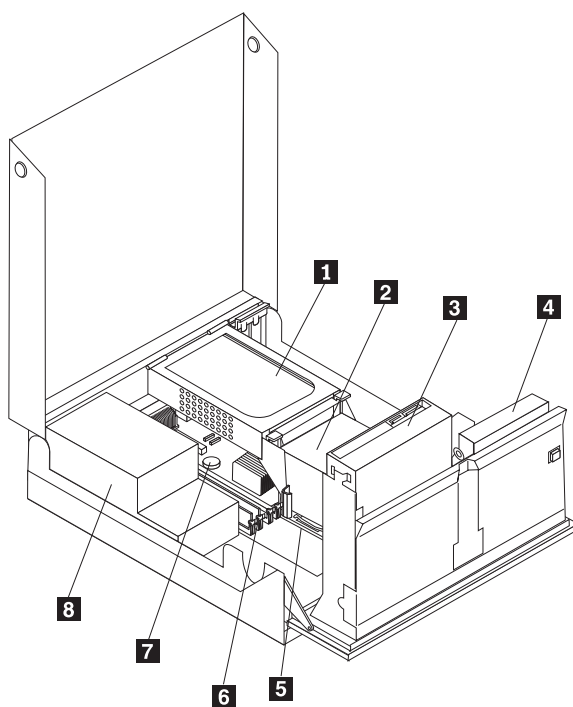
6066 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A5G A6G A4G)	45C4191	1
RE (models A5G A6G A4G)	45C4216	1
FR/CF (models A5G A6G A4G)	45C4192	1
GR (models A5G A6G A4G)	45C4193	1
SP/LA (models A5G A6G A4G)	45C4194	1
IT (models A5G A6G A4G)	45C4196	1
BR (models)	45C4195	1

6066 Windows XP Pro Recovery CDs	FRU#	CRU
SV (models A5G A6G A4G)	45C4199	1
DK (models A5G A6G A4G)	45C4200	1
FI (models A5G A6G A4G)	45C4203	1
NO (models A5G A6G A4G)	45C4198	1
NL (models A5G A6G A4G)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models)	45C4197	1
HE (models A5G A6G A4G)	45C4204	1
PL (models A5G A6G A4G)	45C4205	1
CZ (models A5G A6G A4G)	45C4202	1
AE (models A5G A6G A4G)	45C4206	1
RU (models A5G A6G A4G)	45C4207	1
TR (models A5G A6G A4G)	45C4208	1
HU (models A5G A6G A4G)	45C4209	1
PO (models A5G A6G A4G)	45C4217	1
GK (models A5G A6G A4G)	45C4210	1
SL (models A5G A6G A4G)	45C4215	1

6066 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A2G A3G)	45C4077	1
FR/CF (models A2G A3G)	45C4079	1
GR (models A2G A3G)	45C4080	1
SP/LA (models A2G A3G)	45C4081	1
BR (models)	45C4082	1
IT (models A2G A3G)	45C4083	1
JP (models)	45C4084	1
NO (models A2G A3G)	45C4085	1
SV (models A2G A3G)	45C4086	1
DK (models A2G A3G)	45C4087	1
NL (models A2G A3G)	45C4088	1
CZ (models A2G A3G)	45C4089	1
FI (models A2G A3G)	45C4090	1
PL (models A2G A3G)	45C4091	1
RU (models A2G A3G)	45C4092	1
TR (models A2G A3G)	45C4093	1
HU (models A2G A3G)	45C4094	1
GK (models A2G A3G)	45C4095	1
PO (models A2G A3G)	45C4102	1

6066 Vista Business 32 Recovery DVDs	FRU#	CRU
CS (models)	45C4096	1
Traditional Chinese (models A1V)	45C4097	1
Traditional Chinese (models)	45C4098	1
KR (models)	45C4099	1
SL (models A2G A3G)	45C4100	1
RE (models A2G A3G)	45C4078	1
Romanian (models A2G A3G)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A2G A3G)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A2G A3G)	45C4106	1

Machine Type 6067



Item #	6067 FRUs	FRU#	CRU Tier
1	Hard disk drive, 160GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A1V)	40Y9035	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM drive - 16x/48x - SATA XP and Vista (models A1V)	41N3325	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2
5	Microprocessor, Core 2 Duo E6850 Processor 3GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A1V)	43C1694	N
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1V)	41X4256	2
7	System board, Mercury AMT (GA) (models A1V) Note: When ordering the system board you should also order a new Thermal kit.	87H5128	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A1V)	41A9701	2
8	Power supply, 280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models A1V)	41A9717	2

The FRUs listed in the following tables are not illustrated.

6067 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2

6067 FRUs	FRU#	CRU
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6067 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models)	41A5289	1
Arabic (models)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models)	41A5292	1
Belgian/UK (models)	41A5293	1
Bulgarian (models)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
French Canadian 445 (models)	41A5301	1
French Canadian 58 (models)	41A5302	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Italian 141 (models)	41A5309	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
Norwegian (models)	41A5313	1
Polish (models)	41A5314	1
Portuguese (models)	41A5315	1

6067 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Romanian 096 (models)	41A5317	1
Romanian 446 (models)	41A5316	1
Russian/Cyrillic (models)	41A5318	1
Serbian/Cyrillic (models)	41A5319	1
Slovak (models)	41A5320	1
Spanish (models)	41A5321	1
Swedish/Finn (models)	41A5322	1
Swiss (models)	41A5323	1
Thailand (models)	41A5324	1
Turkish 440 (models)	41A5325	1
Turkish 179 (models)	41A5326	1
UK English (models)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models)	41A5329	1

6067 Keyboards (Fingerprint Reader USB)	FRU#	CRU Tier
US English (models)	41A5248	1
Arabic (models)	41A5249	1
Arabic/French (models)	41A5250	1
Belgian/French (models)	41A5251	1
Belgian/UK (models)	41A5252	1
Brazil/Portuguese (models)	41A5253	1
Bulgarian (models)	41A5254	1
Chinese (models A1V)	41A5255	1
Czech (models)	41A5256	1
Danish (models)	41A5257	1
Dutch (models)	41A5258	1
French (models)	41A5259	1
French Canadian 445 (models)	41A5260	1
French Canadian 58 (models)	41A5261	1
German (models)	41A5262	1
Greek (models)	41A5263	1
Greek/US (models)	41A5264	1
Hebrew (models)	41A5265	1
Hungarian (models)	41A5266	1
Iceland (models)	41A5267	1
Italian 141 (models)	41A5268	1
Japanese (models)	41A5269	1
Korean (models)	41A5270	1
LA Spanish (models)	41A5271	1
Norwegian (models)	41A5272	1

6067 Keyboards (Fingerprint Reader USB)	FRU#	CRU Tier
Polish (models)	41A5273	1
Portuguese (models)	41A5274	1
Romanian 096 (models)	41A5275	1
Romanian 446 (models)	41A5276	1
Russian/Cyrillic (models)	41A5277	1
Serbian/Cyrillic (models)	41A5278	1
Slovak (models)	41A5279	1
Spanish (models)	41A5280	1
Swedish/Finn (models)	41A5281	1
Swiss (models)	41A5282	1
Thailand (models)	41A5283	1
Turkish 440 (models)	41A5284	1
Turkish 179 (models)	41A5285	1
UK English (models)	41A5286	1
US Euro (models)	41A5287	1
Slovenian (models)	41A5288	1

6067 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (all models A1V)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (all models A1V)	41U3030	1

6067 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models)	89P8581	1
Speaker Power brick - Japan (models)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models)	89P8579	1
Speaker Brick - Korea (models)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2

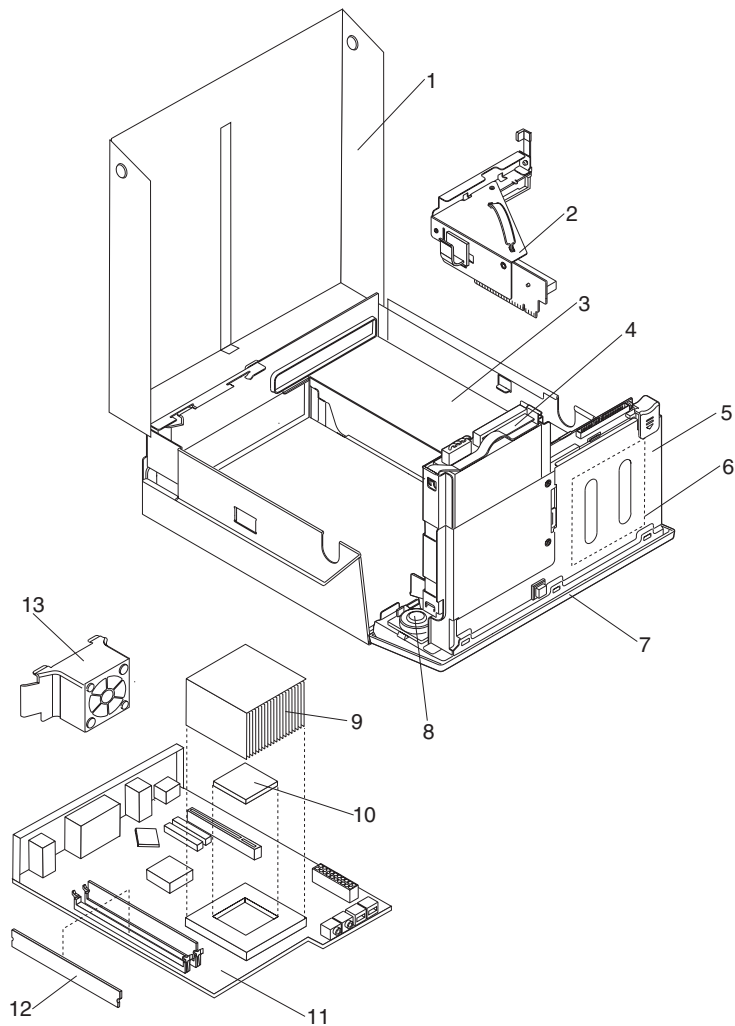
6067 Adapters and miscellaneous FRUs	FRU#	CRU
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6067 Power Cords	FRU#	CRU
Power cord - US (models)	39M5080	1
Power cord - China (models)	39M5205	1
Power cord - Japan (models)	39M5193	1
Power cord - Brazil (models)	39M5232	1
Power cord - LA High Volt APU) (models)	39M5067	1
Power cord - Australia / New Zealand (models)	39M5102	1
Power cord - Korea (models)	39M5212	1
Power cord - Hong Kong (models)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models)	39M5164	1
Power cord - G models (models)	39M5122	1
Power cord - Denmark (models)	39M5129	1
Power cord - Switzerland (models)	39M5157	1
Power cord - Israel (models)	39M5171	1
Power cord - South Africa (models)	39M5143	1
Power cord - India (models)	39M5004	1

6067 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	45C4077	1
FR/CF (models)	45C4079	1
GR (models)	45C4080	1
SP/LA (models)	45C4081	1
BR (models)	45C4082	1
IT (models)	45C4083	1
JP (models)	45C4084	1
NO (models)	45C4085	1
SV (models)	45C4086	1
DK (models)	45C4087	1
NL (models)	45C4088	1
CZ (models)	45C4089	1
FI (models)	45C4090	1
PL (models)	45C4091	1
RU (models)	45C4092	1
TR (models)	45C4093	1

6067 Vista Business 32 Recovery DVDs	FRU#	CRU
HU (models)	45C4094	1
GK (models)	45C4095	1
PO (models)	45C4102	1
CS (models)	45C4096	1
Traditional Chinese (models A1V)	45C4097	1
Traditional Chinese (models)	45C4098	1
KR (models)	45C4099	1
SL (models)	45C4100	1
RE (models)	45C4078	1
Romanian (models)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models)	45C4106	1

Machine Type 6071



Item #	6071 FRUs	FRU#	CRU Tier
1	Top Cover (models)	89P6782	1
2	PCI Riser Card Bracket Asm (all models)	41N8276	1
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (all models)	39M0618	1
2	Interposer Card (all models)	41R2902	1
3	Power Supply, 225 Watt (active PFC) - Standard, Robust, JP (models A5S A5D A5Y A7S A7D A7Y A8M A9M A1G A2U A2F A3U A3F A3S A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4C ACU ACF B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J BDU BDF)	41N3105	2
4	Hard disk drive 80GB 7200rpm Serial ATA, (models A5S A5D A5Y A9M A1G A2U A2F B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J BDU BDF)	40Y9034	1
5	Front Rotating Cage assembly (all models)	41R6259	2

Item #	6071 FRUs	FRU#	CRU Tier
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A7S A7D A7Y A8M A9M A1G A2U A2F A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J BDU BDF)	89H4936	1
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A7S A7D A7Y A8M A9M A1G A2U A2F A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J BDU BDF)	43C2648	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A4C ACU ACF ADU ADF)	43C0053	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A4C ACU ACF ADU ADF)	42Y3910	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A4C ACU ACF ADU ADF)	43C2649	1
7	Front Bezel (all models)	41R6260	1
8	Speaker and Cable assembly (all models)	39K5012	1
9	Thermal kit (all models)	41A7711	2
10	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A8M A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4C ADU ADF)	43C3833	N
10	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models A1G BDU BDGF)	43C1967	N
10	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J)	43C1968	N
11	System board - Jupiter non AMT (GA) (models A5S A5D A5Y A7S A7D A7Y A8M A9M A1G A2U A2F A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4C ACU ACF ADC ADF B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J BDU BDF)	87H5131	2
12	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A5S A5D A5Y)	41X4255	1
12	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A7S A7D A7Y A8M A9M A1G A2U A2F A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4C ACU ACF ADU ADF B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J BDU BDF)	41X4256	1
13	Rear exhaust fan (all models)	39M0551	1

The FRUs listed in the following table are not illustrated.

6071 FRUs	FRU#	CRU Tier
Cable, SATA hard disk drive and optical drive (all models)	39K5061	1
Vertical stand (all models)	89P6792	1
Rear air deflector (all models)	89P6793	1
Under-desk Mounting Kit (all models)	39M0599	1
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1
HSS Tray assembly (includes grommet/pins/bracket/ground springs) (all models)	89P6778	1
Power/LED cable assembly with bracket (all models)	39K5055	2
Chassis and cover assembly (all models)	41R6258	2

6071 FRUs	FRU#	CRU Tier
Miscellaneous hardware kit (all models)	89P6794	1
Plastic parts kit (all models)	39M0575	2
Battery 3.0V (all models)	33F8354	1
Thermal Sense cable (850 mm) (all models)	41R2511	1
Front fan assembly (850 mm) (all models)	41R6359	1

6071 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A8M A9M A1G A2U A2F A3U A3M A3A A3Q A3H A3R A3E AAU ABU ACU ADU B8G B8M B8A B8Q B8H B8R B8E BDU)	41A5289	1
Arabic (models A1G A3G B8G)	41A5290	1
Arabic/French (models A1G A3G B8G)	41A5291	1
Belgian/French (models A1G A3G B8G)	41A5292	1
Belgian/UK (models A1G A3G B8G)	41A5293	1
Brazilian (models B8P)	41A5294	1
Bulgarian (models A1G A3G B8G)	41A5295	1
Chinese/US (models A3B A3V B8B B8V)	41A5296	1
Czech (models A1G A3G B8G)	41A5297	1
Danish (models A1G A3G B8G)	41A5298	1
Dutch (models A1G A3G B8G)	41A5299	1
French (models A1G A3G B8G)	41A5300	1
French Canadian 445 (models A2U A2F A3F ACF ADF BDF)	41A5301	1
French Canadian 58 (models A2U A2F A3F ACF ADF BDF)	41A5302	1
German (models A1G A3G B8G)	41A5303	1
Greek (models A1G A3G B8G)	41A5304	1
Greek/US (models A1G A3G B8G)	41A5305	1
Hebrew (models A1G A3G B8G)	41A5306	1
Hungarian (models A1G A3G B8G)	41A5307	1
Iceland (models A1G A3G B8G)	41A5308	1
Italian 141 (models A1G A3G B8G)	41A5309	1
Japanese (models A3J B8J)	41A5310	1
Korean (models A3K B8K)	41A5311	1
LA Spanish (models A5S A5D A5Y A7S A7D A7Y A3S A3D A3Y B8S B8D B8Y)	41A5312	1
Norwegian (models A1G A3G B8G)	41A5313	1
Polish (models A1G A3G B8G)	41A5314	1
Portuguese (models A1G A3G B8G)	41A5315	1
Romanian 096 (models A1G A3G B8G)	41A5317	1
Romanian 446 (models A1G A3G B8G)	41A5316	1
Russian/Cyrillic (models A1G A3G B8G)	41A5318	1
Serbian/Cyrillic (models A1G A3G B8G)	41A5319	1
Slovak (models A1G A3G B8G)	41A5320	1
Spanish (models A1G A3G B8G)	41A5321	1

6071 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Swedish/Finn (models A1G A3G B8G)	41A5322	1
Swiss (models A1G A3G B8G)	41A5323	1
Thailand (models A3T B8T)	41A5324	1
Turkish 440 (models A1G A3G B8G)	41A5325	1
Turkish 179 (models A1G A3G B8G)	41A5326	1
UK English (models A1G A3G B8G)	41A5327	1
US Euro (models A1G A3G B8G)	41A5328	1
Slovenian (models A1G A3G B8G)	41A5329	1

6071 Mice	FRU#	CRU Tier
Mouse, Optical Wheel (400DPI, USB) (models A5S A5D A5Y A7S A7D A7Y A8M A9M A1G A2U A2F A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4C ACU ACF ADU ADF B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J BDU BDF)	41U3013	1
Mouse, Optical Wheel (400DPI, USB) (models A5S A5D A5Y A7S A7D A7Y A8M A9M A1G A2U A2F A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4C ACU ACF ADU ADF B8S B8P B8L B8D B8Y B8G B8M B8A B8Q B8T B8C B8B B8H B8V B8K B8E B8R B8E B8J BDU BDF)	41U3030	1

6071 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A2U A3U ACU ADU BDU B8S)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models B8D)	89P8575	1
Speaker Power brick - China, Thailand (models B8C B8T)	89P8581	1
Speaker Power brick - Japan (models A3J B8J B8R)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A8M A9M B8M)	89P8579	1
Speaker Brick - Korea (models A3R B8K B8R)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A3B A3H B8B B8H B8G)	89P8573	1
Speaker Brick - Taiwan (models A3V B8V)	41A4905	1
Speaker Power brick - India, South Africa (models A3Q B8Q)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2

6071 Adapters and miscellaneous FRUs	FRU#	CRU
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6071 Power Cords	FRU#	CRU Tier
Power Cord (US) (models A5S A5D A A7S A7D A2U A2F A3U A3F A3S A3D A3L A3A A3T ACU ACF ADU ADF B8S B8D B8L B8A B8T BDU)	39M5080	1
Power Cord (China) (models A3C A4C B8C)	39M5205	1
Power Cord (Japan) (models A3E A3J B8E B8J)	39M5193	1
Power Cord (Brazil) (models A3P B8P)	39M5232	1
Power Cord (LA), (High Volt) (APU) (models A5Y A7Y A3Y A3L B8Y B8L)	39M5067	1
Power Cord (Australia, New Zealand) (models A8M A9M A3M B8M)	39M5102	1
Power Cord (Korea) (models A3K A3R B8K B8R)	39M5212	1
Power Cord (Hong Kong) (models A3B A3H B8B B8H)	39M5151	1
Power Cord (UK, Ireland, Singapore, Malaysia, Brunei) (models A1G A3G B8G)	39M5150	1
Power Cord (Taiwan) (models A3V B8V)	39M5246	1
Power Cord (Italy) (models A5S A7S A1G A3S A3Y A3L B8S B8Y B8L B8G)	39M5164	1
Power Cord (G models) (models A3A B8A)	39M5122	1
Power Cord (Denmark) (models A1G A2F A3G B8G B8F BDF)	39M5129	1
Power Cord (Switzerland) (models A1G B8G)	39M5157	1
Power Cord (Israel) (models A1G B8G)	39M5171	1
Power Cord (South Africa) (models A8M A9M A1G A3G A3M A3A B8G B8M B8A)	39M5143	1
Power Cord (India) (models A3Q B8Q)	39M5004	1

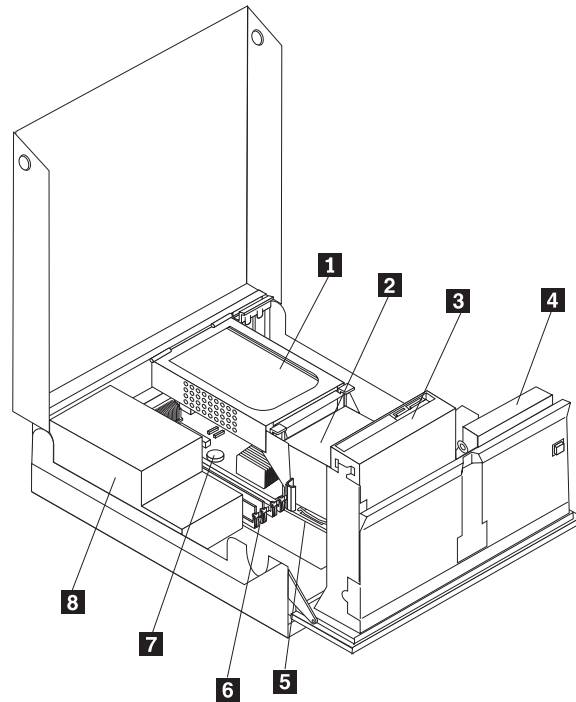
6071 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A8M A9M A1G A4G A3H A3R A3E ACU ADU BDU)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A2F ACF ADF BDF)	45C4192	1
GR (models A1G A3G)	45C4193	1
SP/LA (models A1G A3G)	45C4194	1
IT (models A1G A3G)	45C4196	1
BR (models A3P)	45C4195	1
SV (models A1G A3G)	45C4199	1
DK (models A1G A3G)	45C4200	1
FI (models A1G A3G)	45C4203	1
NO (models A1G A3G)	45C4198	1
NL (models A1G A3G)	45C4201	1
Korean (models A3K)	45C4214	1
Simplified Chinese (models A3C A4C)	45C4211	1
Taiwan-TC (models A3V)	45C4212	1
Hong Kong-TC (models A3B)	45C4213	1
Japanese (models A3J)	45C4197	1

6071 Windows XP Pro Recovery CDs	FRU#	CRU
HE (models)	45C4204	1
PL (models A1G A3G)	45C4205	1
CZ (models A1G A3G)	45C4202	1
AE (models)	45C4206	1
RU (models A1G A3G)	45C4207	1
TR (models A1G A3G)	45C4208	1
HU (models A1G A3G)	45C4209	1
PO (models A1G A3G)	45C4217	1
GK (models A1G A3G)	45C4210	1
SL (models A1G A3G)	45C4215	1

6071 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A8M A9M A1G A4G A3H A3R A3E ACU ADU B8G B8M B8A B8Q B8T B8H B8R B8E)	45C4077	1
FR/CF (models A2F ACF ADF)	45C4079	1
GR (models A1G A3G B8G)	45C4080	1
SP/LA (models A1G A3G B8G)	45C4081	1
BR (models A3P B8P)	45C4082	1
IT (models A1G A3G B8G)	45C4083	1
JP (models A3J B8J)	45C4084	1
NO (models A1G A3G B8G)	45C4085	1
SV (models A1G A3G B8G)	45C4086	1
DK (models A1G A3G B8G)	45C4087	1
NL (models A1G A3G B8G)	45C4088	1
CZ (models A1G A3G B8G)	45C4089	1
FI (models A1G A3G B8G)	45C4090	1
PL (models A1G A3G B8G)	45C4091	1
RU (models A1G A3G B8G)	45C4092	1
TR (models A1G A3G B8G)	45C4093	1
HU (models A1G A3G B8G)	45C4094	1
GK (models A1G A3G B8G)	45C4095	1
PO (models A1G A3G B8G)	45C4102	1
CS (models A3C A4C B8C)	45C4096	1
Traditional Chinese (models A3V B8V)	45C4097	1
Traditional Chinese (models A3B B8B)	45C4098	1
KR (models A3K B8K)	45C4099	1
SL (models A1G A3G B8G)	45C4100	1
RE (models A1G A3G B8G)	45C4078	1
Romanian (models A1G A3G B8G)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A1G A3G B8G)	45C4104	1

6071 Vista Business 32 Recovery DVDs	FRU#	CRU
Arabic Localized (models)	45C4105	1
Hebrew (models A1G A3G B8G)	45C4106	1

Machine Type 6072



Item #	6072 FRUs	FRU#	CRU Tier
1	Hard disk drive, 80GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A7S A7P S7D S7Y AAM AEM AFM AGM A1G A5U A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5H A5V A5K A5R A5E A5J ANU ANF APU APF ATU ATF B2M B3M B4M B5M B7M B8Q B9A B9Q B9T BJU BJF BKU BKF BNU BNF BVU BVF BVS BVP BVL BVD BVY BVG BVM BVA BVQ BVT BVC BVT BVC BVB BVH BVV BVK BVR BVE BVJ BJS BJP BJL BJL BJD BJY BJG BJM BJA BJQ BJT BJC BJB BJH BJV BJK BJR BJE BJJ C1U C1F C2U C2F C3U C3F)	40Y9034	2
1	Hard disk drive, 160GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A2B A2H A3B A3H A9S A9P A9D A9Y ABM ACM ADM AHM AJM AKM AMM ARU ARF ASU ASF AUU AUF B1B B1H B6M BBA BBQ BBT BCA BCQ BCT BDA BDT BFA BFT BGG BHG BMU BMF BPS BPP BPY BRS BRY BSS BSP BSY BTS BTP BTY BUS BUY)	40Y9035	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM drive - 16x/48x - SATA XP and Vista (models A2B A2H A9S A9P A9D A9Y AEM AFM AGM A1G A4U A4U A4F AHM AKM ATU ATF BJS BJP BJL BJL BJD BJY BJG BJM BJA BJQ BJT BJC BJB BJH BJV BJK BJR BJE BJJ C1U C1F C2U C2F)	41N3325	2
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models AAM A5U A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5H A5V A5K A5R A5E A5J BGG BKU BKF BNU BNF BSS BSP BSY BUS BUY C3U C3F)	42Y9353	2
3	Optical drive, DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A3B A3H ABM ACM ADM AJM AMM ASU ASF AUU AUF B1B B1H B6M BBA BBQ BBT BFA BFT BGG BMU BMF BTS BTP BTY)	43C1042	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2

Item #	6072 FRUs	FRU#	CRU Tier
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A2B A2H A3B A3H AAM ABM ADM AEM A5U A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5H A5V A5K A5R A5E A5J ASU ASF ATU ATF B2M B8Q BSS BSP BSY BTS BTP BTY BUS BUY BVU BVF BVS BVP BVL BVD BVY BVG BVM BVA BVQ BVT BVC BVT BVC BVB BVH BVV BVK BVR BVE BVJ BHG BCA BCQ BCT)	43C3833	N
5	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models AKM AMM B1B B1H)	43C1693	N
5	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models A1G C2U C2F C3U C3F)	43C1967	N
5	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models ACM AFM AHM AJM B4M BAA BAQ BAT BDA BDT BJU BJF BKU BKF BMU BMF BJS BJP BJL BJL BJD BJY BJG BJM BJA BJQ BJT BJC BJB BJH BJV BJK BJR BJE BJJ)	43C1968	N
5	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models A9S A9P A9D A9Y A4U A4U A4F AUU AUF B3M BBA BBQ BBT BNU BNF BQS BQY BRS BRP BRY C1U C1F)	43C2056	N
5	Microprocessor, Core 2 Duo E4500 Processor 2.2GHz 800MHz FSB 2M L2 (models B6M B7M BFA BFT BGG)	43C6305	N
5	Microprocessor, Celeron 420 Processor 1.6GHz 800MHz FSB 512K L2 (models AGM B9A B9Q B9T)	43C3835	N
5	Microprocessor, Celeron 430 Processor 1.8GHz 800MHz FSB 512K L2 (models A7S A7P S7D A7Y)	43C1964	N
6	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A7S A7P S7D A7Y B9A B9Q B9T BAA BAQ BAT)	41X4255	2
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A2B A2H A3B A3HA9S A9P A9D A9Y AAM ABM ACM ADM AEM AFM AGM A1G A4U A4U A4F A5U A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5H A5V A5K A5R A5E A5J AHM AJM AKM AMM ASU ASF ATU ATF AUU AUF B1B B1H B2M B3M B4M B5M B6M B7M B8Q BBA BBQ BBT BCA BCQ BCT BDA BDT BFA BFT BGG BHG BJU BJF BKU BKF BMU BMF BNU BNF BPP BPS BPY BQS BQY BRS BRP BRY BSS BSP BSY BTS BTP BTY BUS BUY BVU BVF BVS BVP BVL BVD BVY BVG BVM BVA BVQ BVT BVC BVT BVC BVB BVH BVV BVK BVR BVE BVJ BJS BJP BJL BJL BJD BJY BJG BJM BJA BJQ BJT BJC BJB BJH BJV BJK BJR BJE BJJ C1U C1F C2U C2F C3U C3F)	41X4256	2
7	System board, Mercury non AMT (GA) (models A2B A2H A3B A3H A7S A7P A7D A7Y A9S A9P A9D A9Y AAM ABM ACM ADM AEM AFM AGM A1G A4U A4U A4F A5U A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5H A5V A5K A5R A5E A5J AHM AJM AKM AMM ASU ASF ATU ATF B1B B1H B2M B3M B4M B5M B6M B7M B8Q B9A B9Q B9T BAA BAQ BAT BBA BBQ BBT BCA BCQ BCT BDA BDT BFA BFT BGG BHG BJU BJF BKU BKF BMU BMF BNU BNF BPP BPS BPY BQS BQY BRS BRP BRY BSS BSP BSY BTS BTP BTY BUS BUY BVU BVF BVS BVP BVL BVD BVY BVG BVM BVA BVQ BVT BVC BVT BVC BVB BVH BVV BVK BVR BVE BVJ BJS BJP BJL BJL BJD BJY BJG BJM BJA BJQ BJT BJC BJB BJH BJV BJK BJR BJE BJJ C1U C1F C2U C2F C3U C3F)	87H5127	2

8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A2B A2H A3B A3H A7S A7P A7D A7Y A9S A9P A9D A9Y AAM ABM ACM ADM AEM AFM AGM A1G A4U A4U A4F A5U A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5H A5V A5K A5R A5E A5J AHM AJM AKM AMM ASU ASF ATU ATF B1B B1H B2M B3M B4M B5M B6M B7M B8Q B9A B9Q B9T BAA BAQ BAT BBA BBQ BBT BCA BCQ BCT BDA BDT BFA BFT BGG BHG BJU BJF BKU BKF BMU BMF BNU BNF BPP BPS BPY BQS BQY BRS BRP BRY BSS BSP BSY BTS BTP BTY BUS BUY BVU BVF BVS BVP BVL BVD BVY BVG BVM BVA BVQ BVT BVC BVT BVC BVB BVH BVV BVK BVR BVE BVJ BJS BJP BJL BJL BJD BJY BJG BJM BJA BJQ BJT BJC BJB BJH BJV BJK BJR BJE BJJ C1U C1F C2U C2F C3U C3F)	41A9701	2
---	---	---------	---

The FRUs listed in the following tables are not illustrated.

6072 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6072 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A2H A3H AAM ABM ACM ADM AEM AEM AGM A1G A4U A4U A5U A5U A5G A5M A5A A5Q A5H A5R A5E AHM HJM AKM AMM ASU ATU AUU BJU BKU BMU BNU BGG BHG B2M B3M B4M B5M B6M B7M B8Q B9A B9Q BAA BAQ BBA BBQ BCA BCQ BDA BDQ BFA BFQ B1H BVU BVG BVM BVA BVQ BVH BVR BVE BJG BJM BJA BJQ BJR BJE C1U C2U C3U)	41A5289	1
Arabic (models A1G A5G BGG BHG BVG BJG)	41A5290	1
Belgian/French (models A1G A5G BGG BHG BVG BJG)	41A5292	1
Belgian/UK (models A1G A5G BGG BHG BVG BJG)	41A5293	1
Brazilian (models A7P A8P A9P A5P BPP BQP BRP BSP BTP BVP BUP BJP)	41A5294	1
Bulgarian (models A1G A5G BGG BHG BVG BJG)	41A5295	1

6072 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Chinese/US (models A2B A3B A5B A5V BVB BVV BJB BJV)	41A5296	1
Czech (models A1G A5G BGG BHG BVG BJG)	41A5297	1
Danish (models A1G A5G BGG BHG BVG BJG)	41A5298	1
Dutch (models A1G A5G BGG BHG BVG BJG)	41A5299	1
French (models A1G A5G BGG BHG BVG BJG)	41A5300	1
French Canadian 445 (models A4F A5FASF ATF AUF BJF BKF BMF BNF BJF C1F C2F C3F)	41A5301	1
French Canadian 58 (models A4F A5FASF ATF AUF BJF BKF BMF BNF BJF C1F C2F C3F)	41A5302	1
German (models A1G A5G BGG BHG BVG BJG)	41A5303	1
Greek (models A1G A5G BGG BHG BVG BJG)	41A5304	1
Greek/US (models A1G A5G BGG BHG BVG BJG)	41A5305	1
Hebrew (models A1G A5G BGG BHG BVG BJG)	41A5306	1
Hungarian (models A1G A5G BGG BHG BVG BJG)	41A5307	1
Iceland (models A1G A5G BGG BHG BVG BJG)	41A5308	1
Italian 141 (models A1G A5G BGG BHG BVG BJG)	41A5309	1
Japanese (models A5J BVJ BJJ)	41A5310	1
Korean (models A5K BVK BJK)	41A5311	1
LA Spanish (models A7S A7D A7Y A9S A9D A9Y A5S A5D A5Y BPS BPY BQS BQY BRS BRY BSS BSY BTS BTY BUS BUY BVS BVY BJS BJD BJY)	41A5312	1
Norwegian (models A1G A5G BGG BHG BVG BJG)	41A5313	1
Polish (models A1G A5G BGG BHG BVG BJG)	41A5314	1
Portuguese (models A1G A5G BGG BHG BVG BJG)	41A5315	1
Romanian 096 (models A1G A5G BGG BHG BVG BJG)	41A5317	1
Romanian 446 (models A1G A5G BGG BHG BVG BJG)	41A5316	1
Russian/Cyrillic (models A1G A5G BGG BHG BVG BJG)	41A5318	1
Serbian/Cyrillic (models A1G A5G BGG BHG BVG BJG)	41A5319	1
Slovak (models A1G A5G BGG BHG BVG BJG)	41A5320	1
Spanish (models A1G A5G BGG BHG BVG BJG)	41A5321	1
Swedish/Finn (models A1G A5G BGG BHG BVG BJG)	41A5322	1
Swiss (models A1G A5G BGG BHG BVG BJG)	41A5323	1
Thailand (models A5T B9T BAT BBT BCT BDT BFT BVT BJT)	41A5324	1
Turkish 440 (models A1G A5G BGG BHG BVG BJG)	41A5325	1
Turkish 179 (models A1G A5G BGG BHG BVG BJG)	41A5326	1
UK English (models A1G A5G BGG BHG BVG BJG)	41A5327	1
US Euro (models A1G A5G BGG BHG BVG BJG)	41A5328	1
Slovenian (models A1G A5G BGG BHG BVG BJG)	41A5329	1

6072 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (all models A2B A2H A3B A3H A7S A7P A7D A7Y A9S A9P A9D A9Y AAM ABM ACM ADM AEM AFM AGM A1G A4U A4U A4F A5U A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5H A5V A5K A5R A5E A5J AHM AJM AKM AMM ASU ASF ATU ATF B1B B1H B2M B3M B4M B5M B6M B7M B8Q B9A B9Q B9T BAA BAQ BAT BBA BBQ BBT BCA BCQ BCT BDA BDT BFA BFT BGG BHG BJU BJF BKU BKF BMU BMF BNU BNF BPP BPS BPY BQS BQY BRS BRP BRY BSS BSP BSY BTS BTP BTY BUS BUY BVU BVF BVS BVP BVL BVD BVY BVG BVM BVA BVQ BVT BVC BVT BVC BVB BVH BVV BVK BVR BVE BVJ BJS BJP BJL BJL BJD BJY BJG BJM BJA BJQ BJT BJC BJB BJH BJV BJK BJR BJE BJJ C1U C1F C2U C2F C3U C3F)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (all models A2B A2H A3B A3H A7S A7P A7D A7Y A9S A9P A9D A9Y AAM ABM ACM ADM AEM AFM AGM A1G A4U A4U A4F A5U A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5H A5V A5K A5R A5E A5J AHM AJM AKM AMM ASU ASF ATU ATF B1B B1H B2M B3M B4M B5M B6M B7M B8Q B9A B9Q B9T BAA BAQ BAT BBA BBQ BBT BCA BCQ BCT BDA BDT BFA BFT BGG BHG BJU BJF BKU BKF BMU BMF BNU BNF BPP BPS BPY BQS BQY BRS BRP BRY BSS BSP BSY BTS BTP BTY BUS BUY BVU BVF BVS BVP BVL BVD BVY BVG BVM BVA BVQ BVT BVC BVT BVC BVB BVH BVV BVK BVR BVE BVJ BJS BJP BJL BJL BJD BJY BJG BJM BJA BJQ BJT BJC BJB BJH BJV BJK BJR BJE BJJ C1U C1F C2U C2F C3U C3F)	41U3030	1

6072 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models ASU ATU AUU BJU BKU BMU BNU BVU BPS BQS BRS BSS BTS BUS BVS B9A BAA BBA BCA BDA BFA BVA ANU APU ARU BJU BJS C1U C2U C3U)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models BPY BQY BRY BSY BTY BVY BUY BJY)	89P8575	1
Speaker Power brick - China, Thailand (models BVC BJC BJT)	89P8581	1
Speaker Power brick - Japan (models BVJ BJJ BJE)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models AAM ABM ADM AEM AFM AGM A5M AHM AJM AKM AMM B2M B3M B4M B5M B6M B7M BJM)	89P8579	1
Speaker Brick - Korea (models A5K BVK BJK BJR)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A2B A2H A3B A3H A5B A5H B1B B1H BVB BVH BJB BJH)	89P8573	1
Speaker Brick - Taiwan (models A5V BVV BJV)	41A4905	1
Speaker Power brick - India, South Africa (models A5Q B9Q BAQ BBQ BCQ BDQ BFQ BJQ)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2

6072 Adapters and miscellaneous FRUs	FRU#	CRU
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models ADM B6M)	43C0258	2

6072 Power Cords	FRU#	CRU
Power cord - US (models A7S A7D A9S A9D A4U A4U A4F A5U A5U A5F A5S A5D A5L A5A A5T AHM AJM AKM AMM ASU ASF ATU ATF BJU BJF BKU BKF BMU BMF BPS BQS BRS BSS BTS BVS BUS B9A B9T BAA BAT BBA BBT BCA BCT BDA BDT BFA BFT BVA BVT BJU BJS BJD BJL BJA BJT)	39M5080	1
Power cord - China (models A5C BVC BJC)	39M5205	1
Power cord - Japan (models A5E A5J BVE BVJ BJE BJJ)	39M5193	1
Power cord - Brazil (models A7P A9P A5P BPP BQP BRP BSP BTP BUP BVP BJP)	39M5232	1
Power cord - LA High Volt APU) (models A7Y A9Y A5Y A5L BVL BPY BQY BRY BSY BTY BUY BVY BJY BJL)	39M5067	1
Power cord - Australia / New Zealand (models AAM ABM ACM ADM AEM AFM AGM A5M B2M B3M B4M B5M B6M B7M BVM)	39M5102	1
Power cord - Korea (models A5K A5R BVK BVR BJK BJR)	39M5212	1
Power cord - Hong Kong (models A2B A2H A3B A3H A5B A5H B1B B1H BVB BVH BJB BJH)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1G A5G A5A BGG BHG B9A BAA BBA BCA BDA BFA BVG BVA)	39M5150	1
Power cord - Taiwan (models A5V BVV BJV)	39M5246	1
Power cord - Italy (models A1G A5S A5Y A5L A5G AHM AJM AKM AMM BPS BQS BRS BTS BVS BPY BQY BQY BSY BTY BUY BVY BVL BGG BHG BVG BJG BJS BJY)	39M5164	1
Power cord - G models (models A5A B9A BAA BBA BCA BDA BFA BVA BJA)	39M5122	1
Power cord - Denmark (models A1G A5G B1G BHG BVG BJG)	39M5129	1
Power cord - Switzerland (models A1G A5G B1G BHG BVG BJG)	39M5157	1
Power cord - Israel (models A1G A5G B1G BHG BVG BJG)	39M5171	1
Power cord - South Africa (models AAM ABM ADM AEM AFM AGM A1G A5G A5M A5A B1G BHG BVG B2M B3M B4M B5M B6M B7M BVM B9A BAA BBA BCA BDA BFA BVG BVA BJG BJM BJA)	39M5143	1
Power cord - India (models A5Q B9Q BAQ BBQ BCQ BVQ BJQ)	39M5004	1

6072 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models B2M B3M B4M B5M B1H B9A BAA BBA BCA A2H A3H AAM ABM ACM ADM AEM AFM AGM A1G A4U A4U A5U A5U A5M A5A A5Q A5H A5R A5E AHM AJM AKM AMM ASU ATU AUU B1H BGG BVG BJU BKU BMU BNU BVU BFA B8Q BHG C1U C2U C3U)	45C4191	1
RE (models BHG)	45C4216	1
FR/CF (models BPF BQF A1G A4F A5F ASF ATF AUF BGG BVG BHG C1F C2F C3F)	45C4192	1
GR (models A1G BGG BVG BHG)	45C4193	1
SP/LA (models BPS BPY BUS BUY A9S A9D A9Y A5S A5D A5Y BHG BRS BRY BSS BSY BTS BTY)	45C4194	1
IT (models A1G BGG BVG BHG)	45C4196	1
BR (models BPP A9P A5P)	45C4195	1

6072 Windows XP Pro Recovery CDs	FRU#	CRU
SV (models A1G BGG BVG BHG)	45C4199	1
DK (models A1G BGG BVG BHG)	45C4200	1
FI (models A1G BGG BVG BHG)	45C4203	1
NO (models A1G BGG BVG BHG)	45C4198	1
NL (models A1G BGG BVG BHG)	45C4201	1
Korean (models A5K BVK)	45C4214	1
Simplified Chinese (models BVC)	45C4211	1
Taiwan-TC (models BVV)	45C4212	1
Hong Kong-TC (models A2B A3B A5B B1B BVB)	45C4213	1
Japanese (models A5J BVJ)	45C4197	1
PL (models A1G BGG BVG BHG)	45C4205	1
CZ (models A1G BGG BVG BHG)	45C4202	1
AE (models A1G BGG BVG BHG)	45C4206	1
RU (models A1G BGG BVG BHG)	45C4207	1
TR (models A1G BGG BVG BHG)	45C4208	1
HU (models A1G BGG BVG BHG)	45C4209	1
PO (models A1G BGG BVG BHG)	45C4217	1
GK (models A1G BGG BVG BHG)	45C4210	1
SL (models A1G BGG BVG BHG)	45C4215	1

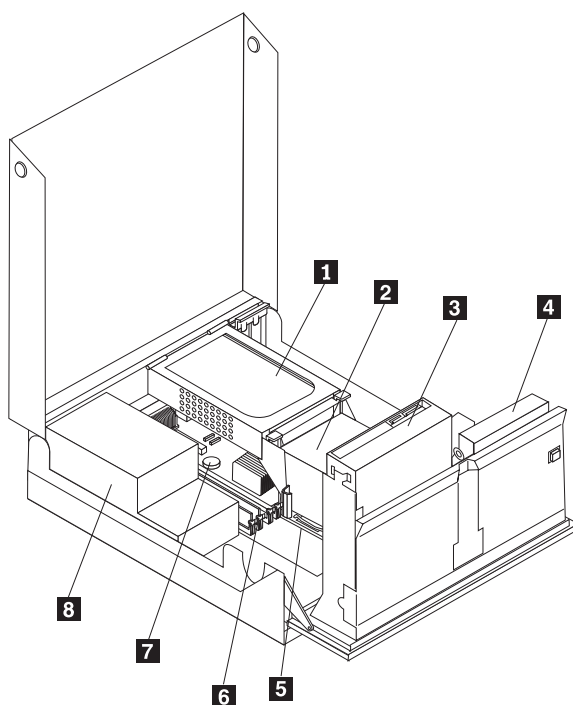
6072 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A2H A3H AAM ABM ACM ADM AEM AFM AGM A1G A4U A4U A5U A5U A5M A5A A5Q A5H A5R A5E AHM AJM AKM AMM ASU ATU AUU B1H BGG BVG BJU BKU BMU BNU BVU BFA B8Q BJG BJM BJA BJQ BJH BJR BJE)	45C4077	1
FR/CF (models A1G A4F A5F ASF ATF AUF BGG BVG BJF BKF BMF BNF BVF BJF)	45C4079	1
GR (models A1G BGG BVG BJG)	45C4080	1
SP/LA (models A9S A9D A9Y A5S A5D A5Y BHG BRS BRY BSS BSY BTS BTY BJS BJD BJY)	45C4081	1
BR (models A9P A5P BRP BSP BTP BJP)	45C4082	1
IT (models A1G BGG BVG BJG)	45C4083	1
JP (models A5J BVJ BJJ)	45C4084	1
NO (models A1G BGG BVG BJG)	45C4085	1
SV (models A1G BGG BVG BJG)	45C4086	1
DK (models A1G BGG BVG BJG)	45C4087	1
NL (models A1G BGG BVG BJG)	45C4088	1
CZ (models A1G BGG BVG BJG)	45C4089	1
FI (models A1G BGG BVG BJG)	45C4090	1
PL (models A1G BGG BVG BJG)	45C4091	1
RU (models A1G BGG BVG BJG)	45C4092	1
TR (models A1G BGG BVG BJG)	45C4093	1
HU (models A1G BGG BVG BJG)	45C4094	1
GK (models A1G BGG BVG BJG)	45C4095	1

6072 Vista Business 32 Recovery DVDs	FRU#	CRU
PO (models A1G BGG BVG BJG)	45C4102	1
CS (models BVC BJC)	45C4096	1
Traditional Chinese (models BVV BJV)	45C4097	1
Traditional Chinese (models A2B A3B A5B B1B BVB BJB)	45C4098	1
KR (models A5K BVK BJK)	45C4099	1
SL (models A1G BGG BVG BJG BJG)	45C4100	1
RE (models A1G A5G BGG BVG BJG)	45C4078	1
Romanian (models A1G A5G BGG BVG BJG)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A1G A5G BGG BVG BJG)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A1G A5G BGG BVG BJG)	45C4106	1

6072 Vista U32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models BHG)	45C4135	1
RE (models BHG)	45C4136	1
FR/CF (models BHG)	45C4137	1
GR (models BHG)	45C4138	1
SP/LA (models BHG BRS BRY BSS BSY BTS BTY)	45C4139	1
BR (models BRP BSP BTP)	45C4140	1
IT (models BHG)	45C4141	1
JP (models BHG)	45C4142	1
NO (models BHG)	45C4143	1
SV (models BHG)	45C4144	1
DK (models BHG)	45C4145	1
NL (models BHG)	45C4146	1
CZ (models BHG)	45C4147	1
FI (models BHG)	45C4148	1
PL (models BHG)	45C4149	1
RU (models BHG)	45C4150	1
TR (models BHG)	45C4151	1
HU (models BHG)	45C4152	1
GK (models BHG)	45C4153	1
CS (models)	45C4154	1
Traditional Chinese (models)	45C4155	1
Traditional Chinese (models)	45C4156	1
KR (models)	45C4157	1
SL (models BHG)	45C4158	1
Hebrew (models BHG)	45C4159	1
Portuguese (models)	45C4160	1
Slovakian (models)	45C4161	1

6072 Vista U32 Recovery DVDs	FRU#	CRU
Arabic Localized (models)	45C4162	1

Machine Type 6073



Item #	6073 FRUs	FRU#	CRU Tier
1	Hard disk drive, 80GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A1G ABU ABF ADU ADF ADS ADD ADL ADD ADY ADP ADG ADM ADA ADQ ADT ADC ADB ADH ADV ADK ADR ADE ADJ ATU ATF ATS ATP ATL ATD ATY ATG ATM ATA ATQ ATT ATC ATB ATH ATV ATK ATR ATE ATJ A1G ABU ABF ADU ADF ADS ADD ADL ADD ADY ADP ADG ADM ADA ADQ ADT ADC ADB ADH ADV ADK ADR ADE ADJ ATU ATF ATS ATP ATL ATD ATY ATG ATM ATA ATQ ATT ATC ATB ATH ATV ATK ATR ATE ATJ)	40Y9034	2
1	Hard disk drive, 160GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A5U A5G A5M A5Q A5J A5S A5P A5D A5Y A4M A2U A2F A3C ACU ACF)	40Y9035	2
1	Hard disk drive, 250 GB 7200rpm SATA (models A7M A8M A9M A9A A9T AAM AAA AAT AJG A7M A8M A9M A9A A9T AAM AAA AAT AJG)	40Y9036	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM drive - 16x/48x - SATA XP and Vista (models A5G A5M A5Q A5J A5S A5P A5D A5Y A4S A5G A5M A5Q A5J A5S A5P A5D A5Y A1G A3C AAM AAA AAT ABU ABF AAM AAA AAT ABU ABF AEB AEH AFQ AGA AGT AEB AEH AFQ AGA AGT AKU ARC ARC ATU ATF ATS ATP ATL ATD ATY ATG ATM ATA ATQ ATT ATC ATB ATH ATV ATK ATR ATE ATJ)	41N3325	2
3	Optical drive, DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models AHG AMU AMF ANS ANP ANY APS APY AMU AMF ANS ANP ANY APS APY AHG AMU AMF ANS ANP ANY APS APY AMU AMF ANS ANP ANY APS APY)	42Y9353	2
3	Optical drive, DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A4S A4P A4D A4Y A6M A7M A8M A2U A2F A9M A9A A9T AJG)	43C1042	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models A3C)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models A3C)	40Y9111	2

Item #	6073 FRUs	FRU#	CRU Tier
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A5U A5G A5M A5Q A5J A5S A5P A5D A5Y A4S A4P A4D A4Y A6M A1G A2U A2F A3C ABU ABF ADU ADF ADS ADD ADL ADD ADY ADP ADG ADM ADA ADQ ADT ADC ADB ADH ADV ADK ADR ADE ADJ AEB AEH AFQ AKU AMU AMF ANS ANP ANY APS APY ARC ATU ATF ATS ATP ATL ATD ATY ATG ATM ATA ATQ ATT ATC ATB ATH ATV ATK ATR ATE ATJ)	43C3833	N
5	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A7M A8M A2U A2F A3C A9M A9A A9T AAM AAA AAT AGA AGT AJG ASU ASG ASA ASH)	43C1693	N
5	Microprocessor, Core 2 Duo E6850 Processor 3GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models AHG)	43C1694	N
6	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A5U A5G A5M A5Q A5J A5S A5P A5D A5Y AKU A5U A5G A5M A5Q A5J A5S A5P A5D A5Y AKU)	41X4255	2
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A4S A4P A4D A4Y A6M A7M A8M A1G A2U A2F A3C A9M A9A A9T AAM AAA AAT ABU AEB AEH AFQ AGA AGT AHG AJG AMU AMF ANS ANP ANY APS APY ARC ASU ASG ASA ASH ATU ATF ATS ATP ATL ATD ABF ADU ADF ADS ADD ADL ADD ADY ADP ADG ADM ADA ADQ ADT ADC ADB ADH ADV ADK ADR ADE ADJ A4S A4P A4D A4Y A6M A7M A8M A1G A2U A2F A3C A9M A9A A9T AAM AAA AAT ABU AEB AEH AFQ AGA AGT AHG AJG AMU AMF ANS ANP ANY APS APY ARC ASU ASG ASA ASH ATU ATF ATS ATP ATL ATD ABF ADU ADF ADS ADD ADL ADD ADY ADP ADG ADM ADA ADQ ADT ADC ADB ADH ADV ADK ADR ADE ADJ)	41X4256	2
7	System board, Mercury AMT (GA) (models A5G A5M A5Q A5J A5S A5P A5D A5Y A4S A4P A4D A4Y A6M A7M A8M A1G A2U A2F A3C A9M A9A A9T AAM AAA AAT ABU ABF ADU ADF ADS ADD ADL ADD ADY ADP ADG ADM ADA ADQ ADT ADC ADB ADH ADV ADK ADR ADE ADJ AEB AEH AFQ AGA AGT AHG AJG AKU AMU AMF ANS ANP ANY APS APY ARC ASU ASG ASA ASH ATU ATF ATS ATP ATL ATD ATY ATG ATM ATA ATQ ATT ATC ATB ATH ATV ATK ATR ATE ATJ A5U ACU ACF A5U) Note: When ordering the system board you should also order a new Thermal kit.	87H5128	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A5G A5M A5Q A5J A5S A5P A5D A5Y A4S A4P A4D A4Y A6M A7M A8M A1G A2U A2F A3C A9M A9A A9T AAM AAA AAT ABU ABF ADU ADF ADS ADD ADL ADD ADY ADP ADG ADM ADA ADQ ADT ADC ADB ADH ADV ADK ADR ADE ADJ AEB AEH AFQ AGA AGT AHG AJG AKU AMU AMF ANS ANP ANY APS APY ARC ASU ASG ASA ASH ATU ATF ATS ATP ATL ATD ATY ATG ATM ATA ATQ ATT ATC ATB ATH ATV ATK ATR ATE ATJ)	41A9701	2
8	Power supply, 280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models A5G A5M A5Q A5J A5S A5P A5D A5Y A4S A4P A4D A4Y A6M A7M A8M A1G A2U A2F A3C A9M A9A A9T AAM AAA AAT ABU ABF ADU ADF ADS ADD ADL ADD ADY ADP ADG ADM ADA ADQ ADT ADC ADB ADH ADV ADK ADR ADE ADJ AEB AEH AFQ AGA AGT AHG AJG AKU AMU AMF ANS ANP ANY APS APY ARC ASU ASG ASA ASH ATU ATF ATS ATP ATL ATD ATY ATG ATM ATA ATQ ATT ATC ATB ATH ATV ATK ATR ATE ATJ)	41A9717	2

The FRUs listed in the following tables are not illustrated.

6073 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2

6073 FRUs	FRU#	CRU
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6073 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A5G A5M A5Q A6M A7M A8M A1G A2U A9M A9A A9Q AAM AAA AAQ ABU ADU ADG ADM ADA ADQ ADH ADR ADE AEH AFQ AGA AHG AJG AKU AMU ASG ASA ASH ATU ATG ATM ATA ATQ ATH ATR ATE)	41A5289	1
Arabic (models A1G A5G ADG AHG AJG ASG ATG)	41A5290	1
Belgian/French (models A1G A5G ADG AHG AJG ASG ATG)	41A5292	1
Belgian/UK (models A1G A5G ADG AHG AJG ASG ATG)	41A5293	1
Brazilian (models A4P ADP ANP ATP)	41A5294	1
Bulgarian (models A1G A5G ADG AHG AJG ASG ATG)	41A5295	1
Chinese/US (models ADB ADV AEB ARC ATB ATV)	41A5296	1
Czech (models A1G A5G ADG AHG AJG ASG ATG)	41A5297	1
Danish (models A1G A5G ADG AHG AJG ASG ATG)	41A5298	1
Dutch (models A1G A5G ADG AHG AJG ASG ATG)	41A5299	1
French (models A1G A5G ADG AHG AJG ASG ATG)	41A5300	1
French Canadian 445 (models A2F ABF ADF AMF ACF)	41A5301	1
French Canadian 58 (models A2F ABF ADF AMF ACF)	41A5302	1
German (models A1G A5G ADG AHG AJG ASG ATG)	41A5303	1
Greek (models A1G A5G ADG AHG AJG ASG ATG)	41A5304	1
Hebrew (models A1G A5G ADG AHG AJG ASG ATG)	41A5306	1
Hungarian (models A1G A5G ADG AHG AJG ASG ATG)	41A5307	1
Iceland (models A1G A5G ADG AHG AJG ASG ATG)	41A5308	1
Italian 141 (models A1G A5G ADG AHG AJG ASG ATG)	41A5309	1
Japanese (models A5J ADJ ATJ)	41A5310	1
Korean (models ADK ATK)	41A5311	1

6073 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
LA Spanish (models A4S A4D A4Y ADS ADP ADY ANS ANY APS APY ATS ATD ATY)	41A5312	1
Norwegian (models A1G A5G ADG AHG AJG ASG ATG)	41A5313	1
Polish (models A1G A5G ADG AHG AJG ASG ATG)	41A5314	1
Portuguese (models A1G A5G ADG AHG AJG ASG ATG)	41A5315	1
Romanian 096 (models A1G A5G ADG AHG AJG ASG ATG)	41A5317	1
Romanian 446 (models A1G A5G ADG AHG AJG ASG ATG)	41A5316	1
Russian/Cyrillic (models A1G A5G ADG AHG AJG ASG ATG)	41A5318	1
Serbian/Cyrillic (models A1G A5G ADG AHG AJG ASG ATG)	41A5319	1
Slovak (models A1G A5G ADG AHG AJG ASG ATG)	41A5320	1
Spanish (models A1G A5G ADG AHG AJG ASG ATG)	41A5321	1
Swedish/Finn (models A1G A5G ADG AHG AJG ASG ATG)	41A5322	1
Thailand (models ABT AGT ATT)	41A5324	1
Turkish 440 (models A1G A5G ADG AHG AJG ASG ATG)	41A5325	1
Turkish 179 (models A1G A5G ADG AHG AJG ASG ATG)	41A5326	1
UK English (models A1G A5G ADG AHG AJG ASG ATG)	41A5327	1
US Euro (models A1G A5G ADG AHG AJG ASG ATG)	41A5328	1
Slovenian (models A1G A5G ADG AHG AJG ASG ATG)	41A5329	1

6073 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models)	41U3030	1

6073 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A2U ABU ADU AKU AMU ASU ATU A4S ABS ADS ANS APS ATS)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A4D ADD ATD)	89P8575	1
Speaker Power brick - China, Thailand (models A3C ADC ARC ATC)	89P8581	1
Speaker Power brick - Japan (models ADJ ATJ)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A6M A7M A8M A9M AAM ADM ATM)	89P8579	1
Speaker Brick - Korea (models ADK ATK)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models ADB ADH AEB AEH ASH ATB ATH)	89P8573	1
Speaker Brick - Taiwan (models ADV ATV)	41A4905	1
Speaker Power brick - India, South Africa (models A5Q AFQ ATQ)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1

6073 Adapters and miscellaneous FRUs	FRU#	CRU
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models A8M)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models A6M A7M)	43C0258	2

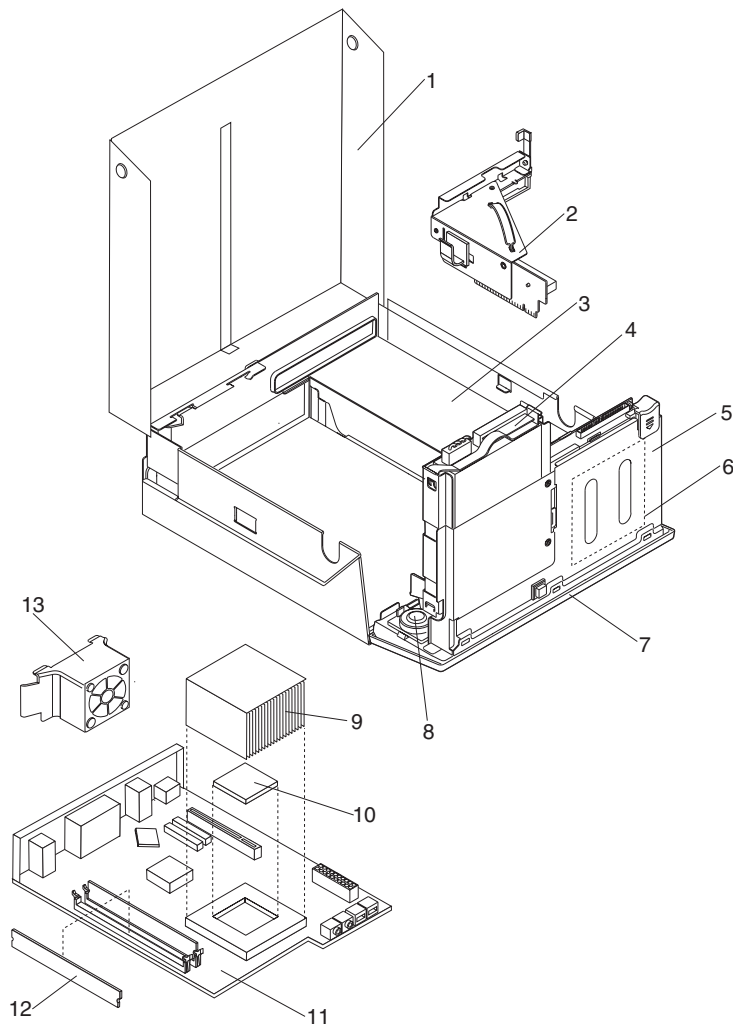
6073 Power Cords	FRU#	CRU
Power cord - US (models A5T A4S A4D A2U A2F ABU ABF A9T AAT ADU ADF ADS ADD ADL ADA ADT AKU AMU AMF ANS ATD ATL AGA ATA ATA AGT)	39M5080	1
Power cord - China (models A3C ADC ARC ATC)	39M5205	1
Power cord - Japan (models ADE ADJ ATE ATJ)	39M5193	1
Power cord - Brazil (models A4P ADP ANP ATP)	39M5232	1
Power cord - LA High Volt APU) (models A4Y ADY ADL ANY APY)	39M5067	1
Power cord - Australia / New Zealand (models A5M A4M A7M A8M A9M AAM ADM ATM)	39M5102	1
Power cord - Korea (models AEK ADR ATR ATK)	39M5212	1
Power cord - Hong Kong (models AEB ADH AEH ATB ATH ASH)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A5G A1G AEG ADA AGA ASA ATA AHG AJG ASH ATG)	39M5150	1
Power cord - Taiwan (models ADV ATV)	39M5246	1
Power cord - Italy (models A5G A4S A1G ADS ADY ADL ADG ANS APS ATS ANY ATY ATL AHG AJG ASG ATG)	39M5164	1
Power cord - G models (models ADA AGA ASA ATA)	39M5122	1
Power cord - Denmark (models A5G A1G ADG AHG AJG ASG ATG)	39M5129	1
Power cord - Switzerland (models A5G A1G ADG AHG AJG ASG ATG)	39M5157	1
Power cord - Israel (models A5G A1G ADG AHG AJG ASG ATG)	39M5171	1
Power cord - South Africa (models A5G A5M A4M A7M A8M A1G A9M AAM ADM ADG ADA AHG AJG ASG ATG AGA ASA ATA ATM)	39M5143	1
Power cord - India (models A5Q AEQ AFQ ATQ)	39M5004	1

6073 Windows XP Pro Recovery CDs	FRU#	CRU Tier
SP/LA (models APS APY)	45C4194	1

6073 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A5Q A5M A5G A4M A7M A8M A1G A2U A9M AAM A9A AAA ADU ADG ADM ADA ADQ ADH AKU AMU ASU ATU)	45C4077	1
FR/CF (models A5G A1G A2F ABF ADF ADG AHG AJG ASG ATG AKF ATF)	45C4079	1
GR (models A5G A1G ADG AJG ASG ATG)	45C4080	1
SP/LA (models A5G A4S A4D A4Y A1G ADS ADD ADY ADG ANS APS ATS ATD ANY APY ATY)	45C4081	1
BR (models A4P ADP ANP ATP)	45C4082	1

6073 Vista Business 32 Recovery DVDs	FRU#	CRU
IT (models A5G A1G ADG AJG ASG ATG)	45C4083	1
JP (models ADJ ATJ)	45C4084	1
NO (models A5G A1G ADG AJG ASG ATG)	45C4085	1
SV (models A5G A1G ADG AJG ASG ATG)	45C4086	1
DK (models A5G A1G ADG AJG ASG ATG)	45C4087	1
NL (models A5G A1G ADG AJG ASG ATG)	45C4088	1
CZ (models A5G A1G ADG AJG ASG ATG)	45C4089	1
FI (models A5G A1G ADG AJG ASG ATG)	45C4090	1
PL (models A5G A1G ADG AJG ASG ATG)	45C4091	1
RU (models A5G A1G ADG AJG ASG ATG)	45C4092	1
TR (models A5G A1G ADG AJG ASG ATG)	45C4093	1
HU (models A5G A1G ADG AJG ASG ATG)	45C4094	1
GK (models A5G A1G ADG AJG ASG ATG)	45C4095	1
PO (models A5G A1G ADG AJG ASG ATG)	45C4102	1
CS (models A3C ADC ARC ATC)	45C4096	1
Traditional Chinese (models ADV ATV)	45C4097	1
Traditional Chinese (models AEB ADH AEH ATB ATH)	45C4098	1
KR (models ADK ATK)	45C4099	1
SL (models A5G A1G ADG AJG ASG ATG)	45C4100	1
RE (models A5G A1G ADG AJG ASG ATG)	45C4078	1
Romanian (models A5G A1G ADG AJG ASG ATG)	45C4101	1
Slovakian (models A5G A1G ADG AJG ASG ATG)	45C4104	1
Hebrew (models A5G A1G ADG AJG ASG ATG)	45C4106	1

Machine Type 6076



Item #	6076 FRUs	FRU#	CRU Tier
1	Top Cover (all models)	89P6782	1
2	PCI Riser Card Bracket Asm (all models)	41N8276	1
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (all models)	39M0618	1
2	Interposer Card (all models)	41R2902	1
3	Power Supply, 225 Watt (active PFC) - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41N3105	2
4	Hard disk drive 80GB 7200rpm Serial ATA, (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	40Y9034	1
5	Front Rotating Cage assembly (all models)	41R6259	2
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	89H4936	1

Item #	6076 FRUs	FRU#	CRU Tier
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C2648	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	43C0053	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	42Y3910	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	43C2649	1
7	Front Bezel (all models)	41R6260	1
8	Speaker and Cable assembly (all models)	39K5012	1
9	Thermal kit (all models)	41A7711	2
10	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C3833	N
11	System board, Jupiter non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	87H5131	2
12	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41X4256	1
13	Rear exhaust fan (all models)	39M0551	1

The FRUs listed in the following table are not illustrated.

6076 FRUs	FRU#	CRU Tier
Cable, SATA hard disk drive and optical drive (all models)	39K5061	1
Vertical stand (all models)	89P6792	1
Rear air deflector (all models)	89P6793	1
Under-desk Mounting Kit (all models)	39M0599	1
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1
HSS Tray assembly (includes grommet/pins/bracket/ground springs) (all models)	89P6778	1
Power/LED cable assembly with bracket (all models)	39K5055	2
Chassis and cover assembly (all models)	41R6258	2
Miscellaneous hardware kit (all models)	89P6794	1
Plastic parts kit (all models)	39M0575	2
Battery 3.0V (all models)	33F8354	1
Thermal Sense cable (850 mm) (all models)	41R2511	1
Front fan assembly (850 mm) (all models)	41R6359	1

6076 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q)	41A5289	1
Arabic (models A1G)	41A5290	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1B A1V)	41A5296	1

6076 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1
Dutch (models A1G)	41A5299	1
French (models A1G)	41A5300	1
French Canadian 445 (models A1F)	41A5301	1
French Canadian 58 (models A1F)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italian 141 (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models A1A A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian 096 (models A1G)	41A5317	1
Romanian 446 (models A1G)	41A5316	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finn (models A1G)	41A5322	1
Swiss (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish 440 (models A1G)	41A5325	1
Turkish 179 (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models A1G)	41A5329	1

6076 Mice	FRU#	CRU Tier
Mouse, Optical Wheel (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Mouse, Optical Wheel (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

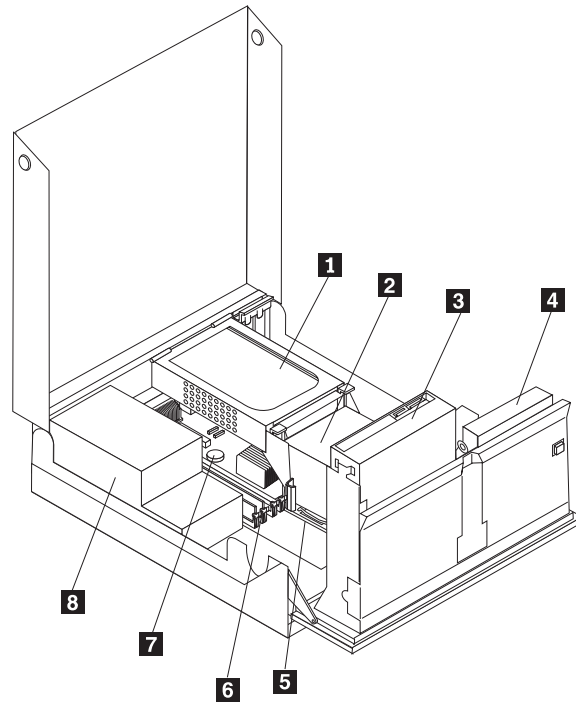
6076 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2

6076 Adapters and miscellaneous FRUs	FRU#	CRU
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A A1Y)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6076 Power Cords	FRU#	CRU Tier
Power Cord (US) (models A1U A1F A1S A1D A1L A1A A1T)	39M5080	1
Power Cord (China) (models A1C)	39M5205	1
Power Cord (Japan) (models A1E A1J)	39M5193	1
Power Cord (Brazil) (models A1P)	39M5232	1
Power Cord (LA), (High Volt) (APU) (models A1Y A1L)	39M5067	1
Power Cord (Australia, New Zealand) (models A1M)	39M5102	1
Power Cord (Korea) (models A1K A1R)	39M5212	1
Power Cord (Hong Kong) (models A1B A1H)	39M5151	1
Power Cord (UK, Ireland, Singapore, Malaysia, Brunei) (models A1G A1A)	39M5150	1
Power Cord (Taiwan) (models A1V)	39M5246	1
Power Cord (Italy) (models A1S A1Y A1L A1G)	39M5164	1
Power Cord (G models) (models A1A)	39M5122	1
Power Cord (Denmark) (models A1G)	39M5129	1
Power Cord (Switzerland) (models A1G)	39M5157	1
Power Cord (Israel) (models A1G)	39M5171	1
Power Cord (South Africa) (models A1G A1M A1A)	39M5143	1
Power Cord (India) (models A1Q)	39M5004	1

6076 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1G A1M A1A A1Q A1H A1R A1E A1F)	45C4077	1
FR/CF (models A1F)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models A1G)	45C4081	1
BR (models A1G A1P)	45C4082	1
IT (models A1G)	45C4083	1
JP (models A1J)	45C4084	1
NO (models A1G)	45C4085	1
SV (models A1G)	45C4086	1
DK (models A1G)	45C4087	1
NL (models A1G)	45C4088	1
CZ (models A1G)	45C4089	1
FI (models A1G)	45C4090	1
PL (models A1G)	45C4091	1
RU (models A1G)	45C4092	1
TR (models A1G)	45C4093	1
HU (models A1G)	45C4094	1
GK (models A1G)	45C4095	1
PO (models A1G)	45C4102	1
CS (models A1G)	45C4096	1
Traditional Chinese (models A1V)	45C4097	1
Traditional Chinese (models A1B)	45C4098	1
KR (models A1K)	45C4099	1
SL (models A1G)	45C4100	1
RE (models A1G)	45C4078	1
Romanian (models A1G)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A1G)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A1G)	45C4106	1

Machine Type 6077



Item #	6077 FRUs	FRU#	CRU Tier
1	Hard disk drive, 80GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	40Y9034	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	42Y9353	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C3833	N
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41X4256	2
7	System board, Mercury non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	87H5127	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41A9701	2
8	Power supply, 280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41A9717	2

The FRUs listed in the following tables are not illustrated.

6077 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6077 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q)	41A5289	1
Arabic (models A1G)	41A5290	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Brazilian (models A1P)	41A5294	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1B A1V)	41A5296	1
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1
Dutch (models A1G)	41A5299	1
French (models A1G)	41A5300	1
French Canadian 445 (models A1F)	41A5301	1
French Canadian 58 (models A1F)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italian 141 (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1

6077 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Korean (models A1K)	41A5311	1
LA Spanish (models A1A A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian 096 (models A1G)	41A5317	1
Romanian 446 (models A1G)	41A5316	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finn (models A1G)	41A5322	1
Swiss (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish 440 (models A1G)	41A5325	1
Turkish 179 (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models A1G)	41A5329	1

6077 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

6077 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A A1Y)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	J89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1

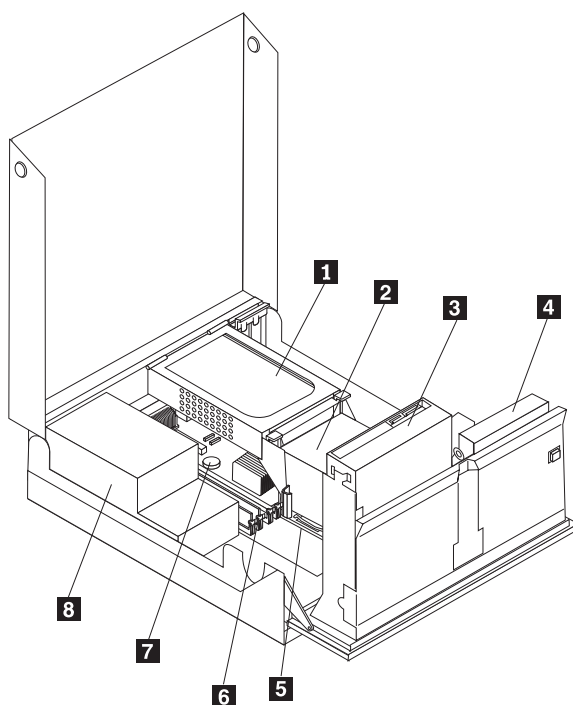
6077 Adapters and miscellaneous FRUs	FRU#	CRU
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6077 Power Cords	FRU#	CRU
Power cord - US (models A1U A1F A1S A1D A1L A1A A1T)	39M5080	1
Power cord - China (models A1C)	39M5205	1
Power cord - Japan (models A1E A1J)	39M5193	1
Power cord - Brazil (models A1P)	39M5232	1
Power cord - LA High Volt APU) (models A1Y A1L)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K A1R)	39M5212	1
Power cord - Hong Kong (models A1B A1H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1G A1A)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models A1S A1Y A1L A1G)	39M5164	1
Power cord - G models (models A1A)	39M5122	1
Power cord - Denmark (models A1G)	39M5129	1
Power cord - Switzerland (models A1G)	39M5157	1
Power cord - Israel (models A1G)	39M5171	1
Power cord - South Africa (models A1G A1M A1A)	39M5143	1
Power cord - India (models A1Q)	39M5004	1

6077 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A1U A1F A1G A1M A1A A1Q A1H A1R A1E)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A1G A1F)	45C4192	1
GR (models A1G)	45C4193	1
SP/LA (models A1S A1Y A1L A1G)	45C4194	1
IT (models A1G)	45C4196	1
BR (models A1P)	45C4195	1
SV (models A1G)	45C4199	1
DK (models A1G)	45C4200	1
FI (models A1G)	45C4203	1
NO (models A1G)	45C4198	1

6077 Windows XP Pro Recovery CDs	FRU#	CRU
NL (models A1G)	45C4201	1
Korean (models A1K)	45C4214	1
Simplified Chinese (models A1V)	45C4211	1
Taiwan-TC (models A1B)	45C4212	1
Hong Kong-TC (models A1G)	45C4213	1
Japanese (models A1J)	45C4197	1
HE (models A1G)	45C4204	1
PL (models A1G)	45C4205	1
CZ (models A1G)	45C4202	1
AE (models A1G)	45C4206	1
RU (models A1G)	45C4207	1
TR (models A1G)	45C4208	1
HU (models A1G)	45C4209	1
PO (models A1G)	45C4217	1
GK (models A1G)	45C4210	1
SL (models A1G)	45C4215	1

Machine Type 6078



Item #	6078 FRUs	FRU#	CRU Tier
1	Hard disk drive, 80GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	40Y9034	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	42Y9353	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C3833	N
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41X4256	2
7	System board, Mercury non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	87H5127	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41A9701	2
8	Power supply, 280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41A9717	2

The FRUs listed in the following tables are not illustrated.

6078 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6078 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q)	41A5289	1
Arabic (models A1G)	41A5290	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Brazilian (models A1P)	41A5294	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1B A1V)	41A5296	1
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1
Dutch (models A1G)	41A5299	1
French (models A1G)	41A5300	1
French Canadian 445 (models A1F)	41A5301	1
French Canadian 58 (models A1F)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italian 141 (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1

6078 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Korean (models A1K)	41A5311	1
LA Spanish (models A1A A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian 096 (models A1G)	41A5317	1
Romanian 446 (models A1G)	41A5316	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finn (models A1G)	41A5322	1
Swiss (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish 440 (models A1G)	41A5325	1
Turkish 179 (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models A1G)	41A5329	1

6078 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

6078 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A A1Y)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	J89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1

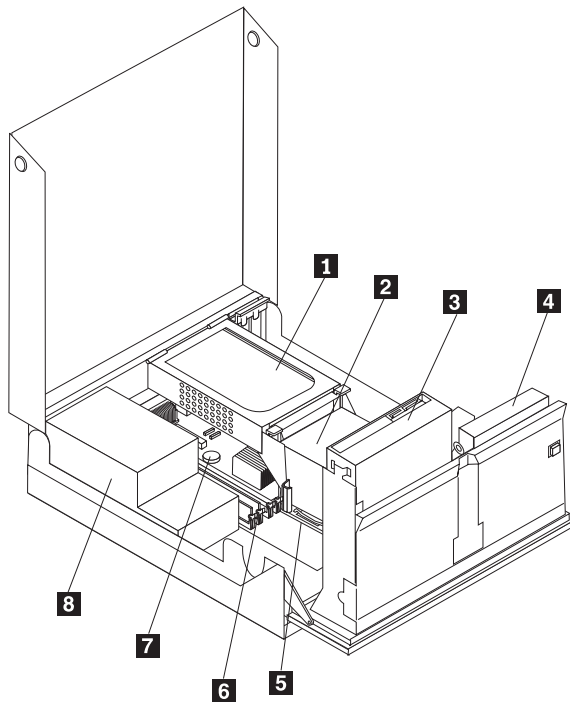
6078 Adapters and miscellaneous FRUs	FRU#	CRU
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6078 Power Cords	FRU#	CRU
Power cord - US (models A1U A1F A1S A1D A1L A1A A1T)	39M5080	1
Power cord - China (models A1C)	39M5205	1
Power cord - Japan (models A1E A1J)	39M5193	1
Power cord - Brazil (models A1P)	39M5232	1
Power cord - LA High Volt APU) (models A1Y A1L)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K A1R)	39M5212	1
Power cord - Hong Kong (models A1B A1H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1G A1A)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models A1S A1Y A1L A1G)	39M5164	1
Power cord - G models (models A1A)	39M5122	1
Power cord - Denmark (models A1G)	39M5129	1
Power cord - Switzerland (models A1G)	39M5157	1
Power cord - Israel (models A1G)	39M5171	1
Power cord - South Africa (models A1G A1M A1A)	39M5143	1
Power cord - India (models A1Q)	39M5004	1

6078 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A1U A1F A1G A1M A1A A1Q A1H A1R A1E)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A1G A1F)	45C4192	1
GR (models A1G)	45C4193	1
SP/LA (models A1S A1Y A1L A1G)	45C4194	1
IT (models A1G)	45C4196	1
BR (models A1P)	45C4195	1
SV (models A1G)	45C4199	1
DK (models A1G)	45C4200	1
FI (models A1G)	45C4203	1
NO (models A1G)	45C4198	1

6078 Windows XP Pro Recovery CDs	FRU#	CRU
NL (models A1G)	45C4201	1
Korean (models A1K)	45C4214	1
Simplified Chinese (models A1V)	45C4211	1
Taiwan-TC (models A1B)	45C4212	1
Hong Kong-TC (models A1G)	45C4213	1
Japanese (models A1J)	45C4197	1
HE (models A1G)	45C4204	1
PL (models A1G)	45C4205	1
CZ (models A1G)	45C4202	1
AE (models A1G)	45C4206	1
RU (models A1G)	45C4207	1
TR (models A1G)	45C4208	1
HU (models A1G)	45C4209	1
PO (models A1G)	45C4217	1
GK (models A1G)	45C4210	1
SL (models A1G)	45C4215	1

Machine Type 6087



Item #	6087 FRUs	FRU#	CRU Tier
1	Hard disk drive, 80GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A6U A6F A7U A7F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J)	40Y9034	2

Item #	6087 FRUs	FRU#	CRU Tier
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	41N3325	2
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	42Y9353	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J A7U A7F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J)	43C3833	N
5	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	43C1968	N
5	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models A6U A6F)	43C2056	N
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J A7U A7F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	41X4256	2
7	System board, Mercury non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J A6U A6F A7U A7F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	87H5127	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J)	41A9701	2

The FRUs listed in the following tables are not illustrated.

6087 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2

6087 FRUs	FRU#	CRU
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6087 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1M A1A A1Q A1H A1R A1E A1G A2U A2M A2A A2Q A2H A2R A2E A2G A5U A6U A7U A8U A8M A8A A8Q A8H A8R A8E A8G A3U A3M A3A A3Q A3H A3R A3E A3G)	41A5289	1
Arabic (models A1G A2G A8G A3G)	41A5290	1
Belgian/French (models A1G A2G A8G A3G)	41A5292	1
Belgian/UK (models A1G A2G A8G A3G)	41A5293	1
Brazilian (models A1P A2P A8P A3P)	41A5294	1
Bulgarian (models A1G A2G A8G A3G)	41A5295	1
Chinese/US (models A5B A8B A8V A3V)	41A5296	1
Czech (models A1G A2G A8G A3G)	41A5297	1
Danish (models A1G A2G A8G A3G)	41A5298	1
Dutch (models A1G A2G A8G A3G)	41A5299	1
French (models A1G A2G A8G A3G)	41A5300	1
French Canadian 445 (models A1G A2G A8G A3G)	41A5301	1
French Canadian 58 (models A1G A2G A8G A3G)	41A5302	1
German (models A1G A2G A8G A3G)	41A5303	1
Greek (models A1G A2G A8G A3G)	41A5304	1
Hebrew (models A1G A2G A8G A3G)	41A5306	1
Hungarian (models A1G A2G A8G A3G)	41A5307	1
Iceland (models A1G A2G A8G A3G)	41A5308	1
Italian 141 (models A1G A2G A8G A3G)	41A5309	1
Japanese (models A1J A2J A8J A3J)	41A5310	1
Korean (models A1K A2K A8K A3K)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y A8S A8D A8Y A3S A3D A3Y)	41A5312	1
Norwegian (models A1G A2G A8G A3G)	41A5313	1
Polish (models A1G A2G A8G A3G)	41A5314	1
Portuguese (models A1G A2G A8G A3G)	41A5315	1
Romanian 096 (models A1G A2G A8G A3G)	41A5317	1

6087 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Romanian 446 (models A1G A2G A8G A3G)	41A5316	1
Russian/Cyrillic (models A1G A2G A8G A3G)	41A5318	1
Serbian/Cyrillic (models A1G A2G A8G A3G)	41A5319	1
Slovak (models A1G A2G A8G A3G)	41A5320	1
Spanish (models A1G A2G A8G A3G)	41A5321	1
Swedish/Finn (models A1G A2G A8G A3G)	41A5322	1
Swiss (models A1G A2G A8G A3G)	41A5323	1
Thailand (models A1T A2T A8T A3T)	41A5324	1
Turkish 440 (models A5T A1G A2G A8G A3G)	41A5325	1
Turkish 179 (models A1G A2G A8G A3G)	41A5326	1
UK English (models A1G A2G A8G A3G)	41A5327	1
US Euro (models A1G A2G A8G A3G)	41A5328	1
Slovenian (models A1G A2G A8G A3G)	41A5329	1

6087 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (all models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J A6U A6F A7U A7F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3R A3E A3J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (all models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J A6U A6F A7U A7F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3R A3E A3J)	41U3030	1

6087 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A6U A7U A8U A8Y A8A A1U A2U A1Y A2Y A1A A2AA3U A3Y A3A)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A8D A1D A2D A3D)	89P8575	1
Speaker Power brick - China, Thailand (models A8C A1C A2C A3C)	89P8581	1
Speaker Power brick - Japan (models A8E A8J A1E A1J A2E A2J A3E A3J)	89P8577	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A8M A1M A2M A3M)	89P8579	1
Speaker Brick - Korea (models A8K A8R A1K A1R A2K A2R A3K A3R)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A8B A8H A1B A1H A2B A2H A3B A3H)	89P8573	1
Speaker Brick - Taiwan (models A8V A1V A2V A3V)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1

6087 Adapters and miscellaneous FRUs	FRU#	CRU
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6087 Power Cords	FRU#	CRU
Power cord - US (models A6U A6F A7U A7F A8U A8F A8S A8D A8L A1U A1F A1S A1D A1L A2U A2F A2S A2D A2L A3U A3F A3S A3D A3L)	39M5080	1
Power cord - China (models A8C A1C A2C A3C)	39M5205	1
Power cord - Japan (models A8E A8J A1J A2J A1E A2E A3E A3J)	39M5193	1
Power cord - Brazil (models A8P A1P A2P A3P)	39M5232	1
Power cord - LA High Volt APU) (models A8Y A8L A1Y A1L A2Y A2L A3Y A3L)	39M5067	1
Power cord - Australia / New Zealand (models A8M A1M A2M A3M)	39M5102	1
Power cord - Korea (models A8K A8R A1K A2K A1R A2R A3K A3R)	39M5212	1
Power cord - Hong Kong (models A8B A8H A1B A1H A2B A2H A3B A3H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A8A A8G A1A A1G A1A A2G A5G A3G A3A)	39M5150	1
Power cord - Taiwan (models A8V A1V A2V A3V)	39M5246	1
Power cord - Italy (models A8S A8Y A8L A8G A1S A1Y A1L A1G A2S A2Y A2L A2G A3L A3G)	39M5164	1
Power cord - G models (models A8A A1A A2A A3A)	39M5122	1
Power cord - Denmark (models A8G A1G A2G A3G)	39M5129	1
Power cord - Switzerland (models A8G A1G A2G A3G)	39M5157	1
Power cord - Israel (models A8G A1G A2G A3G)	39M5171	1
Power cord - South Africa (models A8G A8M A8A A1G A1M A1A A1G A2M A2A A3G A3M A3A)	39M5143	1
Power cord - India (models A8Q A1Q A2Q A3Q)	39M5004	1

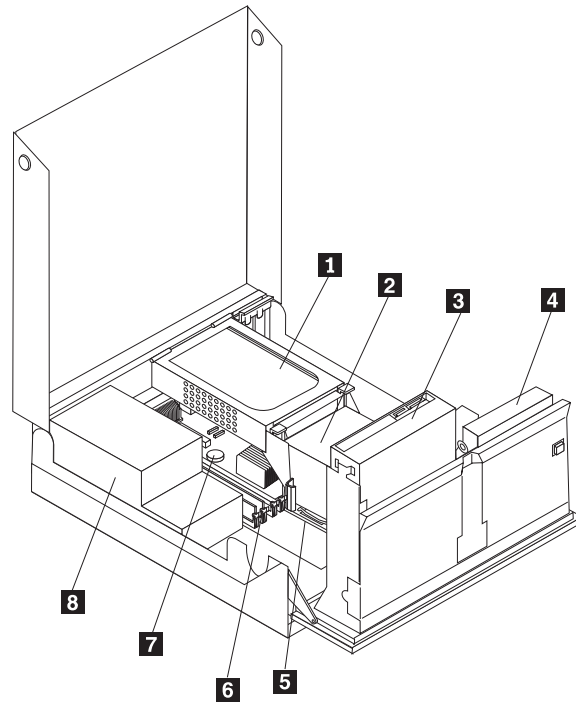
6087 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models)	45C4191	1
RE (models)	45C4216	1
FR/CF (models)	45C4192	1
GR (models)	45C4193	1
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1
SV (models)	45C4199	1

6087 Windows XP Pro Recovery CDs	FRU#	CRU
DK (models)	45C4200	1
FI (models)	45C4203	1
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models)	45C4197	1
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

6087 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1G A1M A1A A1Q A1H A1R A1E A2U A2G A2M A2A A2Q A2H A2R A2E A3U A3G A3M A3Q A2H A3R A3E)	45C4077	1
FR/CF (models A8F A8G A1F A1G A2F A2G A3G)	45C4079	1
GR (models A8G A1G A2G A3G)	45C4080	1
SP/LA (models A8G A8S A8D A8Y A1G A1S A1D A1Y A2G A2S A2D A2Y A3D A3Y)	45C4081	1
BR (models A8P A1P A2P A3P)	45C4082	1
IT (models A8G A1G A2G A3G)	45C4083	1
JP (models A8J A1J A2J A3J)	45C4084	1
NO (models A8G A1G A2G A3G)	45C4085	1
SV (models A8G A1G A2G A3G)	45C4086	1
DK (models A8G A1G A2G A3G)	45C4087	1
NL (models A8G A1G A2G A3G)	45C4088	1
CZ (models A8G A1G A2G A3G)	45C4089	1
FI (models A8G A1G A2G A3G)	45C4090	1
PL (models A8G A1G A2G A3G)	45C4091	1
RU (models A8G A1G A2G A3G)	45C4092	1
TR (models A8G A1G A2G A3G)	45C4093	1
HU (models A8G A1G A2G A3G)	45C4094	1
GK (models A8G A1G A2G A3G)	45C4095	1
PO (models A8G A1G A2G A3G)	45C4102	1

6087 Vista Business 32 Recovery DVDs	FRU#	CRU
CS (models A8C A1C A2C)	45C4096	1
Traditional Chinese (models A1B A1H A2B A2H A3B A3H)	45C4097	1
Traditional Chinese (models A1B A1H A2B A2H A3B A3H)	45C4098	1
KR (models A8K A1K A2K A3K)	45C4099	1
SL (models A8G A1G A2G A3G)	45C4100	1
RE (models A8G A1G A2G A3G)	45C4078	1
Romanian (models A8G A1G A2G A3G)	45C4101	1
Sebian-Latin (models A8G A1G A2G A3G)	45C4103	1
Slovakian (models A8G A1G A2G A3G)	45C4104	1
Arabic Localized (models A8G A1G A2G A3G)	45C4105	1
Hebrew (models A8G A1G A2G A3G)	45C4106	1

Machine Type 6088



Item #	6088 FRUs	FRU#	CRU Tier
1	Hard disk drive, 80GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	40Y9034	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	42Y9353	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C3833	N
6	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models)	41X4255	2
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models)	41X4256	2
7	System board, Mercury non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	87H5127	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41A9701	2

The FRUs listed in the following tables are not illustrated.

6088 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2

6088 FRUs	FRU#	CRU
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

6088 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q)	41A5289	1
Arabic (models A1G)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Brazilian (models A1P)	41A5294	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1B A1V)	41A5296	1
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1
Dutch (models A1G)	41A5299	1
French (models A1G)	41A5300	1
French Canadian 445 (models A1F)	41A5301	1
French Canadian 58 (models A1F)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italian 141 (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1

6088 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Korean (models A1K)	41A5311	1
LA Spanish (models A1A A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian 096 (models A1G)	41A5317	1
Romanian 446 (models A1G)	41A5316	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finn (models A1G)	41A5322	1
Swiss (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish 440 (models A1G)	41A5325	1
Turkish 179 (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models A1G)	41A5329	1

6088 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (all models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (all models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

6088 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A A1Y)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	J89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1

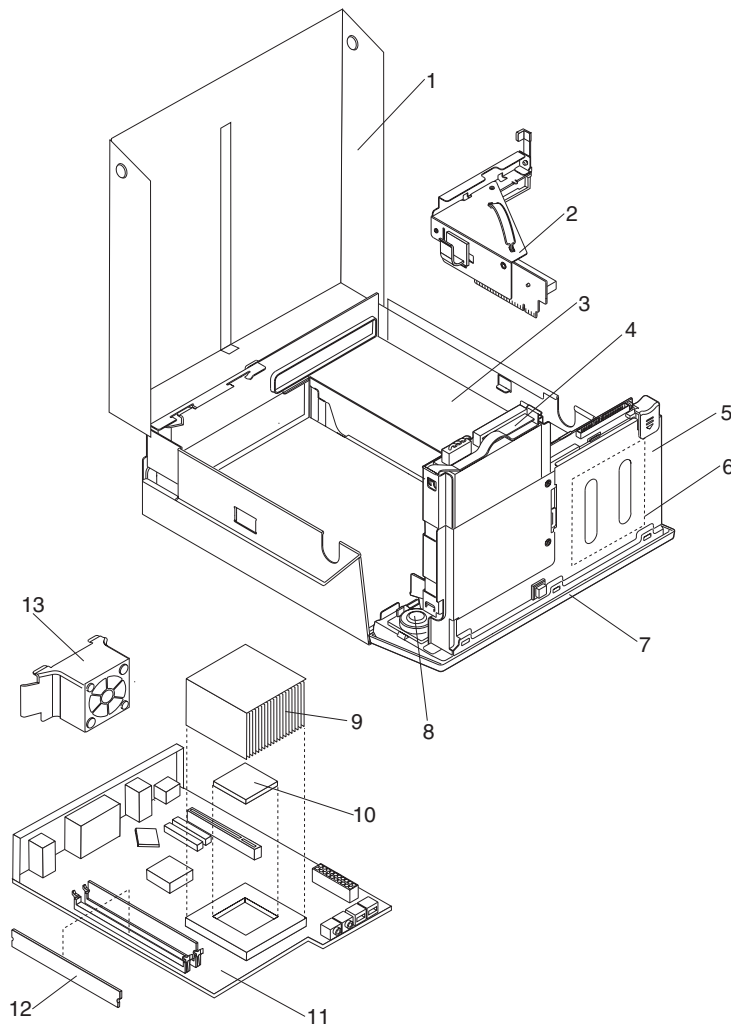
6088 Adapters and miscellaneous FRUs	FRU#	CRU
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6088 Power Cords	FRU#	CRU
Power cord - US (models A1U A1F A1S A1D A1L A1A A1T)	39M5080	1
Power cord - China (models A1C)	39M5205	1
Power cord - Japan (models A1E A1J)	39M5193	1
Power cord - Brazil (models A1P)	39M5232	1
Power cord - LA High Volt APU) (models A1Y A1L)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K A1R)	39M5212	1
Power cord - Hong Kong (models A1B A1H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1G A1A)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models A1S A1Y A1L A1G)	39M5164	1
Power cord - G models (models A1A)	39M5122	1
Power cord - Denmark (models A1G)	39M5129	1
Power cord - Switzerland (models A1G)	39M5157	1
Power cord - Israel (models A1G)	39M5171	1
Power cord - South Africa (models A1G A1M A1A)	39M5143	1
Power cord - India (models A1Q)	39M5004	1

6088 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A1U A1F A1G A1M A1A A1Q A1H A1R A1E)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A1G A1F)	45C4192	1
GR (models A1G)	45C4193	1
SP/LA (models A1S A1Y A1L A1G)	45C4194	1
IT (models A1G)	45C4196	1
BR (models A1P)	45C4195	1
SV (models A1G)	45C4199	1
DK (models A1G)	45C4200	1
FI (models A1G)	45C4203	1
NO (models A1G)	45C4198	1

6088 Windows XP Pro Recovery CDs	FRU#	CRU
NL (models A1G)	45C4201	1
Korean (models A1K)	45C4214	1
Simplified Chinese (models A1V)	45C4211	1
Taiwan-TC (models A1B)	45C4212	1
Hong Kong-TC (models A1G)	45C4213	1
Japanese (models A1J)	45C4197	1
HE (models A1G)	45C4204	1
PL (models A1G)	45C4205	1
CZ (models A1G)	45C4202	1
AE (models A1G)	45C4206	1
RU (models A1G)	45C4207	1
TR (models A1G)	45C4208	1
HU (models A1G)	45C4209	1
PO (models A1G)	45C4217	1
GK (models A1G)	45C4210	1
SL (models A1G)	45C4215	1

Machine Type 6089



Item #	6089 FRUs	FRU#	CRU Tier
1	Top Cover (models)	89P6782	1
2	PCI Riser Card Bracket Asm (all models)	41N8276	1
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (all models)	39M0618	1
2	Interposer Card (all models)	41R2902	1
3	Power Supply, 225 Watt (active PFC) - Standard, Robust, JP (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2B A2C A2H A2V A2K A2R A2E A2J)	41N3105	2
4	Hard disk drive 80GB 7200rpm Serial ATA, (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2B A2C A2H A2V A2K A2R A2E A2J)	40Y9034	1

Item #	6089 FRUs	FRU#	CRU Tier
5	Front Rotating Cage assembly (all models)	41R6259	2
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2B A2C A2H A2V A2K A2R A2E A2J)	89H4936	1
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2B A2C A2H A2V A2K A2R A2E A2J)	43C2648	1
7	Front Bezel (all models)	41R6260	1
8	Speaker and Cable assembly (all models)	39K5012	1
9	Thermal Kit - (heatsink, RM, mounting plate) (all models)	41A7711	2
10	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	43C3833	N
10	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models A4U A4F)	43C2056	N
11	System board - Jupiter non AMT (GA) (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2B A2C A2H A2V A2K A2R A2E A2J)	87H5131	2
12	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2B A2C A2H A2V A2K A2R A2E A2J)	41X4256	1
13	Rear exhaust fan (all models)	39M0551	1

The FRUs listed in the following table are not illustrated.

6089 FRUs	FRU#	CRU Tier
Cable, SATA hard disk drive and optical drive (all models)	39K5061	1
Vertical stand (all models)	89P6792	1
Rear air deflector (all models)	89P6793	1
Under-desk Mounting Kit (all models)	39M0599	1
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1
HSS Tray assembly (includes grommet/pins/bracket/ground springs) (all models)	89P6778	1
Power/LED cable assembly with bracket (all models)	39K5055	2

6089 FRUs	FRU#	CRU Tier
Chassis and cover assembly (all models)	41R6258	2
Miscellaneous hardware kit (all models)	89P6794	1
Plastic parts kit (all models)	39M0575	2
Battery 3.0V (all models)	33F8354	1
Thermal Sense cable (850 mm) (all models)	41R2511	1
Front fan assembly (850 mm) (all models)	41R6359	1

6089 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A3U A3M A3A A3Q A3H A3R A3E A3G A4U A5U A5M A5A A5Q A5H A5R A5E A5G A1U A1M A1A A1Q A1H A1R A1E A1G A2U A2M A2A A2Q A2H A2R A2E)	41A5289	1
Arabic (models A3G A5G A1G A2G)	41A5290	1
Belgian/French (models A3G A5G A1G A2G)	41A5292	1
Belgian/UK (models A3G A5G A1G A2G)	41A5293	1
Brazilian (models A3G A5G A1G A2G)	41A5294	1
Bulgarian (models A3G A5G A1G A2G)	41A5295	1
Chinese/US (models A3B A3V A5B A5V A1B A1V A2B A2V)	41A5296	1
Czech (models A3G A5G A1G A2G)	41A5297	1
Danish (models A3G A5G A1G A2G)	41A5298	1
Dutch (models A3G A5G A1G A2G)	41A5299	1
French (models A3G A5G A1G A2G)	41A5300	1
French Canadian 445 (models A3F A5F A1F A2F)	41A5301	1
French Canadian 58 (models A3F A5F A1F A2F)	41A5302	1
German (models A3G A5G A1G A2G)	41A5303	1
Greek (models A3G A5G A1G A2G)	41A5304	1
Hebrew (models A3G A5G A1G A2G)	41A5306	1
Hungarian (models A3G A5G A1G A2G)	41A5307	1
Iceland (models A3G A5G A1G A2G)	41A5308	1
Italian 141 (models A3G A5G A1G A2G)	41A5309	1
Japanese (models A3J A5J A1J)	41A5310	1
Korean (models A3K A5K A1K)	41A5311	1
LA Spanish (models A3S A3D A3Y A5S A5D A5Y A1S A1D A1Y A2S A2D A2Y)	41A5312	1
Norwegian (models A3G A5G A1G A2G)	41A5313	1
Polish (models A3G A5G A1G A2G)	41A5314	1
Portuguese (models A3G A5G A1G A2G)	41A5315	1
Romanian 096 (models A3G A5G A1G A2G)	41A5317	1
Romanian 446 (models A3G A5G A1G A2G)	41A5316	1
Russian/Cyrillic (models A3G A5G A1G A2G)	41A5318	1
Serbian/Cyrillic (models A3G A5G A1G A2G)	41A5319	1
Slovak (models A3G A5G A1G A2G)	41A5320	1
Spanish (models A3G A5G A1G A2G)	41A5321	1

6089 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Swedish/Finn (models A3G A5G A1G A2G)	41A5322	1
Swiss (models A3G A5G A1G A2G)	41A5323	1
Thailand (models A3T A5T A1T)	41A5324	1
Turkish 440 (models A3G A5G A1G A2G)	41A5325	1
Turkish 179 (models A3G A5G A1G A2G)	41A5326	1
UK English (models A3G A5G A1G A2G)	41A5327	1
US Euro (models A3G A5G A1G A2G)	41A5328	1
Slovenian (models A3G A5G A1G A2G)	41A5329	1

6089 Mice	FRU#	CRU Tier
Mouse, Optical Wheel (400DPI, USB) (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2B A2C A2H A2V A2K A2R A2E A2J)	41U3013	1
Mouse, Optical Wheel (400DPI, USB) (models A3U A3F A3S A3P A3L A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2B A2C A2H A2V A2K A2R A2E A2J)	41U3030	1

6089 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A3U A3A A3Y A4U A5U A5A A5Y A1U A1A A1Y A2U A2A A2Y)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A3D A5D A1D A2D)	89P8575	1
Speaker Power brick - China, Thailand (models A3C A3T A5C A5T A1C A1T A2C A2T)	89P8581	1
Speaker Power brick - Japan (models A3E A3J A1E A1J A2J)	89P8577	1
Speaker Power brick - ANZ (models A3M A5M A1M A2M)	89P8579	1
Speaker Brick - Korea (models A3K A3R A5K A5R A1K A1R A2K A2R)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A3B A3H A5B A5H A1B A1H A2B A2H)	89P8573	1
Speaker Brick - Taiwan (models A3V A5V A1V A2V)	41A4905	1
Speaker Power brick - India, South Africa (models A3Q A5Q A1Q A2Q)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2

6089 Adapters and miscellaneous FRUs	FRU#	CRU
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

6089 Power Cords	FRU#	CRU Tier
Power Cord (US) (models A3U A3F A3S A3D A3L A3A A3T A4U A4F A5U A5F A5S A5D A5L A5A A5T A1U A1F A1S A1D A1L A1A A1T A2U A2F A2S A2D A2L A2A A2T)	39M5080	1
Power Cord (China) (models A3C A5C A1C A2C)	39M5205	1
Power Cord (Japan) (models A3E A3J A5E A5J A1E A1J A2E A2J)	39M5193	1
Power Cord (Brazil) (models A3P A5P A1P A2P)	39M5232	1
Power Cord (LA), (High Volt) (APU) (models A3Y A3L A5Y A5L A1Y A1L A2Y A2L)	39M5067	1
Power Cord (Australia, New Zealand) (models A3M A5M A1M A2M)	39M5102	1
Power Cord (Korea) (models A3K A3R A5K A5R A1K A1R A2K A2R)	39M5212	1
Power Cord (Hong Kong) (models A3B A3H A5B A5H A1B A1H A2B A2H)	39M5151	1
Power Cord (UK, Ireland, Singapore, Malaysia, Brunei) (models A3A A3G A5G A5A A1G A1A A2G A2A)	39M5150	1
Power Cord (Taiwan) (models A3V A5V A1V A2V)	39M5246	1
Power Cord (Italy) (models A3S A3Y A3L A3G A5S A5Y A5L A5G A1G A2S A2Y A2L A2G)	39M5164	1
Power Cord (G models) (models A3A A5A A1A A2A)	39M5122	1
Power Cord (Denmark) (models A3G A5G A1G A2G)	39M5129	1
Power Cord (Switzerland) (models A3G A5G A1G A2G)	39M5157	1
Power Cord (Israel) (models A3G A5G A1G A2G)	39M5171	1
Power Cord (South Africa) (models A3G A5G A1G A1A A1M A2G A2M A2A)	39M5143	1
Power Cord (India) (models A3Q A5Q A1Q A2Q)	39M5004	1

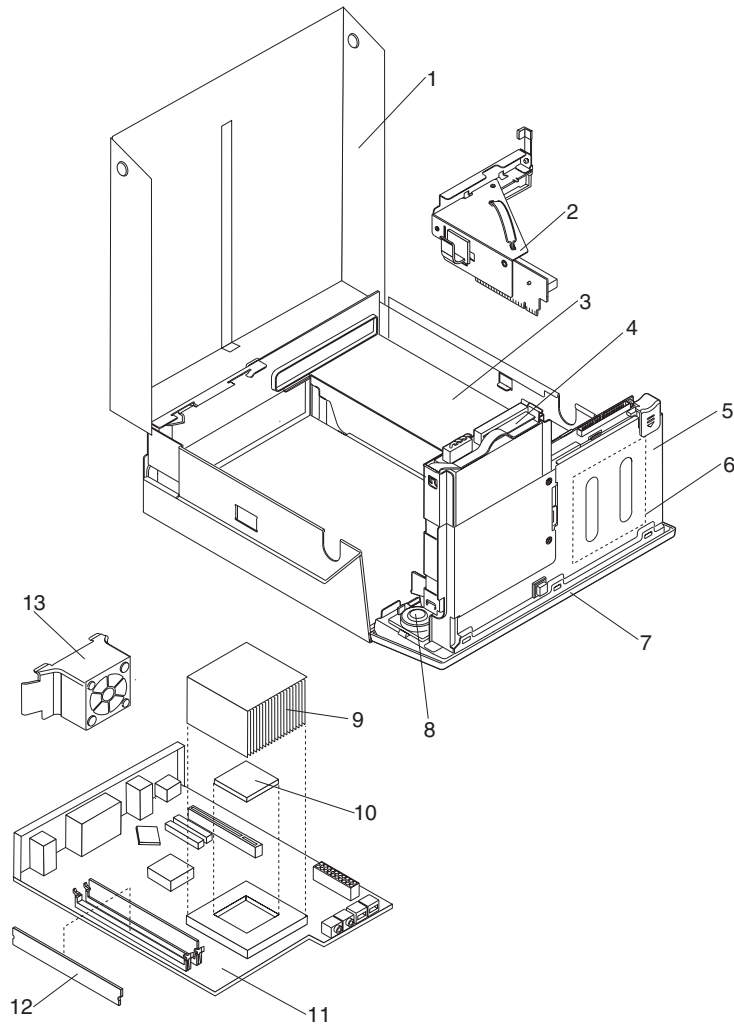
6089 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models)	45C4191	1
RE (models)	45C4216	1
FR/CF (models)	45C4192	1
GR (models)	45C4193	1
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1
SV (models)	45C4199	1
DK (models)	45C4200	1
FI (models)	45C4203	1
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models)	45C4197	1

6089 Windows XP Pro Recovery CDs	FRU#	CRU
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

6089 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A3U A3G A3M A3A A3Q A3H A3R A3E A4U A5U A5G A5M A5A A5Q A5H A5R A5E A1U A1G A1M A1A A1Q A1H A1H A1R A1E A2U A2G A2M A2A A2Q A2H A2R A2E)	45C4077	1
FR/CF (models A3F A3G A4F A5F A1G A1F A2G A2F)	45C4079	1
GR (models A3G A5G A1G A2G)	45C4080	1
SP/LA (models A3G A5G A1G A2G)	45C4081	1
BR (models A3P A5P A1P A2P)	45C4082	1
IT (models A3G A5G A1G A2G)	45C4083	1
JP (models A3J A5J A1J A2J)	45C4084	1
NO (models A3G A5G A1G A2G)	45C4085	1
SV (models A3G A5G A1G A2G)	45C4086	1
DK (models A3G A5G A1G A2G)	45C4087	1
NL (models A3G A5G A1G A2G)	45C4088	1
CZ (models A3G A5G A1G A2G)	45C4089	1
FI (models A3G A5G A1G A2G)	45C4090	1
PL (models A3G A5G A1G A2G)	45C4091	1
RU (models A3G A5G A1G A2G)	45C4092	1
TR (models A3G A5G A1G A2G)	45C4093	1
HU (models A3G A5G A1G A2G)	45C4094	1
GK (models A3G A5G A1G A2G)	45C4095	1
PO (models A3G A5G A1G A2G)	45C4102	1
CS (models A3C A5C A1C A2C)	45C4096	1
Traditional Chinese (models A3B A3H A5B A5H A1B A1H A2B A2H)	45C4097	1
Traditional Chinese (models A3B A3H A5B A5H A1B A1H A2B A2H)	45C4098	1
KR (models A3K A5K A1K A2K)	45C4099	1
SL (models A3G A5G A1G A2G)	45C4100	1
RE (models A3G A5G A1G A2G)	45C4078	1
Romanian (models A3G A5G A1G A2G)	45C4101	1
Sebian-Latin (models)	45C4103	1

6089 Vista Business 32 Recovery DVDs	FRU#	CRU
Slovakian (models A3G A5G A1G A2G)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A3G A5G A1G A2G)	45C4106	1

Machine Type 9011



Item #	9011 FRUs	FRU#	CRU Tier
1	Top Cover (models)	89P6782	1
2	PCI Riser Card Bracket Asm (all models)	41N8276	1
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (all models)	39M0618	1
2	Interposer Card (all models)	41R2902	1
3	Power Supply, 225 Watt (active PFC) - Standard, Robust, JP (models A1J A2J)	41N3105	2
3	Power supply, 280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models A1J A2J)	41A9717	2
4	Hard disk drive 160GB 7200rpm Serial ATA (models A1J A2J)	40Y9035	1
5	Front Rotating Cage assembly (all models)	41R6259	2
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	43C0053	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	42Y3910	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	43C2649	1
7	Front Bezel (all models)	41R6260	1
8	Speaker and Cable assembly (all models)	39K5012	1

Item #	9011 FRUs	FRU#	CRU Tier
9	Thermal kit (all models)	41A7711	2
10	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1J)	43C3833	N
10	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A2J)	43C1693	N
11	System board - Jupiter non AMT (GA) (models A1J A2J)	87H5131	2
12	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1J A2J)	41X4256	1
13	Rear exhaust fan (all models)	39M0551	1

The FRUs listed in the following table are not illustrated.

9011 FRUs	FRU#	CRU Tier
Cable, SATA hard disk drive and optical drive (all models)	39K5061	1
Vertical stand (all models)	89P6792	1
Rear air deflector (all models)	89P6793	1
Under-desk Mounting Kit (all models)	39M0599	1
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1
HSS Tray assembly (includes grommet/pins/bracket/ground springs) (all models)	89P6778	1
Power/LED cable assembly with bracket (all models)	39K5055	2
Chassis and cover assembly (all models)	41R6258	2
Miscellaneous hardware kit (all models)	89P6794	1
Plastic parts kit (all models)	39M0575	2
Battery 3.0V (all models)	33F8354	1
Thermal Sense cable (850 mm) (all models)	41R2511	1
Front fan assembly (850 mm) (all models)	41R6359	1

9011 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models)	41A5289	1
Arabic (models)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models)	41A5292	1
Belgian/UK (models)	41A5293	1
Bulgarian (models)	41A5295	1
Chinese/US (models)	41A5296	1
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
French Canadian 445 (models)	41A5301	1
French Canadian 58 (models)	41A5302	1
German (models)	41A5303	1
Greek (models)	41A5304	1

9011 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Italian 141 (models)	41A5309	1
Japanese (models A1J A2J)	41A5310	1
Korean (models)	41A5311	1
LA Spanish (models)	41A5312	1
Norwegian (models)	41A5313	1
Polish (models)	41A5314	1
Portuguese (models)	41A5315	1
Romanian 096 (models)	41A5317	1
Romanian 446 (models)	41A5316	1
Russian/Cyrillic (models)	41A5318	1
Serbian/Cyrillic (models)	41A5319	1
Slovak (models)	41A5320	1
Spanish (models)	41A5321	1
Swedish/Finn (models)	41A5322	1
Swiss (models)	41A5323	1
Thailand (models)	41A5324	1
Turkish 440 (models)	41A5325	1
Turkish 179 (models)	41A5326	1
UK English (models)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models)	41A5329	1

9011 Mice	FRU#	CRU Tier
Mouse, Optical Wheel (400DPI, USB) (models A1J A2J)	41U3013	1
Mouse, Optical Wheel (400DPI, USB) (models A1J A2J)	41U3030	1

9011 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models)	89P8581	1
Speaker Power brick - Japan (models A1J A2J)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models)	89P8579	1

9011 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Brick - Korea (models)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	1
Speaker Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

9011 Power Cords	FRU#	CRU Tier
Power Cord (US) (models)	39M5080	1
Power Cord (China) (models)	39M5205	1
Power Cord (Japan) (models A1J A2J)	39M5193	1
Power Cord (Brazil) (models)	39M5232	1
Power Cord (LA), (High Volt) (APU) (models)	39M5067	1
Power Cord (Australia, New Zealand) (models)	39M5102	1
Power Cord (Korea) (models)	39M5212	1
Power Cord (Hong Kong) (models)	39M5151	1
Power Cord (UK, Ireland, Singapore, Malaysia, Brunei) (models)	39M5150	1
Power Cord (Taiwan) (models)	39M5246	1
Power Cord (Italy) (models)	39M5164	1
Power Cord (G models) (models)	39M5122	1
Power Cord (Denmark) (models)	39M5129	1
Power Cord (Switzerland) (models)	39M5157	1
Power Cord (Israel) (models)	39M5171	1
Power Cord (South Africa) (models)	39M5143	1
Power Cord (India) (models)	39M5004	1

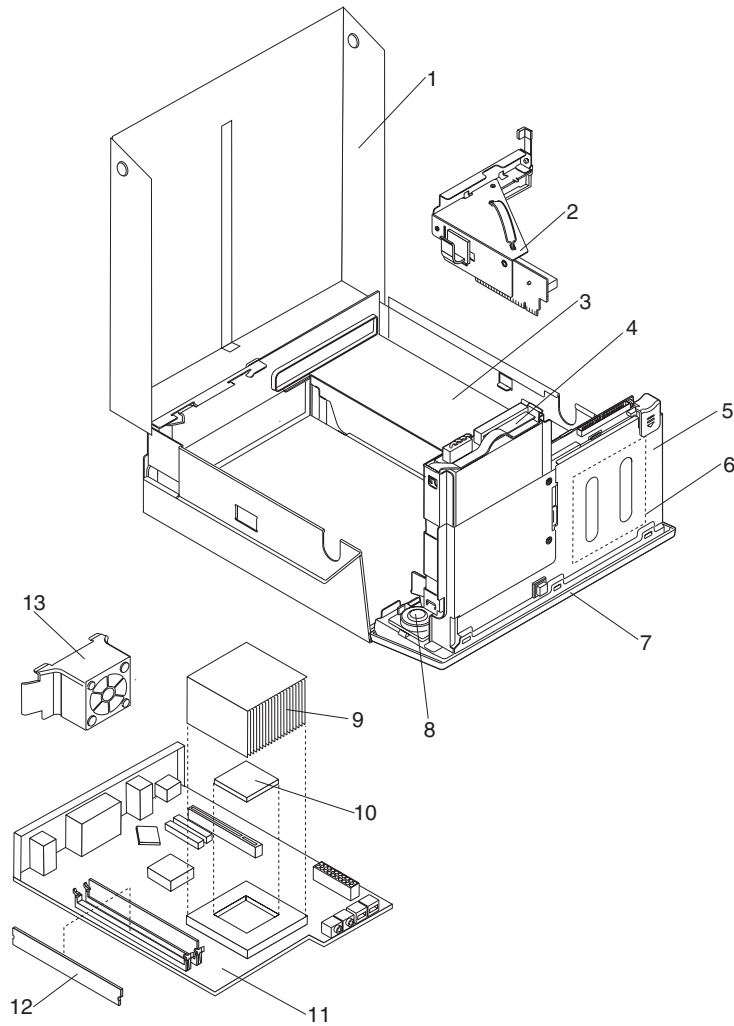
9011 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A1F)	45C4192	1
GR (models)	45C4193	1
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1

9011 Windows XP Pro Recovery CDs	FRU#	CRU
SV (models)	45C4199	1
DK (models)	45C4200	1
FI (models)	45C4203	1
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models A1J)	45C4197	1
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

9011 Vista U32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	45C4135	1
RE (models)	45C4136	1
FR/CF (models)	45C4137	1
GR (models)	45C4138	1
SP/LA (models)	45C4139	1
BR (models)	45C4140	1
IT (models)	45C4141	1
JP (models A2J)	45C4142	1
NO (models)	45C4143	1
SV (models)	45C4144	1
DK (models)	45C4145	1
NL (models)	45C4146	1
CZ (models)	45C4147	1
FI (models)	45C4148	1
PL (models)	45C4149	1
RU (models)	45C4150	1
TR (models)	45C4151	1
HU (models)	45C4152	1
GK (models)	45C4153	1

9011 Vista U32 Recovery DVDs	FRU#	CRU
CS (models)	45C4154	1
Traditional Chinese (models)	45C4155	1
Traditional Chinese (models)	45C4156	1
KR (models)	45C4157	1
SL (models)	45C4158	1
Hebrew (models)	45C4159	1
Portuguese (models)	45C4160	1
Slovakian (models)	45C4161	1
Arabic Localized (models)	45C4162	1

Machine Type 9071



Item #	9071 FRUs	FRU#	CRU Tier
1	Top Cover (models)	89P6782	1
2	PCI Riser Card Bracket Asm (all models)	41N8276	1
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (all models)	39M0618	1
2	Interposer Card (all models)	41R2902	1
3	Power Supply, 225 Watt (active PFC) - Standard, Robust, JP (models A5G A5M A5Q A5V A5K A5J A4C A6M A1G A2U A2F A7U A7F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A9S A9D A9Y ABU ABF AAU A3C)	41N3105	2
4	Hard disk drive 80GB 7200rpm Serial ATA, (models A6M A1G A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J ABU ABF)	40Y9034	1
4	Hard disk drive 160GB 7200rpm Serial ATA (models A5G A5M A5Q A5V A5K A5J A4C A2U A2F A7U A7F A9S A9D A9Y AAU A3C)	40Y9035	1
5	Front Rotating Cage assembly (all models)	41R6259	2

Item #	9071 FRUs	FRU#	CRU Tier
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A5G A5M A5Q A5V A5K A5J A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J AAU ABU ABF)	89H4936	1
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A5G A5M A5Q A5V A5K A5J A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J AAU ABU ABF)	43C2648	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A4C A6M A1G A2U A2F A7U A7F A9S A9D A9Y A3C)	43C0053	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A4C A6M A1G A2U A2F A7U A7F A9S A9D A9Y A3C)	42Y3910	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A4C A6M A1G A2U A2F A7U A7F A9S A9D A9Y A3C)	43C2649	1
7	Front Bezel (all models)	41R6260	1
8	Speaker and Cable assembly (all models)	39K5012	1
9	Thermal kit (all models)	41A7711	2
10	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A5G A5M A5Q A5V A5K A5J A4C A6M A1G A2U A2F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A9S A9D A9Y AAU ABU ABF A3C)	43C3833	N
10	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A2U A2F)	43C1693	N
11	System board, -Lagavulin III - Jupiter non AMT(GA) (models A5G A5M A5Q A5V A5K A5J A4C A6M A1G A2U A2F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A9S A9D A9Y AAU ABU ABF A3C)	43C2298	2
12	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A5G A5M A5Q A5V A5K A5J AAU)	41X4255	1
12	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A4C A6M A1G A2U A2F A7U A7F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A9S A9D A9Y ABU ABF A3C)	41X4256	1
13	Rear exhaust fan (all models)	39M0551	1

The FRUs listed in the following table are not illustrated.

9071 FRUs	FRU#	CRU Tier
Cable, SATA hard disk drive and optical drive (all models)	39K5061	1
Vertical stand (all models)	89P6792	1
Rear air deflector (all models)	89P6793	1
Under-desk Mounting Kit (all models)	39M0599	1
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1
HSS Tray assembly (includes grommet/pins/bracket/ground springs) (all models)	89P6778	1
Power/LED cable assembly with bracket (all models)	39K5055	2
Chassis and cover assembly (all models)	41R6258	2
Miscellaneous hardware kit (all models)	89P6794	1
Plastic parts kit (all models)	39M0575	2
Battery 3.0V (all models)	33F8354	1

9071 FRUs	FRU#	CRU Tier
Thermal Sense cable (850 mm) (all models)	41R2511	1
Front fan assembly (850 mm) (all models)	41R6359	1

9071 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A5M A5Q A5G A6M A1G A2U A7U A8U A8G A8M A8A A8Q A8H A8R A8E)	41A5289	1
Arabic (models A5G A1G A8G)	41A5290	1
Belgian/French (models A5G A1G A8G)	41A5292	1
Belgian/UK (models A5G A1G A8G)	41A5293	1
Brazilian (models A8P)	41A5294	1
Bulgarian (models A5G A1G A8G)	41A5295	1
Chinese/US (models A5G A1G A8G)	41A5296	1
Czech (models A5G A1G A8G)	41A5297	1
Danish (models A5G A1G A8G)	41A5298	1
French (models A5G A1G A8G)	41A5300	1
French Canadian 445 (models A2F A7F A8F ABF)	41A5301	1
French Canadian 58 (models A2F A7F A8F ABF)	41A5302	1
German (models A5G A1G A8G)	41A5303	1
Greek (models A5G A1G A8G)	41A5304	1
Hebrew (models A5G A1G A8G)	41A5306	1
Hungarian (models A5G A1G A8G)	41A5307	1
Iceland (models A5G A1G A8G)	41A5308	1
Italian 141 (models A5G A1G A8G)	41A5309	1
Japanese (models A5J A8J)	41A5310	1
Korean (models A5K A8K)	41A5311	1
LA Spanish (models A8S A8D A8Y A9S A9D A9Y)	41A5312	1
Norwegian (models A5G A1G A8G)	41A5313	1
Polish (models A5G A1G A8G)	41A5314	1
Portuguese (models A5G A1G A8G)	41A5315	1
Romanian 096 (models A5G A1G A8G)	41A5317	1
Romanian 446 (models A5G A1G A8G)	41A5316	1
Russian/Cyrillic (models A5G A1G A8G)	41A5318	1
Serbian/Cyrillic (models A5G A1G A8G)	41A5319	1
Slovak (models A5G A1G A8G)	41A5320	1
Spanish (models A5G A1G A8G)	41A5321	1
Swedish/Finn (models A5G A1G A8G)	41A5322	1
Swiss (models A5G A1G A8G)	41A5323	1
Thailand (models A5G A1G A8G)	41A5324	1
Turkish 440 (models A5G A1G A8G)	41A5325	1
Turkish 179 (models A5G A1G A8G)	41A5326	1
UK English (models A5G A1G A8G)	41A5327	1

9071 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US Euro (models A5G A1G A8G)	41A5328	1
Slovenian (models A5G A1G A8G)	41A5329	1

9071 Mice	FRU#	CRU Tier
Mouse, Optical Wheel (400DPI, USB) (models A5G A5M A5Q A5V A5K A5J A4C A6M A1G A2U A2F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A9S A9D A9Y AAU ABU ABF A3C)	41U3013	1
Mouse, Optical Wheel (400DPI, USB) (models A5G A5M A5Q A5V A5K A5J A4C A6M A1G A2U A2F A8U A8F A8S A8P A8L A8D A8Y A8G A8M A8A A8Q A8T A8C A8B A8H A8V A8K A8R A8E A8J A9S A9D A9Y AAU ABU ABF A3C)	41U3030	1

9071 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A5G A5M A5Q A6M A1G A2U A7U A8U A8S A8A A9S)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A8D A8Y A9D A9Y)	89P8575	1
Speaker Power brick - China, Thailand (models A4C A8C A3C)	89P8581	1
Speaker Power brick - Japan (models A5J A8J A8E)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A6M A5M A8M)	89P8579	1
Speaker Brick - Korea (models A5K A8K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A8B A8H A1G A5G A8G)	89P8573	1
Speaker Brick - Taiwan (models A4V A8V)	41A4905	1
Speaker Power brick - India, South Africa (models A8Q)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models A6M)	43C0258	2

9071 Power Cords	FRU#	CRU Tier
Power Cord (US) (models A2U A2F A7U A7F A7U A7F A8U A8F A8S A8L A8D A8A A8T A9S A9D)	39M5080	1
Power Cord (China) (models A8C A4C A3C)	39M5205	1
Power Cord (Japan) (models A5J A8E A8J)	39M5193	1

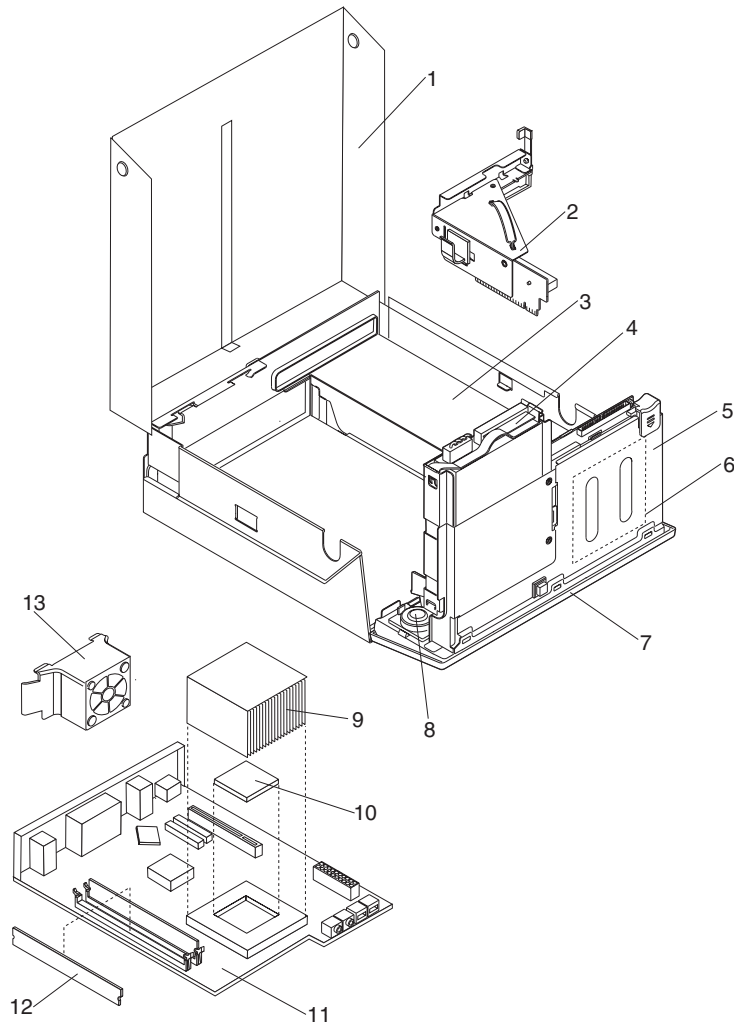
9071 Power Cords	FRU#	CRU Tier
Power Cord (Brazil) (models A8P)	39M5232	1
Power Cord (LA), (High Volt) (APU) (models A8Y A8L A9Y)	39M5067	1
Power Cord (Australia, New Zealand) (models A5M A8M)	39M5102	1
Power Cord (Korea) (models A5K A8K A8R)	39M5212	1
Power Cord (Hong Kong) (models A8B A8H)	39M5151	1
Power Cord (UK, Ireland, Singapore, Malaysia, Brunei) (models A5G A1G A8G A8A)	39M5150	1
Power Cord (Taiwan) (models A5V A8V)	39M5246	1
Power Cord (Italy) (models A5G A1G A8G)	39M5164	1
Power Cord (G models) (models A8A)	39M5122	1
Power Cord (Denmark) (models A5G A1G A8G)	39M5129	1
Power Cord (Switzerland) (models A5G A1G A8G)	39M5157	1
Power Cord (Israel) (models A5G A1G A8G)	39M5171	1
Power Cord (South Africa) (models A5G A5M A6M A1G A8G A8M A8A)	39M5143	1
Power Cord (India) (models A5Q A8Q)	39M5004	1

9071 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A1F)	45C4192	1
GR (models)	45C4193	1
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1
SV (models)	45C4199	1
DK (models)	45C4200	1
FI (models)	45C4203	1
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models A1J)	45C4197	1
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1

9071 Windows XP Pro Recovery CDs	FRU#	CRU
GK (models)	45C4210	1
SL (models)	45C4215	1

9071 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A5G A5M A5A A6M A1G A2U A8U A8G A8M A8A A8Q A8H A8R A8E AAU ABU)	45C4077	1
FR/CF (models A5G A1G A2F A8F A8G ABF)	45C4079	1
GR (models A5G A1G A8G)	45C4080	1
SP/LA (models A5G A1G A8G A9S A9Y)	45C4081	1
BR (models A8P)	45C4082	1
IT (models A5G A1G A8G)	45C4083	1
JP (models A5J A8J)	45C4084	1
NO (models A5G A1G A8G)	45C4085	1
SV (models A5G A1G A8G)	45C4086	1
DK (models A5G A1G A8G)	45C4087	1
NL (models A5G A1G A8G)	45C4088	1
CZ (models A5G A1G A8G)	45C4089	1
FI (models A5G A1G A8G)	45C4090	1
PL (models A5G A1G A8G)	45C4091	1
RU (models A5G A1G A8G)	45C4092	1
TR (models A5G A1G A8G)	45C4093	1
HU (models A5G A1G A8G)	45C4094	1
GK (models A5G A1G A8G)	45C4095	1
PO (models A5G A1G A8G)	45C4102	1
CS (models A8C)	45C4096	1
Traditional Chinese (models A5V A8V A8B A8H)	45C4097	1
Traditional Chinese (models A5V A8V A8B A8H)	45C4098	1
KR (models A5K A8K)	45C4099	1
SL (models A5G A1G A8G)	45C4100	1
RE (models A5G A1G A8G)	45C4078	1
Romanian (models A5G A1G A8G)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A5G A1G A8G)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A5G A1G A8G)	45C4106	1

Machine Type 9089



Item #	9089 FRUs	FRU#	CRU Tier
1	Top Cover (models)	89P6782	1
2	PCI Riser Card Bracket Asm (all models)	41N8276	1
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (all models)	39M0618	1
2	Interposer Card (all models)	41R2902	1
3	Power Supply, 225 Watt (active PFC) - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41N3105	2
4	Hard disk drive 80GB 7200rpm Serial ATA, (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	40Y9034	1
5	Front Rotating Cage assembly (all models)	41R6259	2
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	89H4936	1

Item #	9089 FRUs	FRU#	CRU Tier
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C2648	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	43C0053	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	42Y3910	1
6	DVD-RW/CD-RW Rambo 5 - IDE (models A1J A2J)	43C2649	1
7	Front Bezel (all models)	41R6260	1
8	Speaker and Cable assembly (all models)	39K5012	1
9	Thermal kit (all models)	41A7711	2
10	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C3833	N
11	System board -Lagavulin III - Jupiter AMT(GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C2298	2
12	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41X4256	1
13	Rear exhaust fan (all models)	39M0551	1

The FRUs listed in the following table are not illustrated.

9089 FRUs	FRU#	CRU Tier
Cable, SATA hard disk drive and optical drive (all models)	39K5061	1
Vertical stand (all models)	89P6792	1
Rear air deflector (all models)	89P6793	1
Under-desk Mounting Kit (all models)	39M0599	1
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1
HSS Tray assembly (includes grommet/pins/bracket/ground springs) (all models)	89P6778	1
Power/LED cable assembly with bracket (all models)	39K5055	2
Chassis and cover assembly (all models)	41R6258	2
Miscellaneous hardware kit (all models)	89P6794	1
Plastic parts kit (all models)	39M0575	2
Battery 3.0V (all models)	33F8354	1
Thermal Sense cable (850 mm) (all models)	41R2511	1
Front fan assembly (850 mm) (all models)	41R6359	1

9089 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q)	41A5289	1
Arabic (models A1G)	41A5290	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Brazilian (models A1P)	41A5294	1
Bulgarian (models A1G)	41A5295	1

9089 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Chinese/US (models A1B A1V)	41A5296	1
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1
French (models A1G)	41A5300	1
French Canadian 445 (models A1F)	41A5301	1
French Canadian 58 (models A1F)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italian 141 (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models A1A A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian 096 (models A1G)	41A5317	1
Romanian 446 (models A1G)	41A5316	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finn (models A1G)	41A5322	1
Swiss (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish 440 (models A1G)	41A5325	1
Turkish 179 (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models A1G)	41A5329	1

9089 Mice	FRU#	CRU Tier
Mouse, Optical Wheel (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Mouse, Optical Wheel (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

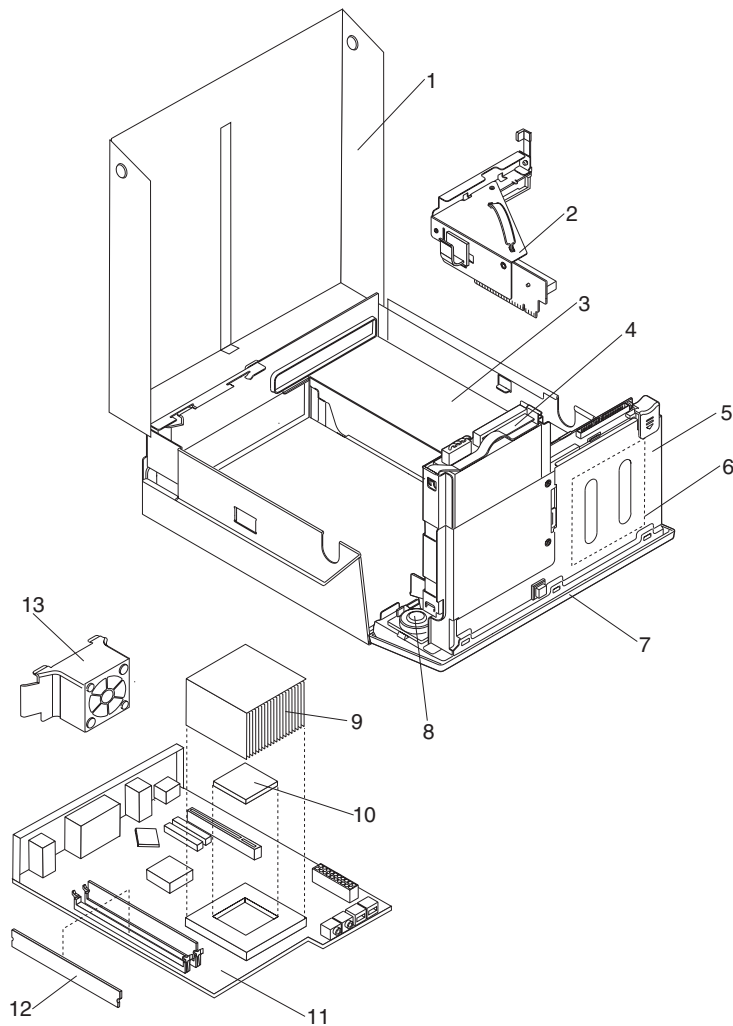
9089 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2

9089 Adapters and miscellaneous FRUs	FRU#	CRU
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A A1Y)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

9089 Power Cords	FRU#	CRU Tier
Power Cord (US) (models A1U A1F A1S A1D A1L A1A A1T)	39M5080	1
Power Cord (China) (models A1C)	39M5205	1
Power Cord (Japan) (models A1E A1J)	39M5193	1
Power Cord (Brazil) (models A1P)	39M5232	1
Power Cord (LA), (High Volt) (APU) (models A1Y A1L)	39M5067	1
Power Cord (Australia, New Zealand) (models A1M)	39M5102	1
Power Cord (Korea) (models A1K A1R)	39M5212	1
Power Cord (Hong Kong) (models A1B A1H)	39M5151	1
Power Cord (UK, Ireland, Singapore, Malaysia, Brunei) (models A1G A1A)	39M5150	1
Power Cord (Taiwan) (models A1V)	39M5246	1
Power Cord (Italy) (models A1S A1Y A1L A1G)	39M5164	1
Power Cord (G models) (models A1A)	39M5122	1
Power Cord (Denmark) (models A1G)	39M5129	1
Power Cord (Switzerland) (models A1G)	39M5157	1
Power Cord (Israel) (models A1G)	39M5171	1
Power Cord (South Africa) (models A1G A1M A1A)	39M5143	1
Power Cord (India) (models A1Q)	39M5004	1

9089 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1G A1M A1A A1Q A1H A1R A1E A1F)	45C4077	1
FR/CF (models A1F)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models A1G)	45C4081	1
BR (models A1G A1P)	45C4082	1
IT (models A1G)	45C4083	1
JP (models A1J)	45C4084	1
NO (models A1G)	45C4085	1
SV (models A1G)	45C4086	1
DK (models A1G)	45C4087	1
NL (models A1G)	45C4088	1
CZ (models A1G)	45C4089	1
FI (models A1G)	45C4090	1
PL (models A1G)	45C4091	1
RU (models A1G)	45C4092	1
TR (models A8B)	45C4093	1
HU (models A1G)	45C4094	1
GK (models A1G)	45C4095	1
PO (models A1G)	45C4102	1
CS (models A1G)	45C4096	1
Traditional Chinese (models A1V)	45C4097	1
Traditional Chinese (models A1B)	45C4098	1
KR (models A1K)	45C4099	1
SL (models A1G)	45C4100	1
RE (models A1G)	45C4078	1
Romanian (models A1G)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A1G)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A1G)	45C4106	1

Machine Type 9162



Item #	9162 FRUs	FRU#	CRU Tier
1	Top Cover (models)	89P6782	1
2	PCI Riser Card Bracket Asm (all models)	41N8276	1
2	Riser Card Bracket Asm, Flippable PCI and PCIX/DVI, RoHS (all models)	39M0618	1
2	Interposer Card (all models)	41R2902	1
3	Power Supply, 225 Watt (active PFC) - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41N3105	2
4	Hard disk drive 80GB 7200rpm Serial ATA, (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	40Y9034	1
5	Front Rotating Cage assembly (all models)	41R6259	2
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	89H4936	1

Item #	9162 FRUs	FRU#	CRU Tier
6	CD-RW/DVD-ROM Combo Drive 48X/32X/48X/16X Max xp & vista (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C2648	1
7	Front Bezel (all models)	41R6260	1
8	Speaker and Cable assembly (all models)	39K5012	1
9	Thermal kit (all models)	41A7711	2
10	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C3833	N
11	System board - Jupiter non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C2298	2
12	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41X4256	1
13	Rear exhaust fan (all models)	39M0551	1

The FRUs listed in the following table are not illustrated.

9162 FRUs	FRU#	CRU Tier
Cable, SATA hard disk drive and optical drive (all models)	39K5061	1
Vertical stand (all models)	89P6792	1
Rear air deflector (all models)	89P6793	1
Under-desk Mounting Kit (all models)	39M0599	1
Bezel, Ultra-Bay-Enhanced (all models)	89P6804	1
HSS Tray assembly (includes grommet/pins/bracket/ground springs) (all models)	89P6778	1
Power/LED cable assembly with bracket (all models)	39K5055	2
Chassis and cover assembly (all models)	41R6258	2
Miscellaneous hardware kit (all models)	89P6794	1
Plastic parts kit (all models)	39M0575	2
Battery 3.0V (all models)	33F8354	1
Thermal Sense cable (850 mm) (all models)	41R2511	1
Front fan assembly (850 mm) (all models)	41R6359	1

9162 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q)	41A5289	1
Arabic (models A1G)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1B A1V)	41A5296	1
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1

9162 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Dutch (models A1G)	41A5299	1
French (models A1G)	41A5300	1
French Canadian 445 (models A1F)	41A5301	1
French Canadian 58 (models A1F)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italian 141 (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models A1A A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian 096 (models A1G)	41A5317	1
Romanian 446 (models A1G)	41A5316	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finn (models A1G)	41A5322	1
Swiss (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish 440 (models A1G)	41A5325	1
Turkish 179 (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models A1G)	41A5329	1

9162 Mice	FRU#	CRU Tier
Mouse, Optical Wheel (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Mouse, Optical Wheel (400DPI, USB) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

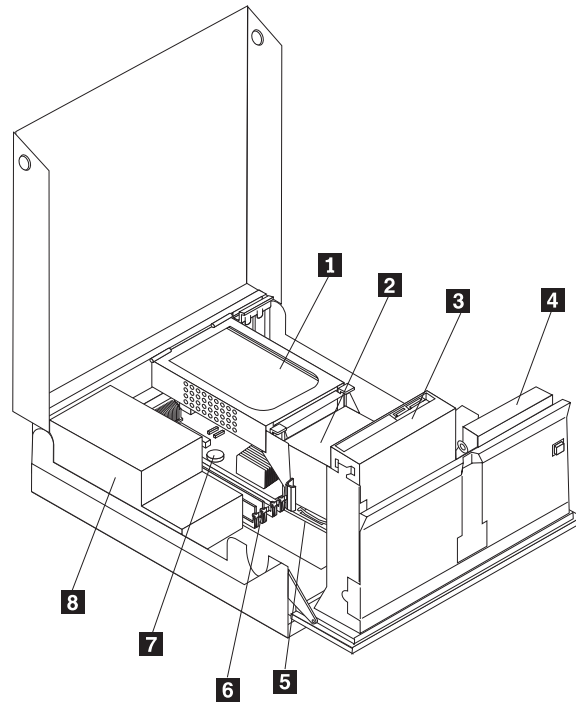
9162 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2

9162 Adapters and miscellaneous FRUs	FRU#	CRU
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A A1Y)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

9162 Power Cords	FRU#	CRU Tier
Power Cord (US) (models A1U A1F A1S A1D A1L A1A A1T)	39M5080	1
Power Cord (China) (models A1C)	39M5205	1
Power Cord (Japan) (models A1E A1J)	39M5193	1
Power Cord (Brazil) (models A1P)	39M5232	1
Power Cord (LA), (High Volt) (APU) (models A1Y A1L)	39M5067	1
Power Cord (Australia, New Zealand) (models A1M)	39M5102	1
Power Cord (Korea) (models A1K A1R)	39M5212	1
Power Cord (Hong Kong) (models A1B A1H)	39M5151	1
Power Cord (UK, Ireland, Singapore, Malaysia, Brunei) (models A1G A1A)	39M5150	1
Power Cord (Taiwan) (models A1V)	39M5246	1
Power Cord (Italy) (models A1S A1Y A1L A1G)	39M5164	1
Power Cord (G models) (models A1A)	39M5122	1
Power Cord (Denmark) (models A1G)	39M5129	1
Power Cord (Switzerland) (models A1G)	39M5157	1
Power Cord (Israel) (models A1G)	39M5171	1
Power Cord (South Africa) (models A1G A1M A1A)	39M5143	1
Power Cord (India) (models A1Q)	39M5004	1

9162 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1G A1M A1A A1Q A1H A1R A1E A1F)	45C4077	1
FR/CF (models A1F)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models A1G)	45C4081	1
BR (models A1G A1P)	45C4082	1
IT (models A1G)	45C4083	1
JP (models A1J)	45C4084	1
NO (models A1G)	45C4085	1
SV (models A1G)	45C4086	1
DK (models A1G)	45C4087	1
NL (models A1G)	45C4088	1
CZ (models A1G)	45C4089	1
FI (models A1G)	45C4090	1
PL (models A1G)	45C4091	1
RU (models A1G)	45C4092	1
TR (models A8B)	45C4093	1
HU (models A1G)	45C4094	1
GK (models A1G)	45C4095	1
PO (models A1G)	45C4102	1
CS (models A1G)	45C4096	1
Traditional Chinese (models A1V)	45C4097	1
Traditional Chinese (models A1B)	45C4098	1
KR (models A1K)	45C4099	1
SL (models A1G)	45C4100	1
RE (models A1G)	45C4078	1
Romanian (models A1G)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A1G)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A1G)	45C4106	1

Machine Type 9181



Item #	9181 FRUs	FRU#	CRU Tier
1	Hard disk drive, 160GB Hard Drive (7200RPM) Serial ATA (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	40Y9035	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	42Y9353	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	43C3833	N
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	41X4256	2
7	System board, Mercury non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	87H5127	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	41A9701	2
8	Power supply, 280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	41A9717	2

9181 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2

9181 FRUs	FRU#	CRU
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

9181 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1M A1A A1Q A1H A1R A1E A1G)	41A5289	1
Arabic (models A1G)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Brazilian (models A1P)	41A5294	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1V)	41A5296	1
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1
Dutch (models A1G)	41A5299	1
French (models A1G)	41A5300	1
French Canadian 445 (models A1G)	41A5301	1
French Canadian 58 (models A1G)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Greek/US (models A1G)	41A5305	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italian 141 (models A1G)	41A5309	1
Japanese (models A1J A2J)	41A5310	1

9181 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Korean (models A1K A2K)	41A5311	1
LA Spanish (models A1S A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian 096 (models A1G)	41A5317	1
Romanian 446 (models A1G)	41A5316	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finn (models A1G)	41A5322	1
Swiss (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish 440 (models A1G)	41A5325	1
Turkish 179 (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models A1G)	41A5329	1

9181 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (all models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (all models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	41U3030	1

The FRUs listed in the following tables are not illustrated.

9181 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1Y A1A)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C)	89P8581	1
Speaker Power brick - Japan (models A1J)	J89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K A1R)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1

9181 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - India, South Africa (models)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

9181 Power Cords	FRU#	CRU
Power cord - US (models A1U A1F A1S A1D A1L)	39M5080	1
Power cord - China (models A1C)	39M5205	1
Power cord - Japan (models A1J A1E)	39M5193	1
Power cord - Brazil (models A1P)	39M5232	1
Power cord - LA High Volt APU) (models A1Y A1L)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K A1R)	39M5212	1
Power cord - Hong Kong (models A1B A1H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1A A1G A1A)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models A1S A1Y A1L A1G)	39M5164	1
Power cord - G models (models A1A)	39M5122	1
Power cord - Denmark (models A1A)	39M5129	1
Power cord - Switzerland (models A1A)	39M5157	1
Power cord - Israel (models A1A)	39M5171	1
Power cord - South Africa (models A1G A1M A1A)	39M5143	1
Power cord - India (models A1Q)	39M5004	1

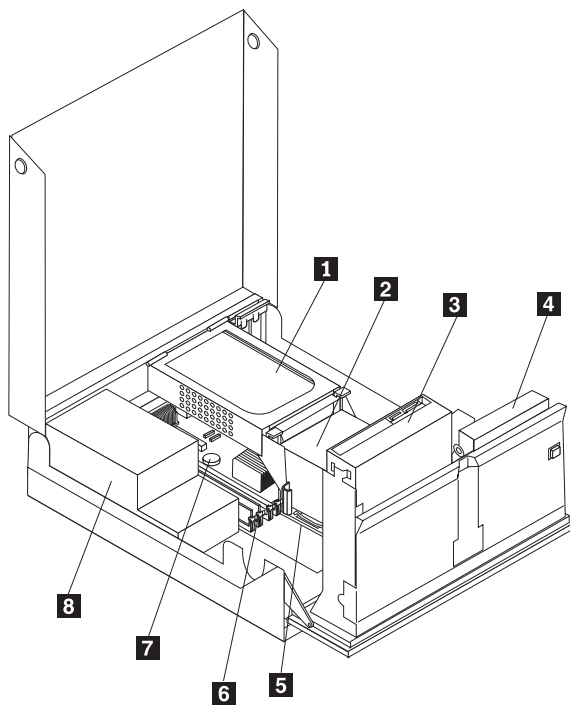
9181 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models)	45C4191	1
RE (models)	45C4216	1
FR/CF (models)	45C4192	1
GR (models)	45C4193	1
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1
SV (models)	45C4199	1
DK (models)	45C4200	1
FI (models)	45C4203	1

9181 Windows XP Pro Recovery CDs	FRU#	CRU
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models)	45C4197	1
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

9181 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1F A1G A1M A1A A1Q A1H A1R A1E)	45C4077	1
FR/CF (models A1G A1F)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models A1S A1Y A1L A1G)	45C4081	1
BR (models A1P)	45C4082	1
IT (models A1G)	45C4083	1
JP (models A1J)	45C4084	1
NO (models A1G)	45C4085	1
SV (models A1G)	45C4086	1
DK (models A1G)	45C4087	1
NL (models A1G)	45C4088	1
CZ (models A1G)	45C4089	1
FI (models A1G)	45C4090	1
PL (models A1G)	45C4091	1
RU (models A1G)	45C4092	1
TR (models A1G)	45C4093	1
HU (models A1G)	45C4094	1
GK (models A1G)	45C4095	1
PO (models A1G)	45C4102	1
CS (models A1C)	45C4096	1
Traditional Chinese (models A1V)	45C4097	1
Traditional Chinese (models A1V)	45C4098	1

9181 Vista Business 32 Recovery DVDs	FRU#	CRU
KR (models A1K)	45C4099	1
SL (models A1G)	45C4100	1
RE (models A1G)	45C4078	1
Romanian (models A1G)	45C4101	1
Sebian-Latin (models A1G)	45C4103	1
Slovakian (models A1G)	45C4104	1
Arabic Localized (models A1G)	45C4105	1
Hebrew (models A1G)	45C4106	1

Machine Type 9196



Item #	9196 FRUs	FRU#	CRU Tier
1	Hard disk drive, 80GB Hard Drive (7200RPM) Serial ATA -- Lenovo (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	40Y9034	2
2	Thermal Kit (all models)	41R6039	N
3	Optical drive, DVD-ROM/CD-RW Combo drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	42Y9353	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9109	2
4	Diskette drive, Slim FDD -- w/o bezel or cable (models)	40Y9111	2
5	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	43C3833	N
6	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models)	41X4255	2

Item #	9196 FRUs	FRU#	CRU Tier
6	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models)	41X4256	2
7	System board, Mercury non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J) Note: When ordering the system board you should also order a new Thermal kit.	87H5128	2
8	Power supply, 280 Watt SFF Power Supply - Standard, Robust, JP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41A9701	2

The FRUs listed in the following tables are not illustrated.

9196 FRUs	FRU#	CRU
Second Serial Port Cable (all models)	41R3388	2
Power switch/LED cable assembly (all models)	41R3391	2
USB cable assembly (all models)	41R3392	2
C2 switch cable (all models)	39K5022	2
SATA cable,120mm (all models)	41R3328	2
SATA cable, 700mm (all models)	39K5026	2
Speaker/Cable assembly (all models)	39K5012	2
Temperature Sense cable (460 mm) (all models)	41R2509	2
System fan (all models)	41R6042	2
System fan assembly (all models)	41R6249	2
System board IO shield assembly (all models)	41R6250	N
CPU Support Module (all models)	41R6251	N
CPU Support Module (all models)	41R6252	N
Hard disk drive tray assembly (all models)	41R6253	2
Internal plastic (all models)	41R6254	2
Bezel, plastic (all models)	41R6255	2
Front rotating cage assembly (all models)	41R6256	N
Top cover assembly (all models)	41R6257	N
Chassis assembly (all models)	41R6248	N

9196 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q)	41A5289	1
Arabic (models A1G)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Brazilian (models A1P)	41A5294	1
Bulgarian (models A1G)	41A5295	1
Chinese/US (models A1B A1V)	41A5296	1
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1

9196 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Dutch (models A1G)	41A5299	1
French (models A1G)	41A5300	1
French Canadian 445 (models A1F)	41A5301	1
French Canadian 58 (models A1F)	41A5302	1
German (models A1G)	41A5303	1
Greek (models A1G)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Italian 141 (models A1G)	41A5309	1
Japanese (models A1J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models A1A A1D A1Y)	41A5312	1
Norwegian (models A1G)	41A5313	1
Polish (models A1G)	41A5314	1
Portuguese (models A1G)	41A5315	1
Romanian 096 (models A1G)	41A5317	1
Romanian 446 (models A1G)	41A5316	1
Russian/Cyrillic (models A1G)	41A5318	1
Serbian/Cyrillic (models A1G)	41A5319	1
Slovak (models A1G)	41A5320	1
Spanish (models A1G)	41A5321	1
Swedish/Finn (models A1G)	41A5322	1
Swiss (models A1G)	41A5323	1
Thailand (models A1T)	41A5324	1
Turkish 440 (models A1G)	41A5325	1
Turkish 179 (models A1G)	41A5326	1
UK English (models A1G)	41A5327	1
US Euro (models A1G)	41A5328	1
Slovenian (models A1G)	41A5329	1

9196 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (all models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (all models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41U3030	1

9196 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
Soft Modem V.90/V.44 - LP (models)	39K5120	2

9196 Adapters and miscellaneous FRUs	FRU#	CRU
Speakers, Lenovo branded (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A A1Y)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	J89P8577	1
Speaker Power brick - Brazil (models)	89P8583	1
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Thermal Grease Syringe (models)	91P8835	N
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
USB2.0 MEMORY CARDREADER,6X2,ROHS, Slim (models)	43C9207	2
USB Memory Key (bootable) (models)	41U5124	2
ATI RV610 128M LP, PCIe x16, DMS59/S-Video (models)	43C0259	2
ATI RV610 256M LP, PCIe x16, DMS59/S-Video (models)	43C0260	2
New Casper DVI-D card, low profile, support HDCP (models)	43C0258	2

9196 Power Cords	FRU#	CRU
Power cord - US (models A1U A1F A1S A1D A1L A1A A1T)	39M5080	1
Power cord - China (models A1C)	39M5205	1
Power cord - Japan (models A1E A1J)	39M5193	1
Power cord - Brazil (models A1P)	39M5232	1
Power cord - LA High Volt APU) (models A1Y A1L)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K A1R)	39M5212	1
Power cord - Hong Kong (models A1B A1H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1G A1A)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models A1S A1Y A1L A1G)	39M5164	1
Power cord - G models (models A1A)	39M5122	1
Power cord - Denmark (models A1G)	39M5129	1
Power cord - Switzerland (models A1G)	39M5157	1
Power cord - Israel (models A1G)	39M5171	1
Power cord - South Africa (models A1G A1M A1A)	39M5143	1
Power cord - India (models A1Q)	39M5004	1

9196 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1F A1G A1M A1A A1Q A1H A1R A1E)	45C4077	1
FR/CF (models A1G A1F)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models A1S A1Y A1L A1G)	45C4081	1
BR (models A1P)	45C4082	1
IT (models A1G)	45C4083	1
JP (models A1J)	45C4084	1
NO (models A1G)	45C4085	1
SV (models A1G)	45C4086	1
DK (models A1G)	45C4087	1
NL (models A1G)	45C4088	1
CZ (models A1G)	45C4089	1
FI (models A1G)	45C4090	1
PL (models A1G)	45C4091	1
RU (models A1G)	45C4092	1
TR (models A1G)	45C4093	1
HU (models A1G)	45C4094	1
GK (models A1G)	45C4095	1
PO (models A1G)	45C4102	1
CS (models A1C)	45C4096	1
Traditional Chinese (models A1V)	45C4097	1
Traditional Chinese (models A1V)	45C4098	1
KR (models A1K)	45C4099	1
SL (models A1G)	45C4100	1
RE (models A1G)	45C4078	1
Romanian (models A1G)	45C4101	1
Sebian-Latin (models A1G)	45C4103	1
Slovakian (models A1G)	45C4104	1
Arabic Localized (models A1G)	45C4105	1
Hebrew (models A1G)	45C4106	1

Chapter 11. Additional Service Information

This chapter provides additional information that the service representative might find helpful.

Security features

Security features in this section include the following:

- Passwords
- Vital Product Data
- Management Information Format (MIF)

Hardware controlled Passwords

Hardware controlled passwords are set using the Setup Utility program. For more information about passwords, see "Using passwords" on page 49.

Operating system password

An operating system password is very similar to a power-on password and denies access to the computer by an unauthorized user when the password is activated. The computer is unusable until the password is entered and recognized by the computer.

Vital product data

Each computer has a unique Vital Product Data (VPD) code stored in the nonvolatile memory on the system board. After you replace the system board, the VPD must be updated. To update the VPD, see "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268.

BIOS levels

An incorrect level of BIOS can cause false errors and unnecessary FRU replacement. Use the following information to determine the current level of BIOS installed in the computer, the latest BIOS available for the computer, and where to obtain the latest level of BIOS.

- To determine the current Level of BIOS:
 - Start the Setup Utility.
 - Select Standard CMOS Features.
- Sources for obtaining the latest level BIOS available
 1. Lenovo support web site:
<http://www.lenovo.com/support/>
 2. Lenovo Customer Support Center
 3. Levels 1 and 2 Support

To update (flash) the BIOS, see "Updating (flashing) BIOS from a CD-ROM or diskette" on page 268.

Updating (flashing) BIOS from a CD-ROM or diskette

This section describes how to update (flash) the BIOS using a CD-ROM or diskette. System program updates are available at <http://www.lenovo.com/support> on the World Wide Web.

1. To update (flash) the BIOS:
 - If using a CD-ROM, make sure the computer is turned on. Insert the system program update (flash) CD-ROM into the optical drive. The update begins.
 - If using a diskette, make sure the computer is turned off. Insert the system program update (flash) diskette and turn on the computer. The update begins.
2. When you are prompted to select a language, press the number on your keyboard that corresponds to the language and then press **Enter**.
3. When prompted to change the serial number, press **Y**.
4. Type the seven-character serial number of your computer and then press **Enter**.
5. When prompted to change the machine type/model, press **Y**.
6. Type the seven-character machine type/model of your computer and then press **Enter**.
7. Follow the instructions on the screen to complete the update.

Recovering from a POST/BIOS update failure

Attention: If an interruption occurs during a POST/BIOS update (flash update), the computer might not restart correctly. If this occurs, perform the following procedure (also known as a Boot-block recovery).

Note: If your computer has no internal diskette drive, an optional USB diskette drive must be connected to use the BIOS flash diskette.

1. Turn the computer off and insert the special recovery BIOS flash diskette in the diskette drive.
2. Turn the computer on.
3. The recovery session takes two to three minutes. During this time you will hear a series of beeps. After the update session completes, the series of beeps ends and the computer automatically turns off. There is no video during the recovery session.
4. Remove the special recovery BIOS flash diskette from the diskette drive.

Power management

Power management reduces the power consumption of certain components of the computer such as the system power supply, processor, hard disk drives, and some monitors.

Automatic configuration and power interface (ACPI) BIOS

Being an ACPI BIOS system, the operating system is allowed to control the power management features of the computer and the setting for Advanced Power Management (APM) BIOS mode is ignored. Not all operating systems support ACPI BIOS mode.

Automatic Power-On features

The Automatic Power-On features within the Power Management menu allow you to enable and disable features that turn on the computer automatically.

- **Serial Port A Ring Detect:** With this feature set to **Enabled** and an external modem connected to serial port (COM1), the computer will turn on automatically when a ring is detected on the modem.
- **PCI Modem Ring Detect:** With this feature set to **Enabled**, the computer will turn on automatically when a ring is detected on the internal modem.
- **PCI Wake Up:** This feature allows PCI cards that support this capability to wake the system.
- **Wake Up on Alarm:** You can specify a date and time at which the computer will be turned on automatically. This can be either a single event or a daily event.
- **Wake on LAN:** If the computer has a properly configured token-ring or Ethernet LAN adapter card that is Wake on LAN-enabled and there is remote network management software, you can use the Wake on LAN feature. When you set Wake on LAN to **Enabled**, the computer will turn on when it receives a specific signal from another computer on the local area network (LAN).

Appendix. Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

*Lenovo (United States), Inc.
1009 Think Place - Building One
Morrisville, NC 27560
U.S.A.
Attention: Lenovo Director of Licensing*

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

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.

Television output notice

The following notice applies to models that have the factory-installed television-output feature.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Trademarks

The following terms are trademarks of Lenovo in the United States, other countries, or both:

- Lenovo
- ThinkCentre
- PS/2
- Rescue and Recovery

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

- Asset ID
- Alert on LAN
- IBM (used under license)
- Wake on LAN

Intel and Pentium are trademarks of Intel Corporation in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.

lenovo

Part Number: 43C8797

Printed in USA

(1P) P/N: 43C8797

