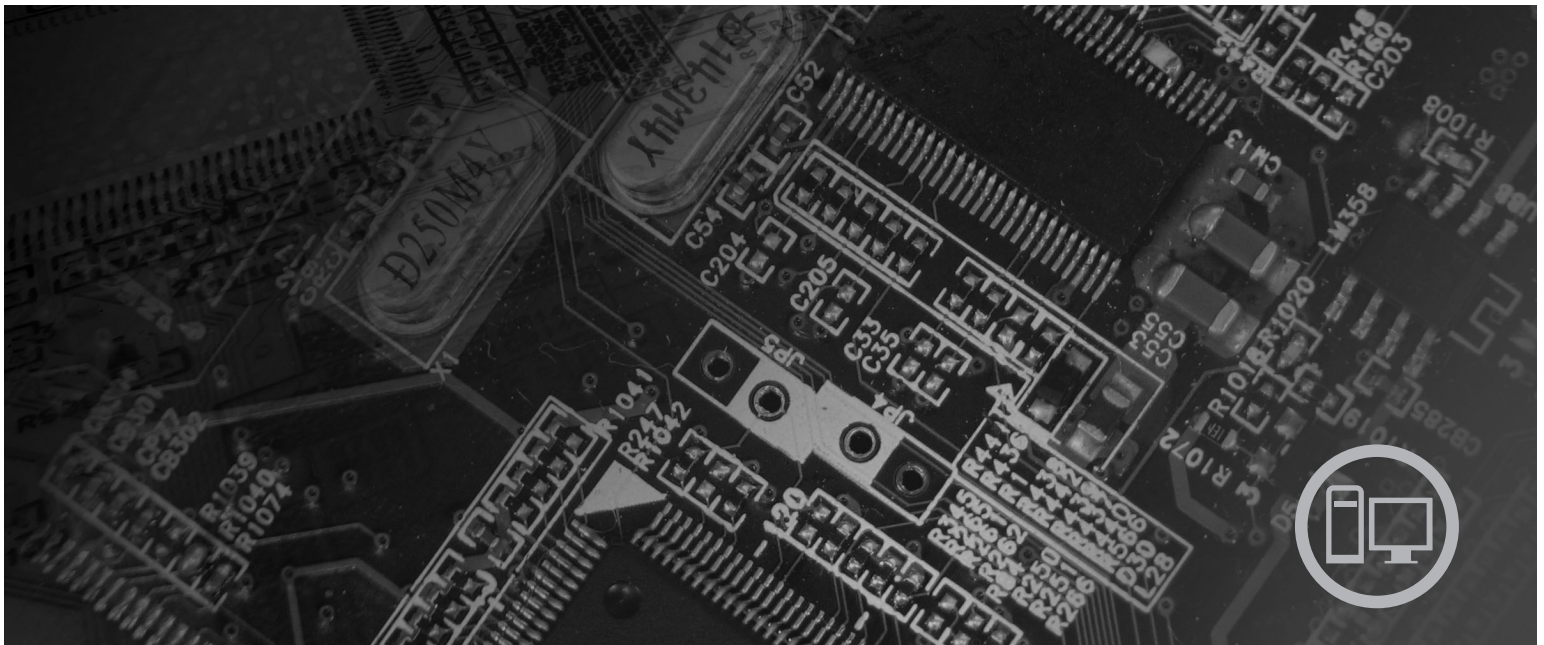




ThinkCentre Hardware Maintenance Manual



Machine Types 6008, 6010, 6068, 6069, 6074, 6075, 6079, 6081, 6082, 6086, 9012, 9013, 9018, 9019, 9087, 9088, 9096, 9160, 9163, 9164, 9172, 9174, 9193, 9194, 9304

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 287.

Second Edition (September 2007)

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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
Voltage-selection switch.	5
Safety inspection guide	5
Handling electrostatic discharge-sensitive devices	6
Grounding requirements	7
Safety notices (multi-lingual translations).	7
Chapter 3. General information	39
The ThinkVantage Productivity Center program	39
Additional information resources	39
Specifications	40
Types 6008, 6068, 6074, 6079, 6082, 9012, 9018, 9087, 9096, 9163, 9172, and 9193	41
Types 6010, 6069, 6075, 6081, 6086, 9013, 9019, 9088, 9160, 9164, 9174, 9194, and 9304	42
Chapter 4. General Checkout	43
Problem determination tips	43
Chapter 5. Diagnostics	45
PC-Doctor for Windows	45
PC-Doctor for Windows PE	45
Running diagnostics from the Rescue and Recovery workspace	45
PC-Doctor for DOS	46
Creating a diagnostic CD image	46
Creating diagnostic diskettes	46
Running diagnostics from the CD or diskettes	47
Navigating through the diagnostics programs	47
Running tests.	47
Viewing the test log	49
Chapter 6. Using the Setup Utility	51
Starting the Setup Utility program.	51
Viewing and changing settings	51
Using passwords	51
Password considerations	51
User Password	52
Administrator Password	52
Setting, changing, and deleting a password.	52
Selecting a startup device.	52
Selecting a temporary startup device	52
Selecting or changing the startup device sequence	53
Advanced settings	53
Exiting from the Setup Utility program	53
Chapter 7. Symptom-to-FRU Index	55

Hard disk drive boot error	55
Power Supply Problems	55
Diagnostic error codes.	56
Beep symptoms	78
POST error codes	79
Miscellaneous error messages	81
Undetermined problems	82

Chapter 8. Replacing FRUs (Types 6008, 6068, 6074, 6079, 6082, 9012, 9018, 9087, 9096, 9163, 9172, and 9193) 85

Locations	86
Rear connectors	86
Computer components	87
System board connectors	88
Removing the cover	89
Accessing system board components and drives	90
Replacing a memory module	92
Replacing the CMOS battery.	93
Replacing the power supply.	94
Replacing the system board	96
Replacing the microprocessor	100
Replacing the hard disk drive	104
Replacing an optical drive	106
Replacing the diskette drive	107
Replacing the power switch/LED assembly	108
Replacing the front panel card.	109
Replacing the system fan assembly	110
Replacing a PCI adapter	111
Completing the FRU replacement.	112

Chapter 9. Replacing FRUs (Types 6010, 6069, 6075, 6081, 6086, 9013, 9019, 9088, 9160, 9164, 9174, 9194, and 9304) 113

Locations	114
Rear connectors	114
Computer components	115
System board connectors	116
Removing the cover	117
Removing and replacing the front bezel	118
Replacing the power supply	119
Replacing the system board	120
Replacing the microprocessor	125
Replacing a memory module	129
Replacing a PCI adapter.	130
Replacing the primary hard disk drive	132
Replacing the secondary hard disk drive	135
Replacing an optical drive	139
Replacing the diskette drive	140
Replacing the rear fan assembly	141
Replacing the front fan assembly	143
Replacing the front audio/USB assembly	145
Replacing the power switch/LED assembly	146

Replacing the CMOS battery	147
Completing the FRU replacement	148

Chapter 10. FRU lists 149

Machine Type 6008	149
Machine Type 6010	155
Machine Type 6068	163
Machine Type 6069	168
Machine Type 6074	175
Machine Type 6075	181
Machine Type 6079	189
Machine Type 6081	195
Machine Type 6086	201
Machine Type 9012	207
Machine Type 9013	211
Machine Type 9018	216
Machine Type 9019	222
Machine Type 9087	225
Machine Type 9088	230
Machine Type 9096	236
Machine Type 9160	242
Machine Type 9163	247
Machine Type 9164	255
Machine Type 9172	261

Machine Type 9174	266
Machine Type 9193	272
Machine Type 9194	277

Chapter 11. Additional Service Information 283

Security features	283
Hardware controlled Passwords	283
Operating system password	283
Vital product data	283
BIOS levels	283
Updating (flashing) BIOS from a CD-ROM or diskette	284
Recovering from a POST/BIOS update failure	284
Power management	285
Automatic configuration and power interface (ACPI) BIOS.	285
Automatic Power-On features	285

Appendix. Notices 287

Television output notice	288
Trademarks	288

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 generatorsand 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.

Voltage-selection switch

Some computers are equipped with a voltage-selection switch located near the power-cord connection point on the computer. If your computer has a voltage-selection switch, ensure that you set the switch to match the voltage available at your electrical outlet. Setting the voltage-selection switch incorrectly can cause permanent damage to the computer.

If your computer does not have a voltage-selection switch, your computer is designed to operate only at the voltage provided in the country or region where the computer was originally purchased.

If you relocate your computer to another country, be aware of the following:

- If your computer does not have a voltage-selection switch, do not connect the computer to an electrical outlet until you have verified that the voltage provided is the same as it was in the country or region where the computer was originally purchased.
- If your computer has a voltage selection switch, do not connect the computer to an electrical outlet until you have verified that the voltage-selection switch is set to match the voltage provided in that country or region.

If you are not sure of the voltage provided at your electrical outlet, contact your local electric company or refer to official Web sites or other literature for travelers to the country or region where you are located.

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 while handling the part.
- 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)

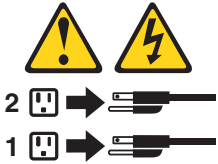
CAUTION:

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.

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.

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.



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 تَقم بـ:

- الفقاء 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)

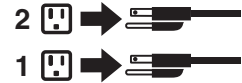


≥55 kg (121.2 lbs)

تنبيه :
يجب استخدام ممارسات آمنة عند الرفع



تنبيهه :
لا يرقم 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)

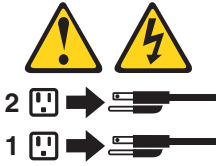
CUIDADO:

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：

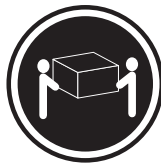
- 请勿卸下外盖。卸下激光产品的外盖可能导致遭受激光辐射的危险。该设备内没有可维修的部件。
- 如果不按照此处指定的过程进行控制、调整或操作，则有可能导致遭受辐射的危险。



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
1. Mettez les unités HORS TENSION.	1. Mettez les unités HORS TENSION.
2. Commencez par brancher tous les cordons sur les unités.	2. Débranchez les cordons d'alimentation des prises.
3. Branchez les câbles d'interface sur des connecteurs.	3. Débranchez les câbles d'interface des connecteurs.
4. Branchez les cordons d'alimentation sur des prises.	4. Débranchez tous les câbles des unités.
5. Mettez les unités SOUS TENSION.	



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-Laufwerken, 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.



$18 \leq$ ק"ג (37 ליב')



$32 \leq$ ק"ג (70.5 ליב')



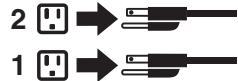
$55 \leq$ ק"ג (121.2 ליב')

זהירות:
השתמשו בהליכים
הנאותים בעת
הרמת הציוד.



זהירות:

לחצן הפעלה של ההתקן ומתג הפעלה 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, ודאו 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 6008, 6068, 6074, 6079, 6082, 9012, 9018, 9087, 9096, 9163, 9172, and 9193

This section lists the physical specifications for your computer.

Dimensions

Width: 325 mm (12.8 in.)

Height: 107 mm (4.21 in.)

Depth: 410 mm (16.14 in.)

Weight

Minimum configuration as shipped: 8.2 kg (18 lbs)

Maximum configuration: 10.4 kg (23 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: Some models have a switchable power supply that supports both low and high input voltage ranges. Some models do not have a switch and support only a low or high input voltage range. See “Voltage-selection switch” on page 5 for additional information.

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 6010, 6069, 6075, 6081, 6086, 9013, 9019, 9088, 9160, 9164, 9174, 9194, and 9304

This section lists the physical specifications.

Dimensions

Height: 400 mm (15.7 in.)

Width: 175 mm (6.9 in.)

Depth: 432 mm (17.0 in.)

Weight

Minimum configuration: 8.17 kg (18 lb)

Maximum configuration: 10.21 kg (22.5 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: Some models have a switchable power supply that supports both low and high input voltage ranges. Some models do not have a switch and support only a low or high input voltage range. See "Voltage-selection switch" on page 5 for additional information.

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)

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 283.

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 78.
 - If the computer displays a POST error, go to “POST error codes” on page 79.
 - If the computer hangs and no error is displayed, continue at step 7.
7. Run the Diagnostic programs. See Chapter 5, “Diagnostics,” on page 45.
 - If you receive an error, replace the part that the diagnostic program calls out or go to “Diagnostic error codes” on page 56.
 - 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 52 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 49.

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 56 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.
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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 51.

1. Start the Setup Utility program (see “Starting the Setup Utility program” on page 51).
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 51).
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 43. 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 82.

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 47 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 2842. 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 2842. 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 2842. 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 2842. 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 2843. 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 2843. 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 2842. 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 2842. 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 284 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 284 2. System board
000-195-XXX BIOS Test aborted by user	Information only Re-start the test, if necessary
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 51 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 51 2. Flash the system and retest. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
000-199-XXX BIOS test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 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 284 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 284 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 284 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 284 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 284 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 284 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 284 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 51 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 51 2. Flash the system and retest. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
001-199-XXX System test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 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 284 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 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
005-199-XXX Video test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 284 3. Go to "Undetermined problems" on page 82
006-199-XXX Diskette interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 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 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82

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 82 2. Flash the system and re-test. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 284 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 284 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 51 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 284 3. Go to "Undetermined problems" on page 82
014-199-XXX Parallel port test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 284 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 284 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 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
015-199-XXX USB port test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
018-199-XXX PCI Card test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82

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 82 2. Flash the system and re-test. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 284 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 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
025-199-XXX IDE interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
030-199-XXX SCSI interface test failed, cause unknown	<ol style="list-style-type: none"> 1. Go to "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
035-199-XXX RAID interface test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 284 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 51 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 51 Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 Go to "Undetermined problems" on page 82
071-199-XXX Audio port test failed, cause unknown	<ol style="list-style-type: none"> See "Undetermined problems" on page 82 Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
080-199-XXX Game Port interface test failed, cause unknown	1. See "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
086-199-XXX Mouse Port interface test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51 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 284 2. Go to "Undetermined problems" on page 82

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 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51 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 51 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 3. Go to "Undetermined problems" on page 82
170-199-XXX Voltage Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51 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 284 3. Go to "Undetermined problems" on page 82
175-199-XXX Thermal Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> 1. See "Undetermined problems" on page 82 2. Flash the system and re-test. See "Updating (flashing) BIOS from a CD-ROM or diskette" on page 284 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 51.2. 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 284.
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 51.2. Perform a Boot block recovery. See "Recovering from a POST/BIOS update failure" on page 284.3. 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 55.	<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 51) 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 55.	<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 55.

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 6008, 6068, 6074, 6079, 6082, 9012, 9018, 9087, 9096, 9163, 9172, and 9193)

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.

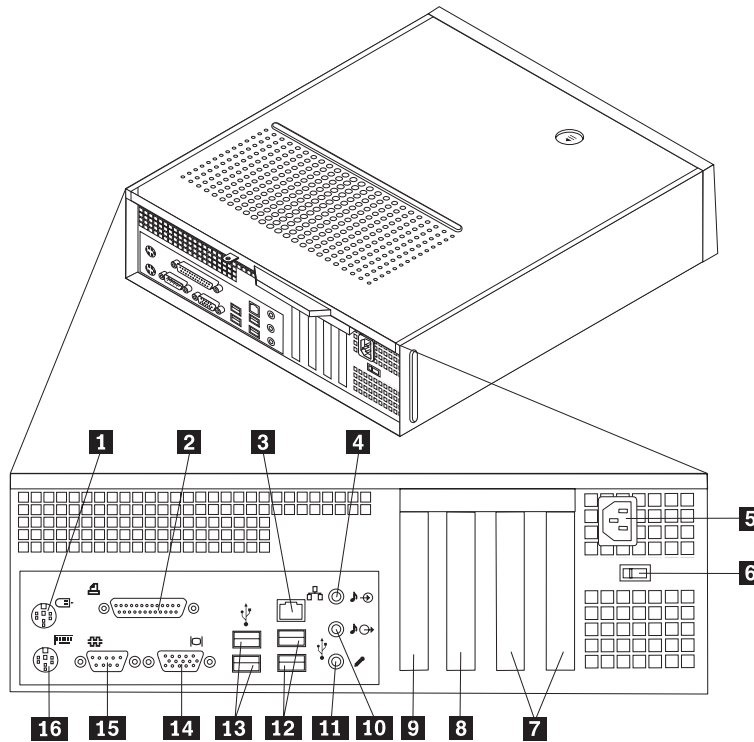
This chapter does not contain a remove and replace procedure for all FRUs. Only the major FRUs are documented.

Locations

The following illustrations will help when locating connectors, controls and components of the computer.

Rear connectors

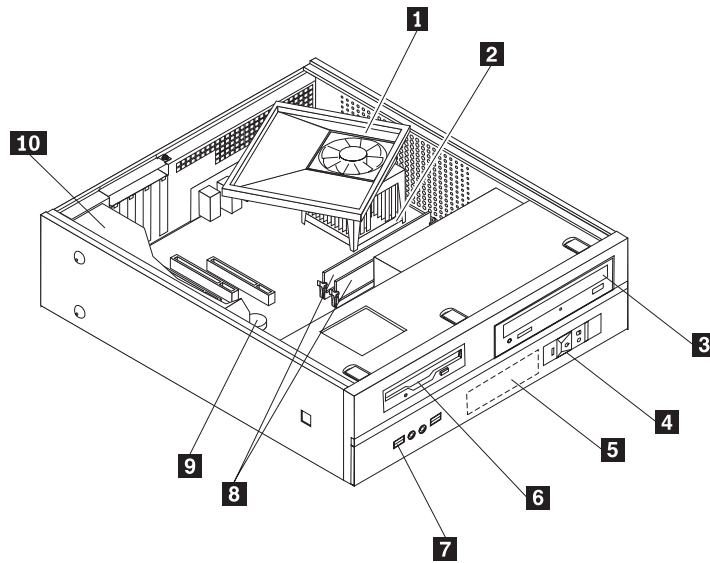
The following illustration shows the locations of the connectors on the rear of the computer.



- | | | | |
|----------|---|-----------|---|
| 1 | Standard mouse connector | 9 | PCI Express x16 adapter connector or)
PCI Express x1 adapter connector (some
models) |
| 2 | Parallel connector | 10 | Audio line out connector |
| 3 | Ethernet connector | 11 | Microphone connector |
| 4 | Audio line in connector | 12 | USB connectors (2) |
| 5 | Power cord connector | 13 | USB connectors (2) |
| 6 | Voltage selection switch (some
models) | 14 | VGA monitor connector |
| 7 | PCI adapter connectors | 15 | Serial connector |
| 8 | PCI Express x16 adapter connector
or) PCI Express x1 adapter
connector (some models) | 16 | Standard keyboard connector |

Computer components

The following illustration will help you locate the major FRUs in the computer.



1 Fan plenum, fan, and heat sink

2 Microprocessor

3 Optical drive

4 Power switch/LED assembly

5 Hard disk drive

6 Diskette drive

7 Front panel card

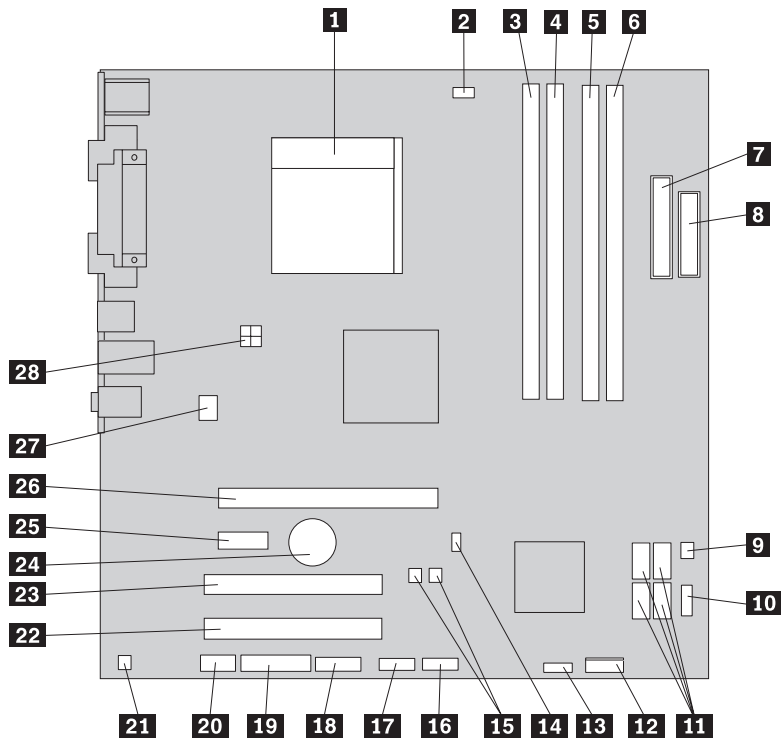
8 Memory modules

9 System board

10 Power supply

System board connectors

This illustration is to help locate the various system board connectors.



- | | | | |
|-----------|------------------------------|-----------|--|
| 1 | Microprocessor fan connector | 15 | Flash BIOS jumper |
| 2 | Microprocessor and heat sink | 16 | Front USB connector |
| 3 | Memory connector 1 | 17 | Front USB connector |
| 4 | Memory connector 2 | 18 | Serial (COM) connector |
| 5 | Memory connector 3 | 19 | LEO connector |
| 6 | Memory connector 4 | 20 | Front audio connector |
| 7 | Power connector | 21 | Mono out connector |
| 8 | Diskette drive connector | 22 | PCI adapter connector |
| 9 | Thermal sensor connector | 23 | PCI adapter connector |
| 10 | Front USB connector | 24 | Battery |
| 11 | Serial ATA connectors (4) | 25 | PCI Express x1 adapter connector |
| 12 | Front panel connector | 26 | PCI Express x16 graphics adapter connector |
| 13 | Power fan connector | 27 | System fan connector |
| 14 | Tamper switch connector | 28 | 12V power connector |

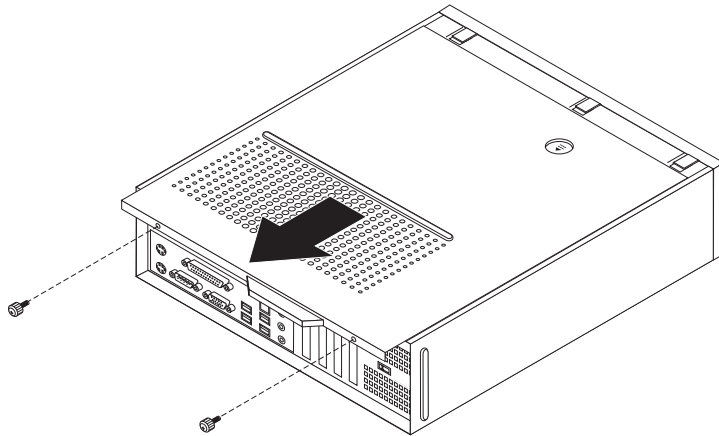
Removing the cover

Important

Read Chapter 2, “Safety information,” on page 3 and “Handling electrostatic discharge-sensitive devices” on page 6 before opening the cover.

This procedure describes how to remove the cover.

1. Remove any media (diskettes, CDs, or tapes) from the drives, shut down the operating system, and turn off all attached devices.
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 any locking devices such as a padlock that secure the cover.
5. If the cover is secured with thumbscrews, remove them.
6. Press the button near the front of the computer cover and slide the cover to the rear.

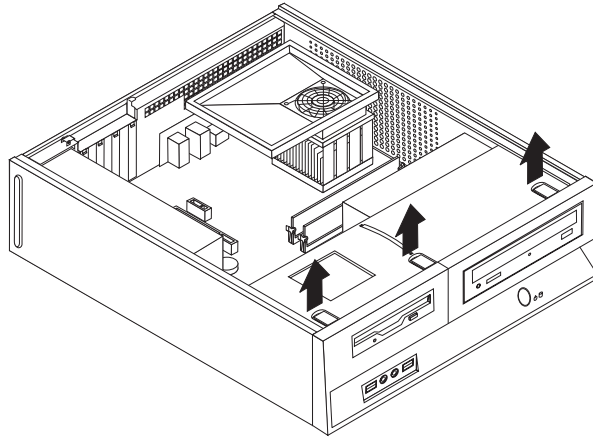


Accessing system board components and drives

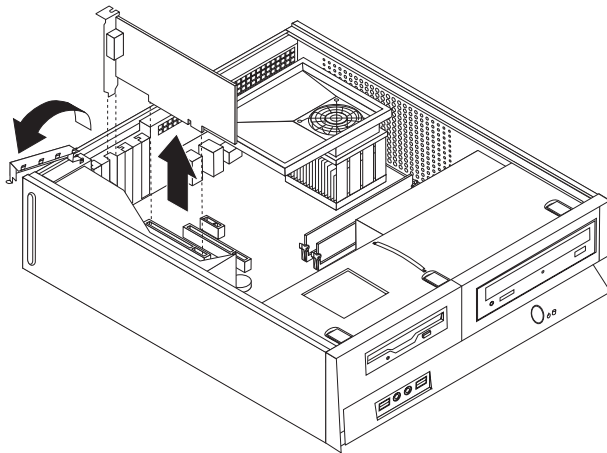
You might need to remove the drive bay assembly to access system board components such as memory, the battery, and CMOS.

To access system board components and the drives:

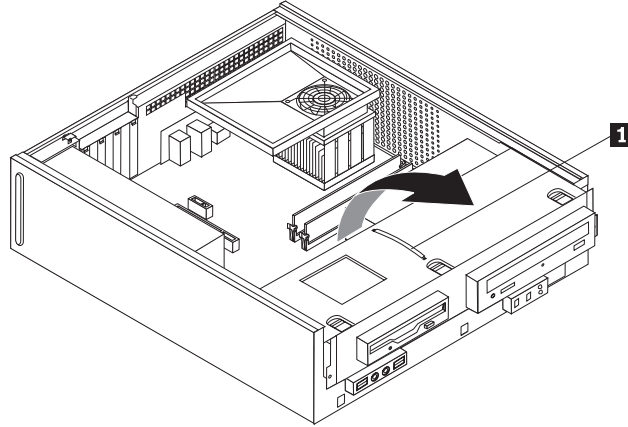
1. Remove the computer cover. See “Removing the cover” on page 89.
2. Remove the front bezel by releasing the three tabs and pivoting the bezel forward to remove completely.



3. In some models, you might have to remove the PCI adapter in order to gain access to the battery.



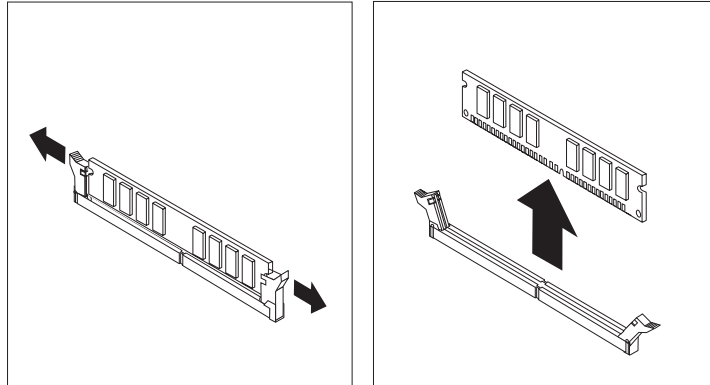
4. Using the blue handle **1**, lift and slide the drive bay assembly forward until the locating studs in the drive bay assembly are aligned with the slots on the sides of the chassis. Pull upward on the handle to remove the drive bay assembly completely from the chassis. Depending on what component of the computer you want to remove, you can either disconnect the cables from the rear of the drives or leave them connected.



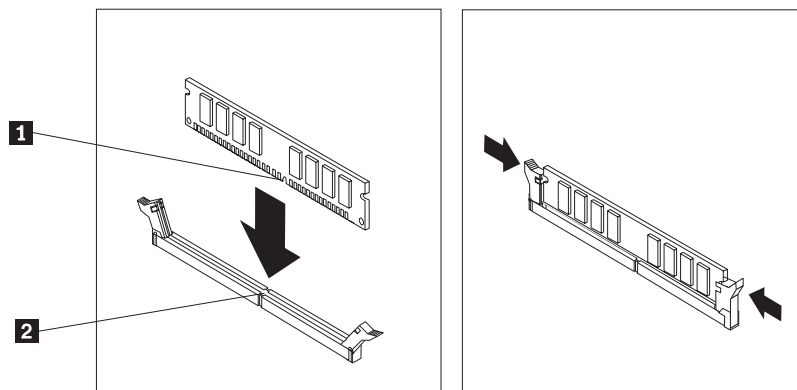
Replacing a memory module

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

1. Remove the cover. See “Removing the cover” on page 89.
2. You might have to remove the drive bay assembly to access the memory connectors. See “Accessing system board components and drives” on page 90.
3. Remove the memory module being replaced by opening the retaining clips as shown.



4. 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.



5. Slide the drive bay assembly towards the rear of the chassis until it snaps into position.
6. Reinstall the front bezel.
7. Go to “Completing the FRU replacement” on page 112.

Replacing 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

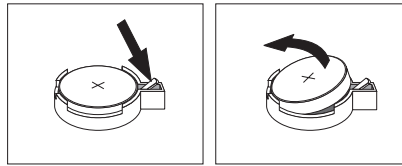
Refer to “Safety notices (multi-lingual translations)” on page 7 for information about replacing and disposing of the battery.

CAUTION:

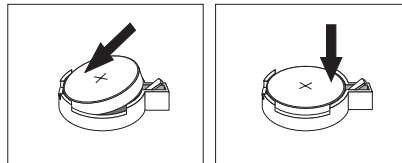
When replacing the lithium battery, use only Part Number 33F8354 or an equivalent type battery recommended by the manufacturer.

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

1. Remove the cover. See “Removing the cover” on page 89.
2. Locate the battery. See the system board illustration for your machine type at “System board connectors” on page 88.
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.



6. Replace any PCI adapters that were removed.

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.

7. 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 serviceable parts inside these components.

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

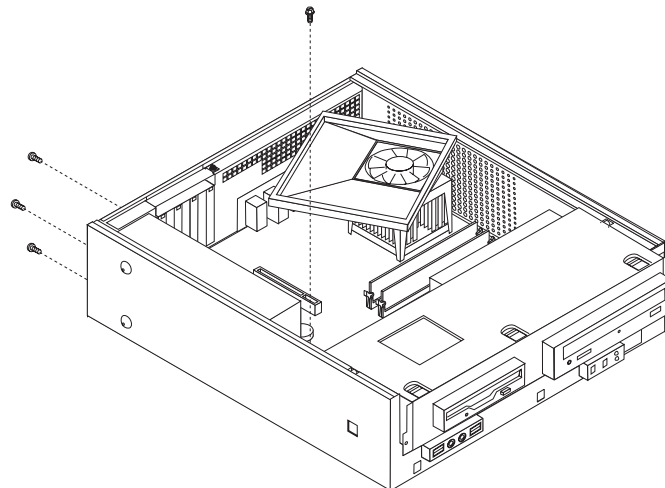
1. Remove the cover. See “Removing the cover” on page 89.
2. Remove the drive bay assembly. See “Accessing system board components and drives” on page 90.
3. Disconnect all power supply cables from the system board. See the system board diagram for your machine type at “System board connectors” on page 88.
4. Remove the hard disk drive. See “Replacing the hard disk drive” on page 104.

Note: Observe the power supply cable routing underneath the hard disk drive.

5. The system board must be moved out of the way to remove the power supply. Remove the screws that secure the system board to the chassis and slide the system board away from the power supply.

Note: You do not have to remove the system board from the chassis to remove the power supply.

6. At the rear of the chassis, remove the three screws that secure the power supply. Also remove the screw that secures the power supply at the front.



7. Lift the power supply out of the chassis.
8. If the power supply has a voltage-selection switch, ensure that it is set to match the voltage available at the electrical outlet.
 - If the voltage supply range in your local country or region is 100-127 V ac, set the switch to 115 V.
 - If the voltage supply range in your local country or region is 200-240 V ac, set the switch to 230 V.
9. Install the new power supply and install the three screws that secure the power supply at the rear of the chassis and install the screw that secures the power supply at the front.
10. Position the system board so that the screws holes are properly aligned and install the system board screws.
11. Route the power supply cable through the cable clamps underneath the hard disk drive and reconnect all power supply cables to the system board.
12. Install the hard disk drive. See “Replacing the hard disk drive” on page 104.
13. Align the drive bay assembly studs with the two slots on the sides of the chassis and place it into position. Reconnect any diskette drive and optical drive cables that were disconnected.
14. Using the blue handle, slide the drive bay assembly towards the rear of the chassis until it snaps into position.
15. Reinstall the front bezel.
16. Go to “Completing the FRU replacement” on page 112.

Replacing the system board

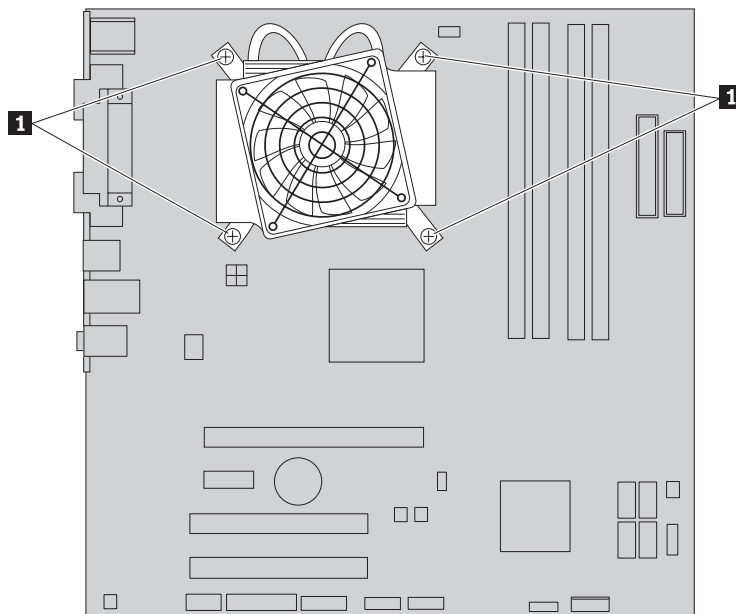
This procedure describes how to remove and replace a memory module. The procedure varies depending upon the machine type.

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.

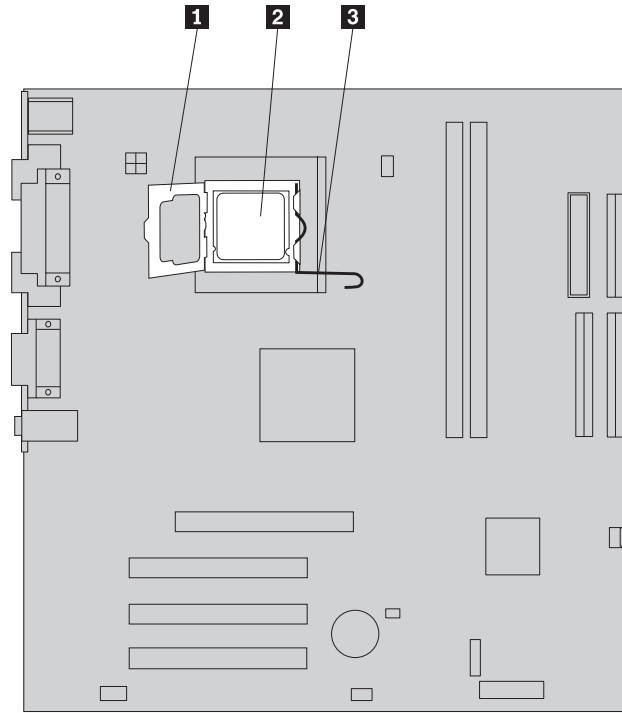
1. Remove the cover. See “Removing the cover” on page 89.
2. Lift the fan duct off the heat sink fan.
3. Remove any adapter cards installed in the PCI connectors.
4. You might have to remove the drive bay assembly to access the system board. See “Accessing system board components and drives” on page 90.
5. Take note of the location of all cable connections on the system board and disconnect all cables. See the system board illustration for your machine type at “System board connectors” on page 88.
6. Remove the hard disk drive. See “Replacing the hard disk drive” on page 104.
7. Remove the screws that secure the system board to the chassis.
8. Lift the system board out of the chassis.
9. Remove the memory modules from the failing system board and install them in the same location on the new system board.
10. Disconnect the heat sink and fan assembly cable from the system board. See the system board illustration for your machine type at “System board connectors” on page 88.
11. Remove the four screws securing the heat sink and fan assembly to the system board.



12. Lift the heat sink and fan assembly off the failing system board. Place the heat sink on its side so that the thermal grease does not come in contact with anything.

Note: You might have to gently twist the heat sink to free it from the microprocessor.

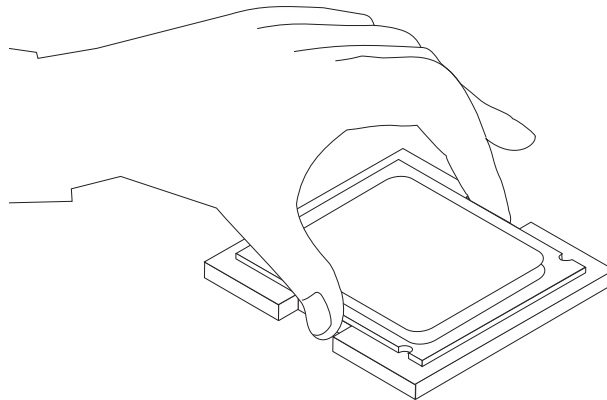
13. To remove the microprocessor **2** from the system board, lift the small handle **3** and open the retainer **1**.



Important

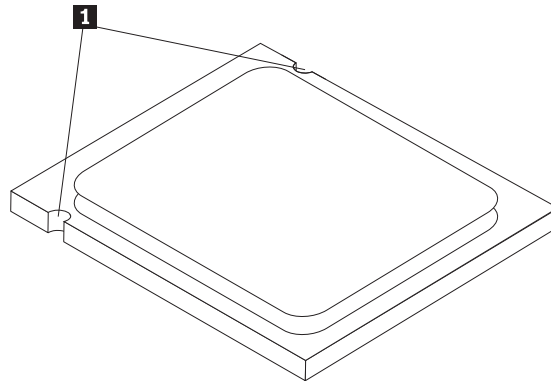
Touch only the sides of the microprocessor. Do not touch the gold contacts on the bottom.

14. Lift the microprocessor straight up and out of the socket.



Notes:

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



- b. Do not drop anything onto the microprocessor socket while it is exposed. The socket pins must be kept as clean as possible.
15. On the new system board, release the lever securing the microprocessor retainer and then pivot the retainer until it is fully open.

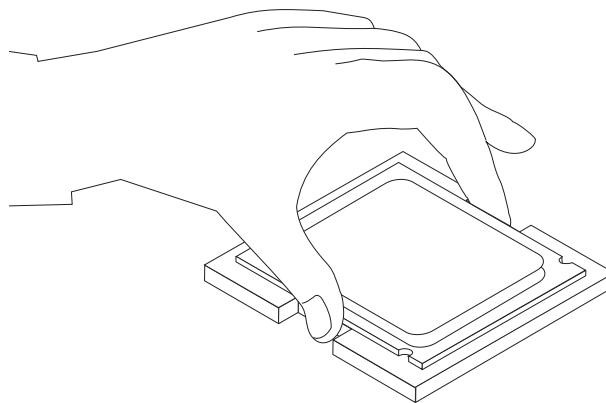
Note: There will be a black plastic cover on the microprocessor retainer to protect the socket on the new system board. Remove the black plastic cover and place it on the microprocessor socket of the failing system board when you complete this procedure.

16. Holding the microprocessor with your fingers, position the microprocessor so that the notches on the microprocessor are aligned with the tabs in the microprocessor socket on the new system board.

Important

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

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



18. To secure the microprocessor in the socket, close the microprocessor retainer and lock it into position with the small handle.
19. Install the new retention module (if required) on the new system board.
20. Install the heat sink and fan assembly on the new system board.

21. Reconnect the heat sink and fan assembly cable to the system board. See the system board illustration for your machine type at “System board connectors” on page 88.
22. Install the new system board into the chassis and align the screw holes with those in the chassis. Insert and tighten the screws that secure the system board.
23. Reconnect all cables that were disconnected from the system board.
24. Reinstall the hard disk drive. See “Replacing the hard disk drive” on page 104.
25. Align the drive bay assembly with the two slots and rails on the sides of the chassis, reconnect the drive cables on the system board, and then slide the drive bay assembly towards the rear of the chassis until it snaps into position.
26. Reinstall the front bezel.
27. Reinstall any PCI adapter cards that were removed.
28. Position the fan duct on the heat sink fan.
29. Go to “Completing the FRU replacement” on page 112.

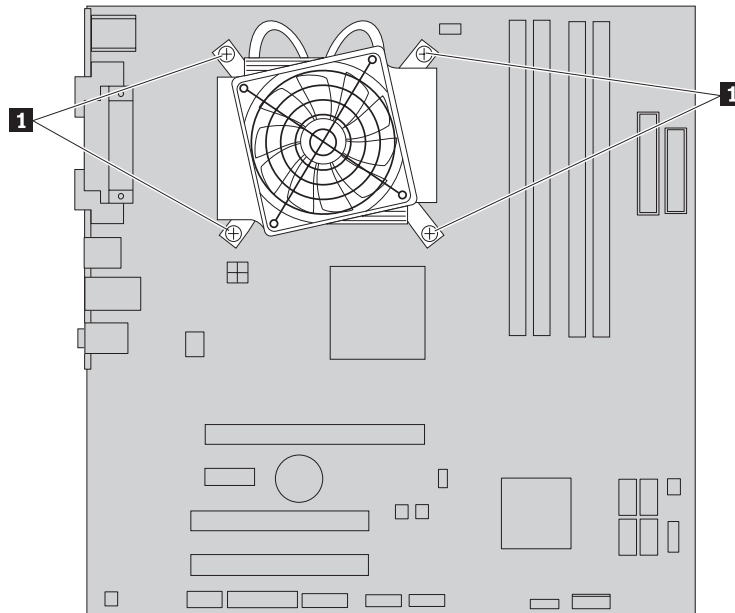
Replacing the microprocessor

This procedure describes how to remove and replace the power supply. The procedure varies depending upon the machine type.

Important

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

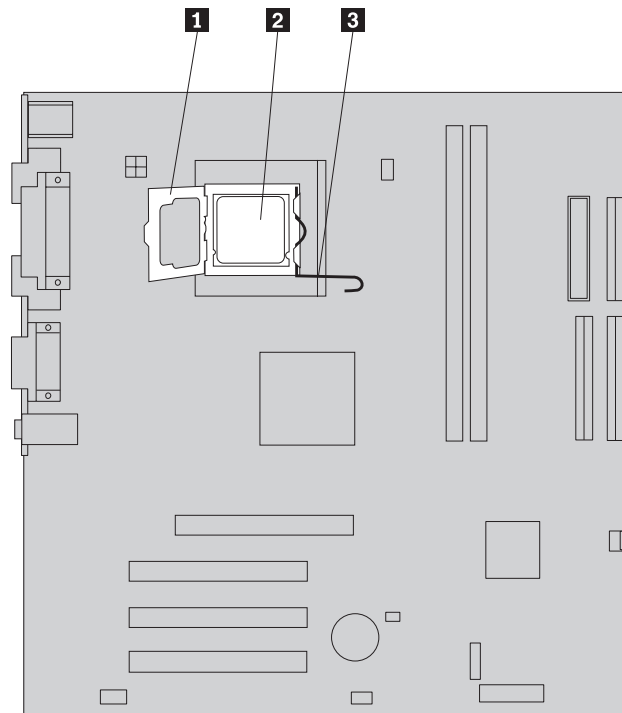
1. Remove the cover. See “Removing the cover” on page 89.
2. Lift the fan duct off the heat sink fan.
3. Disconnect the heat sink and fan assembly cable from the system board. See the system board illustration for your machine type at “System board connectors” on page 88.
4. Remove the four screws securing the heat sink and fan assembly to the system board.



5. Lift the heat sink and fan assembly off the system board. Place the heat sink on its side so that the thermal grease does not come in contact with anything.

Note: You might have to gently twist the heat sink to free it from the microprocessor.

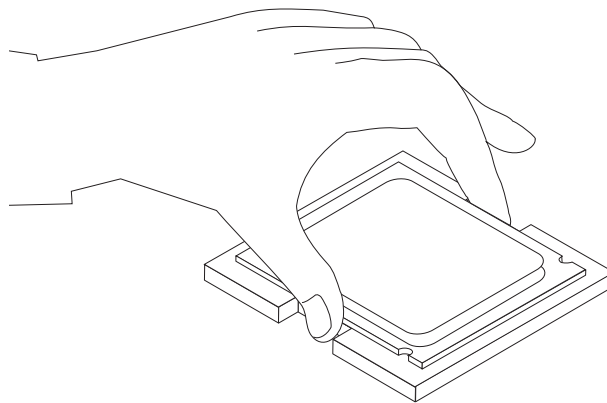
- To remove the microprocessor **2** from the system board, lift the small handle **3** and open the retainer **1**.



Important

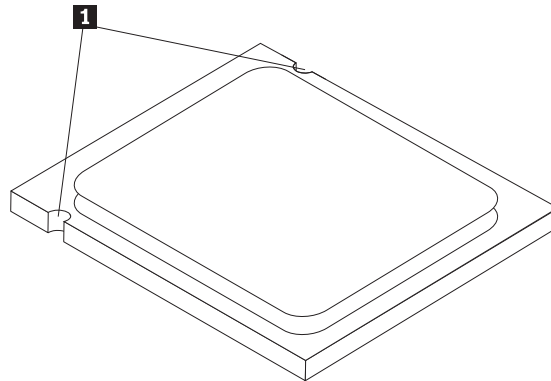
Touch only the sides of the microprocessor. Do not touch the gold contacts on the bottom.

- Lift the microprocessor straight up and out of the socket.

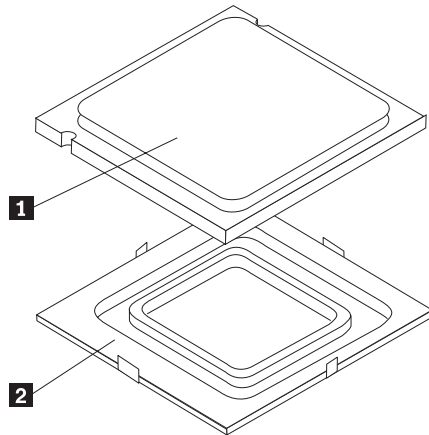


Notes:

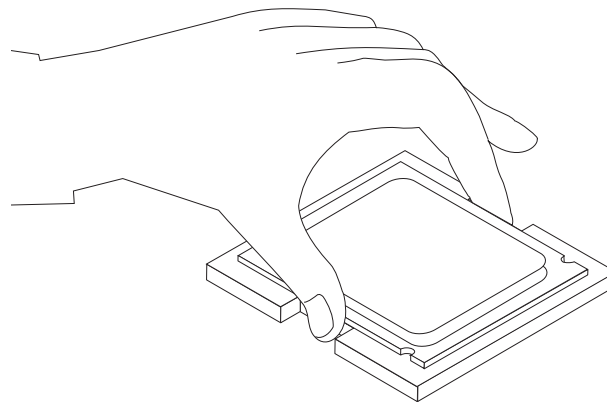
- a. Note the orientation of the notches **1** on the microprocessor. This is important when reinstalling the microprocessor on the system board.



- b. Do not drop anything onto the microprocessor socket while it is exposed. The socket pins must be kept as clean as possible.
8. Make sure that the microprocessor retainer is fully open.
9. Holding the microprocessor with your fingers, remove the protective cover **2** that protects the gold contacts on the new microprocessor **1**.

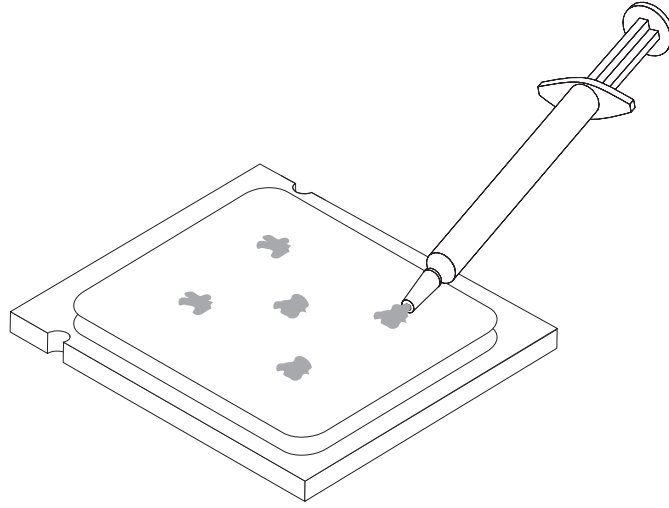


10. Holding the microprocessor with your fingers, align the notches on the microprocessor with the tabs in the microprocessor socket
11. Lower the microprocessor straight down into the socket.



12. To secure the microprocessor in the socket, close the microprocessor retainer and lock it into position with the small handle.

13. Use the thermal grease syringe to place five drops of grease on the top of the microprocessor. Each drop of grease should be 0.03ml (3 tick marks on the grease syringe).



14. Install the heat sink and fan assembly on the system board.
15. Connect the heat sink and fan assembly cable to the system board. See the system board illustration for your machine type at "System board connectors" on page 88.
16. Position the fan duct on the heat sink fan.
17. Go to "Completing the FRU replacement" on page 112.

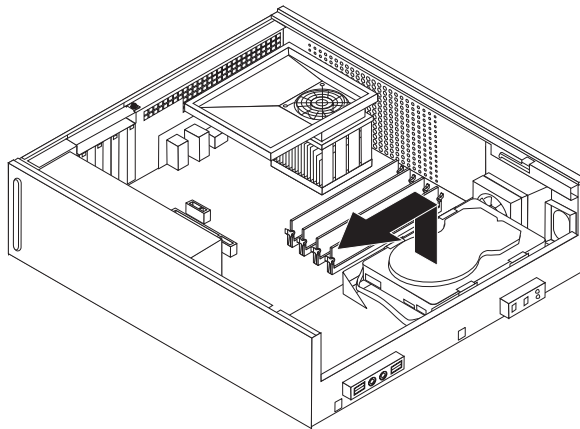
Replacing the hard disk drive

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*.

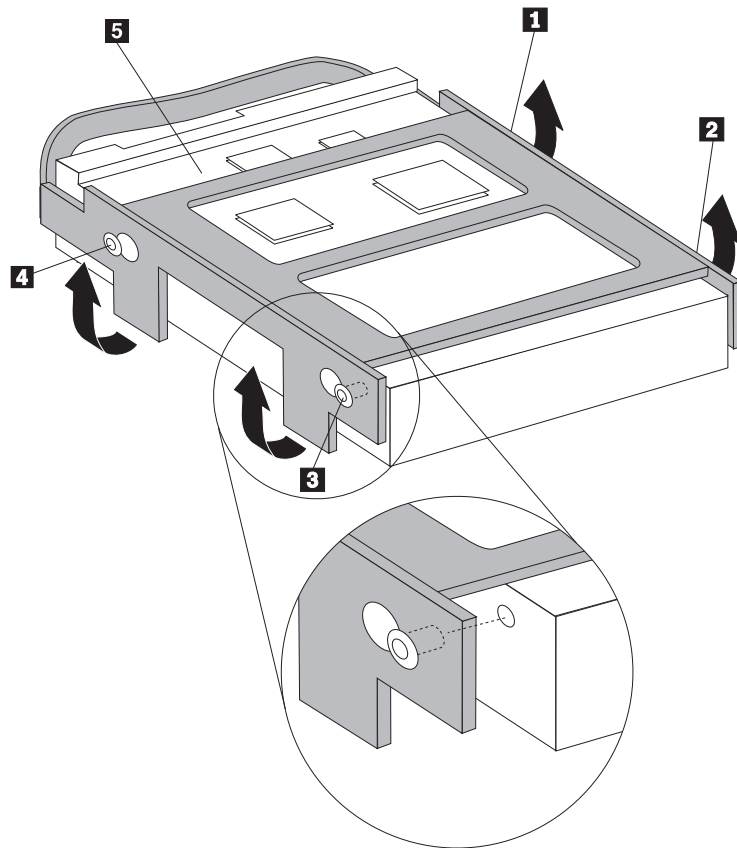
This procedure describes how to remove and replace the hard disk drive.

1. Remove the cover. See "Removing the cover" on page 89.
2. Remove the drive bay assembly. See "Accessing system board components and drives" on page 90.
3. Use the blue handle to pivot the hard disk drive and bracket upward, slide the hard drive to the left until it is free of the retaining clips in the bottom of the chassis, and then completely remove it from the chassis.



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

6. Install the new 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.

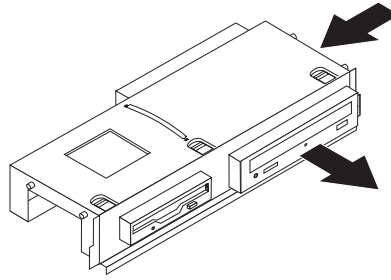


7. Connect the signal and power cables to the rear of the hard disk drive.
8. Position the hard disk drive and bracket so that it engages the retaining clips in the bottom of the chassis when you slide the bracket to the right.
9. Slide the hard disk drive and bracket to the right until it snaps into position.
10. Align the drive bay assembly studs with the two slots on each side of the chassis and reconnect the diskette drive and optical drive cables (if disconnected).
11. Slide the drive bay assembly towards the rear of the chassis until it snaps into position.
12. Reinstall the front bezel.
13. Go to "Completing the FRU replacement" on page 112.

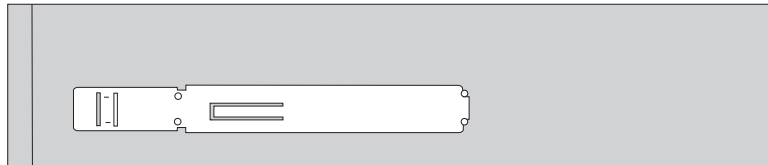
Replacing an optical drive

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

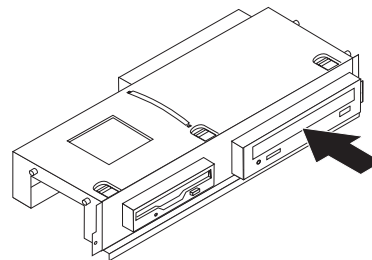
1. Remove the cover. See “Removing the cover” on page 89.
2. Remove the drive bay assembly. See “Accessing system board components and drives” on page 90.
3. Release the optical drive from the drive bay assembly by pressing inward on the blue retainer at the side of the drive.
4. Slide the optical drive being replaced out the front of the drive bay assembly.



5. Remove the retainer bracket from the failing drive and install it on the new drive.



6. Install the new optical drive into the bay until it snaps into position.

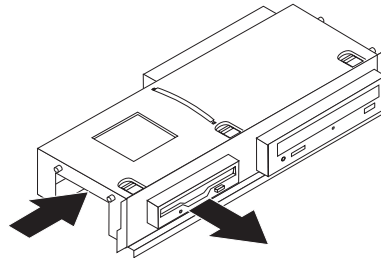


7. Reconnect the signal and power cables to the rear of the optical drive.
8. Align the drive bay assembly with the two slots and rails on the sides of the chassis and slide the drive bay assembly towards the rear of the chassis until it snaps into position.
9. Reinstall the front bezel.
10. Go to “Completing the FRU replacement” on page 112.

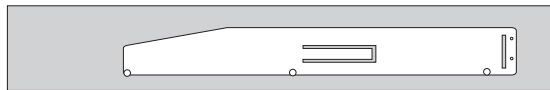
Replacing the diskette drive

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

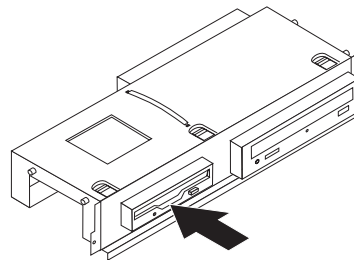
1. Remove the cover. See “Removing the cover” on page 89.
2. Remove the drive bay assembly. See “Accessing system board components and drives” on page 90.
3. Release the diskette drive by pressing inward on the blue retainer at the side of the drive.
4. Remove the failing diskette drive by sliding it out the front of the drive bay assembly.



5. Remove the retainer bracket from the failing drive and install it on the new drive.



6. Install the new diskette drive into the drive bay from the front until it snaps into position.

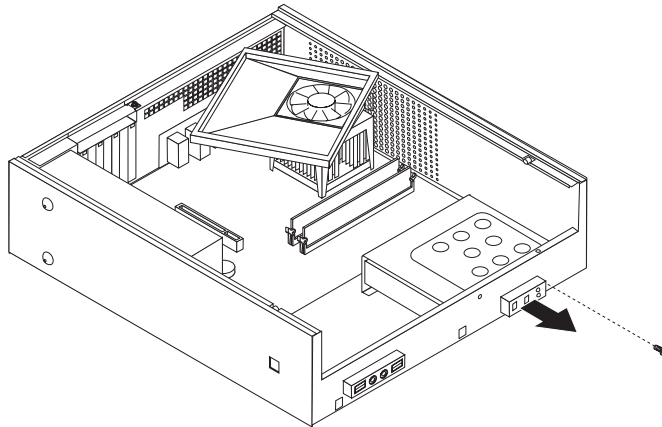


7. Reconnect the signal and power cables to the rear of the diskette drive.
8. Align the drive bay assembly with the two slots and rails on the sides of the chassis and slide the drive bay assembly towards the rear of the chassis until it snaps into position.
9. Reinstall the front bezel.
10. Go to “Completing the FRU replacement” on page 112.

Replacing the power switch/LED assembly

This procedure describes how to remove and replace the power switch/LED assembly.

1. Remove cover. See “Removing the cover” on page 89.
2. Remove the drive bay assembly. See “Accessing system board components and drives” on page 90.
3. Remove the hard disk drive. See “Replacing the hard disk drive” on page 104.
4. Disconnect the power switch/LED assembly cable from the system board. See the system board illustration for your machine type at “System board connectors” on page 88.
5. Remove the screw that secures the power switch/LED assembly to the chassis.

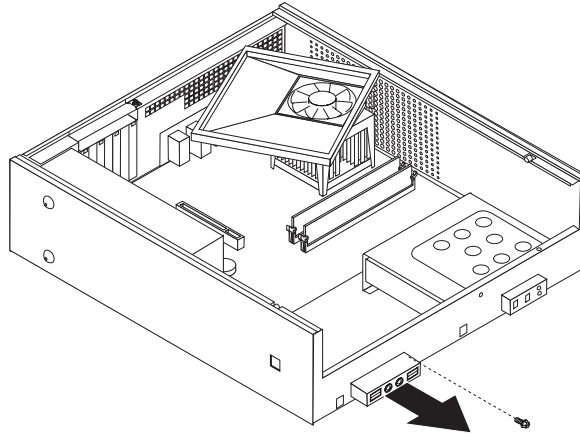


6. Note the power switch/LED assembly cable routing and remove the assembly from the chassis.
7. Route the cable for the new power switch/LED assembly through the hole in the chassis and to the system board.
8. Install the power switch/LED assembly into the chassis and secure the assembly with the screw.
9. Connect the power switch/LED cable to the system board.
10. Reinstall the hard disk drive. See “Replacing the hard disk drive” on page 104.
11. Align the drive bay assembly with the two slots and rails on the sides of the chassis slide the drive bay assembly towards the rear of the chassis until it snaps into position.
12. Reinstall the front bezel.
13. Go to “Completing the FRU replacement” on page 112.

Replacing the front panel card

This procedure describes how to remove and replace the front panel card.

1. Remove cover. See “Removing the cover” on page 89.
2. Remove the drive bay assembly. See “Accessing system board components and drives” on page 90.
3. Disconnect the front panel assembly cables from the system board. See the system board illustration for your machine type at “System board connectors” on page 88.
4. Remove the screw that secures the front panel card assembly to the chassis.

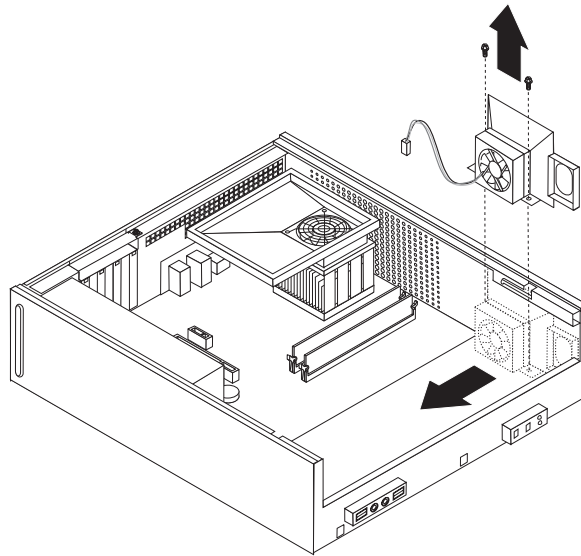


5. Note the front panel assembly cable routing and remove the assembly from the chassis.
6. Route the cable for the new front panel card assembly through the hole in the chassis and to the system board.
7. Install the front panel card assembly into the chassis and secure it with the screw.
8. Connect the front panel assembly cables to the system board.
9. Align the drive bay assembly with the two slots and rails on the sides of the chassis and slide the drive bay assembly towards the rear of the chassis until it snaps into position.
10. Reinstall the front bezel.
11. Go to “Completing the FRU replacement” on page 112.

Replacing the system fan assembly

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

1. Remove cover. See “Removing the cover” on page 89.
2. Remove the drive bay assembly. See “Accessing system board components and drives” on page 90.
3. Remove the hard disk drive. See “Replacing the hard disk drive” on page 104.
4. Disconnect the system fan cable from the system board. See “System board connectors” on page 88.
5. Remove the two screws securing the system fan assembly.
6. Remove the system fan assembly by pulling the bracket outward and lifting it up from the system board to remove completely.

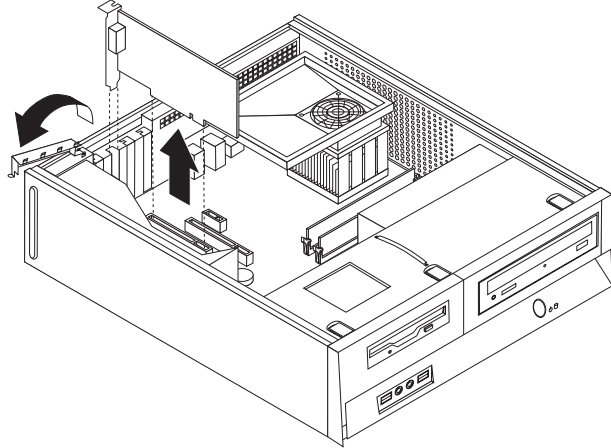


7. Install the new system fan assembly and install the two screws that secure the fan assembly.
8. Connect the system fan cable to the system fan connector on the system board.
9. Reinstall the hard disk drive. See “Replacing the hard disk drive” on page 104.
10. Align the drive bay assembly with the two slots and rails on the sides of the chassis and slide the drive bay assembly towards the rear of the chassis until it snaps into position.
11. Reinstall the front bezel.
12. Go to “Completing the FRU replacement” on page 112.

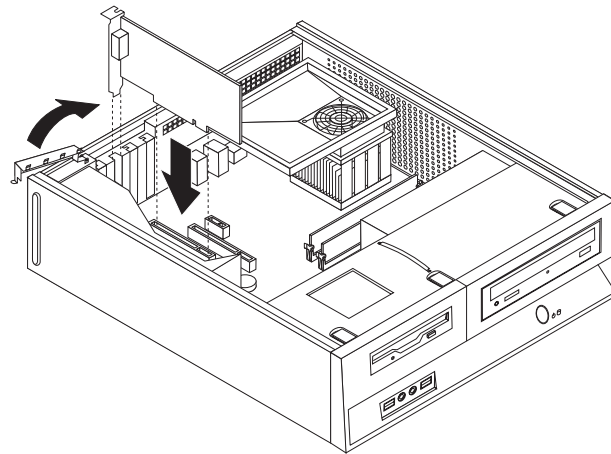
Replacing a PCI adapter

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

1. Remove cover. See “Removing the cover” on page 89.
2. Open the adapter latch and remove the failing adapter.



3. Remove the new adapter from its static-protective package.
4. Install the new adapter into the appropriate connector on the system and close the adapter latch.



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

Completing the FRU replacement

After replacing FRUs, you need to install any removed parts, replace the cover, and reconnect any cables, including telephone lines and power cords. Also, depending on the FRU that is replaced, you might need to confirm the updated information in the Setup Utility program.

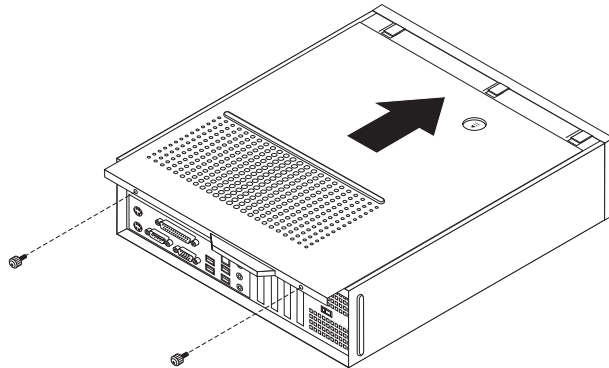
Note: When the power cord is first plugged in, the computer might appear to turn on for a few seconds and then turn off. This is a normal sequence to enable the computer to initialize.

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer.
2. Reposition any cables that might impede the replacement of the computer cover.

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. Position the computer cover on the chassis so that the rail guides on the sides of the cover engage the rails and push the cover to the closed position until it snaps into position.



4. If the cover is secured with thumbscrews, install them.
5. Reconnect the external cables and power cords to the computer. See “Rear connectors” on page 86.
6. If you have replaced the system board, you must update (flash) the BIOS. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 284.
7. Some FRU replacements require the configuration to be updated. See Chapter 6, “Using the Setup Utility,” on page 51.

Chapter 9. Replacing FRUs (Types 6010, 6069, 6075, 6081, 6086, 9013, 9019, 9088, 9160, 9164, 9174, 9194, and 9304)

Important

Before you replace any FRU, read "Important Safety Information" on page 1. These precautions and guidelines will help you work safely.

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

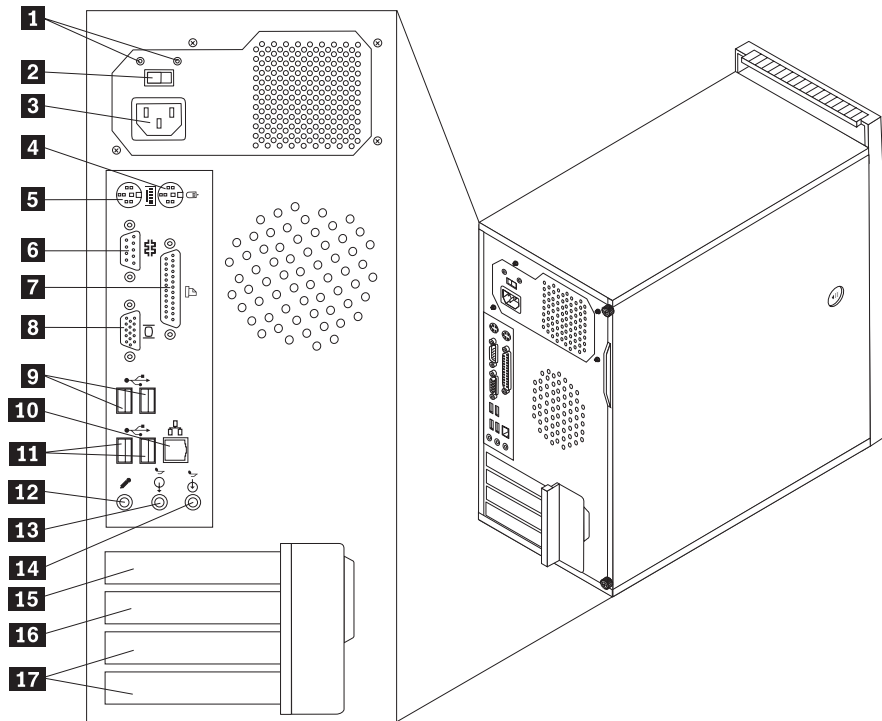
This chapter does not contain a remove and replace procedure for all FRUs. Only the major FRUs are documented.

Locations

The following illustrations help you locate the various connectors, controls, and components of the computer.

Rear connectors

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

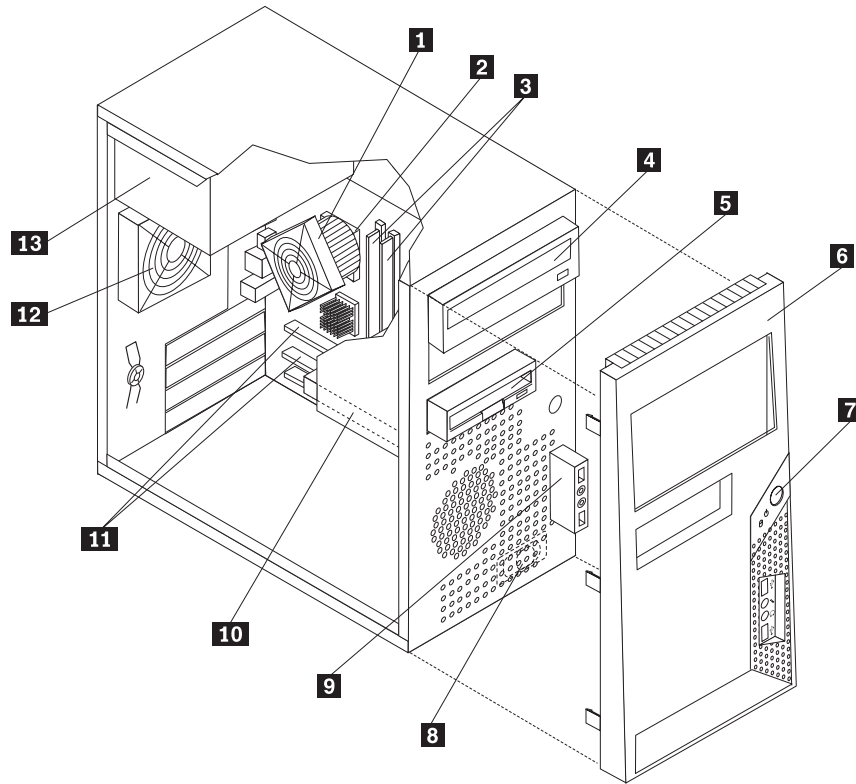


- 1** Power supply diagnostic LEDs
- 2** Voltage selection switch (some models)
- 3** Power connector
- 4** Mouse connector
- 5** Keyboard connector
- 6** Serial connector
- 7** Parallel connector
- 8** VGA monitor connector

- 9** USB connectors
- 10** Ethernet connector
- 11** USB connectors
- 12** Microphone connector
- 13** Audio line out connector
- 14** Audio line in connector
- 15** PCI and PCI Express adapter slots (type of adapter depends on system board)

Computer components

The following illustration will help you locate the major FRUs in the computer.



1 Heat sink and fan assembly

2 Microprocessor

3 Memory modules

4 Optical drive

5 Diskette drive

6 Bezel

7 Power switch/LED assembly

8 Internal speaker

9 Front audio/USB assembly

10 Hard disk drive

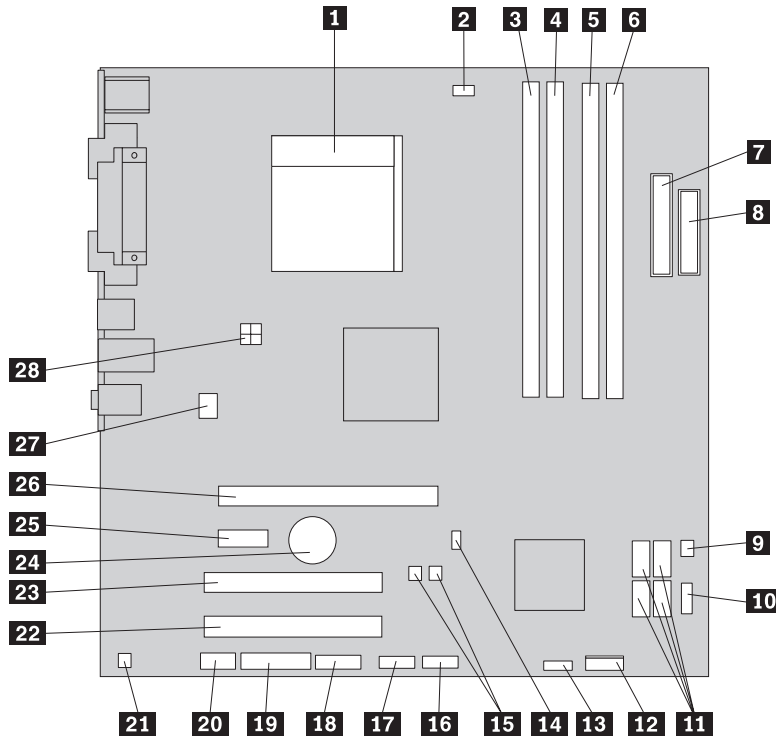
11 System board

12 System fan

13 Power supply

System board connectors

This illustration is to help locate the various components and connectors on the system board.



- | | | | |
|-----------|------------------------------|-----------|--|
| 1 | Microprocessor fan connector | 15 | Flash BIOS jumper |
| 2 | Microprocessor and heat sink | 16 | Front USB connector |
| 3 | Memory connector 1 | 17 | Front USB connector |
| 4 | Memory connector 2 | 18 | Serial (COM) connector |
| 5 | Memory connector 3 | 19 | LEO connector |
| 6 | Memory connector 4 | 20 | Front audio connector |
| 7 | Power connector | 21 | Mono out connector |
| 8 | Diskette drive connector | 22 | PCI adapter connector |
| 9 | Thermal sensor connector | 23 | PCI adapter connector |
| 10 | Front USB connector | 24 | Battery |
| 11 | Serial ATA connectors (4) | 25 | PCI Express x1 adapter connector |
| 12 | Front panel connector | 26 | PCI Express x16 graphics adapter connector |
| 13 | Power fan connector | 27 | System fan connector |
| 14 | Tamper switch connector | 28 | 12V power connector |

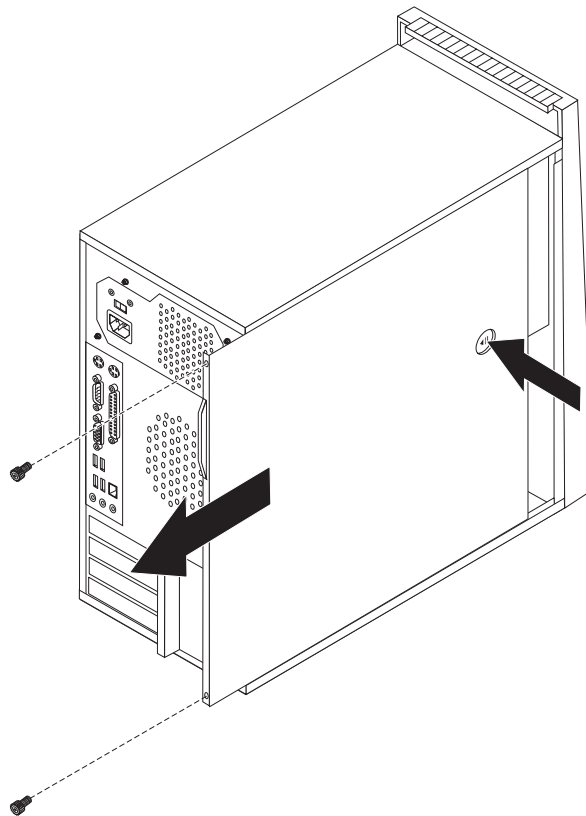
Removing the cover

Important

Read Chapter 2, “Safety information,” on page 3 and “Handling electrostatic discharge-sensitive devices” on page 6 before opening the cover.

This procedure describes how to remove the cover.

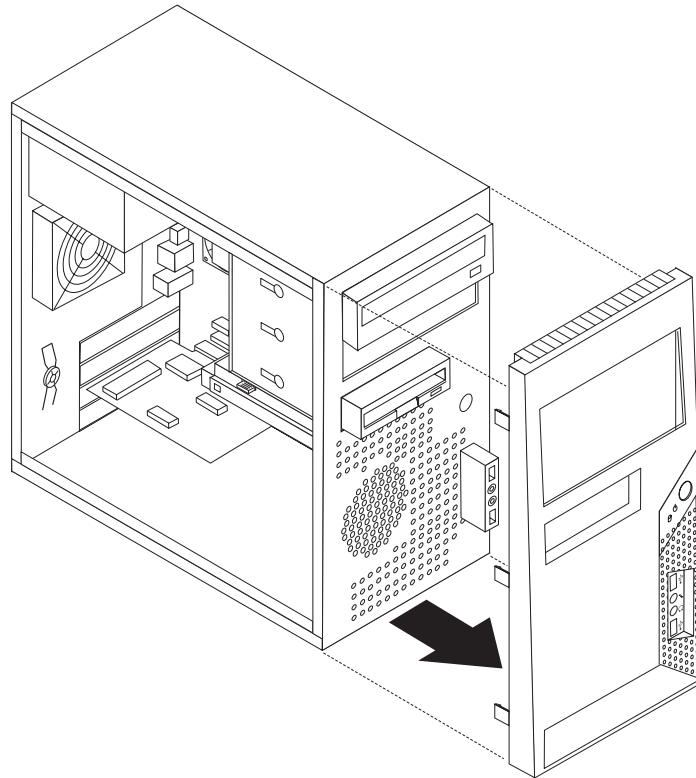
1. Shut down the operating system, remove any media (DVDs, CDs, or tapes) from the drives, and turn off all attached devices.
2. Unplug all power cords from electrical outlets.
3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer.
4. If there are thumb screws securing the cover, remove them.
5. Press the button on the left-side cover and slide the cover to the rear to remove.



Removing and replacing the front bezel

This procedure describes how to remove and replace the front bezel.

1. Remove the computer cover. See “Removing the cover” on page 117.
2. Remove the front bezel by releasing the three plastic tabs inside the chassis and pivoting the bezel outward. Carefully set the bezel to the side without disconnecting the power switch/LED assembly cable.



3. To reinstall the bezel, align the plastic tabs on the right side of the bezel with the corresponding holes in the chassis, then pivot it inward until it snaps into position on the left side.

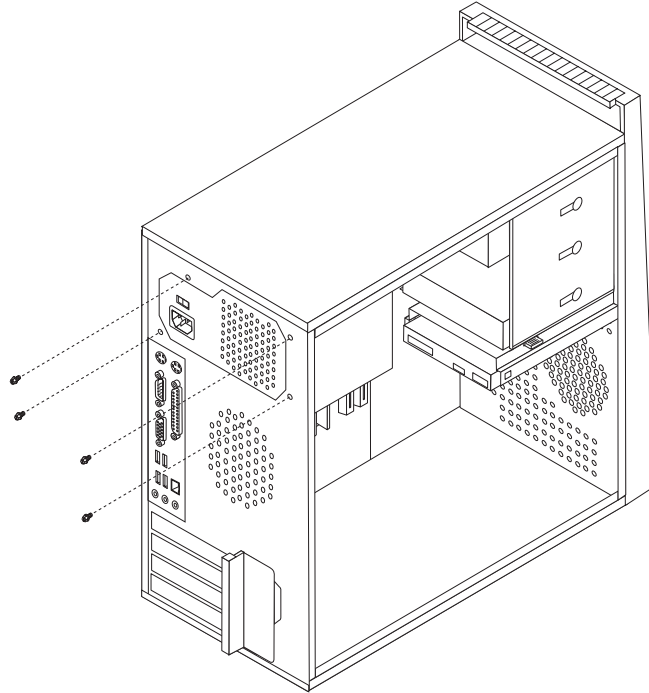
Replacing the power supply

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

1. Remove the computer cover. See “Removing the cover” on page 117.

Note: For this procedure, it helps to lay the computer on its side.

2. Disconnect the power supply cables from the system board and from all drives.
3. Remove the four screws that secure the power supply at the rear of the chassis.



4. Lift the power supply out of the chassis.
5. If the power supply has a voltage-selection switch, ensure that it is set to match the voltage available at the electrical outlet.
 - If the voltage supply range in your local country or region is 100-127 V ac, set the switch to 115 V.
 - If the voltage supply range in your local country or region is 200-240 V ac, set the switch to 230 V.
6. Install the new power supply into the chassis so that the screw holes in the power supply align with those in the chassis.
7. Install the four screws to secure the power supply.

Note: Use only the screws provided by Lenovo.

8. Reconnect the power supply connectors to the system board. See “System board connectors” on page 116.
9. Reconnect a power supply connector to each of the drives.
10. Go to “Completing the FRU replacement” on page 148.

Replacing the system board

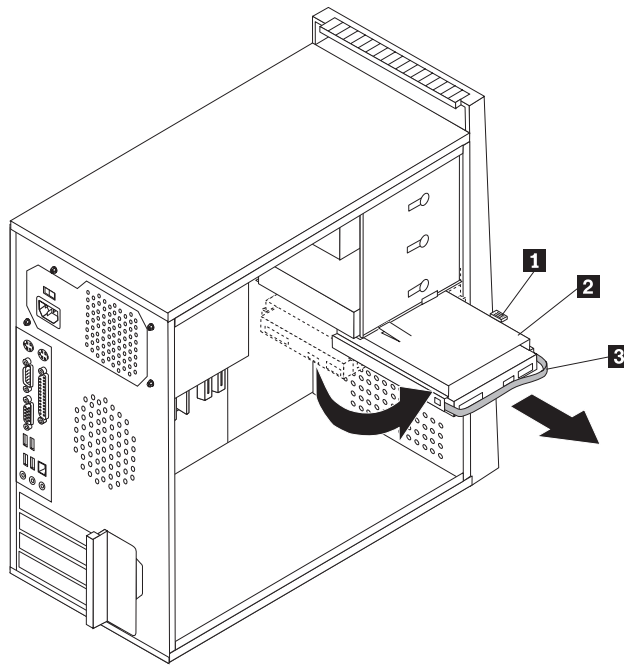
This procedure describes how to remove and replace the system board. The procedure varies depending upon the machine type.

Important

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

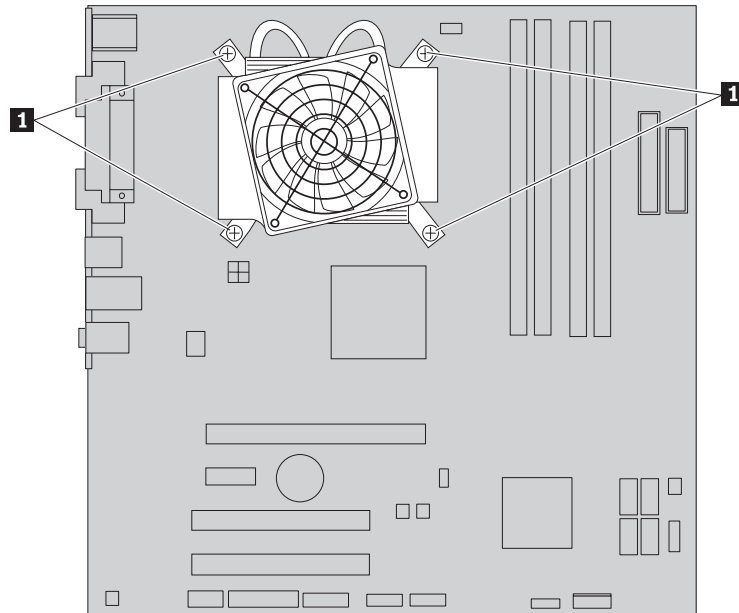
Note: When replacing the system board you must also order a new retention module for the new system board. Make sure you have a retention module for the new system board before continuing with this procedure.

1. Remove the cover. See “Removing the cover” on page 117.
2. Place the computer on its right side to help make the system board more accessible.
3. Remove any adapter cards installed in the PCI connectors.
4. Disconnect the signal and power cables from the hard disk drive.
5. Press the release tab **1** down, slide the hard drive cage **2** back, and pivot the hard disk drive outward as shown.



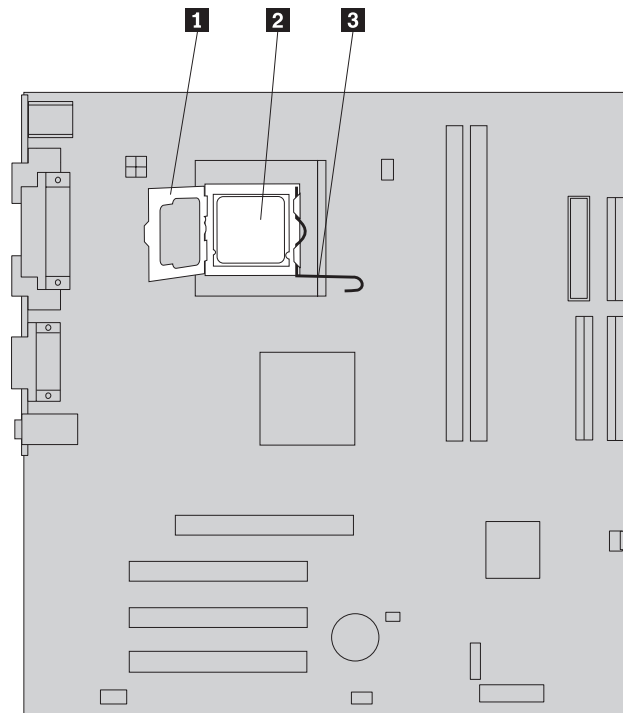
6. Carefully take note of the location of all cable connections on the system board and disconnect all cables. See the system board illustration for your machine type at “System board connectors” on page 116.
7. Remove the screws that secure the system board to the chassis.
8. Lift the system board out of the chassis.
9. Remove the memory modules from the failing system board and install them in the same location on the new system board.
10. Disconnect the heat sink and fan assembly cable from the system board. See the system board illustration for your machine type at “System board connectors” on page 116.

11. Remove the four screws **1** securing the heat sink and fan assembly to the system board.



12. Lift the heat sink and fan assembly off the failing system board. Place the heat sink on its side so that the thermal grease does not come in contact with anything.

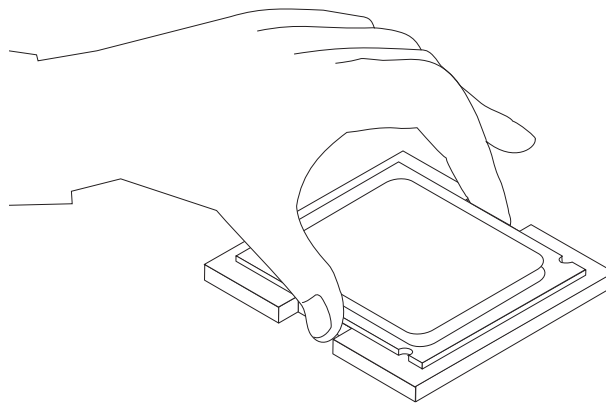
13. To remove the microprocessor **2** from the system board, lift the small handle **3** and open the retainer **1**.



Important

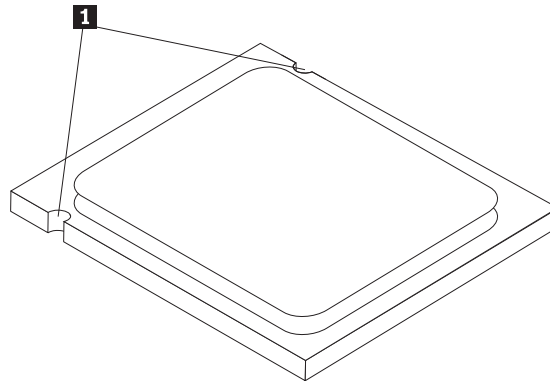
Touch only the sides of the microprocessor. Do not touch the gold contacts on the bottom.

14. Lift the microprocessor straight up and out of the socket.



Notes:

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



- b. Do not drop anything onto the microprocessor socket while it is exposed. The socket pins must be kept as clean as possible.
15. On the new system board, release the lever securing the microprocessor retainer and then pivot the retainer until it is fully open.

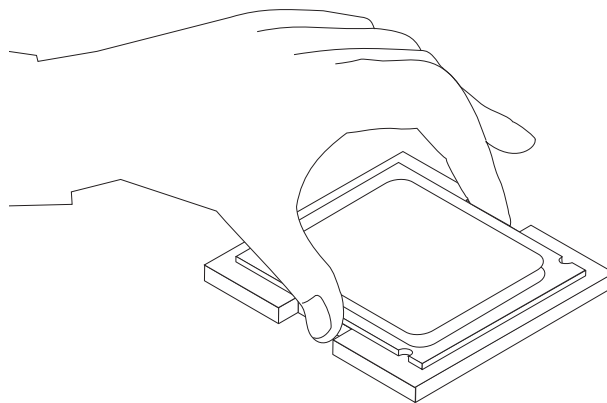
Note: There will be a black plastic cover on the microprocessor retainer to protect the socket on the new system board. Remove the black plastic cover and place it on the microprocessor socket of the failing system board.

16. Holding the microprocessor with your fingers, 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.

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



18. To secure the microprocessor in the socket, close the microprocessor retainer and lock it into position with the small handle.
19. Install the new retention module (if required) on the new system board.
20. Install the heat sink and fan assembly on the system board.

21. Connect the heat sink and fan assembly cable to the new system board. See the system board illustration for your machine type at "System board connectors" on page 116.
22. Install the new system board into the chassis and align the screw holes with those in the chassis. Insert and tighten the screws that secure the system board.
23. Pivot the hard disk drive back into position.
24. Connect the power and signal cables to the hard disk drive.
25. Connect all cables to the system board. See the system board illustration for your machine type at "System board connectors" on page 116.
26. Go to "Completing the FRU replacement" on page 148.

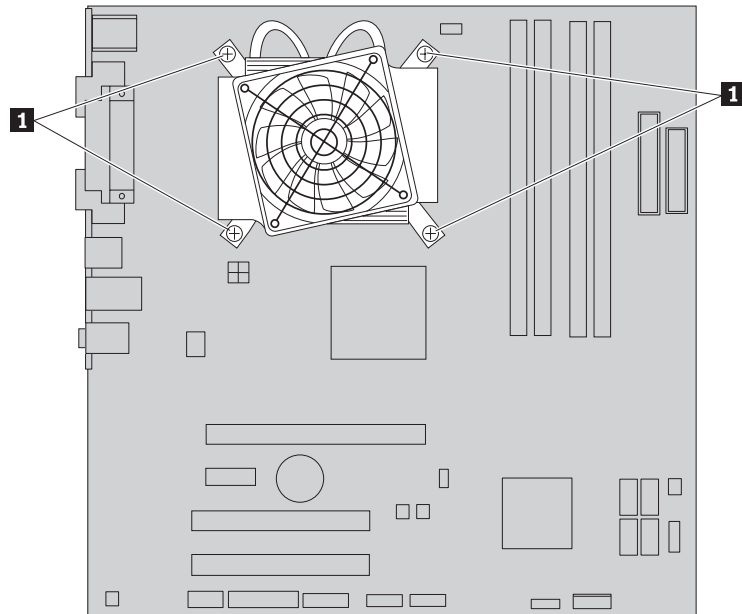
Replacing the microprocessor

This procedure describes how to remove and replace the microprocessor. The procedure varies depending upon the machine type.

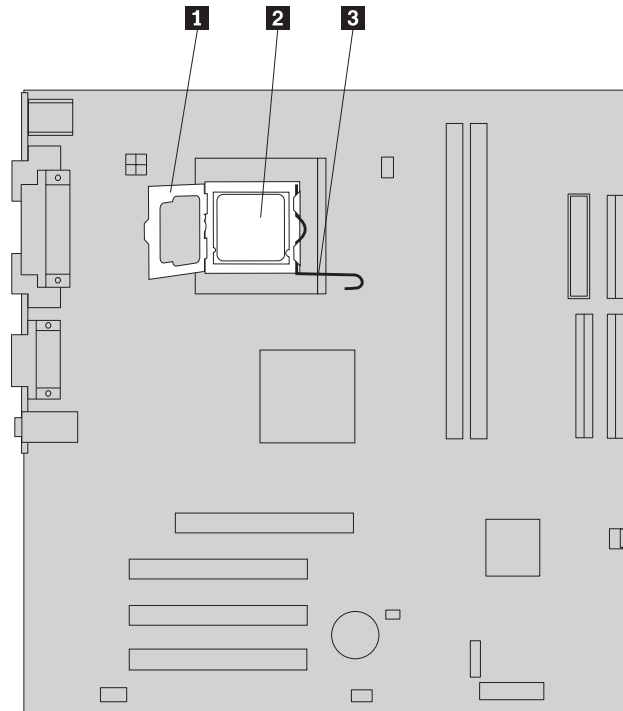
Important

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

1. Remove the side cover. See “Removing the cover” on page 117.
2. Place the computer on its right side to help make the microprocessor more accessible.
3. Disconnect the heat sink and fan assembly cable from the system board. See the system board illustration for your machine type at “System board connectors” on page 116.
4. Remove the four screws securing the heat sink and fan assembly to the system board.



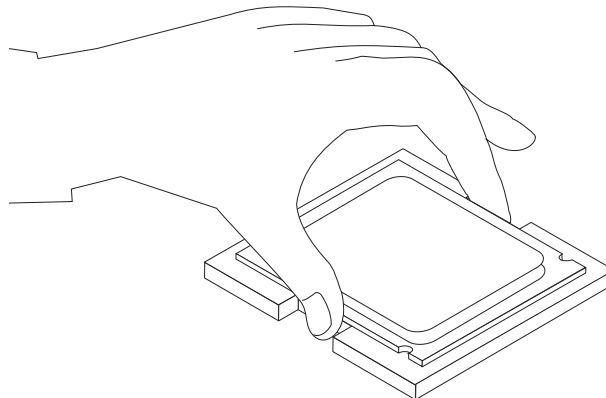
5. Lift the heat sink and fan assembly off the failing system board. Place the heat sink on its side so that the thermal grease does not come in contact with anything.
6. To remove the microprocessor **2** from the system board, lift the small handle **3** and open the retainer **1**.



Important

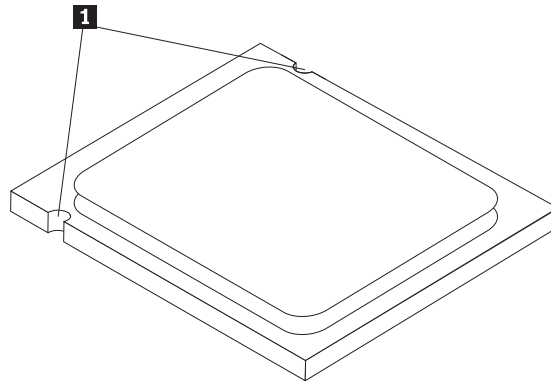
Touch only the sides of the microprocessor. Do not touch the gold contacts on the bottom.

7. Lift the microprocessor straight up and out of the socket.

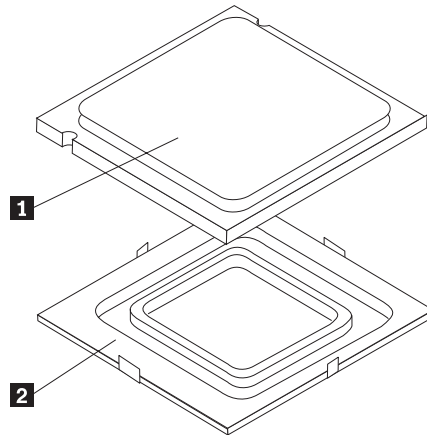


Notes:

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



- b. Do not drop anything onto the microprocessor socket while it is exposed. The socket pins must be kept as clean as possible.
8. Make sure that the microprocessor retainer is fully open.
9. Holding the microprocessor with your fingers, remove the protective cover **2** that protects the gold contacts on the new microprocessor **1**.

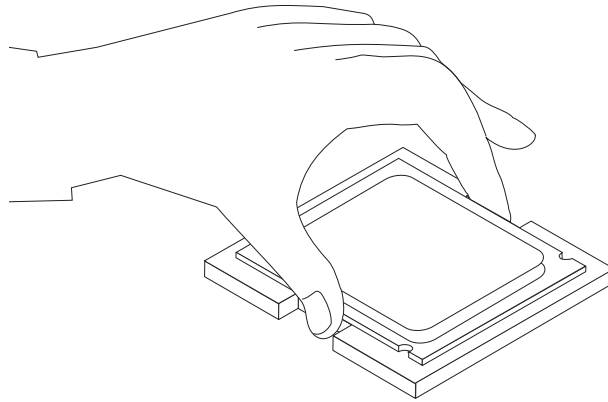


10. Holding the microprocessor with your fingers, position the microprocessor so that the notches on the microprocessor are aligned with the tabs in the microprocessor socket.

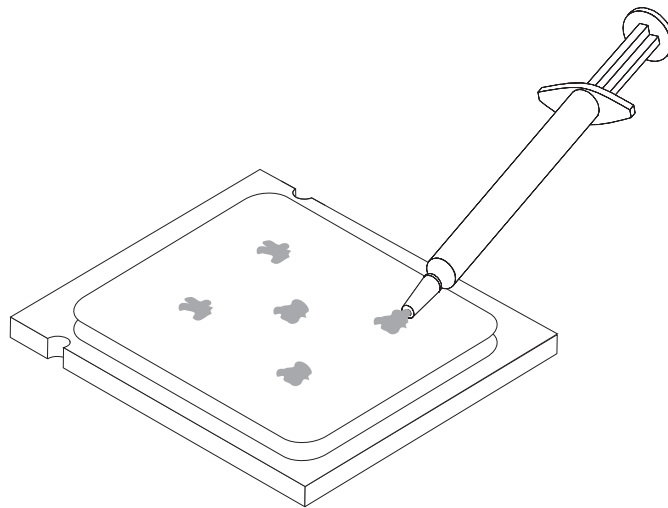
Important

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 of the system board.



12. To secure the microprocessor in the socket, close the microprocessor retainer and lock it into position with the small handle.
13. Use the thermal grease syringe to place five drops of grease on the top of the microprocessor. Each drop of grease should be 0.03ml (3 tick marks on the grease syringe).



14. Install the heat sink and fan assembly on the system board.
15. Connect the heat sink and fan assembly cable to the system board. See the system board illustration for your machine type at “System board connectors” on page 116.
16. Go to “Completing the FRU replacement” on page 148.

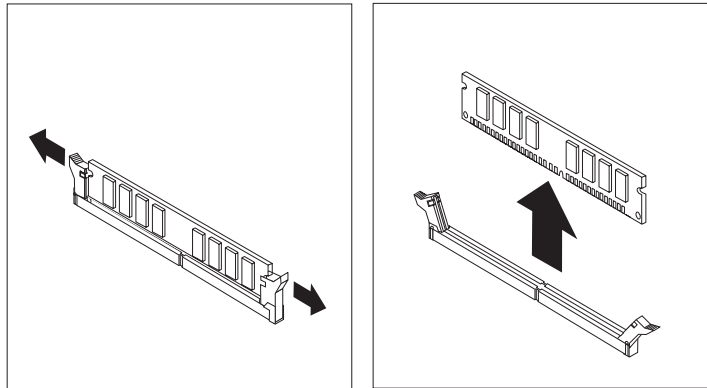
Replacing a memory module

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

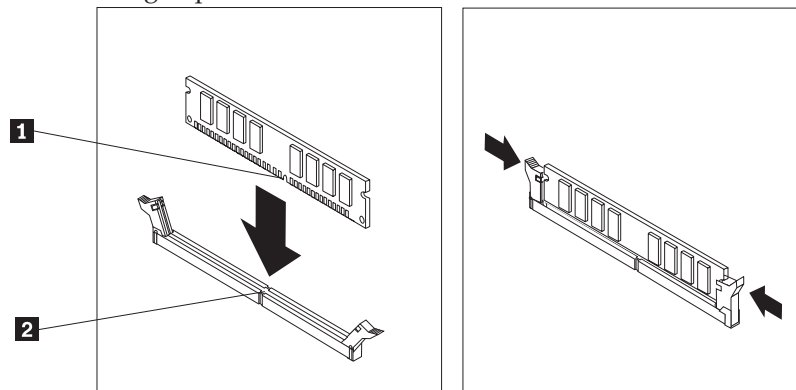
1. Remove the computer cover. See “Removing the cover” on page 117.

Note: For this procedure, it helps to lay the computer on its side.

2. Locate the memory module connectors. See “System board connectors” on page 116.
3. Remove the memory module being replaced by opening the retaining clips as shown.



4. Position the new memory module over the memory connector. Make sure the notch **1** on the memory 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.

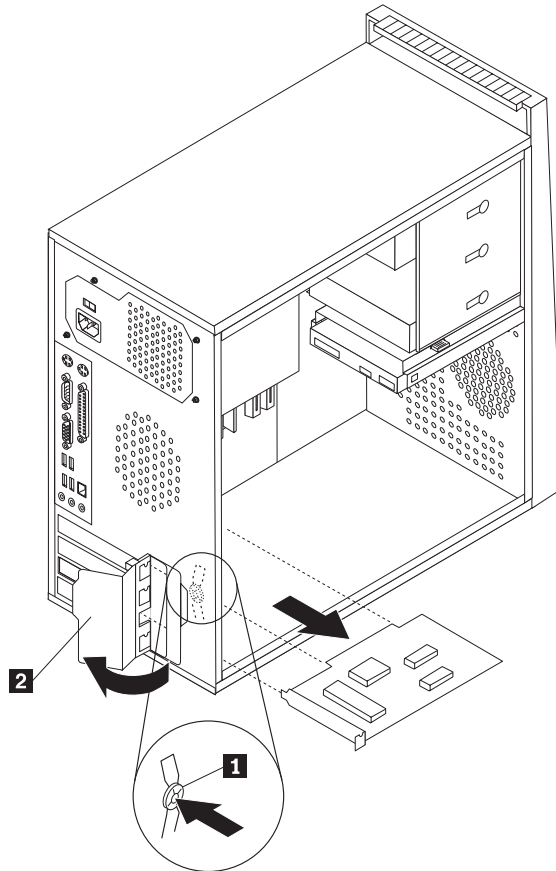


5. Go to “Completing the FRU replacement” on page 148.

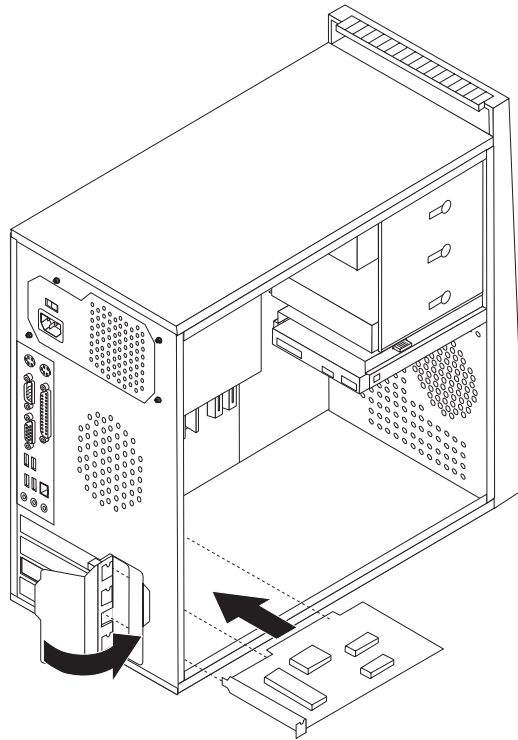
Replacing a PCI adapter

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

1. Remove the computer cover. See “Removing the cover” on page 117.
2. At the rear of the computer, press the release button **1** to open the adapter latch **2** and remove the adapter by pulling it straight out of the adapter connector.



3. Install the new adapter into the same adapter connector.



4. Ensure the adapter is fully seated into the adapter connector.
5. At the rear of the computer, pivot the adapter latch to the closed position to secure the adapter.
6. Go to “Completing the FRU replacement” on page 148.

Replacing the primary hard disk drive

Important

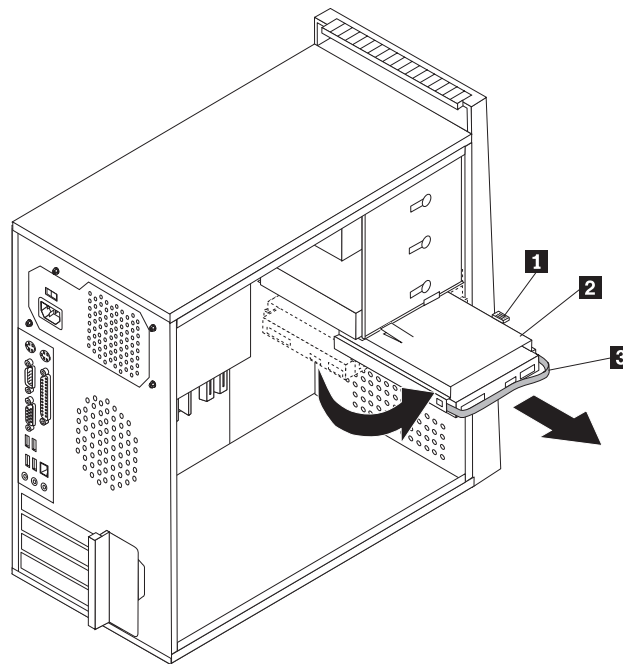
When a new hard disk drive is installed, a set of *Product Recovery* discs might be required. The set of *Product Recovery* discs enable the contents of the hard disk to be restored to the same state as when the computer was originally shipped from the factory. For more information on recovering factory-installed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

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

1. Remove the computer cover. See "Removing the cover" on page 117.

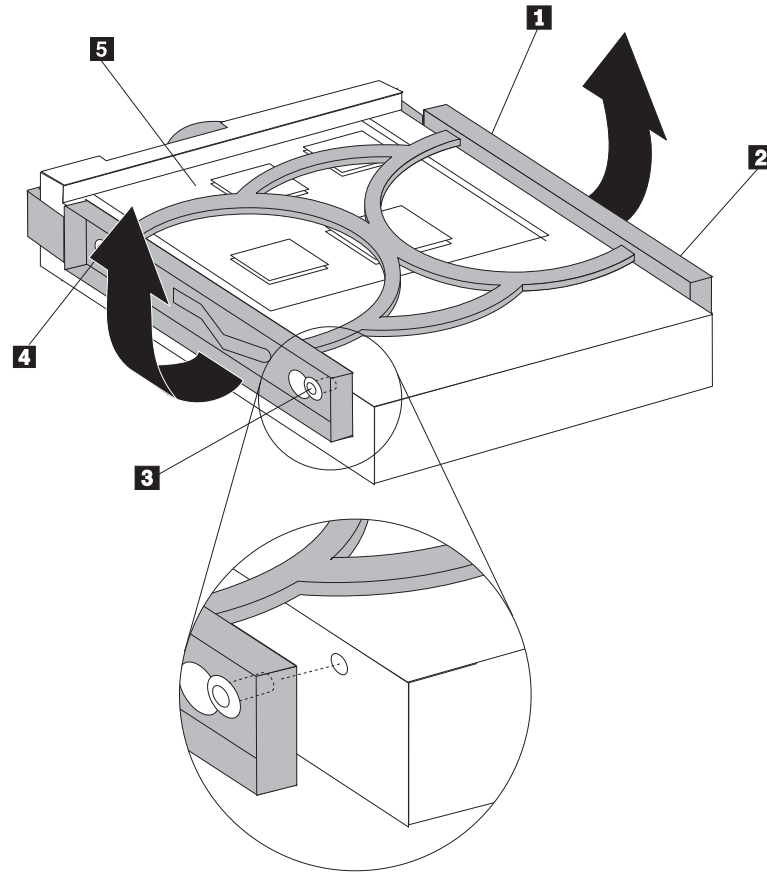
Note: For this procedure, it helps to lay the computer on its side.

2. Disconnect the signal and power cables from the hard disk drive.
3. Press the release tab **1** down, slide the hard drive cage **2** back, and pivot the hard disk drive outward as shown.



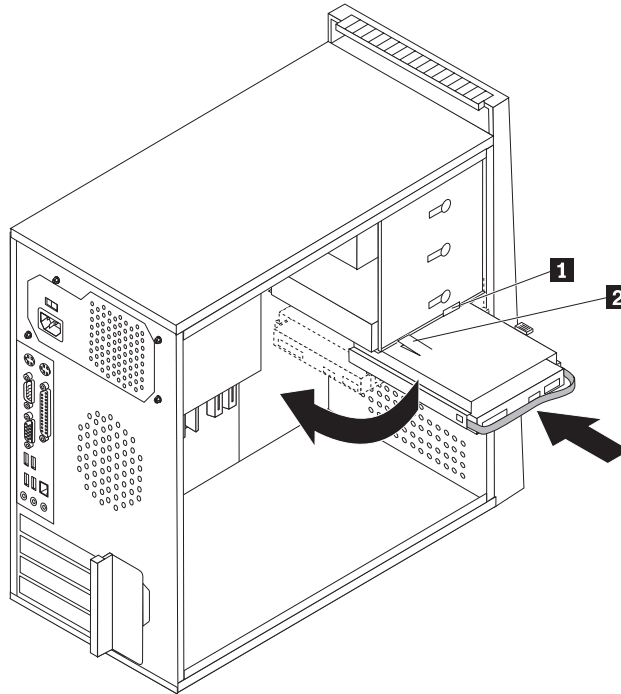
4. Remove the hard disk drive cage from the chassis by simply sliding it outward.
5. Pull on the blue handle **3** to remove hard disk drive from the drive cage.
6. Remove the failing hard disk drive from the blue plastic bracket from by flexing the sides of the bracket enough to free it from the hard disk drive.

7. To install the new 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.



8. Slide the new hard disk drive into the drive cage until it snaps into position.

9. Align the drive cage pivot pin with the slot **1** in the upper drive cage and slide the hard disk drive into the chassis.



10. Press down on the metal latch **2** and pivot in the drive cage into place. Slide it forward until it snaps into position.

Note: There are two arrows, one on the upper drive cage and one on the hard disk drive cage, that are aligned when the hard disk drive is in the proper position.

11. Connect the power and signal cables to the hard disk drive.
12. Go to “Completing the FRU replacement” on page 148.

Replacing the secondary hard disk drive

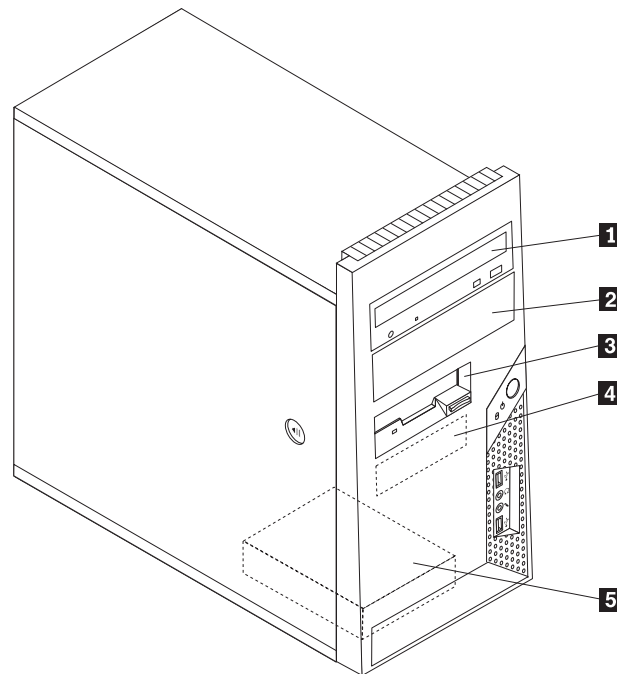
This procedure provides instructions on how to replace the secondary hard disk drive.

Important

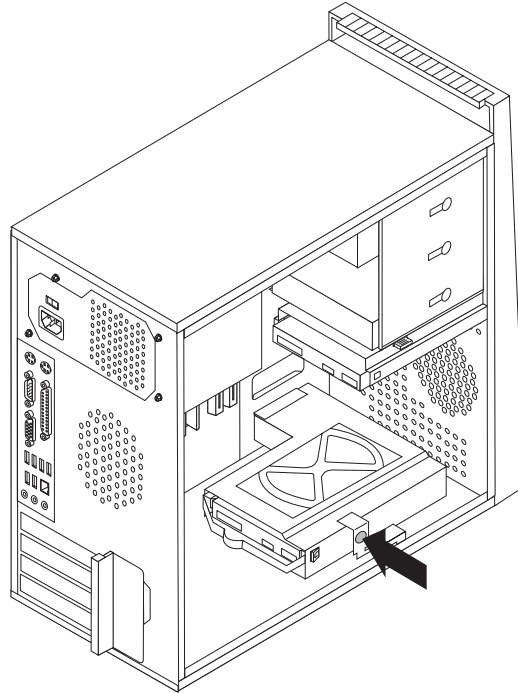
When a new hard disk drive is installed, a set of *Product Recovery* discs might be required. The set of *Product Recovery* discs enable the contents of the hard disk to be restored to the same state as when the computer was originally shipped from the factory. For more information on recovering factory-installed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

To replace the secondary hard disk drive:

1. Remove the computer cover. See "Removing the cover" on page 117.
2. Locate the secondary hard disk drive **5**.

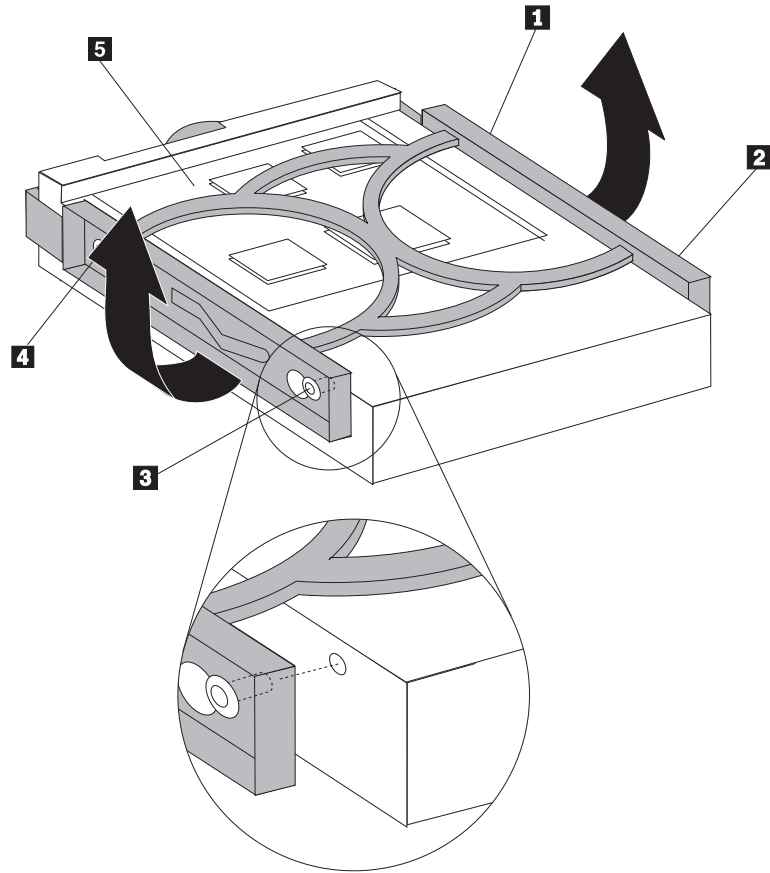


3. Disconnect the signal and power cables from the hard disk drive.
4. Press the blue release button to release the hard drive cage from the chassis.

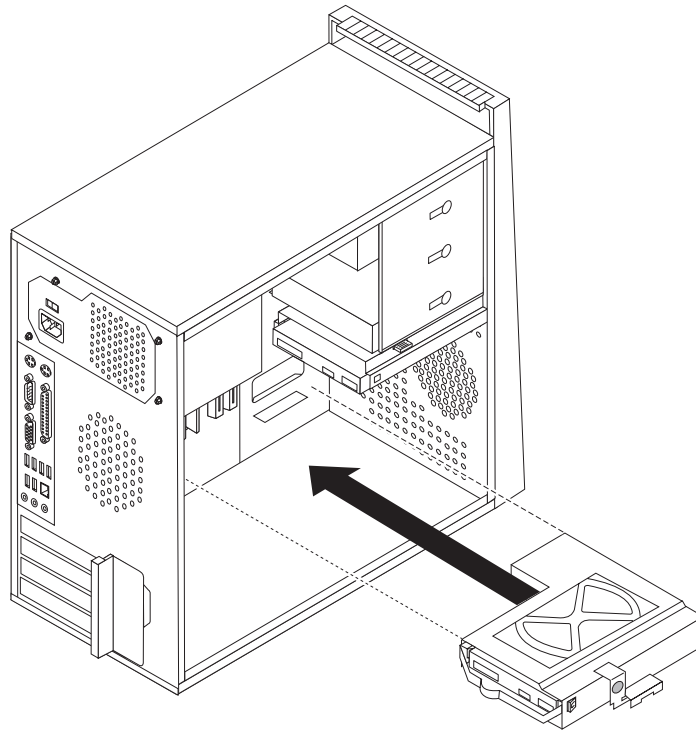


5. Remove the hard drive cage from the chassis by simply sliding it outward.
6. Pull on the blue handle to release and remove the hard disk drive from the hard drive cage.
7. Remove the hard disk drive from the blue plastic bracket by flexing the sides of the bracket enough to slide it free of the hard disk drive.

8. 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.



9. Slide the new hard disk drive into the hard drive cage until it snaps into position.
10. Install the hard drive cage into the chassis until it snaps into position underneath the metal tab. Make sure that the hard drive cage is secure in the chassis.

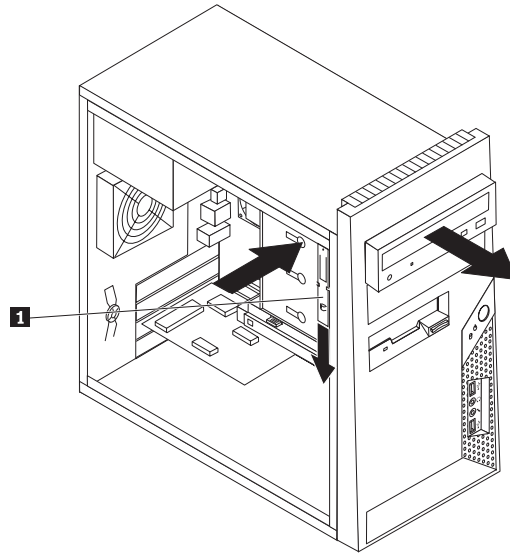


11. Connect the signal and power cables to the rear of the new hard disk drive.
12. Go to “Completing the FRU replacement” on page 148.

Replacing an optical drive

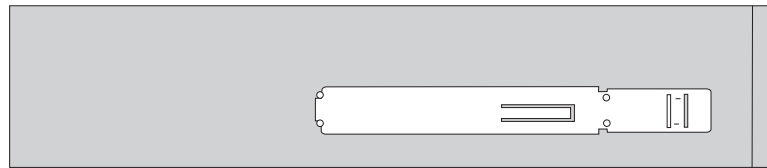
This procedure describes how to remove and replace an optical drive.

1. Remove the computer cover. See “Removing the cover” on page 117.
2. Disconnect the signal and power cables from the rear of the optical drive.
3. Press the release button and remove the optical drive out the front of the computer.



Note: Notice that there is a spare retainer bracket **1** attached to the upper drive cage.

4. Remove the retainer bracket from the drive being replaced and install it on the new drive.

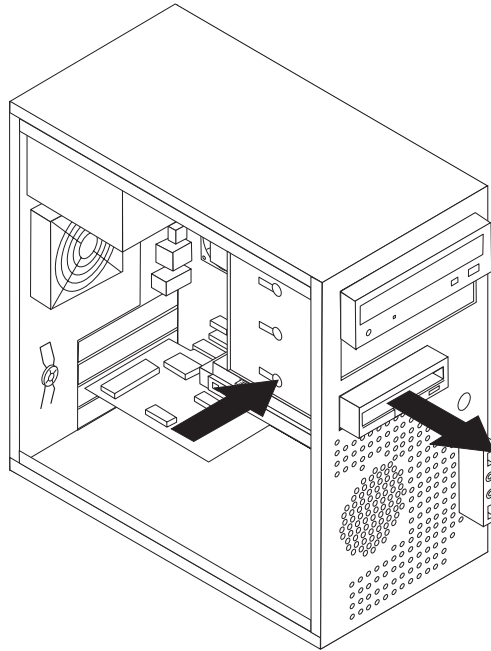


5. Slide the new optical drive into the bay from the front until it snaps into position.
6. Connect the signal and power cables to the drive.
7. Go to “Completing the FRU replacement” on page 148.

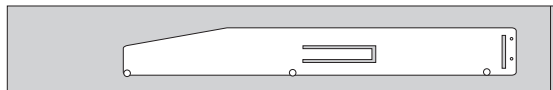
Replacing the diskette drive

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

1. Remove the computer cover. See “Removing the cover” on page 117.
2. Remove the front bezel. See “Removing and replacing the front bezel” on page 118.
3. Disconnect the signal and power cables from the rear of the diskette drive.
4. Press the release button and slide the diskette drive out the front of the computer.



5. Remove the retainer bracket from the failing diskette drive and install it on the new diskette drive.

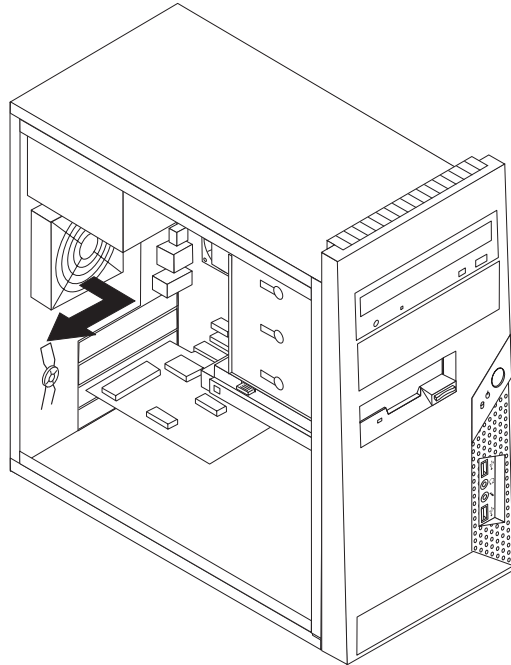


6. Slide the new diskette drive into the drive bay until it snaps into position.
7. Connect the signal and power cables to the drive.
8. Go to “Completing the FRU replacement” on page 148.

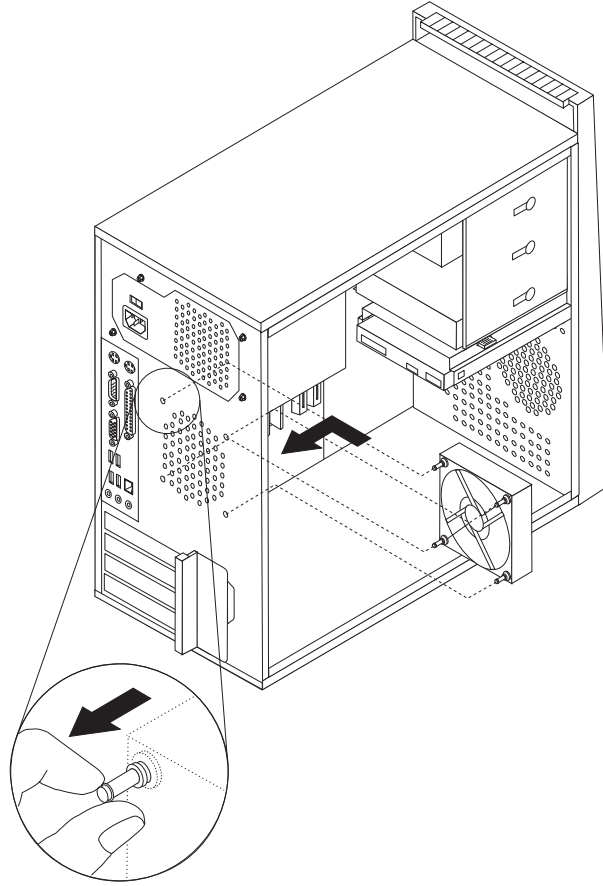
Replacing the rear fan assembly

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

1. Remove the computer cover. See “Removing the cover” on page 117.
2. Note the routing of the rear fan cable to the system board. Disconnect the rear fan cable from the system fan connector on the system board. See “System board connectors” on page 116.
3. The fan assembly is mounted with four rubber mounts that protrude through the rear of the chassis. Remove the fan assembly by pulling the rubber mounts back through the chassis.



4. Install the new rear fan assembly by aligning the rubber mounts of the system fan assembly with the holes on the chassis and push the rubber mounts through the holes.

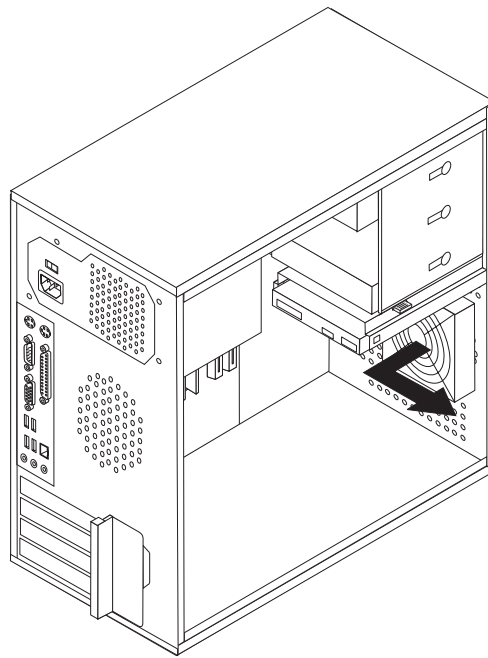


5. Pull on the tips of the rubber mounts until the fan assembly is in place.
6. Route the fan cable to the system board and connect the cable to the system board. See “System board connectors” on page 116.
7. Go to “Completing the FRU replacement” on page 148.

Replacing the front fan assembly

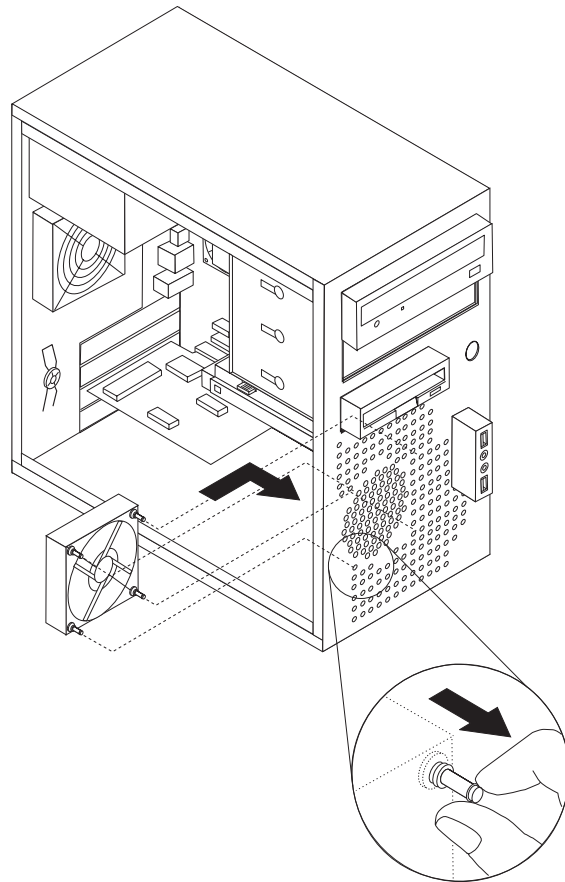
This procedure describes how to remove and replace the front fan assembly.

1. Remove the computer cover. See “Removing the cover” on page 117.
2. Remove the front bezel. See “Removing and replacing the front bezel” on page 118.
3. Note the routing of the front fan cable to the system board. Disconnect the front fan assembly cable from the system board. See “System board connectors” on page 116.
4. The fan assembly is mounted with four rubber mounts that protrude through the front of the chassis. Remove the fan assembly by pulling the rubber mounts back through the chassis.



5. Install the new front fan assembly by aligning the rubber mounts of the front fan assembly with the holes on the chassis and push the rubber mounts through the holes.

6. Pull on the tips of the rubber mounts until the fan assembly is in place.



7. Route the fan cable to the system board and connect the cable to the system board. See “System board connectors” on page 116.
8. Replace the front bezel.
9. Go to “Completing the FRU replacement” on page 112.

Replacing the front audio/USB assembly

This procedure describes how to remove and replace the front audio/USB assembly.

1. Remove the computer cover. See “Removing the cover” on page 117.
2. Remove the front bezel. See “Removing and replacing the front bezel” on page 118
3. Disconnect the front audio/USB assembly cable from the system board. See the system board illustration for your machine type at “System board connectors” on page 116.
4. Note the front audio/USB assembly cable routing and remove the screw that secures the assembly to the chassis.
5. Remove the front audio/USB assembly.
6. Route the cable for the new front audio/USB assembly through the hole in the chassis and to the system board.
7. Install the front audio/USB assembly into the chassis and secure it with the screw.
8. Connect the front audio/USB assembly cable to the system board.
9. Reinstall the front bezel.
10. Go to “Completing the FRU replacement” on page 148.

Replacing the power switch/LED assembly

This procedure describes how to remove and replace the power switch/LED assembly.

1. Remove the computer cover. See “Removing the cover” on page 117.
2. Remove the front bezel. See “Removing and replacing the front bezel” on page 118
3. Disconnect the power switch/LED assembly cable from the system board. See the system board illustration for your machine type at “System board connectors” on page 116.
4. Note the power switch/LED assembly cable routing and the position of the two LEDs.
5. Remove the switch and the LEDs from the bezel.
6. Route the cable for the new power switch/LED assembly through the hole in the chassis and to the system board.
7. Install the new power switch/LED assembly into the bezel. Make sure that the LEDs are in the correct position.
8. Connect the power switch/LED cable to the system board.
9. Reinstall the front bezel.
10. Go to “Completing the FRU 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.

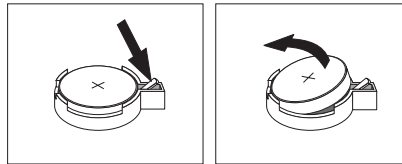
Important

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

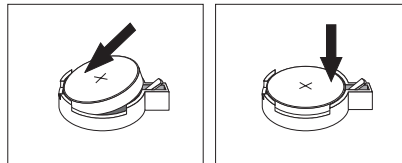
CAUTION:

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

1. Remove the computer cover. See “Removing the cover” on page 117.
2. Locate the battery. See the system board illustration for your machine type at “System board connectors” on page 116.
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.



6. Replace any PCI adapters that were removed.

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.

7. Go to “Completing the FRU replacement” on page 148.

Completing the FRU replacement

After replacing FRUs, you need to install any removed parts, replace the cover, and reconnect any cables, including telephone lines and power cords. Also, depending on the FRU that is replaced, you might need to confirm the updated information in the Setup Utility program.

Note: When the power cord is first plugged in, the computer might appear to turn on for a few seconds and then turn off. This is a normal sequence to enable the computer to initialize.

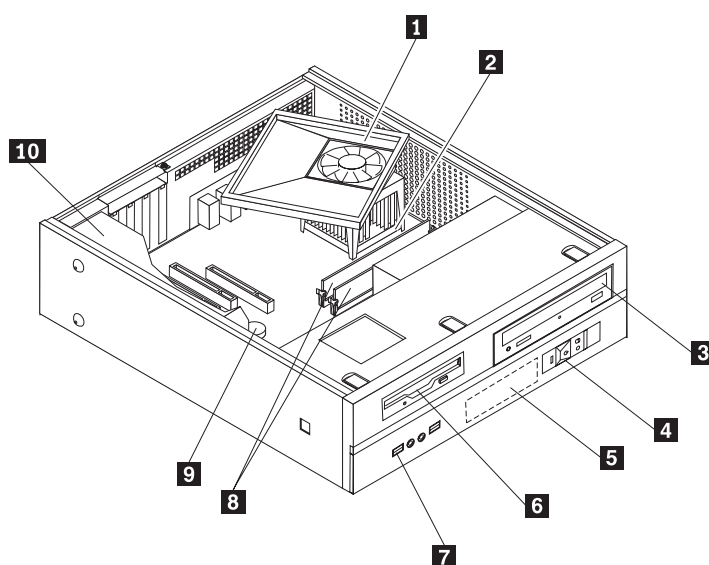
1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside your computer.
2. Replace the cover.
3. Reconnect the external cables and power cords to the computer. See “Rear connectors” on page 114.
4. If you have replaced the system board, you must update (flash) the BIOS. See “Updating (flashing) BIOS from a CD-ROM or diskette” on page 284.
5. Some FRU replacements require the configuration to be updated. See Chapter 6, “Using the Setup Utility,” on page 51.

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 6008



Item #	6008 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models A2A A2T)	43C1968	N
2	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models A1K)	43C2056	N
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A2A A2T)	41N3325	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A1K)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 80GB (7200RPM), Serial ATA (models A2A A2T)	40Y9034	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1K)	40Y9035	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9107	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A2A A2T)	41X4255	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1K)	41X4256	2

Item #	6008 FRUs	FRU#	CRU
9	System board, Saturn non AMT(GA) (models A2A A2T A1K)	87H5129	N
10	280 Watt DT Power Supply -Standard, Robust, JP (models A2A A2T A1K)	41A9705	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models A2A A2T A1K)	41A9701	2

The FRUs listed in the following tables are not illustrated.

6008 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

6008 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A2A)	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
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1

6008 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Japanese (models)	41A5310	1
Korean (models A1K)	41A5311	1
Italian 141 (models)	41A5309	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 A2T)	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

6008 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models)	41U3030	1
PS/2 2 Button Ball Mouse (models)	41R0018	1

6008 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Malaysian Homologation Sticker for all AP Model (models)	TBD	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A2A)	89P8571	1

6008 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models A2T)	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 A1K)	41A4903	1
Speaker Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

6008 Power Cords	FRU#	CRU
Power cord - US (models A2A A2T)	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 A2A A1K)	39M5212	1
Power cord - Hong Kong (models)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A2A)	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 A2A)	39M5143	1
Power cord - India (models)	39M5004	1

6008 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A2A)	45C4191	1
FR/CF (models)		1
GR (models)		1
IT (models)		1
BR (models)		1
SP/LA (models)		1
DK (models)		1
NL (models)		1
AE (models)		1

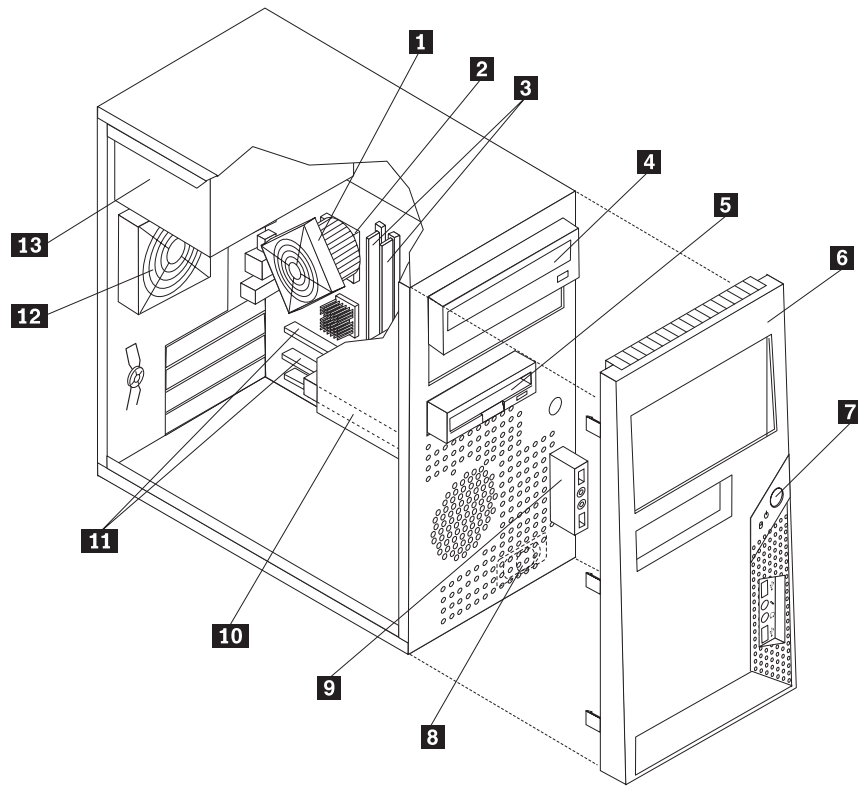
6008 Windows XP Pro Recovery CDs	FRU#	CRU
SV (models)		1
HE (models)		1
FI (models)		1
NO (models)		1
PL (models)		1
PO (models)		1
RU (models)		1
RE (models)		1
HU (models)		1
CZ (models)		1
TR (models)		1
GK (models)		1
SL (models)		1
Japanese (models)		1
Simplified Chinese (models)		1
Taiwan-TC (models)		1
Hong Kong-TC (models)		1
Korea (models)		1
Multilingual 1 XP-P -- EN, NL, FR, GR, IT (models)		1
Multilingual 2 XP-P -- EN, DK, FI, NO, SV (models)		1

6008 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)		1
FR/CF (models)		1
GR (models)		1
SP/LA (models)		1
BR (models)		1
IT (models)		1
JP (models)		1
NO (models)		1
SV (models)		1
DK (models)		1
NL (models)		1
CZ (models)		1
FI (models)		1
PL (models)		1
RU (models)		1
TR (models)		1
HU (models)		1
GK (models)		1
PO (models)		1

6008 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
CS (models)		1
TW (models)		1
HK (models)		1
KR (models A1K)	45C4185	1
SL (models)		1
RE (models)		1

6008 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1K)	45C4077	1
FR/CF (models)		1
GR (models)		1
SP/LA (models)		1
BR (models)		1
IT (models)		1
JP (models)		1
NO (models)		1
SV (models)		1
DK (models)		1
NL (models)		1
CZ (models)		1
FI (models)		1
PL (models)		1
RU (models)		1
TR (models)		1
HU (models)		1
GK (models)		1
PO (models)		1
CS (models)		1
TW (models)		1
HK (models)		1
KR (models)		1
SL (models)		1
RE (models)		1

Machine Type 6010



Item #	6010 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models A2A A2T)	43C1967	N
2	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models A4Q A1K)	43C1968	N
2	Microprocessor, Celeron 430 Processor 1.8GHz 800MHz FSB 512K L2 (models A3Q)	43C1964	N
3	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A3Q A4Q A2A A2T)	41X4255	2
3	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1K)	41X4256	2
4	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A2A A2T A1K)	41N3325	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 80GB (7200RPM), Serial ATA (models A3Q A4Q A2A A2T A1K)	40Y9034	2
11	System board , Saturn non AMT (GA) (models A3Q A4Q A2A A2T A1K)	87H5129	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6269	2

Item #	6010 FRUs	FRU#	CRU Tier
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models A2A A2T A1K)	41A9684	2
13	Power supply, 280 Watt ATX Power Supply (80plus) - Standard, Robust, JP (models A2A A2T A1K)	41A9665	2

The FRUs listed in the following tables are not illustrated.

6010 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

6010 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A2A A3Q A4Q)	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
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1

6010 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Hebrew (models)	41A5306	1
Hungarian (models)	41A5307	1
Iceland (models)	41A5308	1
Japanese (models)	41A5310	1
Korean (models A1K)	41A5311	1
Italian 141 (models)	41A5309	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 A2T)	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

6010 Keyboards (PS2 Preferred Pro)	FRU#	CRU Tier
US English (models)	41A5039	1
Arabic (models)	41A5040	1
Arabic/French (models)	41A5041	1
Belgian/French (models)	41A5042	1
Belgian/UK (models)	41A5043	1
Bulgarian (models)	41A5045	1
Hong Kong/Taiwan (models)	41A5046	1
Czech (models)	41A5047	1
Danish (models)	41A5048	1
Dutch (models)	41A5049	1
French (models)	41A5050	1
French Canadian 445 (models)	41A5051	1
French Canadian 58 (models)	41A5052	1
German (models)	41A5053	1
Greek (models)	41A5054	1
Hebrew (models)	41A5055	1

6010 Keyboards (PS2 Preferred Pro)	FRU#	CRU Tier
Hungarian (models)	41A5056	1
Iceland (models)	41A5057	1
Italian (models)	41A5058	1
Korean (models)	41A5060	1
LA Spanish (models)	41A5061	1
Norwegian (models)	41A5062	1
Polish (models)	41A5063	1
Portuguese (models)	41A5064	1
Romanian (models)	41A5065	1
Russian/Cyrilic (models)	41A5066	1
Serbian/Cyrilic (models)	41A5067	1
Slovak (models)	41A5068	1
Spanish (models)	41A5069	1
Swedish/Finn (models)	41A5070	1
Swiss F/G (models)	41A5071	1
Turkish 440 (models)	41A5073	1
Turkish 179 (models)	41A5074	1
UK English (models)	41A5075	1
US Euro (models)	41A5076	1
Slovenian (models)	41A5077	1
Brazil/Portuguese (models)	41A5044	1

6010 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A3Q A4Q A2A A2T A1K)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A3Q A4Q A2A A2T A1K)	41U3030	1

6010 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A2A)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	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

6010 Adapters and miscellaneous FRUs	FRU#	CRU
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 A1K)	41A4903	1
Speaker Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models A3Q A4Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

6010 Power Cords	FRU#	CRU
Power cord - US (models A2A A2T)	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 A1K)	39M5212	1
Power cord - Hong Kong (models)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A2A)	39M5150	1
Power cord - Taiwan (models)	39M5246	1
Power cord - Italy (models)	39M5164	1
Power cord - G models (models A2A)	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 A2A)	39M5143	1
Power cord - India (models A3Q A4Q)	39M5004	1

6010 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A2A)	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

6010 Windows XP Pro Recovery CDs	FRU#	CRU
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

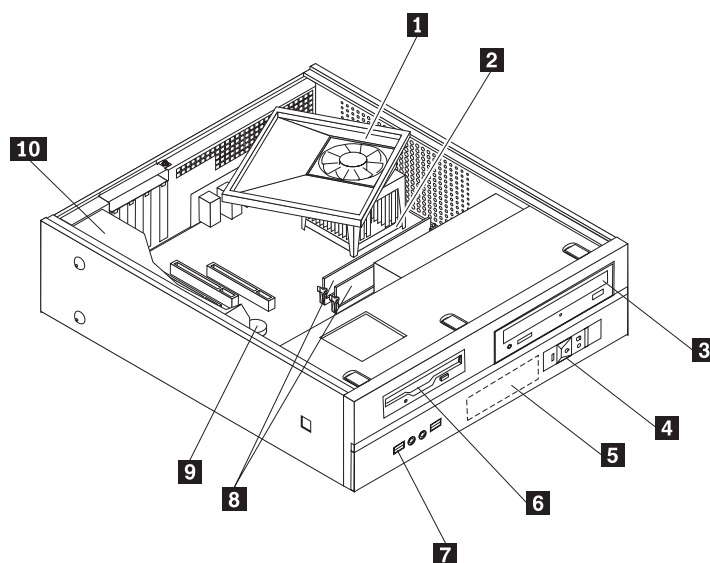
6010 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A4Q)	45C4163	1
FR/CF (models)	45C4165	1
GR (models)	45C4166	1
SP/LA (models)	45C4167	1
BR (models)	45C4168	1
IT (models)	45C4169	1
JP (models)	45C4170	1
NO (models)	45C4171	1
SV (models)	45C4172	1
DK (models)	45C4173	1
NL (models)	45C4174	1
CZ (models)	45C4175	1
FI (models)	45C4176	1
PL (models)	45C4177	1
RU (models)	45C4178	1
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

6010 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
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
Hebrew (models)	45C4106	1

6010 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1G)	45C4077	1
FR/CF (models A1G)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models A1G)	45C4081	1
BR (models)	45C4082	1
IT (models A1G)	45C4083	1
JP (models)	45C4084	1
NO (models A1G)	45C4085	1

6010 Vista Business 32 Recovery DVDs	FRU#	CRU
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)	45C4096	1
Traditional Chinese (models A1V)	45C4097	1
Traditional Chinese (models A1V)	45C4098	1
KR (models)	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 6068



Item #	6068 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1V)	43C3833	N
2	Microprocessor, Celeron 430 Processor 1.8GHz 800MHz FSB 512K L2 (models A2G)	43C1964	N
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A1V)	41N3325	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A2G)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1V A2G)	40Y9035	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9107	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1V A2G)	41X4256	2
9	System board, Saturn non AMT(GA) (models A1V A2G)	87H5129	N
10	280 Watt DT Power Supply -Standard, Robust, JP (models A1V A2G)	41A9705	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models A1V A2G)	41A9701	2

The FRUs listed in the following tables are not illustrated.

6068 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2

6068 FRUs	FRU#	CRU
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

6068 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A2G)	41A5289	1
Arabic (models A2G)	41A5290	1
Arabic/French (models)	41A5291	1
Belgian/French (models A2G)	41A5292	1
Belgian/UK (models A2G)	41A5293	1
Bulgarian (models A2G)	41A5295	1
Czech (models A2G)	41A5297	1
Danish (models A2G)	41A5298	1
Dutch (models A2G)	41A5299	1
French (models A2G)	41A5300	1
German (models A2G)	41A5303	1
Greek (models A2G)	41A5304	1
Greek/US (models A2G)	41A5305	1
Hebrew (models A2G)	41A5306	1
Hungarian (models A2G)	41A5307	1
Iceland (models A2G)	41A5308	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
Italian 141 (models A2G)	41A5309	1
Norwegian (models A2G)	41A5313	1
Polish (models A2G)	41A5314	1
Portuguese (models A2G)	41A5315	1
Romanian 096 (models A2G)	41A5317	1
Romanian 446 (models A2G)	41A5316	1
Russian/Cyrillic (models A2G)	41A5318	1

6068 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Serbian/Cyrillic (models A2G)	41A5319	1
Slovak (models A2G)	41A5320	1
Spanish (models A2G)	41A5321	1
Swedish/Finn (models A2G)	41A5322	1
Swiss (models A2G)	41A5323	1
Thailand (models)	41A5324	1
Turkish 440 (models A2G)	41A5325	1
Turkish 179 (models A2G)	41A5326	1
UK English (models A2G)	41A5327	1
US Euro (models A2G)	41A5328	1
Slovenian (models A2G)	41A5329	1

6068 Keyboards (Preferred Pro Fingerprint Reader USB)	FRU#	CRU
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
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
Polish (models)	41A5273	1
Portuguese (models)	41A5274	1
Romanian 096 (models)	41A5275	1
Romanian 446 (models)	41A5276	1

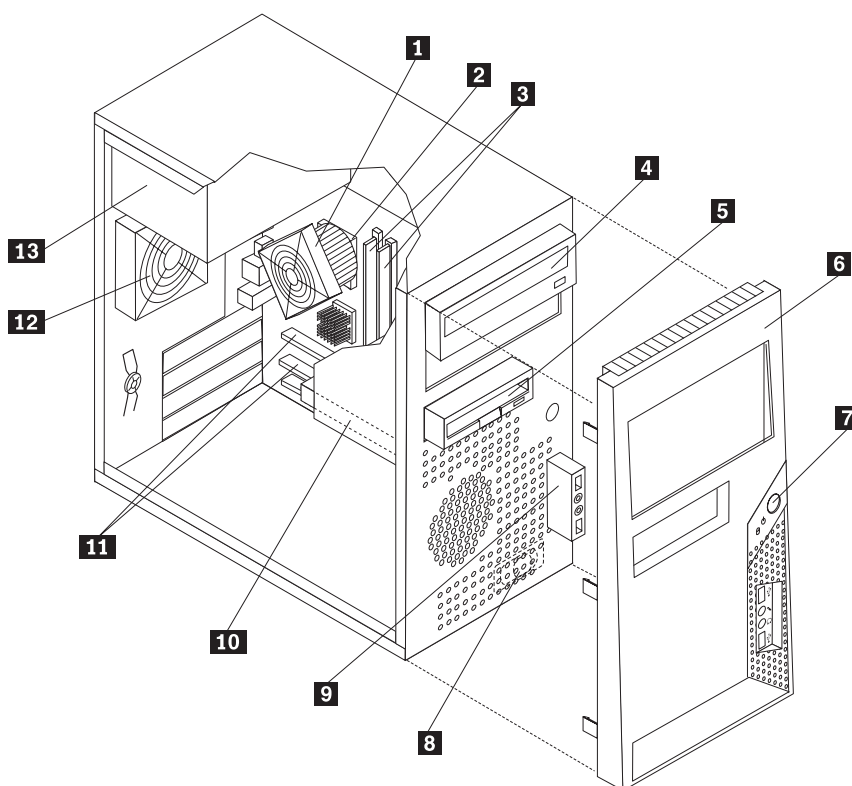
6068 Keyboards (Preferred Pro Fingerprint Reader USB)	FRU#	CRU
Russian/Cyrillic (models)	41A5277	1
Serbian/Cyrillic (models)	41A5278	1
Slovak (models)	41A5279	1
Spanish (models)	41A5280	1
Swedish/Finn (models)	41A5281	1
Swiss (models)	41A5282	1
Swiss (models)	41A5283	1
Turkish 440 (models)	41A5284	1
Turkish 179 (models)	41A5285	1
UK English (models)	41A5286	1
US Euro (models)	41A5287	1
Slovenian (models)	41A5288	1

6068 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models A1V A2G)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models A1V A2G)	41U3030	1

6068 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A2G)	89P8573	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 Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

6068 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)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models A2G)	39M5164	1
Power cord - G models (models)	39M5122	1
Power cord - Denmark (models A2G)	39M5129	1
Power cord - Switzerland (models A2G)	39M5157	1
Power cord - Israel (models A2G)	39M5171	1
Power cord - South Africa (models A2G)	39M5143	1
Power cord - India (models)	39M5004	1

Machine Type 6069



Item #	6069 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A2A A2T A1V A6G)	43C3833	N
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A7G)	43C1693	N
2	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models A5G)	43C2056	N
2	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models A3Q)	43C1968	N
3	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A3Q A1V)	41X4255	2
3	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A2A A2T A5G A6G A7G)	41X4256	2
4	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A3Q A1V)	41N3325	2
4	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A2A A2T A5G A6G)	42Y9353	2
4	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A7G)	43C1042	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models A1V)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models A1V)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2

Item #	6069 FRUs	FRU#	CRU Tier
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 80GB (7200RPM), Serial ATA (models A2A A2T A3Q)	40Y9034	2
10	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1V A5G A6G A7G)	40Y9035	2
11	System board , Saturn non AMT (GA) (models A2A A2T A3Q A1V A5G A6G A7G)	87H5129	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6269	2
13	280 Watt ATX Power Supply - Standard, Robust (models A2A A2T A3Q A1V A5G A6G A7G)	41A9684	2

The FRUs listed in the following tables are not illustrated.

6069 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

6069 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A2A A3Q A5G A6G A7G)	41A5289	1
Arabic (models)	41A5290	1
Arabic/French (models A5G A6G A7G)	41A5291	1
Belgian/French (models A5G A6G A7G)	41A5292	1
Belgian/UK (models A5G A6G A7G)	41A5293	1
Bulgarian (models A5G A6G A7G)	41A5295	1
Chinese/US (models A1V)	41A5296	1
Czech (models A5G A6G A7G)	41A5297	1
Danish (models A5G A6G A7G)	41A5298	1

6069 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Dutch (models A5G A6G A7G)	41A5299	1
French (models A5G A6G A7G)	41A5300	1
German (models A5G A6G A7G)	41A5303	1
Greek (models A5G A6G A7G)	41A5304	1
Greek/US (models A5G A6G A7G)	41A5305	1
Hebrew (models A5G A6G A7G)	41A5306	1
Hungarian (models A5G A6G A7G)	41A5307	1
Iceland (models A5G A6G A7G)	41A5308	1
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
Italian 141 (models A5G A6G A7G)	41A5309	1
Norwegian (models A5G A6G A7G)	41A5313	1
Polish (models A5G A6G A7G)	41A5314	1
Portuguese (models A5G A6G A7G)	41A5315	1
Romanian 096 (models A5G A6G A7G)	41A5317	1
Romanian 446 (models A5G A6G A7G)	41A5316	1
Russian/Cyrillic (models A5G A6G A7G)	41A5318	1
Serbian/Cyrillic (models A5G A6G A7G)	41A5319	1
Slovak (models A5G A6G A7G)	41A5320	1
Spanish (models A5G A6G A7G)	41A5321	1
Swedish/Finn (models A5G A6G A7G)	41A5322	1
Swiss (models A5G A6G A7G)	41A5323	1
Thailand (models A2T)	41A5324	1
Turkish 440 (models A5G A6G A7G)	41A5325	1
Turkish 179 (models A5G A6G A7G)	41A5326	1
UK English (models A5G A6G A7G)	41A5327	1
US Euro (models)	41A5328	1
Slovenian (models A5G A6G A7G)	41A5329	1

6069 Keyboards (PS2 Preferred Pro)	FRU#	CRU Tier
US English (models)	41A5039	1
Arabic (models)	41A5040	1
Arabic/French (models)	41A5041	1
Belgian/French (models)	41A5042	1
Belgian/UK (models)	41A5043	1
Bulgarian (models)	41A5045	1
Hong Kong/Taiwan (models)	41A5046	1
Czech (models)	41A5047	1
Danish (models)	41A5048	1
Dutch (models)	41A5049	1
French (models)	41A5050	1

6069 Keyboards (PS2 Preferred Pro)	FRU#	CRU Tier
French Canadian 445 (models)	41A5051	1
French Canadian 58 (models)	41A5052	1
German (models)	41A5053	1
Greek (models)	41A5054	1
Hebrew (models)	41A5055	1
Hungarian (models)	41A5056	1
Iceland (models)	41A5057	1
Italian (models)	41A5058	1
Korean (models)	41A5060	1
LA Spanish (models)	41A5061	1
Norwegian (models)	41A5062	1
Polish (models)	41A5063	1
Portuguese (models)	41A5064	1
Romanian (models)	41A5065	1
Russian/Cyrilic (models)	41A5066	1
Serbian/Cyrilic (models)	41A5067	1
Slovak (models)	41A5068	1
Spanish (models)	41A5069	1
Swedish/Finn (models)	41A5070	1
Swiss F/G (models)	41A5071	1
Turkish 440 (models)	41A5073	1
Turkish 179 (models)	41A5074	1
UK English (models)	41A5075	1
US Euro (models)	41A5076	1
Slovenian (models)	41A5077	1
Brazil/Portuguese (models)	41A5044	1

6069 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A2A A2T A3Q A1V A5G A6G A7G)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A2A A2T A3Q A1V A5G A6G A7G)	41U3030	1

6069 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1

6069 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A5G A6G A7G)	89P8573	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 A2A)	89P8579	1
Speaker Brick - Korea (models)	41A4903	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A3Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

6069 Power Cords	FRU#	CRU
Power cord - US (models A2A A2T)	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 A2A A5G A6G A7G)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models)	39M5164	1
Power cord - G models (models A2A)	39M5122	1
Power cord - Denmark (models A5G A6G A7G	39M5129	1
Power cord - Switzerland (models A5G A6G A7G	39M5157	1
Power cord - Israel (models A5G A6G A7G	39M5171	1
Power cord - South Africa (models A2A A5G A6G A7G)	39M5143	1
Power cord - India (models A3Q)	39M5004	1

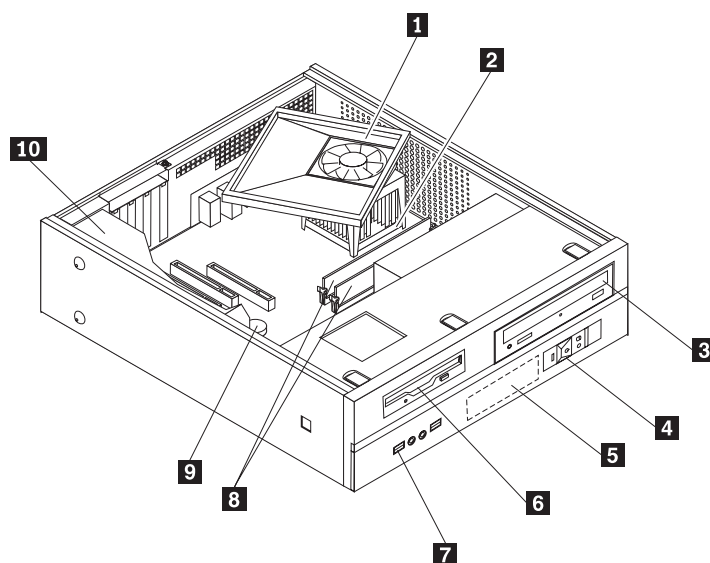
6069 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A2A A3Q A5G A6G A7G)	45C4191	1
RE (models A5G A6G A7G)	45C4216	1
FR/CF (models A5G A6G A7G)	45C4192	1
GR (models A5G A6G A7G)	45C4193	1
SP/LA (models A5G A6G A7G)	45C4194	1
IT (models A5G A6G A7G)	45C4196	1
BR (models)	45C4195	1

6069 Windows XP Pro Recovery CDs	FRU#	CRU
SV (models A5G A6G A7G)	45C4199	1
DK (models A5G A6G A7G)	45C4200	1
FI (models A5G A6G A7G)	45C4203	1
NO (models A5G A6G A7G)	45C4198	1
NL (models A5G A6G A7G)	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 A7G)	45C4204	1
PL (models A5G A6G A7G)	45C4205	1
CZ (models A5G A6G A7G)	45C4202	1
AE (models A5G A6G A7G)	45C4206	1
RU (models A5G A6G A7G)	45C4207	1
TR (models A5G A6G A7G)	45C4208	1
HU (models A5G A6G A7G)	45C4209	1
PO (models A5G A6G A7G)	45C4217	1
GK (models A5G A6G A7G)	45C4210	1
SL (models A5G A6G A7G)	45C4215	1

6069 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A2A A3Q)	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
HU (models)	45C4094	1
GK (models)	45C4095	1
PO (models)	45C4102	1

6069 Vista Business 32 Recovery DVDs	FRU#	CRU
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
Hebrew (models)	45C4106	1

Machine Type 6074



Item #	6074 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A2B A2H A3C)	43C3833	N
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A4G)	43C1693	N
2	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models A1G)	43C1967	N
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A2B A2H A3C)	41N3325	2
3	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A4G)	43C1042	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A1G)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models A2B A2H A1G A3C A4G)	40Y9035	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models A3C)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models A3C)	40Y9107	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models A3C)	40Y9113	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A2B A2H A1G A3C A4G)	41X4256	2
9	System board, Saturn non AMT(GA) (models A2B A2H A1G A3C A4G)	87H5129	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models A2B A2H A1G A3C A4G)	41A9701	2

The FRUs listed in the following tables are not illustrated.

6074 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2

6074 FRUs	FRU#	CRU
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

6074 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A2H A1G A4G)	41A5289	1
Arabic (models A1G A4G)	41A5290	1
Arabic/French (models A1G A4G)	41A5291	1
Belgian/French (models A1G A4G)	41A5292	1
Belgian/UK (models A1G A4G)	41A5293	1
Bulgarian (models A1G A4G)	41A5295	1
Chinese/US (models A2B)	41A5296	1
Czech (models A1G A4G)	41A5297	1
Danish (models A1G A4G)	41A5298	1
Dutch (models A1G A4G)	41A5299	1
French (models A1G A4G)	41A5300	1
German (models A1G A4G)	41A5303	1
Greek (models A1G A4G)	41A5304	1
Greek/US (models A1G A4G)	41A5305	1
Hebrew (models A1G A4G)	41A5306	1
Norwegian (models A1G A4G)	41A5313	1
Polish (models A1G A4G)	41A5314	1
Portuguese (models A1G A4G)	41A5315	1
Romanian 096 (models A1G A4G)	41A5317	1
Romanian 446 (models A1G A4G)	41A5316	1
Russian/Cyrillic (models A1G A4G)	41A5318	1

6074 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Serbian/Cyrillic (models A1G A4G)	41A5319	1
Slovak (models A1G A4G)	41A5320	1
Spanish (models A1G A4G)	41A5321	1
Swedish/Finn (models A1G A4G)	41A5322	1
Swiss (models A1G A4G)	41A5323	1
Turkish 440 (models A1G A4G)	41A5325	1
Turkish 179 (models A1G A4G)	41A5326	1
UK English (models A1G A4G)	41A5327	1
US Euro (models A1G A4G)	41A5328	1
Slovenian (models A1G A4G)	41A5329	1

6074 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models A2B A2H A1G A3C A4G)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models A2B A2H A1G A3C A4G)	41U3030	1

6074 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1G A4G)	89P8573	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models A3C)	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 Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

6074 Power Cords	FRU#	CRU
Power cord - US (models)	39M5080	1
Power cord - China (models A3C)	39M5205	1

6074 Power Cords	FRU#	CRU
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 A2B A2H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1G A4G)	39M5150	1
Power cord - Taiwan (models)	39M5246	1
Power cord - Italy (models A1G A4G)	39M5164	1
Power cord - G models (models)	39M5122	1
Power cord - Denmark (models A1G A4G)	39M5129	1
Power cord - Switzerland (models A1G A4G)	39M5157	1
Power cord - Israel (models A1G A4G)	39M5171	1
Power cord - South Africa (models A1G A4G)	39M5143	1
Power cord - India (models)	39M5004	1

6074 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
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

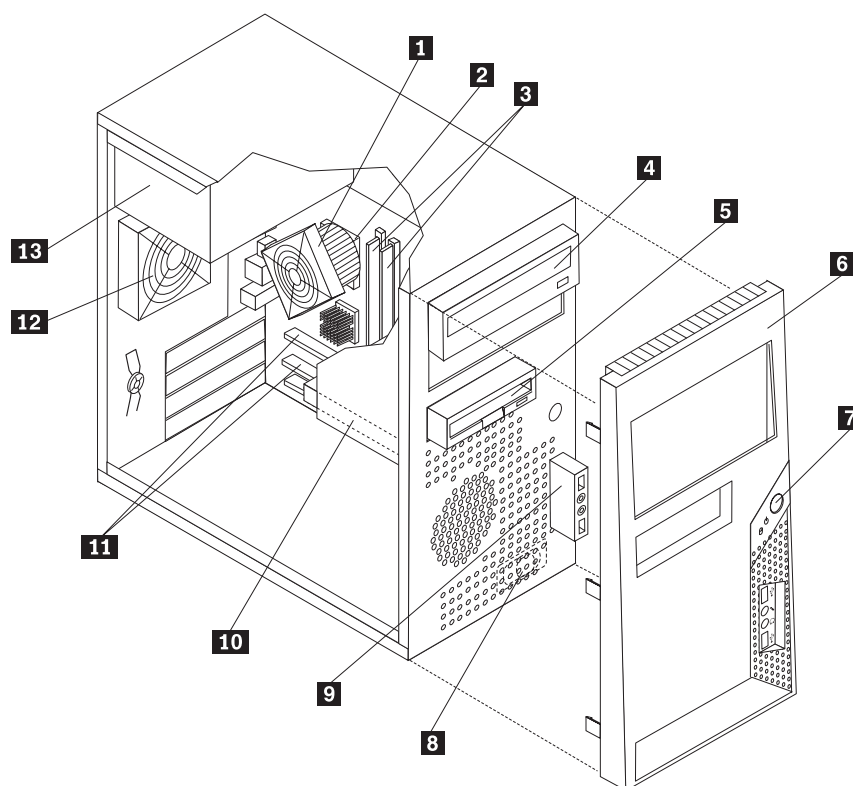
6074 Windows XP Pro Recovery CDs	FRU#	CRU
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

6074 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	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)	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
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

6074 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A2H A1G A4G)	45C4077	1
FR/CF (models A1G A4G)	45C4079	1
GR (models A1G A4G)	45C4080	1
SP/LA (models A1G A4G)	45C4081	1
BR (models)	45C4082	1
IT (models A1G A4G)	45C4083	1
JP (models)	45C4084	1
NO (models A1G A4G)	45C4085	1
SV (models A1G A4G)	45C4086	1

6074 Vista Business 32 Recovery DVDs	FRU#	CRU
DK (models A1G A4G)	45C4087	1
NL (models A1G A4G)	45C4088	1
CZ (models A1G A4G)	45C4089	1
FI (models A1G A4G)	45C4090	1
PL (models A1G A4G)	45C4091	1
RU (models A1G A4G)	45C4092	1
TR (models A1G A4G)	45C4093	1
HU (models A1G A4G)	45C4094	1
GK (models A1G A4G)	45C4095	1
PO (models A1G A4G)	45C4102	1
CS (models A3C)	45C4096	1
Traditional Chinese (models A2B)	45C4097	1
Traditional Chinese (models A2B)	45C4098	1
KR (models)	45C4099	1
SL (models A1G A4G)	45C4100	1
RE (models A1G A4G)	45C4078	1
Romanian (models A1G A4G)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A1G A4G)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A1G A4G)	45C4106	1

Machine Type 6075



Item #	6075 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A2B A2H A9M A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A3C AFU AFF AGU AGF AHU AHF B1B B1H B5A B5Q B5T B9A B9T BPS BPY BQU BQF BQS BQP BQL BQD BQY BQG BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BQE BQJ)	43C3833	N
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models BFG)	43C1693	N
2	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models A7S A7P A7D A7Y AAQ BSU BSF BTU BTF)	43C1967	N
2	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models A6S A6P A6D A6Y B3A B3Q B3T B7A B7T BBM BGU BGF BHU BHF BJU BJB BKS BKP BKY)	43C1968	N
2	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models A8S A8P A8P A8D A8A A1G A4U A4FAEU AEF B4A B4Q B4T BAM BMS BMY BNS BNP BNY BRU BRF)	43C2056	N
2	Microprocessor, Core 2 Duo E4500 Processor 2.2GHz 800MHz FSB 2M L2 (models B8A B8T)	43C6305	N
2	Microprocessor, Celeron 420 Processor 1.6GHz 800MHz FSB 512K L2 (models B2A B2Q B2T B6A B6T BCM)	43C3835	N
2	Microprocessor, Celeron 430 Processor 1.8GHz 800MHz FSB 512K L2 (models A6S A6P A6D A6Y)	43C1964	N
3	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models AAQ A6S A6P A6D A6Y B2A B2Q B2T B3A B3Q B3T)	41X4255	2

Item #	6075 FRUs	FRU#	CRU Tier
3	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A2B A2H A7S A7P A7D A7Y A8S A8P A8D A8Y A9M A1G A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A3C AEU AEF AFU AFF AGU AGF AHU AHF B1B B1H B4A B4Q B4T B5A B5Q B5T B6A B6T B7A B7T B8A B8T B9A B9T BAM BBM BCM BDG BFG BGU BGF BHU BHF BJU BJF BKS BKP BKY BMS BMY BNS BNP BNY BPS BPY BQU BQF BQS BQP BQL BQD BQY BQG BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BQE BQJ BGS BGP BGL BGD BGY BGG BGM BGA BGT BGC BGB BGH BGV BGK BGR BGE BGJ BRU BRF BSU BSF BTU BTF)	41X4256	2
4	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A2B A2H AAQ A8S A8P A8D A8Y A4U A4F A3C AHU AHF B2A B2Q B2T B3A B3Q B3T B5A B5Q B5T B6A B6T B7A B7T B9A B9T BAM BBM BCM BGU BGF BQU BQF BQS BQP BQL BQD BQY BQG BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BQE BQJ BGS BGP BGL BGD BGY BGG BGM BGA BGT BGC BGB BGH BGV BGK BGR BGE BGJ BRU BRF BSU BSF)	41N3325	2
4	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A9M A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J AGU AGF BDG BDG BKS BKP BKY BMS BMY BNS BNP BNY BPS BPY BHU BHF BTU BTF)	42Y9353	2
4	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A7S A7P A7D A7Y A1G AEU AEF AFU AFF B1B B1H B4A B4Q B4T B8A B8T BJU BJF BFG)	43C1042	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models A7S A7P A7D A7Y A3C BKS BKP BKY)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models A7S A7P A7D A7Y A3C BKS BKP BKY)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 80GB (7200RPM), Serial ATA (models AAQ A6S A6P A6D A6Y A7S A7P S7D S7Y A9M A4U A4F A5U A5F A5S A5P A5D A5L A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J B2A B2Q B2T B3A B3Q B3T B6A B6T BAM BBM BCM BGU BGF BHU BHF BQU BQF BQS BQP BQL BQD BQY BQG BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BQE BQJ BSU BSF BRU BRF BTU BTF)	40Y9034	2
10	Hard disk drive, 160GB (7200RPM), Serial ATA (models A2B A2H A8S A8P A8D A8Y A3C B4A B4Q B4T B5A B5Q B5T B7A B7T B8A B8T B9A B9T BKS BKP BKY BMS BMY BNS BNP BNY BPS BPY)	40Y9035	2
10	Hard disk drive, 250GB (7200RPM), Serial ATA (models A1G B1B B1H BDG BFG)	40Y9036	2
10	Hard disk drive, 320GB (7200RPM), Serial ATA (models BJU BJF)	87H4891	2
11	System board , Saturn non AMT (GA) (models A2B A2H AAQ A6S A6P A6D A6Y A7S A7P A7D A7Y A8S A8P A8D A8A A9M A1G A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A3C AEU AEF AFU AFF AGU AGF AHU AHF B1B B1H B2A B2Q B2T B3A B3Q B3T B4A B4Q B4T B5A B5Q B5T B6A B6T B7A B7T B8A B8T B9A B9T BAM BBM BCM BDG BFG BGU BGF BHU BHF BJU BJF BKS BKP BKY BMS BMY BNS BNP BNY BPS BPY BQU BQF BQS BQP BQL BQD BQY BQG BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BQE BQJ BGS BGP BGL BGD BGY BGG BGM BGA BGT BGC BGB BGH BGV BGK BGR BGE BGJ BRU BRF BSU BSF BTU BTF)	87H5129	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6269	2

Item #	6075 FRUs	FRU#	CRU Tier
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models B1B B1H B2A B2Q B2T B3A B3Q B3T B4A B4Q B4T B5A B5Q B5T B6A B6T B7A B7T B8A B8T B9A B9T BAM BBM BCM BDG BFG BGU BGF BHU BHF BJU BJF BKS BKP BKY BMS BMY BNS BNP BNY BPS BPY BQU BQF BQS BQP BQL BQD BQY BQQ BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BGS BGP BGL BGD BGY BGG BGM BGA BGT BGC BGB BGH BGV BGK BGR BGE BGJ BRU BRF BSU BSF BTU BTF)	41A9684	2
13	Power supply, 310 Watt ATX Power Supply - Standard, Robust, JP (models BQJ BGJ)	41A9726	2
13	Power supply, 280 Watt ATX Power Supply (80plus) - Standard, Robust, JP (models B1B B1H B2A B2Q B2T B3A B3Q B3T B4A B4Q B4T B5A B5Q B5T B6A B6T B7A B7T B8A B8T B9A B9T BAM BBM BCM BDG BFG BGU BGF BHU BHF BJU BJF BKS BKP BKY BMS BMY BNS BNP BNY BPS BPY BQU BQF BQS BQP BQL BQD BQY BQQ BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BQE BQJ)	41A9665	2

The FRUs listed in the following tables are not illustrated.

6075 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

6075 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A2H AAQ A9M A1G A4U A5U A5M A5G A5A A5Q A5H A5R A5E AEU AFU AGU AHU BGU BHU BJU BQU BDG BFG BQG BAM BBM BCM BQM B2A B2Q B3A B3Q B3T B4A B4Q B5A B5Q B6A B7A B8A B9A BQA BQQ B1H BQH BQR BQE BGG BGM BGA BGQ BGH BGR BGE C1U C2U C3U BRU BSU BTU)	41A5289	1
Arabic (models A1G A5G BDG BFG)	41A5290	1
Belgian/French (models A1G A5G BDG BFG)	41A5292	1

6075 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Belgian/UK (models A1G A5G BDG BFG)	41A5293	1
Brazilian (models A6P A7P A8P A5P BNP BQP BKP)	41A5294	1
Bulgarian (models A1G A5G BDG BFG)	41A5295	1
Chinese/US (models A2B A5B A5V B1B BQB BQV)	41A5296	1
Czech (models A1G A5G BDG BFG)	41A5297	1
Danish (models A1G A5G BDG BFG)	41A5298	1
Dutch (models A1G A5G BDG BFG)	41A5299	1
French (models A1G A5G BDG BFG)	41A5300	1
French Canadian 445 (models A4F A5F AEF AGF AHF BGF BHF BJF BQF BGF BRF BSF BTF)	41A5301	1
French Canadian 58 (models A4F A5F AEF AGF AHF BGF BHF BJF BQF BGF BRF BSF BTF)	41A5302	1
German (models A1G A5G BDG BFG)	41A5303	1
Greek (models A1G A5G BDG BFG)	41A5304	1
Hebrew (models A1G A5G BDG BFG)	41A5306	1
Hungarian (models A1G A5G BDG BFG)	41A5307	1
Iceland (models A1G A5G BDG BFG)	41A5308	1
Italian 141 (models A1G A5G BDG BFG)	41A5309	1
Japanese (models A5J BQJ)	41A5310	1
Korean (models A5K BQK)	41A5311	1
LA Spanish (models A6S A6D A6Y A7S A7D A7Y A8S A8D A8Y BKS BMS BNS BPS BQS BQD BKY BMY BNY BPY BQY)	41A5312	1
Norwegian (models A1G A5G BDG BFG)	41A5313	1
Polish (models A1G A5G BDG BFG)	41A5314	1
Portuguese (models A1G A5G BDG BFG)	41A5315	1
Romanian 096 (models A1G A5G BDG BFG)	41A5317	1
Romanian 446 (models A1G A5G BDG BFG)	41A5316	1
Russian/Cyrillic (models A1G A5G BDG BFG)	41A5318	1
Serbian/Cyrillic (models A1G A5G BDG BFG)	41A5319	1
Slovak (models A1G A5G BDG BFG)	41A5320	1
Spanish (models A1G A5G BDG BFG)	41A5321	1
Swedish/Finn (models A1G A5G BDG BFG)	41A5322	1
Swiss (models A1G A5G BDG BFG)	41A5323	1
Thailand (models A5T B2T B3T B4T B5T B6T B7T B8T B9T BQT)	41A5324	1
Turkish 440 (models A1G A5G BDG BFG)	41A5325	1
Turkish 179 (models A1G A5G BDG BFG)	41A5326	1
UK English (models A1G A5G BDG BFG)	41A5327	1
US Euro (models A1G A5G BDG BFG)	41A5328	1
Slovenian (models A1G A5G BDG BFG)	41A5329	1

6075 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A2B A2H AAQ A6S A6P A6D A6Y A7S A7P A7D A7Y A8S A8P A8D A8Y A9M A1G A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A3C AEU AEF AFU AFFAGU AGF AHU AHF B1B B1H B2A B2Q B2T B3A B3Q B3T B4A B4Q B4T B5A B5Q B5T B6A B6T B7A B7T B8A B8T B9A B9T BAM BBM BCM BDG BFG BGU BGF BHU BHF BJU BJB BKS BKP BKY BMS BMY BNS BNP BNY BPS BPY BQU BQF BQS BQP BQL BQD BQY BQG BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BQE BQJ BRU BRF BSU BSF BTU BTF)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A2B A2H AAQ A6S A6P A6D A6Y A7S A7P A7D A7Y A8S A8P A8D A8Y A9M A1G A4U A4F A5U A5F A5S A5P A5L A5D A5Y A5G A5M A5A A5Q A5T A5C A5B A5H A5V A5K A5R A5E A5J A3C AEU AEF AFU AFFAGU AGF AHU AHF B1B B1H B2A B2Q B2T B3A B3Q B3T B4A B4Q B4T B5A B5Q B5T B6A B6T B7A B7T B8A B8T B9A B9T BAM BBM BCM BDG BFG BGU BGF BHU BHF BJU BJB BKS BKP BKY BMS BMY BNS BNP BNY BPS BPY BQU BQF BQS BQP BQL BQD BQY BQG BQM BQA BQQ BQT BQC BQB BQH BQV BQK BQR BQE BQJ BRU BRF BSU BSF BTU BTF)	41U3030	1

6075 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A4U A5U AEU AFU AGU AHU A7D A8D A5D A5A BGU BJU BHU BKS BMS BNS BPS BQS B2A B3A B4A B5A B6A B7A B8A B9A BQA BRU BSU BTU)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A6Y A7Y A8Y A5Y BQD BKY BMY BNY BPYBQY)	89P8575	1
Speaker Power brick - China, Thailand (models A5T A5C B2T B3T B4T B5T B6T B7T B8T B9T BQT BQC)	89P8581	1
Speaker Power brick - Japan (models A5E A5J BQE BQJ)	89P8577	1
Speaker Power brick - Brazil (models A6P A7P A8P A5P BKP BMP BNP BPP BQP)	89P8583	1
Speaker Power brick - ANZ (models A9M A5M BAM BBM BCM BQM)	89P8579	1
Speaker Brick - Korea (models A5K A5R BQK BQR)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A5B A2H A5H B1B B1H BQB BQH)	89P8573	1
Speaker Brick - Taiwan (models A5V BQV)	41A4905	1
Speaker Power brick - India, South Africa (models A5Q AAQ B2Q B3Q B4Q B5Q BQQ)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

6075 Power Cords	FRU#	CRU
Power cord - US (models A6S A6D A7S A7D A8S A8D A4U A4F A5U A5F A5A A5T ABU ABF AEU AEF AFF AFU AGU AGF AHF AHU BGU BGF BHU BHF BJU BJB BKS BMS BPS BQS BQD BQL B2A B3A B4A B5A B6A B7A B8A B9A BQA B2T B3T B4T B5T B6T B7T B8T B9T BQT BRU BRF BSU BSF BTU BTF)	39M5080	1
Power cord - China (models A5C A3C BQC)	39M5205	1
Power cord - Japan (models A5E A5J BQE BQJ)	39M5193	1
Power cord - Brazil (models A6P A7P A8P A5P BKP BNP BQP)	39M5232	1
Power cord - LA High Volt APU) (models A6Y A7Y A8Y A5L BQL BKY BMY BNY BPY BQY)	39M5067	1
Power cord - Australia / New Zealand (models A9M A5M BAM BBM BCM BQM)	39M5102	1
Power cord - Korea (models A5K A5R BQK BQR)	39M5212	1
Power cord - Hong Kong (models A2B A2H A5B A5H B1B B1H BQB BQH)	39M5151	1

6075 Power Cords	FRU#	CRU
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1G A5G A5A BDG BFG B2A B3A B4A B5A B6A B7A B8A B9A BQA)	39M5150	1
Power cord - Taiwan (models A5V BQV)	39M5246	1
Power cord - Italy (models A6S A6Y A7S A7Y A8S A8Y A1G A5S A5L A5G BKS BMS BPS BQS BKY BMY BNY BPY BQY BQL BDG BFG)	39M5164	1
Power cord - G models (models A5A B2A B3A B4A B5A B6A B7A B8A B9A BQA)	39M5122	1
Power cord - Denmark (models A1G A5G BDG BFG)	39M5129	1
Power cord - Switzerland (models A1G A5G BDG BFG)	39M5157	1
Power cord - Israel (models A1G A5G BDG BFG)	39M5171	1
Power cord - South Africa (models A9M A1G A5G A5M A5A BDG BFG BAM BBM BCM BQM B2A B3A B4A B5A B6A B7A B8A B9A BQA)	39M5143	1
Power cord - India (models AAQ A5Q B2Q B3Q B4Q B5Q BQQ)	39M5004	1

6075 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models B2A B2Q B3A B3Q B4A B4Q B5A B5Q BAM BBM BCM A2H A9M AAQ A1G A4U A5U A5G A5M A5A A5Q A5H A5R A5E AEU AFU AGU AHU B1H BGU BHU BJU BQU BDG BFG BQG BGU BHU BJU BFG BRU BSU BTU)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A4F A5F A1G A5G AEF AGF AHF BDG BFG BQG BGF BJF BHF BFG BRF BSF BTF)	45C4192	1
GR (models A1G A5G BDG BFG BQG BFG)	45C4193	1
SP/LA (models A7S A7D A7Y BKS BKP BKY BMS BMY BPA BFG BPY)	45C4194	1
IT (models A1G A5G BDG BFG BQG BFG)	45C4196	1
BR (models A7P A8P A5P A6P A7P BQP)	45C4195	1
SV (models A1G A5G BDG BFG BQG BFG)	45C4199	1
DK (models A1G A5G BDG BFG BQG BFG)	45C4200	1
FI (models A1G A5G BDG BFG BQG BFG)	45C4203	1
NO (models A1G A5G BDG BFG BQG BFG)	45C4198	1
NL (models A1G A5G BDG BFG BQG BFG)	45C4201	1
Korean (models A5K BQK)	45C4214	1
Simplified Chinese (models A3C BQC)	45C4211	1
Taiwan-TC (models A5V BQV)	45C4212	1
Hong Kong-TC (models A2B A5B B1B BQB)	45C4213	1
Japanese (models A5J BQJ)	45C4197	1
HE (models)	45C4204	1
PL (models A1G A5G BDG BFG BQG BFG)	45C4205	1
CZ (models A1G A5G BDG BFG BQG BFG)	45C4202	1
AE (models A1G A5G BDG BFG BQG BFG)	45C4206	1
RU (models A1G A5G BDG BFG BQG BFG)	45C4207	1
TR (models A1G A5G BDG BFG BQG BFG)	45C4208	1
HU (models A1G A5G BDG BFG BQG BFG)	45C4209	1
PO (models A1G A5G BDG BFG BQG BFG)	45C4217	1

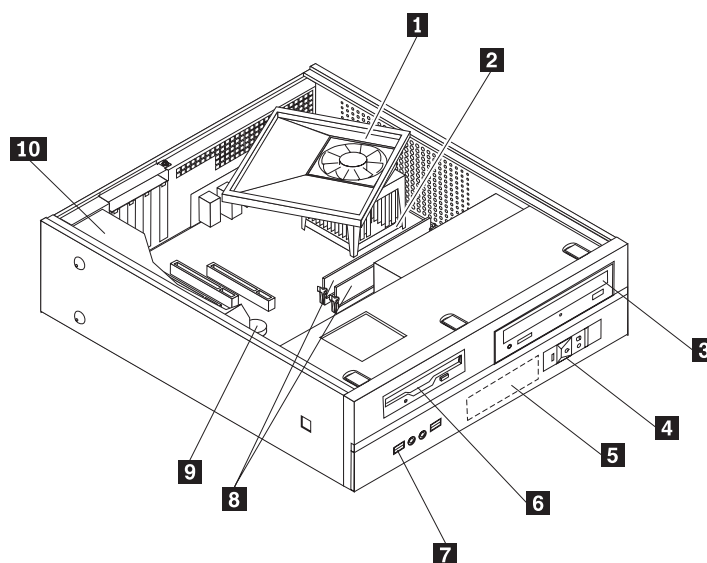
6075 Windows XP Pro Recovery CDs	FRU#	CRU
GK (models A1G A5G BDG BFG BQG BFG)	45C4210	1
SL (models A1G A5G BDG BFG BQG BFG)	45C4215	1

6075 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models B6A B7A B8A B9A)	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)	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
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)	45C4185	1
SL (models)	45C4186	1
RE (models)	45C4164	1

6075 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A2H A9M AAQ A1G A4U A5U A5G A5M A5A A5Q A5H A5R A5E AEU AFU AGU AHU B1H BGU BHU BJU BQU BDG BFG BQG BQU BHU BJU)	45C4077	1
FR/CF (models A4F A5F A1G A5G AEF AGF AHF BDG BFG BQG BGF BJF BHF)	45C4079	1
GR (models A1G A5G BDG BFG BQG)	45C4080	1
SP/LA (models A1G A5G BDG BFG BQG BQS BQY BQD)	45C4081	1
BR (models A8P A5P A6P A7P BQP)	45C4082	1
IT (models A1G A5G A1G A5G BDG BFG BQG)	45C4083	1
JP (models A5J BQJ)	45C4084	1
NO (models A1G A5G BDG BFG BQG)	45C4085	1
SV (models A1G A5G BDG BFG BQG)	45C4086	1

6075 Vista Business 32 Recovery DVDs	FRU#	CRU
DK (models A1G A5G BDG BFG BQG)	45C4087	1
NL (models A1G A5G BDG BFG BQG)	45C4088	1
CZ (models A1G A5G BDG BFG BQG)	45C4089	1
FI (models A1G A5G BDG BFG BQG)	45C4090	1
PL (models A1G A5G BDG BFG BQG)	45C4091	1
RU (models A1G A5G BDG BFG BQG)	45C4092	1
TR (models A1G A5G BDG BFG BQG)	45C4093	1
HU (models A1G A5G BDG BFG BQG)	45C4094	1
GK (models A1G A5G BDG BFG BQG)	45C4095	1
PO (models A1G A5G BDG BFG BQG)	45C4102	1
CS (models A3C BQC)	45C4096	1
Traditional Chinese (models A5V BQV)	45C4097	1
Traditional Chinese (models A5V BQV)	45C4098	1
KR (models A5K BQK)	45C4099	1
SL (models A1G A5G BDG BFG BQG)	45C4100	1
RE (models A1G A5G BDG BFG BQG)	45C4078	1
Romanian (models A1G A5G BDG BFG BQG)	45C4101	1
Sebian-Latin (models A1G A5G BDG BFG BQG)	45C4103	1
Slovakian (models A1G A5G BDG BFG BQG)	45C4104	1
Arabic Localized (models A1G A5G BDG BFG BQG)	45C4105	1
Hebrew (models A1G A5G BDG BFG BQG)	45C4106	1

Machine Type 6079



Item #	6079 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models)	43C3833	N
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models)	43C1693	N
2	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models)	43C1967	N
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models)	41N3325	2
3	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models)	43C1042	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models)	40Y9035	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9107	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9113	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models)	41X4256	2
9	System board, Saturn non AMT(GA) (models)	87H5129	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models)	41A9701	2

The FRUs listed in the following tables are not illustrated.

6079 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2

6079 FRUs	FRU#	CRU
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

6079 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 A2B)	41A5296	1
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	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

6079 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Spanish (models)	41A5321	1
Swedish/Finn (models)	41A5322	1
Swiss (models)	41A5323	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

6079 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models)	41U3030	1

6079 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	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 Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

6079 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

6079 Power Cords	FRU#	CRU
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

6079 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
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

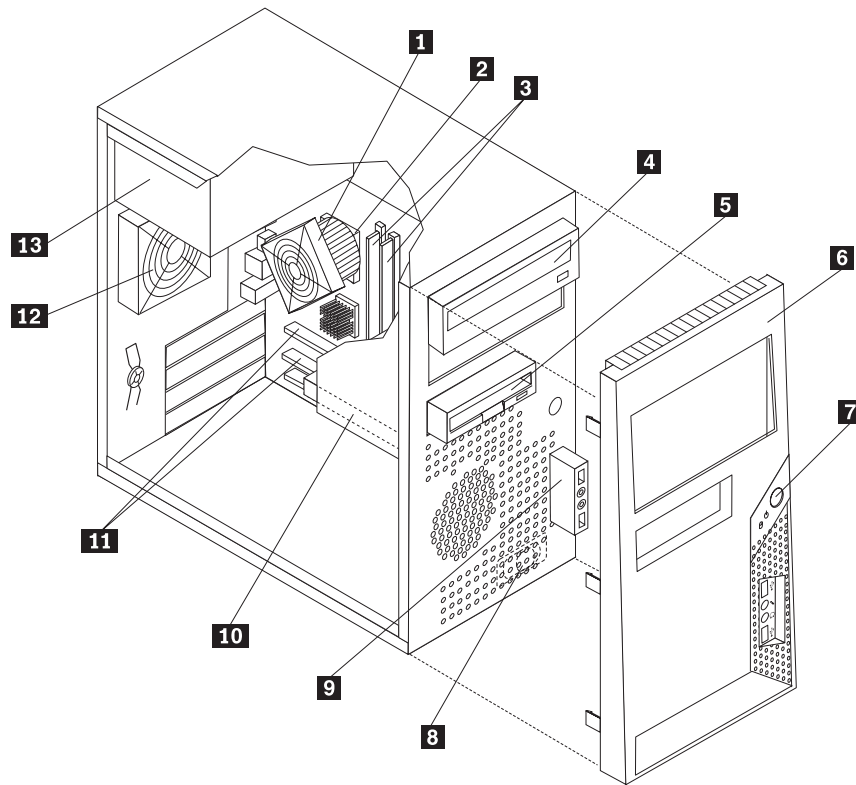
6079 Windows XP Pro Recovery CDs	FRU#	CRU
SL (models)	45C4215	1

6079 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	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)	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
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)	45C4185	1
SL (models)	45C4186	1
RE (models)	45C4164	1

6079 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

6079 Vista Business 32 Recovery DVDs	FRU#	CRU
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
Hebrew (models)	45C4106	1

Machine Type 6081



Item #	6081 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	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
3	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
4	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
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	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	2
11	System board , Saturn non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	87H5129	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6269	2

Item #	6081 FRUs	FRU#	CRU Tier
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J)	41A9684	2
13	Power supply, 310 Watt ATX Power Supply - Standard, Robust, JP (models A1Q A1C A1B A1H A1V)	41A9726	2

The FRUs listed in the following tables are not illustrated.

6081 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHS) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

6081 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

6081 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
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

6081 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

6081 Adapters and miscellaneous FRUs	FRU#	CRU
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 - ANZ (models A1M)	89P8579	1

6081 Adapters and miscellaneous FRUs	FRU#	CRU
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
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

6081 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 A 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

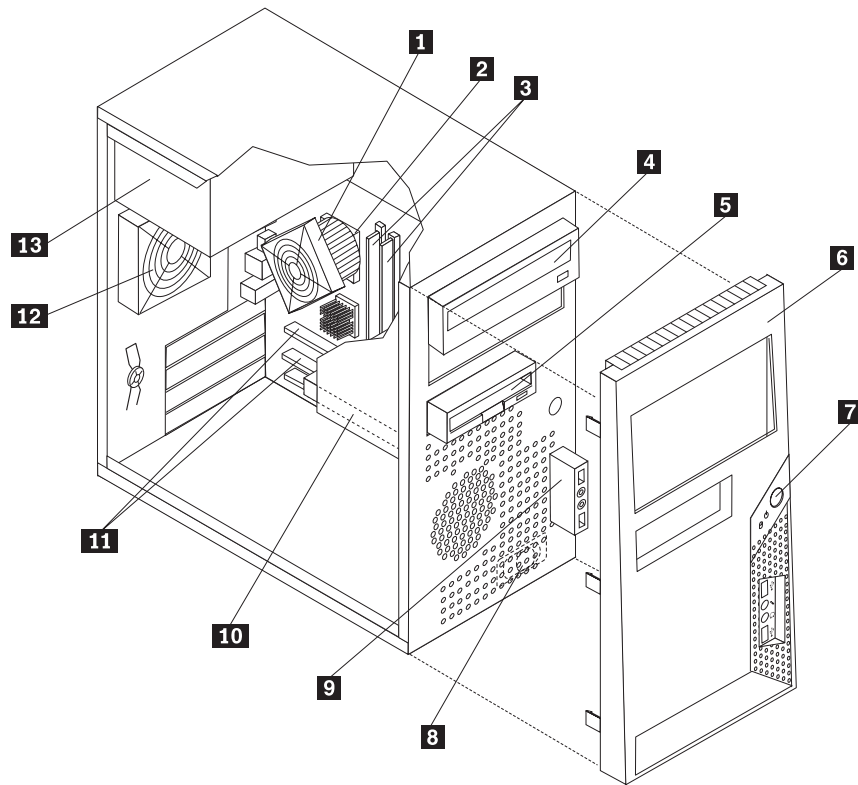
6081 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A1U A1F A1G A1M A1A A1Q A1H A1R A1E)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A1G)	45C4192	1
GR (models A1G)	45C4193	1
SP/LA (models A1G)	45C4194	1
IT (models A1G)	45C4196	1
BR (models A1P)	45C4195	1
SV (models A1G)	45C4199	1
DK (models A1G)	45C4200	1
FI (models A1G)	45C4203	1
NO (models A1G)	45C4198	1
NL (models A1G)	45C4201	1
Korean (models A1K)	45C4214	1
Simplified Chinese (models A1G)	45C4211	1
Taiwan-TC (models A1V)	45C4212	1

6081 Windows XP Pro Recovery CDs	FRU#	CRU
Hong Kong-TC (models A1B)	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

6081 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 A1F)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models 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 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)	45C4078	1
Romanian (models)	45C4101	1
Sebian-Latin (models)	45C4103	1

6081 Vista Business 32 Recovery DVDs	FRU#	CRU
Slovakian (models)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models)	45C4106	1

Machine Type 6086



Item #	6086 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	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 A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2R A2E A2J)	43C3833	N
2	Microprocessor, Core 2 Duo E2160 Processor 1.8GHz 800MHz FSB 1M L2 (models A3U A3F A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	43C1968	N
3	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 A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2R A2E A2J A3U A3F A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	41X4256	2
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2R A2E A2J A3U A3F A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	41N3325	2
4	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
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9107	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9113	2
6	Bezel assembly (all models)	41N8052	2

Item #	6086 FRUs	FRU#	CRU Tier
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	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 A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2R A2E A2J A3U A3F A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	40Y9034	2
11	System board , Saturn non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2R A2E A2J A3U A3F A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	87H5129	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6046	2
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2R A2E A2J A3U A3F A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	41A9684	2
13	Power supply, 310 Watt ATX Power Supply - Standard, Robust, JP (models A1J A2J A3J)	41A9726	2

The FRUs listed in the following tables are not illustrated.

6086 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

6086 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q Q1H A1R A1E A2U A2G A2M A2A A2Q A2H A2R A2E A3U A3G A3M A3A A3Q A3H A3R A3E)	41A5289	1
Arabic (models A1G A2G A3G)	41A5290	1
Belgian/French (models A1G A2G A3G)	41A5292	1
Belgian/UK (models A1G A2G A3G)	41A5293	1
Brazilian (models A1P A2P A3P)	41A5294	1
Bulgarian (models A1G A2G A3G)	41A5295	1
Chinese/US (models A1G A2G A3G)	41A5296	1
Czech (models A1G A2G A3G)	41A5297	1
Danish (models A1G A2G A3G)	41A5298	1
Dutch (models A1G A2G A3G)	41A5299	1
French (models A1G A2G A3G)	41A5300	1
French Canadian 445 (models A1F A2F A3F)	41A5301	1
French Canadian 58 (models A1F A2F A3F)	41A5302	1
German (models A1G A2G A3G)	41A5303	1
Greek (models A1G A2G A3G)	41A5304	1
Hebrew (models A1G A2G A3G)	41A5306	1
Hungarian (models A1G A2G A3G)	41A5307	1
Iceland (models A1G A2G A3G)	41A5308	1
Italian 141 (models A1G A2G A3G)	41A5309	1
Japanese (models A1J A2J A3J)	41A5310	1
Korean (models A1K A2K A3K)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y A3S A3D A3Y)	41A5312	1
Norwegian (models A1G A2G A3G)	41A5313	1
Polish (models A1G A2G A3G)	41A5314	1
Portuguese (models A1G A2G A3G)	41A5315	1
Romanian 446 (models A1G A2G A3G)	41A5316	1
Romanian 096 (models A1G A2G A3G)	41A5317	1
Russian/Cyrillic (models A1G A2G A3G)	41A5318	1
Serbian/Cyrillic (models A1G A2G A3G)	41A5319	1
Slovak (models A1G A2G A3G)	41A5320	1
Spanish (models A1G A2G A3G)	41A5321	1
Swedish/Finn (models A1G A2G A3G)	41A5322	1
Swiss (models A1G A2G A3G)	41A5323	1
Thailand (models A1T A2T A3T)	41A5324	1
Turkish 440 (models A1G A2G A3G)	41A5325	1
Turkish 179 (models A1G A2G A3G)	41A5326	1
UK English (models A1G A2G A3G)	41A5327	1
US Euro (models A5G A7G)	41A5328	1
Slovenian (models A1G A2G A3G)	41A5329	1

6086 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 A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2R A2E A2J A3U A3F A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	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 A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2R A2E A2J A3U A3F A3P A3D A3Y A3G A3M A3A A3Q A3T A3C A3B A3H A3V A3K A3R A3E A3J)	41U3030	1

6086 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1S A2U A2S A3U A3S)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A1D A2D A3D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T A2C A2T A3C A3T)	89P8581	1
Speaker Power brick - Japan (models A1J A2J A3J)	89P8577	1
Speaker Power brick - ANZ (models A1M A2M A3M)	89P8579	1
Speaker Brick - Korea (models A1K A2K A3K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H A1G A2B A2H A2G A3B A3H A3G)	89P8573	1
Speaker Brick - Taiwan (models A1V A2V A3V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q A2Q A3Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

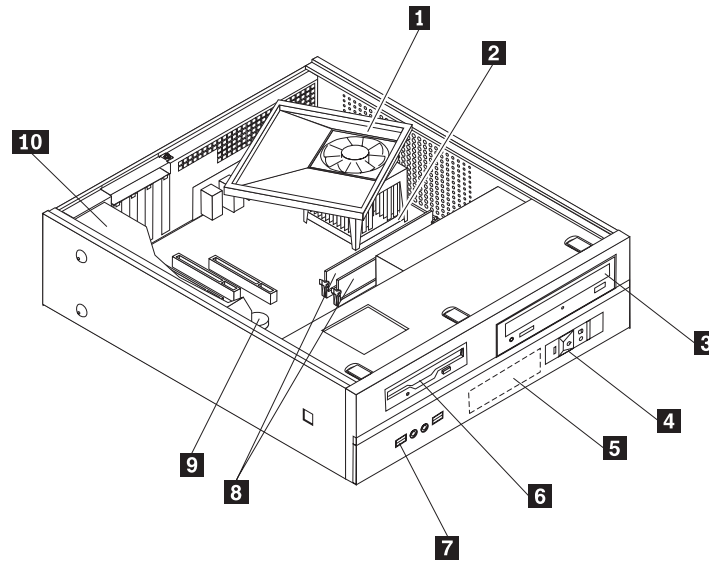
6086 Power Cords	FRU#	CRU
Power cord - US (models A1U A1F A1S A1D A1L A1A A1T A2U A2F A2S A2D A2L A2A A2T A3U A3F A3S A3D A3L A3A A3T)	39M5080	1
Power cord - China (models A1C A2C A3C)	39M5205	1
Power cord - Japan (models A1E A1J A2E A2J A3E A3J)	39M5193	1
Power cord - Brazil (models A1P A2P A3P)	39M5232	1
Power cord - LA High Volt APU) (models A1Y A1L A2Y A2L A3Y A3L)	39M5067	1
Power cord - Australia / New Zealand (models A1M A2M A3M)	39M5102	1
Power cord - Korea (models A1K A1R A2K A2R A3K A3R)	39M5212	1
Power cord - Hong Kong (models A1B A1H A2B A2H A3B A3H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1G A1A A2G A2A A3G A3A)	39M5150	1
Power cord - Taiwan (models A1V A2V A3V)	39M5246	1
Power cord - Italy (models A1S A1Y A1L A1G A2S A2Y A2L A2G A3S A3Y A3L A3G)	39M5164	1
Power cord - G models (models A1A A2A A3A)	39M5122	1
Power cord - Denmark (models A1G A2G A3G)	39M5129	1
Power cord - Switzerland (models A1Y A1L A2Y A2L A3Y A3L)	39M5157	1
Power cord - Israel (models A1G A2G A3G)	39M5171	1
Power cord - South Africa (models A1G A1M A1A A2G A2M A2A A3G A3M A3A)	39M5143	1
Power cord - India (models A1Q A2Q A3Q)	39M5004	1

6086 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
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

6086 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

6086 Vista Business 32 Recovery DVDs	FRU#	CRU
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
Hebrew (models)	45C4106	1

Machine Type 9012



Item #	9012 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A3Q A1K)	43C3833	N
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A2K)	43C1693	N
3	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A1K)	43C1042	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A3Q A2K)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models A3Q A2K)	40Y9035	2
5	Hard disk drive, 250GB (7200RPM), Serial ATA (models A1K)	40Y9036	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9107	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A3Q A1K A2K)	41X4256	2
9	System board, Saturn AMT (GA) (models A3Q A1K A2K)	43C2297	N
10	280 Watt DT Power Supply -Standard, Robust, JP (models A3Q A1K A2K)	41A9705	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models A3Q A1K A2K)	41A9701	2

The FRUs listed in the following tables are not illustrated.

9012 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2
Fan duct assembly (all models)	41R4808	2

9012 FRUs	FRU#	CRU
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

9012 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A3Q)	41A5289	1
Korean (models A1K A2K)	41A5311	1

9012 Keyboards (Preferred Pro Fingerprint Reader USB)	FRU#	CRU
Korean (models A2K)	41A5270	1

9012 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models A3Q A1K A2K)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models A3Q A1K A2K)	41U3030	1

9012 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Brick - Korea (models A1K A2K)	41A4903	1
Speaker Power brick - India, South Africa (models A3Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9012 Power Cords	FRU#	CRU
Power cord - US (models A3Q)	39M5080	1
Power cord - Korea (models A1K A2K)	39M5212	1

9012 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A3Q)	45C4191	1
RE (models)	45C4216	1
FR/CF (models)	45C4192	1
GR (models)	45C4193	1

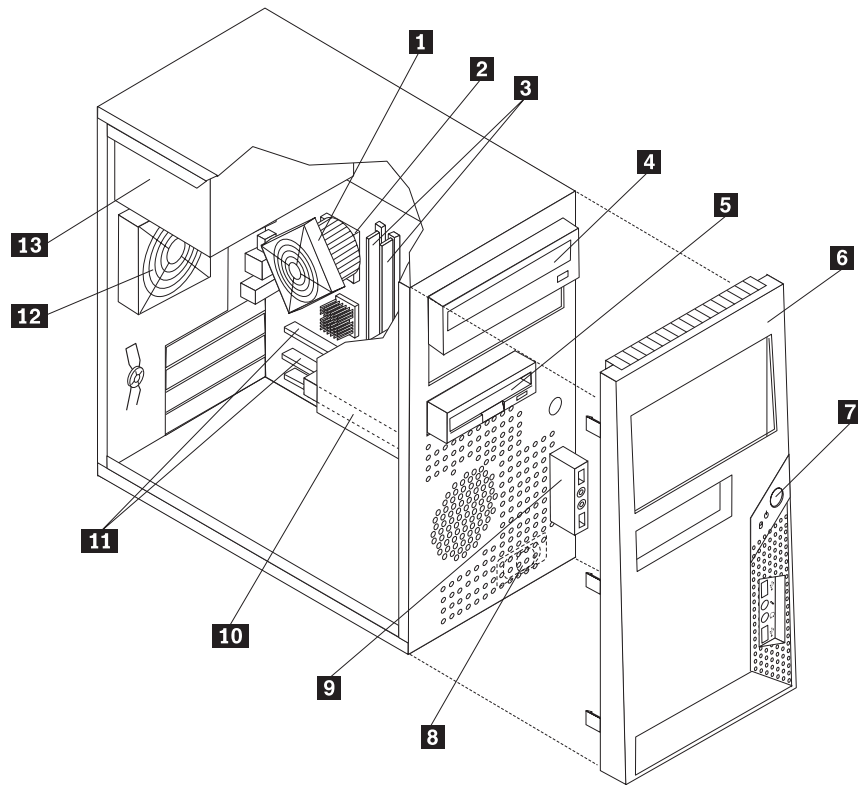
9012 Windows XP Pro Recovery CDs	FRU#	CRU
SP/LA (models)	45C4194	1
IT (models)	45C4196	1
BR (models)	45C4195	1
SV (models)	45C4199	1
DK (models)	45C4200	1
FI (models)	45C4203	1
NO (models)	45C4198	1
NL (models)	45C4201	1
Korean (models A2K)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	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

9012 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	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)	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
TR (models)	45C4179	1

9012 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
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

9012 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A3Q)	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
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 A2K)	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 9013



Item #	9013 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A3A A3Q A3T A1K)	43C3833	N
2	Microprocessor, Core 2 Duo E6850 Processor 3GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A4V)	43C1694	N
3	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A3A A3Q A3T A1K A4V)	41X4256	2
4	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A3A A3Q A3T A1K)	42Y9353	2
4	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A4V)	43C1042	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9107	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9113	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 80GB (7200RPM), Serial ATA (models A3A A3Q A3T)	40Y9034	2
10	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1K A4V)	40Y9035	2
11	System board , Saturn AMT (GA) (models A3A A3Q A3T A1K A4V)	43C2297	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6046	2

Item #	9013 FRUs	FRU#	CRU Tier
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models A3A A3T A1K A2K A3Q)	41A9684	2

The FRUs listed in the following tables are not illustrated.

9013 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHS) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

9013 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A3A A3Q)	41A5289	1
Korean (models A1K)	41A5311	1
Thailand (models A3T)	41A5324	1

9013 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A3A A3Q A3T A1K A4V)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A3A A3Q A3T A1K A4V)	41U3030	1

9013 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A2A)	89P8571	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Brick - Taiwan (models A4V)	41A4905	1
Speaker Power brick - India, South Africa (models A3Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9013 Power Cords	FRU#	CRU
Power cord - US (models A3A A3T)	39M5080	1
Power cord - Korea (models A1K)	39M5212	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A3A)	39M5150	1
Power cord - Taiwan (models A4V)	39M5246	1
Power cord - G models (models A3A)	39M5122	1
Power cord - South Africa (models A3A)	39M5143	1
Power cord - India (models A3Q)	39M5004	1

9013 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A3A A3Q)	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
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

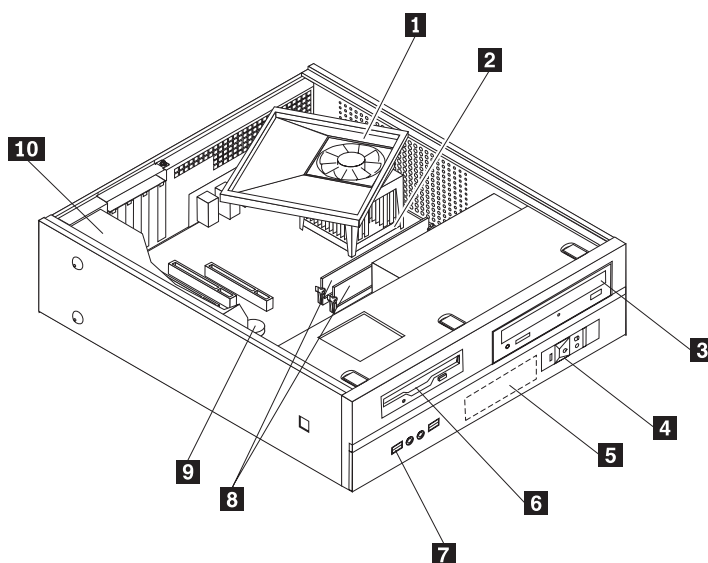
9013 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	45C4163	1
FR/CF (models)	45C4165	1
GR (models)	45C4166	1

9013 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
SP/LA (models)	45C4167	1
BR (models)	45C4168	1
IT (models)	45C4169	1
JP (models)	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
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

9013 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A3A A3Q)	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
HU (models)	45C4094	1

9013 Vista Business 32 Recovery DVDs	FRU#	CRU
GK (models)	45C4095	1
PO (models)	45C4102	1
CS (models)	45C4096	1
Traditional Chinese (models A4V)	45C4097	1
Traditional Chinese (models A4V)	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 9018



Item #	9018 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A1V)	43C1694	N
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models)	41N3325	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1V)	40Y9035	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9107	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A1V)	41X4255	2
9	System board , Saturn AMT (GA) (models A1V)	43C2297	N
10	280 Watt DT Power Supply -Standard, Robust, JP (models A1V)	41A9705	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models A1V)	41A9701	2

The FRUs listed in the following tables are not illustrated.

9018 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1

9018 FRUs	FRU#	CRU
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

9018 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 A1V)	41A5296	1
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	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
Japanese (models)	41A5310	1
Korean (models)	41A5311	1
Italian 141 (models)	41A5309	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

9018 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
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

9018 Keyboards (Preferred Pro Fingerprint Reader USB)	FRU#	CRU
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
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
Polish (models)	41A5273	1
Portuguese (models)	41A5274	1
Romanian 096 (models)	41A5275	1
Romanian 446 (models)	41A5276	1
Russian/Cyrillic (models)	41A5277	1

9018 Keyboards (Preferred Pro Fingerprint Reader USB)	FRU#	CRU
Serbian/Cyrillic (models)	41A5278	1
Slovak (models)	41A5279	1
Spanish (models)	41A5280	1
Swedish/Finn (models)	41A5281	1
Swiss (models)	41A5282	1
Swiss (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

9018 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models)	41U3030	1
PS/2 2 Button Ball Mouse (models)	41R0018	1

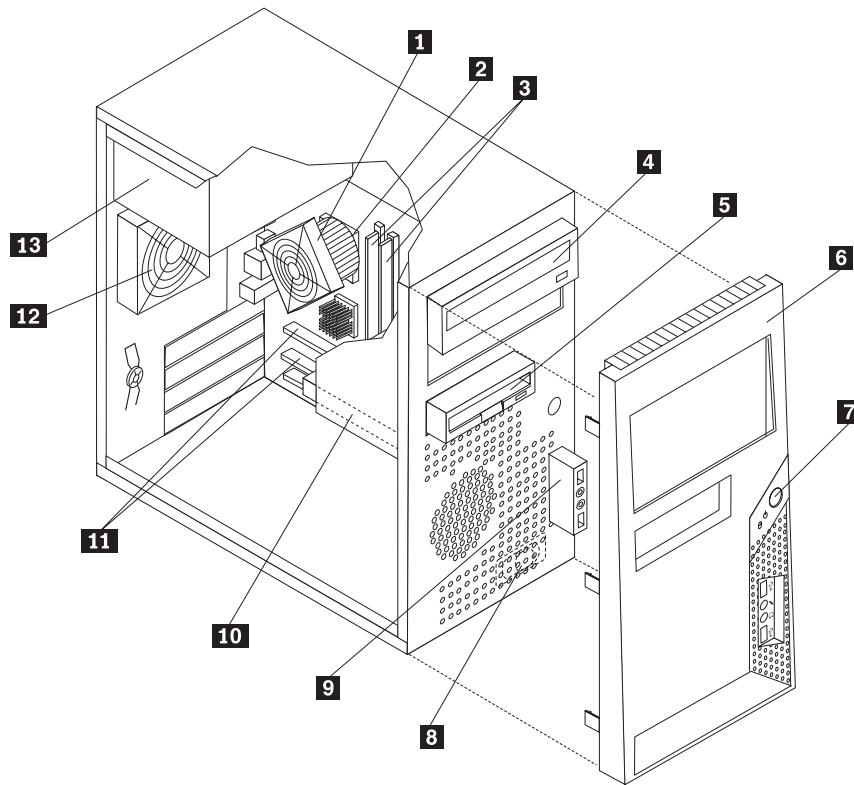
9018 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	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 Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9018 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

9018 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
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 A1V)	45C4098	1

9018 Vista Business 32 Recovery DVDs	FRU#	CRU
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 9019



Item #	9019 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	Microprocessor, Core 2 Duo E6850 Processor 3GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A1V)	43C1694	N
3	Memory module, 512 MB PC2-6400 (800MHz) DDR2 SDRAM (models A1V)	41X1079	2
4	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A1V)	41N3325	2
5	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models A1V)	40Y9107	2
5	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models A1V)	40Y9105	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1V)	40Y9035	2
11	System board , Saturn AMT (GA) (models A1V)	43C2297	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6046	2
13	Power supply, 280 Watt ATX Power Supply (80plus) - Standard, Robust, JP (models A1V)	41A9684	2

The FRUs listed in the following tables are not illustrated.

9019 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2

9019 FRUs	FRU#	CRU Tier
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

9019 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Chinese/US (models A1V)	41A5296	1

9019 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A1V)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A1V)	41U3030	1

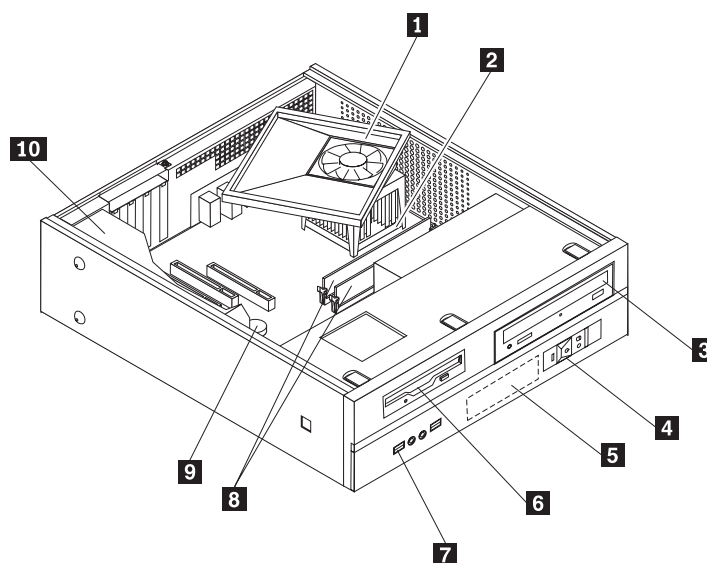
9019 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - India, South Africa (models A1V)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9019 Power Cords	FRU#	CRU
Power cord -Taiwan (models)	39M5246	1

9019 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

9019 Vista Business 32 Recovery DVDs	FRU#	CRU
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 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 9087



Item #	9087 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A3G A3M A3Q A3J A4A A4T A1G A2C A5U)	43C3833	N
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A3G A3M A3Q A3J A2C)	41N3325	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A4A A4T A1G)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models A3U A3G A3M A3Q A3J A4A A4T A1G A2C)	40Y9035	2
6	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models A2C)	40Y9105	2
6	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models A2C)	40Y9107	2
6	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models A2C)	40Y9113	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A3G A3M A3Q A3J)	41X4255	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A4A A4T A1G A2C)	41X4256	2
9	System board, Saturn AMT (GA) (models A3G A3M A3Q A3J A4A A4T A1G A2C A5U)	43C2297	N
10	280 Watt DT Power Supply -Standard, Robust, JP (models A3G A3M A3Q A3J A4A A4T A1G A2C)	41A9705	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models A3G A3M A3Q A3J A4A A4T A1G A2C)	41A9701	2
10	220 Watt Power Supply (80plus) - Standard, Robust, JP (models A3G A3M A3Q A3J A4A A4T A1G A2C)	41A9670	N
10	280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models A3G A3M A3Q A3J A4A A4T A1G A2C)	41A9717	2

The FRUs listed in the following tables are not illustrated.

9087 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

9087 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A3G A3M A3Q A4A A1G)	41A5289	1
Arabic (models A3G A1G)	41A5290	1
Belgian/French (models A3G A1G)	41A5292	1
Belgian/UK (models A3G A1G)	41A5293	1
Bulgarian (models A3G A1G)	41A5295	1
Czech (models A3G A1G)	41A5297	1
Danish (models A3G A1G)	41A5298	1
Dutch (models A3G A1G)	41A5299	1
French (models A3G A1G)	41A5300	1
German (models A3G A1G)	41A5303	1
Greek (models A3G A1G)	41A5304	1
Greek/US (models A3G A1G)	41A5305	1
Hebrew (models A3G A1G)	41A5306	1
Hungarian (models A3G A1G)	41A5307	1
Iceland (models A3G A1G)	41A5308	1
Italian 141 (models A3G A1G)	41A5309	1
Japanese (models A3J)	41A5310	1
Norwegian (models A3G A1G)	41A5313	1

9087 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Polish (models A3G A1G)	41A5314	1
Portuguese (models A3G A1G)	41A5315	1
Romanian 096 (models A3G A1G)	41A5317	1
Romanian 446 (models A3G A1G)	41A5316	1
Russian/Cyrillic (models A3G A1G)	41A5318	1
Serbian/Cyrillic (models A3G A1G)	41A5319	1
Slovak (models A3G A1G)	41A5320	1
Spanish (models A3G A1G)	41A5321	1
Swedish/Finn (models A3G A1G)	41A5322	1
Thailand (models)	41A5324	1
Turkish 440 (models A3G A1G)	41A5325	1
Turkish 179 (models A3G A1G)	41A5326	1
UK English (models A3G A1G)	41A5327	1
US Euro (models A3G A1G)	41A5328	1
Slovenian (models A3G A1G)	41A5329	1

9087 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models A3G A3M A3Q A3J A1G A2C)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models A3G A3M A3Q A3J A1G A2C)	41U3030	1

9087 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A3U)	89P8571	1
Speaker Power brick - China, Thailand (models A2C)	89P8581	1
Speaker Power brick - Japan (models A3J)	89P8577	1
Speaker Power brick - ANZ (models A3M)	89P8579	1
Speaker Power brick - India, South Africa (models A3Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

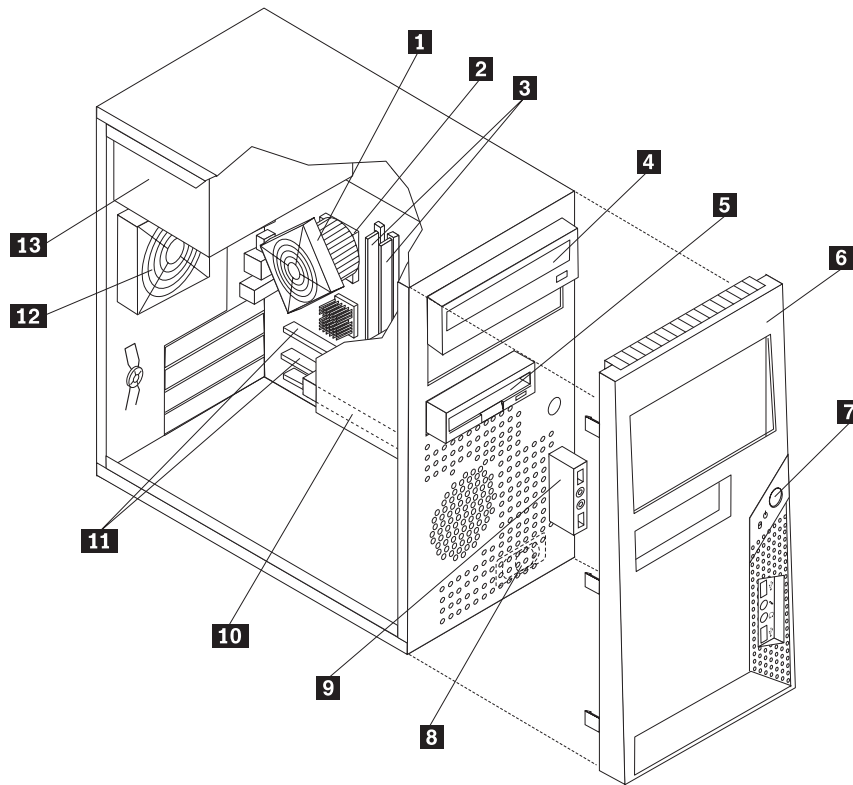
9087 Power Cords	FRU#	CRU
Power cord - US (models A4A A4T)	39M5080	1
Power cord - China (models A2C)	39M5205	1
Power cord - Japan (models A3J)	39M5193	1
Power cord - Australia / New Zealand (models A3M)	39M5102	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A3G A4A A1G)	39M5150	1
Power cord - Italy (models A3G A1G)	39M5164	1
Power cord - G models (models A4A)	39M5122	1
Power cord - Denmark (models A3G A1G)	39M5129	1
Power cord - Switzerland (models A3G A1G)	39M5157	1
Power cord - Israel (models A3G A1G)	39M5171	1
Power cord - South Africa (models A3G A3M A4A A1G)	39M5143	1
Power cord - India (models A3Q)	39M5004	1

9087 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A3M A3Q A3G A4A A1G A5U)	45C4191	1
RE (models A3G A1G)	45C4216	1
FR/CF (models A3G A1G)	45C4192	1
GR (models A3G A1G)	45C4193	1
SP/LA (models)	45C4194	1
IT (models A3G A1G)	45C4196	1
BR (models)	45C4195	1
SV (models A3G A1G)	45C4199	1
DK (models A3G A1G)	45C4200	1
FI (models A3G A1G)	45C4203	1
NO (models A3G A1G)	45C4198	1
NL (models A3G A1G)	45C4201	1
Japanese (models A3J)	45C4197	1
HE (models A3G A1G)	45C4204	1
PL (models A3G A1G)	45C4205	1
CZ (models A3G A1G)	45C4202	1
AE (models A3G A1G)	45C4206	1
RU (models A3G A1G)	45C4207	1
TR (models A3G A1G)	45C4208	1
HU (models A3G A1G)	45C4209	1
PO (models A3G A1G)	45C4217	1
GK (models A3G A1G)	45C4210	1
SL (models A3G A1G)	45C4215	1

9087 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A3M A3Q A3G A4A A1G A5U)	45C4077	1
FR/CF (models A3G A1G)	45C4079	1
GR (models A3G A1G)	45C4080	1
SP/LA (models A3G A1G)	45C4081	1
BR (models)	45C4082	1
IT (models A3G A1G)	45C4083	1
JP (models A3J)	45C4084	1
NO (models A3G A1G)	45C4085	1
SV (models A3G A1G)	45C4086	1
DK (models A3G A1G)	45C4087	1
NL (models A3G A1G)	45C4088	1
CZ (models A3G A1G)	45C4089	1
FI (models A3G A1G)	45C4090	1
PL (models A3G A1G)	45C4091	1
RU (models A3G A1G)	45C4092	1

9087 Vista Business 32 Recovery DVDs	FRU#	CRU
TR (models A3G A1G)	45C4093	1
HU (models A3G A1G)	45C4094	1
GK (models A3G A1G)	45C4095	1
PO (models A3G A1G)	45C4102	1
CS (models A2C)	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
Hebrew (models)	45C4106	1

Machine Type 9088



Item #	9088 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A5U A5G A5M A5Q A5J A7A A7T A8Q A9Q A4S A4P A4D A4Y A3C ACU ACF AEU AEF AES AEP AEL AED AEY AEG AEM AEA AEQ AET AEC AEB AEH AEV AEK AER AEE AEJ AFA AFT AJG AKU AKF AMS AMY ANC ARU ARF ARS ARD ARL ARD ARY ARG ARM ARA ARQ ART ARC ARB ARH ARV ARK ARR ARE ARJ)	43C3833	N
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A6M A1G A2U A2F AAM AAA AAT ABM ABA ABT AGA AGT AHA AHT APU APG APA APH APC APV)	43C1693	N
3	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models A5U A5G A5M A5Q A5J)	41X4255	2
3	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A7A A7T A8Q A9Q A6M A1G A2U A2F A3C AAM AAA AAT ABM ABA ABT ACU ACF AFA AFT AGA AGT AHA AHT AJG AKU AKF AMS AMY ANC APU APG APA APH ARU ARF ARS ARD ARL ARD ARY ARG ARM ARA ARQ ART ARC ARB ARH ARV ARK ARR ARE ARJ APC APV)	41X4256	2
4	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A5U A5G A5M A5Q A5J A9Q A3C ABM ABA ABT ACU ACF AFT AGA AGT AHA ANC ARU ARF ARS ARD ARL ARD ARY ARG ARM ARA ARQ ART ARC ARB ARH ARV ARK ARR ARE ARJ)	41N3325	2
4	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A7A A7T AEU AEF AES AEP AED AEY AEG AEM AEA AET AEK AER AEQ AEC AEB AEH AEV AKU AKF AMS AMY APU APG APA APH APC APV)	42Y9353	2

Item #	9088 FRUs	FRU#	CRU Tier
4	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A8Q A4S A4P A4D A4Y A6M A1G A2U A2F ABM ABA ABT AJG)	43C1042	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models A3C)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models A3C)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 80GB (7200RPM), Serial ATA (models A5U A5G A5M A5Q A5J ACU ACF AEU AEF AES AEP AED AEY AEG AEM AEA AET AEK AER AEQ AEC AEB AEH AEV ARU ARF ARS ARD ARL ARD ARY ARG ARM ARA ARQ ART ARC ARB ARH ARV ARK ARR ARE ARJ)	40Y9034	2
10	Hard disk drive, 160GB (7200RPM), Serial ATA (models A7A A7T A8Q A4S A4P A4D A4Y A2U A2F A3C AFA AFT AGA AGT AHA AHT AKU AKF AMS AMY ANC APU APG APA APH APC APV)	40Y9035	2
10	Hard disk drive, 250GB (7200RPM), Serial ATA (models A1G AAM AAA AAT ABM ABA ABT AJG)	40Y9036	2
11	System board , Saturn AMT (GA) (models A5U A5G A5M A5Q A5J A7T A7A A8Q A9Q A4S A4P A4D A4Y A6M A1G A2U A2F A3C AAM AAA AAT ABM ABA ABT ACU ACF AEU AEF AES AEP AEL AED AEY AEG AEM AEA AEQ AET AEC AEB AEH AEV AEK AER AEE AEJ AFA AFT AGA AGT AHA AHT AJG AKU AKF AMS AMY ANC APU APG APA APH ARU ARF ARS ARD ARL ARD ARY ARG ARM ARA ARQ ART ARC ARB ARH ARV ARK ARR ARE ARJ APC APV)	43C2297	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6046	2
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models A5U A5G A5M A5Q A5J A7A A7T A8Q A9Q A4S A4P A4D A4Y A6M A1G A2U A2F A3C AEU AEF AES AEP AED AEY AEG AEM AEA AET AEK AER AEQ AEC AEB AEH AEV AFA AFT AGA AGT AHA AHT AJG AKU AKF AMS AMY ANC APU APG APA APH ARU ARF ARS ARD ARL ARD ARY ARG ARM ARA ARQ ART ARC ARB ARH ARV ARK ARR APC APV)	41A9684	2
13	Power supply, 310 Watt ATX Power Supply - Standard, Robust, JP (models ARJ AEJ)	41A9726	2
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models AEQ AEC AEB AEH AEV ARQ ANC ARC ARB APH ARH ARV)	41A9665	2

The FRUs listed in the following tables are not illustrated.

9088 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2

9088 FRUs	FRU#	CRU Tier
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

9088 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A5U A5G A5M A5Q A7A A8Q A9Q A6M A1G A2U AAM AAA ABM ABA ACU AEU AEG AEM AEA AEQ AEH AER AEE AKU ARU AJG APG ARG ARM AFA AGA AHA APA ARA ARQ APH APH ARR ARE)	41A5289	1
Arabic (models A5G A1G AEG AJG APG ARG)	41A5290	1
Belgian/French (models A5G A1G AEG AJG APG ARG)	41A5292	1
Belgian/UK (models A5G A1G AEG AJG APG ARG)	41A5293	1
Brazilian (models A4P AEP ARP)	41A5294	1
Bulgarian (models A5G A1G AEG AJG APG ARG)	41A5295	1
Chinese/US (models A5G A1G AEG AJG APG ARG APV)	41A5296	1
Czech (models A5G A1G AEG AJG APG ARG)	41A5297	1
Danish (models A5G A1G AEG AJG APG ARG)	41A5298	1
Dutch (models A5G A1G AEG AJG APG ARG)	41A5299	1
French (models A5G A1G AEG AJG APG ARG)	41A5300	1
French Canadian 445 (models A2F ACF AEF)	41A5301	1
French Canadian 58 (models A2F ACF AEF)	41A5302	1
German (models A5G A1G AEG AJG APG ARG)	41A5303	1
Greek (models A5G A1G AEG AJG APG ARG)	41A5304	1
Hebrew (models A5G A1G AEG AJG APG ARG)	41A5306	1
Hungarian (models A5G A1G AEG AJG APG ARG)	41A5307	1
Iceland (models A5G A1G AEG AJG APG ARG)	41A5308	1
Italian 141 (models A5G A1G AEG AJG APG ARG)	41A5309	1
Japan (models AEJ ARJ)	41A5310	1
Korean (models A1K ARK)	41A5311	1
LA Spanish (models A4S A4D A4Y AES AED AEY AMS ARS ARD AMY ARY)	41A5312	1
Norwegian (models A5G A1G AEG AJG APG ARG)	41A5313	1
Polish (models A5G A1G AEG AJG APG ARG)	41A5314	1
Portuguese (models A5G A1G AEG AJG APG ARG)	41A5315	1
Romanian 096 (models A5G A1G AEG AJG APG ARG)	41A5317	1

9088 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Romanian 446 (models A5G A1G AEG AJG APG ARG)	41A5316	1
Russian/Cyrillic (models A5G A1G AEG AJG APG ARG)	41A5318	1
Serbian/Cyrillic (models A5G A1G AEG AJG APG ARG)	41A5319	1
Slovak (models A5G A1G AEG AJG APG ARG)	41A5320	1
Spanish (models A5G A1G AEG AJG APG ARG)	41A5321	1
Swedish/Finn (models A5G A1G AEG AJG APG ARG)	41A5322	1
Swiss (models A5G A1G AEG AJG APG ARG)	41A5323	1
Thailand (models A7T AAT ABT AET AFT AGT AHT ART)	41A5324	1
Turkish 440 (models A5G A1G AEG AJG APG ARG)	41A5325	1
Turkish 179 (models A5G A1G AEG AJG APG ARG)	41A5326	1
UK English (models A5G A1G AEG AJG APG ARG)	41A5327	1
US Euro (models A5G A1G AEG AJG APG ARG)	41A5328	1
Slovenian (models A5G A1G AEG AJG APG ARG)	41A5329	1

9088 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A5U A5G A5M A5Q A5J A7A A7T A8Q A9Q A4S A4P A4D A4Y A6M A1G A2U A2F A3C AAM AAA AAT ABM ABA ABT ACU ACF AEU AEF AES AEP AED AEY AEG AEM AEA AET AEK AER AEQ AEC AEB AEH AEV AFA AFT AGA AGT AHA AHT AJG AKU AKF AMS AMY ANC APU APG APA APH ARU ARF ARS ARD ARL ARD ARY ARG ARM ARA ARQ ART ARC ARB ARH ARV ARK ARR ARE ARJ APC APV)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A5U A5G A5M A5Q A5J A7A A7T A8Q A9Q A4S A4P A4D A4Y A6M A1G A2U A2F A3C AAM AAA AAT ABM ABA ABT ACU ACF AEU AEF AES AEP AED AEY AEG AEM AEA AET AEK AER AEQ AEC AEB AEH AEV AFA AFT AGA AGT AHA AHT AJG AKU AKF AMS AMY ANC APU APG APA APH ARU ARF ARS ARD ARL ARD ARY ARG ARM ARA ARQ ART ARC ARB ARH ARV ARK ARR ARE ARJ APC APV)	41U3030	1

9088 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A5U A7A A2U ACU AEU AES AEA AKU APU ARU AMS ARS AFA AGA AHA APA ARA)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models AED AEY ARD AMY ARY)	89P8575	1
Speaker Power brick - China, Thailand (models A3C AEC AET ANC ARC AFT AGT AHT ART APC)	89P8581	1
Speaker Power brick - Japan (models A5J AEJ ARJ)	89P8577	1
Speaker Power brick - Brazil (models ARP)	89P8583	1
Speaker Power brick - ANZ (models A6M A5M AAM ABM AEM)	89P8579	1
Speaker Power brick - Taiwan (models APV)	41A4905	1
Speaker Power brick - India, South Africa (models A5Q A8Q A9Q AEQ ARQ)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9088 Power Cords	FRU#	CRU
Power cord - US (models A5U A7A A7T A4S A4D A2U A2F AAA ABA AAT ABT ACU ACF AEU AEF AES AED AEL AEA AET AFT AGT AHT)	39M5080	1
Power cord - China (models A3C AEC ANC ARC APC)	39M5205	1

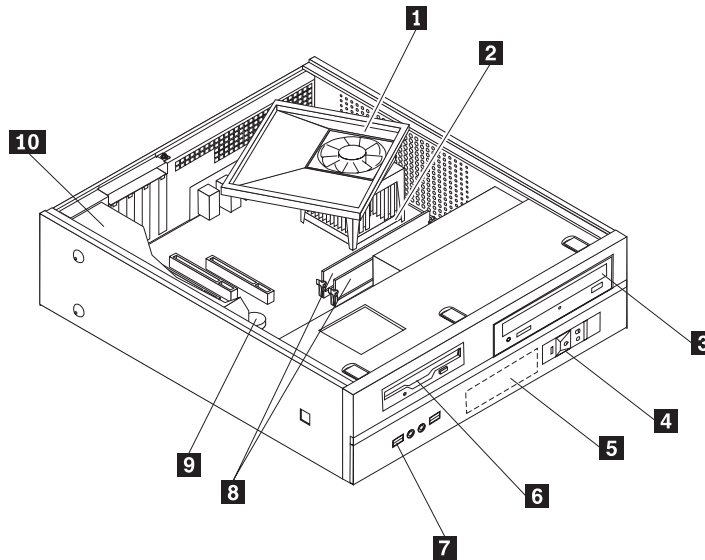
9088 Power Cords	FRU#	CRU
Power cord - Japan (models AEE AEJ ARE ARJ)	39M5193	1
Power cord - Brazil (models A4P AEP ARP)	39M5232	1
Power cord - LA High Volt APU) (models A4Y AEY AEL ARL AMY ARY)	39M5067	1
Power cord - Australia / New Zealand (models A5M A6M AAM ABM AEM ARM)	39M5102	1
Power cord - Korea (models ARK ARR)	39M5212	1
Power cord - Hong Kong (models AEB AEH ARB APH ARH)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A5G A7A A1G AAA ABA AEG AEA AJG APG ARG AFA AGA AHA APA ARA)	39M5150	1
Power cord -Taiwan (models AEV ARV APV)	39M5246	1
Power cord - Italy (models A5G A4S A1G AES AEY AEL AEG AMS ARS AMY ARY ARL AJG APG ARG)	39M5164	1
Power cord - G models (models A7A AEA AAA ABA AEA AFA AGA AHA APA ARA)	39M5122	1
Power cord - Denmark (models A5G A1G AEG AJG APG ARG)	39M5129	1
Power cord - Switzerland (models A5G A1G AEG AJG APG ARG)	39M5157	1
Power cord - Israel (models A5G A1G AEG AJG APG ARG)	39M5171	1
Power cord - South Africa (models A5G A5M A7A A6M A1G AAM ABM AAA ABA AEG AEM AEA ARM AFA AGA AHA APA ARA)	39M5143	1
Power cord - India (models A5Q A8Q A9Q AEQ ARQ)	39M5004	1

9088 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A5U A5M A5Q A5G A7A A8Q A9Q A6M A1G AAM ABM AAA ABA ACU AEU AEG AEM AEA AEQ AEH AER AEE AFA AGA AHA AJA AJG APG ARG AKU APU ARU ARM APA ARA ARQ APH ARH ARR ARE)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A5G A1G A2F ACF AEF AEG AJG APG ARG AKF ARF)	45C4192	1
GR (models A5G A1G AEG)	45C4193	1
SP/LA (models AMS AMY)	45C4194	1
IT (models A5G A1G AEG AJG APG ARG)	45C4196	1
BR (models A4P AEP ARP)	45C4195	1
SV (models A5G A1G AEG AJG APG ARG)	45C4199	1
DK (models A5G A1G AEG AJG APG ARG)	45C4200	1
FI (models A5G A1G AEG AJG APG ARG)	45C4203	1
NO (models A5G A1G AEG AJG APG ARG)	45C4198	1
NL (models A5G A1G AEG AJG APG ARG)	45C4201	1
Korean (models AEK)	45C4214	1
Simplified Chinese (models A3C AEC ANC ARC)	45C4211	1
Taiwan-TC (models AEV)	45C4212	1
Hong Kong-TC (models AEB ARB)	45C4213	1
Japanese (models ARJ)	45C4197	1
HE (models A5G A1G AEG AJG APG ARG)	45C4204	1
PL (models A5G A1G AEG AJG APG ARG)	45C4205	1
CZ (models A5G A1G AEG AJG APG ARG)	45C4202	1

9088 Windows XP Pro Recovery CDs	FRU#	CRU
AE (models A5G A1G AEG AJG APG ARG)	45C4206	1
RU (models A5G A1G AEG AJG APG ARG)	45C4207	1
TR (models A5G A1G AEG AJG APG ARG)	45C4208	1
HU (models A5G A1G AEG AJG APG ARG)	45C4209	1
PO (models A5G A1G AEG AJG APG ARG)	45C4217	1
GK (models A5G A1G AEG AJG APG ARG)	45C4210	1
SL (models A5G A1G AEG AJG APG ARG)	45C4215	1

9088 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A5U A5M A5Q A5G A7A A8Q A9Q A6M A1G AAM ABM AAA ABA ACU AEU AEG AEM AEA AEQ AEH AER AEE AFA AGA AHA AJA AJG APG ARG AKU APU ARU ARM APA ARA ARQ APH ARH ARR ARE)	45C4077	1
FR/CF (models A5G A1G A2F ACF AEF AEG AJG APG ARG AKF ARF)	45C4079	1
GR (models A5G A1G AEG)	45C4080	1
SP/LA (models A5G A4S A4D A4Y A1G AES AED AEY AEG AJG APG ARG AMS ARS ARD AMY ARY)	45C4081	1
BR (models A4P AEP ARP)	45C4082	1
IT (models A5G A1G AEG AJG APG ARG)	45C4083	1
JP (models ARJ)	45C4084	1
NO (models A5G A1G AEG AJG APG ARG)	45C4085	1
SV (models A5G A1G AEG AJG APG ARG)	45C4086	1
DK (models A5G A1G AEG AJG APG ARG)	45C4087	1
NL (models A5G A1G AEG AJG APG ARG)	45C4088	1
CZ (models A5G A1G AEG AJG APG ARG)	45C4089	1
FI (models A5G A1G AEG AJG APG ARG)	45C4090	1
PL (models A5G A1G AEG AJG APG ARG)	45C4091	1
RU (models A5G A1G AEG AJG APG ARG)	45C4092	1
TR (models A5G A1G AEG AJG APG ARG)	45C4093	1
HU (models A5G A1G AEG AJG APG ARG)	45C4094	1
GK (models A5G A1G AEG AJG APG ARG)	45C4095	1
PO (models A5G A1G AEG AJG APG ARG)	45C4102	1
Simplified Chinese (models A3C AEC ANC ARC APC)	45C4096	1
Traditional Chinese (models AEV APV)	45C4097	1
Traditional Chinese (models AEB ARB)	45C4098	1
KR (models AEK)	45C4099	1
SL (A5G A1G AEG AJG APG ARG)	45C4100	1
RE (A5G A1G AEG AJG APG ARG)	45C4078	1
Romanian (A5G A1G AEG AJG APG ARG)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (A5G A1G AEG AJG APG ARG)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (A5G A1G AEG AJG APG ARG)	45C4106	1

Machine Type 9096



Item #	9096 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models)	43C3833	N
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models)	43C1693	N
2	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models)	43C1967	N
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models)	41N3325	2
3	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models)	43C1042	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models)	40Y9035	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9107	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9113	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models)	41X4256	2
9	System board, Saturn non AMT(GA) (models)	87H5129	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models)	41A9701	2

The FRUs listed in the following tables are not illustrated.

9096 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2

9096 FRUs	FRU#	CRU
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

9096 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 A2B)	41A5296	1
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	1
German (models)	41A5303	1
Greek (models)	41A5304	1
Greek/US (models)	41A5305	1
Hebrew (models)	41A5306	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

9096 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Spanish (models)	41A5321	1
Swedish/Finn (models)	41A5322	1
Swiss (models)	41A5323	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

9096 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models)	41U3030	1

9096 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	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 Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9096 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

9096 Power Cords	FRU#	CRU
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

9096 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
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

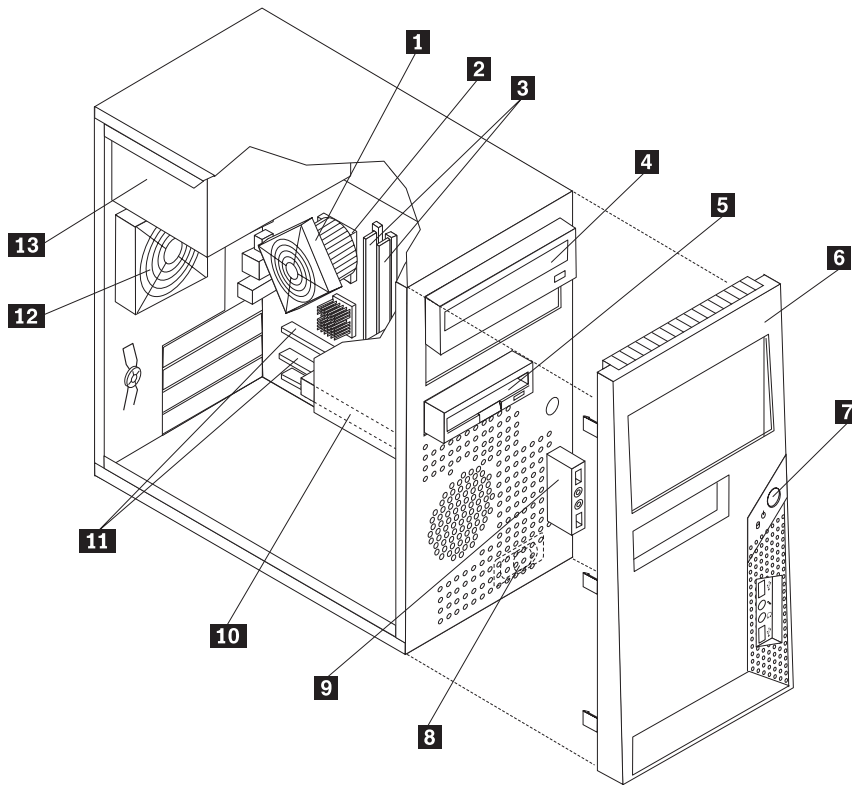
9096 Windows XP Pro Recovery CDs	FRU#	CRU
SL (models)	45C4215	1

9096 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	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)	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
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)	45C4185	1
SL (models)	45C4186	1
RE (models)	45C4164	1

9096 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

9096 Vista Business 32 Recovery DVDs	FRU#	CRU
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
Hebrew (models)	45C4106	1

Machine Type 9160



Item #	9160 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	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
3	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
4	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 A1R A1E A1J)	42Y9353	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 80GB (7200RPM), Serial ATA (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	40Y9034	2
11	System board , Saturn non AMT (GA) (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	43C2297	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6269	2

Item #	9160 FRUs	FRU#	CRU Tier
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	41A9684	2
13	Power supply, 310 Watt ATX Power Supply - Standard, Robust, JP (models A1J)	41A9726	2

The FRUs listed in the following tables are not illustrated.

9160 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

9160 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q A1H A1R A1E)	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)	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

9160 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
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 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

9160 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 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 A1R A1E A1J)	41U3030	1

9160 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A A1S)	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 - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1

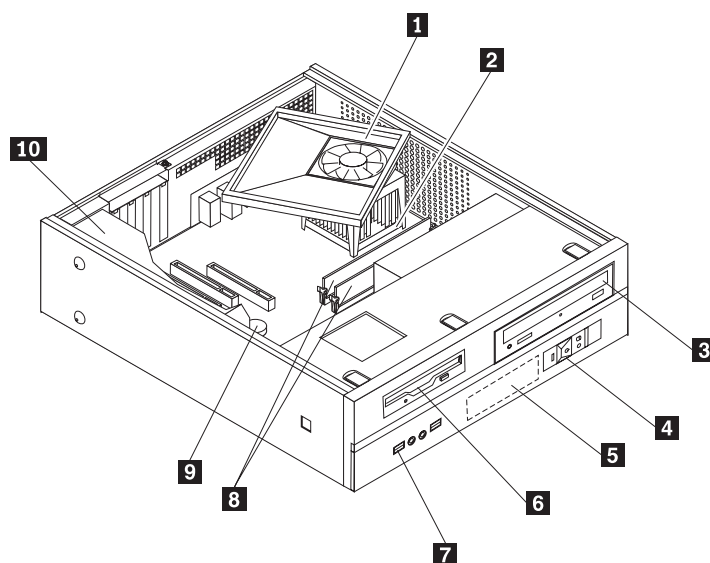
9160 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H A1G)	89P8573	1
Speaker Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9160 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

9160 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1G A1M A1A A1Q A1H A1R A1E)	45C4077	1
FR/CF (models 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

9160 Vista Business 32 Recovery DVDs	FRU#	CRU
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 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 A1G)	45C4103	1
Slovakian (models A1G)	45C4104	1
Arabic Localized (models A1G)	45C4105	1
Hebrew (models A1G)	45C4106	1

Machine Type 9163



Item #	9163 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models)	TBD	N
2	Microprocessor, Core 2 Duo E6750 Processor 2.66GHz 1333MHz FSB 4M L2 G-0 Stepping Level, Mainstream/Value FMB, TXT support (models A3Q A1K)	TBD	N
2	Microprocessor, Core 2 Duo E2140 Processor 1.6GHz 800MHz FSB 1M L2 (models)	TBD	N
2	Microprocessor, Core 2 Duo E4400 Processor 2.0GHz 800MHz FSB 2M L2 (models)	43C2056	N
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models)	42Y6324	2
3	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models)	43C1040	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models)	42Y6325	2
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models)	43C1041	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 80GB (7200RPM), Serial ATA (models)	40Y9034	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models)	40Y9035	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9107	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 512 MB PC2-5300 (667MHz) DDR2 SDRAM (models)	41X4255	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models)	41X4256	2
9	System board, Saturn non AMT(GA) (models)	87H5129	N
10	280 Watt DT Power Supply -Standard, Robust, JP (models)	41A9705	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models)	41A9701	2
10	220 Watt Power Supply (80plus) - Standard, Robust, JP (models)	41A9670	N
10	280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models)	TBD	2

The FRUs listed in the following tables are not illustrated.

9163 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

9163 Keyboards (PS2 Preferred Pro)	FRU#	CRU
US English (models)	41A5039	1
Arabic (models)	41A5040	1
Arabic/French (models)	41A5041	1
Belgian/French (models)	41A5042	1
Belgian/UK (models)	41A5043	1
Bulgarian (models)	41A5045	1
Hong Kong/Taiwan (models)	41A5046	1
Czech (models)	41A5047	1
Danish (models)	41A5048	1
Dutch (models)	41A5049	1
French (models)	41A5050	1
French Canadian 445 (models)	41A5051	1
French Canadian 58 (models)	41A5052	1
German (models)	41A5053	1
Greek (models)	41A5054	1
Hebrew (models)	41A5055	1
Hungarian (models)	41A5056	1
Iceland (models)	41A5057	1

9163 Keyboards (PS2 Preferred Pro)	FRU#	CRU
Italian (models)	41A5058	1
Japanese (models)	41A5059	1
Korean (models)	41A5060	1
LA Spanish (models)	41A5061	1
Norwegian (models)	41A5062	1
Polish (models)	41A5063	1
Portuguese (models)	41A5064	1
Romanian (models)	41A5065	1
Russian/Cyrilic (models)	41A5066	1
Serbian/Cyrilic (models)	41A5067	1
Slovak (models)	41A5068	1
Spanish (models)	41A5069	1
Swedish/Finn (models)	41A5070	1
Swiss F/G (models)	41A5071	1
Thailand (models)	41A5072	1
Turkish 440 (models)	41A5073	1
Turkish 179 (models)	41A5074	1
UK English (models)	41A5075	1
US Euro (models)	41A5076	1
Slovenian (models)	41A5077	1
Brazil/Portuguese (models)	41A5044	1

9163 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
Czech (models)	41A5297	1
Danish (models)	41A5298	1
Dutch (models)	41A5299	1
French (models)	41A5300	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
Japanese (models)	41A5310	1
Korean (models)	41A5311	1

9163 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Italian 141 (models)	41A5309	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

9163 Keyboards (Preferred Pro Fingerprint Reader USB)	FRU#	CRU
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
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

9163 Keyboards (Preferred Pro Fingerprint Reader USB)	FRU#	CRU
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
Swiss (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

9163 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models)	41U3030	1
PS/2 2 Button Ball Mouse (models)	41R0018	1

9163 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Malaysian Homologation Sticker for all AP Model (models)	TBD	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Internal USB Memory Card Reader (models)	41R3376	2
Internal USB Memory Card Reader (models)	41R3378	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1

9163 Adapters and miscellaneous FRUs	FRU#	CRU
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 Brick - Taiwan (models)	41A4905	1
Speaker Power brick - India, South Africa (models)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9163 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)	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

9163 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

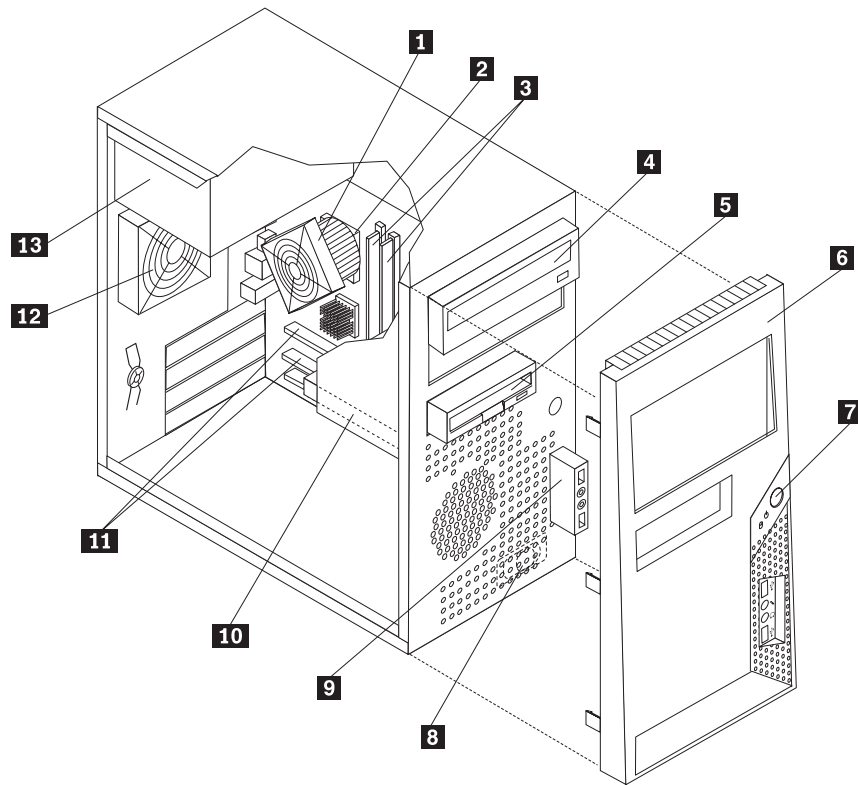
9163 Windows XP Pro Recovery CDs	FRU#	CRU
NL (models)	45C4201	1
Korean (models)	45C4214	1
Simplified Chinese (models)	45C4211	1
Taiwan-TC (models)	45C4212	1
Hong Kong-TC (models)	45C4213	1
Japanese (models)	45C4197	1
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	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

9163 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models)	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)	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
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)	45C4185	1

9163 Vista Home Basic 32 Recovery DVDs	FRU#	CRU
SL (models)	45C4186	1
RE (models)	45C4164	1

9163 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
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
Hebrew (models)	45C4106	1

Machine Type 9164



Item #	9164 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	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 ")	43C3833	N
3	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 ")	41X4256	2
4	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)	41N3325	2
4	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1F)	42Y9353	2
4	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	43C1042	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2

Item #	9164 FRUs	FRU#	CRU Tier
10	Hard disk drive, 80GB (7200RPM), Serial ATA (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R)	40Y9034	2
11	System board , Saturn 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)	87H5129	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6046	2
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models "A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R ")	41A9684	2
13	Power supply, 310 Watt ATX Power Supply - Standard, Robust, JP (models A1J A2J)	41A9726	2

The FRUs listed in the following tables are not illustrated.

9164 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

9164 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)	41A5289	1
Arabic (models A1G A2G)	41A5290	1
Arabic/French (models A1G A2G)	41A5291	1
Belgian/French (models A1G A2G)	41A5292	1
Belgian/UK (models A1G A2G)	41A5293	1
Brazilian (models A1P A2P)	41A5294	1

9164 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Bulgarian (models A1G A2G)	41A5295	1
Chinese/US (models A1V A2V)	41A5296	1
Czech (models A1G A2G)	41A5297	1
Danish (models A1G A2G)	41A5298	1
Dutch (models A1G A2G)	41A5299	1
French (models A1G A2G)	41A5300	1
French Canadian 445 (models A1F A2F)	41A5301	1
French Canadian 58 (models A1F A2F)	41A5302	1
German (models A1G A2G)	41A5303	1
Greek (models A1G A2G)	41A5304	1
Greek/US (models A1G A2G)	41A5305	1
Hebrew (models A1G A2G)	41A5306	1
Hungarian (models A1G A2G)	41A5307	1
Iceland (models A1G A2G)	41A5308	1
Japanese (models A1J A2J)	41A5310	1
Korean (models A1K A2K)	41A5311	1
LA Spanish (models A1S A1D A1Y A2S A2D A2Y)	41A5312	1
Italian 141 (models A1G A2G)	41A5309	1
Norwegian (models A1G A2G)	41A5313	1
Polish (models A1G A2G)	41A5314	1
Portuguese (models A1G A2G)	41A5315	1
Romanian 096 (models A1G A2G)	41A5317	1
Romanian 446 (models A1G A2G)	41A5316	1
Russian/Cyrillic (models A1G A2G)	41A5318	1
Serbian/Cyrillic (models A1G A2G)	41A5319	1
Slovak (models A1G A2G)	41A5320	1
Spanish (models A1G A2G)	41A5321	1
Swedish/Finn (models A1G A2G)	41A5322	1
Swiss (models A1G A2G)	41A5323	1
Thailand (models A1T A2T)	41A5324	1
Turkish 440 (models A1G A2G)	41A5325	1
Turkish 179 (models A1G A2G)	41A5326	1
UK English (models A1G A2G)	41A5327	1
US Euro (models A1G A2G)	41A5328	1
Slovenian (models A1G A2G)	41A5329	1

9164 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 A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J ")	41U3013	1

9164 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 A1R A1E A1J A2U A2F A2S A2P A2L A2D A2Y A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2R A2E A2J ")	41U3030	1

9164 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A2U A1Y A2Y A1A A2A)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models A8D A1D A2D)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A2C)	89P8581	1
Speaker Power brick - Japan (models A1J A2J)	89P8577	1
Speaker Power brick - ANZ (models A1M A2M)	89P8579	1
Speaker Brick - Korea (models A1K A1R A2K A2R)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H A2B A2H)	89P8573	1
Speaker Brick - Taiwan (models A1V A2V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9164 Power Cords	FRU#	CRU
Power cord - US (models A1U A1F A1S A1D A1L A2U A2F A2S A2D A2L)	39M5080	1
Power cord - China (models A1C A2C)	39M5205	1
Power cord - Japan (models A1J A2J A1E A2E)	39M5193	1
Power cord - Brazil (models A1P A2P)	39M5232	1

Power cord - LA High Volt APU (models)1Y A1L A2Y A2L	39M5067	1
Power cord - Australia / New Zealand (models A1M A2M)	39M5102	1
Power cord - Korea (models A1K A2K A1R A2R)	39M5212	1
Power cord - Hong Kong (models A1B A1H A2B A2H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1A A1G A1A A2G)	39M5150	1
Power cord - Taiwan (models A1V A2V)	39M5246	1
Power cord - Italy (models A1S A1Y A1L A1G A2S A2Y A2L A2G)	39M5164	1
Power cord - G models (models A1A A2A)	39M5122	1
Power cord - Denmark (models A1G A2G)	39M5129	1
Power cord - Switzerland (models A1G A2G)	39M5157	1
Power cord - Israel (models A1G A2G)	39M5171	1
Power cord - South Africa (models A1G A1M A1A A1G A2M A2A)	39M5143	1
Power cord - India (models A1Q A2Q)	39M5004	1

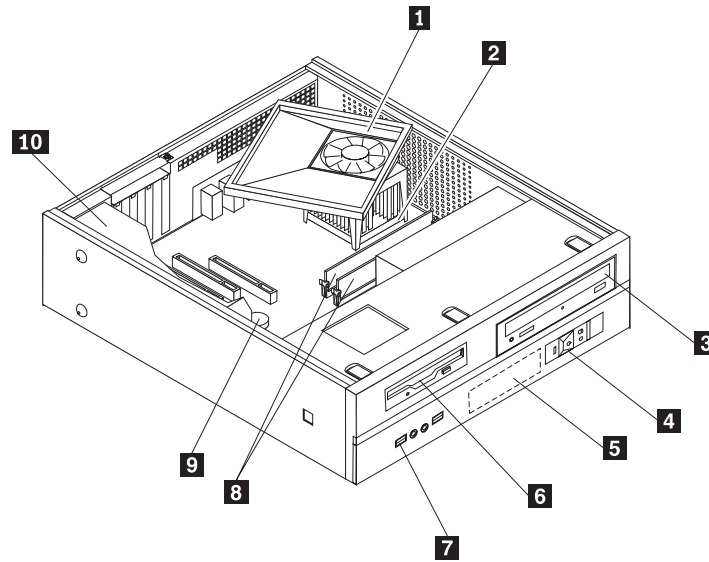
9164 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models A1U A1G A1M A1A A1Q A1H A1R A1E A2U A2G A2M A2A A2Q A2H A2R A2E)	45C4191	1
RE (models)	45C4216	1
FR/CF (models A1F A1G A2F A2G)	45C4192	1

9164 Windows XP Pro Recovery CDs	FRU#	CRU
GR (models A1G A2G)	45C4193	1
SP/LA (models A1G A1S A1D A1Y A2G A2S A2D A2Y)	45C4194	1
IT (models A1G A2G)	45C4196	1
BR (models A1P A2P)	45C4195	1
SV (models A1G A2G)	45C4199	1
DK (models A1G A2G)	45C4200	1
FI (models A1G A2G)	45C4203	1
NO (models A1G A2G)	45C4198	1
NL (models A1G A2G)	45C4201	1
Korean (models A1K A2K)	45C4214	1
Simplified Chinese (models A1C A2C)	45C4211	1
Taiwan-TC (models A1V A2V)	45C4212	1
Hong Kong-TC (models A1B A2B)	45C4213	1
Japanese (models A1J A2J)	45C4197	1
HE (models	45C4204	1
PL (models A1G A2G)	45C4205	1
CZ (models A1G A2G)	45C4202	1
AE (models A1G A2G)	45C4206	1
RU (models A1G A2G)	45C4207	1
TR (models A1G A2G)	45C4208	1
HU (models A1G A2G)	45C4209	1
PO (models A1G A2G)	45C4217	1
GK (models A1G A2G)	45C4210	1
SL (models A1G A2G)	45C4215	1

9164 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)	45C4077	1
FR/CF (models A1F A1G A2F A2G)	45C4079	1
GR (models A1G A2G)	45C4080	1
SP/LA (models A1G A1S A1D A1Y A2G A2S A2D A2Y)	45C4081	1
BR (models A1P A2P)	45C4082	1
IT (models A1G A2G)	45C4083	1
JP (models A1J A2J)	45C4084	1
NO (models A1G A2G)	45C4085	1
SV (models A1G A2G)	45C4086	1
DK (models A1G A2G)	45C4087	1
NL (models A1G A2G)	45C4088	1
CZ (models A1G A2G)	45C4089	1
FI (models A1G A2G)	45C4090	1
PL (models A1G A2G)	45C4091	1

9164 Vista Business 32 Recovery DVDs	FRU#	CRU
RU (models A1G A2G)	45C4092	1
TR (models A1G A2G)	45C4093	1
HU (models A1G A2G)	45C4094	1
GK (models A1G A2G)	45C4095	1
PO (models A1G A2G)	45C4102	1
CS (models A1C A2C)	45C4096	1
Traditional Chinese (models A1V A2V)	45C4097	1
Traditional Chinese (models A1B A2B)	45C4098	1
KR (models A1K A2K)	45C4099	1
SL (models A1G A2G)	45C4100	1
RE (models A1G A2G)	45C4078	1
Romanian (models A1G A2G)	45C4101	1
Sebian-Latin (models)	45C4103	1
Slovakian (models A1G A2G)	45C4104	1
Arabic Localized (models)	45C4105	1
Hebrew (models A1G A2G)	45C4106	1

Machine Type 9172



Item #	9172 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	43C3833	N
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	40Y9035	2
6	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models)	40Y9107	2
6	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models)	40Y9105	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41X4256	2
9	System board, Saturn non AMT (GA) (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	87H5129	N
10	280 Watt DT Power Supply -Standard, Robust, JP (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41A9705	N
10	280 Watt SFF Power Supply - Standard, Robust, JP (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41A9701	2
10	225 Watt Power Supply (active PFC) - Standard, Robust, JP (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41N3105	N
10	280 Watt SFF Power Supply (80plus) - Standard, Robust, JP (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41A9717	2

The FRUs listed in the following tables are not illustrated.

9172 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

9172 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1G A1M A1A A1Q A1H A2H)	41A5289	1
Arabic (models A1G)	41A5290	1
Arabic/French (models A1G)	41A5291	1
Belgian/French (models A1G)	41A5292	1
Belgian/UK (models A1G)	41A5293	1
Brazilian (models)	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)	41A5301	1
French Canadian 58 (models)	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

9172 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Japanese (models A1J A2J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models)	41A5312	1
Italian 141 (models A1G)	41A5309	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

9172 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41U3030	1

9172 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1A)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	89P8577	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
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

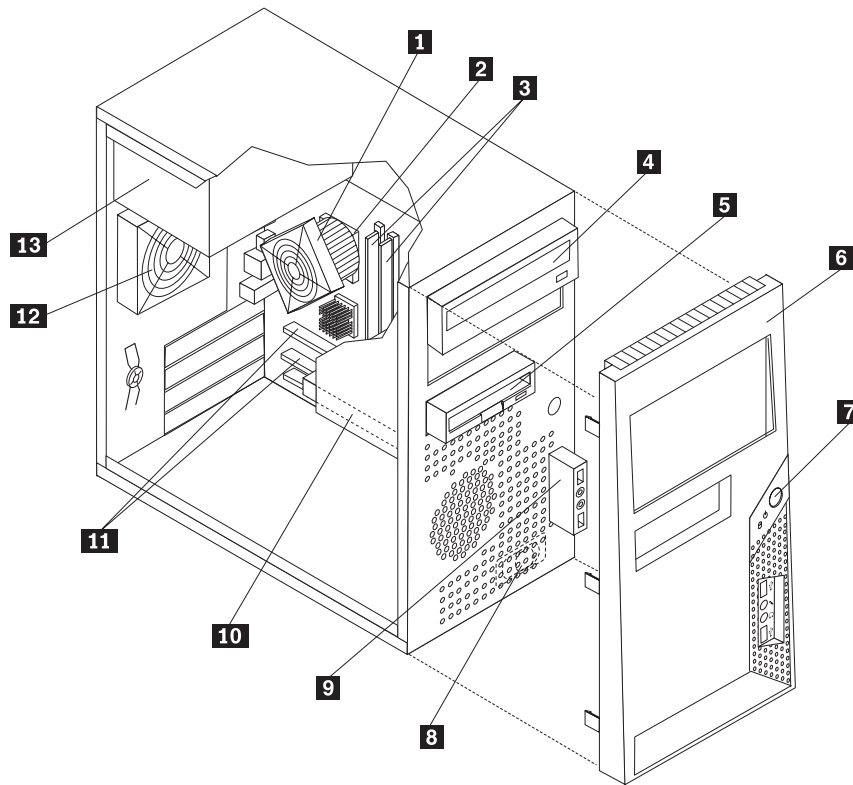
9172 Power Cords	FRU#	CRU
Power cord - US (models A1A A2A A1T)	39M5080	1
Power cord - China (models A1C)	39M5205	1
Power cord - Japan (models A1J)	39M5193	1
Power cord - Brazil (models A1P)	39M5232	1
Power cord - LA High Volt APU) (models)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K)	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 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

9172 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
HE (models)	45C4204	1
PL (models)	45C4205	1
CZ (models)	45C4202	1
AE (models)	45C4206	1
RU (models)	45C4207	1

9172 Windows XP Pro Recovery CDs	FRU#	CRU
TR (models)	45C4208	1
HU (models)	45C4209	1
PO (models)	45C4217	1
GK (models)	45C4210	1
SL (models)	45C4215	1

9172 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1M A1A A1Q A1H)	45C4077	1
FR/CF (models A1F)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models 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 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)	45C4106	1

Machine Type 9174



Item #	9174 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	43C3833	N
3	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41X4256	2
4	DVD-ROM Drive - 16x/48x - SATA XP and Vista (models A2U A2F A2S A2P A2G A2M A2A A2Q A2T A2C A2B A2H A2V A2K A2J)	41N3325	2
4	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	42Y9353	2
5	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models)	40Y9105	2
5	Diskette drive, 3.5" 1.44MB 2 Mode FDD (models)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1U A1F A1D A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	40Y9035	2
11	System board , Saturn non AMT (GA) (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	87H5129	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6046	2

Item #	9174 FRUs	FRU#	CRU Tier
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K)	41A9684	2
13	Power supply, 310 Watt ATX Power Supply - Standard, Robust, JP (models A1Q A1C A1B A1H A1V)	41A9726	2
13	Power supply, 280 Watt ATX Power Supply (80plus) - Standard, Robust, JP (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41A9665	2

The FRUs listed in the following tables are not illustrated.

9174 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

9174 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 A1G)	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 A1B)	41A5296	1
Czech (models A1G)	41A5297	1
Danish (models A1G)	41A5298	1

9174 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 A1G)	41A5305	1
Hebrew (models A1G)	41A5306	1
Hungarian (models A1G)	41A5307	1
Iceland (models A1G)	41A5308	1
Japanese (models A1J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models A1S)	41A5312	1
Italian 141 (models A1G)	41A5309	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

9174 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A1U A1F A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41U3030	1

9174 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2

9174 Adapters and miscellaneous FRUs	FRU#	CRU
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1A)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1B A1H)	89P8573	1
Speaker Power brick - LA high voltage (non-APU) (models)	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 Brick - Taiwan (models A1V)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9174 Power Cords	FRU#	CRU
Power cord - US (models A1U A1F A1S A1A A1T)	39M5080	1
Power cord - China (models A1C A2C)	39M5205	1
Power cord - Japan (models A1J A2J)	39M5193	1
Power cord - Brazil (models A1P A2P)	39M5232	1
Power cord - LA High Volt APU) (models)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K)	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 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 A2G)	39M5171	1
Power cord - South Africa (models A1G A1M A1A)	39M5143	1
Power cord - India (models A1Q)	39M5004	1

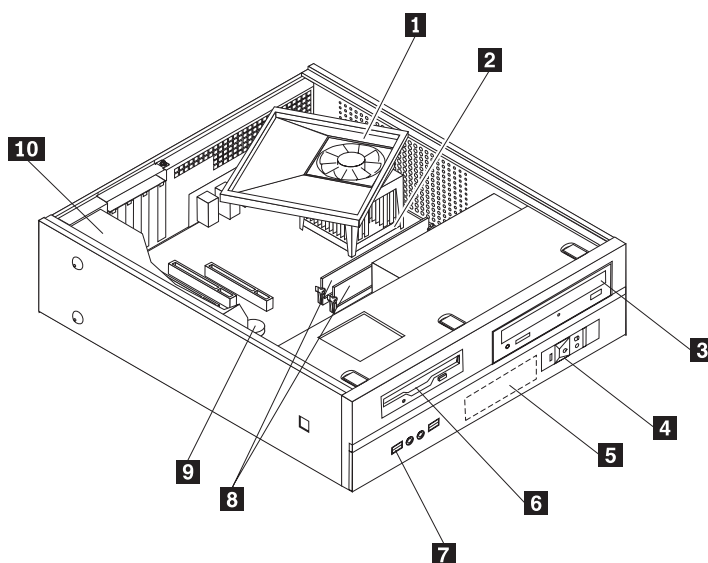
9174 Windows XP Pro Recovery CDs	FRU#	CRU
US/UK/AP/TH (models)	45C4191	1

9174 Windows XP Pro Recovery CDs	FRU#	CRU
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
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

9174 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1M A1A A1Q A1H)	45C4077	1
FR/CF (models A1F)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models 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

9174 Vista Business 32 Recovery DVDs	FRU#	CRU
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 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 9193



Item #	9193 FRUs	FRU#	CRU
1	Heat Sink/RM Kit Intel (all models)	41R6022	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	43C3833	N
3	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	42Y9353	2
4	Front Power/LED PC, bracket, and cable (all models)	41N8213	2
5	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	40Y9035	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9105	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9107	2
6	Diskette drive, 3,5", 1.44MB, 2-mode, (w/bezel) (models)	40Y9113	2
7	Front USB/Audio with bracket (all models)	41N8212	2
8	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41X4256	2
9	System board, Saturn AMT(GA) (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	43C2297	N
10	280 Watt DT Power Supply -Standard, Robust, JP (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41A9705	2
10	280 Watt SFF Power Supply - Standard, Robust, JP (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41A9701	2

The FRUs listed in the following tables are not illustrated.

9193 FRUs	FRU#	CRU
Second Serial Port Cable, 250mm (all models)	42Y8008	2
Cable, diskette drive (all models)	41A7147	2
Hard disk drive fan and bracket asm (all models)	41R6325	2

9193 FRUs	FRU#	CRU
Fan duct assembly (all models)	41R4808	2
Shield, EMC, blank 5.25 in. drive bay (all models)	41N8271	2
Shield, EMC, blank diskette drive bay (all models)	41N8273	2
Foot stand (all models)	41R4813	1
Rear USB 2Ports II LP (R), low profile I/O, 200mm, Rohs (all models)	42Y8006	2
System board shield (all models)	41R6108	N
Cable, serial ATA, 250 mm (all models)	41A7145	2
Cover (all models)	41N8204	2
Mechanical shell kit (all models)	41R6223	N
Miscellaneous hardware kit (all models)	41N8209	2
Hard disk drive bracket assembly (plastic and grommets) (all models)	41N8210	2
Speaker cable assembly, 600 mm cable length (all models)	41N8217	2
Retention module assembly, Intel (all models)	41A7139	N
Intrusion switch assembly (all models)	41R6208	2
Bezel kit, without IBM logo (all models)	41R6238	2
eSATA Cable - LP (all models)	41R3311	2

9193 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q A1H)	41A5289	1
Arabic (models A1G)	41A5290	1
Arabic/French (models A1G)	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 A1F A2F)	41A5301	1
French Canadian 58 (models A1F A2F)	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
Japanese (models A1J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models A1S A1P)	41A5312	1

9193 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
Italian 141 (models A1G)	41A5309	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

9193 mice	FRU#	CRU
Optical Wheel Mouse (400DPI, USB) (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41U3030	1

9193 Adapters and miscellaneous FRUs	FRU#	CRU
PCI Modem Card (Soft) (models)	29R9729	2
L1 IEEE 1394 PCI Adapter (models)	41D2781	2
Dongle Cable - DMS59 to dual VGA (included in Denver L1) (models)	42Y8181	1
Dongle DMS Dule DMS-59 to dual DVI cable (models)	41X6398	1
Dongle DMS Dule DMS-59 to single VGA and single DVI cable (models)	42Y8183	1
Nvidia GeForce 7300LE 128MB 64bit LP / ATX with DMS59 (models)	42Y8165	2
ATI X1300LE 256M 64bit LP / ATX with DMS59 (models)	42Y8162	2
Speakers (2-piece) Lenovo Logo (models)	41A5331	2
BTL external speaker (models)	41A5334	1
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1S A1A)	89P8571	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models)	89P8573	1
Speaker Power brick - LA high voltage (non-APU) (models)	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

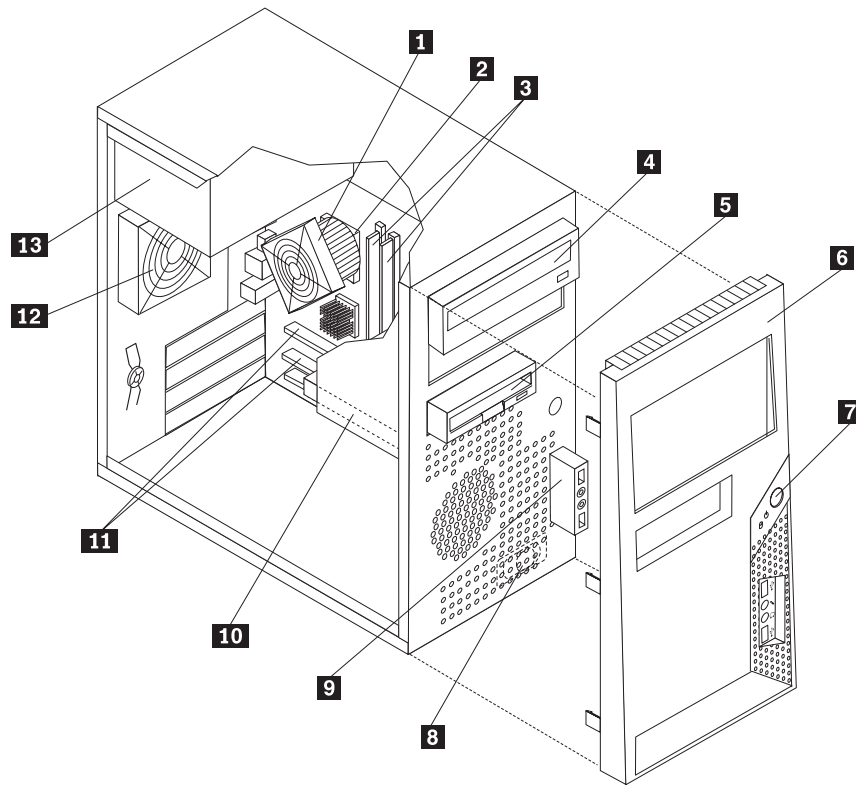
9193 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - Argentina (models)	41A4901	1
Speaker Power brick - ANZ (models A1M)	89P8579	1
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Brick - Taiwan (models A1T)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1
Lenovo USB2.0 Memory Key 1GB (models)	41U4978	2

9193 Power Cords	FRU#	CRU
Power cord - US (models A1U A1S A1A A1T)	39M5080	1
Power cord - China (models A1C)	39M5205	1
Power cord - Japan (models A1J)	39M5193	1
Power cord - Brazil (models A1P)	39M5232	1
Power cord - LA High Volt APU) (models)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K)	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 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

9193 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1G A1M A1A A1Q A1H)	45C4077	1
FR/CF (models A1G)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models 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

9193 Vista Business 32 Recovery DVDs	FRU#	CRU
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 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 9194



Item #	9194 FRUs	FRU#	CRU Tier
1	Intel 65W/95w Heatsink kit (all models)	41R6035	2
2	Microprocessor, Core 2 Duo E6550 Processor 2.33GHz 1333MHz FSB 4M L2 (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	43C3833	N
3	Memory module, 1 GB PC2-5300 (667MHz) DDR2 SDRAM (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41X4256	2
4	DVD-ROM/CD-RW Combo Drive - 48x/32x/48x/16x - SATA vista and XP (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	42Y9353	2
4	DVD-RW/CD-RW Rambo 8 - SATA VISTA AND XP (models A1U A1F A1S A1P A1L A1D A1Y A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1R A1E A1J)	43C1042	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9105	2
5	Diskette drive, 3,5", 1.44MB, 3Mode,(w/bezel) (models)	40Y9107	2
6	Bezel assembly (all models)	41N8052	2
7	Power switch/LED assembly (all models)	41N5284	2
8	Speaker assembly, soldered terminals (models)	39P5023	2
9	Front audio/USB assembly (all models)	41N8054	2
10	Hard disk drive, 160GB (7200RPM), Serial ATA (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	40Y9035	2
11	System board , Saturn AMT (GA) (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	43C2297	N
12	Fan, Rear w/ grommets & Grill (all models)	41R6046	2
13	Power supply, 280 Watt ATX Power Supply - Standard, Robust (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41A9684	2

Item #	9194 FRUs	FRU#	CRU Tier
13	Power supply, 310 Watt ATX Power Supply - Standard, Robust, JP (models A1J)	41A9726	2
13	Power supply, 280 Watt ATX Power Supply (80plus) - Standard, Robust, JP (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41A9665	2

The FRUs listed in the following tables are not illustrated.

9194 FRUs	FRU#	CRU Tier
Shield, 5.25 EMC (all models)	41N8080	2
Shield, diskette drive EMC (all models)	41N8078	2
Cable-SATA 250mm (RoHS) (all models)	41A7145	2
Cable, Diskette drive (RoHs) (all models)	41A7182	2
Intrusion Switch Cable (all models)	39K5022	2
eSATA Cable - FH (all models)	41R3308	2
Cable, SATA (18" RoHs) (all models)	26K1186	2
Kit, Miscellaneous hardware (all models)	41N8055	2
Retainer, Card Reader (all models)	41R2913	2
Optional HDD Bracket Asm, without 4Pin cable (all models)	41R6106	2
Cable, Temp Sense Cable (460mm) (all models)	41R6196	2
Intrusion Switch asm (all models)	41R6116	2
Bezel, without IBM mark (all models)	41R6243	2
Cover, left side (all models)	41N8050	1
Chassis without IBM mark (all models)	41R6241	N
4 Pin System Fan (all models)	41R6296	N
Hard disk drive tray (all models)	41R6291	N
Second Serial Port Cable (all models)	41R6198	N
Fan, front (all models)	41R4791	2

9194 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
US English (models A1U A1G A1M A1A A1Q A1H)	41A5289	1
Arabic (models A1G)	41A5290	1
Arabic/French (models A1G)	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)	41A5301	1

9194 Keyboards (USB Preferred - without hub)	FRU#	CRU Tier
French Canadian 58 (models)	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
Japanese (models A1J)	41A5310	1
Korean (models A1K)	41A5311	1
LA Spanish (models A1S A1P)	41A5312	1
Italian 141 (models A1G)	41A5309	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

9194 mice	FRU#	CRU Tier
Optical Wheel Mouse (400DPI, USB) (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41U3013	1
Optical Wheel Mouse (400DPI, USB) (models A1U A1S A1P A1G A1M A1A A1Q A1T A1C A1B A1H A1V A1K A1J)	41U3030	1

9194 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Power brick - US, Canada, LA low voltage, ASEAN (models A1U A1S A1A)	89P8571	1
Speaker Power brick - LA high voltage (non-APU) (models)	89P8575	1
Speaker Power brick - China, Thailand (models A1C A1T)	89P8581	1
Speaker Power brick - Japan (models A1J)	89P8577	1
Speaker Power brick - ANZ (models A1M)	89P8579	1

9194 Adapters and miscellaneous FRUs	FRU#	CRU
Speaker Brick - Korea (models A1K)	41A4903	1
Speaker Power brick - Hong Kong, Malaysia, Singapore, UK, Brunei (models A1H A1G)	89P8573	1
Speaker Brick - Taiwan (models A1T)	41A4905	1
Speaker Power brick - India, South Africa (models A1Q)	89P8585	1

9194 Power Cords	FRU#	CRU
Power cord - US (models A1U A1S A1A A1T)	39M5080	1
Power cord - China (models A1C)	39M5205	1
Power cord - Japan (models A1J)	39M5193	1
Power cord - Brazil (models A1P)	39M5232	1

Power cord - LA High Volt APU (models)	39M5067	1
Power cord - Australia / New Zealand (models A1M)	39M5102	1
Power cord - Korea (models A1K)	39M5212	1
Power cord - Hong Kong (models A1B A1H)	39M5151	1
Power cord - UK, Ireland, Singapore, Malaysia, Brunei (models A1A A1G)	39M5150	1
Power cord - Taiwan (models A1V)	39M5246	1
Power cord - Italy (models A1S 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

9194 Vista Business 32 Recovery DVDs	FRU#	CRU
US/UK/AP/TH (models A1U A1G A1M A1A A1Q A1H)	45C4077	1
FR/CF (models A1G)	45C4079	1
GR (models A1G)	45C4080	1
SP/LA (models 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

9194 Vista Business 32 Recovery DVDs	FRU#	CRU
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 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

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 51.

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 284.

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 284.

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).

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