

# Hardware Maintenance Manual

Types 8128, 8185, 8186, 8187, 8188, 8189,  
Types 8190, 8192, 8193, 8194, 8195, 8196,  
Types 8197, 8413, 8414, 8415, 8430, 8431  
Types 8432, 8433



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Types 8190, 8192, 8193, 8194, 8195, 8196,  
Types 8197, 8413, 8414, 8415, 8430, 8431  
Types 8432, 8433

**Note:** Before using this information and the product it supports, be sure to read the general information under “Notices” on page 281.

**Ninth Edition (February 2005)**

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## Chapter 1. About this manual

This manual contains service and reference information for IBM® computer Types 8128, 8185, 8186, 8187, 8188, 8189, 8190, 8192 8193, 8194, 8195, 8196, 8197, 8413, 8414, 8415, 8430, 8431 8432, and 8433.

This manual is divided into product service sections and a related service section, as follows:

- The product service sections include procedures for isolating problems to a FRU, a Symptom-to-FRU Index, additional service information and an illustrated parts catalog.
- The related service section includes safety notices and safety information, and problem determination tips.

**Note:**

This manual is intended for trained servicers who are familiar with IBM Personal Computer products. Use this manual along with advanced diagnostic tests to troubleshoot problems effectively.

Before servicing an IBM product, be sure to review the "Safety information" on page 247.

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## Important Safety Information

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

Prenez connaissance de toutes les consignes de type Attention et Danger avant de procéder aux opérations décrites par les instructions.

Lesen Sie alle Sicherheitshinweise, bevor Sie eine Anweisung ausführen.

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### 주의 및 위험 경고문(한글)

**중요:**

이 책에 나오는 모든 주의 및 위험 경고문은 번호로 시작됩니다. 이 번호는 *Safety Information* 책에 나오는 영문판 주의 및 위험 경고문과 한글판 주의 및 위험 경고문을 상호 참조하는데 사용됩니다.

예를 들어 주의 경고문이 번호 1로 시작되면 *Safety Information* 책에서 이 주의 경고문은 경고문 1번 아래에 나옵니다.

지시를 따라 수행하기 전에 먼저 모든 주의 및 위험 경고문을 읽도록 하십시오.

Accertarsi di leggere tutti gli avvisi di attenzione e di pericolo prima di effettuare qualsiasi operazione.

Leia todas as instruções de cuidado e perigo antes de executar qualquer operação.

Lea atentamente todas las declaraciones de precaución y peligro ante de llevar a cabo cualquier operación.

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## 注意和危險声明 (简体中文)

重要事項：

本书中的所有注意和危險声明之前都有编号。该编号用于英语的注意或危險声明与 *Safety Information* 一书中可以找到的翻译版本的注意或危險声明进行交叉引用。

例如，如果一个注意声明以编号 1 开始，那么对该注意声明的翻译出现在 *Safety Information* 一书中的声明 1 中。

在按说明执行任何操作前，请务必阅读所有注意和危險声明。

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## 注意及危險聲明 (中文)

重要資訊：

本書中所有「注意」及「危險」的聲明均以數字開始。此一數字是用來作為交互參考之用，英文「注意」或「危險」聲明可在「安全資訊」(Safety Information) 一書中找到相同內容的「注意」或「危險」聲明的譯文。

例如，有一「危險」聲明以數字 1 開始，則該「危險」聲明的譯文將出現在「安全資訊」(Safety Information) 一書的「聲明」1 中。

執行任何指示之前，請詳讀所有「注意」及「危險」的聲明。

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## Chapter 2. General information

This IBM® computer incorporates many of the latest advances in computer technology.

Go to Access IBM for general information about the use, operation, and maintenance of the computer. Access IBM also contains information to help solve problems and get repair service or other technical assistance.

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### Features

This section provides an overview of the computer features and preinstalled software.

#### Microprocessor (varies by model type)

- Intel® Celeron™ (some models)
- Intel Pentium® 4 (some models)
- Intel Pentium 4 with HyperThreading (some models)
- Internal cache (size varies by model type)

#### Memory

- Support for four dual inline memory modules (DIMMs)
- 512 KB flash memory for system programs

#### Internal drives

- 3.5-inch, 1.44 MB diskette drive
- Internal hard disk drive
- EIDE CD-ROM drive or DVD-ROM drive (some models)

#### Video subsystem

- An integrated graphics controller for a Video Graphics Array (VGA) monitor
- Accelerated graphics port (AGP) video adapter slot on the system board

#### Audio subsystem

- AC'97 with ADI 1981B Audio Codec
- Line in, line out, and microphone connectors on the rear panel

#### Connectivity

- 10/100/1000 Mbps integrated Intel Ethernet controller that supports the Wake on LAN® feature (some models)
- Soft modem V.90/V.44 (some models)

#### System management features

- Remote Program Load (RPL) and Dynamic Host Configuration Protocol (DHCP)
- Wake on LAN
- Wake on Ring (in the IBM Setup Utility program, this feature is called Serial Port Ring Detect for an external modem)
- Remote Administration
- Automatic power-on startup

- System Management (SM) BIOS and SM software
- Ability to store POST hardware test results

#### **Input/output features**

- 25-pin, Extended Capabilities Port (ECP)/Extended Parallel Port (EPP)
- 9-pin serial connector
- Eight 4-pin, USB connectors (two on front panel and six on rear panel)
- PS/2<sup>®</sup> mouse connector
- PS/2 keyboard connector
- Ethernet connector
- VGA monitor connector
- Three audio connectors (line in, line out, and microphone)

#### **Expansion**

- Empty drive bays (some models)
- Three 32-bit peripheral component interconnect (PCI) adapter slots (supports low-profile adapters only)
- One accelerated graphics port (AGP) expansion slot (supports low-profile adapters only)

#### **Power**

- 200 - 230 W power supply with manual voltage selection switch (depending on type)
- Automatic 50/60 Hz input frequency switching
- Advanced Power Management support
- Advanced Configuration and Power Interface (ACPI) support

#### **Security features**

- User and administrator passwords
- Support for the addition of a rope clip and lockable cable
- Support for the addition of an integrated cable lock
- Startup sequence control
- Startup without diskette drive, keyboard, or mouse
- Unattended start mode
- Diskette and hard disk I/O control
- Serial and parallel port I/O control
- Security profile by device

#### **IBM preinstalled software**

The computer might come with preinstalled software. If it does, an operating system, device drivers to support built-in features, and other support programs are included.

#### **Operating systems (preinstalled)** (varies by model type)

**Note:** Not all countries or regions will have these operating systems.

- Microsoft<sup>®</sup> Windows<sup>®</sup> XP Home
- Microsoft Windows XP Professional
- Microsoft Windows 2000

### **Operating systems (tested for compatibility)<sup>1</sup>**

- Microsoft Windows NT<sup>®</sup> Workstation Version 4.0
- Microsoft Windows 98 Second Edition

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## **Physical specifications**

This section details the physical specifications for each computer Type.

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1. The operating systems listed here are being tested for compatibility at the time this publication goes to press. Additional operating systems might be identified by IBM as compatible with the computer following the publication of this booklet. Corrections and additions to this list are subject to change. To determine if an operating system has been tested for compatibility, check the Web site of the operating system vendor.

# Types 8185, 8186, 8192, 8413, and 8430

This section lists the physical specifications for the computer.

<p><b>Dimensions</b></p> <p>Height: 104 mm (4.1 in.)          Width: 360 mm (14.2 in.)          Depth: 412 mm (16.2 in.)</p> <p><b>Weight</b></p> <p>Minimum configuration as shipped: 8.1 kg (18 lb)          Maximum configuration: 9.1 kg (20 lb)</p> <p><b>Environment</b></p> <p>Air temperature:</p> <p>System on: 10° to 35°C (50° to 95° F)          System off: 10° to 43°C (50° to 110° F)          Maximum altitude: 2134 m (7000 ft)  <b>Note:</b> The maximum altitude, 2134 m (7000 ft), is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.</p> <p>Humidity:</p> <p>System on: 8% to 80%          System off: 8% to 80%</p> <p><b>Electrical input</b></p> <p>Input voltage:</p> <p>Low range:</p> <p>Minimum: 90 V ac          Maximum: 180 V ac          Input frequency range: 47–53 Hz          Voltage switch setting: 115 V ac</p> <p>High range:</p> <p>Minimum: 137 V ac          Maximum: 265 V ac          Input frequency range: 57–63 Hz          Voltage switch setting: 230 V ac</p> <p>Input kilovolt-amperes (kVA) (approximate):</p> <p>Minimum configuration as shipped: 0.08 kVA          Maximum configuration: 0.25 kVA</p> <p><b>Note:</b> Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.</p>	<p><b>Heat output</b> (approximate) in British thermal units (Btu) per hour:</p> <p>Minimum configuration: 257 Btu/hr (75 watts)          Maximum configuration: 683 Btu/hr (200 watts)</p> <p><b>Airflow</b></p> <p>Approximately 0.45 cubic meters per minute (16 cubic feet per minute) maximum</p> <p><b>Acoustical noise-emission values</b></p> <p>For microprocessors less than 2.8 GHz:</p> <p>Average sound-pressure levels:</p> <p>At operator position:</p> <p>Idle: 28 dBA          Operating: 30 dBA</p> <p>At bystander position - 1 meter (3.3 ft):</p> <p>Idle: 27 dBA          Operating: 29 dBA</p> <p>Declared (upper limit) sound-power levels:</p> <p>Idle: 4.2 bels          Operating: 4.3 bels</p> <p>For microprocessors greater than or equal to 2.8 GHz:</p> <p>Average sound-pressure levels:</p> <p>At operator position:</p> <p>Idle: 29 dBA          Operating: 31 dBA</p> <p>At bystander position - 1 meter (3.3 ft):</p> <p>Idle: 28 dBA          Operating: 29 dBA</p> <p>Declared (upper limit) sound-power levels:</p> <p>Idle: 4.3 bels          Operating: 4.4 bels</p> <p><b>Note:</b> These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.</p>
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# Types 8128, 8187, 8188, 8193, 8414, and 8431

This section lists the physical specifications for the computer.

<p><b>Dimensions</b></p> <p>Height: 140 mm (5.5 in.) Width: 425 mm (16.7 in.) Depth: 425 mm (16.7 in.)</p> <p><b>Weight</b></p> <p>Minimum configuration as shipped: 10.0 kg (22 lb) Maximum configuration: 11.4 kg (25.0 lb)</p> <p><b>Environment</b></p> <p>Air temperature:</p> <p>System on: 10° to 35°C (50° to 95° F) System off: 10° to 43°C (50° to 110° F)</p> <p>Maximum altitude: 2134 m (7000 ft) <b>Note:</b> The maximum altitude, 2134 m (7000 ft), is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.</p> <p>Humidity:</p> <p>System on: 8% to 80% System off: 8% to 80%</p> <p><b>Electrical input</b></p> <p>Input voltage:</p> <p>Low range:</p> <p>Minimum: 90 V ac Maximum: 180 V ac Input frequency range: 47–53 Hz Voltage switch setting: 115 V ac</p> <p>High range:</p> <p>Minimum: 137 V ac Maximum: 265 V ac Input frequency range: 57–63 Hz Voltage switch setting: 230 V ac</p> <p>Input kilovolt-amperes (kVA) (approximate):</p> <p>Minimum configuration as shipped: 0.08 kVA Maximum configuration: 0.3 kVA</p> <p><b>Note:</b> Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.</p>	<p><b>Heat output</b> (approximate) in British thermal units (Btu) per hour:</p> <p>Minimum configuration: 257 Btu/hr (75 watts) Maximum configuration: 785 Btu/hr (230 watts)</p> <p><b>Airflow</b></p> <p>Approximately 0.51 cubic meters per minute (18 cubic feet per minute) maximum</p> <p><b>Acoustical noise-emission values</b></p> <p>Average sound-pressure levels:</p> <p>At operator position:</p> <p>Idle: 30 dBA Operating: 32 dBA</p> <p>At bystander position - 1 meter (3.3 ft):</p> <p>Idle: 26 dBA Operating: 30 dBA</p> <p>Declared (upper limit) sound-power levels:</p> <p>Idle: 4.0 bels Operating: 4.3 bels</p> <p><b>Note:</b> These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.</p>
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## Types 8189, 8190, 8194, 8195, 8415, 8432, and 8433

This section lists the physical specifications for the computer.

<p><b>Dimensions</b></p> <p>Height: 413 mm (16.25 in.)</p> <p>Width: 191 mm (7.5 in.)</p> <p>Depth: 406 mm (16 in.)</p> <p><b>Weight</b></p> <p>Minimum configuration as shipped: 9.1 kg (20 lb)</p> <p>Maximum configuration: 10.2 kg (22.5 lb)</p> <p><b>Environment</b></p> <p>Air temperature:</p> <p>System on: 10° to 35°C (50° to 95° F)</p> <p>System off: 10° to 43°C (50° to 110° F)</p> <p>Maximum altitude: 2134 m (7000 ft)</p> <p><b>Note:</b> The maximum altitude, 2134 m (7000 ft), is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.</p> <p>Humidity:</p> <p>System on: 8% to 80%</p> <p>System off: 8% to 80%</p> <p><b>Electrical input</b></p> <p>Input voltage:</p> <p>Low range:</p> <p>Minimum: 90 V ac</p> <p>Maximum: 180 V ac</p> <p>Input frequency range: 47–53 Hz</p> <p>Voltage switch setting: 115 V ac</p> <p>High range:</p> <p>Minimum: 137 V ac</p> <p>Maximum: 265 V ac</p> <p>Input frequency range: 57–63 Hz</p> <p>Voltage switch setting: 230 V ac</p> <p>Input kilovolt-amperes (kVA) (approximate):</p> <p>Minimum configuration as shipped: 0.08 kVA</p> <p>Maximum configuration: 0.3 kVA</p> <p><b>Note:</b> Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.</p>	<p><b>Heat output</b> (approximate) in British thermal units (Btu) per hour:</p> <p>Minimum configuration: 257 Btu/hr (75 watts)</p> <p>Maximum configuration: 785 Btu/hr (230 watts)</p> <p><b>Airflow</b></p> <p>Approximately 0.68 cubic meters per minute (24 cubic feet per minute) maximum</p> <p><b>Acoustical noise-emission values</b></p> <p>Average sound-pressure levels:</p> <p>At operator position:</p> <p>Idle: 28 dBA</p> <p>Operating: 30 dBA</p> <p>At bystander position - 1 meter (3.3 ft):</p> <p>Idle: 26 dBA</p> <p>Operating: 29 dBA</p> <p>Declared (upper limit) sound-power levels:</p> <p>Idle: 4.1 bels</p> <p>Operating: 4.3 bels</p> <p><b>Note:</b> These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.</p>
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# Types 8196 and 8197

This section lists the physical specifications for the computer.

<p><b>Dimensions</b></p> <p>Height: 398 mm (15.67 in.)</p> <p>Width: 180 mm (7.08 in.)</p> <p>Depth: 402 mm (15.82 in.)</p> <p><b>Weight</b></p> <p>Minimum configuration as shipped: 7.6 kg (16.8 lb)</p> <p>Maximum configuration: 9.97 kg (22 lb)</p> <p><b>Environment</b></p> <p>Air temperature:</p> <p>System on: 10° to 35°C (50° to 95° F)</p> <p>System off: 10° to 43°C (50° to 110° F)</p> <p>Maximum altitude: 2134 m (7000 ft)</p> <p><b>Note:</b> The maximum altitude, 2134 m (7000 ft), is the maximum altitude at which the specified air temperatures apply. At higher altitudes, the maximum air temperatures are lower than those specified.</p> <p>Humidity:</p> <p>System on: 8% to 80%</p> <p>System off: 8% to 80%</p> <p><b>Electrical input</b></p> <p>Input voltage:</p> <p>Low range:</p> <p>Minimum: 90 V ac</p> <p>Maximum: 180 V ac</p> <p>Input frequency range: 47–53 Hz</p> <p>Voltage switch setting: 115 V ac</p> <p>High range:</p> <p>Minimum: 137 V ac</p> <p>Maximum: 265 V ac</p> <p>Input frequency range: 57–63 Hz</p> <p>Voltage switch setting: 230 V ac</p> <p>Input kilovolt-amperes (kVA) (approximate):</p> <p>Minimum configuration as shipped: 0.08 kVA</p> <p>Maximum configuration: 0.30 kVA</p> <p><b>Note:</b> Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.</p>	<p><b>Heat output</b> (approximate) in British thermal units (Btu) per hour:</p> <p>Minimum configuration: 257 Btu/hr (75 watts)</p> <p>Maximum configuration: 785 Btu/hr (230 watts)</p> <p><b>Airflow</b></p> <p>Approximately 0.68 cubic meters every minute (24 cubic feet every minute) maximum</p> <p><b>Acoustical noise-emission values</b></p> <p>For microprocessors less than 2.8 GHz:</p> <p>Average sound-pressure levels:</p> <p>At operator position:</p> <p>Idle: 28 dBA</p> <p>Operating: 35 dBA</p> <p>At bystander position - 1 meter (3.3 ft):</p> <p>Idle: 25 dBA</p> <p>Operating: 33 dBA</p> <p>Declared (upper limit) sound-power levels:</p> <p>Idle: 4.0 bels</p> <p>Operating: 4.7 bels</p> <p>For microprocessors greater than or equal to 2.8 GHz:</p> <p>Average sound-pressure levels:</p> <p>At operator position:</p> <p>Idle: 33 dBA</p> <p>Operating: 35 dBA</p> <p>At bystander position - 1 meter (3.3 ft):</p> <p>Idle: 30 dBA</p> <p>Operating: 33 dBA</p> <p>Declared (upper limit) sound-power levels:</p> <p>Idle: 4.4 bels</p> <p>Operating: 4.7 bels</p> <p><b>Note:</b> These levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The declared sound-power levels indicate an upper limit, below which a large number of computers will operate.</p>
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## Chapter 3. General Checkout

**Note:** The fans in this system may turn off under normal operation. This is a noise-level reduction feature, and should not be taken to mean there is something wrong with the system.

The following tools are available to help identify and resolve hardware-related problems.

- IBM Setup Utility program
- Power-On Self-Test (POST)
  - POST Beep Codes
  - Error Code Format
- IBM Enhanced Diagnostics program
- Product recovery utility
  - Factory Contents
  - Partial recovery
- Repair utility

**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.

Diagnostic error messages appear when a test program finds a problem with a hardware option. For the test programs to properly determine if a test *Passed*, *Failed* or *Aborted*, the test programs check the error-return code at test completion. See Chapter 4, “IBM Enhanced Diagnostics,” on page 15.

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.

**Notes:**

- By default, the computer starts up quiet (no beep and no memory count and checkpoint code display) when no errors are detected by POST.
- To enable beep and memory count and checkpoint code display when a successful POST occurs, do the following:
  1. Select **Start Options** in the IBM Setup Utility program (see Chapter 5, “IBM Setup Utility program,” on page 19).
  2. Set **Power-On Self-Test** to **Enhanced**.
- 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 112..
- If multiple error codes are displayed, diagnose the first error code displayed.

**001**

1. Power-off the computer and all external devices.
2. Make sure that all external cables and power cords are properly connected.
3. Remove the cover and make sure that all cables to the system board are seated properly.
4. Set all monitor controls to the middle position.
5. Power-on all external devices.
6. Power-on the computer.
7. Check the power-on indicator and listen for the fan(s).

**DID THE COMPUTER POWER-ON AND STAY ON?**

YES, continue to **002** .

NO, go to "Undetermined problems" on page 109.

**002****DID YOU HEAR ANY BEEPS WHEN POWERING ON?**

YES, go to "Beep symptoms" on page 89.

NO, continue to **003** .

**003****IS ANYTHING DISPLAYED ON THE MONITOR SCREEN?**

YES, continue to **004** .

NO, make sure that the monitor is working properly. Most monitors have some sort of diagnostic self test. Refer to the manual for your monitor.

If you determine that the monitor is working properly, make sure it is properly connected to the computer. Otherwise, go to "Undetermined problems" on page 109.

**004****DID YOU RECEIVE THE EXPECTED RESPONSE?**

YES, continue to **005** .

NO, proceed to **006** .

**005**

Run the Diagnostic programs. If necessary, refer to Chapter 4, "IBM Enhanced Diagnostics," on page 15.

- If you receive an error, replace the part that the diagnostic program calls out or go to Chapter 7, "Symptom-to-FRU Index," on page 69.
- If an installed device is not recognized by the diagnostics program, that device might be defective.

- If the test stops and you cannot continue, replace the last device tested.

#### **006**

#### **IS A POST ERROR CODE DISPLAYED?**

If YES, go to “POST error codes” on page 92.

If NO, continue to **007** .

#### **007**

1. Power-off the computer.
2. Press and hold the F1 key and power-on the computer to start the IBM Setup Utility program (see Chapter 5, “IBM Setup Utility program,” on page 19). Release the F1 key when you hear beeps.
3. Select Exit, Load Default Settings, and Save and exit the Setup Utility.
4. If the problem persists, continue to **008** .

#### **008**

Run the Diagnostic programs. If necessary, refer to Chapter 4, “IBM Enhanced Diagnostics,” on page 15.

- If you receive an error, replace the part that the diagnostic program calls out or go to Chapter 7, “Symptom-to-FRU Index,” on page 69.
- If the test stops and you cannot continue, replace the last device tested.





---

## Chapter 4. IBM Enhanced Diagnostics

The IBM Enhanced Diagnostics program uses a full range of diagnostic utilities to determine the operating condition of the computer's hardware components.

For a complete list of error codes and messages, see Chapter 7, "Symptom-to-FRU Index," on page 69.

---

### Diagnostics program download

To download the Diagnostics program, do the following:

- Go to <http://www.ibm.com/>.
- Select **Support & downloads**.
- Select **Personal computing** from the "Get product support for" list.
- Enter your the machine type in the "Quick Path" box.
- Follow the links to find the IBM Enhance Diagnostics.

**Note:** You can download either a diskette image or a startable CD-ROM image (.iso file) of the diagnostics.

---

### 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 press F1.

---

### Running diagnostics tests

There are four ways to run the diagnostic tests.

1. Using the cursor movement keys, highlight **Run Normal Test** or **Run Quick Test** from the Diagnostics menu and then press **Enter**.  
This will automatically run 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 execute.
2. Press F5 to automatically run all selected tests in all categories. See "Test selection" on page 16.
3. From within a test category, press **Ctrl-Enter** to automatically run only the selected tests in that category. See "Test selection" on page 16.
4. Using the cursor movement keys, highlight a single test within a test category, then press **Enter**. This will run 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 18.

## Test selection

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 chevron.
4. Repeat steps 2 and 3 above to select all desired tests.

## Test results

Diagnostics test results will 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 DIMM, or a device on the PCI bus.
- **Date:**  
Contains the date on which 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 IBM computer.
  - The diagnostic error code is recorded correctly.
- **Text:**  
Description of the error.

**Note:** See "Diagnostic error codes" on page 70 for error code listings.

## Fixed disk advanced test (FDAT)

PC-Doctor's (PCDR) Fixed-Disk Advanced Test module (FDAT) is a full-featured highly configurable fixed-disk test suite. The configurable capabilities of FDAT allow users to enable or disable specific tests, enable or disable testing features, control the test log detail, alter testing parameters, etc. FDAT will test for and report most commonly found errors on a fixed-disk drive and is able to test up to 128 SCSI and 4 IDE drives (up to 132 total drives). Drive information is gathered through FDAT's enumeration of available devices and user specific configuration parameters located in the FDAT.INI. FDAT uses information supplied by these features to indicate specifically what devices are available for test, what tests are available for the device, device properties, etc. Modify the FDAT.INI file in PC Doctor for DOS to change testing parameters.

FDAT consists of the following subtests and features.

**Fixed-Disk Tests:**

- *Seek Tests* - checks the physical operation of the drive head.
  - Linear Seek
  - Random Seek
  - Min-Max Seek
  - Butterfly Seek
- *Verify Tests* - checks the integrity of the data present on the media.
  - Linear Verify
  - Random Verify
- *Surface Scan Tests* - checks the drive media for defects.
  - Surface Scan (Linear)
  - Surface Scan (Aggressive) - this is disabled for normal customer use.
  - Surface Scan (Random)
- *SMART* - checks the SMART functionality for drives that support SMART.
  - Start SMART Self-Test
  - Get SMART test results

**Other Test Features:**

- *Write-Splice Repair* - detects and corrects Error Correction Code errors during Verify tests.
- *Auto Spin Down* - a gradual spin down of the drive platters to avoid damaging the media.
- *Manufacturer Log* - an in-depth manufacturer supported log of errors on the drive.

**Multitasking:**

To allow simultaneous testing of multiple hard drives whenever possible, the FDAT module is written as a set of multitasking functions. Each drive under test can run the same test or run a different test at the same time. Each subtest is written to handle a single test pass and all test variables are kept track of in a structure unique for each drive. However, when testing IDE drives, FDAT will not perform simultaneous testing of IDE drives that are attached to the same IDE cable. For example, if FDAT is testing four IDE drives on a PC, it will perform simultaneous testing on drives 1 and 3 first (master drives), then perform tests on 2 and 4 (slave drives). FDAT will also perform simultaneous testing on a master and slave that are on separate IDE cables, but will not perform simultaneous tests on a master and slave on the same IDE cable. This generally increases the amount of time needed to test multiple IDE drives.

Another limitation of FDAT'S multitasking capability is the use of Ultra DMA (UDMA). Only one drive at a time can access the UDMA channel and the UDMA channel buffer must be kept high in order to maintain a speed advantage over other data transfer modes. In order to use the UDMA channel during testing, users must disable the multitasking feature.

**Destructive vs non-destructive testing:**

Most of the tests found in FDAT are non-destructive. This means that PCDR will preserve any data that is present on the tested media prior to beginning any destructive operations (i.e. write operations). However, users can run certain tests

in destructive mode (i.e. surface scan tests). Destructive tests will speed up testing because FDAT does not preserve the data on the media prior to the test beginning. Unlike non-destructive tests, any data present on the media prior to the test beginning is lost. FDAT allows for enabling or disabling destructive tests, as well as specifying a range of destructive and non-destructive sectors on the tested drive. This is done through the configuration of the FDAT.INI. If destructive and non-destructive ranges somehow overlap, then the overlapped area is considered non-destructive. For example, if users specify both destructive and non-destructive ranges as the same, then the entire drive is tested as non-destructive.

## 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 steps.

- 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 steps.

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

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

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

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

---

## Viewing the test log

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

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

- Press F3 to activate the log file.
- Press F3 again to save the file to diskette or F2 to print the file.

---

## Chapter 5. IBM Setup Utility program

### Attention

A customized setup configuration (other than default settings) might exist on the computer you are servicing. Running the IBM Setup Utility program might alter those settings. Note the current configuration settings and verify that the settings are in place when service is complete.

The IBM Setup Utility program is stored in the electrically erasable programmable read-only memory (EEPROM) of the computer. The IBM 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 IBM Setup Utility program.

This program includes settings for the following:

- System Summary
- Product Data
- Devices and I/O Ports
- Start Options
- Date and Time
- System Security
- Advanced Setup
- Power Management

---

### Starting the IBM Setup Utility program

To start the IBM Setup Utility program, do the following:

1. Power-off the computer and wait for a few seconds until all in-use lights go off.
2. Power-on the computer.
3. When the IBM Setup Utility prompt appears on the screen during start-up, press F1. The IBM Setup Utility menu will appear.
4. Follow the instructions on the screen.
5. When finished, select **System Summary** to verify that any configuration changes have been accepted.

The IBM 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 IBM Setup Utility program menu lists items that identify system configuration topics.

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

---

## Exiting from the IBM Setup Utility program

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

---

## Using passwords

The use of passwords provide security for the computer and data. There are two kinds of passwords: a user password and an administrator password. You do not have to set a password of either type to use the computer. However, if you decide to set either one, read the following sections.

### User password

The user password feature deters unauthorized persons from gaining access to the computer.

### Administrator password

Setting an administrator password 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 IBM Setup Utility program. If you type the wrong password, you will see an error message. If you type the wrong password three times, you must turn the computer off and start again.

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 seven characters (A- Z, a-z, and 0-9).

1. Start the IBM Setup Utility program (see “Starting the IBM Setup Utility program” on page 19).
2. From the IBM Setup Utility program menu, select **Security** → **Set Passwords**. Read the information displayed on the right side of the screen.

---

## Using Security Profile by Device

Security Profile by Device is used to enable or disable user access to the following devices:

<b>IDE controller</b>	When this feature is set to <b>Disable</b> , all devices connected to the IDE controller (such as hard disk drives or the CD-ROM drive) are disabled and will not be displayed in the system configuration.
<b>Diskette Drive Access</b>	When this feature is set to <b>Disable</b> , the diskette drive cannot be accessed.
<b>Diskette Write Protect</b>	When this feature is set to <b>Enable</b> , all diskettes are treated as if they are write-protected.

To set Security Profile by Device, do the following:

1. Start the IBM Setup Utility program (see “Starting the IBM Setup Utility program” on page 19).
2. From the IBM Setup Utility program menu, select **Security**.
3. Select **Security Profile by Device**.
4. Select the desired devices and settings and press Enter.
5. Return to the IBM Setup Utility program menu and select **Exit** and then **Save Settings** or **Save and exit the Setup Utility**.

**Note:** If you do not want to save the settings, select **Exit the Setup Utility without saving**.

---

## Using IDE Drives Setup

In addition to listing the different IDE devices, there are options for configuring the serial and parallel IDE controllers.

<b>Parallel ATA</b>	This setting allows the user to disable one or both of the parallel IDE controllers.
<b>Native Mode Operation</b>	This setting is only available when the serial ATA controller is enabled. This allows the user to specify whether the parallel and serial ATA controllers will operate in “legacy” or “native” mode. By default, they will operate in native mode unless both parallel ATA controllers are populated and a serial ATA drive is present. Then the serial ATA drive will become “native” mode. The user can select Automatic or the serial ATA controller to run in “native” mode. However, running in “native” mode might not work with older operating systems.

To configure IDE Drives Setup, do the following:

1. Start the IBM Setup Utility program (see “Starting the IBM Setup Utility program” on page 19).
2. From the IBM Setup Utility program menu, select **Devices**.
3. Select **IDE Drives Setup**.
4. Select the desired devices and settings and press Enter.
5. Return to the IBM Setup Utility program menu and select **Exit** and then **Save Settings**.

---

## 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 startable (bootable).

1. Turn off the computer.
2. Turn on the computer and look for the following prompt on the logo screen:  
(To interrupt normal startup, press Enter)
3. Press the Enter key.
4. When the Startup Interrupt Menu displays, press F12.
5. Double click the desired startup device from the Alternate startup devices.

**Note:** Selecting a startup device from this list does not permanently change the startup sequence.

### Changing the startup device sequence

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

1. Start the IBM Setup Utility program (see “Starting the IBM Setup Utility program” on page 19).
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 IBM 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.



---

## Chapter 6. Replacing FRUs

**Important:** Before you install or remove any option, read “Safety information” on page 247. These precautions and guidelines will help you work safely.

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

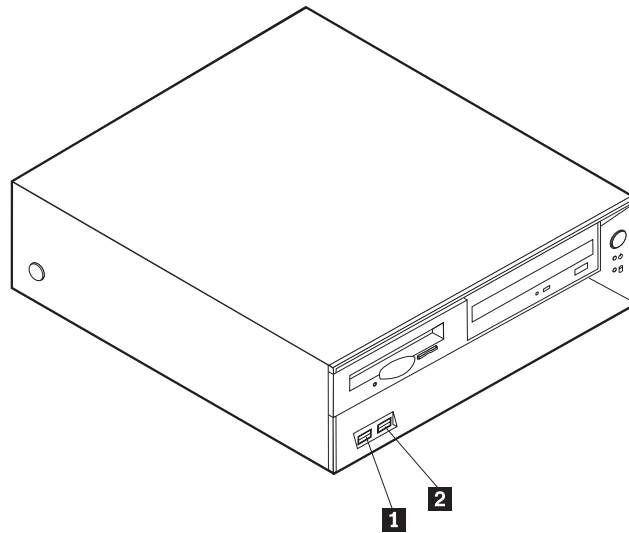
**Note:** Some FRUs are also CRUs (Customer Replaceable Units). For CRU information see Chapter 9, “Parts listing,” on page 119.

---

### Locating connectors on the front

#### Types 8185, 8186, 8192, 8413, and 8430

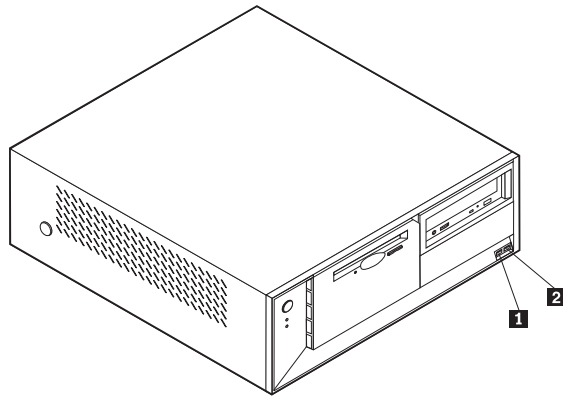
The following illustration shows the locations of the connectors on the front of the computer.



- 1** USB connector
- 2** USB connector

#### Types 8128, 8187, 8188, 8193, 8414, and 8431

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

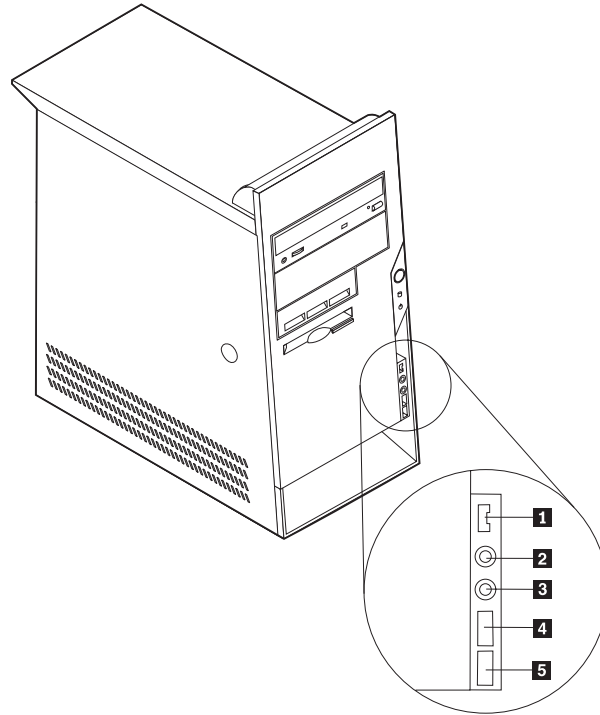


- 1** USB connector
- 2** USB connector

## Types 8189, 8190, 8194, 8195, 8415, 8432, and 8433

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

**Note:** Not all computer models will have the following connectors.

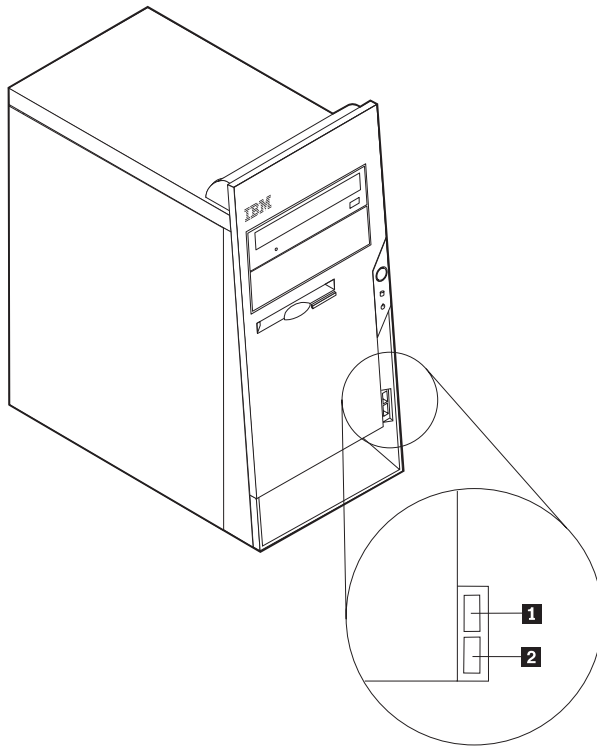


- 1** IEEE 1394 connector
- 2** Microphone connector
- 3** Headphone connector

- 4** USB connector
- 5** USB connector

## Types 8196 and 8197

The following illustration shows the locations of the USB connectors on the front of the computer.



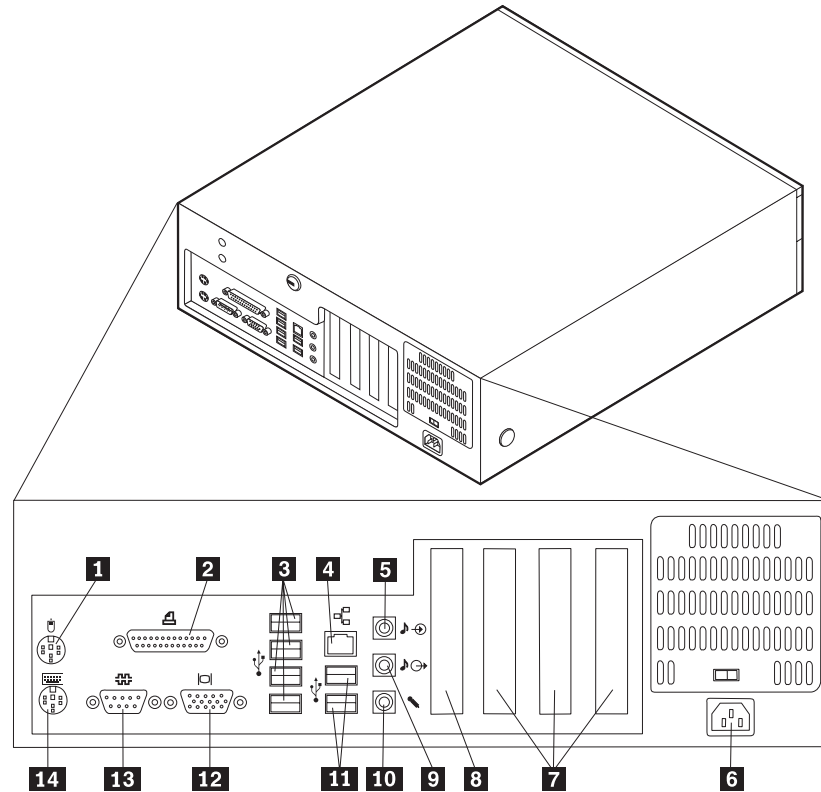
- 1** USB connector
- 2** USB connector

---

## Locating the connectors on the rear

### Types 8185, 8186, 8192, 8413, and 8430

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

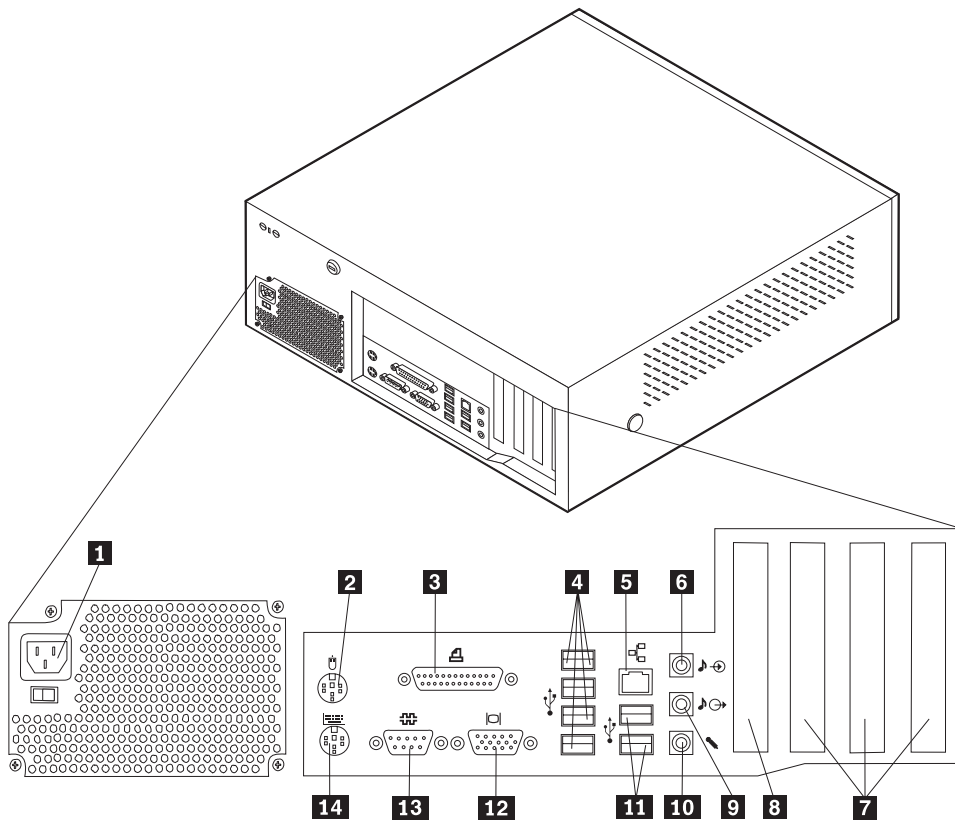


- |                                  |                                   |
|----------------------------------|-----------------------------------|
| <b>1</b> Mouse connector         | <b>8</b> AGP adapter connector    |
| <b>2</b> Parallel connector      | <b>9</b> Audio line out connector |
| <b>3</b> USB connectors          | <b>10</b> Microphone connector    |
| <b>4</b> Ethernet connector      | <b>11</b> USB connectors          |
| <b>5</b> Audio line in connector | <b>12</b> VGA monitor connector   |
| <b>6</b> Power connector         | <b>13</b> Serial connector        |
| <b>7</b> PCI adapter connectors  | <b>14</b> Keyboard connector      |

**Note:** Some connectors on the rear of the computer are color-coded to help you to determine where to connect the cables on the computer.

### Types 8128, 8187, 8188, 8193, 8414, and 8431

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

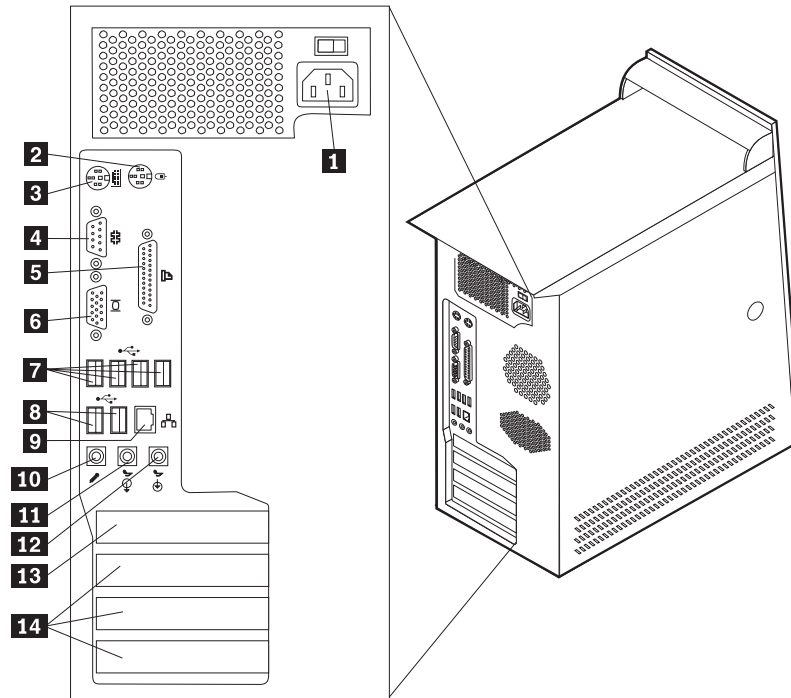


- |                                  |                                   |
|----------------------------------|-----------------------------------|
| <b>1</b> Power connector         | <b>8</b> AGP adapter connector    |
| <b>2</b> Mouse connector         | <b>9</b> Audio line out connector |
| <b>3</b> Parallel connector      | <b>10</b> Microphone connector    |
| <b>4</b> USB connectors          | <b>11</b> USB connectors          |
| <b>5</b> Ethernet connector      | <b>12</b> VGA monitor connector   |
| <b>6</b> Audio line in connector | <b>13</b> Serial connector        |
| <b>7</b> PCI adapter connectors  | <b>14</b> Keyboard connector      |

**Note:** Some connectors on the rear of the computer are color-coded to help you to determine where to connect the cables on the computer.

## Types 8189, 8190, 8194, 8195, 8415, 8432, and 8433

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



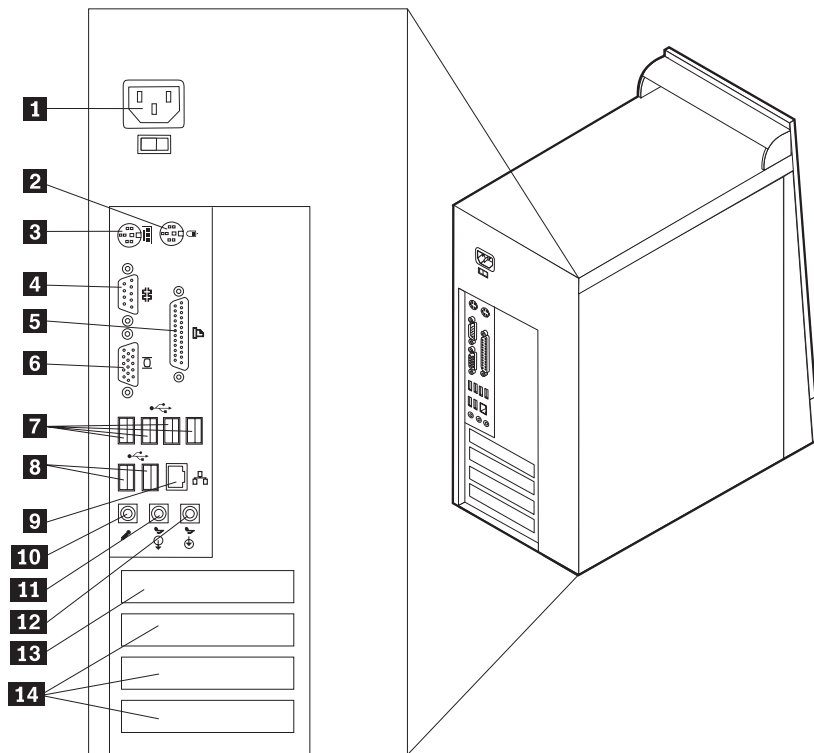
- 1** Power connector
- 2** Mouse connector
- 3** Keyboard connector
- 4** Serial connector
- 5** Parallel connector
- 6** VGA monitor connector
- 7** USB connectors

- 8** USB connectors
- 9** Ethernet connector
- 10** Microphone connector
- 11** Audio line out connector
- 12** Audio line in connector
- 13** AGP adapter connector
- 14** PCI adapter connectors

**Note:** Some connectors on the rear of the computer are color-coded to help you to determine where to connect the cables on the computer.

## Types 8196 and 8197

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



- |                                |                                    |
|--------------------------------|------------------------------------|
| <b>1</b> Power connector       | <b>8</b> USB connectors            |
| <b>2</b> Mouse connector       | <b>9</b> Ethernet connector        |
| <b>3</b> Keyboard connector    | <b>10</b> Microphone connector     |
| <b>4</b> Serial connector      | <b>11</b> Audio line out connector |
| <b>5</b> Parallel connector    | <b>12</b> Audio line in connector  |
| <b>6</b> VGA monitor connector | <b>13</b> AGP adapter connector    |
| <b>7</b> USB connectors        | <b>14</b> PCI adapter connectors   |

**Note:** Some connectors on the rear of the computer are color-coded to help you to determine where to connect the cables on the computer.

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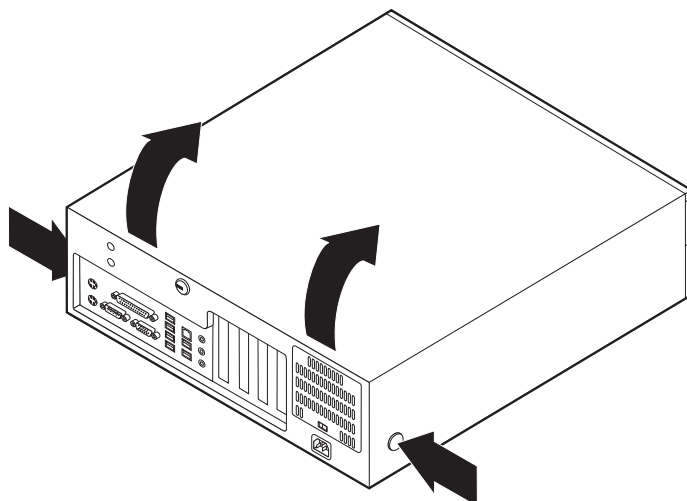
## Removing the cover

**Important:** Read “Safety information” on page 247 and “Handling electrostatic discharge-sensitive devices” on page 250 before removing the cover.

### Types 8185, 8186, 8192, 8413, and 8430

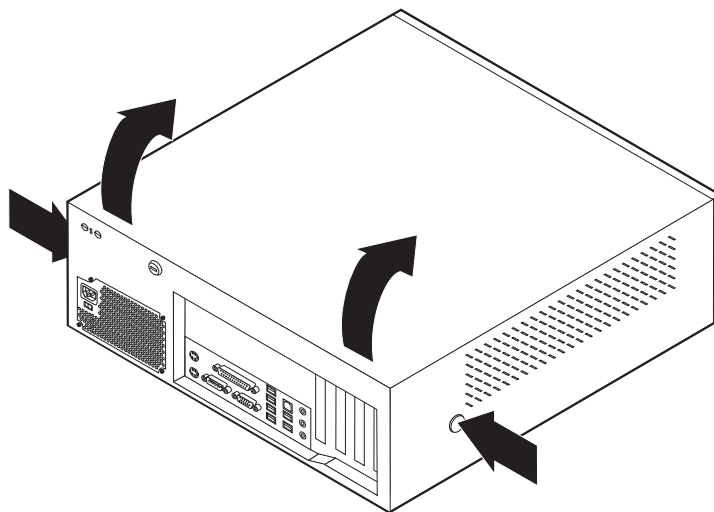
1. Shut down your operating system, remove any media (diskettes, CDs, or tapes) from the drives, and turn off all attached devices and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer.
4. Press the buttons on the sides of the computer and pivot the rear end of the cover up toward the front of the computer.





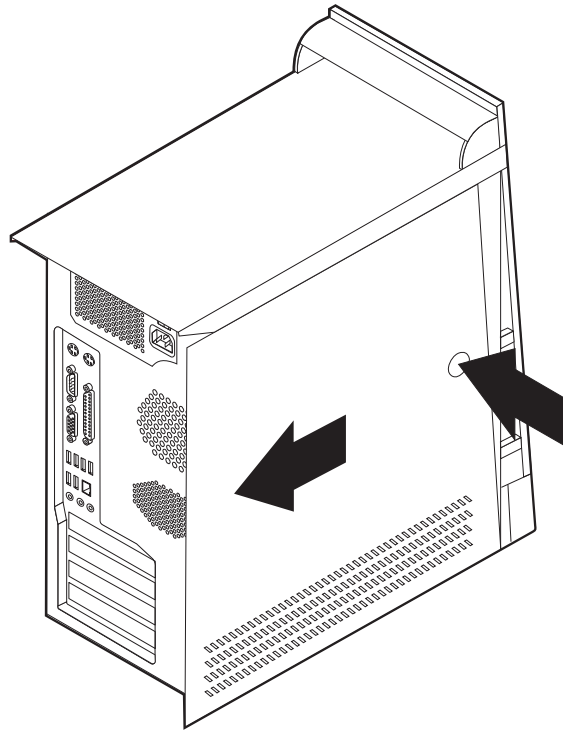
### Types 8128, 8187, 8188, 8193, 8414, and 8431

1. Shut down your operating system, remove any media (diskettes, CDs, or tapes) from the drives, and turn off all attached devices and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer.
4. Press the buttons on the sides of the computer and pivot the rear end of the cover up toward the front of the computer.



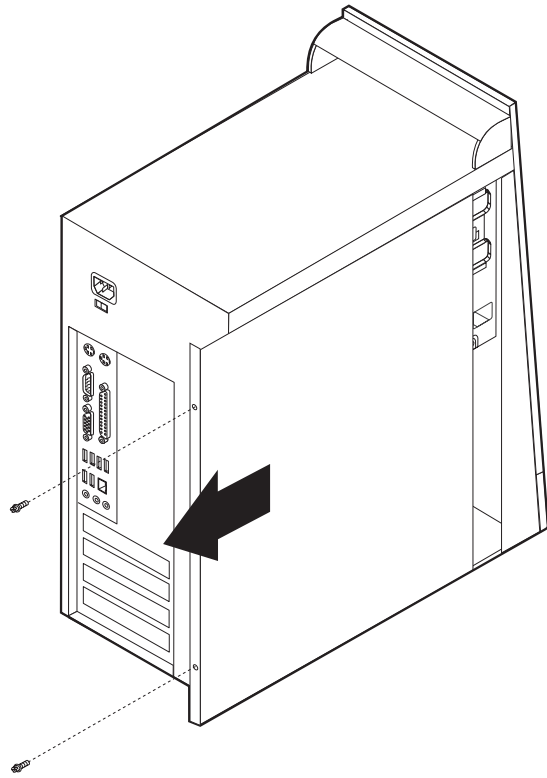
### Types 8189, 8190, 8194, 8195, 8415, 8432, and 8433

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



## Types 8196 and 8197

1. Shut down your operating system, remove any media (diskettes, CDs, or tapes) from the drives, and turn off all attached devices and the computer.
2. Unplug all power cords from electrical outlets.
3. Disconnect all cables attached to the computer. This includes power cords, input/output (I/O) cables, and any other cables that are connected to the computer.
4. Remove the two screws at the rear of the left side cover and slide the cover to the rear to remove.

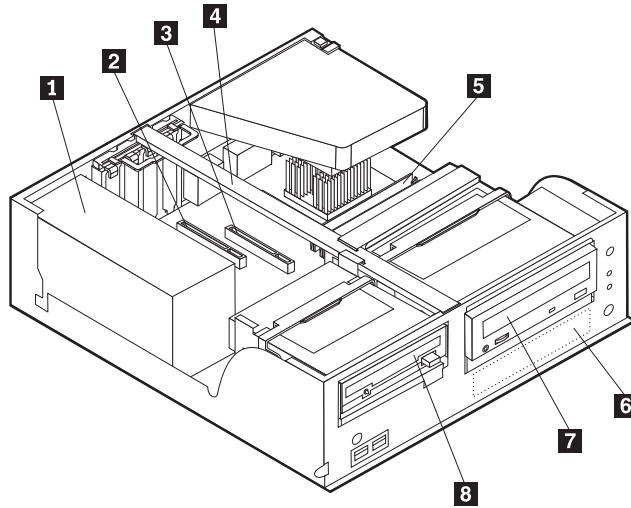


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## Locating components

### Types 8185, 8186, 8192, 8413, and 8430

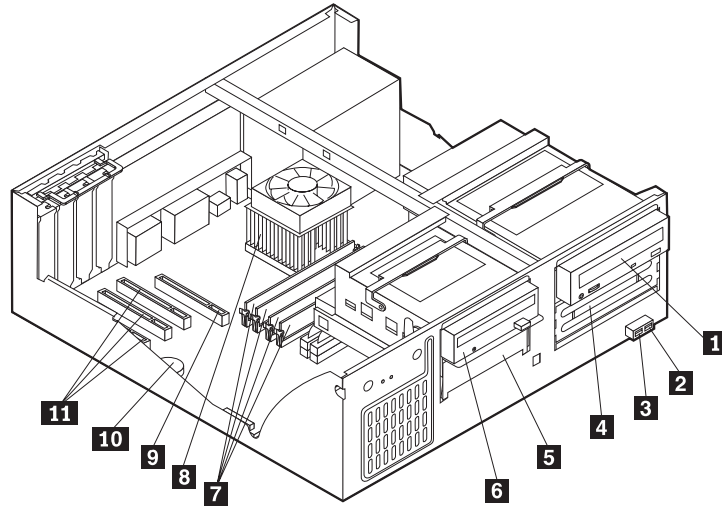
The following illustration will help you locate the various components in the computer.



- |                                |                           |
|--------------------------------|---------------------------|
| <b>1</b> Power supply          | <b>5</b> Memory connector |
| <b>2</b> PCI adapter connector | <b>6</b> Hard disk drive  |
| <b>3</b> AGP adapter connector | <b>7</b> Optical drive    |
| <b>4</b> Support bar           | <b>8</b> Diskette drive   |

## Types 8128, 8187, 8188, 8193, 8414, and 8431

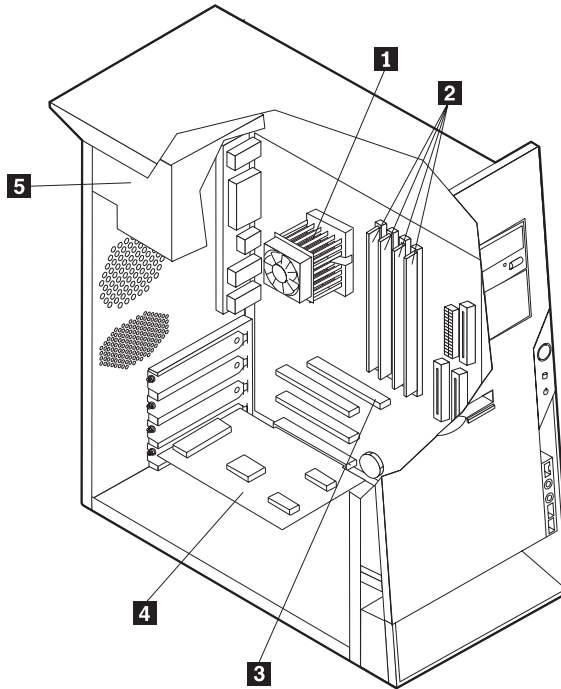
The following illustration will help you locate the various components in the computer.



- |                             |                                       |
|-----------------------------|---------------------------------------|
| <b>1</b> Optical drive      | <b>7</b> Memory connectors            |
| <b>2</b> USB connector      | <b>8</b> Microprocessor and heat sink |
| <b>3</b> USB connector      | <b>9</b> AGP adapter connector        |
| <b>4</b> Optional drive bay | <b>10</b> Battery                     |
| <b>5</b> Hard disk drive    | <b>11</b> PCI adapter connectors      |
| <b>6</b> Diskette drive     |                                       |

## Types 8189, 8190, 8194, 8195, 8415, 8432, and 8433

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



**1** Microprocessor and heat sink

**2** Memory connectors

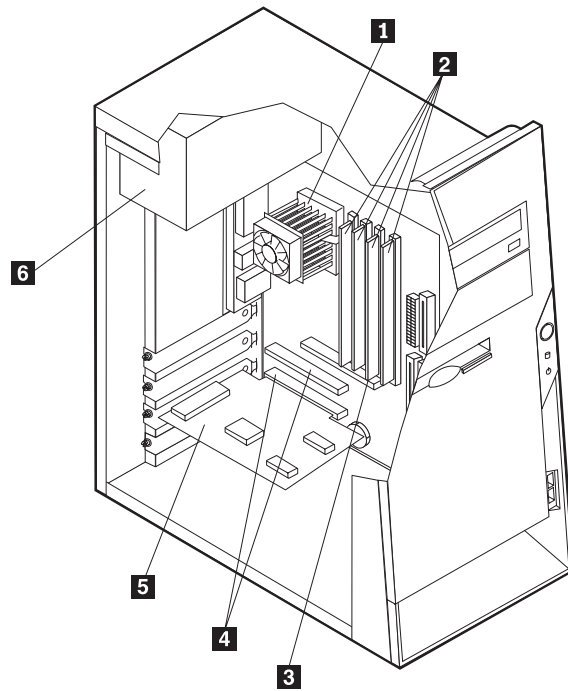
**3** AGP adapter connector

**4** PCI adapter

**5** Power supply

## Types 8196 and 8197

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

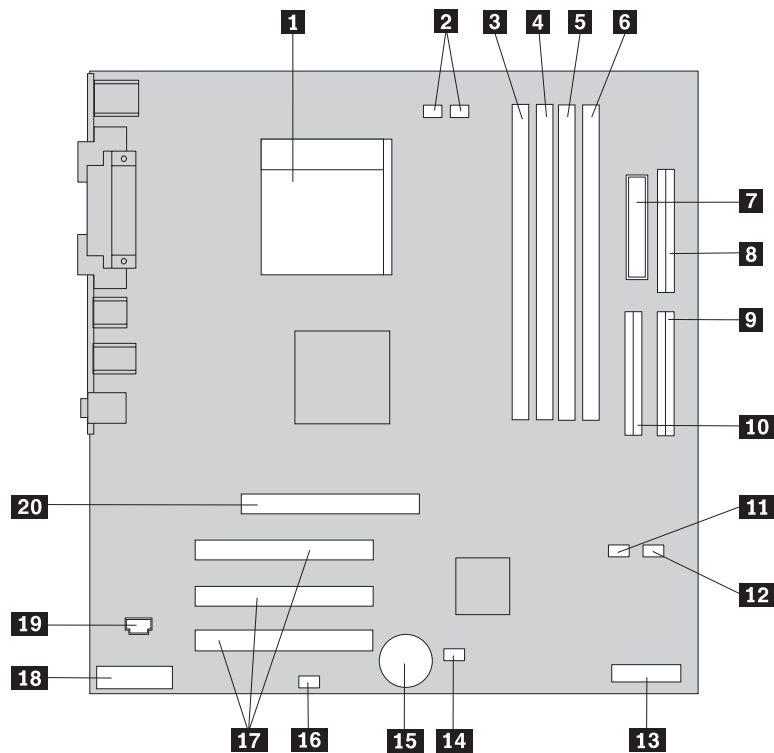


- 1** Microprocessor and heat sink
- 2** Memory connectors
- 3** AGP adapter connector

- 4** PCI adapter connectors
- 5** PCI adapter
- 6** Power supply

---

## Identifying parts on the system board (all machine types)



- |                                        |                                            |
|----------------------------------------|--------------------------------------------|
| <b>1</b> Microprocessor                | <b>11</b> SATA 1 IDE connector             |
| <b>2</b> Fan sink connectors           | <b>12</b> SATA 2 IDE connector             |
| <b>3</b> Memory connector 1            | <b>13</b> Security daughter card connector |
| <b>4</b> Memory connector 2            | <b>14</b> Clear CMOS/Recovery jumper       |
| <b>5</b> Memory connector 3            | <b>15</b> Battery                          |
| <b>6</b> Memory connector 4            | <b>16</b> SCSI LED connector               |
| <b>7</b> Power connector               | <b>17</b> PCI slots                        |
| <b>8</b> Diskette drive connector      | <b>18</b> Front panel audio connector      |
| <b>9</b> PATA primary IDE connector    | <b>19</b> CD-ROM audio connector           |
| <b>10</b> PATA secondary IDE connector | <b>20</b> AGP slot                         |

---

## Replacing memory (all machine types)

The computer has four connectors for installing dual inline memory modules (DIMMs) that provide up to a maximum of 4.0 GB of system memory.

When installing memory modules, the following rules apply:

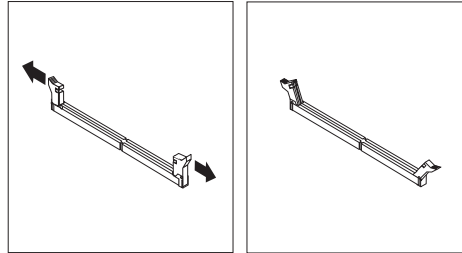
- System memory is divided into two channels (channel A and B). memory connectors 1 and 2 are channel A, and memory connectors 3 and 4 are channel B.
- If memory connectors 1 and 3 (or 2 and 4) are filled with the same technology and size of memory, the system operates in dual channel mode.
- Use 2.5 V, 184-pin, 333 MHz double data rate synchronous dynamic random access memory (DDR SDRAM).
- Use 128 MB, 256 MB, 512 MB or 1.0 GB (when available) memory modules in any combination.
- Memory modules are 25.4 mm (1.0 inches) in height.



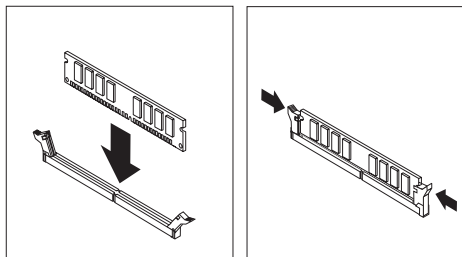
**Note:** Only DDR SDRAM memory modules can be used.

To replace a memory module:

1. Remove the cover. See “Removing the cover” on page 30.
2. To locate the memory connectors. See “Identifying parts on the system board (all machine types)” on page 38.
3. Remove the memory module being replaced by opening the retaining clips as shown.



4. Make sure the notches in the new memory module align with the tabs on the connector. Push or insert the memory module straight down into the connector until the retaining clips close.



5. Go to “Replacing the cover and connecting the cables” on page 63.

---

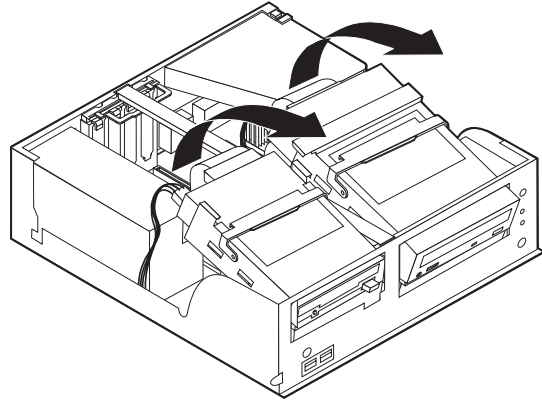
## Replacing adapters

### Types 8185, 8186, 8192, 8413, and 8430

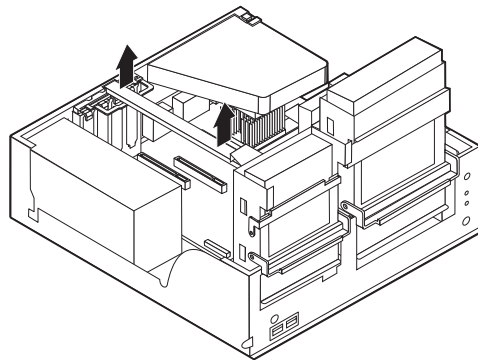
These type computers have three expansion slots for PCI adapters and one slot used for an AGP adapter. Adapters must be low profile. The computer supports adapters up to 168 mm (6.6 inches) long.

1. Remove the cover. See “Removing the cover” on page 30.

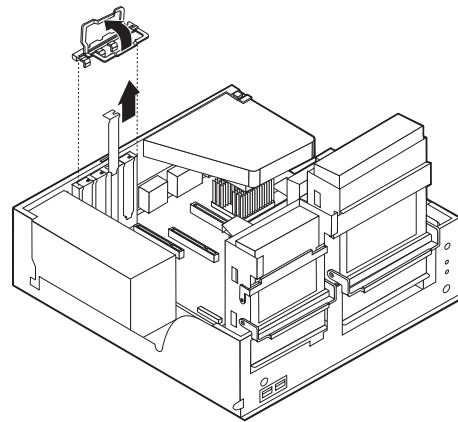
2. Pivot one of the drive bay latch handles toward the front of the computer and then pivot the drive bay cage upward, as shown, until it is latched in the up position. Repeat this procedure for the remaining drive bay.



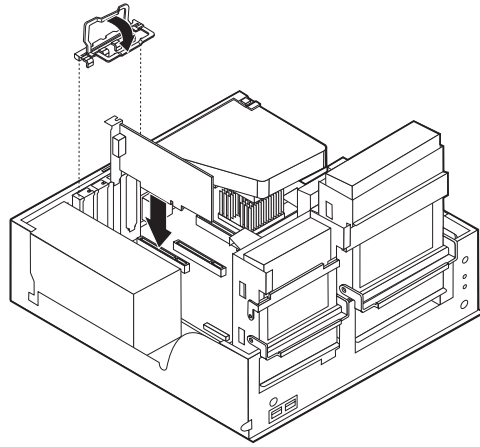
3. Remove the support bar by pulling it outward from the computer.



4. Remove the adapter-slot-cover latch.



5. Remove the adapter being replaced.
6. Remove the new adapter from its static-protective package.
7. Install the new adapter into the appropriate slot on the system board.
8. Install the adapter-slot-cover latch.

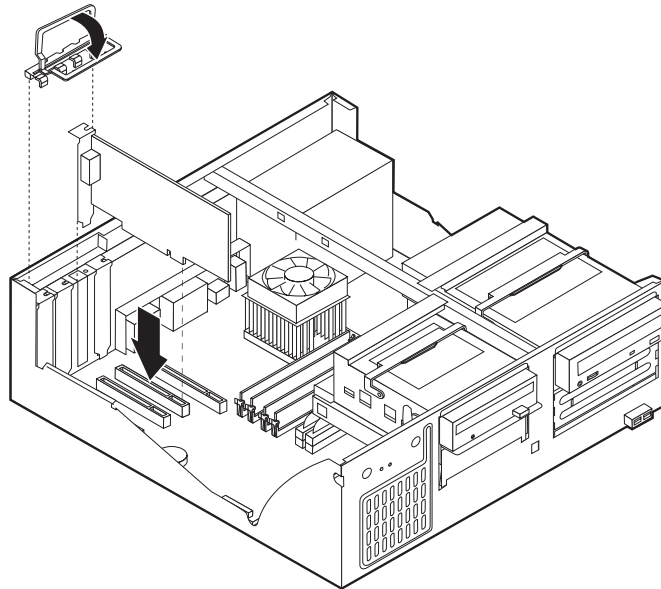


9. Clear any cables that might impede the replacement of the drive bays.
10. Replace the support bar and pivot the two drive bays back to their original positions.
11. Go to “Replacing the cover and connecting the cables” on page 63.

## Types 8128, 8187, 8188, 8193, 8414, and 8431

These type computers have three expansion slots for PCI adapters and one slot used for an AGP adapter. You can install an adapter up to 340 mm (13.4 inches) long.

1. Remove the cover. See “Removing the cover” on page 30.
2. Remove the adapter-slot-cover latch.
3. Remove the adapter being replaced.
4. Remove the new adapter from its static-protective package.
5. Install the adapter into the appropriate slot on the system board.
6. Install the adapter-slot-cover latch.

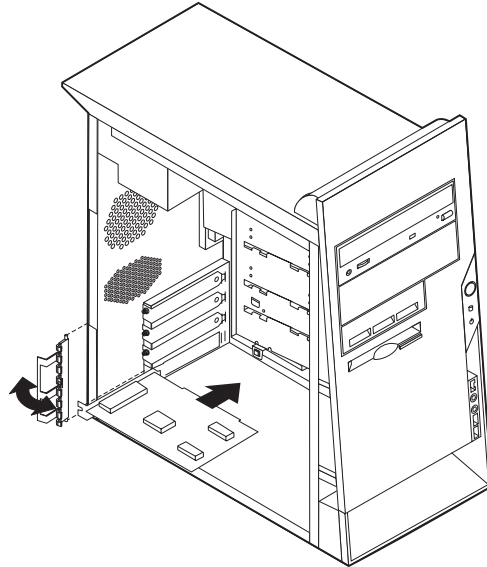


7. Go to “Replacing the cover and connecting the cables” on page 63.

## Types 8189, 8190, 8194, 8195, 8415, 8432, and 8433

These type computers have three expansion slots for PCI adapters and one slot used for an AGP adapter. You can install an adapter up to 228 mm (9 inches) long.

1. Remove the cover. See “Removing the cover” on page 30.
2. Remove the adapter-slot-cover latch.
3. Remove the adapter being replaced.
4. Remove the new adapter from its static-protective package.
5. Install the adapter into the appropriate slot on the system board.
6. Install the adapter-slot-cover latch.

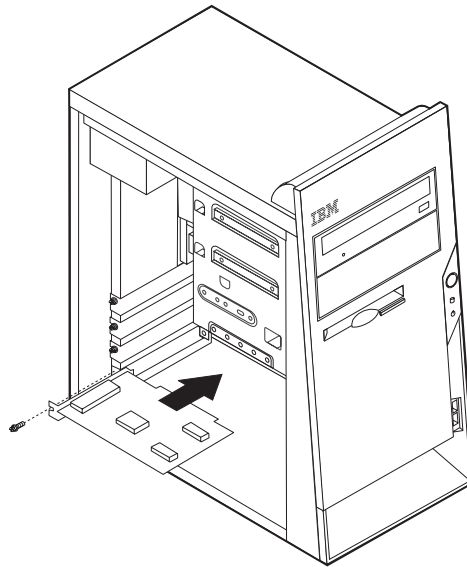


7. Go to “Replacing the cover and connecting the cables” on page 63.

## Types 8196 and 8197

These type computers have three expansion slots for PCI adapters. You can install an adapter up to 228 mm (9 inches) long.

1. Remove the cover. See “Removing the cover” on page 30.
2. Remove the screw securing the adapter in the slot.
3. Remove the adapter being replaced.
4. Remove the new adapter from its static-protective package.
5. Install the adapter into the appropriate slot on the system board.
6. Secure the adapter with the screw as shown.



7. Go to “Replacing the cover and connecting the cables” on page 63.

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## Replacing internal drives

This section provides information and instructions for replacing internal drives.

- Hard disk drives
- CD drives or DVD drives
- Removable media drives

**Note:** These different drives are also referred to as integrated drive electronics (IDE) drives.

Internal drives are installed in *bays*. In this book, the bays are referred to as bay 1, bay 2, and so on.

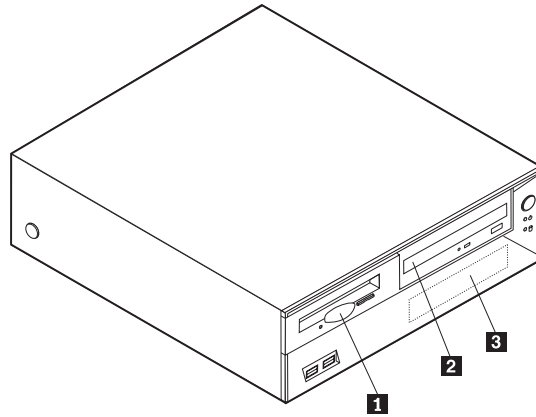
When you install an internal drive, it is important to note what type and size of drive that you can install in each bay. Also, it is important to correctly connect the internal drive cables to the installed drive.

### Types 8185, 8186, 8192, 8413, and 8430

#### Drive bay information

Any bay that does not have a drive installed has a static shield and bay panel installed.

The following illustration shows the locations of the drive bays.



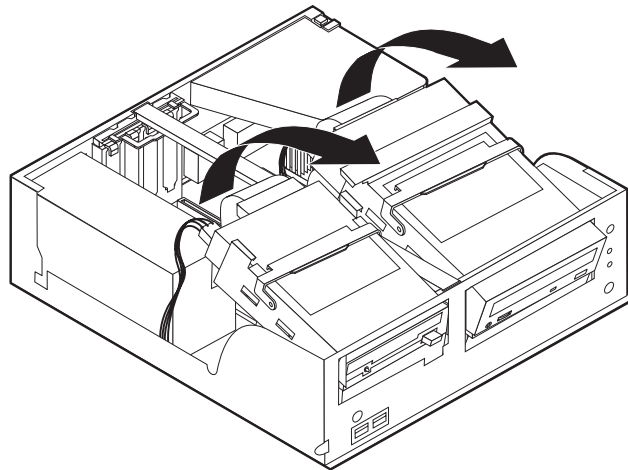
The following list describes some of the drives that you can install in each bay and their height requirements:

Bay **1** and Bay **3** - Maximum height: 25.8 mm (1.0 in.)

Bay **2** - Maximum height: 43.0 mm (1.7 in.)

### Removing a drive

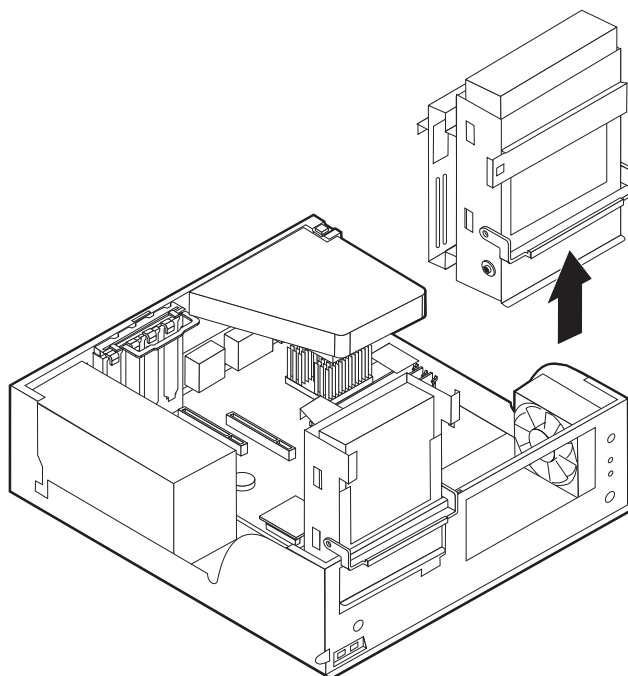
1. Remove the cover. See “Removing the cover” on page 30.
2. Pivot the drive-bay latch handle toward the front of the computer and then pivot the drive-bay cages upward, as shown, until latched in the upright position.



3. Disconnect the signal cable and power supply cable from the drive being replaced.

**Note:** Take note of the location of any cables you disconnect. You might have to disconnect cables to other drives to gain access to the drive you are removing.

4. For the hard disk drive and the CD drive, you can lift the tray out of the computer.



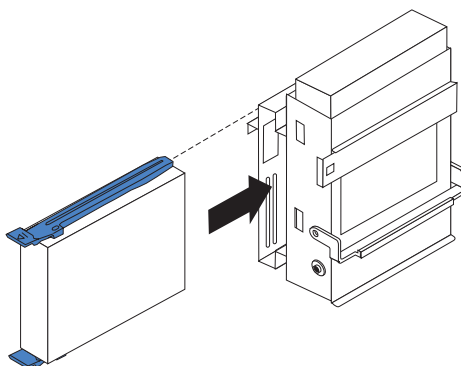
5. Remove any screws that secure the drive. Not all drives have screws.

### Installing a drive

1. If you are installing a parallel drive, make sure the drive is set correctly as either a master or a slave device. Jumper the new drive the same as the drive being replaced. Serial ATA hard disk drives do not require a master/slave jumper.

Refer to the documentation that comes with your drive for master/slave jumper information.

2. Install the drive into the bay and secure with any screws that were removed. This illustration shows the hard disk drive installation.



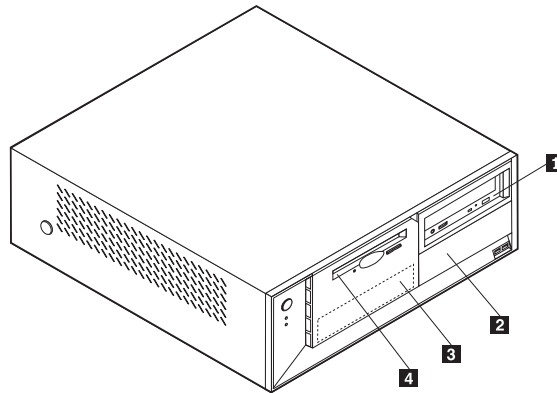
3. Pivot the drive-bay cage back into place.
4. Continue at "Connecting the drive" on page 54.

## Types 8128, 8187, 8188, 8193, 8414, and 8431

### Drive bay information

Any bay that does not have a drive installed has a static shield and bay panel installed.

The following illustration shows the locations of the drive bays.



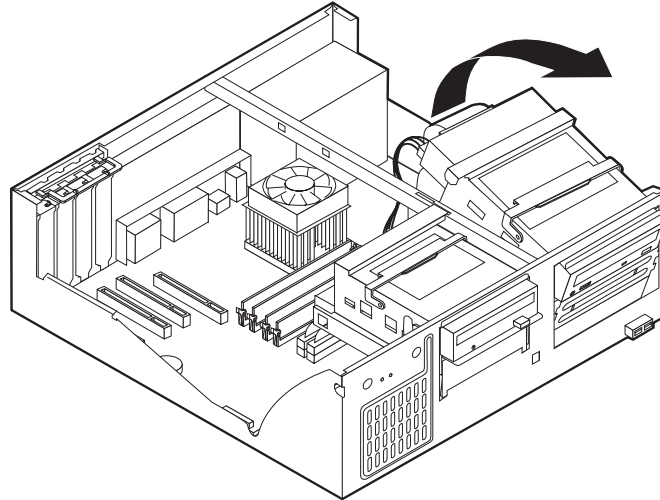
The following list describes some of the drives that you can install in each bay and their height requirements:

Bay **1** and Bay **2** - Maximum height: 43.0 mm (1.7 in.)

Bay **3** and Bay **4** - Maximum height: 25.8 mm (1.0 in.)

### Removing a drive

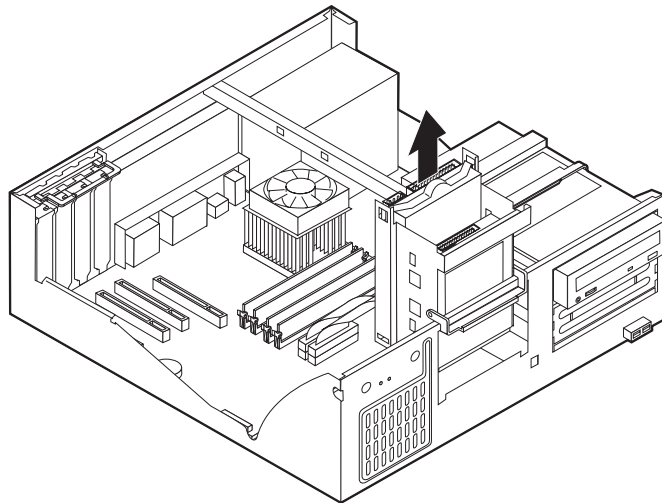
1. Remove the cover. See “Removing the cover” on page 30.
2. Pivot the drive-bay latch handle toward the front of the computer and then pivot the appropriate drive-bay cage upward, as shown, until latched in the upright position.



#### Notes:

- a. Both drive-bay cages pivot in the same manner.
  - b. You can lift the drive-bay cages out of the chassis to make it easier to remove and install the drives.
  - c. Take note of the location of any cables you disconnect. You might have to disconnect cables to other drives to gain access to the drive you are removing.
3. Disconnect the signal cable and power supply cable from the drive being replaced.
  4. Remove any screws that secure the drive. Not all drives have screws.



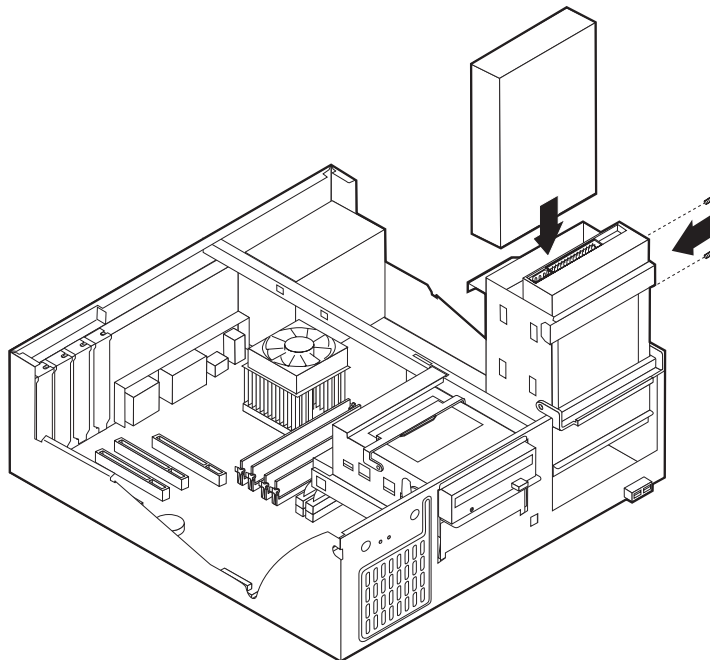


### Installing a drive

1. If you are installing a parallel drive, make sure the drive is set correctly as either a master or a slave device. Jumper the new drive the same as the drive being replaced. Serial ATA hard disk drives do not require a master/slave jumper.

Refer to the documentation that comes with your drive for master/slave jumper information.

2. Install the drive into the bay as shown.



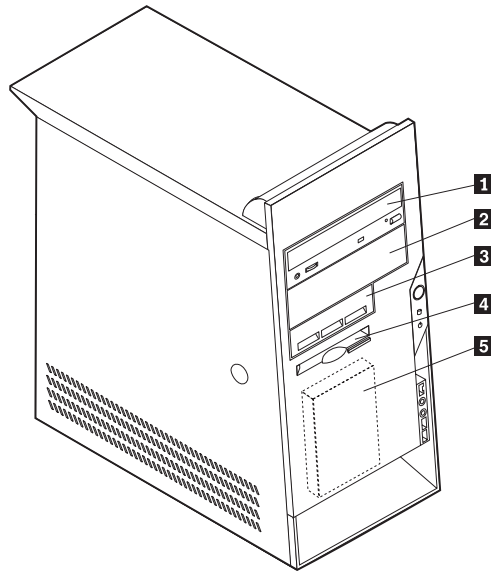
3. Secure the new drive (if necessary) with the screws that were removed.
4. If necessary, place the drive-bay cages back into the chassis.
5. Continue at “Connecting the drive” on page 54.

## Types 8189, 8190, 8194, 8195, 8415, 8432, and 8433

### Drive bay information

Any bay that does not have a drive installed has a static shield and bay panel installed.

The following illustration shows the locations of the drive bays.



The following list describes some of the drives you can install in each bay and their height requirements:

Bay **1** and Bay **2** - Maximum height: 43.0 mm (1.7 in.)

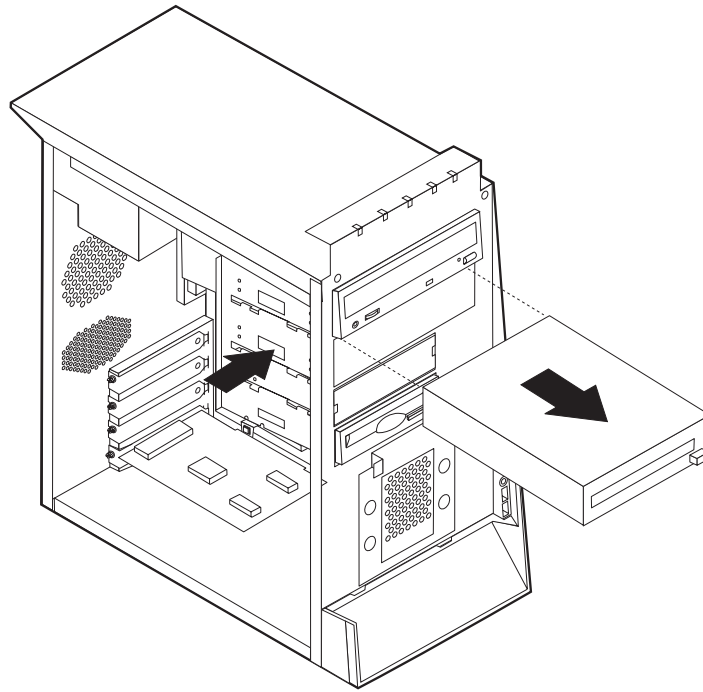
Bay **3**, Bay **4**, and Bay **5** - Maximum height: 25.8 mm (1.0 in.)

### Removing the drive

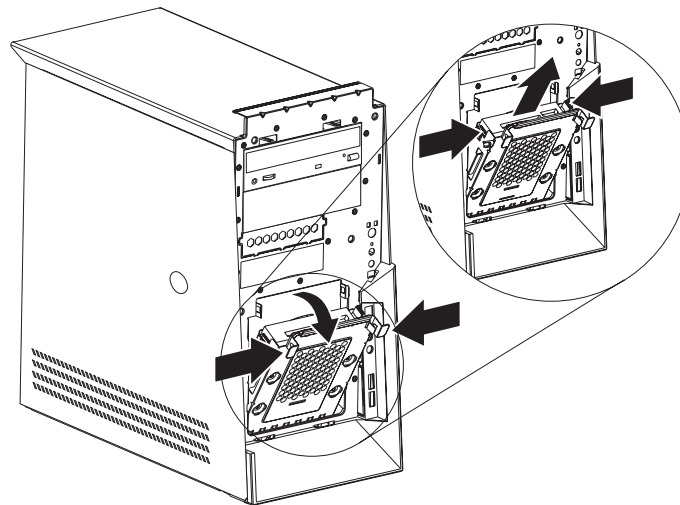
1. Remove the cover. See "Removing the cover" on page 30.
2. Remove the front bezel by pushing in on the blue plastic tab at the rear of the chassis.
3. Disconnect the signal and power cables from the drive being removed.

**Note:** Take note of the location of any cables you disconnect. You might have to disconnect cables to other drives to gain access to the drive you are removing.

4. For all drives except the hard disk drive, push in on the metal tab that secures the drive being removed. The hard disk drive tray pivots out toward the front of the computer for removal of the hard disk drive. See the following illustrations.



For the hard disk drive, see the illustration below.



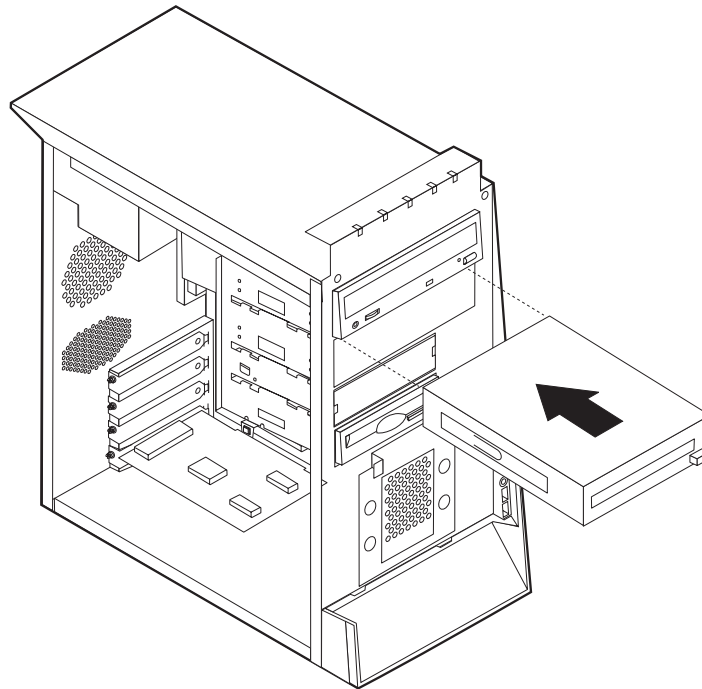
5. Slide the drive out the front of the computer.

### Installing a drive

1. If you are installing a parallel drive, make sure the drive is set correctly as either a master or a slave device. Jumper the new drive the same as the drive being replaced. Serial ATA hard disk drives do not require a master/slave jumper.

Refer to the documentation that comes with your drive for master/slave jumper information.

2. Slide the drive into the appropriate bay.

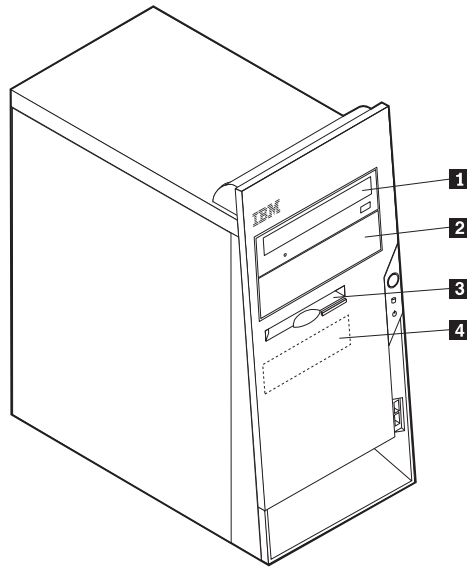


3. For bay 5 (hard disk drive), pivot the drive cage to the closed position.
4. If the front bezel was removed, replace it by aligning and pressing the bezel into position. Continue at "Connecting the drive" on page 54.

## Types 8196 and 8197

### Drive bay information

The following illustration shows the locations of the drive bays.



The following table describes the drive bay height requirements.

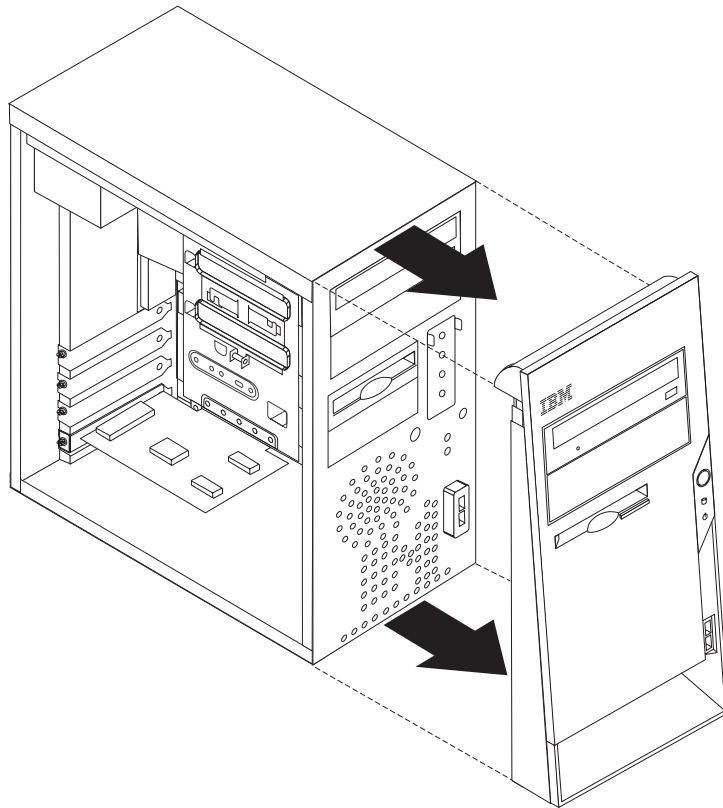
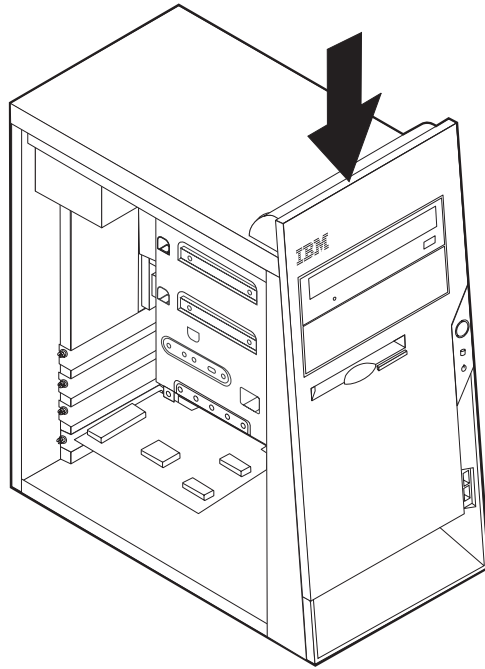
Bay **1** and bay **2** - Maximum height: 43.0 mm (1.7 in.)

Bay **3** and bay **4** - Maximum height: 25.8 mm (1.0 in.)

### Removing a drive

1. Remove the cover. See "Removing the cover" on page 30.

2. If you are removing the hard disk drive or diskette drive, remove the front bezel by releasing the four plastic tabs inside the chassis and pressing down on the top of the bezel.



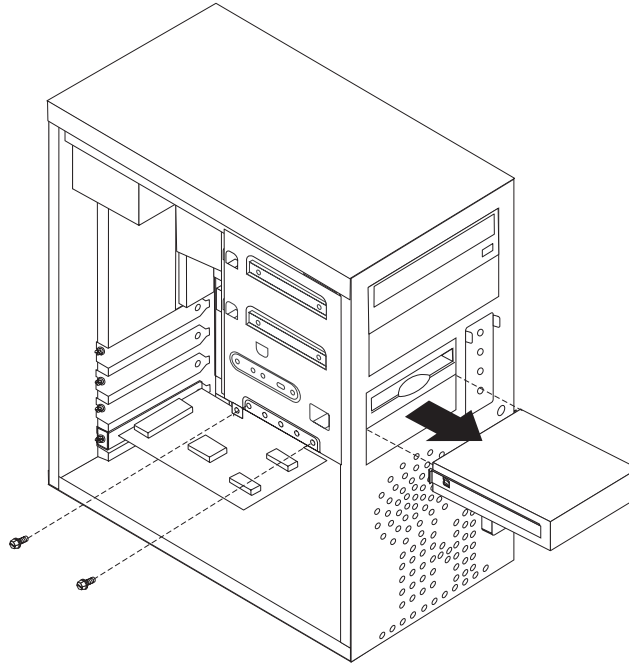
3. Disconnect the signal and power cables from the drive being removed.

**Note:** Take note of the location of any cables you disconnect. You might have to disconnect cables to other drives to gain access to the drive you are removing.

4. Remove the screws that secure the drive being removed.

**Note:** The hard disk drive is secured by two screws in the side and two at the bottom of the drive.

5. Slide the drive out the front of the computer.



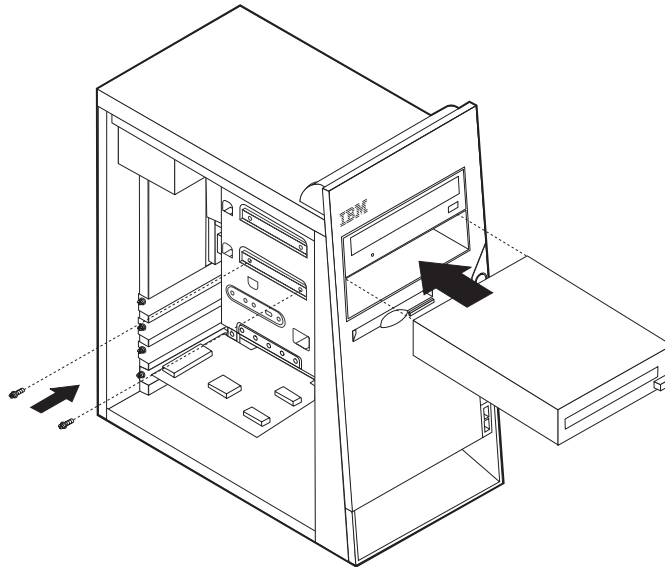
**Note:** This illustration shows the hard disk drive being removed. All drives are removed in the same manner. However, it is only necessary to remove the front bezel when removing the hard disk drive or diskette drive.

### Installing a drive

1. If you are installing a parallel drive, make sure the drive is set correctly as either a master or a slave device. Jumper the new drive the same as the drive being replaced. Serial ATA hard disk drives do not require a master/slave jumper.

Refer to the documentation that comes with your drive for master/slave jumper information.

2. Install the drive into the bay. Align the screw holes and install two screws to secure the drive.



**Note:** This illustration shows a CD drive installation. The hard disk drive and diskette drive is installed in the same manner except that the front bezel is not in place.

3. If the front bezel was removed, replace it by aligning the four plastic tabs and pressing the bezel into position.
4. Go to "Connecting the drive."

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## Connecting the drive

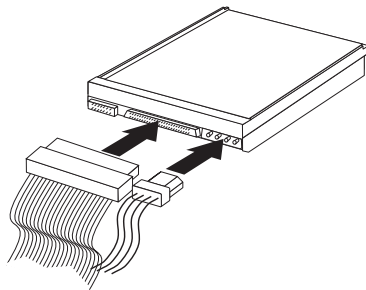
Each drive requires two cables; a power cable from the power supply and a signal cable that connects the drive to the system board. See "Identifying parts on the system board (all machine types)" on page 38.

There are two types of hard disk drives; parallel ATA and serial ATA. Each one is connected to a different location on the system board. See "Parallel ATA hard disk drive" and "Serial ATA hard disk drive" on page 55.

Other drives, such as a CD drive, connect to either the primary or secondary PATA connector.

The diskette drive connects to the diskette drive connector.

### Parallel ATA hard disk drive

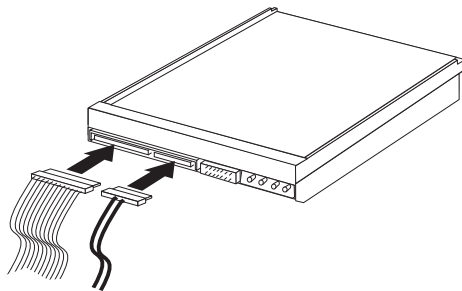




1. Locate an available PATA IDE connector on the three-connector signal cable attached to either the PATA primary IDE or PATA secondary IDE connector on the system board. See “Identifying parts on the system board (all machine types)” on page 38.
2. Connect one end of the signal cable to the drive and the other to an available PATA IDE connector on the system board.
3. Connect a power connector to the drive.
4. Go to “Replacing the cover and connecting the cables” on page 63.

## Serial ATA hard disk drive

A serial hard disk drive can be connected to either the SATA 1 IDE or SATA 2 IDE connector.



1. Locate the signal cable for the new drive.
2. Locate an available SATA IDE connector on the system board. See “Identifying parts on the system board (all machine types)” on page 38.
3. Connect one end of the signal cable to the drive and the other to an available SATA IDE connector on the system board.
4. Connect a power connector to the drive.
5. Go to “Replacing the cover and connecting the cables” on page 63.

## CD drive, DVD drive, CD/RW drive, or DVD/CD/RW combo drive

1. Locate the three-connector signal cable that comes with the computer or with the new drive.
2. Locate the PATA primary and secondary IDE connectors on the system board. See “Identifying parts on the system board (all machine types)” on page 38.
3. Connect one end of the signal cable to the drive and the other to the appropriate PATA IDE connector on the system board. To reduce electronic noise, use the connectors at the end of the cable only.
4. Connect the power connector to the drive.
5. If you have a CD-ROM audio cable, connect it to the drive and to the system board. See “Identifying parts on the system board (all machine types)” on page 38.
6. Go to “Replacing the cover and connecting the cables” on page 63.

## Diskette drive

1. Locate the diskette drive connector on the system board. See “Identifying parts on the system board (all machine types)” on page 38.
2. Connect one end of the signal cable to the drive and the other to the diskette drive connector on the system board.

3. Connect the power connector to the drive.
4. Go to “Replacing the cover and connecting the cables” on page 63.

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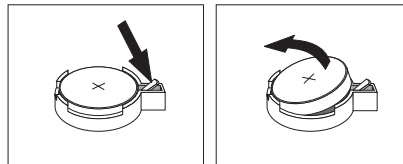
## Replacing the battery (all machine types)

The computer has a special type of memory that maintains the date, time, and settings for built-in features, such as parallel-port assignments (configuration). A battery keeps this information active when you turn off the computer. If the battery fails, the date, time, and configuration information (including passwords) are lost. An error message is displayed when you turn on the computer.

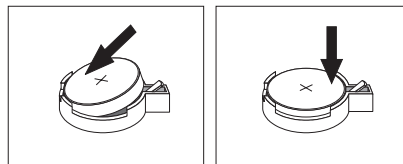
Refer to “Safety notices (multi-lingual translations)” on page 251 for information about replacing and disposing of the battery.

To change the battery:

1. Turn off the computer and all attached devices.
2. Remove the cover. See “Removing the cover” on page 30.
3. Locate the battery. See “Identifying parts on the system board (all machine types)” on page 38.
4. If necessary, remove any adapters that impede access to the battery. See “Replacing adapters” on page 39 for more information.
5. Remove the old battery.



6. Install the new battery.



7. Replace any adapters that were removed to gain access to the battery. See “Replacing adapters” on page 39 for instructions for replacing adapters.
8. Replace the cover, and plug in the power cord. See “Replacing the cover and connecting the cables” on page 63.

**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.

9. Turn on the computer and all attached devices.
10. Use the IBM Setup Utility program to set the date and time and any passwords. See Chapter 5, “IBM Setup Utility program,” on page 19.

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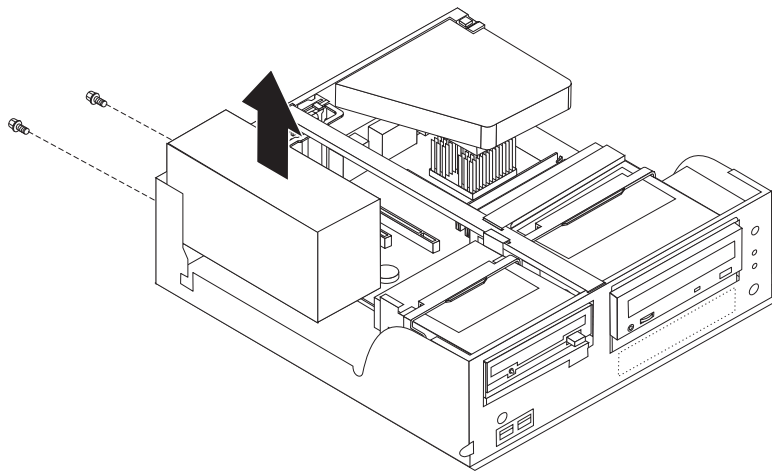
## Replacing the power supply

### Types 8185, 8186, 8192, 8413, and 8430

Before performing any removals or replacements, turn off the computer and peripheral devices and disconnect all external cables and power cords.

To remove the power supply, do the following:

1. Turn off the computer and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover” on page 30.
2. Disconnect all power supply cables from the system board and the drives. See “Identifying parts on the system board (all machine types)” on page 38.
3. Remove the two screws that hold the power supply in place.
4. Lift the power supply out.



To replace the power supply, do the following:

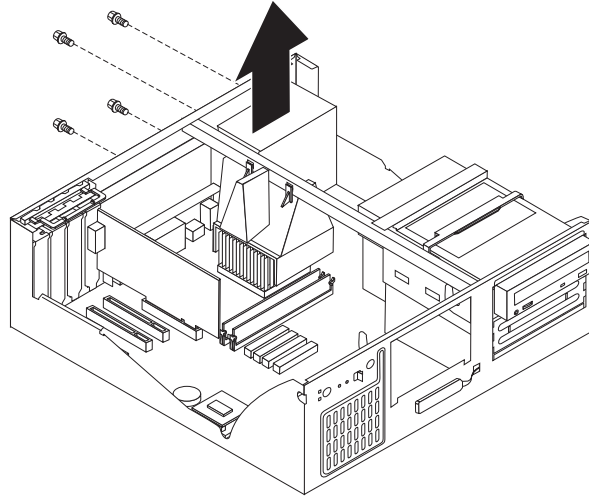
1. Install the new power supply and insert the two screws that hold the power supply in place.
2. Reconnect all power supply cables to the system board and the drives. See “Identifying parts on the system board (all machine types)” on page 38.
3. Go to “Replacing the cover and connecting the cables” on page 63.

### Types 8128, 8187, 8188, 8193, 8414, and 8431

Before performing any removals or replacements, turn off the computer and peripheral devices and disconnect all external cables and power cords.

To remove the power supply, do the following:

1. Turn off the computer and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover” on page 30.
2. Disconnect all power supply cables from the system board and the drives. See “Identifying parts on the system board (all machine types)” on page 38.
3. Remove the four screws that hold the power supply in place.
4. Lift the power supply out.



To replace the power supply, do the following:

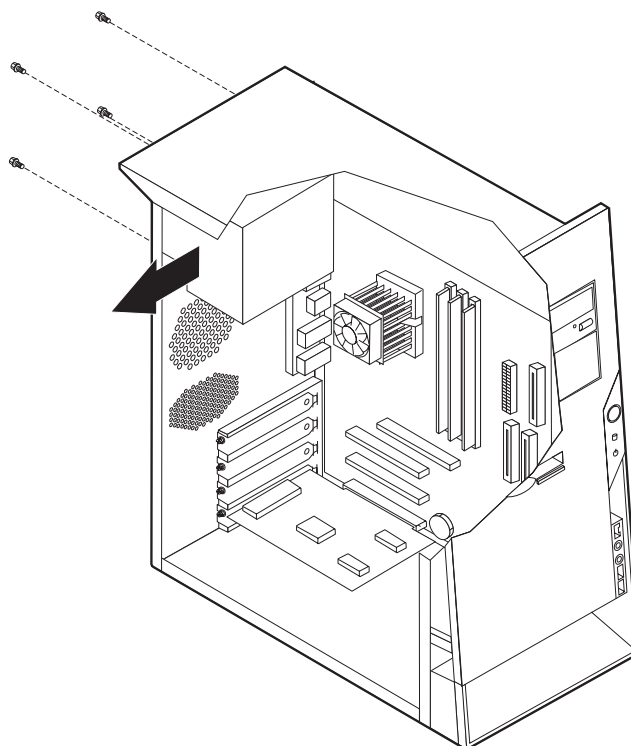
1. Install the new power supply and insert the four screws that hold the power supply in place.
2. Reconnect all power supply cables to the system board and the drives. See “Identifying parts on the system board (all machine types)” on page 38.
3. Go to “Replacing the cover and connecting the cables” on page 63.

### **Types 8189, 8190, 8194, 8195, 8196, 8197, 8415, 8432, and 8433**

Before performing any removals or replacements, turn off the computer and peripheral devices and disconnect all external cables and power cords.

To remove the power supply, do the following:

1. Turn off the computer and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover” on page 30.
2. Disconnect all power supply cables from the system board and the drives. See “Identifying parts on the system board (all machine types)” on page 38.
3. Remove the four screws that hold the power supply in place.
4. Lift the power supply out.



To replace the power supply, do the following:

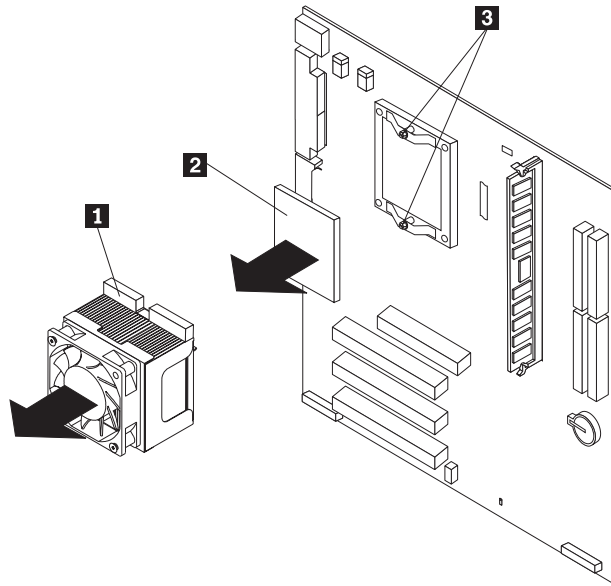
1. Install the new power supply and insert the four screws that hold the power supply in place.
2. Reconnect all power supply cables to the system board and the drives. See “Identifying parts on the system board (all machine types)” on page 38.
3. Go to “Replacing the cover and connecting the cables” on page 63.

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## Replacing a microprocessor (all machine types)

To remove the microprocessor, do the following:

1. Turn off the computer and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover” on page 30.
2. Remove any air baffles or ducts that cover the microprocessor.
3. Disconnect the heat sink fan cable from the system board. Refer to “Identifying parts on the system board (all machine types)” on page 38.



4. Loosen the two captured screws **3** holding the fan and heat sink in place, and pivot them to the side.
5. To remove the fan and heat sink **1** from the microprocessor **2**, gently twist the fan and heat sink to break the seal formed by the thermal grease and remove.

**Note:** If the thermal grease seal cannot be broken, you may want to start up the system to heat the processor and loosen the thermal grease.

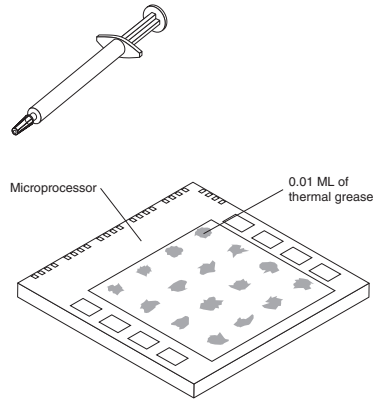
6. Place the heat sink on a clean work surface.
7. Take notice of the orientation of the beveled corner on the microprocessor. This is important when reinstalling the microprocessor on the system board.
8. Release the microprocessor from the system board by pulling outward and lifting the small handle on the microprocessor socket to its maximum vertical position. Carefully lift the microprocessor off the socket.

To replace the microprocessor, do the following:

1. Make sure that the microprocessor socket handle is fully in the vertical position. Otherwise the microprocessor pins might be damaged when installing the microprocessor.
2. Position the microprocessor so that the pins are aligned with the socket and with the beveled corner in the correct orientation.
3. Lower the handle until it is fully in the down position and locked into the socket. This secures the microprocessor in the socket.
4. Remove the cleaning pad from its package and use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

**Notes:**

- a. The cleaning pad and thermal grease are separate FRUs and are not included with the system board or microprocessor FRUs. These must be ordered separately and shipped along with the FRUs being replaced.
- b. Be sure that all of the thermal grease is removed.
5. Use the thermal grease syringe to place 16 uniformly spaced dots of 0.01ML each on the top of the microprocessor.



**Note:** 0.01ML is one tick mark on the syringe. If the grease is properly applied, approximately half (0.02ML) of the grease will remain in the syringe.

6. Place the fan and heat sink into position on the microprocessor.
7. When tightening the screws that clamp the heat sink, do not overtighten. Tighten the clamp screws evenly by tightening one side some and then the other until they are both snug.
8. Reconnect the fan to the system board connector.
9. Go to “Replacing the cover and connecting the cables” on page 63.

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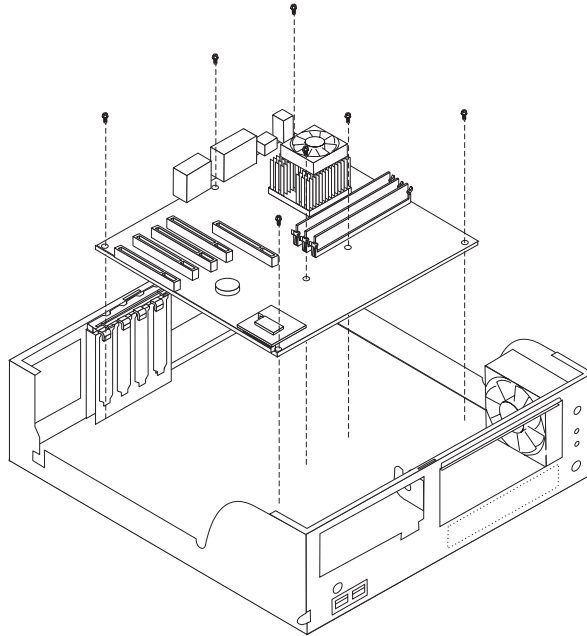
## Replacing the system board (all machine types)

**Note:** The computer might look slightly different than the following illustrations

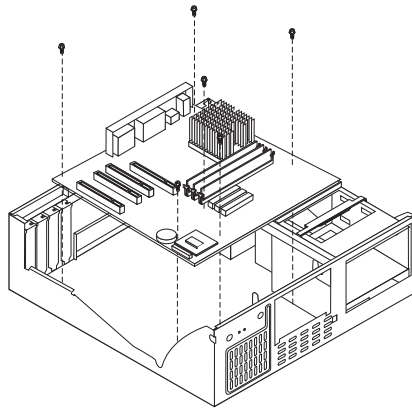
To remove the system board:

1. Turn off the computer and peripheral devices and disconnect all external cables and power cords; then, remove the cover. See “Removing the cover” on page 30.
2. Disconnect all cables connected to the system board.
3. Remove the screws that secure the system board to the chassis and lift out the system board.

**Types 8185, 8186, 8192, 8413, and 8430**

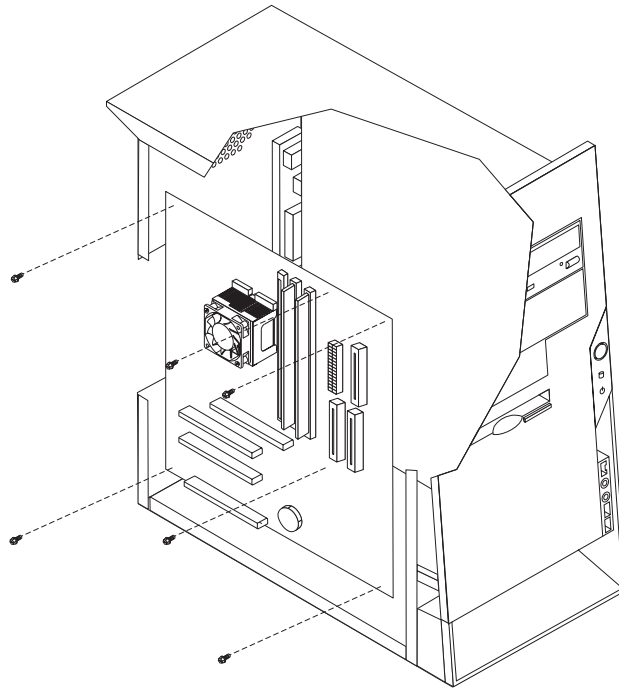


**Types 8128, 8187, 8188, 8193, 8414, and 8431**





Types 8189, 8190, 8194, 8195, 8196, 8197, 8415, 8432, and 8433



4. Remove the memory modules from the system board. Refer to “Replacing memory (all machine types)” on page 38.
5. Remove the microprocessor from the system board. Refer to “Replacing a microprocessor (all machine types)” on page 59.

To replace the system board:

1. Install the microprocessor on the new system board. Refer to “Replacing a microprocessor (all machine types)” on page 59.
2. Install the memory modules on the new system board. Refer to “Replacing memory (all machine types)” on page 38.
3. Place the new the system board into the chassis and install the screws that secure the system board to the chassis.
4. Reconnect all cables that connect to the system board. Refer to “Identifying parts on the system board (all machine types)” on page 38.
5. Go to “Replacing the cover and connecting the cables.”

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## Replacing the cover and connecting the cables

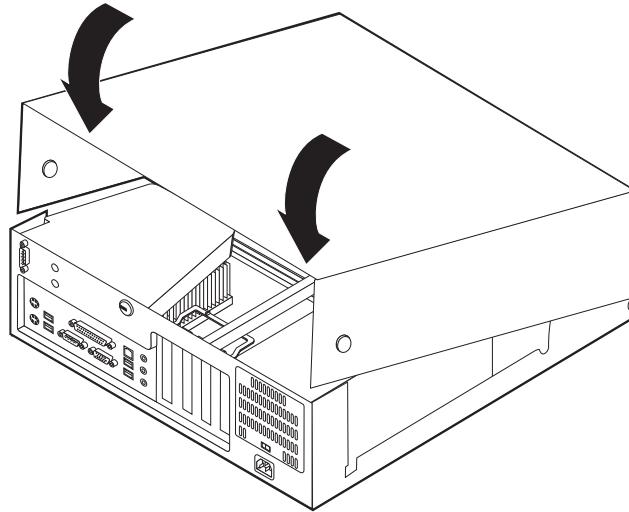
### Types 8185, 8186, 8192, 8413, and 8430

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

To replace the cover and connect cables to the computer:

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

3. Position the cover over the chassis and pivot it down over the computer until it snaps into place.



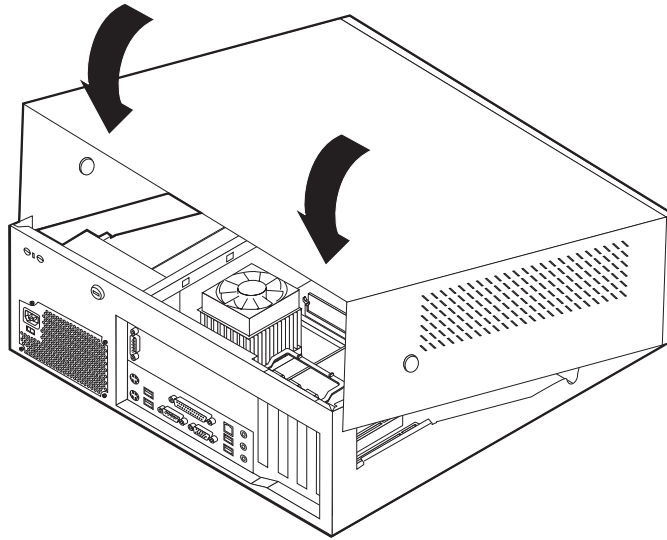
4. Reconnect the external cables and power cords to the computer.
5. If you have replaced the system board, you must update (flash) the BIOS. See "Flash update procedures" on page 113.
6. To update the configuration, see Chapter 5, "IBM Setup Utility program," on page 19.

### **Types 8128, 8187, 8188, 8193, 8414, and 8431**

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 option that is installed, you might need to confirm the updated information in the IBM Setup Utility program.

To replace the cover and connect cables to the computer:

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside the computer.
2. Clear any cables that might impede the replacement of the cover.
3. Position the cover over the chassis and pivot it down over the computer until it snaps into place.



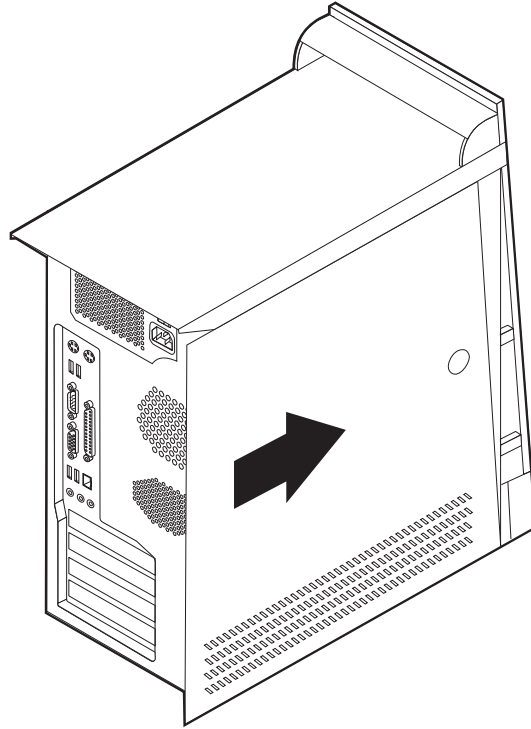
4. Reconnect the external cables and power cords to the computer.
5. If you have replaced the system board, you must update (flash) the BIOS. See “Flash update procedures” on page 113.
6. To update the configuration, see Chapter 5, “IBM Setup Utility program,” on page 19.

### **Types 8189, 8190, 8194, 8195, 8415, 8432, and 8433**

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 option that is installed, you might need to confirm the updated information in the IBM Setup Utility program.

To replace the cover and connect cables to the computer:

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside the computer.
2. Clear any cables that might impede the replacement of the cover.
3. Position the cover on the chassis so that the rail guides on the bottom of the cover engage the rails and push the cover closed until it latches.



4. Reconnect the external cables and power cords to the computer.
5. If you have replaced the system board, you must update (flash) the BIOS. See “Flash update procedures” on page 113.
6. To update the configuration, see Chapter 5, “IBM Setup Utility program,” on page 19.

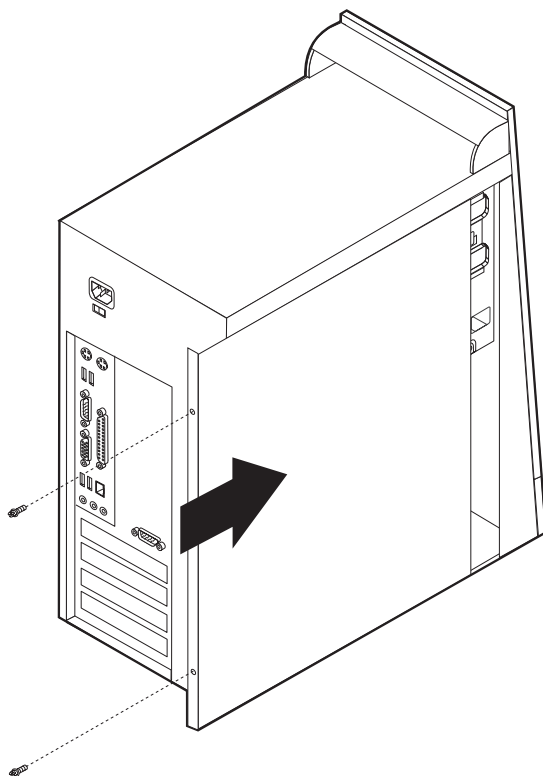
**Note:** When the power cord is first plugged in, the computer might appear to turn on for a few seconds and then turn off. This is a normal sequence to enable the computer to initialize.

## Types 8196 and 8197

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 option that is installed, you might need to confirm the updated information in the IBM Setup Utility program.

To replace the cover and connect cables to the computer:

1. Ensure that all components have been reassembled correctly and that no tools or loose screws are left inside the computer.
2. Clear any cables that might impede the replacement of the cover.
3. Position the cover on the chassis so that the guides on the top and bottom of the cover engage the chassis and push the cover to the closed position. Insert the screws that secure the cover.



4. Reconnect the external cables and power cords to the computer.
5. If you have replaced the system board, you must update (flash) the BIOS. See “Flash update procedures” on page 113.
6. To update the configuration, see Chapter 5, “IBM Setup Utility program,” on page 19.

**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.



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## 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 3, "General Checkout," on page 11. 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 109.

**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.
- Check the hard disk drive jumper settings before you replace a hard disk drive.

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### 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"><li>1. Attempt to access and recover (back-up) the failing hard disk drive.</li><li>2. Using the operating systems programs, format the hard disk drive.</li></ol>
The drive is defective.	Replace the hard disk drive.

---

## Power Supply Errors

If the power-on indicator is not on, the power supply fan is not running, or the computer will not power-off, use the following procedures.

Check/Verify	FRU/Action
Check the following for proper installation. <ul style="list-style-type: none"><li>• Power Cord</li><li>• On/Off Switch assembly</li><li>• Power/LED connector</li><li>• System Board Power Supply connectors</li><li>• Microprocessor(s)</li></ul>	Reseat connectors (see “Identifying parts on the system board (all machine types)” on page 38.
Check the power cord for continuity.	Power Cord
Check the power supply voltages	See “Power supply connectors” on page 110.

---

## Diagnostic error codes

Refer to the following diagnostic error codes when using the diagnostic tests. See Chapter 4, “IBM Enhanced Diagnostics,” on page 15 for information about the Diagnostic programs.

In the following index, *X* can represent any number.

Diagnostic Error Code	FRU/Action
<b>000-000-XXX</b> BIOS Test Passed	1. <b>No action</b>
<b>000-002-XXX</b> BIOS Timeout	1. <b>Flash the system</b> 2. System board
<b>000-024-XXX</b> BIOS Addressing test failure	1. <b>Flash the system</b> 2. System board
<b>000-025-XXX</b> BIOS Checksum Value error	1. <b>Flash the system</b> 2. Boot block 3. System board
<b>000-026-XXX</b> FLASH data error	1. <b>Flash the system</b> 2. Boot block 3. System board
<b>000-027-XXX</b> BIOS Configuration/Setup error	1. <b>Run Setup</b> 2. Flash the system 3. Boot block 4. System board
<b>000-034-XXX</b> BIOS Buffer Allocation failure	1. <b>Reboot the system</b> 2. Flash the system 3. Run memory test 4. System board



Diagnostic Error Code	FRU/Action
<b>000-035-XXX</b> BIOS Reset Condition detected	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>000-036-XXX</b> BIOS Register error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. Boot block</li> <li>3. System board</li> </ol>
<b>000-038-XXX</b> BIOS Extension failure	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. Adapter card</li> <li>3. System board</li> </ol>
<b>000-039-XXX</b> BIOS DMI data error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>000-195-XXX</b> BIOS Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>000-196-XXX</b> BIOS test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>000-197-XXX</b> BIOS test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>000-198-XXX</b> BIOS test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109.</li> </ol>
<b>000-199-XXX</b> BIOS test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>Go to “Undetermined problems” on page 109.</b></li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>000-250-XXX</b> BIOS APM failure	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>000-270-XXX</b> BIOS ACPI failure	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>001-000-XXX</b> System Test Passed	<b>No action</b>
<b>001-00X-XXX</b> System Error	<b>System board</b>
<b>001-01X-XXX</b> System Error	<b>System board</b>
<b>001-024-XXX</b> System Addressing test failure	<b>System board</b>
<b>001-025-XXX</b> System Checksum Value error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
<b>001-026-XXX</b> System FLASH data error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>001-027-XXX</b> System Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
<b>001-032-XXX</b> System Device Controller failure	<b>System board</b>
<b>001-034-XXX</b> System Device Buffer Allocation failure	<ol style="list-style-type: none"> <li>1. <b>Reboot the system</b></li> <li>2. Flash the system</li> <li>3. Run memory test</li> <li>4. System board</li> </ol>
<b>001-035-XXX</b> System Device Reset condition detected	<b>System board</b>
<b>001-036-XXX</b> System Register error	<b>System board</b>
<b>001-038-XXX</b> System Extension failure	<ol style="list-style-type: none"> <li>1. <b>Adapter card</b></li> <li>2. System board</li> </ol>
<b>001-039-XXX</b> System DMI data structure error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>001-040-XXX</b> System IRQ failure	<ol style="list-style-type: none"> <li>1. <b>Power-off/on system and re-test</b></li> <li>2. System board</li> </ol>
<b>001-041-XXX</b> System DMA failure	<ol style="list-style-type: none"> <li>1. <b>Power-off/on system and re-test</b></li> <li>2. System board</li> </ol>
<b>001-195-XXX</b> System Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>001-196-XXX</b> System test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>001-197-XXX</b> System test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>001-198-XXX</b> System test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to "Undetermined problems" on page 109</li> </ol>
<b>001-199-XXX</b> System test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to "Undetermined problems" on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>001-250-XXX</b> System ECC error	<ol style="list-style-type: none"> <li>1. <b>System board</b></li> </ol>

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
001-254-XXX 001-255-XXX 001-256-XXX 001-257-XXX System DMA error	<b>System board</b>
001-260-XXX 001-264-XXX System IRQ error	<b>System board</b>
001-268-XXX System IRQ1 failure	1. <b>Device on IRQ1</b> 2. System board
001-269-XXX System IRQ2 failure	1. <b>Device on IRQ2</b> 2. System board
001-270-XXX System IRQ3 failure	1. <b>Device on IRQ3</b> 2. System board
001-271-XXX System IRQ4 failure	1. <b>Device on IRQ4</b> 2. System board
001-272-XXX System IRQ5 failure	1. <b>Device on IRQ5</b> 2. System board
001-273-XXX System IRQ6 (diskette drive) failure	1. <b>Diskette Cable</b> 2. Diskette drive 3. System board
001-274-XXX System IRQ7 failure	1. <b>Device on IRQ7</b> 2. System board
001-275-XXX System IRQ8 failure	1. <b>Device on IRQ8</b> 2. System board
001-276-XXX System IRQ9 failure	1. <b>Device on IRQ9</b> 2. System board
001-277-XXX System IRQ10 failure	1. <b>Device on IRQ10</b> 2. System board
001-278-XXX System IRQ11 failure	1. <b>Device on IRQ11</b> 2. System board
001-279-XXX System IRQ12 failure	1. <b>Device on IRQ12</b> 2. System board
001-280-XXX System IRQ13 failure	1. <b>Device on IRQ13</b> 2. System board
001-281-XXX System IRQ14 (hard disk drive) failure	1. <b>Hard disk drive cable</b> 2. Hard disk drive 3. System board
001-282-XXX System IRQ15 failure	1. <b>Device on IRQ15</b> 2. System board

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
001-286-XXX 001-287-XXX 001-288-XXX System Timer failure	<b>System board</b>
001-292-XXX System CMOS RAM error	1. <b>Run Setup and re-test</b> 2. System board
001-293-XXX System CMOS Battery	1. <b>Battery</b> 2. System board
001-298-XXX System RTC date/time update failure	1. <b>Flash the system</b> 2. System board
001-299-XXX System RTC periodic interrupt failure	1. <b>System board</b>
001-300-XXX System RTC Alarm failure	1. <b>System board</b>
001-301-XXX System RTC Century byte error	1. <b>Flash the system</b> 2. System board
005-000-XXX Video Test Passed	<b>No action</b>
005-00X-XXX Video error	1. <b>Video card, if installed</b> 2. System board
005-010-XXX 005-011-XXX 005-012-XXX 005-013-XXX Video Signal failure	1. <b>Video card, if installed</b> 2. System board
005-016-XXX Video Simple Pattern test failure	1. <b>Video Ram</b> 2. Video card, if installed 3. System board
005-024-XXX Video Addressing test failure	1. <b>Video card, if installed</b> 2. System board
005-025-XXX Video Checksum Value error	1. <b>Video card, if installed</b> 2. System board
005-027-XXX Video Configuration/Setup error	1. <b>Run Setup</b> 2. Video drivers update 3. Video card, if installed 4. System board
005-031-XXX Video Device Cable failure	1. <b>Video cable</b> 2. Monitor 3. Video card, if installed 4. System board
005-032-XXX Video Device Controller failure	1. <b>Video card, if installed</b> 2. System board

Diagnostic Error Code	FRU/Action
<b>005-036-XXX</b> Video Register error	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-038-XXX</b> System BIOS extension failure	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-040-XXX</b> Video IRQ failure	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>005-195-XXX</b> Video Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>005-196-XXX</b> Video test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>005-197-XXX</b> Video test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>005-198-XXX</b> Video test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to "Undetermined problems" on page 109</li> </ol>
<b>005-199-XXX</b> Video test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to "Undetermined problems" on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>005-2XX-XXX</b> <b>005-3XX-XXX</b> Video subsystem error	<ol style="list-style-type: none"> <li>1. <b>Video card, if installed</b></li> <li>2. System board</li> </ol>
<b>006-000-XXX</b> Diskette interface Test Passed	<b>No action</b>
<b>006-0XX-XXX</b> Diskette interface error	<ol style="list-style-type: none"> <li>1. <b>Diskette drive Cable</b></li> <li>2. Diskette drive</li> <li>3. System board</li> </ol>
<b>006-195-XXX</b> Diskette interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>006-196-XXX</b> Diskette interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>006-197-XXX</b> Diskette interface test warning	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>

Diagnostic Error Code	FRU/Action
<b>006-198-XXX</b> Diskette interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to "Undetermined problems" on page 109</li> </ol>
<b>006-199-XXX</b> Diskette interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to "Undetermined problems" on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>006-25X-XXX</b> Diskette interface Error	<ol style="list-style-type: none"> <li>1. <b>Diskette drive cable</b></li> <li>2. Diskette drive</li> <li>3. System board</li> </ol>
<b>011-000-XXX</b> Serial port Interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>011-001-XXX</b> Serial port Presence	<ol style="list-style-type: none"> <li>1. <b>Remove external serial device, if present</b></li> <li>2. Run setup, enable port</li> <li>3. System board</li> </ol>
<b>011-002-XXX</b> <b>011-003-XXX</b> Serial port Timeout/Parity error	<b>System board</b>
<b>011-013-XXX</b> <b>011-014-XXX</b> Serial port Control Signal/Loopback test failure	<b>System board</b>
<b>011-015-XXX</b> Serial port External Loopback failure	<ol style="list-style-type: none"> <li>1. <b>Wrap plug</b></li> <li>2. System board</li> </ol>
<b>011-027-XXX</b> Serial port Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>Run Setup, enable port</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
<b>011-03X-XXX</b> <b>011-04X-XXX</b> Serial port failure	<b>System board</b>
<b>011-195-XXX</b> Serial port Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>011-196-XXX</b> Serial port test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>011-197-XXX</b> Serial port test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>

Diagnostic Error Code	FRU/Action
<b>011-198-XXX</b> Serial port test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>
<b>011-199-XXX</b> Serial port test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to “Undetermined problems” on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>011-2XX-XXX</b> Serial port signal failure	<ol style="list-style-type: none"> <li>1. <b>External serial device</b></li> <li>2. System board</li> </ol>
<b>014-000-XXX</b> Parallel port Interface Test Passed	<b>No action</b>
<b>014-001-XXX</b> Parallel port Presence	<ol style="list-style-type: none"> <li>1. <b>Remove external parallel device, if present</b></li> <li>2. Run setup, enable port</li> <li>3. System board</li> </ol>
<b>014-002-XXX</b> <b>014-003-XXX</b> Parallel port Timeout/Parity error	<b>System board</b>
<b>014-013-XXX</b> <b>014-014-XXX</b> Parallel port Control Signal/Loopback test failure	<b>System board</b>
<b>014-015-XXX</b> Parallel port External Loopback failure	<ol style="list-style-type: none"> <li>1. <b>Wrap plug</b></li> <li>2. System board</li> </ol>
<b>014-027-XXX</b> Parallel port Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>Run Setup, enable port</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
<b>014-03X-XXX</b> <b>014-04X-XXX</b> Parallel port failure	<b>System board</b>
<b>014-195-XXX</b> Parallel port Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>014-196-XXX</b> Parallel port test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>014-197-XXX</b> Parallel port test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>

Diagnostic Error Code	FRU/Action
<b>014-198-XXX</b> Parallel port test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>
<b>014-199-XXX</b> Parallel port test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to “Undetermined problems” on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>014-2XX-XXX</b> <b>014-3XX-XXX</b> Parallel port failure	<ol style="list-style-type: none"> <li>1. <b>External parallel device</b></li> <li>2. System board</li> </ol>
<b>015-000-XXX</b> USB port Interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>015-001-XXX</b> USB port Presence	<ol style="list-style-type: none"> <li>1. <b>Remove USB device(s) and re-test</b></li> <li>2. System board</li> </ol>
<b>015-002-XXX</b> USB port Timeout	<ol style="list-style-type: none"> <li>1. <b>Remove USB device(s) and re-test</b></li> <li>2. System board</li> </ol>
<b>015-015-XXX</b> USB port External Loopback failure	<ol style="list-style-type: none"> <li>1. <b>Remove USB device(s) and re-test</b></li> <li>2. System board</li> </ol>
<b>015-027-XXX</b> USB port Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>Flash the system</b></li> <li>2. System board</li> </ol>
<b>015-032-XXX</b> USB port Device Controller failure	<b>System board</b>
<b>015-034-XXX</b> USB port buffer allocation failure	<ol style="list-style-type: none"> <li>1. <b>Reboot the system</b></li> <li>2. Flash the system</li> <li>3. Run memory test</li> <li>4. System board</li> </ol>
<b>015-035-XXX</b> USB port Reset condition detected	<ol style="list-style-type: none"> <li>1. <b>Remove USB device(s) and re-test</b></li> <li>2. System board</li> </ol>
<b>015-036-XXX</b> USB port Register error	<b>System board</b>
<b>015-040-XXX</b> USB port IRQ failure	<ol style="list-style-type: none"> <li>1. <b>Run setup and check for conflicts</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
<b>015-195-XXX</b> USB port Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>015-196-XXX</b> USB port test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>



Diagnostic Error Code	FRU/Action
<b>015-197-XXX</b> USB port test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>015-198-XXX</b> USB port test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to "Undetermined problems" on page 109</li> </ol>
<b>015-199-XXX</b> USB port test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to "Undetermined problems" on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>018-000-XXX</b> PCI Card Test Passed	<b>No action</b>
<b>018-0XX-XXX</b> PCI Card Failure	<ol style="list-style-type: none"> <li>1. <b>Riser card, if installed</b></li> <li>2. System board</li> </ol>
<b>018-195-XXX</b> PCI Card Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>PCI card</b></li> <li>2. Information</li> <li>3. Re-start the test, if necessary</li> </ol>
<b>018-196-XXX</b> PCI Card test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>018-197-XXX</b> PCI Card test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>018-198-XXX</b> PCI Card test aborted	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to "Undetermined problems" on page 109</li> </ol>
<b>018-199-XXX</b> PCI Card test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to "Undetermined problems" on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>018-250-XXX</b> PCI Card Services error	<ol style="list-style-type: none"> <li>1. <b>PCI card</b></li> <li>2. Riser card, if installed</li> <li>3. System board</li> </ol>
<b>020-000-XXX</b> PCI Interface Test Passed	<b>No action</b>

Diagnostic Error Code	FRU/Action
<b>020-0XX-XXX</b> PCI Interface error	<ol style="list-style-type: none"> <li>1. <b>PCI card</b></li> <li>2. Riser card, if installed</li> <li>3. System board</li> </ol>
<b>020-195-XXX</b> PCI Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>020-196-XXX</b> PCI test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>020-197-XXX</b> PCI test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>020-198-XXX</b> PCI test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>
<b>020-199-XXX</b> PCI test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to “Undetermined problems” on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>020-262-XXX</b> PCI system error	<ol style="list-style-type: none"> <li>1. <b>PCI card</b></li> <li>2. Riser card, if installed</li> <li>3. System board</li> </ol>
<b>025-000-XXX</b> IDE interface Test Passed	<ol style="list-style-type: none"> <li>1. <b>No action</b></li> </ol>
<b>025-00X-XXX</b> <b>025-01X-XXX</b> IDE interface failure	<ol style="list-style-type: none"> <li>1. <b>IDE signal cable</b></li> <li>2. Check power supply</li> <li>3. IDE device</li> <li>4. System board</li> </ol>
<b>025-027-XXX</b> IDE interface Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>IDE signal cable</b></li> <li>2. Flash the system</li> <li>3. IDE device</li> <li>4. System board</li> </ol>
<b>025-02X-XXX</b> <b>025-03X-XXX</b> <b>025-04X-XXX</b> IDE Interface failure	<ol style="list-style-type: none"> <li>1. <b>IDE signal cable</b></li> <li>2. Check power supply</li> <li>3. IDE device</li> <li>4. System board</li> </ol>
<b>025-195-XXX</b> IDE interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>025-196-XXX</b> IDE interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>

Diagnostic Error Code	FRU/Action
025-197-XXX IDE interface test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
025-198-XXX IDE interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to "Undetermined problems" on page 109</li> </ol>
025-199-XXX IDE interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to "Undetermined problems" on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
030-000-XXX SCSI interface Test Passed	<b>No action</b>
030-00X-XXX 030-01X-XXX SCSI interface failure	<ol style="list-style-type: none"> <li>1. <b>SCSI signal cable</b></li> <li>2. Check power supply</li> <li>3. SCSI device</li> <li>4. SCSI adapter card, if installed</li> <li>5. System board</li> </ol>
030-027-XXX SCSI interface Configuration/Setup error	<ol style="list-style-type: none"> <li>1. <b>SCSI signal cable</b></li> <li>2. Flash the system</li> <li>3. SCSI device</li> <li>4. SCSI adapter card, if installed</li> <li>5. System board</li> </ol>
030-03X-XXX 030-04X-XXX SCSI interface error	<ol style="list-style-type: none"> <li>1. <b>SCSI signal cable</b></li> <li>2. Check power supply</li> <li>3. SCSI device</li> <li>4. SCSI adapter card, if installed</li> <li>5. installed System board</li> </ol>
030-195-XXX SCSI interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
030-196-XXX SCSI interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
030-197-XXX SCSI interface test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>

Diagnostic Error Code	FRU/Action
<b>030-198-XXX</b> SCSI interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>
<b>030-199-XXX</b> SCSI interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to “Undetermined problems” on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>035-000-XXX</b> RAID interface Test Passed	<b>No action</b>
<b>035-0XX-XXX</b> RAID interface Failure	<ol style="list-style-type: none"> <li>1. <b>RAID signal cable</b></li> <li>2. RAID device</li> <li>3. RAID adapter card, if installed</li> <li>4. System board</li> </ol>
<b>035-195-XXX</b> RAID interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>035-196-XXX</b> RAID interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>035-197-XXX</b> RAID interface test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>035-198-XXX</b> RAID interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>
<b>035-199-XXX</b> RAID interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to “Undetermined problems” on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>071-000-XXX</b> Audio port Interface Test Passed	<b>No action</b>
<b>071-00X-XXX</b> <b>071-01X-XXX</b> <b>071-02X-XXX</b> Audio port error	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Flash the system</li> <li>3. System board</li> </ol>
<b>071-03X-XXX</b> Audio port failure	<ol style="list-style-type: none"> <li>1. <b>Speakers</b></li> <li>2. Microphone</li> <li>3. Audio card, if installed</li> <li>4. System board</li> </ol>

Diagnostic Error Code	FRU/Action
<b>071-04X-XXX</b> Audio port failure	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Audio card, if installed</li> <li>3. System board</li> </ol>
<b>071-195-XXX</b> Audio port Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>071-196-XXX</b> Audio port test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>071-197-XXX</b> Audio port test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>071-198-XXX</b> Audio port test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>
<b>071-199-XXX</b> Audio port test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to “Undetermined problems” on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>071-25X-XXX</b> Audio port failure	<ol style="list-style-type: none"> <li>1. <b>Speakers</b></li> <li>2. Audio card, if installed</li> <li>3. System board</li> </ol>
<b>080-000-XXX</b> Game Port interface Test Passed	<b>No action</b>
<b>080-XXX-XXX</b> Game Port interface Error	<b>Remove the game port device and re-test the system</b>
<b>080-195-XXX</b> Game Port interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>080-196-XXX</b> Game Port interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>080-197-XXX</b> Game Port interface test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>080-198-XXX</b> Game Port interface test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
<b>080-199-XXX</b> Game Port interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to "Undetermined problems" on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>086-000-XXX</b> Mouse Port interface Test Passed	<b>No action</b>
<b>086-001-XXX</b> Mouse Port interface Presence	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. System board</li> </ol>
<b>086-032-XXX</b> Mouse Port interface Device controller failure	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. System board</li> </ol>
<b>086-035-XXX</b> Mouse Port interface Reset	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. System board</li> </ol>
<b>086-040-XXX</b> Mouse Port interface IRQ failure	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. Mouse</li> <li>3. System board</li> </ol>
<b>086-195-XXX</b> Mouse Port interface Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>086-196-XXX</b> Mouse Port interface test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>086-197-XXX</b> Mouse Port interface test warning	<ol style="list-style-type: none"> <li>1. Make sure the component that is called out is connected and/or enabled</li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>086-198-XXX</b> Mouse Port interface test aborted	<ol style="list-style-type: none"> <li>1. If a component is called out, make sure it is connected and/or enabled</li> <li>2. Flash the system and re-test</li> <li>3. Go to "Undetermined problems" on page 109</li> </ol>
<b>086-199-XXX</b> Mouse Port interface test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to "Undetermined problems" on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>089-000-XXX</b> Microprocessor Test Passed	<b>No action</b>
<b>089-XXX-XXX</b> Microprocessor failure	<ol style="list-style-type: none"> <li>1. <b>Microprocessor(s)</b></li> <li>2. System board</li> </ol>
<b>089-195-XXX</b> Microprocessor Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>089-196-XXX</b> Microprocessor test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>

Diagnostic Error Code	FRU/Action
<b>089-197-XXX</b> Microprocessor test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>089-198-XXX</b> Microprocessor test aborted	<ol style="list-style-type: none"> <li>1. <b>Flash the system and re-test</b></li> <li>2. Go to “Undetermined problems” on page 109</li> </ol>
<b>089-199-XXX</b> Microprocessor test failed, cause unknown	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Go to “Undetermined problems” on page 109.</li> <li>3. Flash the system and re-test</li> <li>4. Replace component under function test</li> </ol>
<b>170-000-XXX</b> Voltage Sensor(s) Test Passed	<b>No action</b>
<b>170-0XX-XXX</b> Voltage Sensor(s) failure	<ol style="list-style-type: none"> <li>1. <b>Flash system</b></li> <li>2. System board</li> </ol>
<b>170-195-XXX</b> Voltage Sensor(s) Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>170-196-XXX</b> Voltage Sensor(s) test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>170-197-XXX</b> Voltage Sensor(s) test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>170-198-XXX</b> Voltage Sensor(s) test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>
<b>170-199-XXX</b> Voltage Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to “Undetermined problems” on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>170-250-XXX</b> <b>170-251-XXX</b> Voltage Sensor(s) Voltage limit error	<ol style="list-style-type: none"> <li>1. <b>Power supply</b></li> <li>2. System board</li> </ol>
<b>170-254-XXX</b> Voltage Sensor(s) Voltage Regulator Module error	<ol style="list-style-type: none"> <li>1. <b>Voltage Regulator Module (VRM)</b></li> <li>2. Microprocessor</li> <li>3. System board</li> </ol>

Diagnostic Error Code	FRU/Action
<b>175-000-XXX</b> Thermal Sensor(s) Test Passed	<b>No action</b>
<b>175-0XX-XXX</b> Thermal Sensor(s) failure	<ol style="list-style-type: none"> <li>1. <b>Flash system</b></li> <li>2. System board</li> </ol>
<b>175-195-XXX</b> Thermal Sensor(s) Test aborted by user	<ol style="list-style-type: none"> <li>1. <b>Information</b></li> <li>2. Re-start the test, if necessary</li> </ol>
<b>175-196-XXX</b> Thermal Sensor(s) test halt, error threshold exceeded	<ol style="list-style-type: none"> <li>1. <b>Press F3 to review the log file</b></li> <li>2. Re-start the test to reset the log file</li> </ol>
<b>175-197-XXX</b> Thermal Sensor(s) test warning	<ol style="list-style-type: none"> <li>1. <b>Make sure the component that is called out is connected and/or enabled</b></li> <li>2. Re-run test</li> <li>3. Component that is called out in warning statement</li> <li>4. Component under test</li> </ol>
<b>175-198-XXX</b> Thermal Sensor(s) test aborted	<ol style="list-style-type: none"> <li>1. <b>If a component is called out, make sure it is connected and/or enabled</b></li> <li>2. Flash the system and re-test</li> <li>3. Go to “Undetermined problems” on page 109</li> </ol>
<b>175-199-XXX</b> Thermal Sensor(s) test failed, cause unknown	<ol style="list-style-type: none"> <li>1. Go to “Undetermined problems” on page 109</li> <li>2. Flash the system and re-test</li> <li>3. Replace component under function test</li> </ol>
<b>175-250-XXX</b> <b>175-251-XXX</b> Thermal Sensor(s) limit error	<ol style="list-style-type: none"> <li>1. <b>Check fans</b></li> <li>2. Check Power supply</li> <li>3. Microprocessor</li> <li>4. System board</li> </ol>
<b>185-000-XXX</b> Asset Security Test Passed	<b>No action</b>
<b>185-XXX-XXX</b> Asset Security failure	<ol style="list-style-type: none"> <li>1. <b>Flash system</b></li> <li>2. System board</li> </ol>
<b>185-278-XXX</b> Asset Security Chassis Intrusion	<ol style="list-style-type: none"> <li>1. <b>Assure Asset Security Enabled</b></li> <li>2. C2 Cover Switch</li> <li>3. System board</li> </ol>
<b>201-000-XXX</b> System Memory Test Passed	<b>No action</b>
<b>201-XXX-XXX</b> System Memory error	<ol style="list-style-type: none"> <li>1. <b>Replace the memory module called out by the test</b></li> <li>2. System board</li> </ol>
<b>202-000-XXX</b> System Cache Test Passed	<b>No action</b>
<b>202-XXX-XXX</b> System Cache error	<ol style="list-style-type: none"> <li>1. <b>Cache, if removable</b></li> <li>2. System board</li> <li>3. Microprocessor</li> </ol>



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

<b>Diagnostic Error Code</b>	<b>FRU/Action</b>
<b>305-250-XXX</b> Monitor DDC self test failure	<b>1. Run Setup to enable DDC</b> 2. Cable 3. Monitor 4. Video card 5. System board
<b>415-000-XXX</b> Modem Test Passed	<b>No action</b>
<b>415-XXX-XXX</b> Modem error	<b>Remove the Modem and re-test the system</b>

## Beep symptoms

Beep symptoms are short tones or a series of short tones separated by pauses (intervals without sound). See the following examples.

Beeps	Description
1-2-X	<ul style="list-style-type: none"> <li>• One beep</li> <li>• A pause (or break)</li> <li>• Two beeps</li> <li>• A pause (or break)</li> <li>• Any number of breaks</li> </ul>
4	Four continuous beeps

Use the following table to diagnose beep symptoms.

Beep Symptom	FRU/Action
1-1-3 CMOS read-write error	<ol style="list-style-type: none"> <li>1. <b>Run Setup</b></li> <li>2. System Board</li> </ol>
1-2-2-3 ROM BIOS check error	<b>System Board</b>
1-2-1 Programmable Interval Timer failed	<b>System Board</b>
1-2-2 DMA Initialization failed	<b>System Board</b>
1-2-3 DMA page register write/read failed	<b>System Board</b>
1-2-4 RAM refresh verification failed	<ol style="list-style-type: none"> <li>1. <b>Memory module</b></li> <li>2. System Board</li> </ol>
1-3-3-1 1st 64K RAM test failed	<ol style="list-style-type: none"> <li>1. <b>Memory module</b></li> <li>2. System Board</li> </ol>
1-3-2 1st 64K RAM parity test failed	<ol style="list-style-type: none"> <li>1. <b>Memory module</b></li> <li>2. Processor</li> <li>3. System Board</li> </ol>
2-2-3-1 Interrupt vector loading test failed	<b>System Board</b>
2-1-1 Secondary DMA register failed	<b>System Board</b>
2-1-2 Primary DMA register failed	<b>System Board</b>
2-1-3 Primary interrupt mask register failed	<b>System Board</b>
2-1-4 Secondary interrupt mask register failed	<b>System Board</b>
2-2-1 Interrupt vector loading failed	<b>System Board</b>
1-3-1-3 Keyboard controller failed	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Keyboard</li> </ol>
2-2-3 CMOS power failure and checksum checks failed	<ol style="list-style-type: none"> <li>1. <b>Battery</b></li> <li>2. System Board</li> </ol>

<b>Beep Symptom</b>	<b>FRU/Action</b>
2-2-4 CMOS configuration info validation failed	1. <b>Battery</b> 2. System Board
2-3-1 Screen initialization failed	1. <b>Jumper on J28</b> 2. System Board
2-3-2 Screen memory failed	<b>System Board</b>
2-3-3 Screen retrace failed	<b>System Board</b>
1-2 Search for video ROM failed	<b>System Board</b>
All other beep code sequences	<b>System Board</b>
Continuous beep	<b>System Board</b>
Repeating short beeps	1. <b>Keyboard stuck key</b> 2. Keyboard Cable 3. System Board

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## No-beep symptoms

Symptom/Error	FRU/Action
No beep during POST but computer works correctly.	<b>System Board</b>
No beep during POST.	<ol style="list-style-type: none"><li>1. See “Undetermined problems” on page 109.</li><li>2. System Board</li><li>3. Memory Module</li><li>4. Any Adapter or Device</li><li>5. Riser Card</li><li>6. Power Cord</li><li>7. Power Supply</li></ol>

## 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 diskette drive is working
- Verifies that the hard disk drive is working

If the POST finishes without detecting any problems, a single beep sounds and the first screen of the operating system or application program appears.

**Note:**

Some computers default to come up quiet (no beep and no memory count and checkpoint code display) when no errors are detected by POST.

To enable beep and memory count and checkpoint code display when a successful POST occurs, do the following:

1. Select **Start Options** in the IBM Setup Utility program (see Chapter 5, "IBM Setup Utility program," on page 19).
2. Set **Power-On Self-Test** to **Enhanced**.

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.

In the following index, *X* can represent any number.

POST Error Code	FRU/Action
<b>000</b> SCSI Adapter not enabled	<b>Verify adapter device and Bus Master fields are enabled in the IBM Setup Utility program. See documentation shipped with computer.</b>
<b>02X</b>	<b>SCSI Adapter</b>
<b>08X</b> Check SCSI terminator installation.	<ol style="list-style-type: none"><li>1. <b>SCSI Cable</b></li><li>2. <b>SCSI Terminator</b></li><li>3. <b>SCSI Device</b></li><li>4. <b>SCSI Adapter</b></li></ol>
<b>101</b> System board interrupt failure	<b>System Board</b>
<b>102</b> System board timer error	<b>System Board</b>
<b>106</b>	<b>System Board</b>
<b>110</b> System board memory parity error	<ol style="list-style-type: none"><li>1. <b>Memory Module</b></li><li>2. <b>System Board</b></li></ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>111</b> I/O channel parity error	<ol style="list-style-type: none"> <li><b>Reseat adapters</b></li> <li>Any adapter</li> <li>Riser card</li> <li>System Board</li> </ol>
<b>114</b> Adapter ROM error	<ol style="list-style-type: none"> <li><b>Adapter Memory</b></li> <li>System Board</li> <li>Riser card</li> </ol>
<b>129</b> Internal cache test error	<ol style="list-style-type: none"> <li><b>Processor</b></li> <li>L2 Cache Memory</li> <li>System Board</li> </ol>
<b>135</b> Fan failure	<ol style="list-style-type: none"> <li><b>Fan</b></li> <li>System board</li> </ol>
<b>151</b> System board failure	<b>System Board</b>
<b>161</b> Bad CMOS battery	<ol style="list-style-type: none"> <li><b>Run Setup</b></li> <li>CMOS Backup Battery. Go to "Replacing the battery (all machine types)" on page 56</li> <li>System Board</li> </ol>
<b>162</b> Configuration mismatch	<ol style="list-style-type: none"> <li><b>Run Setup and verify Configuration</b></li> <li>Had a device been added, removed, changed location? If not, suspect that device.</li> <li>Power-on external devices first, then power-on computer</li> <li>CMOS Backup Battery. Go to "Replacing the battery (all machine types)" on page 56</li> <li>System Board</li> </ol>
<b>163</b> Date and Time Incorrect	<ol style="list-style-type: none"> <li><b>Time and Date Set</b></li> <li>CMOS Backup Battery. Go to "Replacing the battery (all machine types)" on page 56</li> <li>System Board</li> </ol>
<b>164</b> Memory Size Error	<ol style="list-style-type: none"> <li><b>Run Setup. Check System Summary menu for memory size change. (See Chapter 5, "IBM Setup Utility program," on page 19.)</b></li> <li>Run the Extended Memory Diagnostic tests</li> </ol>
<b>166</b> Boot Block Check Sum Error	<ol style="list-style-type: none"> <li><b>Run Flash Recovery using Boot Block. See "Recovering from a POST/BIOS update failure" on page 114.</b></li> <li>System Board</li> </ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>167</b> No Processor BIOS Update Found	<ol style="list-style-type: none"> <li>1. <b>Run Setup. Check Stepping level for the BIOS level needed, then perform the flash update.</b></li> <li>2. Processor</li> </ol>
<b>168</b> Alert on LAN error	<ol style="list-style-type: none"> <li>1. <b>Run Setup. Check to see that Ethernet and Alert on LAN are enabled.</b></li> <li>2. System Board</li> </ol>
<b>17X, 18X</b>	<b>C2 Security</b>
<b>175</b> Primary Copy of Secure Data is damaged	<ol style="list-style-type: none"> <li>1. <b>Run Setup. See Chapter 5, "IBM Setup Utility program," on page 19.</b></li> <li>2. System Board</li> </ol>
<b>176</b> The System has been tampered with	<ol style="list-style-type: none"> <li>1. <b>Covers were removed from the computer</b></li> </ol>
<b>177</b> Corrupted Administrator Password	<b>System Board</b>
<b>178</b>	<b>System Board</b>
<b>179</b> Boot Integrity Services Segment Error	<b>System Board</b>
<b>183</b>	<ol style="list-style-type: none"> <li>1. <b>Enter the administrator password</b></li> </ol>
<b>184</b> Asset Control Antenna not detected	<ol style="list-style-type: none"> <li>1. <b>Make sure Asset Care and Asset ID are enabled in the IBM Setup Utility program.</b></li> <li>2. RFID Antenna</li> <li>3. System Board</li> </ol>
<b>185</b> Corrupted boot sequence	<b>Set configuration and reinstall the boot sequence</b>
<b>186</b> Security Hardware Control Logic Error	<b>System Board</b>
<b>187</b>	<ol style="list-style-type: none"> <li>1. <b>Clear Administration password</b></li> <li>2. System Board</li> </ol>
<b>189</b>	<b>More than three password attempts were made to access the computer</b>
<b>190</b> System Security: Invalid Remote Change Requested	<b>System Board</b>
<b>191</b> System Security: IBM Embedded Security Hardware Reset	<b>System Board</b>
<b>193</b> System Security: IBM Embedded Security Hardware Removed	<b>System Board</b>
<b>194</b> System Security: Asset ID Antenna has been Removed	<b>System Board</b>
<b>195</b> System Security: Asset ID Antenna has been Installed	<b>System Board</b>
<b>196</b> System Tampered Cleared	<b>System Board</b>
<b>1XX</b> Not listed above	<b>System Board</b>



POST Error Code	FRU/Action
<b>201, 20X</b> Memory data error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics Memory Test</b></li> <li>2. Memory Module</li> <li>3. System Board</li> </ol>
<b>225</b>	<ol style="list-style-type: none"> <li>1. <b>Unsupported Memory</b></li> </ol>
<b>229</b> External cache test error	<ol style="list-style-type: none"> <li>1. <b>L2 Cache Memory</b></li> <li>2. System Board</li> </ol>
<b>262</b> POST detected a base memory or extended memory type error	<ol style="list-style-type: none"> <li>1. <b>Run Setup. Check System Summary menu for memory. (See Chapter 5, "IBM Setup Utility program," on page 19.)</b></li> <li>2. Run the Extended Memory Diagnostic tests.</li> </ol>
<b>301</b> Keyboard Error	<ol style="list-style-type: none"> <li>1. <b>Keyboard</b></li> <li>2. Keyboard Cable</li> <li>3. System Board</li> </ol>
<b>303</b> With an 8603 error	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. Keyboard</li> <li>3. Keyboard Cable</li> <li>4. System Board</li> </ol>
<b>303</b> With no 8603 error	<ol style="list-style-type: none"> <li>1. <b>Keyboard</b></li> <li>2. Keyboard Cable</li> <li>3. System Board</li> </ol>
<b>3XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Keyboard</b></li> <li>2. Keyboard Cable</li> <li>3. System Board</li> </ol>
<b>5XX</b>	<ol style="list-style-type: none"> <li>1. <b>Video Adapter (if installed)</b></li> <li>2. System Board</li> </ol>
<b>601</b>	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive A</b></li> <li>2. Diskette Drive Cable</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
<b>602</b>	<ol style="list-style-type: none"> <li>1. <b>Bad Diskette?</b></li> <li>2. Verify Diskette and retry</li> </ol>
<b>604</b> And able to run diagnostics	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify diskette configuration settings</b></li> <li>2. Diskette Drive A/B</li> <li>3. Diskette Drive Cable</li> <li>4. System Board</li> <li>5. Riser card</li> </ol>
<b>605</b> POST cannot unlock the diskette drive	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. Diskette Drive Cable</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>662</b> Configuration Change has occurred	<b>Diskette drive configuration error or wrong diskette drive type; run Setup.</b>
<b>6XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. System Board</li> <li>3. Riser card</li> <li>4. External Drive Adapter</li> <li>5. Diskette Drive Cable</li> <li>6. Power Supply</li> </ol>
<b>762</b> Math coprocessor configuration error	<ol style="list-style-type: none"> <li>1. <b>Run Setup.</b></li> <li>2. Processor</li> <li>3. System Board</li> </ol>
<b>7XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Processor</b></li> <li>2. System Board</li> </ol>
<b>962</b> Parallel port configuration error	<ol style="list-style-type: none"> <li>1. <b>Run Setup.</b></li> <li>2. Parallel Adapter (if installed)</li> <li>3. System Board</li> </ol>
<b>9XX</b>	<ol style="list-style-type: none"> <li>1. <b>Printer</b></li> <li>2. System Board</li> </ol>
<b>1047</b>	<b>16-Bit AT™ Fast SCSI Adapter</b>
<b>107X</b> Check SCSI terminator installation	<ol style="list-style-type: none"> <li>1. <b>Check SCSI terminator installation</b></li> <li>2. SCSI Cable</li> <li>3. SCSI Terminator</li> <li>4. SCSI Device</li> <li>5. SCSI Adapter</li> </ol>
<b>1101</b> Serial connector error, possible system board failure	<b>Run Enhanced Diagnostics</b>
<b>1101, 1102, 1106, 1108, 1109</b>	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Any Serial Device</li> </ol>
<b>1107</b>	<ol style="list-style-type: none"> <li>1. <b>Communications Cable</b></li> <li>2. System Board</li> </ol>
<b>1102</b> Card selected feedback error	<b>Run Enhanced Diagnostics</b>
<b>1103</b> Port fails register check	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> <li>2. System Board</li> </ol>
<b>1106</b> Serial option cannot be turned off	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> <li>2. System Board</li> </ol>
<b>1107</b>	<ol style="list-style-type: none"> <li>1. <b>Serial Device Cable</b></li> <li>2. System Board</li> </ol>
<b>1110</b> Register test failed	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> <li>2. System Board</li> </ol>
<b>1116</b> Interrupt error	<b>Run Enhanced Diagnostics</b>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>1117</b> Failed baud rate test	<b>Run Enhanced Diagnostics</b>
<b>1162</b> Serial port configuration error	<ol style="list-style-type: none"> <li>1. <b>Run Setup.</b></li> <li>2. Serial Adapter (if installed)</li> <li>3. System Board</li> </ol>
<b>11XX</b> Not listed above	<b>System Board</b>
<b>1201</b>	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Any Serial Device</li> </ol>
<b>1202, 1206, 1208, 1209, 12XX</b>	<ol style="list-style-type: none"> <li>1. <b>Dual Async Adapter/A</b></li> <li>2. System Board</li> <li>3. Any Serial Device</li> </ol>
<b>1207</b>	<ol style="list-style-type: none"> <li>1. <b>Communications Cable</b></li> <li>2. Dual Async Adapter/A</li> </ol>
<b>13XX</b>	<b>Game Adapter</b>
<b>1402</b> Printer not ready	Information only
<b>1403</b> No paper error, or interrupt failure	Information only
<b>1404</b> System board timeout failure	<b>Run Enhanced Diagnostics</b>
<b>1405</b> Parallel adapter error	<b>Run Enhanced Diagnostics</b>
<b>1406</b> Presence test error	<b>Run Enhanced Diagnostics</b>
<b>14XX</b> Not listed above. Check printer before replacing system board	<ol style="list-style-type: none"> <li>1. <b>Printer</b></li> <li>2. System Board</li> </ol>
<b>15XX</b>	<b>SDLC Adapter</b>
<b>1692</b> Boot sequence error	<b>Run FDISK to ensure at least one active partition is set active</b>
<b>16XX</b>	<b>36/38 Workstation Adapter</b>
<b>1762</b> Hard disk drive configuration error	<b>Run Setup. (See Chapter 5, "IBM Setup Utility program," on page 19.)</b>
<b>1780</b> (Disk Drive 0) <b>1781</b> (Disk Drive 1) <b>1782</b> (Disk Drive 2) <b>1783</b> (Disk Drive 3)	<ol style="list-style-type: none"> <li>1. <b>Hard Disk Drive</b></li> <li>2. System Board</li> <li>3. Riser card</li> <li>4. Hard Disk Cable</li> <li>5. Power Supply</li> </ol>
<b>1800</b> PCI/PnP Error! No Hardware Interrupt Available	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. Rerun diagnostics.</li> <li>3. PCI Adapter</li> </ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>1801</b> PCI/PnP Error! No Space Available to Shadow ROM	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. Rerun diagnostics.</li> <li>3. PCI Adapter</li> </ol>
<b>1802</b> PCI/PnP Error! Not Enough I/O Space Available	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. Rerun diagnostics.</li> <li>3. PCI Adapter</li> </ol>
<b>1803</b> PCI/PnP Error! Not Enough Memory Space Available	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. Rerun diagnostics.</li> <li>3. PCI Adapter</li> </ol>
<b>1804</b> PCI/PnP Error! Not Enough Real Memory Space Available	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. Rerun diagnostics.</li> <li>3. PCI Adapter</li> </ol>
<b>1805</b> PCI/PnP Error! Adapter ROM Checksum Error	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. Rerun diagnostics.</li> <li>3. PCI Adapter</li> </ol>
<b>180X, 188X</b> PCI configuration or resource error	<ol style="list-style-type: none"> <li>1. <b>Run Setup and verify PCI/ISA configuration settings.</b></li> <li>2. Rerun diagnostics.</li> <li>3. PCI Adapter</li> </ol>
<b>1962</b> No operating system found	<b>Press F1 to repeat boot sequence.</b>
<b>209X</b>	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. Diskette Cable</li> </ol>
<b>20XX</b> Not listed above	<b>BSC Adapter</b>
<b>21XX</b>	<ol style="list-style-type: none"> <li>1. <b>SCSI Device</b></li> <li>2. 16-bit AT Fast SCSIU adapter</li> <li>3. Alternate BSC adapter</li> </ol>
<b>2401, 2402</b> If screen colors change	<b>Display</b>
<b>2401, 2402</b> If screen colors are OK	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Display</li> </ol>
<b>2409</b>	<b>Display</b>
<b>2410</b>	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Display</li> </ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>2462</b> Video memory configuration error	<ol style="list-style-type: none"> <li>1. <b>Check cable connections</b></li> <li>2. Run Setup and verify video configuration settings</li> <li>3. Video Memory Modules</li> <li>4. Video Adapter (if installed)</li> <li>5. System Board</li> </ol>
<b>4611, 4630</b>	<ol style="list-style-type: none"> <li>1. <b>Multiport/2 Interface Board</b></li> <li>2. Multiport/2 Adapter</li> </ol>
<b>4612, 4613, 4640, 4641</b>	<ol style="list-style-type: none"> <li>1. <b>Memory Module Package</b></li> <li>2. Multiport/2 Adapter</li> </ol>
<b>4650</b>	<b>Multiport/2 Interface Cable</b>
<b>46XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Multiport/2 Adapter</b></li> <li>2. Multiport/2 Interface Board</li> <li>3. Memory Module</li> </ol>
<b>5600</b>	<b>Financial System Controller Adapter</b>
<b>5962</b> An IDE device (other than hard drive) configuration error	<ol style="list-style-type: none"> <li>1. <b>Run Setup.</b></li> <li>2. CD-ROM Drive</li> <li>3. CD-ROM Adapter</li> <li>4. Zip or other ATAPI device</li> <li>5. System Board</li> <li>6. Riser card</li> </ol>
<b>62XX</b>	<ol style="list-style-type: none"> <li>1. <b>1st Store Loop Adapter</b></li> <li>2. Adapter Cable</li> </ol>
<b>63XX</b>	<ol style="list-style-type: none"> <li>1. <b>2nd Store Loop Adapter</b></li> <li>2. Adapter Cable</li> </ol>
<b>64XX</b>	<b>Network Adapter</b>
<b>71XX</b>	<b>Voice Adapter</b>
<b>74XX</b>	<b>Video Adapter (if installed)</b>
<b>76XX</b>	<b>Page Printer Adapter</b>
<b>78XX</b>	<b>High Speed Adapter</b>
<b>79XX</b>	<b>3117 Adapter</b>
<b>80XX</b>	<b>PCMCIA Adapter</b>
<b>84XX</b>	<ol style="list-style-type: none"> <li>1. <b>Speech Adapter</b></li> <li>2. Speech Control Assembly.</li> </ol>
<b>8601, 8602</b>	<ol style="list-style-type: none"> <li>1. <b>Pointing Device (Mouse)</b></li> <li>2. System Board</li> </ol>
<b>8603, 8604</b> Pointing Device Error	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Pointing Device (Mouse)</li> </ol>

POST Error Code	FRU/Action
86XX Not listed above	<ol style="list-style-type: none"> <li>1. <b>Mouse</b></li> <li>2. System Board</li> </ol>
89XX	<ol style="list-style-type: none"> <li>1. <b>PC Music Adapter</b></li> <li>2. MIDI Adapter Unit</li> </ol>
91XX	<ol style="list-style-type: none"> <li>1. <b>Optical Drive</b></li> <li>2. Adapter</li> </ol>
96XX	<ol style="list-style-type: none"> <li>1. <b>SCSI Adapter</b></li> <li>2. Any SCSI Device</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
10101, 10102, 10104, 10105, 10106, 10107, 10108, 10109, 10111, 10112, 10113, 10114, 10115, 10116	<ol style="list-style-type: none"> <li>1. <b>Have customer verify correct operating system device drivers are installed and operational.</b></li> <li>2. Modem</li> </ol>
10103, 10110, 101171	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Data/Fax Modem</li> <li>3. Riser card</li> </ol>
10117	<ol style="list-style-type: none"> <li>1. <b>Check system speaker</b></li> <li>2. Check PSTN cable</li> <li>3. External DAA (if installed)</li> <li>4. Modem</li> </ol>
10118	<ol style="list-style-type: none"> <li>1. <b>Run Diagnostics and verify the correct operation of the modem slot</b></li> <li>2. Modem</li> </ol>
10119	<ol style="list-style-type: none"> <li>1. <b>Diagnostics detected a non-IBM modem</b></li> <li>2. Modem</li> </ol>
10120	<ol style="list-style-type: none"> <li>1. <b>Check PSTN Cable</b></li> <li>2. External DAA (if installed)</li> <li>3. Modem</li> </ol>
10132, 10133, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10148, 10149, 10150, 10151, 10152	<b>Modem</b>
10153	<ol style="list-style-type: none"> <li>1. <b>Data/Fax Modem</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>101XX</b> Not listed above	<ol style="list-style-type: none"> <li>1. <b>Modem Adapter/A</b></li> <li>2. Data/Fax Modem</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
<b>10450, 10451, 10490, 10491, 10492, 10499</b> Read/write error	<ol style="list-style-type: none"> <li>1. <b>Run Enhanced Diagnostics</b></li> <li>2. Hard Disk Drive</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
<b>10452</b> Seek test error	<b>Run Enhanced Diagnostics</b>
<b>10453</b> Wrong drive type?	Information only
<b>10454</b> Sector buffer test error	<b>Run Enhanced Diagnostics</b>
<b>10455, 10456</b> Controller error	<b>Run Enhanced Diagnostics</b>
<b>10459</b> Drive diagnostic command error	Information only
<b>10461</b> Drive format error	<b>Run Enhanced Diagnostics</b>
<b>10462</b> Controller seek error	<b>Run Enhanced Diagnostics</b>
<b>10464</b> Hard Drive read error	<b>Run Enhanced Diagnostics</b>
<b>10467</b> Drive non-fatal seek error	<b>Run Enhanced Diagnostics</b>
<b>10468</b> Drive fatal seek error	<b>Run Enhanced Diagnostics</b>
<b>10469</b> Drive soft error count exceeded	<b>Run Enhanced Diagnostics</b>
<b>10470, 10471, 10472</b> Controller wrap error	<b>Run Enhanced Diagnostics</b>
<b>10473</b> Corrupt data. Low level format might be required	Information only
<b>10480</b>	<ol style="list-style-type: none"> <li>1. <b>Hard Disk Drive (ESDI)</b></li> <li>2. Drive Cable</li> <li>3. System Board</li> </ol>
<b>10481</b> ESDI drive D seek error	<b>Run Enhanced Diagnostics</b>
<b>10482</b> Drive select acknowledgement bad	<b>Run Enhanced Diagnostics</b>
<b>106X1</b>	<ol style="list-style-type: none"> <li>1. <b>Check Configuration</b></li> <li>2. Ethernet Adapter</li> </ol>

POST Error Code	FRU/Action
10635	<ol style="list-style-type: none"> <li>1. <b>Power-off computer, wait ten seconds then power-on the computer</b></li> <li>2. Ethernet Adapter</li> </ol>
10651, 10660	<ol style="list-style-type: none"> <li>1. <b>Check Cables</b></li> <li>2. Ethernet Adapter</li> </ol>
106XX Not listed above	<b>Ethernet Adapter</b>
107XX	<ol style="list-style-type: none"> <li>1. <b>5.25-inch External Diskette Drive</b></li> <li>2. 5.25-inch Diskette Drive Adapter/A</li> </ol>
109XX Check the adapter cables	<ol style="list-style-type: none"> <li>1. <b>ActionMedia Adapter/A</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
112XX This adapter does not have cache	<ol style="list-style-type: none"> <li>1. <b>SCSI Adapter</b></li> <li>2. Any SCSI Device</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
119XX	<b>3119 Adapter</b>
121XX	<ol style="list-style-type: none"> <li>1. <b>Modem Adapter</b></li> <li>2. Any Serial Device</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
136XX	<ol style="list-style-type: none"> <li>1. <b>ISDN Primary Rate Adapter</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
137XX	<b>System Board</b>
141XX	<b>Realtime Interface Coprocessor Portmaster Adapter/A</b>
143XX	<ol style="list-style-type: none"> <li>1. <b>Japanese Display Adapter</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
14710, 14711	<ol style="list-style-type: none"> <li>1. <b>System Board Video Adapter</b></li> <li>2. Adapter Video Memory</li> </ol>
148XX	<b>Video Adapter</b>
14901, 14902, 1491X, 14922	<ol style="list-style-type: none"> <li>1. <b>Video Adapter (if installed)</b></li> <li>2. System Board</li> <li>3. Riser card</li> <li>4. Display (any type)</li> </ol>



POST Error Code	FRU/Action
14932	<ol style="list-style-type: none"> <li>1. External Display</li> <li>2. Video Adapter</li> </ol>
161XX	<ol style="list-style-type: none"> <li>1. FaxConcentrator Adapter</li> </ol>
164XX	<ol style="list-style-type: none"> <li>1. 120 MB Internal Tape Drive</li> <li>2. Diskette Cable</li> <li>3. System Board</li> <li>4. Riser card</li> </ol>
16500	<ol style="list-style-type: none"> <li>1. 6157 Tape Attachment</li> <li>2. Adapter</li> </ol>
16520, 16540	<ol style="list-style-type: none"> <li>1. 6157 Streaming Tape Drive</li> <li>2. 6157 Tape Attachment Adapter</li> </ol>
166XX, 167XX	<ol style="list-style-type: none"> <li>1. Token Ring Adapter</li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
18001 to 18029	<ol style="list-style-type: none"> <li>1. Wizard Adapter</li> <li>2. Wizard Adapter Memory</li> </ol>
18031 to 18039	Wizard Adapter Cable
185XXXX	<ol style="list-style-type: none"> <li>1. DBCS Japanese Display Adapter/A</li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
20001 to 20003	<ol style="list-style-type: none"> <li>1. Image Adapter/A Image-I Adapter/A</li> <li>2. Memory Module DRAM, VRAM</li> </ol>
20004	<ol style="list-style-type: none"> <li>1. Memory Module DRAM, VRAM</li> <li>2. Image Adapter/A Image-I Adapter/A</li> </ol>
20005 to 20010	<ol style="list-style-type: none"> <li>1. Image Adapter/A Image-I Adapter/A</li> <li>2. Memory Module DRAM, VRAM</li> </ol>
200XX Not listed above	<ol style="list-style-type: none"> <li>1. Image Adapter/A</li> <li>2. Image-I Adapter/A</li> <li>3. Memory Module DRAM, VRAM</li> <li>4. System Board</li> <li>5. Riser card</li> </ol>
20101 to 20103	<ol style="list-style-type: none"> <li>1. Printer/Scanner Option</li> <li>2. Image Adapter/A</li> <li>3. Memory Module DRAM, VRAM</li> </ol>
20104	<ol style="list-style-type: none"> <li>1. Memory Module DRAM, VRAM</li> <li>2. Printer/Scanner Option</li> <li>3. Image Adapter/A</li> </ol>

<b>POST Error Code</b>	<b>FRU/Action</b>
<b>20105 to 20110</b>	<ol style="list-style-type: none"> <li><b>1. Printer/Scanner Option</b></li> <li>Image Adapter/A</li> <li>Memory Module DRAM, VRAM</li> </ol>
Image Adapter/A Memory Test failure indicated by graphic of adapter	<b>Replace memory module (shown in graphic)</b>
<b>206XX</b>	<ol style="list-style-type: none"> <li><b>1. SCSI-2 Adapter</b></li> <li>Any SCSI Device</li> <li>System Board</li> <li>Riser card</li> </ol>
<b>208XX</b> Verify there are no duplicate SCSI ID settings on the same bus.	<b>Any SCSI Device</b>
<b>210XXXX</b> Internal bus, size unknown <b>210XXX1</b> External bus, size unknown	<ol style="list-style-type: none"> <li><b>1. SCSI Hard Disk Drive</b></li> <li>SCSI Adapter or System Board</li> <li>SCSI Cable</li> <li>SCSI ID Switch (on some models)</li> </ol>
Tape Drive amber LED remains on	<ol style="list-style-type: none"> <li><b>1. Tape Drive</b></li> <li>SCSI Cable (internal)</li> <li>SCSI Adapter or System Board</li> </ol>
Tape Drive green "in use" LED fails to come on	<ol style="list-style-type: none"> <li><b>1. Tape Drive</b></li> <li>SCSI Adapter or System Board</li> <li>SCSI Cable (internal)</li> <li>SCSI Cable (external)</li> </ol>
Tape automatically ejected from drive	<b>Tape Cassette Drive</b>
SCSI ID on rotary switch does not match SCSI ID set in configuration. Verify drive switches inside cover are set to zero	<ol style="list-style-type: none"> <li><b>1. Rotary Switch Circuit Board</b></li> <li>Circuit Board Cable</li> <li>Tape Drive</li> </ol>
Tape sticks or breaks in drive. Verify that the tapes used meet ANSI standard X3B5	<b>Tape Cassette</b>
<b>212XX</b>	<ol style="list-style-type: none"> <li><b>1. SCSI Printer</b></li> <li>Printer Cable</li> </ol>
<b>213XX</b>	<b>SCSI Processor</b>
<b>214XX</b>	<b>WORM Drive</b>
<b>215XXXC, 215XXXD, 215XXXE, 215XXXU</b> If an external device, and power-on LED is off, check external voltages	<ol style="list-style-type: none"> <li><b>1. CD-ROM Drive I</b></li> <li>CD-ROM Drive II Enhanced CD-ROM Drive II Any CD-ROM Drive</li> <li>SCSI Cable</li> <li>SCSI Adapter or System Board</li> </ol>
<b>216XX</b>	<b>Scanner</b>

POST Error Code	FRU/Action
<b>217XX</b> If an external device, and power-on LED is off, check external voltages	<ol style="list-style-type: none"> <li>1. <b>Rewritable Optical Drive</b></li> <li>2. SCSI Adapter or System Board</li> <li>3. SCSI Cable</li> </ol>
<b>218XX</b> Check for multi CD tray or jukebox	<b>Changer</b>
<b>219XX</b>	<b>SCSI Communications Device</b>
<b>24201Y0, 24210Y0</b> Be sure wrap plug is attached	<ol style="list-style-type: none"> <li>1. <b>ISDN/2 Adapter</b></li> <li>2. ISDN/2 Wrap Plug</li> <li>3. ISDN/2 Communications Cable</li> </ol>
<b>273XX</b>	<ol style="list-style-type: none"> <li>1. <b>1 Mbps Micro Channel</b></li> <li>2. Infrared LAN Adapter</li> </ol>
<b>27501, 27503, 27506, 27507</b>	<ol style="list-style-type: none"> <li>1. <b>ServerGuard Adapter</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
<b>27502, 27504, 27510, 27511, 27533, 27534, 27536, 27537</b>	<b>ServerGuard Adapter</b>
<b>27509</b>	<b>Remove redundant adapters, run the IBM Setup Utility program, then retest.</b>
<b>27512</b>	<ol style="list-style-type: none"> <li>1. <b>WMSELF.DGS diagnostics file is missing</b></li> <li>2. WMSELF.DGS diagnostics file is incorrect</li> </ol>
<b>27535</b>	<ol style="list-style-type: none"> <li>1. <b>3V Lithium Backup Battery</b></li> <li>2. ServerGuard Adapter</li> </ol>
<b>27554</b>	<ol style="list-style-type: none"> <li>1. <b>Internal Temperature out of range</b></li> <li>2. ServerGuard Adapter</li> </ol>
<b>27555, 27556</b>	<ol style="list-style-type: none"> <li>1. <b>ServerGuard Adapter</b></li> <li>2. Power Supply</li> </ol>
<b>27557</b>	<ol style="list-style-type: none"> <li>1. <b>7.2V NiCad Main Battery Pack</b></li> <li>2. ServerGuard Adapter</li> </ol>
<b>27558, 27559, 27560, 27561</b>	<ol style="list-style-type: none"> <li>1. <b>PCMCIA Type II Modem</b></li> <li>2. ServerGuard Adapter</li> </ol>
<b>27562</b>	<ol style="list-style-type: none"> <li>1. <b>External Power Control not connected</b></li> <li>2. External Power Control</li> <li>3. ServerGuard Adapter</li> </ol>
<b>27563, 27564</b>	<ol style="list-style-type: none"> <li>1. <b>External Power Control</b></li> <li>2. ServerGuard Adapter</li> </ol>
<b>275XX</b>	<b>Update Diagnostic Software</b>
<b>27801 to 27879</b>	<ol style="list-style-type: none"> <li>1. <b>Personal Dictation System</b></li> <li>2. Adapter</li> <li>3. System Board</li> </ol>
<b>27880 to 27889</b>	<ol style="list-style-type: none"> <li>1. <b>External FRU (Speaker, Microphone)</b></li> </ol>

POST Error Code	FRU/Action
999030X Hard disk reset failure	Possible hard disk drive problem; see "Hard disk drive boot error" on page 69.

## Miscellaneous error messages

Message/Symptom	FRU/Action
CMOS Backup Battery inaccurate	<ol style="list-style-type: none"> <li>1. <b>CMOS Backup Battery</b> (see “Replacing the battery (all machine types)” on page 56)</li> <li>2. System Board</li> </ol>
Changing colors	<b>Display</b>
Computer will <i>not</i> power-off. See “Power Supply Errors” on page 70.	<ol style="list-style-type: none"> <li>1. <b>Power Switch</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
Computer will <i>not</i> RPL from server	<ol style="list-style-type: none"> <li>1. <b>Ensure that network is in startup sequence as first device or first device after diskette</b></li> <li>2. Ensure that network adapter is enabled for RPL</li> <li>3. Network adapter (Advise network administrator of new MAC address)</li> </ol>
Computer will <i>not</i> Wake On LAN (if applicable)	<ol style="list-style-type: none"> <li>1. <b>Check power supply and signal cable connections to network adapter</b></li> <li>2. Ensure that the operating system settings are set to enable Wake on LAN</li> <li>3. Ensure Wake On LAN feature is enabled in the IBM Setup Utility program. See Chapter 5, “IBM Setup Utility program,” on page 19).</li> <li>4. Ensure network administrator is using correct MAC address</li> <li>5. Ensure no interrupt or I/O address conflicts</li> <li>6. Network adapter (advise network administrator of new MAC address)</li> </ol>
Dead computer. See “Power Supply Errors” on page 70.	<ol style="list-style-type: none"> <li>1. <b>Power Supply</b></li> <li>2. System Board</li> <li>3. Riser card</li> </ol>
Diskette drive in-use light remains on or does not light when drive is active.	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. System Board</li> <li>3. Diskette Drive Cable</li> <li>4. Riser card</li> </ol>
Flashing cursor with an otherwise blank display.	<ol style="list-style-type: none"> <li>1. <b>System Board</b></li> <li>2. Primary Hard Disk Drive</li> <li>3. Hard Disk Drive Cable</li> <li>4. Riser card</li> </ol>
Incorrect memory size during POST	<ol style="list-style-type: none"> <li>1. <b>Run the Memory tests</b></li> <li>2. Memory Module</li> <li>3. System Board</li> </ol>

Message/Symptom	FRU/Action
"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"> <li>1. <b>System Board</b></li> <li>2. Diskette Drive Cable</li> <li>3. Riser card</li> <li>4. Network Adapter</li> </ol>
Intensity or color varies from left to right of characters and color bars	<ol style="list-style-type: none"> <li>1. <b>Display</b></li> <li>2. System Board</li> </ol>
No power or fan not running	See <b>"Power Supply Errors" on page 70.</b>
Non-system disk or disk error-type message with a known-good diagnostic diskette.	<ol style="list-style-type: none"> <li>1. <b>Diskette Drive</b></li> <li>2. System Board</li> <li>3. Diskette Drive Cable</li> <li>4. Riser card</li> </ol>
Other display symptoms not listed above (including blank or illegible display)	<ol style="list-style-type: none"> <li>1. <b>Display</b></li> <li>2. System Board</li> </ol>
Power-on indicator or hard disk drive in-use light not on, but computer works correctly	<ol style="list-style-type: none"> <li>1. <b>Power Supply</b></li> <li>2. System Board</li> <li>3. LED Cables</li> </ol>
Printer problems	<b>Printer</b>
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"> <li>1. <b>Run Setup</b></li> <li>2. Diskette Drive</li> <li>3. Diskette Drive Cable</li> <li>4. System Board</li> <li>5. Riser card</li> <li>6. Power Supply</li> </ol>
RPL computer cannot access programs from its own hard disk.	<ol style="list-style-type: none"> <li>1. <b>If network administrator is using LCCM Hybrid RPL, check startup sequence:</b> <ol style="list-style-type: none"> <li>a. <b>First device - network</b></li> <li>b. <b>Second device - hard disk</b></li> </ol> </li> <li>2. Hard disk drive</li> </ol>
RPL computer does not RPL from server	<ol style="list-style-type: none"> <li>1. <b>Check startup sequence</b></li> <li>2. Check the network adapter LED status</li> </ol>
Serial or parallel port device failure (system board port)	<ol style="list-style-type: none"> <li>1. <b>External Device Self-Test OK?</b></li> <li>2. External Device</li> <li>3. Cable</li> <li>4. System Board</li> </ol>
Serial or parallel port device failure (adapter port)	<ol style="list-style-type: none"> <li>1. <b>External Device Self-Test OK?</b></li> <li>2. External Device</li> <li>3. Cable</li> <li>4. Alternate Adapter</li> <li>5. System Board</li> </ol>
Some or all keys on the keyboard do not work	<ol style="list-style-type: none"> <li>1. <b>Keyboard</b></li> <li>2. Keyboard Cable</li> <li>3. System Board</li> </ol>

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## Undetermined problems

1. Power-off the computer.
2. Remove or disconnect the following components (if installed) one at a time.
  - a. Non-IBM devices
  - b. External devices (modem, printer, or mouse)
  - c. Any adapters
  - d. Riser card
  - e. Memory modules
  - f. Extended video memory
  - g. External Cache
  - h. External Cache RAM
  - i. Hard disk drive
  - j. Diskette drive
3. Power-on the computer to re-test the system.
4. Repeat steps 1 through 3 until you isolate the failing device or adapter.  
If all devices and adapters have been removed, and the problem persists, continue to the next step.
5. Check the power supply voltages (see "Power supply connectors" on page 110).  
If the voltages are within tolerance, continue with the next step. If the voltages are not within tolerance, replace the power supply.
6. Replace the system board (see "Replacing the system board (all machine types)" on page 61).

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## Power supply connectors

These tables enable you to check the power supply voltages.

### Connector P1

OUTPUT	CONNECTOR PINS	WIRE COLOR	TOLERANCE
+3.3 Vdc	1, 2, 11	Orange	+5%, -5%
DC return	3, 5, 7, 13, 15, 16, 17	Black	N/A
+5 Vdc	4, 6, 19, 20	Red	+5%, -5%
Power Good	8	Gray	N/A
+5 AUX	9	Purple	+5%, -5%
+12 Vdc	10	Yellow	+5%, -5%
-12 Vdc	12	Blue	+10%, -10%
On/Off	14	Green	N/A

### Connector P2, P3, P4, and P7

OUTPUT	CONNECTOR PINS	WIRE COLOR	TOLERANCE
DC return	2, 3	Black	N/A
+5 Vdc	4	Red	+5%, -5%
+12 Vdc	1	Yellow	+5%, -5%

### Connector P5 (Diskette drive)

OUTPUT	CONNECTOR PINS	WIRE COLOR	TOLERANCE
DC return	2, 3	Black	N/A
+5 Vdc	1	Red	+5%, -5%
+12 Vdc	4	Yellow	+5%, -5%

### Connector P6

OUTPUT	CONNECTOR PINS	WIRE COLOR	TOLERANCE
DC return	1, 2	Black	N/A
+12 Vdc	3, 4	Yellow	+5%, -5%

### Connector P8 (Serial ATA)

OUTPUT	CONNECTOR PINS	WIRE COLOR	TOLERANCE
DC return	2, 4	Black	N/A
+12 Vdc	1	Red	+5%, -5%
+5 Vdc	3	Yellow	+5%, -5%
+3.3 Vdc	5	Orange	+5%, -5%



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## Chapter 8. Additional Service Information

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### Security features

Security features in this section include the following:

- Passwords
- Vital Product Data
- Alert on LAN

### Passwords

The following section provides information about computer hardware and software-related passwords.

- Power-on Password
- Administrator Password
- Operating System Password

Power-on and Administrator passwords are set in the Setup Utility program. See Chapter 5, “IBM Setup Utility program,” on page 19 for information about running the Setup Utility.

#### Power-on password

A power-on password denies access to the computer by an unauthorized user when the computer is powered on. When a power-on password is active, the password prompt appears on the screen each time the computer is powered on. The computer starts after the proper password is entered.

#### Removing a power-on password

To service a computer with an active and unknown power-on password, power-off the computer and use the following procedure.

<b>Note:</b> On some models, this procedure will also remove the administrator password.
------------------------------------------------------------------------------------------

1. Unplug the power cord and remove the top cover.
2. Refer to “Identifying parts on the system board (all machine types)” on page 38 to find the Virtual clear CMOS/BIOS recovery jumper.
3. Move the recovery jumper from **normal** to **ROM recovery**.
4. Power-on the computer. The system senses the change in the position and erases the password.
5. Wait 30 seconds for beeps to sound, and then power down by holding the power button for 10 seconds.
6. Return the jumper to normal position.
7. Reset the date and time and remind the user to enter a new password when service is complete.

#### Administrator password

The administrator password is used to restrict access to the IBM Setup Utility program. If the administrator password is activated, and you do not enter the administrator password, the configuration can be viewed but not changed.

**Note:**

Your computer has Enhanced Security Mode. If Enhanced Security mode is enabled and there is no password set, the computer will act as if Enhanced Security is disabled.

If Enhanced Security is Enabled and an administrator password is set, the administrator password must be entered to use the computer. If the administrator password is lost or forgotten, the system board in the computer must be replaced in order to regain access to the IBM Setup Utility program.

**Administrator password control**

The Administrator password is set in the IBM Setup Utility program. Refer to Chapter 5, "IBM Setup Utility program," on page 19.

**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 "Flash update procedures" on page 113.

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**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.

- Current Level BIOS information
  - Run the IBM Setup Utility program to determine the level of BIOS installed.
- Sources for determining the latest level BIOS available
  1. IBM PC support web site  
<http://www.ibm.com/pc/support/>
  2. PC PartnerInfo-Technical Database (CTSTIPS.NSF)
  3. IBM Support Center
  4. Levels 1 and 2 Support
  5. RETAIN<sup>®</sup>
- Sources for obtaining the latest level BIOS available
  1. IBM PC support web site  
<http://www.ibm.com/pc/support/>
  2. PC PartnerInfo-Technical Database (CTSTIPS.NSF)
  3. IBM Support Center
  4. Levels 1 and 2 Support

To update (flash) the BIOS, see "Flash update procedures" on page 113.

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## Erasing a lost or forgotten password (clearing CMOS)

This section applies to lost or forgotten passwords. For more information about lost or forgotten passwords, see Access IBM on your desktop.

**Note:** Some models have a POV daughter card installed on the system board. In these models, the password is stored in the EEPROM on the POV card and cannot be erased. See “Identifying parts on the system board (all machine types)” on page 38 for the location of the POV card.

To erase a forgotten password:

1. Turn off the computer and all attached devices.
2. Remove the cover. See “Removing the cover” on page 30.
3. Locate the Clear CMOS/Recovery jumper on the system board. See “Identifying parts on the system board (all machine types)” on page 38.
4. If necessary, see “Replacing adapters” on page 39 to remove any adapters that impede access to the Clear CMOS/Recovery jumper.
5. Move the jumper from the standard position (pins 1 and 2) to the maintenance or configure position (pins 2 and 3).
6. Replace the cover and connect the power cord. See “Replacing the cover and connecting the cables” on page 63.
7. Restart the computer, leave it on for approximately 10 seconds. Turn off the computer by holding the power switch for approximately 5 seconds. The computer will turn off.
8. Repeat steps 2 through 4 on page 113..
9. Move the jumper back to the standard (pins 1 and 2).
10. Replace the cover and connect the power cord. See “Replacing the cover and connecting the cables” on page 63.

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## Flash update procedures

This section details how to flash (update) the BIOS. Flash updates are available at <http://www.ibm.com/pc/support/> on the World Wide Web.

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

1. Shut down the operating system and turn off the computer.
2. Insert the flash update diskette or CD-ROM.
3. Turn on the computer. The update begins.

### Updating (flashing) BIOS from your operating system

**Note:** Due to constant improvements being made to the IBM Web site, Web page content (including the links referenced in the following procedure) is subject to change.

1. From your browser, type <http://www.ibm.com/pc/support/> in the address field and press Enter.
2. Locate the Downloadable files for your machine type.
3. Under Select your product, choose your machine type and click **Go**.
4. In Downloadable file by category, click **BIOS**.
5. Under Download files - BIOS by date, click your machine type.

6. Scroll down and look for a .txt file that has instructions for Flash BIOS update from the operating system. Click the .txt file.
7. Print these instructions. This is very important since they are not on the screen after the download begins.
8. From your browser, Click **Back** to return to the list of files. Carefully follow the printed instructions to download, extract, and install the update.

## Recovering from a POST/BIOS update failure

**Attention:** If an interruption occurs during a Flash/BIOS upgrade, the BIOS might be left in an unusable state. The Boot Block jumper enables you to restart the system and recover the BIOS.

To perform a Flash/BIOS recovery using the recovery jumper, use the following procedure.

1. Power-off the computer and remove the cover.
2. Move the system board recovery jumper to the clear position. Refer to Identifying parts on the system board on page 25 or the label inside the computer for more information.
3. Place the cover back on the system.
4. Place the BIOS flash recovery diskette in the floppy disk drive.
5. Restore power to the system by plugging in the power cord.
6. During the recovery process, there will be a sequence of short beeps. This sequence of beeps will be followed by a single long beep and then silence from the system speaker. During this process there will be no video. After the last long beep, hold the power button in for approximately ten seconds to turn the system off.
7. Remove the BIOS flash recovery diskette, power cord and cover.
8. Return the boot block recovery jumper to its original position, replace the cover and reinsert the BIOS flash recovery diskette in the floppy disk drive.
9. Connect the power cord back to the system and power the system on. When the system POST tests, it will report several POST errors. These errors can be ignored. The standard POST/BIOS Update Utility screen will appear after a pause.
10. Select the desired language from the list and press Enter.
11. Enter the serial number of the system and press Enter.
12. Enter the Machine Type and model number of the system and press Enter.
13. If a prompt appears stating that the BIOS ROM is older than (or the same as) the BIOS ROM image, press Y to continue.
14. When the flash programming is complete, remove the diskette from the drive and press any key to restart the system.

---

## 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. Advanced Power Management and Rapid Resume™ Manager are features of some personal computers.

### 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 are ignored. Not all operating systems support ACPI BIOS mode.

### Advanced Power Management

Energy-saving settings can be viewed and changed by using the Advanced Power Management menu in the IBM Setup Utility program.

**Attention:**

If a device, such as a monitor, does not have power-management capabilities, it can be damaged when exposed to a reduced-power state. Before making energy-saving selections for the monitor, check the documentation supplied with the monitor to see if it supports Display Power Management Signaling (DPMS).

### Automatic Hardware Power Management features

Automatic Hardware Power Management can reduce the power states of the computer, processor, and monitor (if the monitor supports DPMS) if they are inactive for a predetermined length of time.

Set the time for the system to enter a low-power state.

You can define the amount of energy savings by specifying values for the following options.

- **System Power**

- Select **On** for the computer to remain on.
- Select **Off** for the computer to shut down.

- **Display**

Set display to be disabled or to be reduced at these power states:

- **Standby:** Screen is blank, but can be restored immediately when any activity is detected.
- **Suspend:** Monitor uses less power than in Standby mode. Screen image is restored after a few seconds when any activity is detected.
- **Off:** Monitor power is off. Press Monitor power button to restore power. On some monitors, you might have to depress the power button twice.

### Setting Automatic Hardware Power Management features

1. Start the IBM Setup Utility program (see Chapter 5, “IBM Setup Utility program,” on page 19).
2. Select **Power Management** from the IBM Setup Utility program menu.

3. Select **APM BIOS Mode** within the APM sub menu and be sure it is set to **Enabled**. If it is not, press Left Arrow (←) or Right Arrow (→) to change the setting.
4. Select **Automatic Hardware Power Management**.
5. Set **Automatic Hardware Power Management** to **Enabled**.
6. Select values for the three categories of power management (system power, processor speed, and display), as necessary.
7. Set **Hard Disk** to **Enabled** or **Disabled**.

**Note:** This does not apply to SCSI drives.

8. Press **Esc** twice to return to the IBM Setup Utility program menu.
9. Before you exit from the program, select **Save Settings** from the IBM Setup Utility program menu.
10. To exit from the IBM Setup Utility program, press **Esc** and follow the instructions on the screen.

## 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 IBM-developed 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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## Product Recovery Program

The product recovery program is on a separate hard drive partition.

At startup, the machine displays the following prompt:

**To start the Product Recovery Program, press F11**

**Attention:** Make sure all data is backed up to avoid loss when the Product Recovery program is used.

After depressing F11, you are given the following options.

- **Factory Contents**

This utility reformats the hard drive and restores all original files.

- **System utilities**

1. **Repair (Windows NT 4.0 and 2000 Only)**

This runs the Windows NT 4.0 emergency repair utility.

2. **Run Diagnostics**

Runs the IBM Enhanced Diagnostic Program.

3. **Create a Diagnostics Diskette**

Creates a bootable diagnostic diskette.

4. **System Information**

Displays information about the computer configuration and allows the user to gather system information that would be needed during a Help Center call.

5. **Create Recovery/Repair Diskette (Disk to Disk Solution Only)**

Creates a startable diskette to restore access to the IBM Product Recovery program on the hard disk.

6. **Recovery CD**

In the event of a Hard Disk Drive failure, a Recovery CD can be used to restore the Hard Disk Drive to the original factory preset. Be sure to use the Recovery CD FRU list to obtain the proper recovery CD for the computer model you are servicing.

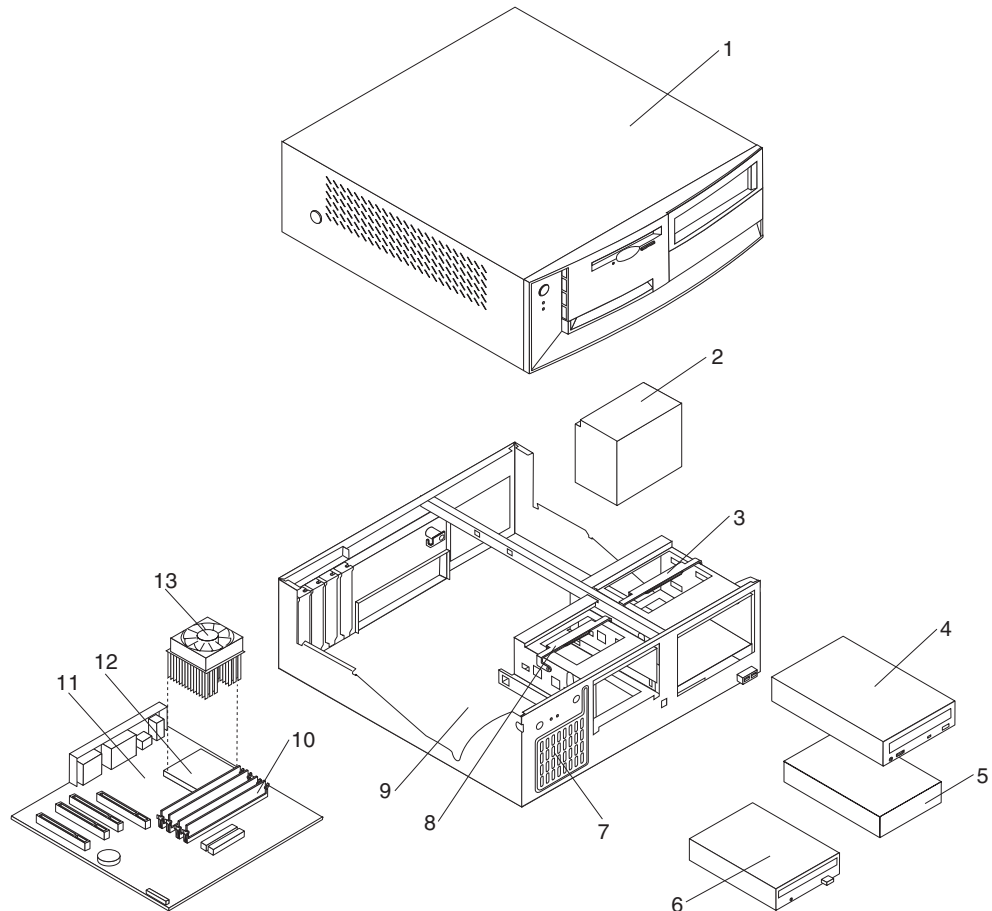




## Chapter 9. Parts listing

**Note:** A CRU (Customer Replaceable Unit) is identified by a single asterisk (\*) or two asterisks (\*\*) in the CRU ID column. An N in the CRU ID Column means that the part is not a CRU. A single asterisk (\*) means that the part is a Tier 1 CRU; two asterisks (\*\*) mean that the part is a Tier 2 CRU.

### Type 8128



Item #	8128 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5962	**
2	Power supply, 230W (models 11M)	74P4300	N
3	Pivot lock, 5.25 DASD (all models)	09N5747	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models 11M)	71P7367	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models 11M)	71P7369	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models 11M)	71P7371	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models 11M)	71P7375	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models 11M)	71P7385	**
4	CD-ROM Drive 48X - Black (models 11M)	40Y8801	**

Item #	8128 FRUs	FRU#	CRU
4	CD-ROM Drive 48X - Black (models 11M)	40Y8807	**
4	CD-ROM Drive 48X - Black (models 11M)	40Y8805	**
4	CD-ROM Drive 48X - Black (models 11M)	40Y8813	**
5	Hard disk drive, 40 GB EIDE (models 11M)	19K1568	**
6	Diskette drive, 1.44 MB, 3.5", 2 mode (wo/Bezel) (models 11M)	76H4091	**
6	Diskette drive, 1.44 MB, 3.5", 2 mode (w/ bezel) (models 11M)	40Y8899	**
6	Diskette drive, 1.44 MB, 3.5", 2 mode (w/ bezel) (models 11M)	40Y9107	**
6	Diskette drive, 1.44 MB, 3.5", 2 mode (w/ bezel) (models 11M)	40Y9105	**
7	Speaker assembly (all models)	39M0614	*
8	Pivot lock, 3.5 diskette drive (all models)	09N5748	**
9	Chassis/top cover kit (all models)	88P5963	**
10	256 MB SDRAM (models 11M)	31P9121	*
11	System board, Gigabit E-net, no POV (supports Prescott CPU) (models 11M)	41X2829	**
11	System board, Gigabit E-net, no POV (supports Prescott CPU) (models 11M)	41X2830	**
12	Intel Prescott Celeron 2.8 GHz (models 11M)	19R0421	**
13	Fan sink (for Prescott only) (models 11M)	13R9195	**
13	Heat sink, dual heat pipe -- optional to 13R9195(models 11M)	13N2951	*

The FRUs listed in the following table are not illustrated.

8128 FRUs	FRU#	CRU
5.25 EMC shield (all models)	19K5548	*
Retention kit (all models)	88P5915	*
Planar EMC shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P6515	*
Cable, ATA66 1 drop (all models)	88P5967	*
Cable, ATA66 2 drop (all models)	88P5971	*
Cable, SATA (all models)	88P5927	*
Service label (all models)	88P5964	*
Bezel kit (all models)	49P4371	*
Misc. hardware kit (all models)	88P5965	*
Cable, CDROM audio (all models)	75H9219	*
Hard disk drive mounting bracket assembly (all models)	88P5916	*
Cable assembly, power/LED (all models)	37L5092	*
Cable, second serial port (all models)	49P4530	*
Cable, dual USB 2.0 (all models)	49P4365	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, optical wheel (models 11M)	89P5089	*

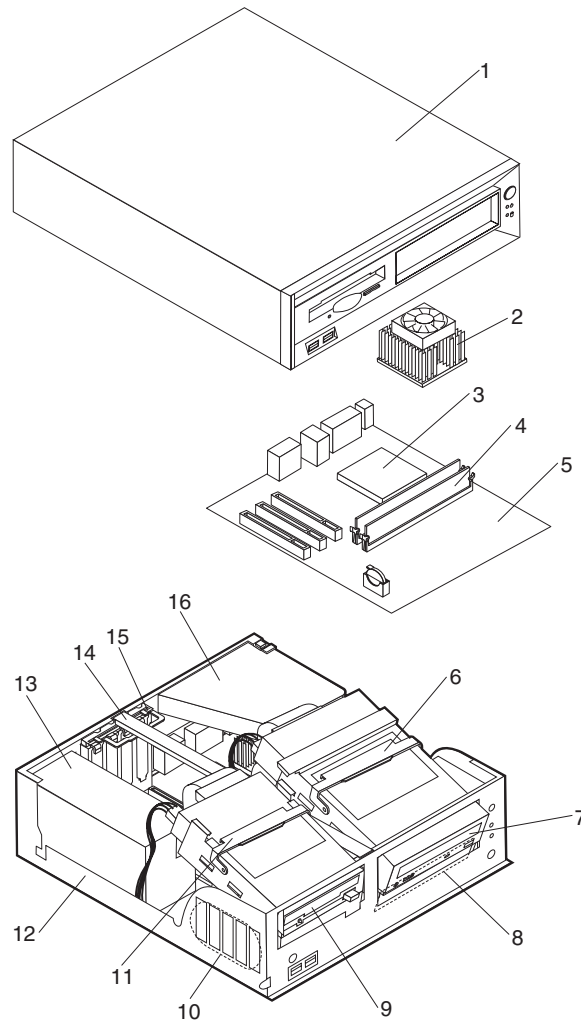
8128 FRUs	FRU#	CRU
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*

8128 Windows XP Pro Recovery CDs	FRU #	CRU
US (models 11M)	29R7998	*

8128 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models 11M)	89P8300	*

8128 Power Cords	FRU#	CRU
Power Cord (models 11M)	13F9939	*

## Type 8185



Item #	8185 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5925	*

Item #	8185 FRUs	FRU#	CRU
2	Fan sink (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B2U B3U B3S B3P B3Y D1B D1H D2U D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E2U E3U E3F E3S E3P E3Y E6B E6H A6A A6B A6H B4U B4F D6U D6F CAU CBU CCU CDU B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U A6V E9A E9T D1F E6M E6C E6V 31G 32U CHU CJU)	32P4004	**
2	Fan sink (models F1U F1S F1P F1Y G1U CEU CGU F4U F4F F4S F4P F4Y F5U F3M F3A F3C F3H F3V F3R 41B 41H G1F G3A G4S G4P G4Y 51U CKU)	01R3330	**
3	Intel P4 2.93 GHz Prescott Celeron (models CTO-U CTO-G)	29R6989	**
3	Intel P4 2.4 GHz (models A3V A4B A4H A6A A6B A6H A3U A3S A3P A3Y A3A A3T A4U A4F A6V)	88P5867	**
3	Intel P4 2.4 GHz (models A1U A1F A1S A1P A1Y CAU)	74P1625	**
3	Intel P4 2.53 GHz (models B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B2U B3U B3S B3P B3Y B4U B4F CBU B1K)	74P1627	**
3	Intel P4 2.6 GHz (models D1B D1H D7A D7T D7V D1U D1F CHU)	88P5868	**
3	Intel P4 2.66 GHz (models D2U D3U D3F D3S D3P D3Y D5U D5S D5P D5Y D6U D6F CCU)	74P1629	**
3	Intel P4 2.8 GHz (models E6B E6H E8A E8T E9A E9T E6M E6C E6V 32U CJU)	88P5869	**
3	Intel P4 2.8 GHz (models E2U E3U E3F E3S E3P E3Y CDU 31G)	74P1631	**
3	Intel P4 3.0 GHz (models F4U F4F F4S F4P F4Y F5U F3M F3A F3C F3H F3V F3R 41B 41H CKU)	88P5870	**
3	Intel P4 3.06 GHz (models F1U F1S F1P F1Y CEU)	74P1633	**
3	Intel P4 3.2 GHz (models G1U CGU G1F G3A G4S G4P G4Y 51U)	88P5871	**
3	Intel P4 3.4 GHz (models CTO-U CTO-G)	29R6991	**
4	128 MB SDRAM (models CAU CBU CCU CDU CEU CGU CHU CJU CKU)	31P9120	*
4	256 MB SDRAM (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B3U B3S B3P B3Y D1B D1H D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E3U E3F E3S E3P E3Y E6B E6H A6A A6B A6H B4U B4F D6U D6F B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V E9A E9T D1F E6M E6C E6V 31G 41B 41H G3A G4S G4P G4Y 32U)	31P9121	*
4	512 MB SDRAM (models B2U D2U E2U F1U F1S F1P F1Y G1U F5U F3M F3A F3C F3H F3V F3R G1F 51U)	31P9122	*
5	System board, 10/100 E-net, no POV (models A1U A1F A1S A1P A1Y A3V B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B3U B3S B3P B3Y D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E3U E3F E3S E3P E3Y F1U F1S F1P F1Y CAU CBU CCU CDU CEU CGU CTO B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T E9A E9T 31G G3A 51U CHU CJU CKU)	89P7942	**
5	System board, 10/100 E-net, no POV (supports Prescott CPU) (models A1U A1F A1S A1P A1Y A3V B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B3U B3S B3P B3Y D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E3U E3F E3S E3P E3Y F1U F1S F1P F1Y CAU CBU CCU CDU CEU CGU CTO B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T E9A E9T 31G G3A 51U CHU CJU CKU)	41X2825	**

Item #	8185 FRUs	FRU#	CRU
5	System board, 10/100 E-net, no POV (supports Prescott CPU) (models A1U A1F A1S A1P A1Y A3V B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B3U B3S B3P B3Y D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E3U E3F E3S E3P E3Y F1U F1S F1P F1Y CAU CBU CCU CDU CEU CGU CTO B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T E9A E9T 31G G3A 51U CHU CJU CKU)	41X2826	**
5	System board, 10/100 E-net, POV (models B4U B4F D6U D6F 32U)	89P7941	**
5	System board, 10/100 E-net, POV (supports Prescott CPU) (models B4U B4F D6U D6F 32U)	41X2827	**
5	System board, 10/100 E-net, POV (supports Prescott CPU) (models CTO B4U B4F D6U D6F 32U)	41X2828	**
5	System board, Gigabit E-net, no POV (models A4B A4H B2U D1B D1H D2U E2U E6B E6H G1U A4U A4F D1U F4U F4F F4S F4P F4Y D1F E6M E6C E6V F3M F3A F3C F3H F3V F3R 41B 41H G1F G4S G4P G4Y)	89P7944	**
5	System board, Gigabit E-net, no POV (supports Prescott CPU) (models A4B A4H B2U D1B D1H D2U E2U E6B E6H G1U A4U A4F D1U F4U F4F F4S F4P F4Y D1F E6M E6C E6V F3M F3A F3C F3H F3V F3R 41B 41H G1F G4S G4P G4Y)	41X2829	**
5	System board, Gigabit E-net, no POV (supports Prescott CPU) (models CTO A4B A4H B2U D1B D1H D2U E2U E6B E6H G1U A4U A4F D1U F4U F4F F4S F4P F4Y D1F E6M E6C E6V F3M F3A F3C F3H F3V F3R 41B 41H G1F G4S G4P G4Y)	41X2830	**
5	System board, Gigabit E-net, POV (models A6A A6B A6H A6V F5U)	89P7943	**
5	System board, Gigabit E-net, POV (supports Prescott CPU) (models A6A A6B A6H A6V F5U)	41X2831	**
5	System board, Gigabit E-net, POV (supports Prescott CPU) (models CTO A6A A6B A6H A6V F5U)	41X2832	**
5	System board, Gigabit E-net, POV (supports Prescott CPU) (models CTO)	19R2403	**
5	System board, Gigabit E-net, POV (supports Prescott CPU) (models CTO)	41X2835	**
5	System board, Gigabit E-net, POV (supports Prescott CPU) (models CTO)	41X2836	**
6	Pivot lock, 5.25 DASD (all models)	24P9877	*
7	CD-ROM Drive 48X - Black (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B2U B3U B3S B3P B3Y D1B D1H D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y A6A A6B A6H B4U B4F D6U D6F B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V E9A E9T D1F E6M E6C E6V)	33P3203	**
7	CD-ROM Drive 48X - Black (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B2U B3U B3S B3P B3Y D1B D1H D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y A6A A6B A6H B4U B4F D6U D6F B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V E9A E9T D1F E6M E6C E6V)	33P3211	**

Item #	8185 FRUs	FRU#	CRU
7	CD-ROM Drive 48X - Black (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B2U B3U B3S B3P B3Y D1B D1H D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y A6A A6B A6H B4U B4F D6U D6F B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V E9A E9T D1F E6M E6C E6V)	33P3215	**
7	CD-ROM Drive 48X - Black w/o jack & vol (models 31G 41B 41H G3A 51U 32U)	71P7367	**
7	CD-ROM Drive 48X - Black w/o jack & vol (models 31G 41B 41H G3A 51U 32U)	71P7369	**
7	CD-ROM Drive 48X - Black w/o jack & vol (models 31G 41B 41H G3A 51U 32U)	71P7371	**
7	CD-ROM Drive 48X - Black w/o jack & vol (models 31G 41B 41H G3A 51U 32U)	71P7375	**
7	CD-ROM Drive 48X - Black w/o jack & vol (models 31G 41B 41H G3A 51U 32U)	71P7385	**
7	CD-ROM Drive 48X - Black (models 31G 41B 41H G3A 51U 32U)	40Y8807	**
7	CD-ROM Drive 48X - Black (models 31G 41B 41H G3A 51U 32U)	40Y8805	**
7	CD-ROM Drive 48X - Black (models 31G 41B 41H G3A 51U 32U)	40Y8813	**
7	DVD-ROM 16X/48X - Black (models D2U E2U G1U F5U F3M F3A F3C F3H F3V F3R G1F)	71P7357	**
7	DVD-ROM 16X/48X - Black (models D2U E2U G1U F5U F3M F3A F3C F3H F3V F3R G1F)	33P3237	**
7	DVD-ROM 16X/48X - Black (models D2U E2U G1U F5U F3M F3A F3C F3H F3V F3R G1F)	40Y8803	**
7	DVD-ROM 16X/48X - Black (models D2U E2U G1U F5U F3M F3A F3C F3H F3V F3R G1F)	40Y8811	**
8	Hard disk drive, 40 GB EIDE (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B2U B3U B3S B3P B3Y D1B D1H D2U D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E2U E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y G1U A6A A6B A6H B4U B4F D6U D6F B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V F5U E9A E9T D1F E6M E6C E6V 31G 41B 41H G1F G3A 51U 32U)	19K1568	*
8	Hard disk drive, 80 GB SATA (models F3M F3A F3C F3H F3V F3R G4S G4P G4Y)	71P7293	*
9	Diskette drive, 3.5 1.44 MB, 2-mode (wo/bezel) (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B2U B3U B3S B3P B3Y D1B D1H D2U D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E2U E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y G1U A6A A6B A6H B4U B4F D6U D6F CAU CBU CCU CEU CGU CTO B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V F5U F3M F3A F3C F3H F3V F3R E9A E9T D1F E6M E6C E6V B1J 31G 41B 41H G1F G3A G4S G4P G4Y 51U 32U CHU CJU CKU)	76H4091	**

Item #	8185 FRUs	FRU#	CRU
9	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B2U B3U B3S B3P B3Y D1B D1H D2U D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E2U E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y G1U A6A A6B A6H B4U B4F D6U D6F CAU CBU CCU CDU CEU CGU CTO B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V F5U F3M F3A F3C F3H F3V F3R E9A E9T D1F E6M E6C E6V B1J 31G 41B 41H G1F G3A G4S G4P G4Y 51U 32U CHU CJU CKU)	40Y8899	**
9	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B2U B3U B3S B3P B3Y D1B D1H D2U D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E2U E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y G1U A6A A6B A6H B4U B4F D6U D6F CAU CBU CCU CDU CEU CGU CTO B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V F5U F3M F3A F3C F3H F3V F3R E9A E9T D1F E6M E6C E6V B1J 31G 41B 41H G1F G3A G4S G4P G4Y 51U 32U CHU CJU CKU)	40Y9107	**
9	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B2U B3U B3S B3P B3Y D1B D1H D2U D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E2U E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y G1U A6A A6B A6H B4U B4F D6U D6F CAU CBU CCU CDU CEU CGU CTO B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V F5U F3M F3A F3C F3H F3V F3R E9A E9T D1F E6M E6C E6V B1J 31G 41B 41H G1F G3A G4S G4P G4Y 51U 32U CHU CJU CKU)	40Y9105	**
10	Speaker assembly (all models)	00N5151	*
11	Pivot lock, 3.5 Diskette drive (all models)	24P9876	*
12	Chassis assembly (all models)	88P5924	**
13	Power supply, 200W (models A1U A1F B1U B1F B1G B1M B1A B1T B1J B2U B3U D2U D3U D3F D5U E2U E3U E3F F1U G1U A6A B4U B4F D6U D6F CAU CBU CCU CDU CEU CGU CTO B1K A3U A3A A3T D7A D7T E8A E8T A4U A4F D1U F4U F4F F5U F3M F3A F3R E9A E9T D1F E6M 31G G1F G3A 51U 32U CHU CJU CKU)	74P4305	N
14	Link bracket (all models)	88P5918	*
15	I/O cam bracket (all models)	24P9869	*
16	Air duct w/o fan (all models)	88P5922	*

The FRUs listed in the following table are not illustrated.

8185 FRUs	FRU#	CRU
Cable, C2 (squal) (models A6A A6B A6H B4U B4F D6U D6F A6V F5U A6V F5U F3M F3A F3C F3H F3V F3R 32U)	09K9827	*
5.25 EMC shield (all models)	19K5548	*
Retention kit (all models)	88P5915	*
Planar shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P5930	*
Optical cable, ATA66 (all models)	88P5929	*
Cable, Hard disk drive (all models)	88P5928	*



8185 FRUs	FRU#	CRU
Cable, SATA (all models)	88P5927	*
Service label (all models)	88P5926	*
Bezel kit (all models)	88P5923	*
Fan bracket assembly (all models)	88P5921	*
Korean label (models B1K, F3R)	13R9162	*
Misc. hardware kit (all models)	24P9878	*
Cable, CDRom audio (all models)	75H9219	*
Keylock assembly, random (models A6A A6B A6H B4U B4F D6U D6F A6V F5U F3M F3A F3C F3H F3V F3R 32U)	88P5920	*
Vertical stand, black (all models)	88P5917	*
Bottom foot (all models)	03K9655	*
Hard disk drive mounting bracket assembly (all models)	88P5916	**
Cable assembly, power/LED (all models)	37L5092	*
Cable, USB 2.0 (all models)	49P4365	*
Battery, 3.0 V (all models)	33F8354	*
Mouse, 2 button, black (models CAU CBU CCU CDU CEU CGU CHU CJU CKU)	24P0383	*
Mouse, 3 button wheel (model 31G)	24P0491	*
Mouse, optical wheel (models A1U A1F A1S A1P A1Y A3V A4B A4H B1U B1F B1S B1P B1Y B1G B1M B1A B1T B1C B1B B1H B1V B1J B2U B3U B3S B3P B3Y D1B D1H D2U D3U D3F D3S D3P D3Y D5U D5S D5P D5Y E2U E3U E3F E3S E3P E3Y E6B E6H F1U F1S F1P F1Y G1U A6A A6B A6H B4U B4F D6U D6F B1K A3U A3S A3P A3Y A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P F4Y A6V F5U F3M F3A F3C F3H F3V F3R E9A E9T D1F E6M E6C E6V 41B 41H G1F G3A G4S G4P G4Y 51U 32U)	89P5089	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Nvidia GeForce MX 440 (model E2U)	73P0715	*
ATI RADEON 9600 (model CTO-U CTO-G)	29R7236	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*



8185 Windows 2000 Recovery CDs	FRU #	CRU
US (models B3U D5U)	13R9673	*
BR (models B3P D5P)	13R9678	*
SP (models B3S B3Y D5S D5Y)	13R9676	*

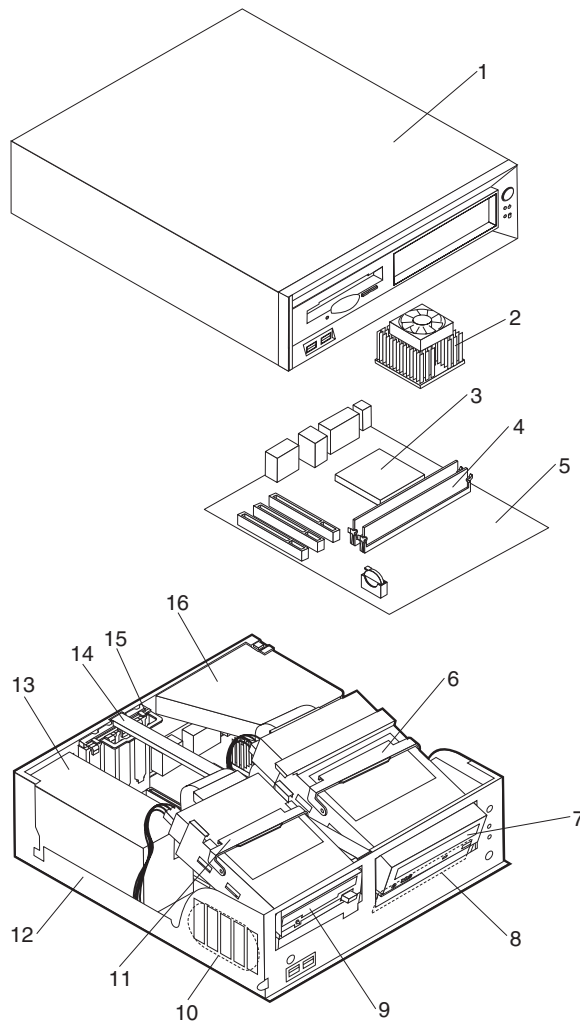
8185 Windows XP Pro Recovery CDs	FRU #	CRU
US (models A1U A3A A3T A3U A4H A4U A6A A6H B1A B1G B1H B1M B1T B1U B2U B4U D1H D1U D2U D3U D6U D7A D7T E2U E3U E6H E6M E8A E8T E9A E9T F1U F3A F3H F3M F3R F4U F5U G1U 31G 41H G3A 51U 32U)	29R7998	*
FR (models A1F A4F B1F B1G B4F D1F D3F D6F E3F F4F 31G G1F)	29R7999	*
GR (models B1G 31G)	29R8000	*
IT (models B1G 31G)	29R8002	*
SP (models A1S A1Y A3S A3Y B1G B1S B1Y D3S D3Y E3S E3Y F1S F1Y F4S F4Y 31G G4S G4Y)	29R8001	*
BR (models A1P A3P B1P D3P E3P F1P F4P G4P)	29R8003	*
DK (models B1G 31G)	29R8005	*
NL (models B1G 31G)	29R8008	*
AE (models B1G 31G)	29R8012	*
SV (models B1G 31G)	29R8004	*
HE (models B1G 31G)	29R8009	*
FI (models B1G 31G)	29R8006	*
NO (models B1G 31G)	29R8007	*
PL (models B1G 31G)	29R8010	*
PO (models B1G 31G)	29R8016	*
RU (models B1G 31G)	29R8013	*
HU (models B1G 31G)	29R8015	*
CZ (models B1G 31G)	29R8011	*
TR (models B1G 31G)	29R8014	*
GK (models B1G 31G)	29R8017	*
JP (model B1J)	13M6438	*
JP (model B1J)	13M6438	*
SC (models B1C E6C F3C)	27K6907	*
TW (models A3V A6V B1V D7V E6V F3V)	27K6912	*
HK (models A4B A6B B1B D1B E6B 41B)	27K6917	*

8185 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models A1U A4H B1U B1G B1M B1A B1C B1H B2U B3U D1H D2U D3U D5U E2U E3U E6H F1U G1U A6A A6H B4U D6U CAU CBU CCU CDU CEU CGU A3U A3A D7A E8A A4U D1U F4U F5U F3M F3A F3C F3H F3R E9A E6M E6C 31G 41H G3A 51U 32U CHU CJU CKU)	89P8300	*
Arabic (models B1G 31G)	89P8301	*
Belgian/French (models B1G 31G)	89P8302	*
Belgian/UK (models B1G 31G)	89P8303	*

8185 Keyboards (Standard PS/2 Black)	FRU#	CRU
Bulgarian (models B1G 31G)	89P8305	*
Chinese/US (models A3V A4B B1B B1V D1B E6B A6B D7V A6V E9V F3V 41B)	89P8306	*
Czech (models B1G 31G)	89P8307	*
Danish (models B1G 31G)	89P8308	*
Dutch (models B1G 31G)	89P8309	*
French (models B1G 31G)	89P8310	*
French Canadian (models A1F B1F D3F E3F B4F D6F A4F F4F D1F G1F)	89P8311	*
French Canadian (models A1F B1F D3F E3F B4F D6F A4F F4F D1F G1F)	89P8312	*
German (models B1G 31G)	89P8313	*
Greek (models B1G 31G)	89P8314	*
Hebrew (models B1G 31G)	89P8315	*
Hungarian (models B1G 31G)	89P8316	*
Iceland (models B1G 31G)	89P8317	*
Italian (models B1G 31G)	89P8318	*
Italian (models B1G 31G)	89P8319	*
Japanese (model B1J)	89P8320	*
Korean (model B1K)	89P8321	*
LA Spanish (models A1S A1Y B1S B1Y B3S B3Y D3S D3Y D5S D5Y E3S E3Y F1S F1Y A3S A3Y F4S F4Y G4S G4Y)	89P8322	*
Norwegian (models B1G 31G)	89P8323	*
Polish (models B1G 31G)	89P8324	*
Portuguese (models B1G 31G)	89P8325	*
Romanian (models B1G 31G)	89P8326	*
Russian/Cy (models B1G 31G)	89P8327	*
Russian/Cy (models B1G 31G)	89P8328	*
Serbian/Cyrillic (models B1G 31G)	89P8329	*
Slovak (models B1G 31G)	89P8330	*
Spanish (models B1G 31G)	89P8331	*
Swedish/Finn (models B1G 31G)	89P8332	*
Swiss F/G (models B1G 31G)	89P8333	*
Thailand (models B1T A3T D7T E8T E9T)	89P8334	*
Turkish (models B1G 31G)	89P8335	*
Turkish (models B1G 31G)	89P8336	*
UK English (models B1G 31G)	89P8337	*
US International (models B1G 31G)	89P8338	*
Yugoslav/Latin (models B1G 31G)	89P8339	*
Brazil/Portuguese (models A1P B1P B3P D3P D5P E3P F1P A3P F4P G4P)	89P8304	*

8185 Power Cords	FRU#	CRU
Power Cord (models A1U A1F A1S A1P A3V D2U D3U D3F D3S D3P D5U D5S D5P E2U E3U E3F E3S E3P F1U F1S F1P G1U A6A B4U B4F D6U D6F CAU CBU CCU CDU CEU CGU CTO A3U A3S A3P A3A A3T D7A D7T D7V E8A E8T A4U A4F D1U F4U F4F F4S F4P A6V F5U F3A F3V E9A E9T D1F E6V 31G G1F G3A G4S G4P 51U 32U CHU CJU CKU)	6952301	*
Power Cord (models E9M F3M)	13F9939	*
Power Cord (models A6A B1K F3R 31G)	13F9978	*
Power Cord (models A4H D1H E6H A6A A6H F3H 31G 41H)	14F0032	*
Power Cord (models B1G 31G)	13F9996	*
Power Cord (models A1S A1P A1Y D3S D3P D3Y D5S D5P D5Y E3S E3P E3Y F1S F1P F1Y A3S A3P A3Y F4S F4P F4Y 31G G4S G4P G4Y)	14F0068	*
Power Cord (models A1Y D3Y D5Y E3Y F1Y A3Y F4Y G4Y)	36L8879	*
Power Cord (models A4B A4H D1B D1H E6B E6H A6B A6H F3C F3H E6C 41B 41H)	02K0545	*
Power Cord (models B1G 31G)	14F0086	*
Power Cord (models A6A 31G)	14F0014	*
Power Cord (models B1G 31G)	14F0050	*

# Type 8186



Item #	8186 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5925	*
2	Fan sink (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	32P4004	**
3	Intel P4 2.53 GHz (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	74P1627	**
4	256 MB SDRAM (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	31P9121	*
5	System board, 10/100 E-net, no POV (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	73P0595	**
5	System board, 10/100 E-net, no POV (supports Prescott CPU) (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	13R8926	**
6	Pivot lock, 5.25 DASD (all models)	24P9877	*
7	CD-ROM Drive 48X - Black (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	33P3203	**
7	CD-ROM Drive 48X - Black (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	33P3211	**

Item #	8186 FRUs	FRU#	CRU
7	CD-ROM Drive 48X - Black (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	33P3215	**
8	Hard disk drive, 40 GB EIDE (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	19K1568	**
9	Diskette drive, 3.5 1.44 MB (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1K B1Y B1J)	76H4091	**
10	Speaker assembly (all models)	00N5151	*
11	Pivot lock, 3.5 Diskette drive (all models)	24P9876	*
12	Chassis assembly (all models)	88P5924	**
13	Power supply, 200W (models B1U B1F B1G B1M B1A B1T B1J B1K)	74P4305	N
13	Power supply, 200W (China) (models B1S B1P B1C B1B B1H B1V B1Y)	74P4306	N
14	Link bracket (all models)	88P5918	*
15	I/O cam bracket (all models)	24P9869	*
16	Air duct w/o fan (all models)	88P5922	*

The FRUs listed in the following table are not illustrated.

8186 FRUs	FRU#	CRU
5.25 EMC shield (all models)	19K5548	*
Retention kit (all models)	88P5915	*
Planar shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P5930	*
Optical cable, ATA66 (all models)	88P5929	*
Cable, Hard disk drive (all models)	88P5928	*
Cable, SATA (all models)	88P5927	*
Service label (all models)	88P5926	*
Bezel kit (all models)	88P5923	*
Fan bracket assembly (all models)	88P5921	*
Korean label (model B1K)	13R9162	*
Misc. hardware kit (all models)	24P9878	*
Cable, CDROM audio (all models)	75H9219	*
Keylock assembly, random (all models)	88P5920	*
Vertical stand, black (all models)	88P5917	*
Bottom foot (all models)	03K9655	*
Hard disk drive mounting bracket assembly (all models)	88P5916	**
Cable assembly, power/LED (all models)	37L5092	*
Cable, USB 2.0 (all models)	49P4365	*
Battery, 3.0 V (all models)	33F8354	*
Power switch repair kit (all models)	26K1195	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*

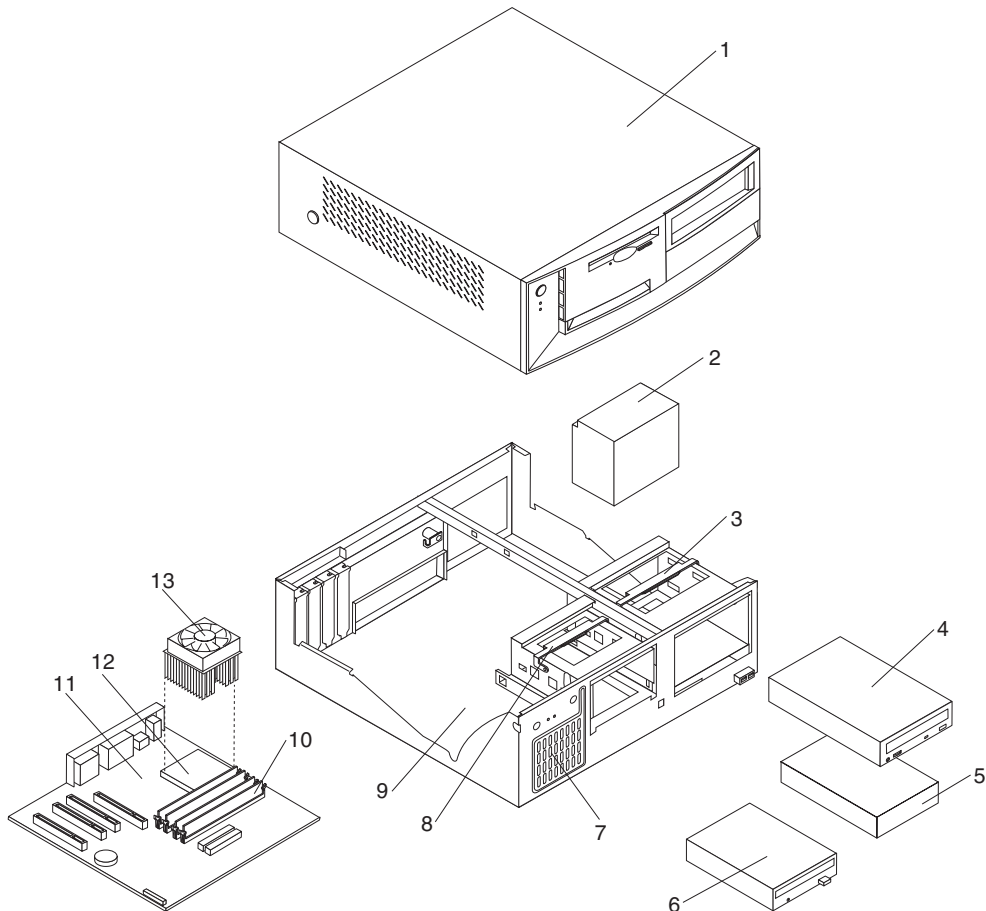
8186 FRUs	FRU#	CRU
Mouse, optical wheel (models B1U B1F B1S B1P B1G B1M B1A B1T B1C B1B B1H B1V B1J B1K B1Y)	89P5089	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8186 Windows XP Pro Recovery CDs	FRU #	CRU
US (models B1U B1G B1M B1A B1T B1H)	29R7998	*
FR (models B1F B1G)	29R7999	*
GR (model B1G)	29R8000	*
IT (model B1G)	29R8002	*
SP (models B1S B1G B1Y)	29R8001	*
BR (model B1P)	29R8003	*
DK (model B1G)	29R8005	*
SV (model B1G)	29R8004	*
NL (model B1G)	29R8008	*
AE (model B1G)	29R8012	*
HE (model B1G)	29R8009	*
FI (model B1G)	29R8006	*
NO (model B1G)	29R8007	*
PL (model B1G)	29R8010	*
PO (model B1G)	29R8016	*
RU (model B1G)	29R8013	*
HU (model B1G)	29R8015	*
CZ (model B1G)	29R8011	*
TR (model B1G)	29R8014	*
GK (model B1G)	29R8017	*
JP (model B1J)	13M6438	*
SC (model B1C)	27K6907	*
TW (model B1V)	27K6912	*
HK (model B1B)	27K6917	*
KR (model B1K)	13M6405	*

8186 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models B1U B1G B1M B1A B1C B1H)	89P8300	*
Arabic (model B1G)	89P8301	*
Belgian/French (model B1G)	89P8302	*
Belgian/UK (model B1G)	89P8303	*
Bulgarian (model B1G)	89P8305	*
Chinese/US (models B1B B1V)	89P8306	*
Czech (model B1G)	89P8307	*
Danish (model B1G)	89P8308	*
Dutch (model B1G)	89P8309	*
French (model B1G)	89P8310	*
French Canadian (model B1F)	89P8311	*
French Canadian (model B1F)	89P8312	*
German (model B1G)	89P8313	*
Greek (model B1G)	89P8314	*
Hebrew (model B1G)	89P8315	*
Hungarian (model B1G)	89P8316	*
Iceland (model B1G)	89P8317	*
Italian (model B1G)	89P8318	*
Italian (model B1G)	89P8319	*
Japanese (model B1J)	89P8320	*
Korean (model B1K)	89P8321	*
LA Spanish (models B1S B1Y)	89P8322	*
Norwegian (model B1G)	89P8323	*
Polish (model B1G)	89P8324	*
Portuguese (model B1G)	89P8325	*
Romanian (model B1G)	89P8326	*
Russian (model B1G)	89P8327	*
Russian/Cy (model B1G)	89P8328	*
Serbian/Cyrillic (model B1G)	89P8329	*
Slovak (model B1G)	89P8330	*
Spanish (model B1G)	89P8331	*
Swedish/Finn (model B1G)	89P8332	*
Swiss F/G (model B1G)	89P8333	*
Thailand (model B1T)	89P8334	*
Turkish (model B1G)	89P8335	*
Turkish (model B1G)	89P8336	*
UK English (model B1G)	89P8337	*
US International (model B1G)	89P8338	*
Yugoslav/Latin (model B1G)	89P8339	*
Brazil/Portuguese (model B1P)	89P8304	*

8186 Power Cords	FRU#	CRU
Power Cord (models B1U B1F B1S B1P B1G B1A B1T B1V)	6952301	*
Power Cord (model B1M)	13F9939	*
Power Cord (models B1G B1A B1K)	13F9978	*
Power Cord (models B1G B1A B1H)	14F0032	*
Power Cord (model B1G)	13F9996	*
Power Cord (models B1S B1P B1G B1Y)	14F0068	*
Power Cord (model B1Y)	36L8879	*
Power Cord (models B1C B1B B1H)	02K0545	*
Power Cord (model B1G)	14F0086	*
Power Cord (models B1G B1A)	14F0014	*
Power Cord (model B1G)	14F0050	*

## Type 8187



Item #	8187 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5962	**



Item #	8187 FRUs	FRU#	CRU
2	Power supply, 230W (models 33G 34U 34A 34T 36G 37U 43U 43F 43G 43M 43A 43T 43K 43J 44U 44A 44T 46G 47U 48U 49U 7BG 7CG 7DG CSU CTU CUU 7EG 38U E3F 3BU 3BF 3CU 4BU 4BF CVU CWU 14U 15U 3DU 3EU C1U 4CG 55G 55A 55Q 55T 56U 56F 57U 58U 61G 63U 63F 64U 4DG 4EU 59U 5AU 5AF 5AG 5AM 5AA 5AT 5AK 5AJ 65U 65F 66G C2U C3U A1U A1F A3U A4M A4A A4T A7M A7A A7T B1U B2U B3U B3F B5G B6U E1U E2G E3U E4U E4F E5G F1U F2U F2F F3G G3U G4U G5G G6G G8U G8F A8A A8T B7U B8U B8F B9U B9F DBM DCU DCF DDU DEU DEF E8U E9G EEM 71G 72G 73G 74G 75G 76G 77G CTO CAU CBU CCU CDU CEU CGU D1K F4U F4F F4G F4M F4A F4T F4K F4J A6U A6A A6T DAU DFA DFT DGU E7A E7T EHU EHF CHJ CJJ CKJ D9U E6M EJU EKU EKF F7U F8G EFM EGG F6M F6A F5G AAM DAF DHM E6A ABM 11U 12U 21M 31M 32A 32T 41M G4A G4T 78G CLU CMU CNU 79G 13U 52U CPU CQU G3F CRJ 7AG)	74P4300	N
2	Power supply, 230W (China) (models F4S F4P F4Y F4C F4B F4H F4V A6S A6P A6Y A6V DFV E7V D9S D9P D9Y EJS EJP EJY F7S F7P F7Y F6C F6H E6V 12S 12P 12Y 42B 42H 51S 51P 51Y 22S 22P 22Y 52S 52P 52Y 34S 34P 34Y 34V 35C 35B 35H 37S 37P 37Y 43S 43P 43Y 43C 43B 43H 43V 44S 44P 44Y 44V 45C 45B 45H 53B 53H 54C 13S 13P 13Y 14P 23S 39P 3AS 3BS 3BP 3BL 4BS 4BP 4BL 59B 59H 62C 5AS 5AP 5AY 5AC 5AB 5AH 5AV 67C 5AL 5AQ)	74P4301	N
3	Pivot lock, 5.25 DASD (all models)	09N5747	**
4	CD-ROM Drive 48X - Black (All models EXCEPT those listed in other opticals)	33P3203	**
4	CD-ROM Drive 48X - Black (All models EXCEPT those listed in other opticals)	33P3211	**
4	CD-ROM Drive 48X - Black (All models EXCEPT those listed in other opticals)	33P3207	**
4	CD-ROM Drive 48X - Black (All models EXCEPT those listed in other opticals)	71P7353	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models 11U 12U 12S 12P 12Y 32A 32T 42B 42H G4A G4T G5G G6G 77G 79G 33G 34U 34S 34P 34Y 34A 34T 34V 35C 35B 35H 36G 37U 37S 37P 37Y 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 44U 44S 44P 44Y 44A 44T 44V 45C 45B 45H 47U 49U 53B 53H 7BG 13S 13P 13Y 38U 23S 39P 3AS 3BU 3BF 3BS 3BP 3BL 3CU 14U 15U 4CG 55G 55A 55Q 55T 56U 56F 59B 59H 61G 62C 63U 63F 59U 65U 65F)	71P7367	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models 11U 12U 12S 12P 12Y 32A 32T 42B 42H G4A G4T G5G G6G 77G 79G 33G 34U 34S 34P 34Y 34A 34T 34V 35C 35B 35H 36G 37U 37S 37P 37Y 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 44U 44S 44P 44Y 44A 44T 44V 45C 45B 45H 47U 49U 53B 53H 7BG 13S 13P 13Y 38U 23S 39P 3AS 3BU 3BF 3BS 3BP 3BL 3CU 14U 15U 4CG 55G 55A 55Q 55T 56U 56F 59B 59H 61G 62C 63U 63F 59U 65U 65F)	71P7369	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models 11U 12U 12S 12P 12Y 32A 32T 42B 42H G4A G4T G5G G6G 77G 79G 33G 34U 34S 34P 34Y 34A 34T 34V 35C 35B 35H 36G 37U 37S 37P 37Y 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 44U 44S 44P 44Y 44A 44T 44V 45C 45B 45H 47U 49U 53B 53H 7BG 13S 13P 13Y 38U 23S 39P 3AS 3BU 3BF 3BS 3BP 3BL 3CU 14U 15U 4CG 55G 55A 55Q 55T 56U 56F 59B 59H 61G 62C 63U 63F 59U 65U 65F)	71P7371	**



Item #	8187 FRUs	FRU#	CRU
4	DVD-ROM 16X/48X - Black (models B2U D6U E3U G3U G8U G8F B9U B9F DEU DEF E9G F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J DAU E7A E7T E7V EKU EKF F8G F6M F6A F6C F6H F5G DAF F6V F6R 21M 31M 41M G3F 7AG 46G 54C 7CG 7DG 7EG E3F 4BU 4BF 4BS 4BP 4BL 3DU 4DG 4EU 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 66G 67C)	40Y8935	**
4	DVD-ROM 16X/48X - Black (models B2U D6U E3U G3U G8U G8F B9U B9F DEU DEF E9G F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J DAU E7A E7T E7V EKU EKF F8G F6M F6A F6C F6H F5G DAF F6V F6R 21M 31M 41M G3F 7AG 46G 54C 7CG 7DG 7EG E3F 4BU 4BF 4BS 4BP 4BL 3DU 4DG 4EU 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 66G 67C)	40Y8933	**
4	48X24X48 CD-RW (Black) (model DGU)	33P3289	**
4	CD-RW Drive (48X/32X/48X) (models 78G 48U)	71P7347	**
4	CD-RW Drive (48X/32X/48X) (models 78G 48U DGU)	71P7349	**
4	CD-RW Drive (48X/32X/48X) (models 78G 48U DGU)	40Y8901	**
4	48X Combo drive (models 52U 52S 52P 52Y)	33P3301	**
4	Universal Combo drive 48x/24x/48x/16x (models 3EU 57U 58U 64U)	26K5390	*
4	Combo drive 48x/32x/48x/16x (models 3EU 57U 58U 64U)	26K5379	**
4	Combo drive 48x/32x/48x/16x (models 3EU 57U 58U 64U)	26K5381	**
4	Combo drive 48x/32x/48x/16x (models 3EU 57U 58U 64U)	40Y8781	**
4	Combo drive 48x/32x/48x/16x (models 3EU 57U 58U 64U)	40Y8903	**
5	Hard disk drive, 40 GB EIDE (All models EXCEPT G8U G8F EKU EKF F6M F6A F6C F6H F6V F6R G2P G2S G2U G2Y G4P G4S G4Y G7U G1A G1B G1C G1F G1G G1H G1J G1K G1M G1P G1S G1T G1U G1V G1Y GAJ GBJ GCJ GDJ 22S 22P 22Y 52U 52S 52P CPU CQU 54C 57U 64U 59U 64U)	19K1568	**
5	Hard disk drive, 80 GB SATA (models G8U G8F EKU EKF F6M F6A F6C F6H F6V F6R 54C 67C)	71P7293	**
5	Hard disk drive, 80 GB EIDE (models 51S 51P 51Y 22S 22P 22Y 52U 52S 52P 52Y 39P 57U 64U 59U 64U)	24P3665	**
6	Diskette drive, 3.5 1.44 MB, 2-mode (wo/bezel) (all models)	76H4091	**
6	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (all models)	40Y8899	**
6	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (all models)	40Y9107	**
6	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (all models)	40Y9105	**
7	Speaker assembly (all models)	39M0614	*
8	Pivot lock, 3.5 Diskette drive (all models)	09N5748	**
9	Chassis/top cover kit (all models)	88P5963	**
10	128 MB PC2700 SDRAM (models CAU CBU CCU CDU CEU CGU CLU CMU CNU)	31P9120	*

Item #	8187 FRUs	FRU#	CRU
10	256 MB PC2700 SDRAM (models 32T 41M 42B 42H G4A G4T 51S 51P 51Y 78G 79G 13U 22S 22P 22Y CPU CQU 7AG 33G 34U 34S 34P 34Y 34A 34T 34V 35C 35B 35H 44U 44S 44P 44Y 44A 44T 44V 45C 45B 45H 46G 53B 53H 54C 7BG 7CG 7DG CSU CTU CUU 13S 13P 13Y 7EG 14P 23S 39P 3CU CVU CWU 14U A1U A1F A1S A1P A1Y A3U A3S A3P A3Y A4M A4A A4T A4C A4B A4H A4V A5C A5B A5H A7M A7A A7T A7C A7B A7H B3U B3F B3S B3P B5G B6U B6S B6P B6Y D9C D9B D9H D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D2G D5G D7U D7S D7P D7Y E2G E4U E4F E4S E4P E4Y E5G E6C E6B E6H F2U F2F F3G G4U G5G G6G G8U G8F A8A A8T A8C A8B A8H A8V B8U B8F B9U B9F DBM DCU DCF DEU DEF E9G EEM 71G 72G 73G 74G 75G 76G 77G D1K F4U F4F F A6U DAU DFA DFT DFV D9U D9S D9P D9Y E6M F8G EFM AAM DAF DHM E6A E6V 11U 12U 12S 12P 12Y 21M 31M 32A)	31P9121	*
10	512 MB PC2700 SDRAM (models B1U B2U D3U D3S D3P D3Y D4U D6U E1U E1S E1P E1Y E3U F1U F1S F1P F1Y G3U B7U B7S B7P B7Y DDU DDS DDP DDY E8U E8S E8P E8Y EJU EJS EJP EJU EKV EKF F7U F7S F7P F7Y EGG F6M F6A F6C F6H F5G F6V F6R G3F 52U 52S 52P 52Y 37U 37S 37P 37Y 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 47U 48U 49U 38U E3F 3AS 3BU 3BF 3BS 3BP 3BL 4BU 4BF 4BS 4BP 4BL 15U 3DU 3EU)	31P9122	*
10	256 MB PC3200 SDRAM (models 4CG 55G 55A 55Q 55T 59B 59H 61G 62C 4DG 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 66G 67C)	73P2683	*
10	512 MB PC3200 SDRAM (models 56F 57U 58U 63U 63F 64U 4EU 59U 65U 65F)	73P2684	*
11	System board, 10/100 E-net, no POV (models A1U A1F A1S A1P A1Y A3U A3S A3P A3Y A4M A4A A4T A4C A4B A4H A4V A7M A7A A7T A7C A7B A7H B1U B3U B3F B3S B3P B5G B6U B6S B6P B6Y D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D2G D3U D3S D3P D3Y D5G D7U D7S D7P D7Y E1U E1S E1P E1Y E2G E4U E4F E4S E4P E4Y E5G F1U F1S F1P F1Y F2U F2F F3G G4U G5G G6G 71G 72G 73G 74G 75G 76G 77G CAU CBU CCU CDU CEU CGU CTO D1K A6U A6S A6P A6Y A6A A6T A6V DFA DFT DFV DGU E7A E7T E7V 11U 12U 12S 12P 12Y 32A 32T G4A G4T 78G CLU CMU CNU 79G 13U 7AG 13S 13P 13Y 14P 23S)	89P7942	**
11	System board, 10/100 E-net, no POV (supports Prescott CPU) (models A1U A1F A1S A1P A1Y A3U A3S A3P A3Y A4M A4A A4T A4C A4B A4H A4V A7M A7A A7T A7C A7B A7H B1U B3U B3F B3S B3P B5G B6U B6S B6P B6Y D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D2G D3U D3S D3P D3Y D5G D7U D7S D7P D7Y E1U E1S E1P E1Y E2G E4U E4F E4S E4P E4Y E5G F1U F1S F1P F1Y F2U F2F F3G G4U G5G G6G 71G 72G 73G 74G 75G 76G 77G CAU CBU CCU CDU CEU CGU CTO D1K A6U A6S A6P A6Y A6A A6T A6V DFA DFT DFV DGU E7A E7T E7V 11U 12U 12S 12P 12Y 32A 32T G4A G4T 78G CLU CMU CNU 79G 13U 7AG 14P 23S 3CU CWU 4CG 55G 55A 55Q 55T 61G)	41X2825	**

Item #	8187 FRUs	FRU#	CRU
11	System board, 10/100 E-net, no POV (supports Prescott CPU) (models A1U A1F A1S A1P A1Y A3U A3S A3P A3Y A4M A4A A4T A4C A4B A4H A4V A7M A7A A7T A7C A7B A7H B1U B3U B3F B3S B3P B5G B6U B6S B6P B6Y D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D2G D3U D3S D3P D3Y D5G D7U D7S D7P D7Y E1U E1S E1P E1Y E2G E4U E4F E4S E4P E4Y E5G F1U F1S F1P F1Y F2U F2F F3G G4U G5G G6G 71G 72G 73G 74G 75G 76G 77G CAU CBU CCU CDU CEU CGU CTO D1K A6U A6S A6P A6Y A6A A6T A6V DFA DFT DFV DGU E7A E7T E7V 11U 12U 12S 12P 12Y 32A 32T G4A G4T 78G CLU CMU CNU 79G 13U 7AG 14P 23S 3CU CWU 4CG 55G 55A 55Q 55T 61G)	41X2826	**
11	System board, 10/100 E-net, POV (models B7U B7S B7P B7Y B8U B8F DCU DCF DDU DDS DDP DDY E8U E8S E8P E8Y EHU EHF EGG F5G 7EG)	89P7941	**
11	System board, 10/100 E-net, POV (supports Prescott CPU) (models B7U B7S B7P B7Y B8U B8F DCU DCF DDU DDS DDP DDY E8U E8S E8P E8Y EHU EHF EGG F5G 36G 46G 7CG 7DG 7EG)	41X2827	**
11	System board, 10/100 E-net, POV (supports Prescott CPU) (models B7U B7S B7P B7Y B8U B8F DCU DCF DDU DDS DDP DDY E8U E8S E8P E8Y EHU EHF EGG F5G 36G 46G 7CG 7DG 7EG)	41X2828	**
11	System board, Gigabit E-net, no POV (models A5C A5B A5H B2U D9C D9B D9H D4U D6U E3U E6C E6B E6H G3U G8U G8F D9U D9S D9P D9Y E6M EJU EJS EJP EJY EKV F7U F7S F7P F7Y AAM DAU DAF DHM E6A E6V EFM 21M 31M 41M 42B 42H 51S 51P 51Y 22S 22P 22Y 52U 52S 52P CPU CQU G3F 52Y 53B 53H 38U E3F 39P 3AS)	89P7944	**
11	System board, Gigabit E-net, no POV (supports Prescott CPU) (models A5C A5B A5H B2U D9C D9B D9H D4U D6U E3U E6C E6B E6H G3U G8U G8F D9U D9S D9P D9Y E6M EJU EJS EJP EJY EKV F7U F7S F7P F7Y AAM DAU DAF DHM E6A E6V EFM 21M 31M 41M 42B 42H 51S 51P 51Y 22S 22P 22Y 52U 52S 52P CPU CQU G3F 52Y 35C 35B 35H 37U 37S 37P 37Y 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 45C 45B 45H 48U 49U 53B 53H CUU 38U E3F 39P 3AS 3BU 3BF 3BS 3BP 3BL 4BU 4BF 4BS 4BP 4BL CVU 14U 15U 3DU 3EU C1U 56U 56F 57U 58U 59B 59H 62C 63U 63F 64U C2U C3U)	41X2829	**
11	System board, Gigabit E-net, no POV (supports Prescott CPU) (models A5C A5B A5H B2U D9C D9B D9H D4U D6U E3U E6C E6B E6H G3U G8U G8F D9U D9S D9P D9Y E6M EJU EJS EJP EJY EKV F7U F7S F7P F7Y AAM DAU DAF DHM E6A E6V EFM 21M 31M 41M 42B 42H 51S 51P 51Y 22S 22P 22Y 52U 52S 52P CPU CQU G3F 52Y 35C 35B 35H 37U 37S 37P 37Y 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 45C 45B 45H 48U 49U 53B 53H CUU 38U E3F 39P 3AS 3BU 3BF 3BS 3BP 3BL 4BU 4BF 4BS 4BP 4BL CVU 14U 15U 3DU 3EU C1U 56U 56F 57U 58U 59B 59H 62C 63U 63F 64U C2U C3U)	41X2830	**
11	System board, Gigabit E-net, POV (models A8A A8T A8C A8B A8H A8V B9U B9F DEU DEF E9G F8G DBM EEM F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J CHJ CJJ CKJ ABM F6V F6R F6M F6A F6C F6H CRJ 54C)	89P7943	**

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11	System board, Gigabit E-net, POV (supports Prescott CPU) (models A8A A8T A8C A8B A8H A8V B9U B9F DEU DEF E9G F8G DBM EEM F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J CHJ CJJ CKJ ABM F6V F6R F6M F6A F6C F6H CRJ 47U 54C 4DG 4EU 59U 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 65U 65F 66G 67C)	41X2831	**
11	System board, Gigabit E-net, POV (supports Prescott CPU) (models A8A A8T A8C A8B A8H A8V B9U B9F DEU DEF E9G F8G DBM EEM F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J CHJ CJJ CKJ ABM F6V F6R F6M F6A F6C F6H CRJ 47U 54C 4DG 4EU 59U 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 65U 65F 66G 67C)	41X2832	**
12	Intel Celeron 2.2 GHz (models 11U 14P)	74P1621	**
12	Intel Celeron 2.4 GHz (models 12U 12S 12P 12Y)	88P7699	**
12	Intel Celeron 2.6 GHz (models 13U 13S 13P 13Y)	13R8907	**
12	Intel Celeron 2.7 GHz (models CTO-U CTO-G)	13R8947	**
12	Intel Celeron 2.8 GHz (models CPU CQU 7AG)	13R8963	**
12	Intel P4 2.4 GHz (models CAU CHJ A1U A1F A1S A1P A1Y A3U A3S A3P A3Y 79G)	74P1625	**
12	Intel P4 2.4 GHz (models A4M A4A A4T A4C A4B A4H A4V A5C A5B A5H A7M A7A A7T A7C A7B A7H A8A A8T A8C A8B A8H A8V A6U A6S A6P A6Y A6A A6T A6V AAM ABM)	88P5867	**
12	Intel P4 2.53 GHz (models B1U B2U B3U B3F B3S B3P B5G B6U B6S B6P B6Y B7U B7S B7P B7Y B8U B8F B9U B9F 71G 72G CBU)	74P1627	**
12	Intel P4 2.66 GHz (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D2G D3U D3S D3P D3Y D4U D5G D6U D7U D7S D7P D7Y DCU DCF DDU DDS DDP DDY DEU DEF 73G 74G CCU D1K DGU 22S 22P 22Y 23S)	74P1629	**
12	Intel P4 2.6 GHz (models D9C D9B D9H DBM DAU DFA DFT DFV D9U D9S D9P D9Y DAF DHM 21M 78G CLU)	88P5868	**
12	Intel Prescott Celeron 2.66 GHz (models 14U CTO-U CTO-G)	19R0419	**
12	Intel P4 2.8 GHz (models E1U E1S E1P E1Y E2G E3U E4U E4F E4S E4P E4Y E5G E8U E8S E8P E8Y 75G CDU EHU EHF E3F 39P)	74P1631	**
12	Intel P4 2.8 GHz (models E6C E6B E6H EEM E7A E7T E7V CJJ E6M EJU EJS EJP EYJ EYK EYF E9G EFM EGG F6M F6A F6C F6H E6A E6V 31M 32A 32T CMU CPU 7AG 7EG 38U 3AS)	88P5869	**
12	Intel Prescott Celeron 2.8 GHz (models 15U CTO-U CTO-G)	19R0421	**
12	Intel Prescott P4 2.8 GHz (models CTO-U CTO-G 33G 7BG 3BU 3BF 3BS 3BP 3BL 3CU CVU CWU 3DU 3EU C1U)	19R0423	**
12	Intel Prescott P4 2.8 GHz (models CTO-U CTO-G 34U 34S 34P 34Y 34A 34T 34V 35C 35B 35H 36G 37U 37S 37P 37Y 7CG CSU)	19R0292	**
12	Intel Prescott P4 3.0 GHz (models CTO-U CTO-G 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 44U 44S 44P 44Y 44A 44T 44V 45C 45B 45H 46G 47U 48U 49U 7DG CTU CUU 4BU 4BF 4BS 4BP 4BL 4CG 4DG 4EU)	19R0294	**
12	Intel Prescott P4 3.2 GHz (models 55G 55A 55Q 55T 56U 56F 57U 58U 59B 59H 59U 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ C2U)	19R0296	**
12	Intel Prescott P4 3.4 GHz (models 61G 62C 63U 63F 64U 65U 65F 66G 67C C3U)	29R6991	**



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12	Intel P4 3.06 GHz (models F1U F1S F1P F1Y F2U F2F F3G 76G CEU F8G)	74P1633	**
12	Intel P4 3.0 GHz (models F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J CKJ F7U F7S F7P F7Y F6M F6A F6C F6H F5G F6V F6R 41M 42B 42H CNU CQU)	88P5870	**
12	Intel P4 3.2 GHz (models G3U G4U G5G G6G G8U G8F 77G CGU G4A G4T 51S 51P 51Y 52U 52S 52P G3F CRJ 52Y 53B 53H 54C)	88P5871	**
13	Fan sink (models F1U F1S F1P F1Y F2U F2F F3G G3U G4U G5G G6G G8U G8F 76G 77G CEU CGU F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J CKJ F7U F7S F7P F7Y F8G F6M F6A F6C F6H F5G F6V F6R 41M 42B 42H G4A G4T 51S 51P 51Y CNU 52U 52S 52P CQU G3F CRJ 52Y 53B 53H 54C)	01R3330	**
13	Fan sink (All models EXCEPT F1U F1S F1P F1Y F2U F2F F3G G3U G4U G5G G6G G8U G8F 76G 77G CEU CGU F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J CKJ F7U F7S F7P F7Y F8G F6M F6A F6C F6H F5G F6V F6R 41M 42B 42H G4A G4T 51S 51P 51Y CNU 52U 52S 52P CQU G3F CRJ 52Y 53B 53H 54C E3F 14P 23S 39P 3AS)	32P4004	**
13	Fan sink (for Prescott only) (models 33G 7BG 34U 34S 34P 34Y 34A 34T 34V 35C 35B 35H 36G 37U 37S 37P 37Y 7CG CSU 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 44U 44S 44P 44Y 44A 44T 44V 45C 45B 45H 46G 47U 48U 49U 7DG CTU CUU 3BU 3BF 3BS 3BP 3BL 3CU CVU CWU 4BU 4BF 4BS 4BP 4BL 14U 15U CTO-U CTO-G 3DU 3EU C1U 4CG 4DG 4EU 55G 55A 55Q 55T 56U 56F 57U 58U 59B 59H 59U 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ C2U 61G 62C 63U 63F 64U 65U 65F 66G 67C C3U)	13R9195	**
13	Heat sink, dual heat pipe -- optional to 13R9195 (all models)	13N2951	*

The FRUs listed in the following table are not illustrated.

8187 FRUs	FRU#	CRU
RFID antenna - velcro (models A8A A8T A8C A8B A8H A8V B7U B7S B7P B7Y B8U B8F B9U B9F DBM DCU DCF DDU DDS DDP DDY DEU DEF E8U E8S E8P E8Y E9G EEM F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J F8G EGG F6M F6A F6C F6H CHJ CJJ CKJ F5G ABM F6V F6R CRJ 36G 46G 47U 54C 7CG 7DG 7EG 4DG 4EU 59U 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 65U 65F 66G 67C)	03K9654	*
Cable, C2 assembly (models A8A A8T A8C A8B A8H A8V B7U B7S B7P B7Y B8U B8F B9U B9F DBM DCU DCF DDU DDS DDP DDY DEU DEF E8U E8S E8P E8Y E9G EEM F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J F8G EGG F6M F6A F6C F6H CHJ CJJ CKJ F5G ABM F6V F6R CRJ 36G 46G 47U 54C 7CG 7DG 7EG 4DG 4EU 59U 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 65U 65F 66G 67C)	09K9827	*
5.25 EMC shield (all models)	19K5548	*
Retention kit (all models)	88P5915	*
Planar EMC shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P6515	*
Cable, ATA66 1 drop (all models)	88P5967	*
Cable, ATA66 2 drop (all models)	88P5971	*
Cable, SATA (all models)	88P5927	*

8187 FRUs	FRU#	CRU
Service label (all models)	88P5964	*
Bezel kit (all models)	49P4371	*
Fan bracket assembly (models CSU CTU CUU 36G 46G 47U 54C 7CG 7DG 13S 13P 13Y 7EG E3F 3BU 3BF 3BS 3BP 3BL 3CU 4BU 4BF 4BS 4BP 4BL CVU CWU 14U 15U 3DU 3EU C1U 4CG 55G 55A 55Q 55T 56U 56F 57U 58U 59B 59H 61G 62C 63U 63F 64U C2U C3U 4DG 4EU 59U 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 65U 65F 66G 67C F1U F1S F1P F1Y F2U F2F F3G G3U G4U G5G G6G G8U G8F 76G 77G CEU CGU F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J CKJ F7U F7S F7P F7Y F8G F6M F6A F6C F6H F5G F6V F6R 11U 12U 12S 12P 12Y 21M 31M 32A 32T 41M 42B 42H G4A G4T 51S 51P 51Y 78G CLU CMU CNU 79G 13U 22S 22P 22Y 52U 52S 52P CPU CQU G3F CRJ 7AG 52Y 33G 34U 34S 34P 34Y 34A 34T 34V 35C 35B 35H 37U 37S 37P 37Y 43U 43F 43S 43P 43Y 43G 43M 43A 43T 43C 43B 43H 43V 43K 43J 44U 44S 44P 44Y 44A 44T 44V 45C 45B 45H 48U 49U 53B 53H 7BG)	89P6700	*
Korean label (models F6R D1K F4K 43K 5AK)	13R9162	*
Misc. hardware kit (all models)	88P5965	*
Cable, CDRom audio (all models)	75H9219	*
Keylock assembly, random (models A8A A8T A8C A8B A8H A8V B7U B7S B7P B7Y B8U B8F B9U B9F DBM DCU DCF DDU DDS DDP DDY DEU DEF E8U E8S E8P E8Y E9G EEM F4U F4F F4S F4P F4Y F4G F4M F4A F4T F4C F4B F4H F4V F4K F4J EHU EHF F8G EGG F6M F6A F6C F6H CHJ CJJ CKJ F5G ABM F6V F6R CRJ 36G 46G 47U 54C 7CG 7DG 7EG 4DG 4EU 59U 5AU 5AF 5AS 5AP 5AL 5AY 5AG 5AM 5AA 5AQ 5AT 5AC 5AB 5AH 5AV 5AK 5AJ 65U 65F 66G 67C)	88P5920	*
Hard disk drive mounting bracket assembly (all models)	88P5916	*
Cable assembly, power/LED (all models)	37L5092	*
Cable, second serial port (all models)	49P4530	*
Cable, dual USB 2.0 (all models)	49P4365	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, 2 button, black (models CAU CBU CCU CDU CEU CGU CLU CMU CNU CPU CQU)	24P0383	*
Mouse, 3-button wheel (models B5G D2G D5G E2G E5G F3G G5G G6G 71G 72G 73G 74G 75G 76G 77G AAM DHM EFM ABM DBM EEM 21M 31M 41M 78G 79G 7AG 7BG)	24P0491	*
Mouse, optical wheel (All models EXCEPT CAU CBU CCU CDU CEU CGU CLU CMU CNU CPU CQU B5G D2G D5G E2G E5G F3G G5G G6G 71G 72G 73G 74G 75G 76G 77G AAM DHM EFM ABM DBM EEM 21M 31M 41M 78G 79G 7AG 7BG)	89P5089	*
Nvidia GeForce MX 440 (model D6U)	73P0715	*
ATI RADEON 9600 (Superman) (models 52U 52S 52P 52Y)	88P6084	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*



8187 FRUs	FRU#	CRU
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8187 Windows 2000 Recovery CDs	FRU #	CRU
US (models A3U A7M A7A A7T A7H B6U D7U 72G 74G)	13R9673	*
FR (models 72G 74G)	13R9674	*
GR (models 72G 74G)	13R9675	*
IT (models 72G 74G)	13R9677	*
BR (models A3P B6P D7P)	13R9678	*
SP (models A3S A3Y B6S B6Y D7S D7Y 72G 74G)	13R9676	*
DK (models 72G 74G)	13R9680	*
NL (models 72G 74G)	13R9683	*
AE (models 72G 74G)	13R9687	*
SV (models 72G 74G)	13R9679	*
HE (models 72G 74G)	13R9684	*
FI (models 72G 74G)	13R9681	*
NO (models 72G 74G)	13R9682	*
PL (models 72G 74G)	13R9685	*
PO (models 72G 74G)	13R9691	*
RU (models 72G 74G)	13R9688	*
HU (models 72G 74G)	13R9690	*
CZ (models 72G 74G)	13R9686	*
TR (models 72G 74G)	13R9689	*
GK (models 72G 74G)	13R9692	*
SC (model A7C)	13M6421	*
HK (model A7B)	13M6427	*

8187 Windows XP Pro Recovery CDs	FRU #	CRU
US (models 4BU 4BL 14U 15U 3DU 3EU 4CG 55G 55A 55Q 55T 56U 57U 58U 59H 61G 63U 64U 4DG 4EU 59U 5AU 5AL 5AG 5AM 5AA 5AQ 5AT 5AH 65U 66G 71G 73G 75G 76G 77G A1U A5H A6A A6T A6U A8A A8H A8T AAM ABM B1U B2U B3U B5G B7U B8U B9U D1A D1G D1H D1M D1T D1U D2G D3U D4U D6U D9H D9U DAU DBM DCU DDU DEU DFA DFT DGU DHM E1U E2G E3U E4U E5G E6A E6H E6M E7A E7T E8U E9G EEM EFM EGG EHU EJU EKU F1U F2U F3G F4A F4G F4H F4M F4T F4U F5G F6A F6H F6M F6R F7U F8G G3U G4U G5G G6G G8U 11U 12U 21M 31M 32A 32T 41M 42H G4A G4T 78G 79G 13U 52U 7AG 33G 34U 34A 34T 35H 36G 37U 43U 43G 43M 43A 43T 43H 44U 44A 44T 45H 46G 47U 48U 49U 53H 7BG 7CG 7DG 7EG 38U 3BU 3BL 3CU)	29R7998	*

8187 Windows XP Pro Recovery CDs	FRU #	CRU
FR (models 71G 73G 75G 76G 77G A1F B3F B5G B8F B9F D1F D1G D2G DAF DCF DEF E2G E4F E5G E9G EGG EHF EKF F2F F3G F4F F4G F5G F8G G5G G6G G8F 78G 79G G3F 7AG 33G 36G 43F 43G 46G 7BG 7CG 7DG 7EG E3F 3BF 4BF 4CG 55G 56F 61G 63F 4DG 5AF 5AG 65F 66G)	29R7999	*
GR (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8000	*
IT (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8002	*
SP (models 71G 73G 75G 76G 77G A1S A1Y A6S A6Y B3S B3Y B5G B7S B7Y D1G D1S D1Y D2G D3S D3Y D9S D9Y DDS DDY E1S E1Y E2G E4S E4Y E5G E8S E8Y E9G EGG EJS EJY F1S F1Y F3G F4G F4S F4Y F5G F7S F7Y F8G G5G G6G 12S 12Y 51S 51Y 78G 79G 22S 52S 7AG 52Y 33G 34S 34Y 36G 37S 37Y 43S 43Y 43G 44S 44Y 46G 7BG 7CG 7DG 13S 13Y 7EG 23S 3AS 3BS 4BS 4CG 55G 61G 4DG 5AS 5AY 5AG 66G)	29R8001	*
BR (models A1P A6P B3P B7P D1P D3P D9P DDP E1P E4P E8P EJP F1P F4P F7P 12P 51P 22P 52P 34P 37P 43P 44P 13P 14P 39P 3BP 4BP 5AP)	29R8003	*
DK (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8005	*
NL (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8008	*
AE (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8012	*
SV (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8004	*
HE (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8009	*
FI (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8006	*
NO (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8007	*
PL (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8010	*
PO (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8016	*
RU (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8013	*
HU (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8015	*

8187 Windows XP Pro Recovery CDs	FRU #	CRU
CZ (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8011	*
TR (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8014	*
GK (models 71G 73G 75G 76G 77G B5G D1G D2G E2G E5G E9G EGG F3G F4G F5G F8G G5G G6G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	29R8017	*
JP (models D1J F4J)	13M6330	*
JP (models D1J F4J 43J 5AJ-- optional to 13M6330)	13M6438	*
SC (models A5C A8C D1C D9C E6C F4C F6C)	88P8777	*
SC (models A5C A8C D1C D9C E6C F4C F6C 35C 43C 45C 54C 62C 5AC 67C --optional to 88P8777)	27K6907	*
TW (models A6V A8V D1V DFV E6V E7V F4V F6V)	88P8781	*
TW (models A6V A8V D1V DFV E6V E7V F4V F6V 34V 43V 44V 5AV-- optional to 88P8781)	27K6912	*
HK (models A5B A8B D1B D9B E6B F4B 42B)	13M6300	*
HK (models A5B A8B D1B D9B E6B F4B 42B 35B 43B 45B 53B 59B 5AB-- optional to 13M6300)	27K6917	*
KR (models D1K F4K)	13M6351	*
KR (models D1K F4K 43K 5AK-- optional to 13M6351)	27K6902	*
Multilingual RCD 1 (models 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	19R1268	*
Multilingual RCD 2 (models 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	19R1270	*

8187 Windows XP Home Recovery CDs	FRU#	CRU
US (models A4A A4H A4M A4T)	29R8098	*
SC (model A4C)	27K6932	*
TW (model A4V)	27K6937	*
HK (model A4B)	27K6942	*

8187 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models 33G 34U 34A 35C 35H 36G 37U 43U 43G 43M 43A 43C 43H 44U 44A 45C 45H 46G 47U 48U 49U 53H 54C 7BG 7CG 7DG CSU CTU CUU 7EG 38U 3BU 3BL 3CU 4BU 4BL CVU CWU 14U 15U 3DU 3EU 4CG 55G 55A 55Q 56U 57U 58U 59H 61G 62C 63U 64U 4DG 4EU 59U 5AU 5AL 5AG 5AM 5AA 5AQ 5AC 5AH 65U 66G 67C A1U A3U A4M A4A A4C A4H A5C A5H A7M A7A A7C A7H B1U B2U B3U B5G B6U D9C D9H D1U D1G D1M D1A D1C D1H D2G D3U D4U D5G D6U D7U E1U E2G E3U E4U E5G E6C E6H F1U F2U F3G G3U G4U G5G G6G G8U A8A A8C A8H B7U B8U B9U DBM DCU DDU DEU E8U E9G EEM 71G 72G 73G 74G 75G 76G 77G CAU CBU CCU CDU CEU CGU A6U A6A DAU DFA DGU E7A EHU D9U E6M EJU EKV F7U F8G EFM EGG F6M F6A F6C F6H F5G AAM DHM E6A ABM F6R 11U 12U 21M 31M 32A 41M 42H G4A 78G CLU CMU CNU 79G 13U 52U CPU CQU 7AG)	89P8300	*

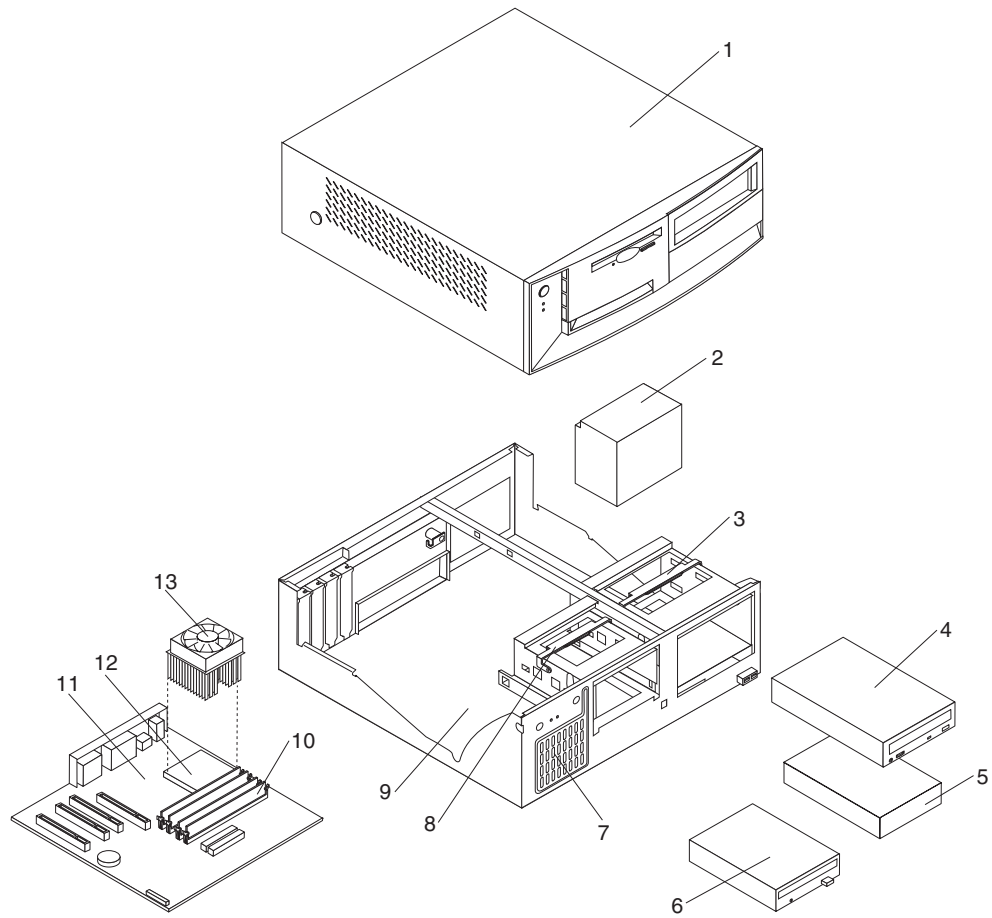
8187 Keyboards (Standard PS/2 Black)	FRU#	CRU
Arabic (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8301	*
Belgian/French (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8302	*
Belgian/UK (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8303	*
Bulgarian (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8305	*
Chinese/US (models A4B A4V A5B A7B D9B D1B D1V E6B A8B A8V A6V DFV E7V E6V F6V 42B 34V 35B 43B 43V 44V 45B 53B)	89P8306	*
Czech (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8307	*
Danish (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8308	*
Dutch (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8309	*
French (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8310	*
French Canadian (models A1F B3F D1F E4F F2F G8F B8F B9F DCF DEF EHF EK F DAF G3F 43F E3F 3BF 4BF 56F 63F 5AF 65F)	89P8311	*
French Canadian (models A1F B3F D1F E4F F2F G8F B8F B9F DCF DEF EHF EK F DAF G3F 43F E3F 3BF 4BF 56F 63F 5AF 65F)	89P8312	*
German (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8313	*
Greek (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8314	*
Hebrew (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8315	*
Hungarian (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8316	*
Iceland (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8317	*
Italian (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8318	*
Italian (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8319	*

8187 Keyboards (Standard PS/2 Black)	FRU#	CRU
Japanese (models D1J 43J 5AJ)	89P8320	*
Korean (models D1K 43K 5AK)	89P8321	*
LA Spanish (models A1S A1Y A3S A3Y B3S B6S B6Y D1S D1Y D3S D3Y D7S D7Y E1S E1Y E4S E4Y F1S F1Y B7S B7Y DDS DDY E8S E8Y A6S A6Y D9S D9Y EJS EJY F7S F7Y 12S 12Y 51S 51Y 22S 22Y 52S 52Y 34S 34Y 37S 37Y 43S 43Y 44S 44Y 13S 13Y 23S 3AS 3BS 4BS 5AS 5AY)	89P8322	*
Norwegian (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8323	*
Polish (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8324	*
Portuguese (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8325	*
Romanian (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8326	*
Russian (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8327	*
Russian/Cy (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8328	*
Serbian/Cyrillic (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8329	*
Slovak (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8330	*
Spanish (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8331	*
Swedish/Fin (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8332	*
Swiss F/G (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8333	*
Thailand (models A4T A7T D1T A8T A6T DFT E7T 32T G4T 34T 43T 44T 55T 5AT)	89P8334	*
Turkish (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8335	*
Turkish (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8336	*
UK English (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8337	*

8187 Keyboards (Standard PS/2 Black)	FRU#	CRU
US International (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8338	*
Yugoslav/Latin (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	89P8339	*
Brazil/Portuguese (models A1P A3P B3P B6P D1P D3P D7P E1P E4P F1P B7P DDP E8P A6P D9P EJP F7P 12P 51P 22P 52P 34P 37P 43P 44P 13P 14P 39P 3BP 4BP 5AP)	89P8304	*

8187 Power Cords	FRU#	CRU
Power Cord (All xxU xxF xxS xxP xxG xxA xxT xxV models; CTO)	6952301	*
Power Cord (models A4M A7M D1M DBM EEM F4M E6M EFM F6M AAM DHM ABM 21M 31M 41M 43M 5AM)	13F9939	*
Power Cord (models A4A A7A B5G D1G D1A D2G D5G E2G E5G F3G G5G G6G A8A E9G 71G 72G 73G 74G 75G 76G 77G D1K F4G F4A F4K F8G EGG F5G F6R 78G 79G 7AG 33G 36G 43G 43K 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 5AK 66G)	13F9978	*
Power Cord (models A4A A4H A5H A7A A7H B5G D9H D1G D1A D1H D2G D5G E2G E5G E6H F3G G5G G6G A8A A8H E9G 71G 72G 73G 74G 75G 76G 77G F4G F4A F4H F8G EGG F6H F5G 42H 78G 79G 7AG 33G 35H 36G 43G 43H 45H 46G 53H 7BG 7CG 7DG 7EG 4CG 55G 59H 61G 4DG 5AG 5AH 66G)	14F0032	*
Power Cord (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F4G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	13F9996	*
Power Cord (models A1S A1P A1Y A3S A3P A3Y B3S B3P B5G B6S B6P B6Y D1S D1P D1Y D1G D2G D3S D3P D3Y D5G D7S D7P D7Y E1S E1P E1Y E2G E4S E4P E4Y E5G F1S F1P F1Y F3G G5G G6G B7S B7P B7Y DDS DDP DDY E8S E8P E8Y E9G 71G 72G 73G 74G 75G 76G 77G F4S F4P F4Y F4G A6S A6P A6Y D9S D9P D9Y EJS EJP EJY F7S F7P F7Y F8G EGG F5G 12S 12P 12Y 51S 51P 51Y 78G 79G 22S 22P 22Y 52S 52P 7AG 52Y 33G 34S 34P 34Y 36G 37S 37P 37Y 43S 43P 43Y 43G 44S 44P 44Y 46G 7BG 7CG 7DG 13S 13P 13Y 7EG 14P 23S 39P 3AS 3BS 3BP 3BL 4BS 4BP 4BL 4CG 55G 61G 4DG 5AS 5AP 5AL 5AY 5AG 66G)	14F0068	*
Power Cord (models A1Y A3Y B6Y D1Y D3Y D7Y E1Y E4Y F1Y B7Y DDY E8Y F4Y A6Y D9Y EJY F7Y 12Y 51Y 22Y 52Y 34Y 37Y 43Y 44Y 13Y 5AY)	36L8879	*
Power Cord (models A4C A4B A4H A5C A5B A5H A7C A7B A7H D9C D9B D9H D1C D1B D1H E6C E6B E6H A8C A8B A8H F4C F4B F4H F6C F6H 42B 42H 35C 35B 35H 43C 43B 43H 45C 45B 45H 53B 53H 54C 59B 59H 62C 5AC 5AB 5AH 67C)	02K0545	*
Power Cord (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F4G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	14F0086	*
Power Cord (models A4A A7A B5G D1G D1A D2G D5G E2G E5G F3G G5G G6G A8A E9G 71G 72G 73G 74G 75G 76G 77G F4G F4A F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	14F0014	*
Power Cord (models B5G D1G D2G D5G E2G E5G F3G G5G G6G E9G 71G 72G 73G 74G 75G 76G 77G F4G F8G EGG F5G 78G 79G 7AG 33G 36G 43G 46G 7BG 7CG 7DG 7EG 4CG 55G 61G 4DG 5AG 66G)	14F0050	*
Power Cord (models 55Q 5AQ)	49P2078	*

# Type 8188



Item #	8188 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5962	**
2	Power supply, 230W (models D1U D1F D1G D1M D1A D1T D1J D1K F1U F1F F1G F1M F1A F1T F1J EJU EJF EJG EJM EJA EJT EJK EJJ 21M 31M 41M 22M 32M 42M 3AM 3BM 46M 47M 49U 49F 49G 49M 49A 49T 49K 49J 29U 29F 29G 29M 29A 29T 29K 29J 52M 53M)	74P4300	N
2	Power supply, 230W (China) (models F1S F1P F1Y F1C F1B F1H F1V EJS EJP EY EJC EJB EJH EJV 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 11S 11P 11Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 44S 44P 44Y 45S 45P 45Y 48S 48P 48Y 51S 51P 51Y 49S 49P 49Y 49C 49B 49H 49V 29S 29P 29L 29Y 29Q 29C 29B 29H 29V)	74P4301	N
3	Pivot lock, 5.25 DASD (all models)	09N5747	**
4	CD-ROM Drive 48X - Black (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K)	33P3203	**
4	CD-ROM Drive 48X - Black (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K)	33P3211	**
4	CD-ROM Drive 48X - Black (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K)	33P3215	**
4	CD-ROM Drive 48X - Black (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K)	71P7353	**



Item #	8188 FRUs	FRU#	CRU
4	CD-ROM Drive 48X - Black w/o jack & vol (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	71P7367	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	71P7369	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	71P7371	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	71P7375	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	71P7385	**
4	CD-ROM Drive 48X - Black (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	40Y8801	**
4	CD-ROM Drive 48X - Black (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	40Y8807	**
4	CD-ROM Drive 48X - Black (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	40Y8805	**
4	CD-ROM Drive 48X - Black (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 44S 44P 44Y 45S 45P 45Y 46M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M)	40Y8813	**



Item #	8188 FRUs	FRU#	CRU
4	DVD-ROM 16X/48X - Black (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 21M 31M 41M 21M 31M 41M)	33P3237	**
4	DVD-ROM 16X/48X - Black (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 21M 31M 41M 21M 31M 41M 3BM 47M 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	40Y8935	**
4	DVD-ROM 16X/48X - Black (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 21M 31M 41M 21M 31M 41M 3BM 47M 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	40Y8933	**
4	DVD-ROM 16X/48X - Black (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 21M 31M 41M 3BM 47M 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	71P7357	**
4	DVD-ROM 16X/48X - Black (B3 only) (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 21M 31M 41M 3BM 47M 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	33P3237	**
4	Universal Combo drive 48x/24x/48x/16x (models 53M)	26K5390	*
4	Combo drive 48x/32x/48x/16x (models 53M)	26K5379	**
4	Combo drive 48x/32x/48x/16x (models 53M)	26K5381	**
4	Combo drive 48x/32x/48x/16x (models 53M)	40Y8781	**
4	Combo drive 48x/32x/48x/16x (models 53M)	40Y8903	**
5	Hard disk drive, 40 GB EIDE (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 11S 11P 11Y 36S 36P 36Y 39S 39P 39Y 3AM 3BM 46M 47M 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J 52M)	19K1568	*
5	Hard disk drive, 80 GB EIDE (models 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 37S 37P 37Y 38S 38P 38Y 44S 44P 44Y 45S 45P 45Y 48S 48P 48Y 51S 51P 51Y 53M)	24P3665	*
6	Diskette drive, 3.5 1.44 MB (wo/bezel) (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1K F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V D1J F1J EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 11S 11P 11Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 3BM 44S 44P 44Y 45S 45P 45Y 46M 47M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 29J 52M 53M)	76H4091	**
6	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (models 29J 52M 53M D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1K F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V D1J F1J EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 11S 11P 11Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 3BM 44S 44P 44Y 45S 45P 45Y 46M 47M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K)	40Y8899	**

Item #	8188 FRUs	FRU#	CRU
6	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (models 29J 52M 53M D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1K F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V D1J F1J EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 11S 11P 11Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 3BM 44S 44P 44Y 45S 45P 45Y 46M 47M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K)	40Y9107	**
6	Diskette drive, 3.5 1.44 MB, 2-mode (w/bezel) (models 29J 52M 53M D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1K F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V D1J F1J EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 11S 11P 11Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 3BM 44S 44P 44Y 45S 45P 45Y 46M 47M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K)	40Y9105	**
7	Speaker assembly (all models)	39M0614	*
8	Pivot lock, 3.5 DASD (all models)	09N5748	**
9	Chassis/top cover kit (all models)	88P5963	**
10	256 MB PC2700 SDRAM (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 11S 11P 11Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 3BM 44S 44P 44Y 45S 45P 45Y 46M 47M 48S 48P 48Y 51S 51P 51Y)	22P9121	*
10	512 MB PC2700 SDRAM (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J)	22P9122	*
10	256 MB PC3200 SDRAM (models 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J 52M 53M)	73P2683	*
11	System board, 10/100 E-net, no POV (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K)	89P7942	**
11	System board, 10/100 E-net, no POV (supports Prescott CPU) (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K 11S 11P 11Y 36S 36P 36Y 39S 39P 39Y)	41X2825	**
11	System board, 10/100 E-net, no POV (supports Prescott CPU) (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K 11S 11P 11Y 36S 36P 36Y 39S 39P 39Y)	41X2826	**
11	System board, Gigabit E-net, no POV (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y)	89P7944	**
11	System board, Gigabit E-net, no POV (supports Prescott CPU) (models EJU EJF EJS EJP EJY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 37S 37P 37Y 38S 38P 38Y 3AM 3BM 44S 44P 44Y 45S 45P 45Y 46M 47M 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M 53M)	41X2829	**

Item #	8188 FRUs	FRU#	CRU
11	System board, Gigabit E-net, no POV (supports Prescott CPU) (models EJU EJF EJS EJP EY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 37S 37P 37Y 38S 38P 38Y 3AM 3BM 44S 44P 44Y 45S 45P 45Y 46M 47M 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 52M 53M)	41X2830	**
11	System board, Gigabit E-net, POV (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 35S 35P 35Y 43S 43P 43Y)	89P7943	**
11	System board, Gigabit E-net, POV (supports Prescott CPU) (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 35S 35P 35Y 43S 43P 43Y 48S 48P 48Y 51S 51P 51Y 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	41X2831	**
11	System board, Gigabit E-net, POV (supports Prescott CPU) (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 35S 35P 35Y 43S 43P 43Y 48S 48P 48Y 51S 51P 51Y 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	41X2832	**
12	2.6GHz Celeron (multi VID) (models 11S 11P 11Y)	13R8907	**
12	Intel P4 2.6 GHz (models 21M 22M)	88P5868	**
12	Intel P4 2.66 GHz (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K 23S 23P 23Y)	74P1629	**
12	Intel P4 2.8 GHz (models EJU EJF EJS EJP EY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 31M 32M 34S 34P 34Y)	88P5869	**
12	Intel P4 2.8 GHz (models 33S 33P 33Y 35S 35P 35Y)	74P1631	**
12	2.8GHZ Prescott P4 (models 36S 36P 36Y 37S 37P 37Y)	19R0423	**
12	2.8GHZ Prescott P4 (models 38S 38P 38Y 39S 39P 39Y 3AM 3BM)	19R0292	**
12	3.0GHZ Prescott P4 (models 45S 45P 45Y 46M 47M 48S 48P 48Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J)	19R0294	**
12	3.2GHZ Prescott P4 (models 51S 51P 51Y 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J 52M 53M)	19R0296	**
12	Intel P4 3.0 GHz (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 41M 42M 44S 44P 44Y)	88P5870	**
12	Intel P4 3.2 GHz (models 51S 51P 51Y)	88P5871	**
12	Intel P4 3.06 GHz (models 43S 43P 43Y)	74P1633	**
13	Fan sink (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 41M 42M 43S 43P 43Y 44S 44P 44Y 51S 51P 51Y)	01R3330	**
13	Fan sink (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K EJU EJF EJS EJP EY EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 22M 31M 32M 23S 23P 23Y 33S 33P 33Y 35S 35P 35Y 34S 34P 34Y 11S 11P 11Y)	32P4004	**
13	Fan Sink (for Prescott only) (models 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 3BM 45S 45P 45Y 46M 47M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J 52M 53M)	13R9195	**
13	Fan Sink (Dual heat pipe) (optional to 13R9195) (all models)	13N2951	**

The FRUs listed in the following table are not illustrated.

8188 FRUs	FRU#	CRU
RFID antenna - velcro (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 22M 32M 42M 35S 35P 35Y 43S 43P 43Y 48S 48P 48Y 51S 51P 51Y 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	03K9654	*
Cable, C2 assembly (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 22M 32M 42M 35S 35P 35Y 43S 43P 43Y 48S 48P 48Y 51S 51P 51Y 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	09K9827	*
5.25 EMC shield (all models)	19K5548	*
Retention kit (all models)	88P5915	*
Planar EMC shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P6515	*
Cable, ATA66 1 drop (all models)	88P5967	*
Cable, ATA66 2 drop (all models)	88P5971	*
Cable, SATA (all models)	88P5927	*
Service label (all models)	88P5964	*
Bezel kit (all models)	49P4371	*
Fan bracket assembly (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J EJU EJF EJS EJP EYJ EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 44S 44P 44Y 45S 45P 45Y 46M 47M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J 52M 53M)	89P6700	*
Misc. hardware kit (all models)	88P5965	*
Cable, CDROM audio (all models)	75H9219	*
Keylock assembly, random (models F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J 22M 32M 42M 35S 35P 35Y 43S 43P 43Y 48S 48P 48Y 51S 51P 51Y 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J)	88P5920	*
Hard disk drive mounting bracket assembly (all models)	88P5916	*
Cable assembly, power/LED (all models)	37L5092	*
Cable, second serial port (all models)	49P4530	*
Cable, dual USB 2.0 (all models)	49P4365	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, optical wheel (models D1U D1F D1S D1P D1Y D1G D1M D1A D1T D1C D1B D1H D1V D1J D1K F1U F1F F1S F1P F1Y F1G F1M F1A F1T F1C F1B F1H F1V F1J EJU EJF EJS EJP EYJ EJG EJM EJA EJT EJC EJB EJH EJV EJK EJJ 21M 31M 41M 22M 32M 42M 23S 23P 23Y 33S 33P 33Y 34S 34P 34Y 35S 35P 35Y 43S 43P 43Y 11S 11P 11Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 3AM 3BM 44S 44P 44Y 45S 45P 45Y 46M 47M 48S 48P 48Y 51S 51P 51Y 49U 49F 49S 49P 49Y 49G 49M 49A 49T 49C 49B 49H 49V 49K 49J 29U 29F 29S 29P 29L 29Y 29G 29M 29A 29Q 29T 29C 29B 29H 29V 29K 29J 52M 53M)	89P5089	*
Korean label (models D1K EJK 49K)	13R9162	*
ATI RADEON 9600 (model CTO-U CTO-G)	29R7236	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*

8188 FRUs	FRU#	CRU
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8188 Windows XP Pro Recovery CDs	FRU #	CRU
US (models D1A D1G D1H D1M D1T D1U F1A F1G F1H F1M F1T F1U EJU EJG EJM EJA EJT EJH 21M 31M 41M 22M 32M 42M 3AM 3BM 46M 47M 49U 49G 49M 49A 49T 49H 29U 29L 29G 29M 29A 29Q 29T 29H 52M 53M)	29R7998	*
FR (models D1F D1G F1F F1G E1F E1G 49F 49G 29F 29G)	29R7999	*
GR (models D1G F1G E1G 49G 29G)	29R8000	*
IT (models D1G F1G E1G 49G 29G)	29R8002	*
SP (models D1G D1S D1Y F1G F1S F1Y E1S E1Y E1G 23S 23Y 33S 33Y 34S 34Y 35S 35Y 43S 43Y 11S 11Y 36S 36Y 37S 37Y 38S 38Y 39S 39Y 44S 44Y 45S 45Y 48S 48Y 51S 51Y 49S 49Y 49G 29S 29Y 29G)	29R8001	*
BR (models D1P F1P E1P 23P 33P 34P 35P 43P 11P 36P 37P 38P 39P 44P 45P 48P 51P 49P 29P)	29R8003	*
DK (models D1G F1G E1G 49G 29G)	29R8005	*
NL (models D1G F1G E1G 49G 29G)	29R8008	*
AE (models D1G F1G E1G 49G 29G)	29R8012	*
SV (models D1G F1G E1G 49G 29G)	29R8004	*
HE (models D1G F1G E1G 49G 29G)	29R8009	*
FI (models D1G F1G E1G 49G 29G)	29R8006	*
NO (models D1G F1G E1G 49G 29G)	29R8007	*
PL (models D1G F1G E1G 49G 29G)	29R8010	*
PO (models D1G F1G E1G 49G 29G)	29R8016	*
RU (models D1G F1G E1G 49G 29G)	29R8013	*
HU (models D1G F1G E1G 49G 29G)	29R8015	*
CZ (models D1G F1G E1G 49G 29G)	29R8011	*
TR (models D1G F1G E1G 49G 29G)	29R8014	*
GK (models D1G F1G E1G 49G 29G)	29R8017	*
JP-- (w/SP1) (models D1J F1J E1J 49J 29J)	13M6438	*
JP-- (w/SP2) (models D1J F1J E1J 49J 29J)	27K6922	*
SC (models D1C F1C E1C 49C 29C)	27K6907	*
TW (models D1V F1V E1V 49V 29V)	27K6912	*
HK (models D1B F1B E1B 49B 29B)	27K6917	*
KR (models D1K E1K 49K 29K)	27K6902	*

8188 Windows XP Pro Recovery CDs	FRU #	CRU
Multilingual RCD 1 (models)	19R1268	*
Multilingual RCD 2 (models)	19R1270	*

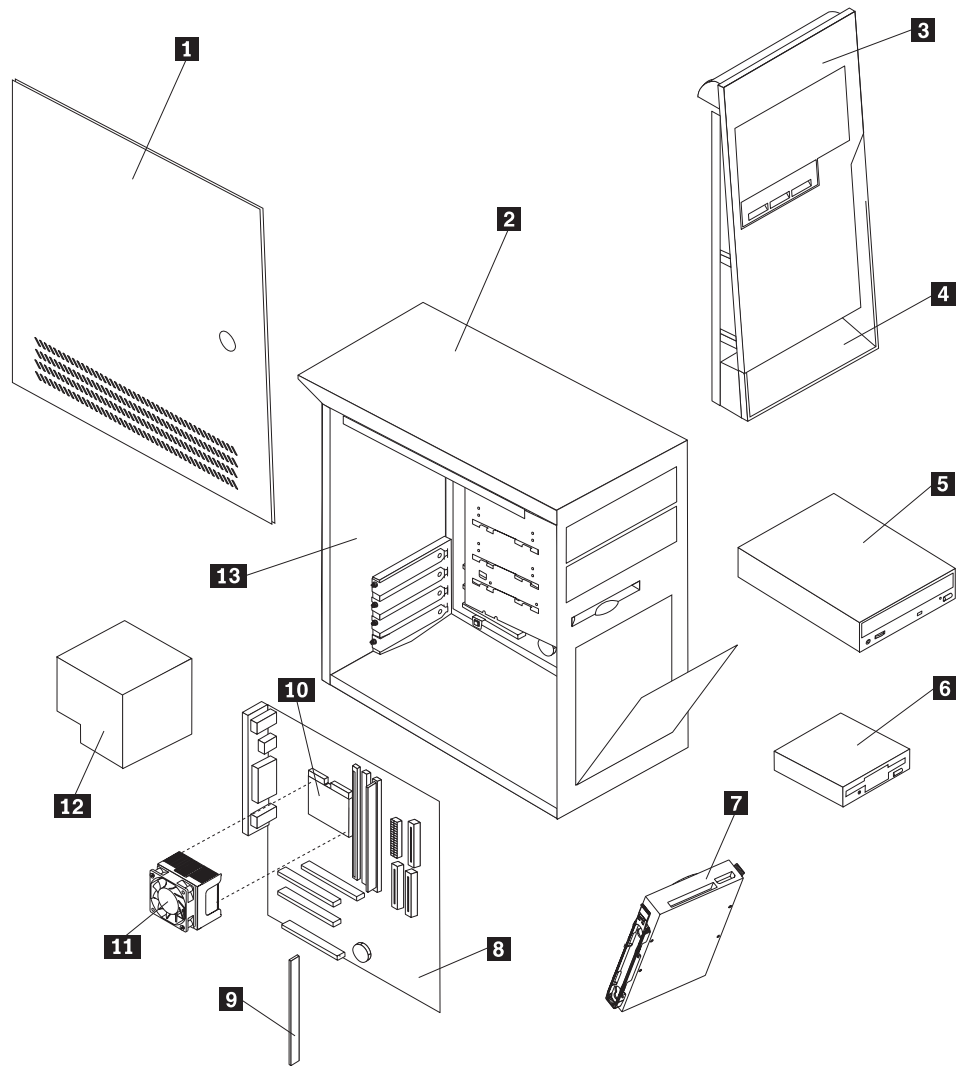
8188 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models D1U D1G D1M D1A D1C D1H F1U F1G F1M F1A F1C F1H EJU EJG EJM EJA EJC EJH 21M 31M 41M 22M 32M 42M 3AM 3BM 46M 47M 49U 49G 49M 49A 49C 49H 29U 29L 29G 29M 29A 29Q 29C 29H 52M 53M)	89P8300	*
Arabic (models D1G F1G EJG 49G 29G)	89P8301	*
Belgian/French (models D1G F1G EJG 49G 29G)	89P8302	*
Belgian/UK (models D1G F1G EJG 49G 29G)	89P8303	*
Bulgarian (models D1G F1G EJG 49G 29G)	89P8305	*
Chinese/US (models D1B D1V F1B F1V EJB EJV 49B 49V 29B 29V)	89P8306	*
Czech (models D1G F1G EJG 49G 29G)	89P8307	*
Danish (models D1G F1G EJG 49G 29G)	89P8308	*
Dutch (models D1G F1G EJG 49G 29G)	89P8309	*
French (models D1G F1G EJG 49G 29G)	89P8310	*
French Canadian (models D1F F1F EJJ 49F 29F)	89P8311	*
French Canadian (models D1F F1F EJJ 49F 29F)	89P8312	*
German (models D1G F1G EJG 49G 29G)	89P8313	*
Greek (models D1G F1G EJG 49G 29G)	89P8314	*
Hebrew (models D1G F1G EJG 49G 29G)	89P8315	*
Hungarian (models D1G F1G EJG 49G 29G)	89P8316	*
Iceland (models D1G F1G EJG 49G 29G)	89P8317	*
Italian (models D1G F1G EJG 49G 29G)	89P8318	*
Italian (models D1G F1G EJG 49G 29G)	89P8319	*
Japanese (models D1J F1J EJJ 49J 29J)	89P8320	*
Korean (models D1K EJK 49K 29K)	89P8321	*
LA Spanish (models D1S D1Y F1S F1Y EJS EJY 23S 23Y 33S 33Y 34S 34Y 35S 35Y 43S 43Y 11S 11Y 36S 36Y 37S 37Y 38S 38Y 39S 39Y 44S 44Y 45S 45Y 48S 48Y 51S 51Y 49S 49Y 29S 29Y)	89P8322	*
Norwegian (models D1G F1G EJG 49G 29G)	89P8323	*
Polish (models D1G F1G EJG 49G 29G)	89P8324	*
Portuguese (models D1G F1G EJG 49G 29G)	89P8325	*
Romanian (models DD1G F1G EJG 49G 29G)	89P8326	*
Russian (models D1G F1G EJG 49G 29G)	89P8327	*
Russian/Cy (models D1G F1G EJG 49G 29G)	89P8328	*
Serbian/Cyrillic (models D1G F1G EJG 49G 29G)	89P8329	*
Slovak (models D1G F1G EJG 49G 29G)	89P8330	*
Spanish (models D1G F1G EJG 49G 29G)	89P8331	*
Swedish/Finn (models D1G F1G EJG 49G 29G)	89P8332	*
Swiss F/G (models D1G F1G EJG 49G 29G)	89P8333	*

<b>8188 Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU</b>
Thailand (models D1T F1T EJT 49T)	89P8334	*
Turkish (models D1G F1G EJJ 49G 29G)	89P8335	*
Turkish (models D1G F1G EJJ 49G 29G)	89P8336	*
UK English (models D1G F1G EJJ 49G 29G)	89P8337	*
US International (models D1G F1G EJJ 49G 29G)	89P8338	*
Yugoslav/Latin (models D1G F1G EJJ 49G 29G)	89P8339	*
Brazil/Portuguese (models D1P F1P EJP 23P 33P 34P 35P 43P 11P 36P 37P 38P 39P 44P 45P 48P 51P 49P 29P)	89P8304	*

<b>8188 Power Cords</b>	<b>FRU#</b>	<b>CRU</b>
Power Cord (models D1U D1F D1S D1P D1G D1A D1T D1V F1U F1F F1S F1P F1G F1A F1T F1V EJU EJJ EJS EJP EJJ EJA EJT EJV 11S 11P 36S 36P 37S 37P 38S 38P 39S 39P 44S 44P 45S 45P 48S 48P 51S 51P 49U 49F 49S 49P 49G 49A 49T 49V 29U 29F 29S 29P 29L 29G 29A 29T 29V)	6952301	*
Power Cord (models D1M F1M EJM 21M 31M 41M 22M 32M 42M 3AM 3BM 46M 47M 49M 29M 52M 53M)	13F9939	*
Power Cord (models D1G D1A D1K F1G EJJ EJK 49G 49K 29G 29K)	13F9978	*
Power Cord (models D1G D1A D1H F1G F1H EJJ EJJ 49G 49H 29G 29H)	14F0032	*
Power Cord (models D1G F1G EJJ 49G 29G)	13F9996	*
Power Cord (models D1S D1P D1Y D1G F1S F1P F1Y F1G EJS EJP EJJ EJJ 11S 11P 11Y 36S 36P 36Y 37S 37P 37Y 38S 38P 38Y 39S 39P 39Y 44S 44P 44Y 45S 45P 45Y 48S 48P 48Y 51S 51P 51Y 49S 49P 49Y 49G 29S 29P 29L 29Y 29G)	14F0068	*
Power Cord (models D1Y F1Y EJJ 11Y 36Y 37Y 38Y 39Y 44Y 45Y 48Y 51Y 49Y 29Y)	36L8879	*
Power Cord (models D1C D1B D1H F1C F1B F1H EJJ EJJ EJJ 49C 49B 49H 29C 29B 29H)	02K0545	*
Power Cord (models 29J)	1838576	*
Power Cord (models D1G F1G EJJ 49G 29G)	14F0086	*
Power Cord (models D1G D1A F1G EJJ 49G 29G)	14F0014	*
Power Cord (models D1G F1G EJJ 49G 29G)	14F0050	*
Power Cord (models 29Q)	49P2078	*



# Type 8189



Item #	8189 FRUs	FRU#	CRU
1	Side cover assembly (all models)	59P8547	*
2	"L" cover (all models)	59P8546	N
3	Front bezel assembly (all models)	59P8544	*
4	Trim bezel/label kit (all models)	49P1900	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y A4C B1U B1S B1P B1Y B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G D1C D2U D2S D2P D2Y D3G D4U D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E2P E2Y E3G F1U F1S F1P F1Y F2G A5A A5C A6V B7U B7F DAU DAF 71G 72G 73G 74G 75G 77G A7K A8K DBK DCK E1K F1U F1F A4U A4S A4P A4Y D1U D1F D1S D1P D1Y E8U E8F E8S E8P E8Y F5U F5S F5P F5Y E6M E6A E6C E6V E6R E7G E2U E2S 13U 15U 16U 17U)	33P3203	*



Item #	8189 FRUs	FRU#	CRU
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y A4C B1U B1S B1P B1Y B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G D1C D2U D2S D2P D2Y D3G D4U D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E2P E2Y E3G F1U F1S F1P F1Y F2G A5A A5C A6V B7U B7F DAU DAF 71G 72G 73G 74G 75G 77G A7K A8K DBK DCK E1K F1U F1F A4U A4S A4P A4Y D1U D1F D1S D1P D1Y E8U E8F E8S E8P E8Y F5U F5S F5P F5Y E6M E6A E6C E6V E6R E7G E2U E2S 13U 15U 16U 17U)	33P3211	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y A4C B1U B1S B1P B1Y B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G D1C D2U D2S D2P D2Y D3G D4U D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E2P E2Y E3G F1U F1S F1P F1Y F2G A5A A5C A6V B7U B7F DAU DAF 71G 72G 73G 74G 75G 77G A7K A8K DBK DCK E1K F1U F1F A4U A4S A4P A4Y D1U D1F D1S D1P D1Y E8U E8F E8S E8P E8Y F5U F5S F5P F5Y E6M E6A E6C E6V E6R E7G E2U E2S 13U 15U 16U 17U)	33P3207	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y A4C B1U B1S B1P B1Y B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G D1C D2U D2S D2P D2Y D3G D4U D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E2P E2Y E3G F1U F1S F1P F1Y F2G A5A A5C A6V B7U B7F DAU DAF 71G 72G 73G 74G 75G 77G A7K A8K DBK DCK E1K F1U F1F A4U A4S A4P A4Y D1U D1F D1S D1P D1Y E8U E8F E8S E8P E8Y F5U F5S F5P F5Y E6M E6A E6C E6V E6R E7G E2U E2S 13U 15U 16U 17U)	71P7353	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 11U 12U 21C 41K G4A 32U 7CG 7EG 52K 53K 14U 35G 36S 36Y 37U 37S 37Y 37A 37T 38U 38S 39C 3AK 3CG 3DS 3DY 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 47U 47S 47Y 47A 47T 48C 4AK 4CU 4CS 4CY 7GG 3GU 3GF 3GS 3GP 3GL 3HU 4KG 57G 57A 57Q 57T 58U 58F 61G 62C 63U 63F 5CU 65U 65F)	71P7367	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 11U 12U 21C 41K G4A 32U 7CG 7EG 52K 53K 14U 35G 36S 36Y 37U 37S 37Y 37A 37T 38U 38S 39C 3AK 3CG 3DS 3DY 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 47U 47S 47Y 47A 47T 48C 4AK 4CU 4CS 4CY 7GG 3GU 3GF 3GS 3GP 3GL 3HU 4KG 57G 57A 57Q 57T 58U 58F 61G 62C 63U 63F 5CU 65U 65F)	71P7369	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 11U 12U 21C 41K G4A 32U 7CG 7EG 52K 53K 14U 35G 36S 36Y 37U 37S 37Y 37A 37T 38U 38S 39C 3AK 3CG 3DS 3DY 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 47U 47S 47Y 47A 47T 48C 4AK 4CU 4CS 4CY 7GG 3GU 3GF 3GS 3GP 3GL 3HU 4KG 57G 57A 57Q 57T 58U 58F 61G 62C 63U 63F 5CU 65U 65F)	71P7371	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 11U 12U 21C 41K G4A 32U 7CG 7EG 52K 53K 14U 35G 36S 36Y 37U 37S 37Y 37A 37T 38U 38S 39C 3AK 3CG 3DS 3DY 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 47U 47S 47Y 47A 47T 48C 4AK 4CU 4CS 4CY 7GG 3GU 3GF 3GS 3GP 3GL 3HU 4KG 57G 57A 57Q 57T 58U 58F 61G 62C 63U 63F 5CU 65U 65F)	71P7375	*

Item #	8189 FRUs	FRU#	CRU
5	CD-ROM Drive 48X - Black w/o jack & vol (models 11U 12U 21C 41K G4A 32U 7CG 7EG 52K 53K 14U 35G 36S 36Y 37U 37S 37Y 37A 37T 38U 38S 39C 3AK 3CG 3DS 3DY 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 47U 47S 47Y 47A 47T 48C 4AK 4CU 4CS 4CY 7GG 3GU 3GF 3GS 3GP 3GL 3HU 4KG 57G 57A 57Q 57T 58U 58F 61G 62C 63U 63F 5CU 65U 65F)	71P7385	*
5	DVD-ROM 16X/48X - Black (models B2U D5U E4U G3U E5G G7G 76G 7AG 7BG EAG F6U F6F F6S F6P F6Y F6G F4G F7M F7A F7C F7H F7R G3F 4DG 55C 7HG 7KG 7MG 4JU 4JF 4JS 4JP 4JL 3JU 4LG 4MU 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 66G 67C)	71P7357	*
5	DVD-ROM 16X/48X - Black (models B2U D5U E4U G3U E5G G7G 76G 7AG 7BG EAG F6U F6F F6S F6P F6Y F6G F4G F7M F7A F7C F7H F7R G3F 4DG 55C 7HG 7KG 7MG 4JU 4JF 4JS 4JP 4JL 3JU 4LG 4MU 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 66G 67C)	33P3237	*
5	48X24X48X CD-RW (Black) (models B6G DEU)	33P3289	*
5	CD-RW Drive (48X/32X/48X) (models G1U G2G G5G 78G 7DG 34U 45U 22U 49U 49S)	71P7347	*
5	CD-RW Drive (48X/32X/48X) (models G1U G2G G5G 78G 7DG 34U 45U 22U 49U 49S B6G DEU)	71P7349	*
5	48X Combo drive (models 31U 42K 43U 51U 51S 51Y 54K 7FG)	33P3301	*
5	Universal Combo Drive (48x/24x/48x/16x) -- optional to 26K5379 and 26K5381 (models 3BK 4BK 4FU 7JG 7LG 7NG 3FU 3KU 59U 5AU 64U)	26K5390	*
5	Combo drive 48x/32x/48x/16x (models 3BK 4BK 4FU 7JG 7LG 7NG 3FU 3KU 59U 5AU 64U)	26K5379	*
5	Combo drive 48x/32x/48x/16x (models 3BK 4BK 4FU 7JG 7LG 7NG 3FU 3KU 59U 5AU 64U)	26K5381	*
5	Universal Rambo drive (Black) (model 56U)	26K5377	*
5	Rambo III (Black) -- optional to 26K5377 (model 56U)	33P3309	*
6	Diskette drive, 3.5 1.44 MB (all models)	76H4091	*
7	Hard disk drive, 40 GB EIDE (All models EXCEPT CTO CAU CBU CCU CDU CEU CGU F4G F7M F7A F7C F7H F7R A7K A8K DBK DCK 55C 3AK 3BK 4AK 4BK 56U 7JG 7LG 7NG)	19K1568	*
7	Hard disk drive, 80GB 7200rpm S-ATA (models F4G F7M F7A F7C F7H F7R 55C 67C)	71P7293	*
7	Hard disk drive, 80GB 7200rpm EIDE ATA-100 (models A7K A8K DBK DCK 31U 41K 42K 43U 51U 51S 51Y 52K 53K 54K 3AK 3BK 4AK 4BK 56U 7JG 7LG 7NG 59U 64U)	24P3665	*
8	System board, 10/100 E-net, no POV (models A1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y B1U B1S B1P B1Y B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G B6G D2U D2S D2P D2Y D3G D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E2P E2Y E3G F1U F1S F1P F1Y F2G G1U G2G G5G 71G 72G 73G 74G 75G 77G 78G CAU CBU CCU CDU CEU CGU CTO A7K A8K DBK DCK E1K DEU F1U F1F 11U 12U 21C 31U 41K 42K 43U G4A 7CG E2U E2S 7DG CJU CKU CMU 7EG 13U 33U 44U 52K 53K 54K 7FG 34U 45U 22U CVU CWU)	89P7942	**

Item #	8189 FRUs	FRU#	CRU
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models 1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y B1U B1S B1P B1Y B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G B6G D2U D2S D2P D2Y D3G D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E2P E2Y E3G F1U F1S F1P F1Y F2G G1U G2G G5G 71G 72G 73G 74G 75G 77G 78G CAU CBU CCU CDU CEU CGU CTO A7K A8K DBK DCK E1K DEU F1U F1F 11U 12U 21C 31U 41K 42K 43U G4A 7CG E2U E2S 7DG CJU CKU CMU 7EG 13U 33U 44U 52K 53K 54K 7FG 34U 45U 22U 3HU C2U)	41X2825	**
8	System board, 10/100 E-net, POV (models A6V B7U B7F DAU DAF 76G 7AG 7BG E7G F4G 32U CLU 51U 51S 51Y CNU CPU 7MG 7NG)	89P7941	**
8	System board, 10/100 E-net, POV (models A6V B7U B7F DAU DAF 76G 7AG 7BG E7G F4G 32U CLU 51U 51S 51Y CNU CPU 3CG 4DG 7HG 7JG 7KG 7LG 7MG 7NG)	41X2827	**
8	System board, Gigabit E-net, no POV (models A4C B2U D1C D4U D5U E4U G3U A4U A4S A4P A4Y D1U D1F D1S D1P D1Y E8U E8F E8S E8P E8Y F5U F5S F5P F5Y E6M E6A E6C E6V E6R G3F 3EU 3FU)	89P7944	**
8	System board, Gigabit E-net, no POV (models A4C B2U D1C D4U D5U E4U G3U A4U A4S A4P A4Y D1U D1F D1S D1P D1Y E8U E8F E8S E8P E8Y F5U F5S F5P F5Y E6M E6A E6C E6V E6R G3F 14U 36S 36Y 38U 38S 39C 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 48C 49U 49S 4EU 4FU 56U CUU 3EU 3FU 3GU 3GF 3GS 3GP 3GL 4JU 4JF 4JS 4JP 4JL C1U 15U 16U 17U 3JU 3KU C1U 58U 58F 59U 5AU 62C 63U 63F 64U C5U C6U)	41X2829	**
8	System board, Gigabit E-net, POV (models A5A A5C E5G G7G EAG F6U F6F F6S F6P F6Y F6G F7M F7A F7C F7H F7R CQJ CRJ)	89P7943	**
8	System board, Gigabit E-net, POV (models A5A A5C E5G G7G EAG F6U F6F F6S F6P F6Y F6G F7M F7A F7C F7H F7R CQJ CRJ 3DS 3DY 4CU 4CS 4CY 55C 4LG 4MU 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 5CU 65U 65F 66G 67C C4U)	41X2831	**
9	128MB NP SDRAM PC2700 (models CAU CBU CCU CDU CEU CGU CJU CKU CLU CMU)	31P9120	*
9	256MB NP SDRAM PC2700 (models 35G 36S 36Y 37U 37S 37Y 37A 37T 39C 3AK 3BK 3CG 3DS 3DY 47U 47S 47Y 47A 47T 48C 4DG 55C 7GG 7HG 7JG 7KG 7LG CSU CTU CUU CVU CWU 7MG 7NG 3HU C1U C2U 15U A1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y A4C B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G B6G D1C D3G D4U D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E3G F2G G2G G5G A5A A5C A6V B7U B7F DAU DAF E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G A7K A8K DBK DCK E1K DEU 7AG 7BG A4U A4S A4P A4Y D1U D1F D1S D1P D1Y EAG F6U F6F F6S F6P F6Y F6G E6M E6A E6C E6V E6R 11U 12U 21C 41K 42K G4A 7CG 7DG 7EG 13U 33U 44U CNU CPU 52K 53K 54K 7FG)	31P9121	*
9	512MB NP SDRAM PC2700 (models B1U B1S B1P B1Y B2U D2U D2S D2P D2Y D4U D5U E2P E2Y E4U F1U F1S F1P F1Y G1U G3U F1U F1F E8U E8F E8S E8P E8Y F5U F5S F5P F5Y E7G F4G F7M F7A F7C F7H F7R 31U 43U G3F 32U E2U E2S 51U 51S 51Y 34U 45U 22U 14U 38U 38S 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 49U 49S 4AK 4BK 4CU 4CS 4CY 4EU 4FU 56U 3EU 3FU 3GU 3GF 3GS 3GP 3GL 4JU 4JF 4JS 4JP 4JL 16U 17U 3JU 3KU)	31P9122	*

Item #	8189 FRUs	FRU#	CRU
9	256MB NP SDRAM PC3200 (models 4KG 57G 57A 57Q 57T 61G 62C 4LG 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 66G 67C)	73P2683	*
9	512MB NP SDRAM PC3200 (models 58U 58F 59U 5AU 63U 63F 64U 4MU 5CU 65U 65F)	73P2684	*
10	Intel Celeron 2.2 GHz (model 11U)	74P1621	**
10	Intel Celeron 2.4 GHz (models 12U 12S 12P 12Y 12U)	88P7699	**
10	Intel Celeron 2.6 GHz (models 13U 14U CVU)	13R8907	**
10	Intel Celeron 2.7 GHz (models CTO-U CTO-G)	13R8947	**
10	Intel Celeron 2.8 GHz (models CPU CNU 7FG CWU)	13R8963	**
10	Intel P4 2.4 GHz (models A1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y CAU A7K A8K 7EG)	74P1625	**
10	Intel P4 2.53 GHz (models B1U B1S B1P B1Y B2U B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G B6G B7U B7F 71G 72G CBU)	74P1627	**
10	Intel P4 2.66 GHz (models D2U D2S D2P D2Y D3G D4U D5U D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G DAU DAF 73G 74G CCU DBK DCK DEU 7AG 21C)	74P1629	**
10	Intel P4 2.8 GHz (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E2P E2Y E3G E4U E5G 75G 76G CDU E1K E2U E2S 34U)	74P1631	**
10	Intel P4 3.06 GHz (models F1U F1S F1P F1Y F2G 77G CEU F1U F1F 7BG 45U)	74P1633	**
10	Intel P4 2.4 GHz (models A4C A5A A5C A6V A4U A4S A4P A4Y)	88P5867	**
10	Intel P4 2.6 GHz (models D1C D1U D1F D1S D1P D1Y 7DG CJU 22U)	88P5868	**
10	Intel P4 2.8 GHz (models E8U E8F E8S E8P E8Y EAG E6M E6A E6C E6V E6R E7G 31U 32U 7CG CKU CLU 33U CNU 7FG 7MG 7NG 3EU 3FU)	88P5869	**
10	Intel P4 3.0 GHz (models F5U F5S F5P F5Y F6U F6F F6S F6P F6Y F6G F4G F7M F7A F7C F7H F7R 41K 42K 43U CMU 44U CPU CQJ)	88P5870	**
10	Intel P4 3.2 GHz (models G1U G2G G3U G5G G7G 78G CGU G3F G4A 51U 51S 51Y CRJ 52K 53K 54K 55C 56U)	88P5871	**
10	Intel Prescott Celeron 2.66 GHz (model 15U)	19R0419	**
10	Intel Prescott Celeron 2.8 GHz (models 16U 17U)	19R0421	**
10	Intel Prescott P4 2.8 GHz (models 35G 36S 36Y 7GG 3GU 3GF 3GS 3GP 3GL 3HU C1U C2U)	19R0423	**
10	Intel Prescott P4 2.8 GHz (models 37U 37S 37Y 37A 37T 38U 38S 39C 3AK 3BK 3CG 3DS 3DY 7HG 7JG CSU 3JU 3KU C1U)	19R0292	**
10	Intel Prescott P4 3.0 GHz (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 47U 47S 47Y 47A 47T 48C 49U 49S 4AK 4BK 4CU 4CS 4CY 4DG 4EU 4FU 7KG 7LG CTU CUU 4JU 4JF 4JS 4JP 4JL 4KG 4LG 4MU C4U)	19R0294	**
10	Intel Prescott P4 3.2 GHz (models 57G 57A 57Q 57T 58U 58F 59U 5AU 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 5CU C5U)	19R0296	**
10	Intel Prescott P4 3.4 GHz (models 61G 62C 63U 63F 64U 65U 65F 66G 67C C6U)	29R6991	**

Item #	8189 FRUs	FRU#	CRU
11	Fan sink (for <3.0 Ghz processors) (models 22U 14U CVU CWU 7MG 7NG 3EU 3FU A1U A1S A1P A1U A1Y A2U A2F A2S A2P A2Y A4C B1U B1S B1P B1Y B2U B3U B3S B3P B3Y B4U B4F B4S B4P B4Y B5G B6G D1C D2U D2S D2P D2Y D3G D4U D5U D6G D7U D7S D7P D7Y D8U D8F D8S D8P D8Y D9G E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E2P E2Y E3G E4U A5A A5C A6V B7U B7F DAU DAF E5G 71G 72G 73G 74G 75G 76G CAU CBU CCU CDU A7K A8K DBK DCK E1K DEU 7AG A4U A4S A4P A4Y D1U D1F D1S D1P D1Y E8U E8F E8S E8P E8Y EAG E6M E6A E6C E6V E6R E7G 11U 12U 21C 31U 32U 7CG E2U E2S 7DG CJU CKU CLU 7EG 33U CNU 7FG 34U)	32P4004	**
11	Fan Sink (for =>3.0 Ghz processors) (models F1U F1S F1P F1Y F2G G1U G2G G3U G5G G7G 77G 78G CEU CGU F1U F1F 7BG F5U F5S F5P F5Y F6U F6F F6S F6P F6Y F6G F4G F7M F7A F7C F7H F7R 31U 41K 42K 43U G3F G4A CMU 44U CPU 51U 51S 51Y CQJ CRJ 52K 53K 54K 45U 55C 56U)	01R3330	**
11	Fan Sink (for Prescott only) (models 35G 36S 36Y 37U 37S 37Y 37A 37T 38U 38S 39C 3AK 3BK 3CG 3DS 3DY 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 47U 47S 47Y 47A 47T 48C 49U 49S 4AK 4BK 4CU 4CS 4CY 4DG 4EU 4FU 7KG 7LG CTU CUU 7GG 7HG 7JG 3GU 3GF 3GS 3GP 3GL 3HU 4JU 4JF 4JS 4JP 4JL C1U C2U 15U 16U 17U 3JU 3KU C1U 4KG 4LG 4MU C4U 57G 57A 57Q 57T 58U 58F 59U 5AU 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 5CU C5U 61G 62C 63U 63F 64U 65U 65F 66G 67C C6U)	13R9195	**
11	Heat sink, dual heat pipe -- optional to 13R9195 (models 35G 36S 36Y 37U 37S 37Y 37A 37T 38U 38S 39C 3AK 3BK 3CG 3DS 3DY 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 47U 47S 47Y 47A 47T 48C 49U 49S 4AK 4BK 4CU 4CS 4CY 4DG 4EU 4FU 7KG 7LG CTU CUU 7GG 7HG 7JG 3GU 3GF 3GS 3GP 3GL 3HU 4JU 4JF 4JS 4JP 4JL C1U C2U 15U 16U 17U 3JU 3KU C1U 4KG 4LG 4MU C4U)	13N2951	**
11	P4 mounting assembly (all models)	48P6726	*
12	Power supply, 230W (models 14U 35G 37U 37A 37T 38U 3AK 3BK 3CG 46U 46F 46G 46M 46A 46T 46K 46J 47U 47A 47T 49U 4AK 4BK 4CU 4DG 4EU 4FU 56U 7GG 7HG 7JG 7KG 7LG CSU CTU CUU CVU CWU 7MG 7NG 3EU 3FU 3GU 3GF 3HU 4JU 4JF C1U C2U 15U 16U 17U 3JU 3KU C1U 4KG 57G 57A 57T 58U 58F 59U 5AU 61G 63U 63F 64U 4LG 4MU 5BU 5BF 5BG 5BM 5BA 5BT 5BK 5BJ 5CU 65U 65F 66G C4U C5U C6U A1U A1U A2U A2F B1U B2U B3U B4U B4F B5G B6G D2U D3G D4U D5U D6G D7U D8U D8F D9G E1U E1F E1G E1M E1A E1T E1C E1B E1J E3G E4U F1U F2G G1U G2G G3U G5G A5A B7U B7F DAU DAF E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G CTO CAU CBU CCU CDU CEU CGU A7K A8K DBK DCK E1K DEU F1U F1F 7AG 7BG A4U D1U D1F E8U E8F F5U EAG F6U F6F F6G E6M E6A E6R E7G F4G F7M F7A F7R 11U 12U 31U 41K 42K 43U G3F G4A 32U 7CG E2U 7DG CJU CKU CLU CMU 7EG 13U 33U 44U 51U CNU CPU CQJ CRJ 52K 53K 54K 7FG 34U 45U 22U)	74P4300	N
12	Power supply, 230W (China) (models A4S A4P A4Y D1S D1P D1Y E8S E8P E8Y F5S F5P F5Y F6S F6P F6Y E6C E6V F7C F7H 21C E2S 51S 51Y 36S 36Y 37S 37Y 38S 39C 3DS 3DY 46S 46P 46Y 46C 46B 46H 46V 47S 47Y 48C 49S 4CS 4CY 55C 3GS 3GP 4JS 4JP 3GL 4JL 57Q 62C 5BS 5BP 5BL 5BY 5BQ 5BC 5BB 5BH 5BV 67C)	74P4301	N
13	Chassis assembly (all models)	59P8542	N

The FRUs listed in the following table are not illustrated.

8189 FRUs	FRU#	CRU
Speaker assembly (all models)	00N5151	*
Rubber foot (all models)	03K9655	*
Front bezel release (all models)	25P0069	*
Front bezel blanks kit (all models)	25P0068	*
5.25 EMC shield (all models)	19K5548	*
Cable, Diskette drive (all models)	59P8568	*
Cable clip (all models)	59P8584	*
Cable, IDE (ATA66 2 drop) (all models)	37L5098	*
RFID Antenna w/o velcro (models A5A A5C A6V B7U B7F DAU DAF E5G G7G 76G 7AG 7BG EAG F6U F6F F6S F6P F6Y F6G E7G F4G F7M F7A F7C F7H F7R 32U CLU CQJ CRJ 3CG 3DS 3DY 4CU 4CS 4CY 4DG 55C 7HG 7JG 7KG 7LG 7MG 7NG 4LG 4MU 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 5CU 65U 65F 66G 67C C4U)	03K9654	*
2 drop (close spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8571	*
2 drop (large spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8572	*
Retainer, cards I/O (all models)	59P8564	*
Universal adapter bracket (3.5 - 5.25) (all models)	32P4743	*
Fan assembly, 80 mm, fixed speed (all models)	22P4447	*
Misc. hardware kit (all models)	09N5764	*
Cable, CDRom audio (all models)	75H9219	*
Cable, C2 (models A5A A5C A6V B7U B7F DAU DAF E5G G7G 76G 7AG 7BG EAG F6U F6F F6S F6P F6Y F6G E7G F4G F7M F7A F7C F7H F7R 32U CLU CQJ CRJ 3CG 3DS 3DY 4CU 4CS 4CY 4DG 55C 7HG 7JG 7KG 7LG 7MG 7NG 4LG 4MU 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 5CU 65U 65F 66G 67C C4U)	09K9827	*
Hard disk drive bracket assembly (all models)	59P8543	*
Hard disk drive tray (dampened) (all models)	59P8549	*
Cable, dual USB 2.0 (all models)	49P4365	*
Power switch assembly (all models)	59P8545	*
Audio cable assembly (ATA) (all models)	49P1933	*
PCMCIA assembly (all models)	59P8587	*
PCMCIA ATA-66 cable (all models)	49P4361	*
2 audio front panel (all models)	49P1750	*
2 audio w/1394 front panel (all models)	49P1752	*
2 audio w/1394 & SPDIF front panel (all models)	49P1754	*
Bezel Diskette drive (all models)	59P8548	*
Battery, 3.0 V (all models)	33F8354	*
Mouse, optical wheel (All models EXCEPT CAU CBU CCU CDU CEU CGU CJU CKU CLU CMU CNU CPU B5G D3G D6G D9G E3G F2G G2G G5G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG 7CG 7DG 7EG 7FG 7GG C4U C5U C6U)	89P5089	*
Mouse, PS/2 - 2 Button (Black) (models CAU CBU CCU CDU CEU CGU CJU CKU CLU CMU CNU CPU)	24P0383	*



8189 FRUs	FRU#	CRU
Mouse, PS/2 - 3 Button (Ball) Wheel (models B5G D3G D6G D9G E3G F2G G2G G5G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG 7CG 7DG 7EG 7FG 7GG)	24P0491	*
Korean label (models A7K A8K DBK DCK E1K 41K 42K E6R F7R 52K 53K 54K 3AK 3BK 46K 4AK 4BK 5BK 5BK)	13R9162	*
Keylock Kit GBM (random keyed) (models A5A A5C A6V B7U B7F DAU DAF E5G G7G 76G 7AG 7BG EAG F6U F6F F6S F6P F6Y F6G E7G F4G F7M F7A F7C F7H F7R CLU CQJ CRJ 3CG 3DS 3DY 4CU 4CS 4CY 4DG 55C 7HG 7JG 7KG 7LG 7MG 7NG 4LG 4MU 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ 5CU 65U 65F 66G 67C C4U)	26K2205	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Video Adapter, Robin, Nvidia 64Mb (models D5U A7K A8K DBK DCK 31U 41K 42K 43U 32U 7CG 52K 53K 54K 3AK 3BK 4AK 4BK)	73P0715	*
ATI RADEON 9600 (Superman) (models 51U 51S 51Y 4FU 56U 3FU)	88P6084	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8189 Windows 2000 Recovery CDs	FRU #	CRU
US (models 72G 74G A1U B3U D7U)	13R9673	*
FR (models 72G 74G)	13R9674	*
GR (models 72G 74G)	13R9675	*
IT (models 72G 74G)	13R9677	*
BR (models A1P B3P D7P)	13R9678	*
SP (models 72G 74G A1S A1Y B3S B3Y D7S D7Y)	13R9676	*
DK (models 72G 74G)	13R9680	*
NL (models 72G 74G)	13R9683	*
AE (models 72G 74G)	13R9687	*
SV (models 72G 74G)	13R9679	*
HE (models 72G 74G)	13R9684	*
FI (models 72G 74G)	13R9681	*
NO (models 72G 74G)	13R9682	*
PL (models 72G 74G)	13R9685	*
PO (models 72G 74G)	13R9691	*

8189 Windows 2000 Recovery CDs	FRU #	CRU
RU (models 72G 74G)	13R9688	*
HU (models 72G 74G)	13R9690	*
CZ (models 72G 74G)	13R9686	*
TR (models 72G 74G)	13R9689	*
GK (models 72G 74G)	13R9692	*

8189 Windows XP Pro Recovery CDs	FRU #	CRU
US (models 4KG 57G 57A 57Q 57T 58U 59U 5AU 61G 63U 64U 4LG 4MU 5BU 5BL 5BG 5BM 5BA 5BQ 5BT 5BH 5CU 65U 66G71G 73G 75G 76G 77G 78G 7AG 7BG A2U A4U A5A B1U B2U B4U B5G B6G B7U D1U D2U D3G D4U D5U D8U D9G DAU DEU E1A E1G E1H E1M E1T E1U E2U E3G E4U E5G E6A E6M E6R E7G E8U EAG F1U F1U F2G F4G F5U F6G F6U F7A F7H F7M F7R G1U G2G G3U G5G G7G 11U 12U 31U 43U G4A 32U 7CG E2U 7DG 7EG 13U 33U 44U 51U 7FG 34U 45U 22U 14U 35G 37U 37A 37T 38U 3CG 46U 46G 46M 46A 46T 46H 47U 47A 47T 49U 4CU 4DG 4EU 4FU 56U 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3EU 3FU 3GU 3GL 3HU 4JU 4JL 15U 16U 17U 3JU 3KU)	29R7998	*
FR (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R7999	*
GR (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8000	*
IT (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8002	*
SP (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2S A2Y A4S A4Y B1S B1Y B4S B4Y B5G B6G D1S D1Y D2S D2Y D3G D8S D8Y D9G E1G E1S E1Y E2Y E3G E5G E7G E8S E8Y EAG F1S F1Y F2G F4G F5S F5Y F6G F6S F6Y G2G G5G G7G 7CG E2S 7DG 7EG 51S 51Y 7FG 35G 36S 36Y 37S 37Y 38S 3CG 3DS 3DY 46S 46Y 46G 47S 47Y 49S 4CS 4CY 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GS 4JS 4KG 57G 61G 4LG 5BS 5BY 5BG 66G)	29R8001	*
BR (models A2P A4P B1P B4P D1P D2P D8P E1P E2P E8P F1P F5P F6P 46P 3GP 4JP 5BP)	29R8003	*
DK (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8005	*
NL (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8008	*
AE (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8012	*
SV (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8004	*



8189 Windows XP Pro Recovery CDs	FRU #	CRU
HE (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8009	*
FI (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8006	*
NO (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8007	*
PL (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8010	*
PO (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8016	*
RU (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8013	*
HU (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8015	*
CZ (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8011	*
TR (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8014	*
GK (models 71G 73G 75G 76G 77G 78G 7AG 7BG A2F B4F B5G B6G B7F D1F D3G D8F D9G DAF E1F E1G E3G E5G E7G E8F EAG F1F F2G F4G F6F F6G G2G G5G G7G G3F 7CG 7DG 7EG 7FG 35G 3CG 46F 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GF 4JF 4KG 57G 58F 61G 63F 4LG 5BF 5BG 65F 66G)	29R8017	*
JP (model E1J 46J 5BJ)	13M6438	*
SC (models A4C A5C D1C E1C E6C F7C 21C 39C 46C 48C 55C 62C 5BC 67C)	27K6907	*
TW (models A6V E1V E6V 46V 5BV)	27K6912	*
HK (models E1B 46B 5BB)	27K6917	*
KR (models A7K DBK E1K 52K 46K 5BK)	27K6902	*
Multilingual RCD 1 (models 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	19R1268	*
Multilingual RCD 2 (models 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	19R1270	*

8189 Windows XP Home Recovery CDs	FRU#	CRU
KR (models A8K DCK 41K 42K 53K 54K 3AK 3BK 4AK 4BK)	27K6927	*

8189 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3EU 3FU 3GU 3GL 3HU 4JU 4JL C1U C2U 15U 16U 17U 3JU 3KU 4KG 57G 57A 57Q 58U 59U 5AU 61G 62C 63U 64U 4LG 4MU 5BU 5BL 5BG 5BM 5BA 5BQ 5BC 5BH 5CU 65U 66G 67C A1U A1U A2U A4C B1U B2U B3U B4U B5G B6G D1C D2U D3G D4U D5U D6G D7U D8U D9G E1U E1G E1M E1A E1C E1H E3G E4U F1U F2G G1U G2G G3U G5G A5A A5C B7U DAU E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G CAU CBU CCU CDU CEU CGU DEU F1U 7AG 7BG A4U D1U E8U F5U EAG F6U F6G E6M E6A E6C E6R E7G F4G F7M F7A F7C F7H F7R 11U 12U 21C 31U 43U G4A 32U 7CG E2U 7DG CJU CKU CLU CMU 7EG 13U 33U 44U 51U CNU CPU 7FG 34U 45U 22U 14U 35G 37U 37A 38U 39C 3CG 46U 46G 46M 46A 46C 46H 47U 47A 48C 49U 4CU 4DG 4EU 4FU 55C 56U)	89P8300	*
Arabic (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8301	*
Belgian/French (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8302	*
Belgian/UK (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8303	*
Bulgarian (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8305	*
Chinese/US (models E1B E1V A6V E6V 46B 46V 5BB 5BV)	89P8306	*
Czech (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8307	*
Danish (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8308	*
Dutch (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8309	*
French (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8310	*
French Canadian (models A2F B4F D8F E1F B7F DAF F1F D1F E8F F6F G3F 46F 3GF 4JF 58F 63F 5BF 65F)	89P8311	*
French Canadian (models A2F B4F D8F E1F B7F DAF F1F D1F E8F F6F G3F 46F 3GF 4JF 58F 63F 5BF 65F)	89P8312	*

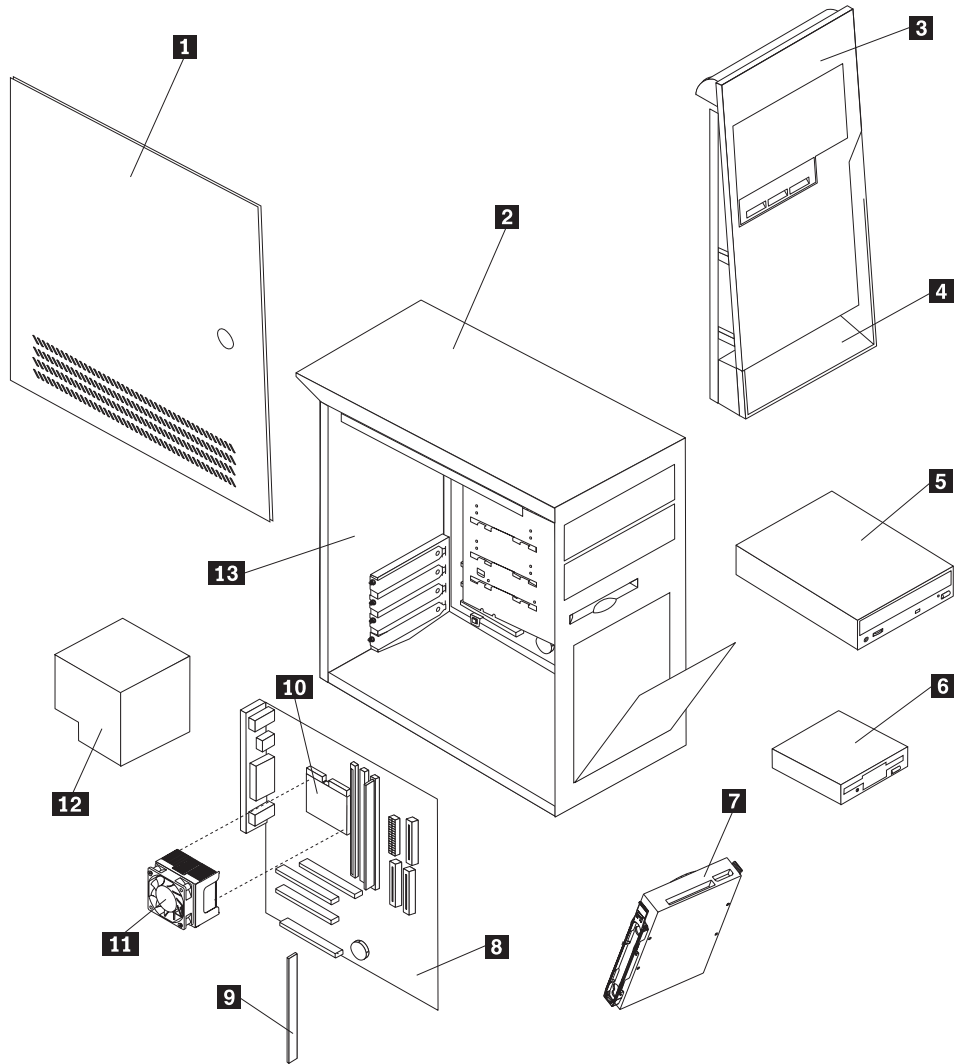
8189 Keyboards (Standard PS/2 Black)	FRU#	CRU
German (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8313	*
Greek (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8314	*
Hebrew (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8315	*
Hungarian (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8316	*
Iceland (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8317	*
Italian (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8318	*
Italian (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8319	*
Japanese (models E1J 46J 5BJ)	89P8320	*
Korean (models A7K A8K DBK DCK E1K 41K 42K 52K 53K 54K 3AK 3BK 46K 4AK 4BK 5BK)	89P8321	*
LA Spanish (models A1S A1Y A2S A2Y B1S B1Y B3S B3Y B4S B4Y D2S D2Y D7S D7Y D8S D8Y E1S E1Y E2Y F1S F1Y A4S A4Y D1S D1Y E8S E8Y F5S F5Y F6S F6Y E2S 51S 51Y 36S 36Y 37S 37Y 38S 3DS 3DY 46S 46Y 47S 47Y 49S 4CS 4CY 3GS 4JS 5BS 5BY)	89P8322	*
Norwegian (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8323	*
Polish (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8324	*
Portuguese (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8325	*
Romanian (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8326	*

8189 Keyboards (Standard PS/2 Black)	FRU#	CRU
Russian (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8327	*
Russian/Cy (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8328	*
Serbian/Cyrillic (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8329	*
Slovak (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8330	*
Spanish (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8331	*
Swedish/Finn (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8332	*
Swiss F/G (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8333	*
Thailand (models E1T 37T 46T 47T 57T 5BT)	89P8334	*
Turkish (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8335	*
Turkish (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8336	*
UK English (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8337	*
US International (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8338	*
Yugoslav/Latin (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	89P8339	*
Brazil/Portuguese (models A1P A2P B1P B3P B4P D2P D7P D8P E1P E2P F1P A4P D1P E8P F5P F6P 46P 3GP 4JP 5BP)	89P8304	*

8189 Power Cords	FRU#	CRU
Power Cord (models 13U 33U 44U 51U 51S CNU CPU 7FG 34U 45U 22U 14U 35G 36S 37U 37S 37A 37T 38U 38S 3CG 3DS 46U 46F 46S 46P 46G 46M 46A 46T 46V 47U 47S 47A 47T 49U 49S 4CU 4CS 4DG 4EU 4FU 56U 7GG 7HG 7JG 7KG 7LG CSU CTU CUU CVU CWU 7MG 7NG 3EU 3FU 3GU 3GF 3GS 3GP 3GL 3HU 4JU 4JF 4JS 4JP 4JL C1U C2U 15U 16U 17U 3JU 3KU C1U 4KG 57G 57A 57T 58U 58F 59U 5AU 61G 63U 63F 64U 4LG 4MU 5BU 5BF 5BS 5BP 5BL 5BG 5BA 5BT 5BV 5CU 65U 65F 66G C4U C5U C6U A1U A1S A1P A1U A2U A2F A2S A2P B1U B1S B1P B2U B3U B3S B3P B4U B4F B4S B4P B5G B6G D2U D2S D2P D3G D4U D5U D6G D7U D7S D7P D8U D8F D8S D8P D9G E1U E1F E1S E1P E1G E1A E1T E1V E2P E3G E4U F1U F1S F1P F2G G1U G2G G3U G5G A5A A6V B7U B7F DAU DAF E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G CTO CAU CBU CCU CDU CEU CGU DEU F1U F1F 7AG 7BG A4U A4S A4P D1U D1F D1S D1P E8U E8F E8S E8P F5U F5S F5P EAG F6U F6F F6S F6P F6G E6M E6A E6V E7G F4G F7M F7A 11U 12U 31U 43U G3F G4A 32U 7CG E2U E2S 7DG CJU CKU CLU CMU 7EG)	6952301	*
Power Cord (models E1M E6A F7A G4A 37A 46A 47A 5BM)	13F9939	*
Power Cord (models B5G B6G D3G D6G D9G E1G E1A E3G F2G G2G G5G A5A E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G A7K A8K DBK DCK E1K 7AG 7BG EAG F6G E6A E6R E7G F4G F7A F7R 41K 42K G4A 7CG 7DG 7EG 52K 53K 54K 7FG 35G 37A 3AK 3BK 3CG 46G 46A 46K 47A 4AK 4BK 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 5BK 66G)	13F9978	*
Power Cord (models B5G B6G D3G D6G D9G E1G E1A E1H E3G F2G G2G G5G A5A E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E6A E7G F4G F7A F7H G4A 7CG 7DG 7EG 7FG 35G 37A 3CG 46G 46A 46H 47A 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 5BH 66G)	14F0032	*
Power Cord (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	13F9996	*
Power Cord (models A1S A1P A1Y A2S A2P A2Y B1S B1P B1Y B3S B3P B3Y B4S B4P B4Y B5G B6G D2S D2P D2Y D3G D6G D7S D7P D7Y D8S D8P D8Y D9G E1S E1P E1Y E1G E2P E2Y E3G F1S F1P F1Y F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG A4S A4P A4Y D1S D1P D1Y E8S E8P E8Y F5S F5P F5Y EAG F6S F6P F6Y F6G E7G F4G 7CG E2S 7DG 7EG 51S 51Y 7FG 35G 36S 36Y 37S 37Y 38S 3CG 3DS 3DY 46S 46P 46Y 46G 47S 47Y 49S 4CS 4CY 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 3GS 3GP 3GL 4JS 4JP 4JL 4KG 57G 61G 4LG 5BS 5BP 5BL 5BY 5BG 66G)	14F0068	*
Power Cord (models A1Y A2Y B1Y B3Y B4Y D2Y D7Y D8Y E1Y E2Y F1Y A4Y D1Y E8Y F5Y F6Y 51Y 36Y 37Y 3DY 46Y 47Y 4CY 5BY)	36L8879	*
Power Cord (models 5BJ)	1838576	*
Power Cord (models A4C D1C E1C E1B E1H A5C E6C F7C F7H 21C 39C 46C 46B 46H 48C 55C 62C 5BC 5BB 5BH 67C)	02K0545	*
Power Cord (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	14F0086	*
Power Cord (models B5G B6G D3G D6G D9G E1G E1A E3G F2G G2G G5G A5A E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E6A E7G F4G F7A G4A 7CG 7DG 7EG 7FG 35G 37A 3CG 46G 46A 47A 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	14F0014	*
Power Cord (models B5G B6G D3G D6G D9G E1G E3G F2G G2G G5G E5G G7G 71G 72G 73G 74G 75G 76G 77G 78G 7AG 7BG EAG F6G E7G F4G 7CG 7DG 7EG 7FG 35G 3CG 46G 4DG 7GG 7HG 7JG 7KG 7LG 7MG 7NG 4KG 57G 61G 4LG 5BG 66G)	14F0050	*

8189 Power Cords	FRU#	CRU
Power Cord (models 57Q 5BQ)	49P2078	*

## Type 8190



Item #	8190 FRUs	FRU#	CRU
1	Side cover assembly (all models)	59P8547	*
2	"L" cover (all models)	59P8546	N
3	Front bezel assembly (all models)	59P8544	*
4	Trim bezel/label kit (all models)	49P1900	*
5	CD-ROM Drive 48X - Black (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	33P3203	*
5	CD-ROM Drive 48X - Black (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	33P3211	*
5	CD-ROM Drive 48X - Black (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	33P3207	*

Item #	8190 FRUs	FRU#	CRU
5	CD-ROM Drive 48X - Black (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	71P7353	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	71P7367	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	71P7369	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	71P7371	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	71P7375	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	71P7385	*
5	DVD-ROM 16X/48X - Black (models 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	71P7357	*
5	DVD-ROM 16X/48X - Black (models 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	33P3237	*
6	Diskette drive, 3.5 1.44 MB (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1K E1J 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	76H4091	*
7	Hard disk drive, 40 GB EIDE (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	19K1568	*
8	System board, 10/100 E-net, no POV (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	89P7942	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	41X2825	**
8	System board, Gigabit E-net, no POV (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	89P7944	**
8	System board, Gigabit E-net, no POV (supports Prescott CPU) (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	41X2829	**
8	System board, Gigabit E-net, POV (supports Prescott CPU) (models 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	41X2831	**
9	256 MB PC2700 SDRAM (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	31P9121	*
9	512 MB PC2700 SDRAM (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	31P9122	*
9	256 MB PC3200 SDRAM (models 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	73P2683	*
10	Intel P4 2.8 GHz (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	74P1631	**
10	Intel P4 3.0 GHz Prescott (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J)	19R0294	**
10	Intel P4 3.2 GHz Prescott (models 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	19R0296	**



Item #	8190 FRUs	FRU#	CRU
11	Fan sink (for <3.0Ghz processors) (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K)	32P4004	**
11	Fan Sink (for Prescott only) (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	13R9195	**
11	Heat Sink, Dual Heat Pipe -- optional to 13R9195 (for Prescott only) (models 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	13N2951	**
11	P4 mounting assembly (all models)	48P6726	*
12	Power supply, 230W (models E1U E1F E1G E1M E1A E1T E1J E1K 46U 46F 46G 46M 46A 46T 46K 46J 5BU 5BF 5BG 5BM 5BA 5BT 5BK 5BJ)	74P4300	N
12	Power supply, 230W (China) (models 46S 46P 46Y 46C 46B 46H 46V 5BS 5BP 5BL 5BY 5BQ 5BC 5BB 5BH 5BV)	74P4301	N
13	Chassis assembly (all models)	59P8542	N

The FRUs listed in the following table are not illustrated.

8190 FRUs	FRU#	CRU
Speaker assembly (all models)	00N5151	*
Rubber foot (all models)	03K9655	*
Front bezel release (all models)	25P0069	*
Front bezel blanks kit (all models)	25P0068	*
5.25 EMC shield (all models)	19K5548	*
Cable, Diskette drive (all models)	59P8568	*
Cable clip (all models)	59P8584	*
Cable, IDE (ATA66 2 drop) (all models)	37L5098	*
RFID Antenna w/o velcro (models 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	03K9654	*
2 drop (close spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8571	*
2 drop (large spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8572	*
Retainer, cards I/O (all models)	59P8564	*
Universal adapter bracket (3.5 - 5.25) (all models)	32P4743	*
Fan assembly, 80 mm, fixed speed (all models)	22P4447	*
Misc. hardware kit (all models)	09N5764	*
Cable, CDRom audio (all models)	75H9219	*
C2 Cable (models 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	09K9827	*
Hard disk drive bracket assembly (all models)	59P8543	*
Hard disk drive tray (dampened) (all models)	59P8549	*
Cable, dual USB 2.0 (all models)	49P4365	*
Power switch assembly (all models)	59P8545	*
Audio cable assembly (ATA) (all models)	49P1933	*
PCMCIA assembly (all models)	59P8587	*



8190 FRUs	FRU#	CRU
PCMCIA ATA-66 cable (all models)	49P4361	*
2 audio front panel (all models)	49P1750	*
2 audio w/1394 front panel (all models)	49P1752	*
2 audio w/1394 & SPDIF front panel (all models)	49P1754	*
Bezel Diskette drive (all models)	59P8548	*
Keylock Kit GBM (random keyed) (models 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	59P8565	*
Battery, 3.0 V (all models)	33F8354	*
Mouse, optical wheel (models E1U E1F E1S E1P E1Y E1G E1M E1A E1T E1C E1B E1H E1V E1J E1K 46U 46F 46S 46P 46Y 46G 46M 46A 46T 46C 46B 46H 46V 46K 46J 5BU 5BF 5BS 5BP 5BL 5BY 5BG 5BM 5BA 5BQ 5BT 5BC 5BB 5BH 5BV 5BK 5BJ)	89P5089	*
Video DVI-D connection adapter LP (ATX) (model KJA)	58P9978	*
Korean label (models E1K 46K 5BK)	13R9162	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Video DVI-D connection adapter LP (model KJA)	58P9978	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

The FRUs listed in the following table are not illustrated.

8190 Windows XP pro Recovery CDs	FRU #	CRU
US (models E1U E1G E1M E1A E1T E1H 46U 46G 46M 46A 46T 46H 5BU 5BL 5BG 5BM 5BA 5BQ 5BT 5BH)	29R7998	*
FR (models E1F E1G 46F 46G 5BF 5BG)	29R7999	*
GR (models E1G 46G 5BG)	29R8000	*
IT (models E1G 46G 5BG)	29R8002	*
SP (models E1S E1Y E1G 46S 46Y 46G 5BS 5BY 5BG)	29R8001	*
BR (models E1P 46P 5BP)	29R8003	*
DK (models E1G 46G 5BG)	29R8005	*
NL (models E1G 46G 5BG)	29R8008	*
AE (models E1G 46G 5BG)	29R8012	*

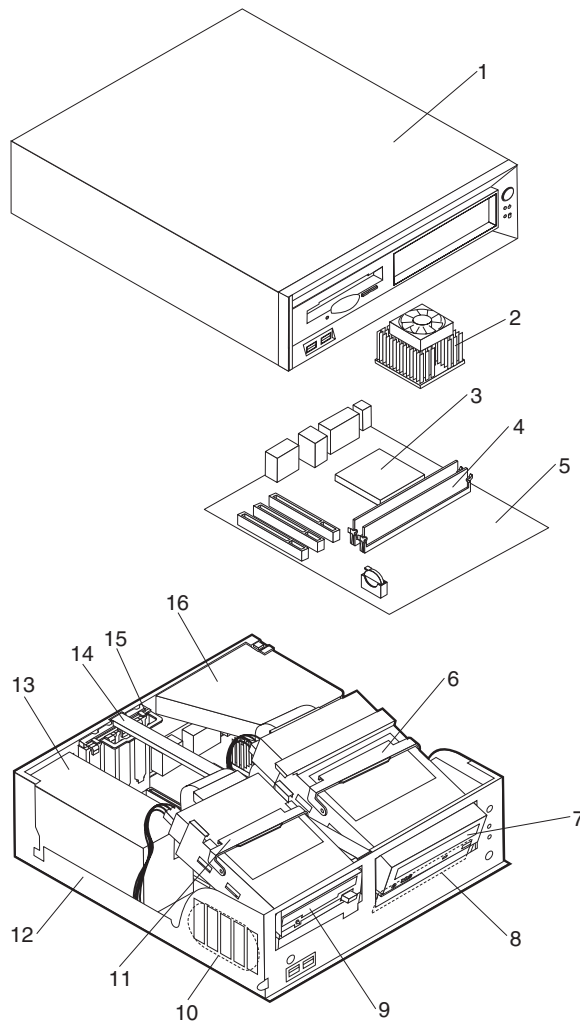
8190 Windows XP pro Recovery CDs	FRU #	CRU
SV (models E1G 46G 5BG)	29R8004	*
HE (models E1G 46G 5BG)	29R8009	*
FI (models E1G 46G 5BG)	29R8006	*
NO (models E1G 46G 5BG)	29R8007	*
PL (models E1G 46G 5BG)	29R8010	*
PO (models E1G 46G 5BG)	29R8016	*
RU (models E1G 46G 5BG)	29R8013	*
HU (models E1G 46G 5BG)	29R8015	*
CZ (models E1G 46G 5BG)	29R8011	*
TR (models E1G 46G 5BG)	29R8014	*
GK (models E1G 46G 5BG)	29R8017	*
JP (models E1J 46J 5BJ)	13M6438	*
SC (models E1C 46C 5BC)	27K6907	*
TW (models E1V 46V 5BV)	27K6912	*
HK (models E1B 46B 5BB)	27K6917	*
KR (models E1K 46K 5BK)	27K6902	*
Multilingual RCD 1 (model 46G 5BG)	19R1268	*
Multilingual RCD 2 (model 46G 5BG)	19R1270	*

8190 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models E1U E1G E1M E1A E1C E1H 46U 46G 46M 46A 46C 46H 5BU 5BL 5BG 5BM 5BA 5BQ 5BC 5BH)	89P8300	*
Arabic (models E1G 46G 5BG)	89P8301	*
Belgian/French (models E1G 46G 5BG)	89P8302	*
Belgian/UK (models E1G 46G 5BG)	89P8303	*
Bulgarian (models E1G 46G 5BG)	89P8305	*
Chinese/US (models E1B E1V 46B 46V 5BB 5VB)	89P8306	*
Czech (models E1G 46G 5BG)	89P8307	*
Danish (models E1G 46G 5BG)	89P8308	*
Dutch (models E1G 46G 5BG)	89P8309	*
French (models E1G 46G 5BG)	89P8310	*
French Canadian (models E1F 46F 5BF)	89P8311	*
French Canadian (models E1F 46F 5BF)	89P8312	*
German (models E1G 46G 5BG)	89P8313	*
Greek (models E1G 46G 5BG)	89P8314	*
Hebrew (models E1G 46G 5BG)	89P8315	*
Hungarian (models E1G 46G 5BG)	89P8316	*
Iceland (models E1G 46G 5BG)	89P8317	*
Italian (models E1G 46G 5BG)	89P8318	*
Italian (models E1G 46G 5BG)	89P8319	*
Japanese (models E1J 46J 5BJ)	89P8320	*

<b>8190 Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU</b>
Korean (models E1K 46K 5BK)	89P8321	*
LA Spanish (models E1S E1Y 46S 46Y 5BS 5BY)	89P8322	*
Norwegian (models E1G 46G 5BG)	89P8323	*
Polish (models E1G 46G 5BG)	89P8324	*
Portuguese (models E1G 46G 5BG)	89P8325	*
Romanian (models E1G 46G 5BG)	89P8326	*
Russian (models E1G 46G 5BG)	89P8327	*
Russian/Cy (models E1G 46G 5BG)	89P8328	*
Serbian/Cyrillic (models E1G 46G 5BG)	89P8329	*
Slovak (models E1G 46G 5BG)	89P8330	*
Spanish (models E1G 46G 5BG)	89P8331	*
Swedish/Finn (models E1G 46G 5BG)	89P8332	*
Swiss F/G (models E1G 46G 5BG)	89P8333	*
Thailand (models E1T 46T 5BT)	89P8334	*
Turkish (models E1G 46G 5BG)	89P8335	*
Turkish (models E1G 46G 5BG)	89P8336	*
UK English (models E1G 46G 5BG)	89P8337	*
US International (models E1G 46G 5BG)	89P8338	*
Yugoslav/Latin (models E1G 46G 5BG)	89P8339	*
Brazil/Portuguese (models E1P 46P 5BP)	89P8304	*

<b>8190 Power Cords</b>	<b>FRU#</b>	<b>CRU</b>
Power Cord (models E1U E1F E1S E1P E1G E1A E1T E1V 46U 46F 46S 46P 46G 46A 46T 46V 5BU 5BF 5BS 5BP 5BL 5BG 5BA 5BT 5BV)	6952301	*
Power Cord (models E1M 46M 5BM)	13F9939	*
Power Cord (models E1G E1A E1K 46G 46K 5BG 5BK)	13F9978	*
Power Cord (models E1G E1A E1H 46G 46H 5BG 5BH)	14F0032	*
Power Cord (models E1G 46G 5BG)	13F9996	*
Power Cord (models E1S E1P E1Y E1G 46S 46P 46Y 46G 5BS 5BP 5BL 5BY 5BG)	14F0068	*
Power Cord (models E1Y 46Y 5BY)	36L8879	*
Power Cord (models 5BJ)	1838576	*
Power Cord (models E1C E1B E1H 46C 46B 46H 5BC 5BB 5BH)	02K0545	*
Power Cord (models E1G 46G 5BG)	14F0086	*
Power Cord (models E1G E1A 46G 5BG)	14F0014	*
Power Cord (models E1G 46G 5BG)	14F0050	*
Power Cord (models 5BQ)	49P2078	*

## Type 8192



Item #	8192 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5925	*
2	Fan sink (model E1B)	32P4004	**
3	Intel P4 2.8 GHz (model E1B)	88P5869	**
4	256 MB SDRAM (model E1B)	31P9121	*
5	System board, 10/100 E-net, no POV (model E1B)	89P7942	**
5	System board, 10/100 E-net, no POV (supports Prescott CPU) (model E1B)	41X2825	**
6	Pivot lock, 5.25 DASD (all models)	24P9877	*
7	48X combo drive (model E1B)	33P3301	**
8	Hard disk drive, 40 GB EIDE (model E1B)	19K1568	*
9	Diskette drive, 3.5 1.44 MB (model E1B)	76H4091	**
10	Speaker assembly (all models)	00N5151	*
11	Pivot lock, 3.5 Diskette drive (all models)	24P9876	*
12	Chassis assembly (all models)	88P5924	**

Item #	8192 FRUs	FRU#	CRU
13	Power supply, 200W (China) (model E1B)	74P4306	N
14	Link bracket (all models)	88P5918	*
15	I/O cam bracket (all models)	24P9869	*
16	Air duct w/o fan (all models)	88P5922	*

The FRUs listed in the following table are not illustrated.

8192 FRUs	FRU#	CRU
5.25 EMC shield (all models)	19K5548	*
Retention kit (all models)	88P5915	*
Planar shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P5930	*
Optical cable, ATA66 (all models)	88P5929	*
Cable, Hard disk drive (all models)	88P5928	*
Cable, SATA (all models)	88P5927	*
Service label (all models)	88P5926	*
Bezel kit (all models)	88P5923	*
Fan bracket assembly (all models)	88P5921	*
Misc. hardware kit (all models)	24P9878	*
Cable, CDROM audio (all models)	75H9219	*
Vertical stand, black (all models)	88P5917	*
Bottom foot (all models)	03K9655	*
Hard disk drive mounting bracket assembly (all models)	88P5916	**
Cable assembly, power/LED (all models)	37L5092	*
Cable, USB 2.0 (all models)	49P4365	*
Battery, 3.0 V (all models)	33F8354	*
Power switch repair kit (all models)	26K1195	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, optical wheel (model E1B)	89P5089	*
PCI modem card (soft) LP V.90 (model E1B)	22P7945	*
Audio - 2 audio/USB (model E1B)	49P1750	*
Speakers, Infinity Active T1 (Black) (model E1B)	25P4726	*
Speaker Power brick - UK, Hong Kong (3 prong) (model E1B)	25P5703	*
Speaker Power brick (newer 2 prong) - China, Thailand, Philippines (model E1B)	10K2597	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*

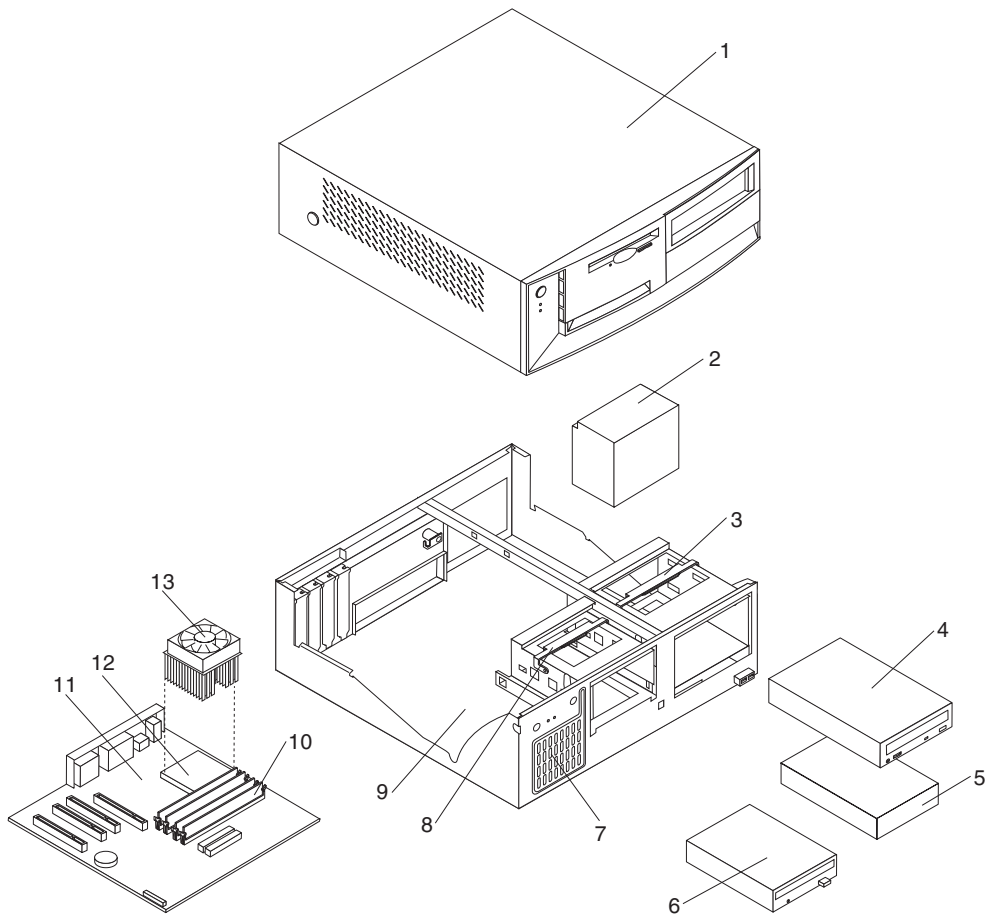
8192 FRUs	FRU#	CRU
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8192 Windows XP Home Recovery CDs	FRU#	CRU
HK (model E1B)	27K6942	*

8192 RAK III Lite Keyboards	FRU#	CRU
Chinese/US (model E1B)	19K1915	*

8192 Power Cords	FRU#	CRU
Power Cord (model E1B)	02K0545	*

## Type 8193



Item #	8193 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5962	*
2	Power supply, 230W (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U CTO CAU CBU CCU CDU CEU CFU 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F 7GG 7HG 33G 35G 36U 37U 41U 42G 43U 7JG 7KG 7LG 7MG B4G)	74P4300	N
2	230W Power Supply - AcBel China version (models 14P 15P 21P 31P 32P 34P 36P 41P 43P)	74P4301	N
3	Pivot lock, 5.25 DASD (all models)	09N5747	**
4	CD-ROM Drive 48X - Black (models B1G D1G E1G F1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 93U 95U 97U 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F)	33P3203	**
4	CD-ROM Drive 48X - Black (models B1G D1G E1G F1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 93U 95U 97U 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F)	33P3211	**
4	CD-ROM Drive 48X - Black (models B1G D1G E1G F1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 93U 95U 97U 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F)	33P3207	**
4	CD-ROM Drive 48X - Black (models B1G D1G E1G F1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 93U 95U 97U 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F)	71P7353	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models G1G 7HG 14P 15P 21P 31P 33G 34P 35G 36U 36P 41U 41P 42G 7JG 7KG 7LG 7MG B4G)	71P7367	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models G1G 7HG 14P 15P 21P 31P 33G 34P 35G 36U 36P 41U 41P 42G 7JG 7KG 7LG 7MG B4G)	71P7369	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models G1G 7HG 14P 15P 21P 31P 33G 34P 35G 36U 36P 41U 41P 42G 7JG 7KG 7LG 7MG B4G)	71P7371	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models G1G 7HG 14P 15P 21P 31P 33G 34P 35G 36U 36P 41U 41P 42G 7JG 7KG 7LG 7MG B4G)	71P7385	**
4	CD-ROM Drive 48X - Black w/o jack & vol (models G1G 7HG 14P 15P 21P 31P 33G 34P 35G 36U 36P 41U 41P 42G 7JG 7KG 7LG 7MG B4G)	71P7375	**
4	48X24X48X CD-RW (Black) (models 92U 94U 96U 98U)	33P3289	**
4	CD-RW Drive (48X/32X/48X) (models 7GG 32P 37U 43U 43P)	71P7347	**
4	CD-RW Drive (48X/32X/48X) (models 7GG 32P 37U 43U 43P)	71P7349	**
5	Hard disk drive, 40 GB EIDE (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F 7GG 7HG 14P 15P 21P 31P 32P 33G 34P 35G 36U 36P 37U 41U 41P 42G 43U 43P 7JG 7KG 7LG 7MG B4G)	19K1568	*
6	Diskette drive, 3.5 1.44 MB (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U CTO CAU CBU CCU CDU CEU CFU 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F 7GG 7HG 14P 15P 21P 31P 32P 33G 34P 35G 36U 36P 37U 41U 41P 42G 43U 43P 7JG 7KG 7LG 7MG B4G)	76H4091	**
7	Speaker assembly (no models)	00N5151	*

Item #	8193 FRUs	FRU#	CRU
8	Pivot lock, 3.5 DASD (all models)	09N5748	**
9	Chassis/top cover kit (all models)	88P5963	**
10	128 MB SDRAM (models CAU CBU CCU CDU CEU CFU 14P 15P)	31P9120	*
10	256 MB SDRAM (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F 7GG 7HG 21P 31P 32P 33G 34P 35G 36U 36P 37U 41U 41P 42G 43U 43P 7JG 7KG 7LG 7MG B4G)	31P9121	*
11	System board, 10/100 E-net, no POV (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U CTO CAU CBU CCU CDU CEU CFU 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F 7GG 7HG)	89P7942	**
11	System board, 10/100 E-net, no POV (supports Prescott CPU) (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U CTO CAU CBU CCU CDU CEU CFU 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F 7GG 7HG 14P 15P 21P 31P 32P 33G 34P 35G 36U 36P 37U 41U 41P 42G 43U 43P 7JG 7KG 7LG 7MG)	41X2825	**
11	System board, 10/100 E-net, no POV (model B4G)	89P7958	**
11	System board, 10/100 E-net, no POV (supports Prescott CPU) (model B4G)	41X2833	**
12	Intel Celeron 2.0 GHz (models 11U 11F)	74P1617	**
12	Intel Celeron 2.2 GHz (models 12U 12F)	74P1621	**
12	Intel Celeron 2.4 GHz (models 14P 15P)	88P7699	**
12	Intel P4 2.4 GHz (models 91U 92U CAU A3U A3F 7HG)	74P1625	**
12	Intel P4 2.4 GHz (models 93U CBU)	88P5867	**
12	Intel P4 2.53 GHz (models B1G 71G 72G 73G 74G)	74P1627	**
12	Intel P4 2.66 GHz (models D1G 75G 76G 77G 78G 7FG 95U 96U CDU D1U D1F 21P)	74P1629	**
12	Intel P4 2.6 GHz (models 94U CCU)	88P5868	**
12	Intel P4 2.8 GHz (models E1G 79G 7AG 7BG 97U CEU E1U E1F 31P)	74P1631	**
12	Intel P4 2.8 GHz (models 98U CFU 32P)	88P5869	**
12	Intel Prescott Celeron 2.53 GHz (models 7MG B4G)	19R0417	**
12	Intel Prescott P4 2.8 GHz (models 35G 36U 36P 37U 7KG 7LG)	19R0292	**
12	Intel Prescott P4 2.8 GHz (models 33G 34P 7JG)	19R0423	**
12	Intel P4 3.0 GHz (model F2G)	88P5870	**
12	Intel Prescott P4 3.0 GHz (models 42G 43U 43P)	19R0294	**
12	Intel P4 3.06 GHz (models F1G 7CG 7DG 7EG F1U F1F 41U 41P)	74P1633	**
12	Intel P4 3.2 GHz (models G1G 7GG)	88P5871	**
13	Fan sink (for =>3.0 Ghz) (models F1G 7CG 7DG 7EG G1G F2G F1U F1F 7GG 41U 41P)	01R3330	**
13	Fan sink (for <3.0Ghz processors) (models B1G 71G 72G 73G 74G D1G 75G 76G 77G 78G E1G 79G 7AG 7BG 7FG 91U 92U 93U 94U 95U 96U 97U 98U CAU CBU CCU CDU CEU CFU 11U 11F 11U 11F 12U 12F 13U 13F A3U A3F D1U D1F E1U E1F 7HG 14P 15P 21P 31P 32P)	32P4004	**



Item #	8193 FRUs	FRU#	CRU
13	Fan sink (models 33G 34P 7JG 35G 36U 36P 37U 7KG 7LG 42G 43U 43P 7MG B4G)	13R9195	**

The FRUs listed in the following table are not illustrated.

8193 FRUs	FRU#	CRU
Cable, C2 assembly (all models)	09K9827	*
Retention kit (all models)	88P5915	*
Planar shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P6515	*
Cable, ATA66 1 drop (all models)	88P5967	*
Cable, ATA66 2 drop (all models)	88P5971	*
Cable, SATA (all models)	88P5927	*
Service label (all models)	88P5964	*
Bezel kit (all models)	44P4731	*
Fan bracket assembly (models F1G 7CG 7DG 7EG G1G F2G F1U F1F 7GG 7HG 14P 15P 21P 31P 32P 33G 34P 35G 36U 36P 37U 41U 41P 42G 43U 43P 7JG 7KG 7LG 7MG B4G)	89P6700	*
Misc. hardware kit (all models)	88P5965	*
Cable, CDROM audio (all models)	75H9219	*
Hard disk drive mounting bracket assembly (all models)	88P5916	*
Cable assembly, power/LED (all models)	37L5092	*
Cable, second serial port (all models)	49P4530	*
Cable, dual USB 2.0 (all models)	49P4365	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, 2 button, black (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U CAU CBU CCU CDU CEU CFU 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	24P0383	*
Mouse, Optical Wheelmouse (models 14P 15P 21P 31P 32P 34P 36U 36P 37U 41U 41P 43U 43P)	89P5089	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*

8193 FRUs	FRU#	CRU
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8193 Recovery CDs Win 2k	FRU #	CRU
US (models 74G 78G)	13R9673	*
FR (models 74G 78G)	13R9674	*
GR (models 74G 78G)	13R9675	*
IT (models 74G 78G)	13R9677	*
SP (models 74G 78G)	13R9676	*
DK (models 74G 78G)	13R9680	*
NL (models 74G 78G)	13R9683	*
AE (models 74G 78G)	13R9687	*
SV (models 74G 78G)	13R9679	*
HE (models 74G 78G)	13R9684	*
FI (models 74G 78G)	13R9681	*
NO (models 74G 78G)	13R9682	*
PL (models 74G 78G)	13R9685	*
PO (models 74G 78G)	13R9691	*
RU (models 74G 78G)	13R9688	*
HU (models 74G 78G)	13R9690	*
CZ (models 74G 78G)	13R9686	*
TR (models 74G 78G)	13R9689	*
GK (models 74G 78G)	13R9692	*

8193 Windows XP Pro Recovery CDs	FRU #	CRU
US (models 11U 12U 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG 91U 92U 93U 94U 95U 96U 97U 98U A3U B1G D1G D1U E1G E1U F1G F1U F2G G1G 7GG 7HG 33G 35G 36U 37U 41U 42G 43U 7JG 7KG 7LG 7MG B4G)	29R7998	*
FR (models 11F 12F 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG A3F B1G D1F D1G E1F E1G F1F F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R7999	*
GR (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8000	*
IT (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8002	*
BR (models 14P 15P 21P 31P 32P 34P 36P 41P 43P)	29R8003	*
SP (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8001	*
DK (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8005	*
NL (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8008	*
AE (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8012	*

<b>8193 Windows XP Pro Recovery CDs</b>	<b>FRU #</b>	<b>CRU</b>
SV (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	1349699	*
HE (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8009	*
FI (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8006	*
NO (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8007	*
PL (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8010	*
PO (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8016	*
RU (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8013	*
HU (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8015	*
CZ (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8011	*
TR (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8014	*
GK (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D1G E1G F1G F2G G1G 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	29R8017	*
Multilingual RCD 1 (models 33G 35G 36U 37U 41U 42G 43U 7JG 7KG 7LG 7MG B4G)	19R1268	*
Multilingual RCD 2 (models 33G 35G 36U 37U 41U 42G 43U 7JG 7KG 7LG 7MG B4G)	19R1270	*

<b>8193 Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU</b>
US English (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U CAU CBU CCU CDU CEU CFU 11U 12U A3U D1U E1U F1U 7GG 7HG 33G 35G 36U 37U 41U 42G 43U 7JG 7KG 7LG 7MG B4G)	89P8300	*
Arabic (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8301	*
Belgian/French (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8302	*
Belgian/UK (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8303	*
Brazil/Portuguese) (models 14P 15P 21P 31P 32P 34P 36P 41P 43P)	89P8304	*
Bulgarian (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8305	*
Czech (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8307	*

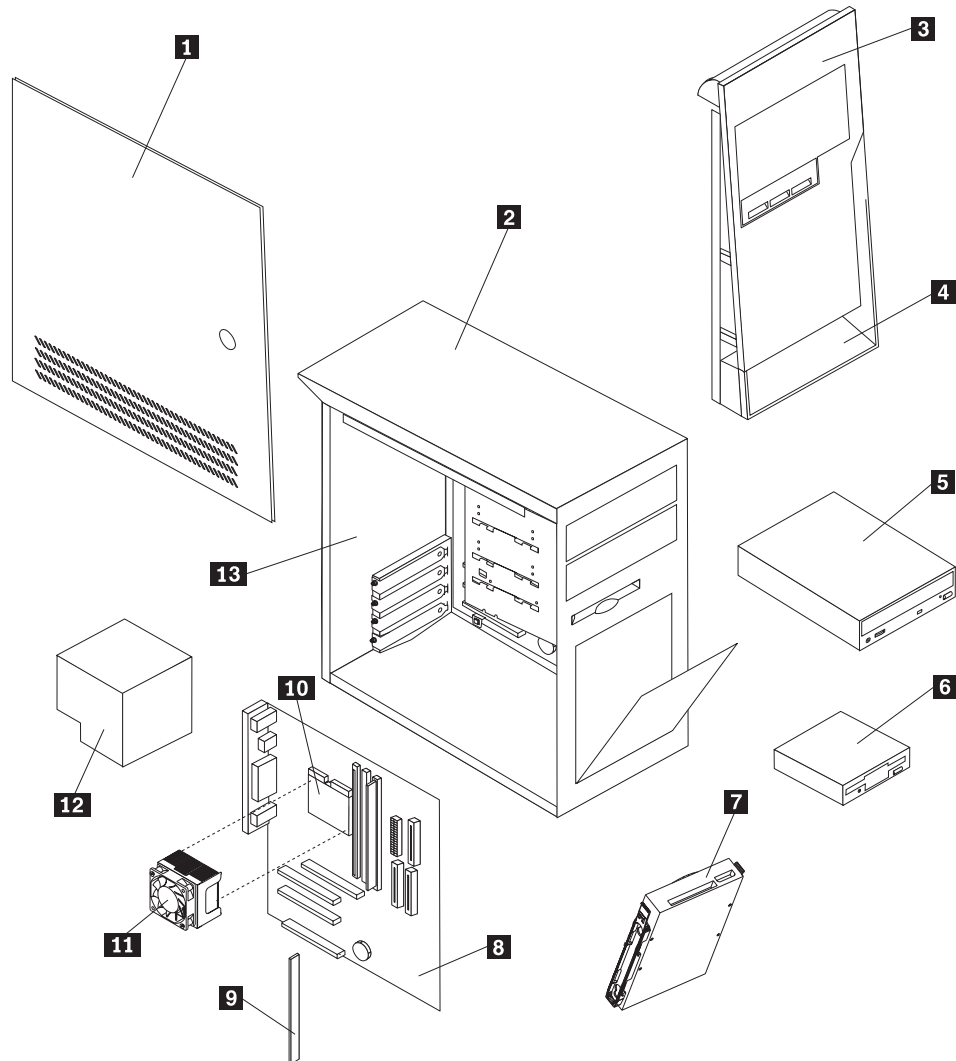
8193 Keyboards (Standard PS/2 Black)	FRU#	CRU
Danish (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8308	*
Dutch (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8309	*
French (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8310	*
French Canadian (models 11F 12F A3F D1F E1F F1F)	89P8311	*
French Canadian (models 11F 12F A3F D1F E1F F1F)	89P8312	*
German (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8313	*
Greek (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8314	*
Hebrew (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8315	*
Hungarian (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8316	*
Iceland (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8317	*
Italian (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8318	*
Italian (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8319	*
Norwegian (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8323	*
Polish (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8324	*
Portuguese (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8325	*
Romanian (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8326	*
Russian (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8327	*
Russian/Cy (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8328	*

8193 Keyboards (Standard PS/2 Black)	FRU#	CRU
Serbian/Cyrillic (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8329	*
Slovak (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8330	*
Spanish (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8331	*
Swedish/Finn (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8332	*
Swiss F/G (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8333	*
Turkish (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8335	*
Turkish (models BB1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8336	*
UK English (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8337	*
US International (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8338	*
Yugoslav/Latin (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	89P8339	*

8193 Power Cords	FRU#	CRU
Power Cord (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 91U 92U 93U 94U 95U 96U 97U 98U CTO CAU CBU CCU CDU CEU CFU 11U 11F 12U 12F A3U A3F D1U D1F E1U E1F F1U F1F 7GG 7HG 14P 15P 21P 31P 32P 33G 34P 35G 36U 36P 37U 41U 41P 42G 43U 43P 7JG 7KG 7LG 7MG B4G)	6952301	*
Power Cord (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	13F9978	*
Power Cord (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	14F0032	*
Power Cord (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	13F9996	*
Power Cord (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 14P 15P 21P 31P 32P 33G 34P 35G 36P 41P 42G 43P 7JG 7KG 7LG 7MG B4G)	14F0068	*

8193 Power Cords	FRU#	CRU
Power Cord (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	14F0086	*
Power Cord (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	14F0014	*
Power Cord (models B1G D1G E1G F1G G1G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F2G 7FG 7GG 7HG 33G 35G 42G 7JG 7KG 7LG 7MG B4G)	14F0050	*

## Type 8194



Item #	8194 FRUs	FRU#	CRU
1	Side cover assembly (all models)	59P8547	*
2	"L" cover (all models)	59P8546	N
3	Front bezel assembly (all models)	59P8544	*

Item #	8194 FRUs	FRU#	CRU
4	Trim bezel/label kit (all models)	49P1900	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1Y A2U A6U A6S A6P A6Y B1G B2U B2S B2P B2Y D3U D3S D3P D3Y D7G E1U E1S E1P E1Y E5G F4G A7U A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG D7S D7P D7Y E5S E5P E5Y F6G 7FG DAU 91U 93U 95U 97U 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F B6G)	33P3203	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1Y A2U A6U A6S A6P A6Y B1G B2U B2S B2P B2Y D3U D3S D3P D3Y D7G E1U E1S E1P E1Y E5G F4G A7U A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG D7S D7P D7Y E5S E5P E5Y F6G 7FG DAU 91U 93U 95U 97U 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F B6G)	33P3211	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1Y A2U A6U A6S A6P A6Y B1G B2U B2S B2P B2Y D3U D3S D3P D3Y D7G E1U E1S E1P E1Y E5G F4G A7U A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG D7S D7P D7Y E5S E5P E5Y F6G 7FG DAU 91U 93U 95U 97U 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F B6G)	33P3207	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1Y A2U A6U A6S A6P A6Y B1G B2U B2S B2P B2Y D3U D3S D3P D3Y D7G E1U E1S E1P E1Y E5G F4G A7U A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG D7S D7P D7Y E5S E5P E5Y F6G 7FG DAU 91U 93U 95U 97U 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F B6G)	71P7353	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models G4G 21G 31G 41G 51G 53U 7KG 7LG 36G 37U 37F 39G 47U 47F 49G 7VG 7WG 7YG)	71P7367	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models G4G 21G 31G 41G 51G 53U 7KG 7LG 36G 37U 37F 39G 47U 47F 49G 7VG 7WG 7YG)	71P7369	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models G4G 21G 31G 41G 51G 53U 7KG 7LG 36G 37U 37F 39G 47U 47F 49G 7VG 7WG 7YG)	71P7371	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models G4G 21G 31G 41G 51G 53U 7KG 7LG 36G 37U 37F 39G 47U 47F 49G 7VG 7WG 7YG)	71P7375	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models G4G 21G 31G 41G 51G 53U 7KG 7LG 36G 37U 37F 39G 47U 47F 49G 7VG 7WG 7YG)	71P7385	*
5	DVD-ROM 16X/48X - Black (models D1G G5G E7G F9G 32G 42G 52G 7GG 7JG 3BG 3CG 4BG 4DG 7MG 7NG 3DC 4EC 56C 57G 4GC 5BC 7SG 7TG)	71P7357	*
5	DVD-ROM 16X/48X - Black (models D1G G5G E7G F9G 32G 42G 52G 7GG 7JG 3BG 3CG 4BG 4DG 7MG 7NG 3DC 4EC 56C 57G 4GC 5BC 7SG 7TG)	33P3237	*
5	48X24X48X CD-RW (Black) (models A3U A3F A4U B3U B4U B4F D2U D1G D4U D6U D6F E2U E4U E4F F2U F2S F2P F2Y B3S B3P B3Y E7G 92U 94U 96U 98U F9G 7HG 7JG)	33P3289	*
5	CD-RW Drive (48X/32X/48X) (models G1U G5G 38U 3CG 46U 4DG 4EC 56C 5BC)	71P7347	*



Item #	8194 FRUs	FRU#	CRU
5	CD-RW Drive (48X/32X/48X (models G1U G5G 38U 3CG 46U 4DG 4EC 56C 5BC)	71P7349	*
5	48X Combo drive (models A5M E3U E6U E6S E6P E6Y F1U F1S F1P F1Y G3U D9M E8M F7U F8U F3S F3P F3Y 22M 33M 43M 24M 35M)	33P3301	*
5	Universal Combo drive 48x/24x/48x/16x (models 3AM 48M 4AU 4CU 54U 7PG 7QG 7RG 4FM)	26K5390	*
5	Combo drive 48x/32x/48x/16x (models 3AM 48M 4AU 4CU 54U 7PG 7QG 7RG 4FM)	26K5379	*
5	Combo drive 48x/32x/48x/16x (models 3AM 48M 4AU 4CU 54U 7PG 7QG 7RG 4FM)	26K5381	*
5	Universal Rambo drive (Black) (models 55M 57G 5AM)	26K5377	*
5	Rambo II (Black) (model 45M)	33P3243	*
5	Rambo III (Black) -- optional to 26K5377 (models 55M 57G 5AM)	33P3309	*
6	Diskette drive, 3.5 1.44 MB (all models)	76H4091	*
7	Hard disk drive, 40 GB EIDE w/o bezel (models A1U A1S A1P A1Y A2U A3U A3F A5M A6U A6S A6P A6Y B1G B2U B2S B2P B2Y B4U B4F D3U D3S D3P D3Y D6U D6F D7G E1U E1S E1P E1Y E4U E4F E5G F4G G4G A7U A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG D9M D7S D7P D7Y E5S E5P E5Y E8M F6G 7FG DAU 91U 92U 93U 94U 95U 96U 97U 98U 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F 21G 31G 32G 41G 42G 51G 52G 53U 53F 7GG 7HG 7KG 23U 23F 34U 34F 44U 44F 7LG 36G 37U 37F 39G 3BG 46U 47U 47F 49G 4BG 7MG 7NG 7VG 7WG 7YG B6G)	19K1568	*
7	Hard disk drive, 80GB 7200rpm S-ATA (models D1G 22M 33M 43M 7JG 24M 35M 45M 3AM 48M 55M 4FM 5AM)	71P7293	*
7	Hard disk drive, 80GB 7200rpm EIDE ATA-100 (models A4U B3U D2U D4U E2U F2U F2S F2P F2Y G1U B3S B3P B3Y F7U 38U 4AU 54U 7SG 7TG)	24P3665	*
7	Hard disk drive, 120GB 7200rpm EIDE ATA-100 (models E3U E6U E6S E6P E6Y F1U F1S F1P F1Y F3S F3P F3Y 7PG 7QG 3DC 4EC 56C 7RG 4GC 5BC)	24P3687	*
7	Hard disk drive, 160GB 7200rpm EIDE ATA-100 (models G3U G5G F8U F9G E7G G3S G3P G3D G3Y 3CG 4CU 4DG 57G)	71P7297	*
8	System board, 10/100 E-net, no POV (models F2U F2S F2P F2Y F4G G1U G3U G4G G5G 7CG 7DG 7EG CKU CLU F3S F3P F3Y F9G F4U F4F 7JG 51G 52G 53U 53F 7KG 56C 57G 7RG 4FM 5AM 5BC 7SG B6G 7TG A1U A1S A1P A1Y A2U A3U A3F A4U A5M A6U A6S A6P A6Y B1G B2U B2S B2P B2Y B3U B4U B4F D2U D1G D3U D3S D3P D3Y D4U D6U D6F D7G E1U E1S E1P E1Y E2U E3U E4U E4F E5G E6U E6S E6P E6Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG CAU CBU CCU CDU CEU CGU CHU B3S B3P B3Y D9M D7S D7P D7Y E5S E5P E5Y E7G E8M F6G F7U F8U 7FG DAU 91U 92U 93U 94U 95U 96U 97U 98U 11U 11F 12U 12F A8U A8F A8U A8F D7U D7F E5U E5F 7HG 7GG 24M 35M 45M 7LG)	89P7942	**



Item #	8194 FRUs	FRU#	CRU
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models F2U F2S F2P F2Y F4G G1U G3U G4G G5G 7CG 7DG 7EG CKU CLU F3S F3P F3Y F9G F4U F4F 7JG 51G 52G 53U 53F 7KG 36G 37U 37F 38U 39G 3AM 3BG 3CG 46U 47U 47F 48M 49G 4AU 4BG 4CU 4DG 54U 55M 7MG 7NG 7PG 7QG 7VG 7WG 7YG CMU CNU 3DC 4EC 56C 57G 7RG 4FM 4GC 5AM 5BC 7SG B6G 7TG A1U A1S A1P A1Y A2U A3U A3F A4U A5M A6U A6S A6P A6Y B1G B2U B2S B2P B2Y B3U B4U B4F D2U D1G D3U D3S D3P D3Y D4U D6U D6F D7G E1U E1S E1P E1Y E2U E3U E4U E4F E5G E6U E6S E6P E6Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG CAU CBU CCU CDU CEU CGU CHU B3S B3P B3Y D9M D7S D7P D7Y E5S E5P E5Y E7G E8M F6G F7U F8U 7FG DAU 91U 92U 93U 94U 95U 96U 97U 98U 11U 11F 12U 12F A8U A8F A8U A8F D7U D7F E5U E5F 7HG 7G 7LG)	41X2825	**
8	System board, 10/100 E-net, POV (models A7U A7S A7P A7Y)	89P7946	**
8	System board, 10/100 E-net, POV (supports Prescott CPU) (models A7U A7S A7P A7Y)	41X2827	**
8	System board, Gigabit E-net, no POV (models 23U 23F 34U 34F 44U 44F)	89P7944	**
8	System board, Gigabit E-net, no POV (supports Prescott CPU) (models 23U 23F 34U 34F 44U 44F)	41X2829	**
9	128MB NP SDRAM PC2700 (models A1U A1S A1P A1Y A2U A4U A6U A6S A6P A6Y B2U B2S B2P B2Y B3U D3U D3S D3P D3Y D4U E1U E1S E1P E1Y E2U F2U F2S F2P F2Y CAU CBU CCU CDU CEU B3S B3P B3Y DAU 3DC 4EC 4GC 5BC)	31P9120	*
9	256MB NP SDRAM PC2700 (models 36G 37U 37F 38U 39G 3AM 3BG 3CG 46U 47U 47F 48M 49G 4AU 4BG 4CU 4DG 55M 7MG 7NG 7PG 7QG 7VG 7WG 7YG CMU CNUA 56C 57G 7RG 4FM 5AM 7SG B6G 7TG A3U A3F A5M B1G B4U B4F D2U D1G D6U D6F D7G E3U E4U E4F E5G E6U E6S E6P E6Y F1U F1S F1P F1Y F4G G1U G3U G4G G5G A7U A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG CJU CLU D9M D7S D7P D7Y E5S E5P E5Y E7G E8M F6G F7U F8U F3S F3P F3Y 7FG CGU CHU CKU 91U 92U 93U 94U 95U 96U 97U 98U F9G 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F 21G 22M 31G 32G 33M 41G 42G 43M G3S G3P G3D G3Y 51G 52G 53U 53F 7GG 7HG 7JG 7KG 23U 23F 24M 34U 34F 35M 44U 44F 45M 7LG)	31P9121	*
9	512MB NP SDRAM PC2700 (model 54U)	31P9122	*
10	Intel Celeron 2.0 GHz (models 11U 11F)	74P1617	**
10	Intel Celeron 2.2 GHz (models 12U 12F)	74P1621	**
10	Intel Celeron 2.6 GHz (model B6G)	13R8907	**
10	Intel P4 2.4 GHz (models A1U A1S A1P A1Y A2U A3U A3F A4U A7U A7S A7P A7Y CAU 91U 92U A8U A8F)	74P1625	**
10	Intel P4 2.53 GHz (models B1G B2U B2S B2P B2Y B3U B4U B4F 71G 72G 73G 74G CCU B3S B3P B3Y)	74P1627	**
10	Intel P4 2.66 GHz (models D1G D3U D3S D3P D3Y D4U D6U D6F D7G 75G 76G 77G 78G D7S D7P D7Y DAU 7FG 95U 96U CDU D7U D7F 7GG 23U 23F)	74P1629	**
10	Intel P4 2.8 GHz (models E1U E1S E1P E1Y E2U E3U E4U E4F E5G 79G 7AG 7BG CGU E5S E5P E5Y 97U E5U E5F 34U 34F 7LG 7SG)	74P1631	**
10	Intel P4 3.06 GHz (models F2U F2S F2P F2Y F4G 7CG 7DG 7EG CKU F3S F3P F3Y F9G F4U F4F 44U 44F 46U)	74P1633	**
10	Intel P4 2.4 GHz (models A6U A6S A6P A6Y CBU A5M 93U)	88P5867	**

Item #	8194 FRUs	FRU#	CRU
10	Intel P4 2.6 GHz (models D2U CEU D9M 94U 21G 22M 24M)	88P5868	**
10	Intel P4 2.8 GHz (models E6U E6S E6P E6Y CHU E7G E8M 98U 31G 32G 33M 7HG 35M 7RG)	88P5869	**
10	Intel P4 3.0 GHz (models F1U F1S F1P F1Y CJU F6G F7U F8U 41G 42G 43M 7JG 45M 4FM)	88P5870	**
10	Intel P4 3.2 GHz (models G1U G3U G4G G5G CLU G3S G3P G3D G3Y 51G 52G 53U 53F 7KG 54U 55M 56C 57G 5AM 5BC)	88P5871	**
10	Intel P4 2.8 GHz (models 36G 7VG)	19R0423	**
10	Intel P4 2.8 GHz (models 38U 39G 3AM 3BG 3CG 7MG 7PG 7WG CMU 3DC 37U 37F)	19R0292	**
10	Intel P4 3.0 GHz (models 48M 49G 4AU 4BG 4CU 4DG 7NG 7QG 7YG CNU 4EC 47U 47F 4GC 7TG)	19R0294	**
11	Fan sink (for <3.0 Ghz processors) (models A1U A1S A1P A1Y A2U A3U A3F A4U A5M A6U A6S A6P A6Y B1G B2U B2S B2P B2Y B3U B4U B4F D2U D1G D3U D3S D3P D3Y D4U D6U D6F D7G E1U E1S E1P E1Y E2U E3U E4U E4F E5G E6U E6S E6P E6Y A7U A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG CAU CBU CCU CDU CEU CGU CHU B3S B3P B3Y D9M D7S D7P D7Y E5S E5P E5Y E7G E8M F6G F7U F8U 7FG DAU 91U 92U 93U 94U 95U 96U 97U 98U 11U 11F 12U 12F A8U A8F A8U A8F D7U D7F E5U E5F 21G 22M 31G 32G 33M 7HG 7GG 23U 23F 24M 34U 34F 35M 7LG 7RG 7SG B6G)	32P4004	**
11	Fan Sink (for =>3.0 Ghz processors) (models F2U F2S F2P F2Y F4G G1U G3U G4G G5G 7CG 7DG 7EG CKU CLU F3S F3P F3Y F9G F4U F4F 41G 42G 43M 7JG G3S G3P G3D G3Y 51G 52G 53U 53F 7KG 44U 44F 45M 46U 54U 55M 56C 57G 4FM 5AM 5BC)	01R3330	**
11	Fan Sink (for Prescott only) (models 36G 38U 39G 3AM 3BG 3CG 7MG 7PG 7WG CMU 7VG 48M 49G 4AU 4BG 4CU 4DG 7NG 7QG 7YG CNU 3DC 4EC 37U 37F 47U 47F 4GC 7TG)	13R9195	**
11	P4 mounting assembly (all models)	48P6726	*
12	Power supply, 230W (models 36G 37U 37F 38U 39G 3AM 3BG 3CG 46U 47U 47F 48M 49G 4AU 4BG 4CU 4DG 54U 55M 7MG 7NG 7PG 7QG 7VG 7WG 7YG CMU CNU 57G 7RG 4FM 5AM 7SG B6G 7TG A1U A2U A3U A3F A4U A5M A6U B1G B2U B3U B4U B4F D2U D1G D3U D4U D6U D6F D7G E1U E2U E3U E4U E4F E5G E6U F1U F2U F4G G1U G3U G4G G5G A7U 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG CAU CBU CCU CDU CEU CGU CHU CJU CKU CLU CTO D9M E7G E8M F6G F7U F8U 7FG DAU D9M E7G E8M F6G F7U F8U 7FG DAU 91U 92U 93U 94U 95U 96U 97U 98U F9G 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F 21G 22M 31G 32G 33M 41G 42G 43M 51G 52G 53U 53F 7GG 7HG 7JG 7KG 23U 23F 24M 34U 34F 35M 44U 44F 45M 7LG)	74P4300	N
12	Power supply, 230W (China) (models A1S A1P A1Y A6S A6P A6Y B2S B2P B2Y D3S D3P D3Y E1S E1P E1Y E6S E6P E6Y F1S F1P F1Y F2S F2P F2Y A7S A7P A7Y B3S B3P B3Y D7S D7P D7Y E5S E5P E5Y F3S F3P F3Y G3S G3P G3D G3Y 3DC 4EC 56C 4GC 5BC)	74P4301	N
13	Chassis assembly (all models)	59P8542	N

The FRUs listed in the following table are not illustrated.

8194 FRUs	FRU#	CRU
Speaker assembly (models A5M D9M E8M 24M 35M 45M 3AM 48M 55M 4FM 5AM)	00N5151	*
Front bezel release (all models)	25P0069	*
Front bezel blanks kit (all models)	25P0068	*
5.25 EMC shield (all models)	19K5548	*
Cable, Diskette drive (all models)	59P8568	*
Cable clip (all models)	59P8584	*
Cable, IDE (ATA66 2 drop) (all models)	37L5098	*
2 drop (close spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8571	*
2 drop (large spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8572	*
Retainer, cards I/O (all models)	59P8564	*
Universal adapter bracket (3.5 - 5.25) (all models)	32P4743	*
Fan assembly, 80 mm, fixed speed (all models)	22P4447	*
Misc. hardware kit (all models)	09N5764	*
Cable, CDRom audio (all models)	75H9219	*
Cable, C2 (models A7U A7S A7P A7Y 23U 23F 34U 34F 44U 44F)	09K9827	*
Rubber foot (all models)	03K9655	*
Hard disk drive bracket assembly (all models)	59P8543	*
Hard disk drive tray (dampened) (all models)	59P8549	*
Cable, dual USB 2.0 (all models)	49P4365	*
Power switch assembly (all models)	59P8545	*
Audio cable assembly (ATA) (all models)	49P1933	*
Bezel Diskette drive (all models)	59P8548	*
Cable, SATA (all models)	88P5927	*
PCMCIA assembly (all models)	59P8587	*
PCMCIA ATA-66 cable (all models)	49P4361	*
2 audio front panel (models D1G G1U CLU 23U 23F 24M 34U 34F 35M 44U 44F 45M 38U 3AM 46U 48M 4AU 54U 55M CMU CNU 37U 37F 47U 47F 56C 4FM)	49P1750	*
2 audio w/1394 front panel (models E6U E6S E6P E6Y F1U F1S F1P F1Y G3U G5G F8U E7G F7U F9G G3S G3P G3D G3Y 7JG 3CG 4CU 4DG 7PG 7QG 3DC 4EC 56C 57G 7RG 4GC 5AM 5BC)	49P1752	*
Keylock Kit GBM (random keyed) -- sub'd from 59P8565 (models A7U A7S A7P A7Y 23U 23F 34U 34F 44U 44F)	26K2205	*
90 deg 6 pin 1394 Cable (models E6U E6S E6P E6Y F1U F1S F1P F1Y G3U G5G E7G F7U F8U F9G 4GC 5AM 5BC)	59P8561	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*

8194 FRUs	FRU#	CRU
Mouse, optical wheel (models A3U A3F A4U A6U A6S A6P A6Y B2U B2S B2P B2Y B3U B4U B4F D2U D1G D3U D3S D3P D3Y D4U D6U D6F E1U E1S E1P E1Y E2U E3U E4U E4F E6U E6S E6P E6Y F1U F1S F1P F1Y F2U F2S F2P F2Y G1U G3U G5G CAU CBU CCU CDU CEU CGU CHU CJU CKU B3S B3P B3Y E7G F7U F8U F3S F3P F3Y DAU 91U 92U 93U 94U 95U 96U 97U 98U F9G 22M 33M 43M G3S G3P G3D G3Y 53U 53F 7JG CLU 23U 23F 24M 34U 34F 35M 44U 44F 45M 37U 37F 38U 3AM 3CG 46U 47U 47F 48M 4AU 4CU 4DG 54U 55M 7PG 7QG CMU CNU 3DC 4EC 56C 57G 7RG 4FM 4GC 5AM 5BC 7SG 7TG)	89P5089	*
Mouse, PS/2 - 2 button (Black) (models A1U A1S A1P A1Y A2U B1G D7G E5G F4G G4G A7U A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG D7S D7P D7Y E5S E5P E5Y F6G 7FG 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG B6G)	24P0383	*
Mouse, PS/2 - 3 button (Ball) Wheel (models A5M D9M E8M)	24P0491	*
PCI Modem Card (Soft), ATX V.90 (models A5M E6U E6S E6P E6Y F1U F1S F1P F1Y G3U G5G D9M E8M F8U E7G F9G 22M 33M 42G G3S G3P G3D G3Y 7JG 24M 35M 45M 38U 3AM 3CG 46U 48M 4AU 4CU 4DG 54U 55M 7PG 7QG 3DC 4EC 56C 57G 7RG 4FM 4GC 5AM 5BC)	22P7943	*
Nvidia GeForce MX 440 (Robin) (for 73P0712) includes xtra LP bracket for 73P0713 (models A5M E3U G1U D9M E8M F7U F3S F3P F3Y D1G 22M 33M 43M 35M 45M 48M 55M 4EC 5BC)	73P0715	*
ATI RADEON 9200(Batman) (for 74P0367) includes xtra LP bracket for 74P0368 (models D1G 7PG 7QG 7RG)	88P5942	*
ATI RADEON 9600 (Superman) (models E6U E6S E6P E6Y F1U F1S F1P F1Y G3U G5G E7G F8U F9G G3S G3P G3D G3Y 7JG 3CG 4CU 4DG 54U 56C 57G 5AM)	88P6084	*
1394 Firewire PCI LP (ATX) (models E6U E6S E6P E6Y F1U F1S F1P F1Y G3U G5G E7G F7U F8U F9G)	22P6849	*
1394 Firewire PCI LP (ATX) (models 3CG 4CU 4DG 7PG 7QG 3DC 4EC 56C 57G 7RG 4GC 5AM 5BC)	73P2609	*
Speakers, Infinity Active T1 (Black) (models D1G E6U E6S E6P E6Y F1U F1S F1P F1Y G3U G5G E7G F8U F9G G3S G3P G3D G3Y 7JG 38U 3CG 46U 4AU 4CU 4DG 54U 7PG 7QG 3DC 4EC 56C 57G 7RG 4GC 5BC)	25P4726	*
Speaker Power brick - US, CE, CF, LA, Taiwan (models E6U E6S E6Y F1U F1S F1Y G3U F8U G3S G3D G3Y 38U 46U 4AU 4CU 54U)	10K2587	*
Speaker Power brick - Europe (non-UK) (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	25P5704	*
Speaker Power brick - UK, Hong Kong (3 prong) (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	25P5703	*
Speaker Power brick (newer 2 prong) - China, Thailand, Phillipines (models 3DC 4EC 56C 4GC 5BC)	10K2597	*
Speaker Power brick - Brazil (models E6P F1P G3P)	25P5706	*
Speaker Power brick - Argentina (models E6Y F1S F1Y G3S G3Y)	01R2253	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*

8194 FRUs	FRU#	CRU
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8194 Windows 2000 Recovery CDs	FRU #	CRU
US (models 74G 78G A2U DAU)	13R9673	*
FR (models 74G 78G)	13R9674	*
GR (models 74G 78G)	13R9675	*
IT (models 74G 78G)	13R9677	*
SP (models 74G 78G)	13R9676	*
DK (models 74G 78G)	13R9680	*
NL (models 74G 78G)	13R9683	*
AE (models 74G 78G)	13R9687	*
SV (models 74G 78G)	13R9679	*
HE (models 74G 78G)	13R9684	*
FI (models 74G 78G)	13R9681	*
NO (models 74G 78G)	13R9682	*
PL (models 74G 78G)	13R9685	*
PO (models 74G 78G)	13R9691	*
RU (models 74G 78G)	13R9688	*
HU (models 74G 78G)	13R9690	*
CZ (models 74G 78G)	13R9686	*
TR (models 74G 78G)	13R9689	*
GK (models 74G 78G)	13R9692	*

8194 Windows XP Pro Recovery CDs	FRU #	CRU
US (models 23U 24M 34U 35M 44U 45M 11U 12U 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG 91U 92U 93U 94U 95U 96U 97U 98U A1U A3U A4U A5M A6U A7U A8U B1G B2U B3U B4U D2U D3U D4U D6U D7G D7U D9M E1U E2U E3U E4U E5G E5U E8M F2U F4G F4U F6G F7U G1U G4G 21G 22M 31G 32G 33M 41G 42G 43M 51G 52G 53U 7GG 7HG 7KG 36G 37U 39G 3AM 3BG 47U 48M 49G 4BG 55M 7MG 7NG 7PG 7QG 7VG 7WG 7YG 54U 7RG 4FM 5AM 7SG B6G 7TG)	29R7998	*
FR (models 23F 34F 44F 11F 12F 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG A3F A8F B1G B4F D6F D7F D7G E4F E5F E5G F4F F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 53F 7GG 7HG 7KG 36G 37F 39G 3BG 47F 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R7999	*
GR (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8000	*

8194 Windows XP Pro Recovery CDs	FRU #	CRU
IT (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8002	*
SP (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG A1S A1Y A6S A6Y A7S A7Y B1G B2S B2Y B3S B3Y D3S D3Y D7G D7S D7Y E1S E1Y E5G E5S E5Y F2S F2Y F3S F3Y F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8001	*
BR (models A1P A6P A7P B2P B3P D3P D7P E1P E5P F2P F3P)	29R8003	*
DK (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8005	*
NL (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8008	*
AE (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8012	*
SV (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8004	*
HE (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8009	*
FI (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8006	*
NO (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8007	*
PL (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8010	*
PO (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8016	*
RU (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8013	*
HU (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8015	*
CZ (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8011	*
TR (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8014	*
GK (models 71G 72G 73G 75G 76G 77G 79G 7AG 7BG 7CG 7DG 7EG B1G D7G E5G F4G F6G G4G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	29R8017	*



8194 Windows XP Pro Recovery CDs	FRU #	CRU
Multilingual RCD 1 (models 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	19R1268	*
Multilingual RCD 2 (models 36G 39G 3BG 49G 4BG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 7RG 7SG B6G 7TG)	19R1270	*

8194 Windows XP Home Recovery CDs	FRU#	CRU
US (models D1G E6U E7G F1U F8U F9G G3U G5G 7JG 38U 3CG 46U 4AU 4CU 4DG 57G)	29R8098	*
FR (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8099	*
GR (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8100	*
IT (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8102	*
BR (models E6P F1P G3P)	29R8103	*
SP/LA (models D1G E6S E6Y E7G F1S F1Y F9G G5G G3S G3D G3Y 7JG 3CG 4DG 57G)	29R8101	*
DK (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8105	*
NL (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8108	*
AE (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8112	*
SV (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8104	*
HE (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8109	*
FI (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8106	*
NO (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8107	*
PL (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8110	*
PO (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8116	*
RU (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8113	*
HU (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8115	*
CZ (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8111	*
TR (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8114	*
GK (models D1G E7G F9G G5G 7JG 3CG 4DG 57G)	29R8117	*
SC (models 3DC 4EC 56C 4GC 5BC)	27K6932	*

8194 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models A1U A2U A3U A4U A5M A6U B1G B2U B3U B4U D2U D3U D4U D6U D7G E1U E2U E3U E4U E5G F2U F4G G1U G4G A7U 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG CAU CBU CCU CDU CEU CGU CHU CJU CKU CLU D9M E8M F6G F7U 7FG DAU 91U 92U 93U 94U 95U 96U 97U 98U 11U 12U A8U D7U E5U F4U 21G 22M 31G 32G 33M 41G 42G 43M 51G 52G 53U 7GG 7HG 7KG 23U 24M 34U 35M 44U 45M 7LG 36G 37U 38U 39G 3BG 46U 47U 49G 4AU 4BG 54U 7MG 7NG 7VG 7WG 7YG CMU CNU 3AM 48M 55M 4FM 5AM 7SG B6G 7TG)	89P8300	*
Arabic (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8301	*

8194 Keyboards (Standard PS/2 Black)	FRU#	CRU
Belgian/French (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8302	*
Belgian/UK (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8303	*
Bulgarian (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8305	*
Czech (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8307	*
Danish (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8308	*
Dutch (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8309	*
French (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8310	*
French Canadian (models A3F B4F D6F E4F 11F 12F A8F D7F E5F F4F 53F 23F 34F 44F 37F 47F)	89P8311	*
French Canadian (models A3F B4F D6F E4F 11F 12F A8F D7F E5F F4F 53F 23F 34F 44F 37F 47F)	89P8312	*
German (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8313	*
Greek (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8314	*
Hebrew (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8315	*
Hungarian (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8316	*
Iceland (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8317	*



8194 Keyboards (Standard PS/2 Black)	FRU#	CRU
Italian 141 (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8318	*
Italian 142 (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8319	*
LA Spanish (models A1S A1Y A6S A6Y B2S B2Y D3S D3Y E1S E1Y F2S F2Y A7S A7Y B3S B3Y D7S D7Y E5S E5Y F3S F3Y)	89P8322	*
Norwegian (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8323	*
Polish (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8324	*
Portuguese (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8325	*
Romanian (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8326	*
Russian (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8327	*
Russian/Cy (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8328	*
Serbian/Cyrillic (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8329	*
Slovak (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8330	*
Spanish (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8331	*
Swedish/Finn (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8332	*

8194 Keyboards (Standard PS/2 Black)	FRU#	CRU
Swiss F/G (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8333	*
Turkish (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8335	*
Turkish (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8336	*
UK English (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8337	*
US International (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8338	*
Yugoslav/Latin (models B1G D7G E5G F4G G4G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG F6G 7FG 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7KG 7LG 36G 39G 3BG 49G 4BG 7MG 7NG 7VG 7WG 7YG 7SG B6G 7TG)	89P8339	*
Brazil/Portuguese (models A1P A6P B2P D3P E1P F2P A7P B3P D7P E5P F3P)	89P8304	*

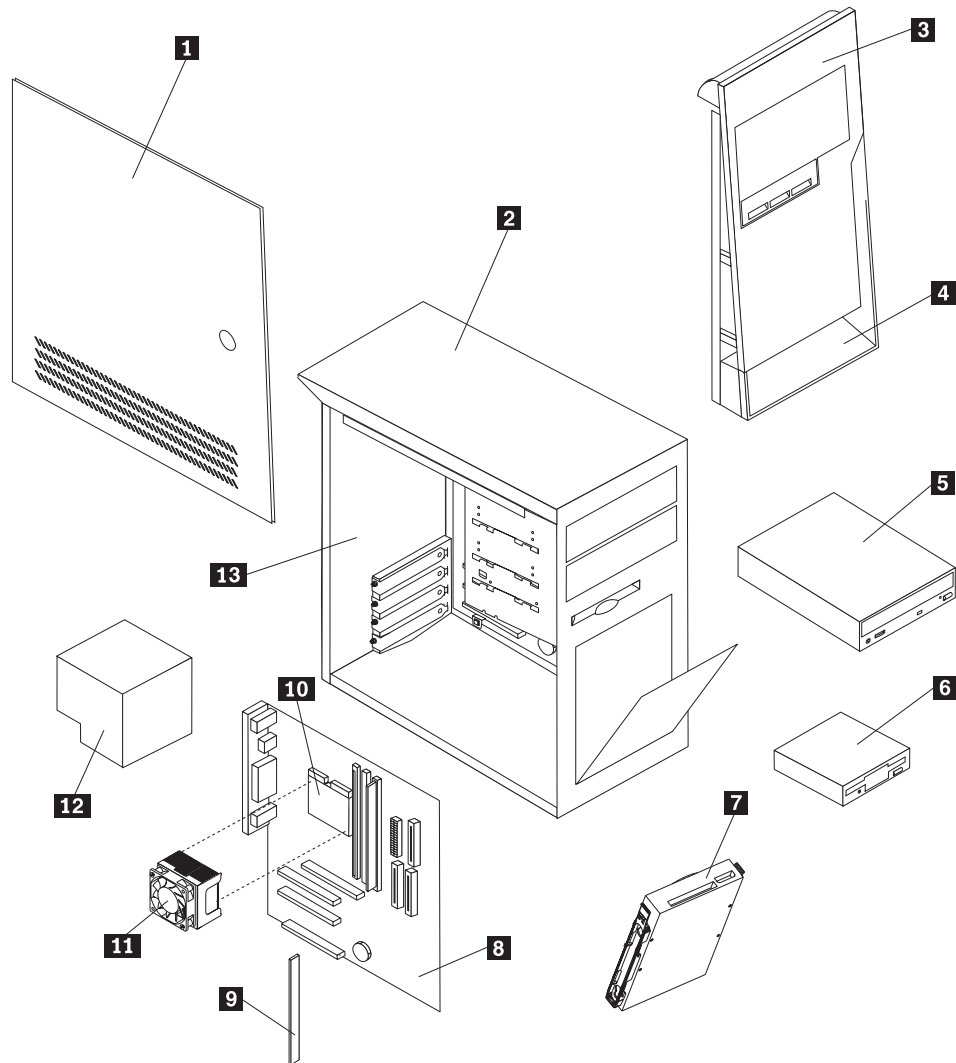
8194 Keyboards RAK III Lite	FRU#	CRU
US English (models D1G E6U F1U G3U G5G E7G F8U F9G 7JG 3CG 4CU 4DG 7PG 7QG 3DC 4EC 56C 57G 7RG 4GC 5BC)	19K1910	*
Arabic (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1911	*
Belgian/French (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1912	*
Belgian/UK (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1913	*
Bulgarian (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1914	*
Czech (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1916	*
Danish (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1917	*
Dutch (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1918	*
French (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1919	*
German (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1922	*
Greek (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1923	*
Hebrew (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1924	*
Hungarian (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1925	*
Iceland (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1926	*
Italian (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1927	*
LA Spanish (models E6S E6Y F1S F1Y G3S G3D G3Y)	19K1930	*
Norwegian (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1931	*
Polish (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1932	*
Portuguese (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1933	*

<b>8194 Keyboards RAK III Lite</b>	<b>FRU#</b>	<b>CRU</b>
Romanian (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1934	*
Russian (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1935	*
Russian/Cy (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1936	*
Serbian/Cyrillic (models D1G G5G E7G F9G 7JG 57G 7RG)	19K1937	*
Slovak (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1938	*
Spanish (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1939	*
Swedish/Finn (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1940	*
Swiss F/G (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1941	*
Turkish (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1943	*
Turkish (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1944	*
UK English (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1945	*
US International (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1946	*
Yugoslav/Latin (models D1G G5G E7G F9G 7JG 3CG 4DG 7PG 7QG 57G 7RG)	19K1947	*
Brazil/Portuguese (models E6P F1P G3P)	19K1948	*

<b>8194 Power Cords</b>	<b>FRU#</b>	<b>CRU</b>
Power Cord (models 36G 37U 37F 38U 39G 3AM 3BG 3CG 46U 47U 47F 48M 49G 4AU 4BG 4CU 4DG 54U 55M 7MG 7NG 7PG 7QG 7VG 7WG 7YG CMU CNU 57G 7RG 4FM 5AM 7SG B6G 7TG A1U A1S A1P A2U A3U A3F A4U A5M A6U A6S A6P B1G B2U B2S B2P B3U B4U B4F E1U E1S E1P E2U E3U E4U E4F E5G E6U E6S E6P F1U F1S F1P F2U F2S F2P F4G G1U G3U G4G G5G A7U A7S A7P 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG CAU CBU CCU CDU CEU CGU CHU CJU CKU CLU CTO B3S B3P D9M D7S D7P E5S E5P E7G E8M F6G F7U F8U F3S F3P 7FG DAU 91U 92U 93U 94U 95U 96U 97U 98U F9G 11U 11F 12U 12F A8U A8F D7U D7F E5U E5F F4U F4F 21G 22M 31G 32G 33M 41G 42G 43M G3S G3P G3D 51G 52G 53U 53F 7GG 7HG 7JG 7KG 7LG)	6952301	*
Power Cord (models B1G E5G F4G G4G G5G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG E7G F6G 7FG F9G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7JG 7KG 7LG 36G 39G 3BG 3CG 49G 4BG 4DG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 57G 7RG 7SG B6G 7TG)	13F9978	*
Power Cord (models B1G E5G F4G G4G G5G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG E7G F6G 7FG F9G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7JG 7KG 7LG 36G 39G 3BG 3CG 49G 4BG 4DG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 57G 7RG 7SG B6G 7TG)	14F0032	*
Power Cord (models B1G E5G F4G G4G G5G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG E7G F6G 7FG F9G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7JG 7KG 7LG 36G 39G 3BG 3CG 49G 4BG 4DG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 57G 7RG 7SG B6G 7TG)	13F9996	*
Power Cord (models A1S A1P A1Y A6S A6P A6Y B1G B2S B2P B2Y E1S E1P E1Y E5G E6S E6P E6Y F1S F1P F1Y F2S F2P F2Y F4G G4G G5G A7S A7P A7Y 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG B3S B3P B3Y D7S D7P D7Y E5S E5P E5Y E7G F6G F3S F3P F3Y 7FG F9G 21G 31G 32G 41G 42G G3S G3P G3D G3Y 51G 52G 7GG 7HG 7JG 7KG 7LG 36G 39G 3BG 3CG 49G 4BG 4DG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 57G 7RG 7SG B6G 7TG)	14F0068	*
Power Cord (models A1Y A6Y B2Y E1Y E6Y F1Y F2Y A7Y B3Y D7Y E5Y F3Y G3Y)	36L8879	*
Power cord (China, HK) (models 3DC 4EC 56C 4GC 5BC)	02K0545	*

8194 Power Cords	FRU#	CRU
Power Cord (models B1G E5G F4G G4G G5G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG E7G F6G 7FG F9G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7JG 7KG 7LG 36G 39G 3BG 3CG 49G 4BG 4DG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 57G 7RG 7SG B6G 7TG)	14F0086	*
Power Cord (models B1G E5G F4G G4G G5G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG E7G F6G 7FG F9G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7JG 7KG 7LG 36G 39G 3BG 3CG 49G 4BG 4DG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 57G 7RG 7SG B6G 7TG)	14F0014	*
Power Cord (models B1G E5G F4G G4G G5G 71G 72G 73G 74G 75G 76G 77G 78G 79G 7AG 7BG 7CG 7DG 7EG E7G F6G 7FG F9G 21G 31G 32G 41G 42G 51G 52G 7GG 7HG 7JG 7KG 7LG 36G 39G 3BG 3CG 49G 4BG 4DG 7MG 7NG 7PG 7QG 7VG 7WG 7YG 57G 7RG 7SG B6G 7TG)	14F0050	*

## Type 8195



Item #	8195 FRUs	FRU#	CRU
1	Side cover assembly (all models)	59P8547	*

Item #	8195 FRUs	FRU#	CRU
2	"L" cover (all models)	59P8546	N
3	Front bezel assembly (all models)	59P8544	*
4	Trim bezel/label kit (all models)	49P1900	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1Y A4U A4S A4P A4Y B4U B4S B4P B4Y D2U D2S D2P D2Y D4U D4S D4P D4Y E1U E1S E1P E1Y E4U F1U F1S F1P F1Y F2U F2S F2P F2Y A1D B4D D2D D4D E1D F2D 91U 93U 95U 97U 29U 39U 39S 39Y 3AS 3AY)	33P3203	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1Y A4U A4S A4P A4Y B4U B4S B4P B4Y D2U D2S D2P D2Y D4U D4S D4P D4Y E1U E1S E1P E1Y E4U F1U F1S F1P F1Y F2U F2S F2P F2Y A1D B4D D2D D4D E1D F2D 91U 93U 95U 97U 29U 39U 39S 39Y 3AS 3AY)	33P3211	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1Y A4U A4S A4P A4Y B4U B4S B4P B4Y D2U D2S D2P D2Y D4U D4S D4P D4Y E1U E1S E1P E1Y E4U F1U F1S F1P F1Y F2U F2S F2P F2Y A1D B4D D2D D4D E1D F2D 91U 93U 95U 97U 29U 39U 39S 39Y 3AS 3AY)	33P3207	*
5	CD-ROM Drive 48X - Black (models A1U A1S A1P A1Y A4U A4S A4P A4Y B4U B4S B4P B4Y D2U D2S D2P D2Y D4U D4S D4P D4Y E1U E1S E1P E1Y E4U F1U F1S F1P F1Y F2U F2S F2P F2Y A1D B4D D2D D4D E1D F2D 91U 93U 95U 97U 29U 39U 39S 39Y 3AS 3AY)	71P7353	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 24J 34J 45U)	71P7367	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 24J 34J 45U)	71P7369	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 24J 34J 45U)	71P7371	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 24J 34J 45U)	71P7375	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 24J 34J 45U)	71P7385	*
5	DVD-ROM 16X/48X - Black (models A6C DAC DBC EBC F6C 21C 51C 26U 26S 26D 26Y 33U 33S 33D 33Y 43C 36U 36S 36D 36Y)	71P7357	*
5	DVD-ROM 16X/48X - Black (models A6C DAC DBC EBC F6C 21C 51C 26U 26S 26D 26Y 33U 33S 33D 33Y 43C 36U 36S 36D 36Y)	33P3237	*
5	48X24X48X CD-RW (Black) (models A2U B2U B2F B5U D3U D3F D5U E2U F3U 11S 11P 11D 11Y A7U A7F A5U B2S B2P B2D B2Y D8U DAC DBC EBC F6C 92U 94U 96U 98U DCU DCF)	33P3289	*
5	CD-RW Drive (48X/32X/48X) (models A8U 51C 26U 26S 26D 26Y 43C 27S 27D 27Y 35U 35S 35D 35Y 36U 36S 36D 36Y 47U 47S 47D 47Y)	71P7347	*
5	CD-RW Drive (48X/32X/48X) (models A8U 51C 26U 26S 26D 26Y 43C 27S 27D 27Y 35U 35S 35D 35Y 36U 36S 36D 36Y 47U 47S 47D 47Y)	71P7349	*
5	48X Combo drive (models A3M D6U E3U E3F F4U F4F F4S F4P F4Y G1U G1F D9M D6S D6P D6D D6Y E3S E3P E3D E3Y E9U E9F EAM F5U F5F F4D DEU DEF 22M 23U 31M 25M 32M)	33P3301	*
5	Combo drive 48x/32x/48x/16x (models 28S 28D 28Y 37M 46S 46D 46Y 48U 48S 48D 48Y 4BU 4BF)	26K5379	*
5	Combo drive 48x/32x/48x/16x (models 28S 28D 28Y 37M 46S 46D 46Y 48U 48S 48D 48Y 4BU 4BF)	26K5381	*
5	Universal Combo drive 48x/24x/48x/16x (models 28S 28D 28Y 37M 46S 46D 46Y 48U 48S 48D 48Y 4BU 4BF)	26K5390	*
5	Universal Rambo drive (Black) (models 41M 33U 33S 33D 33Y 42S 44M 32M 4AM 52M 4CM)	26K5377	*
5	Rambo III (Black) -- optional to 26K5377 (models 41M 33U 33S 33D 33Y 42S 44M 32M 4AM 52M 4CM)	33P3309	*

Item #	8195 FRUs	FRU#	CRU
6	Diskette drive, 3.5 1.44 MB w/o bezel (all models except CSJ CTJ CUJ)	76H4091	*
7	Hard disk drive, 40 GB EIDE (models A1U A1S A1P A1Y A2U A3M A4U A4S A4P A4Y B2U B2F B4U B4S B4P B4Y D2U D2S D2P D2Y D3U D3F D4U D4S D4P D4Y E1U E1S E1P E1Y E4U F1U F1S F1P F1Y F2U F2S F2P F2Y 11S 11P 11D 11Y A1D A7U A7F B2S B2P B2D B2Y B4D D2D D9M D4D E1D EAM F2D 91U 92U 93U 94U 95U 96U 97U 98U 14U 14F DDU DDF 24J 28S 28D 28Y 34J 35U 35S 35D 35Y 45U 47U 47S 47D 47Y 29U 39U 39S 39Y)	19K1568	*
7	Hard disk drive, 80GB 7200rpm S-ATA (models G1U G1F 22M 31M 41M 51C 25M 32M 42S 37M 4AM 4CM)	71P7293	*
7	Hard disk drive, 80GB 7200rpm EIDE ATA-100 (models B5U D5U D6U E2U E3U E3F F3U F4U F4F F4S F4P F4Y A5U A6C D8U DAC DBC D6S D6P D6D D6Y E3S E3P E3D E3Y E9U E9F F5U F5F F4D DCU DCF DEU DEF A8U 21C 23U 26U 26S 26D 26Y 27S 27D 27Y 36U 36S 36D 36Y 46S 46D 46Y 48U 48S 48D 48Y 3AS 3AY)	24P3665	*
7	Hard disk drive, 120GB 7200rpm EIDE ATA-100 (models EBC F6C 33U 33S 33D 33Y)	24P3687	*
7	Hard disk drive, 160GB 7200rpm S-ATA (models 51C 43C 44M 4BU 4BF 52M)	71P7297	*
8	System board, 10/100 E-net, no POV (models 41M 51C 25M 32M CTJ 26U 26S 26D 26Y 33U 33S 33D 33Y 42S 43C 27S 27D 27Y 4CM A1U A1S A1P A1Y A2U A3M A4U A4S A4P A4Y B2U B2F B4U B4S B4P B4Y B5U D2U D2S D2P D2Y D3U D3F D4U D4S D4P D4Y D5U D6U E1U E1S E1P E1Y E2U E3U E3F E4U F1U F1S F1P F1Y F2U F2S F2P F2Y F3U F4U F4F F4S F4P F4Y G1U G1F CAU CBU CCJ CDU CEU CGU CHJ CJU CKU CLJ CMU CNU CPU CTO 11S 11P 11D 11Y A1D A7U A7F A5U A6C B2S B2P B2D B2Y B4D D2D D8U D9M DAC DBC D4D D6S D6P D6D D6Y E1D E3S E3P E3D E3Y E9U E9F EAM EBC F5U F5F F6C F2D F4D 91U 92U 93U 94U 95U 96U 97U 98U 14U 14F DCU DCF DDU DDF DEU DEF A8U 21C 22M 23U 24J 31M)	89P7942	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models 41M 51C 25M 32M CTJ 26U 26S 26D 26Y 33U 33S 33D 33Y 42S 43C 27S 27D 27Y 28S 28D 28Y 34J 35U 35S 35D 35Y 36U 36S 36D 36Y 37M 45U 46S 46D 46Y 47U 47S 47D 47Y 48U 48S 48D 48Y 4AM 4BU 4BF 52M CVJ CWU CYU 4CM A1U A1S A1P A1Y A2U A3M A4U A4S A4P A4Y B2U B2F B4U B4S B4P B4Y B5U D2U D2S D2P D2Y D3U D3F D4U D4S D4P D4Y D5U D6U E1U E1S E1P E1Y E2U E3U E3F E4U F1U F1S F1P F1Y F2U F2S F2P F2Y F3U F4U F4F F4S F4P F4Y G1U G1F CAU CBU CCJ CDU CEU CGU CHJ CJU CKU CLJ CMU CNU CPU CTO 11S 11P 11D 11Y A1D A7U A7F A5U A6C B2S B2P B2D B2Y B4D D2D D8U D9M DAC DBC D4D D6S D6P D6D D6Y E1D E3S E3P E3D E3Y E9U E9F EAM EBC F5U F5F F6C F2D F4D 91U 92U 93U 94U 95U 96U 97U 98U 14U 14F DCU DCF DDU DDF DEU DEF A8U 21C 22M 23U 24J 31M)	41X2825	**
8	System board, 10/100 E-net, POV (model 44M)	89P7941	**
8	System board, 10/100 E-net, POV (supports Prescott CPU) (model 44M)	41X2827	**
8	System board, Gigabit E-net, POV (models CSJ CUJ)	89P7943	**
8	System board, Gigabit E-net, POV (supports Prescott CPU) (models CSJ CUJ)	41X2831	**
8	System board, 10/100 E-net no POV (models 29U 39U 39S 39Y 3AS 3AY)	89P7958	**



Item #	8195 FRUs	FRU#	CRU
8	System board, 10/100 E-net no POV (supports Prescott CPU) (models 29U 39U 39S 39Y 3AS 3AY)	41X2833	**
9	128MB NP SDRAM PC2700 (models A1U A1S A1P A1Y A2U A4U A4S A4P A4Y B4U B4S B4P B4Y B5U D2U D2S D2P D2Y D4U D4S D4P D4Y D5U E1U E1S E1P E1Y E2U E4U F2U F2S F2P F2Y F3U CAU CBU CDU CEU CGU A1D A5U B4D D2D D4D E1D F2D A8U 24J 34J)	31P9120	*
9	256MB NP SDRAM PC2700 (models A3M B2U B2F D3U D3F D6U E3U E3F F1U F1S F1P F1Y F4U F4F F4S F4P F4Y G1U G1F CMU CPU 11S 11P 11D 11Y A7U A7F A6C B2S B2P B2D B2Y D8U D9M DAC DBC D6S D6P D6D D6Y E3S E3P E3D E3Y E9U E9F EAM EBC F5U F5F F4D CJU CKU CNU 91U 92U 93U 94U 95U 96U 97U 98U 14U 14F DCU DCF DDU DDF DEU DEF 21C 22M 23U 31M 41M 25M 32M 26U 26S 26D 26Y 33U 33S 33D 33Y 42S 44M 27S 27D 27Y 28S 28D 28Y 35U 35S 35D 35Y 36U 36S 36D 36Y 37M 45U 46S 46D 46Y 47U 47S 47D 47Y 48U 48S 48D 48Y 4AM 4BU 4BF CWU CYU 4CM 29U 39U 39S 39Y 3AS 3AY)	31P9121	*
9	512MB NP SDRAM PC2700 (models F6C 51C 43C 52M)	31P9122	*
10	Intel Celeron 2.0 GHz (models 11S 11P 11D 11Y)	74P1617	**
10	Intel Celeron 2.2 GHz (models 14U 14F)	74P1621	**
10	Intel Celeron 2.4 GHz (models 12U 12S 12P 12Y)	88P7699	**
10	Intel P4 2.4 GHz (models A1U A1S A1P A1Y A2U CAU A1D A7U A7F CCJ 91U 92U A8U)	74P1625	**
10	Intel P4 2.53 GHz (models B2U B2F B4U B4S B4P B4Y B5U CDU B2S B2P B2D B2Y B4D)	74P1627	**
10	Intel P4 2.66 GHz (models D3U D3F D4U D4S D4P D4Y D5U D6U CEU D4D D6S D6P D6D D6Y 95U 96U DDU DDF DEU DEF 24J)	74P1629	**
10	Intel P4 2.8 GHz (models E1U E1S E1P E1Y E2U E3U E3F CJU E1D E3S E3P E3D E3Y 97U)	74P1631	**
10	Intel P4 3.06 GHz (models F2U F2S F2P F2Y F3U F4U F4F F4S F4P F4Y F2D F4D CNU 45U)	74P1633	**
10	Intel P4 2.4 GHz (models A4U A4S A4P A4Y CBU A3M A5U A6C 93U)	88P5867	**
10	Intel P4 2.6 GHz (models D2U D2S D2P D2Y CGU CHJ D2D D8U D9M DAC DBC 94U DCU DCF 21C 22M 23U 25M 26U 26S 26D 26Y 27S 27D 27Y 28S 28D 28Y 29U)	88P5868	**
10	Intel P4 2.8 GHz (models E4U CKU CLJ E9U E9F EAM EBC 98U 31M 32M 33U 33S 33D 33Y 39U 39S 39Y 3AS 3AY)	88P5869	**
10	Intel P4 3.0 GHz (models F1U F1S F1P F1Y CMU F5U F5F F6C 41M CSJ 42S 43C 44M 46S 46D 46Y 4CM)	88P5870	**
10	Intel P4 3.2 GHz (models G1U G1F CPU 51C CTJ CUJ 52M)	88P5871	**
10	Intel P4 2.8 GHz (models 34J CVJ)	19R0423	**
10	Intel P4 2.8 GHz (models 35U 35S 35D 35Y 36U 36S 36D 36Y 37M CWU)	19R0292	**
10	Intel P4 3.0 GHz (models 47U 47S 47D 47Y 48U 48S 48D 48Y 4AM 4BU 4BF CYU)	19R0294	**

Item #	8195 FRUs	FRU#	CRU
11	Fan sink (for <3.0 Ghz processor) (models A1U A1S A1P A1Y A2U A3M A4U A4S A4P A4Y B2U B2F B4U B4S B4P B4Y B5U D2U D2S D2P D2Y D3U D3F D4U D4S D4P D4Y D5U D6U E1U E1S E1P E1Y E2U E3U E3F E4U CAU CBU CCJ CDU CEU CGU CHJ CJU CKU CLJ 11S 11P 11D 11Y A1D A7U A7F A5U A6C B2S B2P B2D B2Y B4D D2D D8U D9M DAC DBC D4D D6S D6P D6D D6Y E1D E3S E3P E3D E3Y E9U E9F EAM EBC CHE CLE 91U 92U 93U 94U 95U 96U 97U 98U 14U 14F DCU DCF DDU DDF DEU DEF A8U 21C 22M 23U 24J 31M 25M 32M 26U 26S 26D 26Y 33U 33S 33D 33Y 27S 27D 27Y 28S 28D 28Y 29U 39U 39S 39Y 3AS 3AY)	32P4004	**
11	Fan Sink (for =>3.0 Ghz processor) (models F1U F1S F1P F1Y F2U F2S F2P F2Y F3U F4U F4F F4S F4P F4Y G1U G1F CNU CPU F5U F5F F6C F2D F4D 41M 51C CSJ CTJ CUJ 42S 43C 44M 52M 45U 46S 46D 46Y 4CM)	01R3330	**
11	Fan Sink (for Prescott only) (models 34J CVJ 35U 35S 35D 35Y 36U 36S 36D 36Y 37M CWU 47U 47S 47D 47Y 48U 48S 48D 48Y 4AM 4BU 4BF CYU)	13R9195	**
11	P4 mounting assembly (all models)	48P6726	*
12	Power supply, 230W (models A1U A2U A3M A4U B2U B2F B4U B5U D2U D3U D3F D4U D5U D6U E1U E2U E3U E3F E4U F1U F2U F3U F4U F4F G1U G1F CAU CBU CCJ CDU CEU CGU CHJ CJU CKU CLJ CMU CNU CPU A7U A7F A5U D8U D9M E9U E9F EAM F5U F5F 91U 92U 93U 94U 95U 96U 97U 98U 14U 14F DCU DCF DDU DDF DEU DEF A8U 22M 23U 24J 31M 41M 25M 32M CSJ CTJ CUJ 26U 33U 44M 34J 35U 36U 37M 45U 47U 48U 4AM 4BU 4BF 52M CVJ CWU CYU 4CM 29U 39U)	74P4300	N
12	Power supply, 230W (China) (models A1S A1P A1Y A4S A4P A4Y B4S B4P B4Y D2S D2P D2Y D4S D4P D4Y E1S E1P E1Y F1S F1P F1Y F2S F2P F2Y F4S F4P F4Y 11S 11P 11D 11Y A1D A6C B2S B2P B2D B2Y B4D D2D DAC DBC D4D D6S D6P D6D D6Y E1D E3S E3P E3D E3Y EBC F6C F2D F4D 21C 51C 26S 26D 26Y 33S 33D 33Y 42S 43C 27S 27D 27Y 28S 28D 28Y 35S 35D 35Y 36S 36D 36Y 46S 46D 46Y 47S 47D 47Y 48S 48D 48Y 39S 39Y 3AS 3AY)	74P4301	N
13	Chassis assembly (all models)	59P8542	N

The FRUs listed in the following table are not illustrated.

8195 FRUs	FRU#	CRU
Front bezel release (all models)	25P0069	*
Front bezel blanks kit (all models)	25P0068	*
Rubber foot (all models)	03K9655	*
5.25 EMC shield (all models)	19K5548	*
Cable, Diskette drive (all models)	59P8568	*
Cable clip (all models)	59P8584	*
Cable, IDE (ATA66 2 drop) (all models)	37L5098	*
2 drop (close spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8571	*
2 drop (large spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8572	*
Retainer, cards I/O (all models)	59P8564	*
Universal adapter bracket (3.5 - 5.25) (all models)	32P4743	*
Fan assembly, 80 mm, fixed speed (all models)	22P4447	*



8195 FRUs	FRU#	CRU
Misc. hardware kit (all models)	09N5764	*
Cable, CDROM audio (all models)	75H9219	*
Cable, C2 (models CSJ CUJ 44M)	09K9827	*
Hard disk drive bracket assembly (all models)	59P8543	*
Hard disk drive tray (dampened) (all models)	59P8549	*
Cable, dual USB 2.0 (all models)	49P4365	*
Power switch assembly (all models)	59P8545	*
Audio cable assembly (ATA) (all models)	49P1933	*
2 audio front panel (models A6C DAC E9U E9F F5U F5F F4D F4U F4F F4S F4P F4Y 21C A8U 23U G1U G1F CPU 25M 32M 26U 26S 26D 26Y 33U 33S 33D 33Y 44M 35U 35S 35D 35Y 36U 36S 36D 36Y 37M 45U 46S 46D 46Y 47U 47S 47D 47Y 48U 48S 48D 48Y 4AM 4BU 4BF CWU CYU 4CM)	49P1750	*
2 audio w/1394 front panel (models DBC EBC F6C 51C 43C 52M)	49P1752	*
Keylock Kit GBM (random keyed) -- sub'd from 59P8565 (models CSJ CUJ 44M)	26K2205	*
90 deg 6 pin 1394 Cable (models DBC EBC F6C 43C)	59P8561	*
Cable, SATA (all models)	88P5927	*
Bezel Diskette drive (all models)	59P8548	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, optical wheel (models 26U 26S 26D 26Y 33U 33S 33D 33Y 42S 43C 44M 27S 27D 27Y 28S 28D 28Y 35U 35S 35D 35Y 36U 36S 36D 36Y 37M 45U 46S 46D 46Y 47U 47S 47D 47Y 48U 48S 48D 48Y 4AM 4BU 4BF 52M CWU CYU 4CM 29U 39U 39S 39Y 3AS 3AY A2U A3M A4U A4S A4P A4Y B2U B2F B4U B4S B4P B4Y B5U D2U D2S D2P D2Y D3U D3F D4U D4S D4P D4Y D5U D6U E1U E1S E1P E1Y E2U E3U E3F E4U F1U F1S F1P F1Y F2U F2S F2P F2Y F3U F4U F4F F4S F4P F4Y G1U G1F 11S 11P 11D 11Y A7U A7F A5U A6C B2S B2P B2D B2Y B4D D2D D8U D9M DAC DBC D4D D6S D6P D6D D6Y E1D E3S E3P E3D E3Y E9U E9F EAM EBC F5U F5F F6C F2D F4D CAU CBU CDU CEU CGU CJU CKU CMU CNU 91U 92U 93U 94U 95U 96U 97U 98U 14U 14F DCU DCF DDU DDF DEU DEF A8U 21C 22M 23U 31M 41M 51C CPU 25M 32M)	89P5089	*
Mouse, PS/2 - 2 button (Black) (models A1U A1S A1P A1Y A1D)	24P0383	*
Mouse, PS/2 - 3 button (Ball) Wheel (models 24J 34J)	24P0491	*
PCI Modem Card (Soft), ATX V.90 (models 35U 35S 35D 35Y 36U 36S 36D 36Y 37M 38C 45U 46S 46D 46Y 47U 47S 47D 47Y 48U 48S 48D 48Y 49C 4AM 4BU 4BF 52M 53C 4CM 29U 39U 39S 39Y 3AS 3AY A1U A1S A1P A1Y A2U A3M A4U A4S A4P A4Y B2U B2F B4U B4S B4P B4Y B5U D2U D2S D2P D2Y D3U D3F D4U D4S D4P D4Y D5U D6U E1U E1S E1P E1Y E2U E3U E3F E4U F1U F1S F1P F1Y F2U F2S F2P F2Y F3U F4U F4F F4S F4P F4Y G1U G1F 11S 11P 11D 11Y A1D A7U A7F A5U A6C B2S B2P B2D B2Y B4D D2D D8U D9M DAC DBC D4D D6S D6P D6D D6Y E1D E3S E3P E3D E3Y E9U E9F EAM EBC F5U F5F F6C F2D F4D 14U 14F DCU DCF DDU DDF DEU DEF A8U 21C 22M 23U 24J 31M 41M 51C 25M 32M 26U 26S 26D 26Y 33U 33S 33D 33Y 42S 43C 44M 27S 27D 27Y 28S 28D 28Y 34J)	22P7943	*
Nvidia GeForce MX 440 (Robin) (for 73P0712) includes xtra LP bracket for 73P0713 (models A3M D6U E3U E3F F4U F4F F4S F4P F4Y D6S D6P D6D D6Y E3S E3P E3D E3Y E9U E9F EAM EBC F5U F5F F6C F4D DEU DEF 22M 23U 31M 41M 32M 33U 33S 33D 33Y 28S 28D 28Y 46S 46D 46Y 48U 48S 48S 48Y 4AM 4CM)	73P0715	*

8195 FRUs	FRU#	CRU
ATI RADEON 9600 (Superman) (models G1U G1F 51C 42S 43C 44M 4BU 4BF 52M)	88P6084	*
1394 Firewire PCI LP (ATX) (models DBC EBC F6C 43C)	22P6849	*
1394 Firewire PCI LP (ATX) (models 43C 52M)	73P2609	*
Speakers, Infinity Active T1 (Black) (models 35U 35S 35D 35Y 36U 36S 36D 36Y 37M 38C 45U 46S 46D 46Y 47U 47S 47D 47Y 48U 48S 48D 48Y 49C 4AM 4BU 4BF 52M 53C 4CM 29U 39U 39S 39Y 3AS 3AY A1U A1S A1P A1Y A2U A3M A4U A4S A4P A4Y B2U B2F B4U B4S B4P B4Y B5U D2U D2S D2P D2Y D3U D3F D4U D4S D4P D4Y D5U D6U E1U E1S E1P E1Y E2U E3U E3F E4U F1U F1S F1P F1Y F2U F2S F2P F2Y F3U F4U F4F F4S F4P F4Y G1U G1F 11S 11P 11D 11Y A1D A7U A7F A5U A6C B2S B2P B2D B2Y B4D D2D D8U D9M DAC DBC D4D D6S D6P D6D D6Y E1D E3S E3P E3D E3Y E9U E9F EAM EBC F5U F5F F6C F2D F4D 14U 14F DCU DCF DDU DDF DEU DEF A8U 21C 22M 23U 24J 31M 41M 51C 25M 32M 26U 26S 26D 26Y 33U 33S 33D 33Y 42S 43C 44M 27S 27D 27Y 28S 28D 28Y 34J)	25P4726	*
Speaker Power brick - US, CE, CF, LA, Taiwan (models A1U A1S A1Y A2U A4U A4S A4Y B2U B2F B4U B4S B4Y B5U D2U D2S D2Y D3U D3F D4U D4S D4Y D5U D6U E1U E1S E1Y E2U E3U E3F E4U F1U F1S F1Y F2U F2S F2Y F3U F4U F4F F4S F4Y G1U G1F 11S 11D 11Y A1D A7U A7F A5U B2S B2D B2Y B4D D2D D8U D4D D6S D6D D6Y E1D E3S E3D E3Y E9U E9F F5U F5F F2D F4D 14U 14F DCU DCF DDU DDF DEU DEF A8U 23U 26U 26S 26D 26Y 33U 33S 33D 33Y 42S 27S 27D 27Y 28S 28D 28Y 35U 35S 35D 35Y 36U 36S 36D 36Y 45U 46S 46D 46Y 47U 47S 47D 47Y 48U 48S 48D 48Y 4BU 4BF 29U 39U 39S 39Y 3AS 3AY)	10K2587	*
Speaker Power brick (newer 2 prong) - China, Thailand, Phillipines (models A6C DAC DBC EBC F6C 21C 51C 43C)	10K2597	*
Speaker Power brick - Japan (models 24J 34J)	10K2593	*
Speaker Power brick - ANZ (models A3M D9M EAM 22M 31M 41M 25M 32M 44M 37M 4AM 52M 4CM)	25P5705	*
Speaker Power brick - Brazil (models A1P A4P B4P D2P D4P E1P F1P F2P F4P 11P B2P D6P E3P)	25P5706	*
Speaker Power brick - Argentina (models A1S A1Y A4S A4Y B4S B4Y D2S D2Y D4S D4Y E1S E1Y F1S F1Y F2S F2Y F4S F4Y 11S 11Y B2S B2Y D6S D6Y E3S E3Y 26S 26Y 33S 33Y 42S 27S 27Y 28S 28Y 35S 35Y 36S 36Y 46S 46Y 47S 47Y 48S 48Y 39S 39Y 3AS 3AY)	01R2253	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8195 Windows XP Pro Recovery CDs	FRU #	CRU
US (models 91U 92U 93U 94U 95U 96U 97U 98U)	29R7998	*
SP/LA (models 3AS 3AY)	29R8001	*

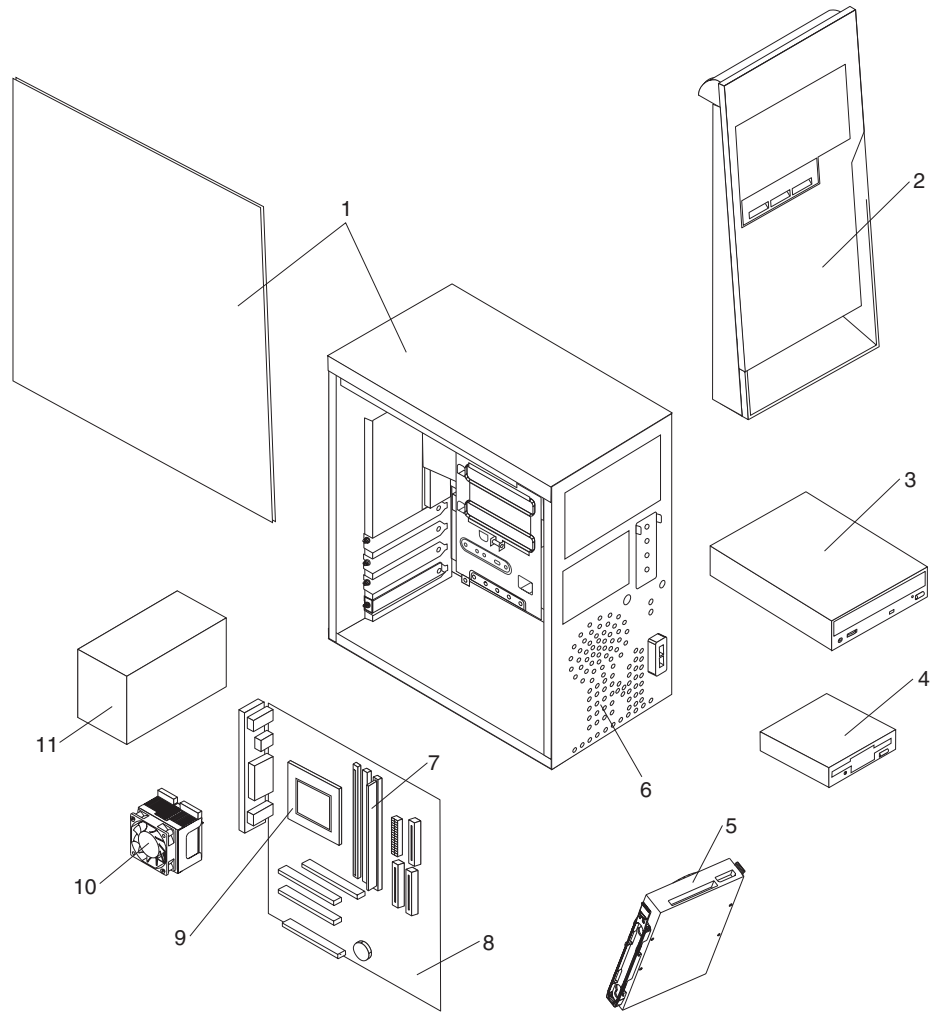
8195 Windows XP Home Recovery CDs	FRU#	CRU
US (models 14U A1U A2U A3M A4U A5U A7U B2U B4U B5U D2U D3U D4U D5U D6U D8U D9M DCU DDU DEU E1U E2U E3U E4U E9U EAM F1U F2U F3U F4U F5U G1U A8U 22M 23U 31M 41M 25M 32M 26U 33U 44M 35U 36U 37M 45U 47U 48U 4AM 4BU 52M 4CM 29U 39U)	29R8098	*
FR (models 14F A7F B2F D3F DCF DDF DEF E3F E9F F4F F5F G1F 4BF)	29R8099	*
SP (models 11D 11S 11Y A1D A1S A1Y A4S A4Y B2D B2S B2Y B4D B4S B4Y D2D D2S D2Y D4D D4S D4Y D6D D6S D6Y E1D E1S E1Y E3D E3S E3Y F1S F1Y F2D F2S F2Y F4D F4S F4Y 26S 26D 26Y 33S 33D 33Y 42S 27S 27D 27Y 28S 28D 28Y 35S 35D 35Y 36S 36D 36Y 46S 46D 46Y 47S 47D 47Y 48S 48D 48Y 39S 39Y)	29R8101	*
BR (models 11P A1P A4P B2P B4P D2P D4P D6P E1P E3P F1P F2P F4P)	29R8103	*
JP (models 24J 34J)	13M6445	*
SC (models A6C DAC DBC EBC F6C 21C 51C)	27K6932	*

8195 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models A1U A2U A4U B4U B5U D2U D4U D5U D6U E1U E2U E4U F1U F2U CAU CBU CDU CEU CGU CJU CKU CMU CNU CPU A5U D8U 91U 92U 93U 94U 95U 96U 97U 98U A8U 23U 26U 33U 35U 36U 45U 47U 48U CWU CYU 29U 39U)	89P8300	*
Japanese (models 24J 34J)	89P8320	*
LA Spanish (models A1S A1Y A4S A4Y B4S B4Y D2S D2Y D4S D4Y E1S E1Y F1S F1Y F2S F2Y A1D B4D D2D D4D D6S D6D D6Y E1D F2D 26S 26D 26Y 33S 33D 33Y 27S 27D 27Y 35S 35D 35Y 36S 36D 36Y 47S 47D 47Y 48S 48D 48Y 39S 39Y 3AS 3AY)	89P8322	*
Brazil/Portuguese (models A1P A4P B4P D2P D4P E1P F1P F2P D6P)	89P8304	*

8195 Keyboards RAK III Lite	FRU#	CRU
US English (models A3M B2U D3U G1U A7U A6C D9M DAC DBC E3U E9U EAM EBC F5U F6C F3U F4U 14U DCU DDU DEU 21C 22M 31M 41M 51C 25M 32M 43C 44M 37M 4AM 4BU 52M 4CM)	19K1910	*
French Canadian (models B2F D3F G1F A7F E3F E9F F5F 14F DCF DDF DEF 4BF)	19K1920	*
French Canadian (models B2F D3F G1F A7F E3F E9F F5F 14F DCF DDF DEF 4BF)	19K1921	*
LA Spanish (models 11S 11D 11Y B2S B2D B2Y E3S E3D E3Y F4D F4S F4Y 42S 28S 28D 28Y 46S 46D 46Y)	19K1930	*
Brazil/Portuguese (models 11P B2P E3P F4P)	19K1948	*

8195 Power Cords	FRU#	CRU
Power Cord (models 28S 28D 35U 35S 35D 36U 36S 36D 37M 45U 46S 46D 47U 47S 47D 48U 48S 48D 4AM 4BU 4BF 52M CWU CYU A1U A1S A1P A2U A3M A4U A4S A4P B2U B2F B4U B4S B4P B5U D2U D2S D2P D3U D3F D4U D4S D4P D5U D6U E1U E1S E1P E2U E3U E3F E4U F1U F1S F1P F2U F2S F2P F3U F4U F4F F4S F4P G1U G1F CAU CBU CDU CEU CGU CJU CKU CMU CNU CPU CTO 11S 11P 11D A1D A7U A7F A5U B2S B2P B2D B4D D2D D8U D9M D4D D6S D6P D6D E1D E3S E3P E3D E9U E9F EAM F2D F4D 91U 92U 93U 94U 95U 96U 97U 98U 14U 14F DCU DCF DDU DDF DEU DEF A8U 22M 23U 31M 41M 25M 32M 26U 26S 26D 33U 33S 33D 42S 44M 27S 27D)	6952301	*
Power Cord (models D9M EAM 22M 31M 41M 25M 32M 44M 37M 4AM 52M 4CM)	13F9939	*
Power Cord (models D9M EAM 22M 31M 41M 25M 32M 44M 37M 4AM 52M 4CM)	13F9978	*
Power Cord (models D9M EAM 22M 31M 41M 25M 32M 44M 37M 4AM 52M 4CM)	14F0032	*
Power Cord (models A1S A1P A1Y A4S A4P A4Y B4S B4P B4Y D2S D2P D2Y D4S D4P D4Y E1S E1P E1Y F1S F1P F1Y F2S F2P F2Y F4S F4P F4Y 11S 11P 11D 11Y A1D B2S B2P B2D B2Y B4D D2D D4D D6S D6P D6D D6Y E1D E3S E3P E3D E3Y F2D F4D 26S 26D 26Y 33S 33D 33Y 42S 27S 27D 27Y 28S 28D 28Y 35S 35D 35Y 36S 36D 36Y 46S 46D 46Y 47S 47D 47Y 48S 48D 48Y 39S 39Y 3AS 3AY)	14F0068	*
Power Cord (models A1Y A4Y B4Y D2Y D4Y E1Y F1Y F2Y F4Y 11Y B2Y D6Y E3Y 26Y 33Y 27Y 28Y 35Y 36Y 46Y 47Y 48Y 39Y 3AY)	36L8879	*
Power Cord (models CCJ CHJ CLJ 24J CSJ CTJ CUJ 34J CVJ)	1838576	*
Power Cord (models A6C DAC DBC EBC 21C 51C 43C)	02K0545	*
Power Cord (models D9M EAM 22M 31M 41M 25M 32M 44M 37M 4AM 52M 4CM)	14F0014	*

# Type 8196



Item #	8196 FRUs	FRU#	CRU
1	Chassis assembly (all models)	74P2256	**
2	Bezel and shield kit (all models)	74P2257	*
3	CD-ROM Drive 48X - Black (models A2V D1A D1T D1B D1H D1V A2C A2B A2H)	33P3203	**
3	CD-ROM Drive 48X - Black (models A2V D1A D1T D1B D1H D1V A2C A2B A2H)	33P3211	**
3	CD-ROM Drive 48X - Black (models A2V D1A D1T D1B D1H D1V A2C A2B A2H)	33P3207	**
3	CD-ROM Drive 48X - Black (models A2V D1A D1T D1B D1H D1V A2C A2B A2H)	71P7353	**
3	CD-ROM Drive 48X - Black w/o jack & vol (models 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	71P7367	**

Item #	8196 FRUs	FRU#	CRU
3	CD-ROM Drive 48X - Black w/o jack & vol (models 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	71P7369	**
3	CD-ROM Drive 48X - Black w/o jack & vol (models 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	71P7371	**
3	CD-ROM Drive 48X - Black w/o jack & vol (models 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	71P7375	**
3	CD-ROM Drive 48X - Black w/o jack & vol (models 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	71P7385	**
3	48X combo drive (model DAV)	33P3301	**
4	Diskette drive, 3.5 1.44 MB (models A2V D1A D1T D1B D1H D1V A2C A2B A2H D4V 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	76H4091	**
5	Hard disk drive, 40 GB EIDE (models A2V D1A D1T D1B D1H D1V A2C A2B A2H 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	19K1568	*
5	Hard disk drive, 80 GB EIDE (model D4V)	24P3665	*
6	Speaker Asm. Soldered Terminals (no models)	00N5151	*
7	256 MB SDRAM (models A2V D1A D1T D1B D1H D1V A2C A2B A2H D4V 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	31P9121	*
8	System board, 10/100 E-net, no POV (models A2V D1A D1T D1B D1H D1V A2C A2B A2H D4V 31A 31T 31B 31H 51A 51T)	89P7942	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models A2V D1A D1T D1B D1H D1V A2C A2B A2H D4V 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C)	41X2825	**
8	System board, 10/100 E-net, no POV (models 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 52A 52T)	89P7958	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 52A 52T)	41X2833	**
9	Intel Celeron 2.4 GHz (models 12U 12S 12P 12Y)	88P7699	**
9	Intel P4 2.4 GHz (models A2V A2C A2B A2H)	88P5867	**
9	Intel P4 2.6 GHz (models D4V D1A D1T D1B D1H D1V)	88P5868	**
9	Intel P4 2.8 GHz (models 33A 33T)	74P1631	**
9	Intel P4 2.8 GHz (models 31A 31T 31B 31H 34C 35C 36A 36T 36B 36H)	88P5869	**
9	Intel P4 3.0 GHz (models 42C 43C 44B 44H)	88P5870	**
9	Intel P4 3.2 GHz (models 51A 51T 51B 51H 52A 52T)	88P5871	**
9	Intel Prescott P4 2.8 GHz (models 32A 32T 32B 32C 32H 32V)	19R0292	**

Item #	8196 FRUs	FRU#	CRU
9	Intel Prescott P4 3.0 GHz (models 41A 41T 41B 41H 41V 45A 45T 45V)	19R0294	**
10	Fan sink (for =>2.8 GHz processor) (models 51A 51T 51B 51H 42C 43C 44B 44H 52A 52T)	01R3330	**
10	Fan sink (for <2.8 GHz processor) (models A2V D1A D1T D1B D1H D1V A2C A2B A2H D4V D1A D1T D1B D1H D1V 31A 31T 31B 31H 33A 33T 34C 35C 36A 36T 36B 36H)	32P4004	**
10	Fan sink (for Prescott only) (models 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 32C 45A 45T 45V)	13R9195	**
11	Power Supply, 230W (models D1A D1T 31A 31T 51A 51T 32A 32T 41A 41T 33A 33T 36A 36T 45A 45T 52A 52T)	74P4300	N
11	Power Supply, 230W (China) (models A2V D1B D1H D1V A2C A2B A2H D4V 31B 31H 32B 32H 32V 41B 41H 41V 51B 51H 32C 34C 35C 36B 36H 42C 43C 44B 44H 45V)	74P4301	N

The FRUs listed in the following table are not illustrated.

8196 FRUs	FRU#	CRU
Cable, Diskette drive (all models)	59P8568	*
Cable, IDE (ATA66 1 drop) (all models)	37L4525	*
Cable, IDE (ATA66 2 drop) (all models)	37L5098	*
Cable, SATA (all models)	88P5927	*
Cable, CDROM audio (all models)	75H9219	*
Audio cable assembly (ATA) (all models)	49P1933	*
SPDIF card assembly (all models)	49P1754	*
Front panel label kit (all models)	09N6708	*
Cable assembly, power/LED (all models)	09N6709	*
Cable, dual USB 1.1 (all models)	89P8137	*
Access panel (all models)	49P3386	*
Screw kit (all models)	49P3387	*
Bracket, second hardfile mount & 6-32 screw (all models)	74P2254	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, optical wheel (models A2V D1A D1T D1B D1H D1V A2C A2B A2H D4V 31A 31T 31B 31H 51A 51T 32A 32T 32B 32H 32V 41A 41T 41B 41H 41V 51B 51H 32C 33A 33T 34C 35C 36A 36T 36B 36H 42C 43C 44B 44H 45A 45T 45V 52A 52T)	89P5089	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*

8196 FRUs	FRU#	CRU
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8196 Windows XP Pro Recovery CDs	FRU #	CRU
US (models A2H D1A D1H D1T 31A 31T 31H 51A 51T 32A 32T 32H 41A 41T 41H 51H 33A 33T 36A 36T 36H 44H 45A 45T 52A 52T)	29R7998	*
SC (model A2C)	88P8777	*
SC (models A2C 32C -- optional to 88P8777)	27K6907	*
TW (models A2V D1V 32V 41V 45V)	27K6912	*
HK (models A2B D1B 31B 32B 41B 51B 36B 44B)	27K6917	*

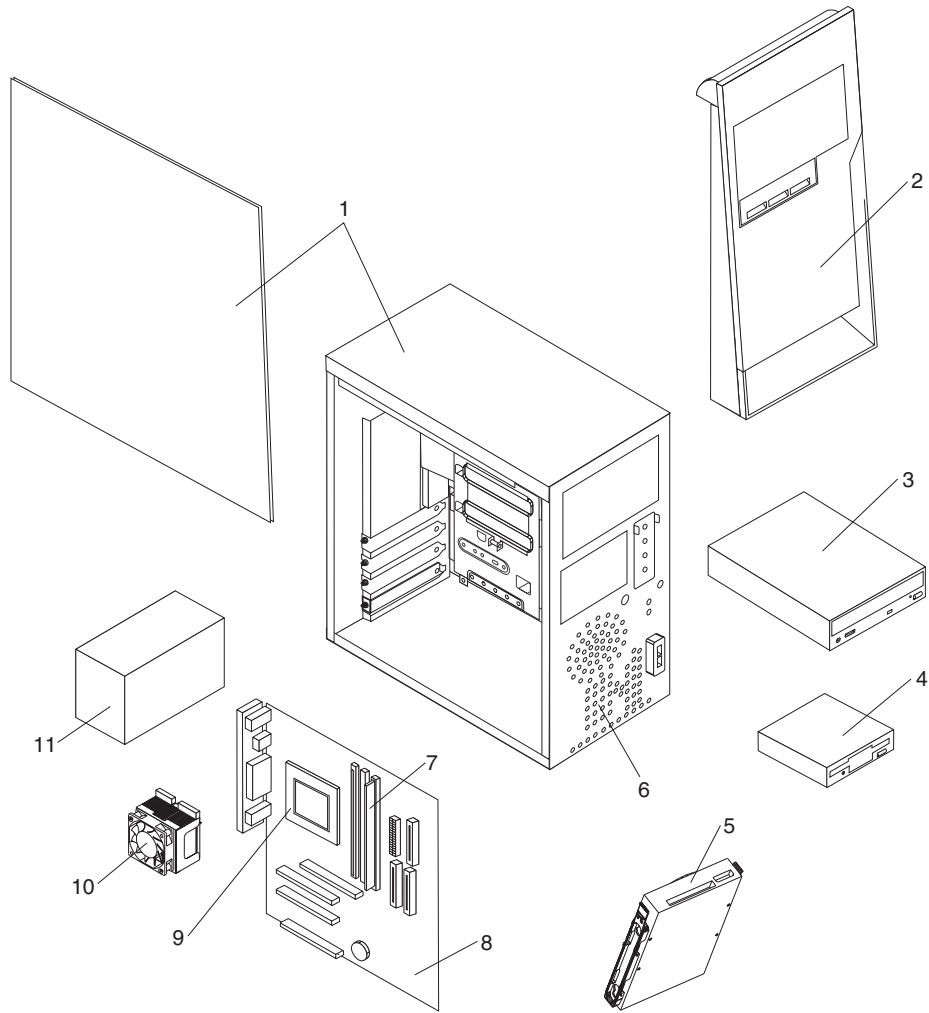
8196 Windows XP Home Recovery CDs	FRU#	CRU
SC (models 35C 43C)	13M6304	*
TW (model D4V)	27K6937	*

8196 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models D1A D1H A2C A2H 31A 31H 51A 32A 32H 41A 41H 51H 32C 33A 34C 35C 36A 36H 42C 43C 44H 45A 52A)	89P8300	*
Chinese/US (models A2V D1B D1V A2B D4V 31B 32B 32V 41B 41V 51B 36B 44B 45V)	89P8306	*
Thailand (models D1T 31T 51T 32T 41T 33T 36T 45T 52T)	89P8334	*

8196 Power Cords	FRU#	CRU
Power Cord (models A2V D1A D1T D1V D4V 32A 32T 32V 41A 41T 41V 33A 33T 36A 36T 45A 45T 45V 52A 52T)	6952301	*
Power Cord (models D1A 32A 41A 33A 36A 45A 52A)	13F9939	*
Power Cord (models D1A 32A 41A 33A 36A 45A 52A)	13F9978	*
Power Cord (models D1A D1H A2H 32A 32H 41A 41H 51H 33A 36A 36H 44H 45A 52A)	14F0032	*
Power Cord (models D1B D1H A2C A2B A2H 32B 32H 41B 41H 51B 51H 32C 34C 35C 36B 36H 42C 43C 44B 44H)	02K0545	*
Power Cord (models D1A 32A 41A 33A 36A 45A 52A)	14F0014	*



# Type 8197



Item #	8197 FRUs	FRU#	CRU
1	Chassis assembly (all models)	74P2256	**
2	Bezel and shield kit (all models)	74P2257	*
3	DVD-ROM 16X/48X - Black (model E2B)	71P7357	**
3	DVD-ROM 16X/48X - Black (model E2B)	33P3237	**
3	48X24X48X CD-RW (Black) (models D2A D2T E2B)	33P3289	**
3	48X24X48X CD-RW (Black) (models D2A D2T E2B)	71P7349	**
3	48X combo drive (models E3A E3T E4V)	33P3301	**
4	Diskette drive, 3.5 1.44 MB (models D2A D2T E3A E3T E4V E2B)	76H4091	**
5	Hard disk drive, 80 GB EIDE (models D2A D2T E3A E3T E4V E2B)	24P3665	*
6	Speaker Asm. Soldered Terminals (no models)	00N5151	*
7	256 MB SDRAM (models D2A D2T E3A E3T)	31P9121	*
7	512 MB SDRAM (model E2B)	31P9122	*
8	System board, 10/100 E-net, no POV (models D2A D2T E3A E3T E4V E2B)	89P7942	**

Item #	8197 FRUs	FRU#	CRU
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models D2A D2T E3A E3T E4V E2B)	41X2825	**
9	Intel P4 2.6 GHz (models D2A D2T)	88P5868	**
9	Intel P4 2.8 GHz (models E3A E3T E4V E2B)	88P5869	**
10	Fan sink (models D2A D2T E3A E3T E4V E2B)	32P4004	**
11	Power supply, 230W (models D2A D2T E3A E3T)	74P4300	N
11	Power supply, 230W (China) (models E4V E2B)	74P4301	N

The FRUs listed in the following table are not illustrated.

8197 FRUs	FRU#	CRU
Cable, Diskette drive (all models)	59P8568	*
Cable, IDE (ATA66 1drop) (all models)	37L4525	*
Cable, IDE (ATA66 2drop) (all models)	37L5098	*
Cable, SATA (all models)	88P5927	*
Cable, CDROM audio (all models)	75H9219	*
Audio cable assembly (ATA) (all models)	49P1933	*
SPDIF card assembly (all models)	49P1754	*
Front panel label kit (all models)	09N6708	*
Cable assembly, power/LED (all models)	09N6709	*
Cable, dual USB 1.1 (all models)	89P8137	*
Access panel (all models)	49P3386	*
Screw kit (all models)	49P3387	*
Bracket, second hardfile mount & 6-32 screw (all models)	74P2254	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, optical wheel (models D2A D2T E3A E3T E4V E2B)	89P5089	*
PCI modem card (soft) ATX V.90 (models D2A D2T E3A E3T E4V E2B)	22P7943	*
Nvidia GeForce MX 440 (models D2A D2T E2B E4V)	73P0715	*
ATI RADEON 9600 (models E3A E3T)	88P6084	*
Speakers, Infinity Active T1 (Black) (models D2A D2T E3A E3T E4V E2B)	25P4726	*
Speaker Power brick - US, CE, CF, LA (models D2T E3T)	10K2587	*
Speaker Power brick - Taiwan (model E4V)	03R0338	*
Speaker Power brick - UK, Hong Kong (3 prong) (model E2B)	25P5703	*
Speaker Power brick (newer 2 prong) - China, Thailand, Philippines (model E2B)	10K2597	*
Speaker Power brick - ANZ (models D2A E3A)	25P5705	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*

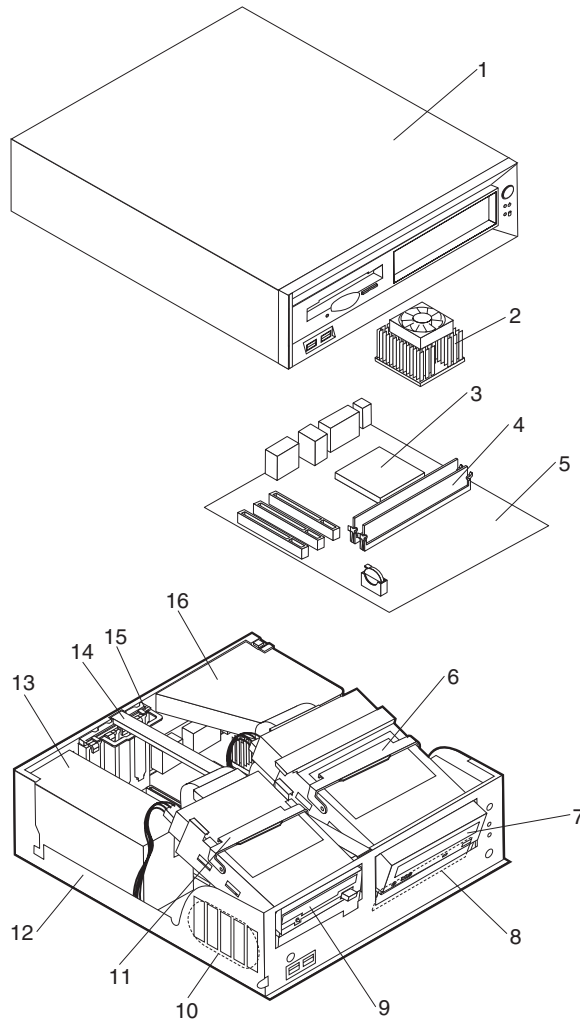
<b>8197 FRUs</b>	<b>FRU#</b>	<b>CRU</b>
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

<b>8197 Windows XP Home Recovery CDs</b>	<b>FRU#</b>	<b>CRU</b>
US (models D2A D2T E3A E3T)	29R8098	*
TW (model E4V)	27K6937	*
HK (model E2B)	27K6942	*

<b>8197 Keyboards RAK III Lite</b>	<b>FRU#</b>	<b>CRU</b>
US English (models D2A E3A)	19K1910	*
Chinese/US (models E4V E2B)	19K1915	*
Thailand (models D2T E3T)	19K1942	*

<b>8197 Power Cords</b>	<b>FRU#</b>	<b>CRU</b>
Power Cord (model E2B)	02K0545	*

## Type 8413



Item #	8413 FRUs	FRU#	CRU
1	Top cover assembly	88P5925	*
2	Fan sink	32P4004	**
2	Fan sink	01R3330	**
3	Intel P4 2.4 GHz	88P5867	**
3	Intel P4 2.4 GHz	74P1625	**
3	Intel P4 2.53 GHz	74P1627	**
3	Intel P4 2.6 GHz	88P5868	**
3	Intel P4 2.66 GHz	74P1629	**
3	Intel P4 2.8 GHz	88P5869	**
3	Intel P4 2.8 GHz	74P1631	**
3	Intel P4 3.0 GHz	88P5870	**
3	Intel P4 3.06 GHz	74P1633	**
3	Intel P4 3.2 GHz	88P5871	**
4	128 MB SDRAM	31P9120	*

Item #	8413 FRUs	FRU#	CRU
4	256 MB SDRAM	31P9121	*
4	512 MB SDRAM	31P9122	*
5	System board, 10/100 E-net, no POV	73P0595	**
5	System board, 10/100 E-net, no POV (supports Prescott CPU)	13R8926	**
5	System board, 10/100 E-net, POV	73P0594	**
5	System board, 10/100 E-net, POV (supports Prescott CPU)	13R8925	**
5	System board, Gigabit E-net, no POV	88P5837	**
5	System board, Gigabit E-net, no POV (supports Prescott CPU)	13R8931	**
5	System board, Gigabit E-net, POV	73P0596	**
5	System board, Gigabit E-net, POV (supports Prescott CPU)	13R8930	**
6	Pivot lock, 5.25 DASD	24P9877	*
7	CD-ROM Drive 48X - Black	33P3203	**
7	CD-ROM Drive 48X - Black	33P3211	**
7	CD-ROM Drive 48X - Black	33P3215	**
7	CD-ROM Drive 48X - Black w/o jack & vol	71P7367	**
7	CD-ROM Drive 48X - Black w/o jack & vol	71P7369	**
7	CD-ROM Drive 48X - Black w/o jack & vol	71P7375	**
7	DVD-ROM 16X/48X - Black	33P3237	**
8	Hard disk drive, 40 GB EIDE	19K1568	*
8	Hard disk drive, 80 GB SATA	71P7293	*
9	Diskette drive, 3.5 1.44 MB	76H4091	**
10	Speaker assembly	00N5151	*
11	Pivot lock, 3.5 Diskette drive	24P9876	*
12	Chassis assembly	88P5924	**
13	Power supply, 200W	74P4305	N
13	Power supply, 200W (China)	74P4306	N
14	Link bracket	88P5918	*
15	I/O cam bracket	24P9869	*
16	Air duct w/o fan	88P5922	*

The FRUs listed in the following table are not illustrated.

8413 FRUs	FRU#	CRU
Cable, C2 (squal)	09K9827	*
5.25 EMC shield	19K5548	*
Retention kit	88P5915	*
Planar shield kit	88P5931	*
Cable, Diskette drive	88P5930	*
Optical cable, ATA66	88P5929	*
Cable, Hard disk drive	88P5928	*
Cable, SATA	88P5927	*

8413 FRUs	FRU#	CRU
Service label	88P5926	*
Bezel kit	88P5923	*
Fan bracket assembly	88P5921	*
Korean label	13R9162	*
Misc. hardware kit	24P9878	*
Cable, CDRom audio	75H9219	*
Keylock assembly, random	88P5920	*
Vertical stand, black	88P5917	*
Bottom foot	03K9655	*
Hard disk drive mounting bracket assembly	88P5916	**
Cable assembly, power/LED	37L5092	*
Cable, USB 2.0	49P4365	*
Battery, 3.0 V	33F8354	*
Mouse, 2 button, black	24P0383	*
Mouse, 3 button wheel	24P0491	*
Mouse, optical wheel	89P5089	*
Nvidia GeForce MX 440	73P0715	*
RJ11 connector adapter (Spain, Ireland)	60H6043	*
RJ11 connector adapter (Austria)	60H6045	*
RJ11 connector adapter (Belgium)	60H6046	*
RJ11 connector adapter (Denmark)	60H6047	*
RJ11 connector adapter (Norway, Finland)	60H6048	*
RJ11 connector adapter (France)	60H6049	*
RJ11 connector adapter (Germany)	60H6050	*
RJ11 connector adapter (UK, NZ, HK))	60H6051	*
RJ11 connector adapter (Italy)	60H6052	*
RJ11 connector adapter (Netherlands)	60H6053	*
RJ11 connector adapter (Sweden)	60H6054	*
RJ11 connector adapter (Switzerland)	60H6055	*

8413 Windows 2000 Recovery CDs	FRU #	CRU
US	13M6813	*
BR	13M6833	*
SP	13M6825	*

8413 Windows XP Pro Recovery CDs	FRU #	CRU
US	13M6885	*
FR	13M6890	*
GR	13M6895	*
IT	13M6905	*
SP	13M6900	*

8413 Windows XP Pro Recovery CDs	FRU #	CRU
BR	13M6910	*
DK	13M6920	*
NL	74P2610	*
AE	74P2635	*
SV	13M6915	*
HE	74P2615	*
FI	13M7038	*
NO	74P2605	*
PL	74P2620	*
PO	74P2650	*
RU	74P2625	*
HU	74P2645	*
CZ	74P2630	*
TR	74P2640	*
GK	74P2655	*
JP	13M6330	*
SC	88P8777	*
TW	88P8781	*
HK	13M6300	*

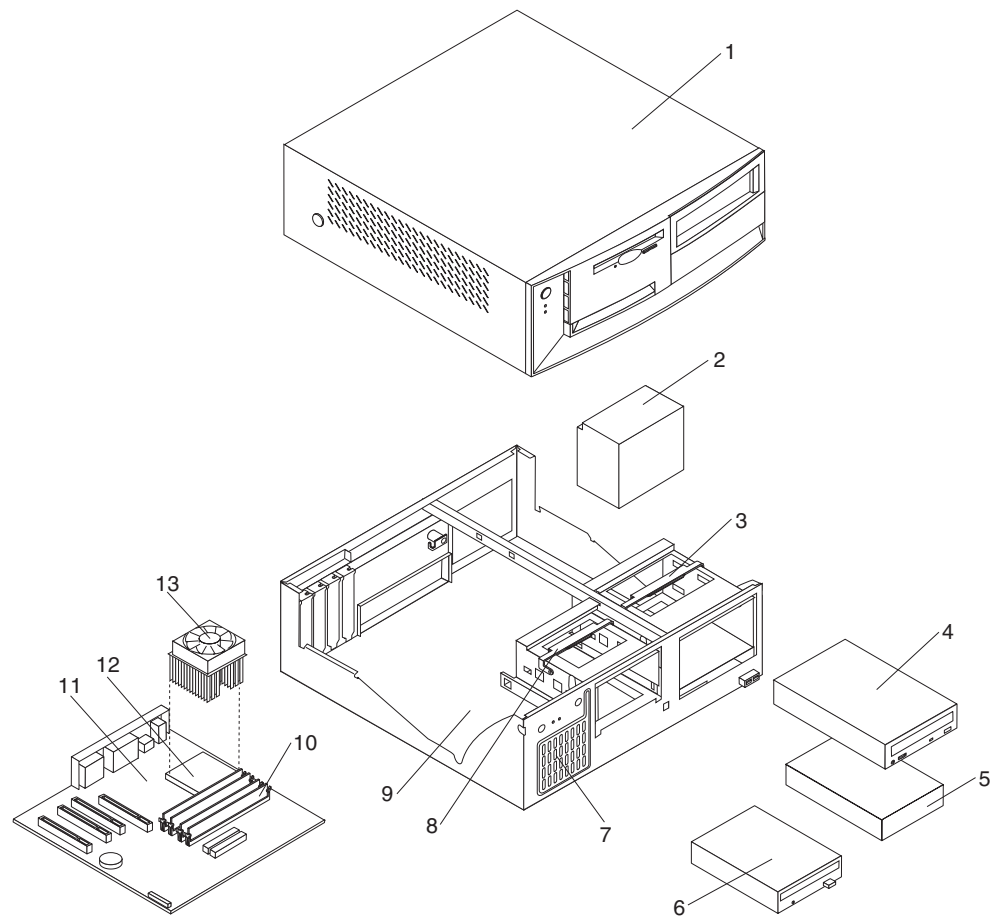
8413 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English	89P8300	*
Arabic	89P8301	*
Belgian/French	89P8302	*
Belgian/UK	89P8303	*
Bulgarian	89P8305	*
Chinese/US	89P8306	*
Czech	89P8307	*
Danish	89P8308	*
Dutch	89P8309	*
French	89P8310	*
French Canadian	89P8311	*
French Canadian	89P8312	*
German	89P8313	*
Greek	89P8314	*
Hebrew	89P8315	*
Hungarian	89P8316	*
Iceland	89P8317	*
Italian	89P8318	*
Italian	89P8319	*
Japanese	89P8320	*

<b>8413 Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU</b>
Korean	89P8321	*
LA Spanish	89P8322	*
Norwegian	89P8323	*
Polish	89P8324	*
Portuguese	89P8325	*
Romanian	89P8326	*
Russian/Cy	89P8327	*
Russian/Cy	89P8328	*
Serbian/Cyrillic	89P8329	*
Slovak	89P8330	*
Spanish	89P8331	*
Swedish/Finn	89P8332	*
Swiss F/G	89P8333	*
Thailand	89P8334	*
Turkish	89P8335	*
Turkish	89P8336	*
UK English	89P8337	*
US International	89P8338	*
Yugoslav/Latin	89P8339	*
Brazil/Portuguese	89P8304	*

<b>8413 Power Cords</b>	<b>FRU#</b>	<b>CRU</b>
Power Cord	6952301	*
Power Cord	13F9939	*
Power Cord	13F9978	*
Power Cord	14F0032	*
Power Cord	13F9996	*
Power Cord	14F0068	*
Power Cord	36L8879	*
Power Cord	02K0545	*
Power Cord	14F0086	*
Power Cord	14F0014	*
Power Cord	14F0050	*



## Type 8414



Item #	8414 FRUs	FRU#	CRU
1	Top cover assembly	88P5962	**
2	Power supply, 230W	74P4300	N
2	Power supply, 230W (China)	74P4301	N
3	Pivot lock, 5.25 DASD	09N5747	**
4	CD-ROM Drive 48X - Black	33P3203	**
4	CD-ROM Drive 48X - Black	33P3211	**
4	CD-ROM Drive 48X - Black	33P3215	**
4	CD-ROM Drive 48X - Black w/o jack & vol	71P7367	**
4	CD-ROM Drive 48X - Black w/o jack & vol	71P7369	**
4	CD-ROM Drive 48X - Black w/o jack & vol	71P7375	**
4	DVD-ROM 16X/48X - Black	71P7357	**
4	DVD-ROM 16X/48X - Black	33P3237	**
4	DVD-ROM 16X/48X - Black	33P3257	**
4	48X24X48 CD-RW (Black)	33P3289	**
4	CD-RW Drive (48X/32X/48X)	71P7347	**
4	CD-RW Drive (48X/32X/48X)	71P7349	**
4	48X Combo drive	33P3301	**

Item #	8414 FRUs	FRU#	CRU
5	Hard disk drive, 40 GB EIDE	19K1568	*
5	Hard disk drive, 80 GB SATA	71P7293	*
5	Hard disk drive, 80 GB EIDE	24P3665	*
6	Diskette drive, 3.5 1.44 MB	76H4091	**
7	Speaker assembly	00N5151	*
8	Pivot lock, 3.5 Diskette drive	09N5748	**
9	Chassis/top cover kit	88P5963	**
10	128 MB SDRAM	31P9120	*
10	256 MB SDRAM	31P9121	*
10	512 MB SDRAM	31P9122	*
11	System board, 10/100 E-net, no POV	73P0595	**
11	System board, 10/100 E-net, no POV (supports Prescott CPU)	13R8926	**
11	System board, 10/100 E-net, POV	73P0594	**
11	System board, 10/100 E-net, POV (supports Prescott CPU)	13R8925	**
11	System board, Gigabit E-net, no POV	88P5837	**
11	System board, Gigabit E-net, no POV (supports Prescott CPU)	13R8931	**
11	System board, Gigabit E-net, POV	73P0596	**
11	System board, Gigabit E-net, POV (supports Prescott CPU)	13R8930	**
12	Intel Celeron 2.2 GHz	74P1621	**
12	Intel Celeron 2.4 GHz	88P7699	**
12	Intel Celeron 2.6 GHz	13R8907	**
12	Intel Celeron 2.7 GHz	13R8947	**
12	Intel Celeron 2.8 GHz	13R8963	**
12	Intel P4 2.4 GHz	74P1625	**
12	Intel P4 2.4 GHz	88P5867	**
12	Intel P4 2.53 GHz	74P1627	**
12	Intel P4 2.66 GHz	74P1629	**
12	Intel P4 2.6 GHz	88P5868	**
12	Intel P4 2.8 GHz	74P1631	**
12	Intel P4 2.8 GHz	88P5869	**
12	Intel P4 3.06 GHz	74P1633	**
12	Intel P4 3.0 GHz	88P5870	**
12	Intel P4 3.2 GHz	88P5871	**
13	Fan sink	01R3330	**
13	Fan sink	32P4004	**

The FRUs listed in the following table are not illustrated.

8414 FRUs	FRU#	CRU
RFID antenna - velcro	03K9654	*
Cable, C2 assembly	09K9827	*

8414 FRUs	FRU#	CRU
5.25 EMC shield	19K5548	*
Retention kit	88P5915	*
Planar shield kit	88P5931	*
Cable, Diskette drive	88P6515	*
Cable, ATA66 1 drop	88P5967	*
Cable, ATA66 2 drop	88P5971	*
Cable, SATA	88P5927	*
Service label	88P5964	*
Bezel kit	49P4371	*
Fan bracket assembly	89P6700	*
Korean label	13R9162	*
Misc. hardware kit	88P5965	*
Cable, CDROM audio	75H9219	*
Keylock assembly, random	88P5920	*
Hard disk drive mounting bracket assembly	88P5916	*
Cable assembly, power/LED	37L5092	*
Cable, second serial port	49P4530	*
Cable, dual USB 2.0	49P4365	*
Battery, 3.0 V	33F8354	*
Mouse, 2 button, black	24P0383	*
Mouse, 3-button wheel	24P0491	*
Mouse, optical wheel	89P5089	*
Nvidia GeForce MX 440	73P0715	*
ATI RADEON 9600 (Superman)	88P6084	*
RJ11 connector adapter (Spain, Ireland)	60H6043	*
RJ11 connector adapter (Austria)	60H6045	*
RJ11 connector adapter (Belgium)	60H6046	*
RJ11 connector adapter (Denmark)	60H6047	*
RJ11 connector adapter (Norway, Finland)	60H6048	*
RJ11 connector adapter (France)	60H6049	*
RJ11 connector adapter (Germany)	60H6050	*
RJ11 connector adapter (UK, NZ, HK)	60H6051	*
RJ11 connector adapter (Italy)	60H6052	*
RJ11 connector adapter (Netherlands)	60H6053	*
RJ11 connector adapter (Sweden)	60H6054	*
RJ11 connector adapter (Switzerland)	60H6055	*

8414 Windows 2000 Recovery CDs	FRU #	CRU
US	13R9673	*
FR	13R9674	*
GR	13R9675	*

8414 Windows 2000 Recovery CDs	FRU #	CRU
IT	13R9677	*
BR	13R9678	*
SP (	13R9676	*
DK	13R9680	*
NL	13R9683	*
AE	13R9687	*
SV	13R9679	*
HE	13R9684	*
FI	13R9681	*
NO	13R9682	*
PL	13R9685	*
PO	13R9691	*
RU	13R9688	*
HU	13R9690	*
CZ	13R9686	*
TR	13R9689	*
GK	13R9692	*
SC	13M6421	*
HK	13M6427	*

8414 Windows XP Pro Recovery CDs	FRU #	CRU
US	29R7998	*
FR	29R7999	*
GR	29R8000	*
IT	29R8002	*
SP	29R8001	*
BR	29R8003	*
DK	29R8005	*
NL	29R8008	*
AE	29R8012	*
SV	29R8004	*
HE	29R8009	*
FI	29R8006	*
NO	29R8007	*
PL (	29R8010	*
PO	29R8016	*
RU	29R8013	*
HU	29R8015	*
CZ	29R8011	*
TR	29R8014	*
GK	29R8017	*

8414 Windows XP Pro Recovery CDs	FRU #	CRU
JP	13M6438	*
SC	27K6907	*
TW	27K6912	*
HK	27K6917	*
KR	13M6405	*

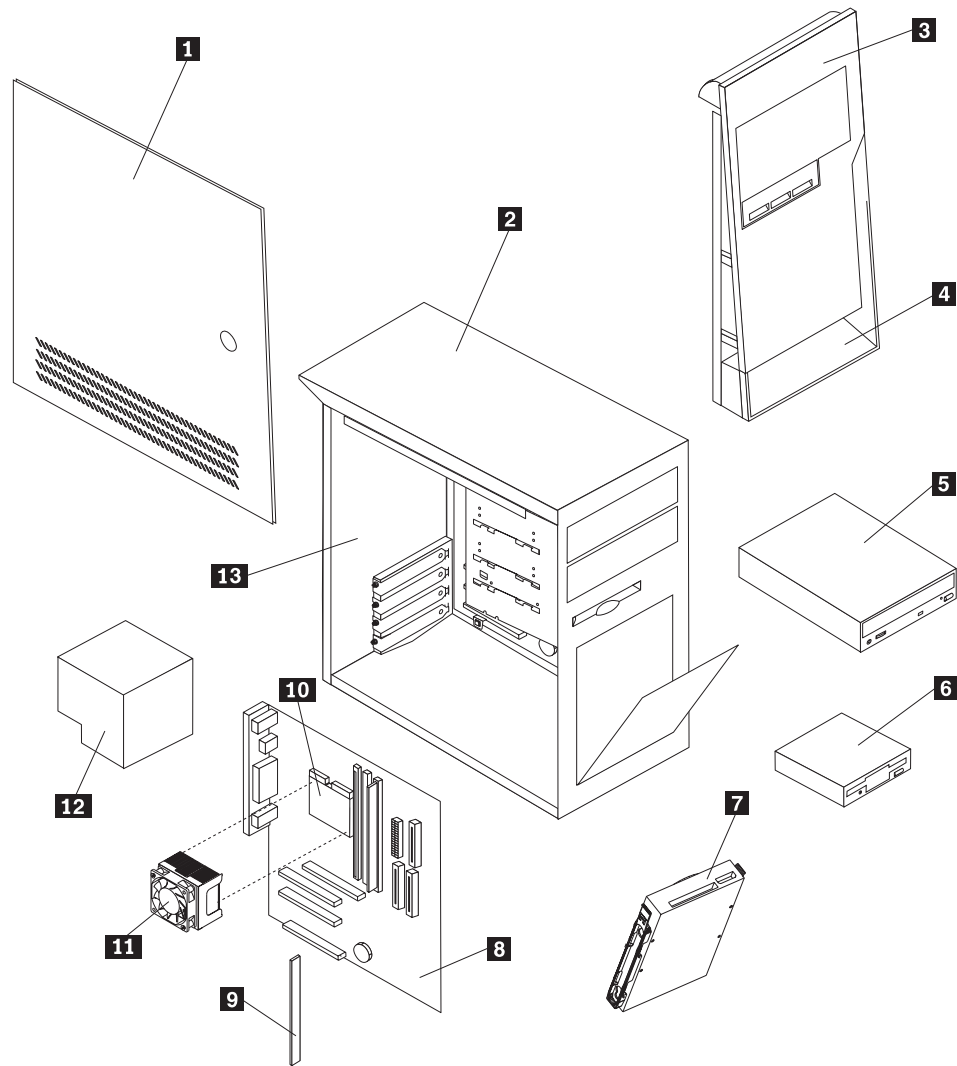
8414 Windows XP Home Recovery CDs	FRU#	CRU
US	29R8098	*
SC	27K6932	*
TW	27K6937	*
HK	27K6942	*

8414 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English	89P8300	*
Arabic	89P8301	*
Belgian/French	89P8302	*
Belgian/UK	89P8303	*
Bulgarian	89P8305	*
Chinese/US	89P8306	*
Czech	89P8307	*
Danish	89P8308	*
Dutch	89P8309	*
French	89P8310	*
French Canadian	89P8311	*
French Canadian	89P8312	*
German	89P8313	*
Greek	89P8314	*
Hebrew	89P8315	*
Hungarian	89P8316	*
Iceland	89P8317	*
Italian	89P8318	*
Italian	89P8319	*
Japanese	89P8320	*
Korean	89P8321	*
LA Spanish	89P8322	*
Norwegian	89P8323	*
Polish	89P8324	*
Portuguese	89P8325	*
Romanian	89P8326	*
Russian	89P8327	*
Russian/Cy	89P8328	*

<b>8414 Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU</b>
Serbian/Cyrillic	89P8329	*
Slovak	89P8330	*
Spanish	89P8331	*
Swedish/Finn	89P8332	*
Swiss F/G	89P8333	*
Thailand	89P8334	*
Turkish	89P8335	*
Turkish	89P8336	*
UK English	89P8337	*
US International	89P8338	*
Yugoslav/Latin	89P8339	*
Brazil/Portuguese	89P8304	*

<b>8414 Power Cords</b>	<b>FRU#</b>	<b>CRU</b>
Power Cord	6952301	*
Power Cord	13F9939	*
Power Cord	13F9978	*
Power Cord	14F0032	*
Power Cord	13F9996	*
Power Cord	14F0068	*
Power Cord	36L8879	*
Power Cord	02K0545	*
Power Cord	14F0086	*
Power Cord	14F0014	*
Power Cord	14F0050	*

# Type 8415



Item #	8415 FRUs	FRU#	CRU
1	Side cover assembly (all models)	59P8547	*
2	"L" cover (all models)	59P8546	N
3	Front bezel assembly (all models)	59P8544	*
4	Trim bezel/label kit (all models)	49P1900	*
5	CD-ROM Drive 48X - Black (model)	33P3203	*
5	CD-ROM Drive 48X - Black (models)	33P3211	*
5	CD-ROM Drive 48X - Black (models)	33P3215	*
5	CD-ROM Drive 48X - Black (models)	71P7353	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models)	71P7367	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models)	71P7369	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models)	71P7371	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models)	71P7375	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models)	71P7385	*

Item #	8415 FRUs	FRU#	CRU
6	Diskette drive, 3.5 1.44 MB (models)	76H4091	*
7	Hard disk drive, 40 GB EIDE (models)	19K1568	*
8	System board, 10/100 E-net, no POV (models)	73P0595	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models)	13R8926	**
8	System board, 10/100 E-net, no POV (models)	88P5837	**
9	256 MB SDRAM (models)	31P9121	*
9	512 MB SDRAM (models)	31P9122	*
10	Intel P4 2.8 GHz (models)	74P1631	**
10	Intel P4 3.0 GHz Prescott (models)	19R0294	**
11	Fan sink (models)	32P4004	**
11	Fan Sink (for Prescott only) (models)	13R9195	**
11	P4 mounting assembly (all models)	48P6726	*
12	Power supply, 230W (model)	74P4300	N
12	Power supply, 230W (China) (models)	74P4301	N
13	Chassis assembly (all models)	59P8542	N

The FRUs listed in the following table are not illustrated.

8415 FRUs	FRU#	CRU
Speaker assembly (all models)	00N5151	*
Front bezel release (all models)	25P0069	*
Front bezel blanks kit (all models)	25P0068	*
5.25 EMC shield (all models)	19K5548	*
Cable, Diskette drive (all models)	59P8568	*
Cable clip (all models)	59P8584	*
Cable, IDE (ATA66 2 drop) (all models)	37L5098	*
2 drop (close spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8571	*
2 drop (large spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8572	*
Retainer, cards I/O (all models)	59P8564	*
Universal adapter bracket (3.5 - 5.25) (all models)	32P4743	*
Fan assembly, 80 mm, fixed speed (models with 3.06GHz microprocessor or greater)	22P4447	*
Misc. hardware kit (all models)	09N5764	*
Cable, CDROM audio (all models)	75H9219	*
Rubber foot (all models)	03K9655	*
Hard disk drive bracket assembly (all models)	59P8543	*
Hard disk drive tray (dampened) (all models)	59P8549	*
Cable, dual USB 2.0 (all models)	49P4365	*
Control panel assembly (all models)	59P8545	*
Audio cable assembly (ATA) (all models)	49P1933	*
PCMCIA assembly (all models)	59P8587	*



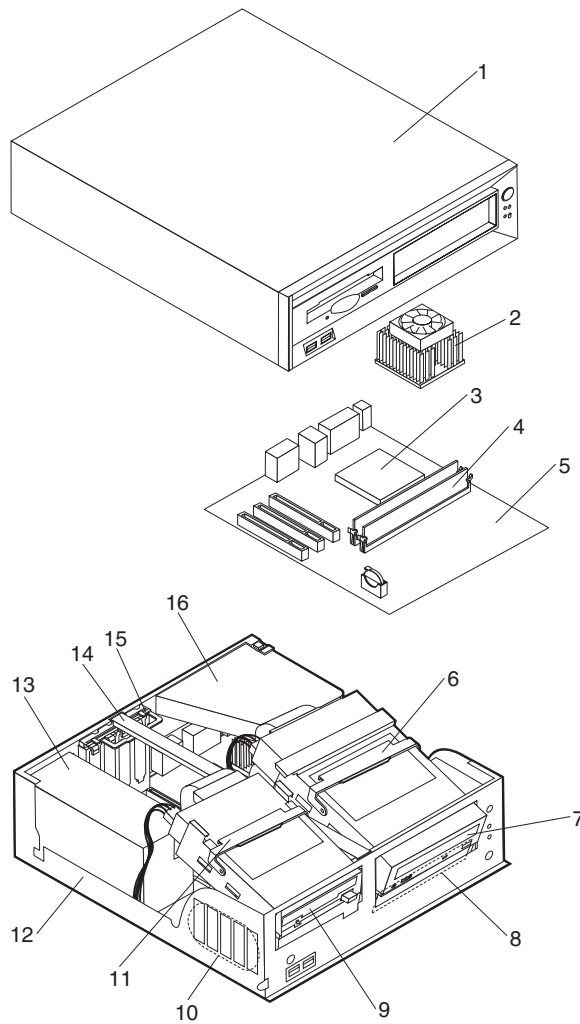
8415 FRUs	FRU#	CRU
PCMCIA ATA-66 cable (all models)	49P4361	*
2 audio front panel (all models)	49P1750	*
2 audio w/1394 front panel (all models)	49P1752	*
2 audio w/1394 & SPDIF front panel (all models)	49P1754	*
Battery, 3.0 V (all models)	33F8354	*
Mouse, optical wheel (models)	89P5089	*
Video DVI-D connection adapter LP (ATX) (model)	58P9978	*
Korean label (model)	13R9162	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8415 Windows XP Pro Recovery CDs	FRU #	CRU
US	13M6885	*

8415 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English	89P8300	*

8415 Power Cords	FRU#	CRU
Power Cord	6952301	*

## Type 8430



Item #	8430 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5925	*
2	Fan sink (models KUA KAA KNA KJA KGA)	32P4004	**
3	Intel P4 2.8 GHz (models KUA KAA KNA KJA KGA)	88P5869	**
4	512 MB SDRAM (models KUA KAA KNA KJA KGA)	31P9122	*
5	System board, Gigabit E-net, no POV (models KUA KAA KNA KJA KGA)	89P7944	**
5	System board, Gigabit E-net, no POV (models KUA KAA KNA KJA KGA) (optional to 89P7944)	41X2829	**
6	Pivot lock, 5.25 DASD (all models)	24P9877	*
7	CD-ROM Drive 48X - Black (models KUA KAA KNA KJA KGA)	33P3203	**
7	CD-ROM Drive 48X - Black (models KUA KAA KNA KJA KGA)	33P3211	**
7	CD-ROM Drive 48X - Black (models KUA KAA KNA KJA KGA)	71P7353	**
8	Hard disk drive, 40 GB EIDE (models KUA KAA KNA KJA KGA)	19K1568	*
9	Diskette drive, 3.5 1.44 MB (models KUA KAA KNA KJA KGA)	76H4091	**
10	Speaker assembly (all models)	00N5151	*

Item #	8430 FRUs	FRU#	CRU
11	Pivot lock, 3.5 Diskette drive (all models)	24P9876	*
12	Chassis assembly (all models)	88P5924	**
13	Power supply, 200W (models KUA KAA KNA KJA KGA)	74P4305	N
13	Power supply, 200W (China)	74P4306	N
14	Link bracket (all models)	88P5918	*
15	I/O cam bracket (all models)	24P9869	*
16	Air duct w/o fan (all models)	88P5922	*

The FRUs listed in the following table are not illustrated.

8430 FRUs	FRU#	CRU
Cable, C2 (squal)	09K9827	*
5.25 EMC shield (all models)	19K5548	*
Retention kit (all models)	88P5915	*
Planar shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P5930	*
Optical cable, ATA66 (all models)	88P5929	*
Cable, Hard disk drive (all models)	88P5928	*
Cable, SATA (all models)	88P5927	*
Service label (all models)	88P5926	*
Bezel kit (all models)	88P5923	*
Fan bracket assembly (all models)	88P5921	*
Korean label	13R9162	*
Misc. hardware kit (all models)	24P9878	*
Cable, CDROM audio (all models)	75H9219	*
Keylock assembly, random	88P5920	*
Vertical stand, black (all models)	88P5917	*
Bottom foot (all models)	03K9655	*
Hard disk drive mounting bracket assembly (all models)	88P5916	**
Cable assembly, power/LED (all models)	37L5092	*
Cable, USB 2.0 (all models)	49P4365	*
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, optical wheel (models KUA KAA KNA KJA KGA)	89P5089	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*

8430 FRUs	FRU#	CRU
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G" "M" "B" "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

8430 Windows 2000 Recovery CDs	FRU #	CRU
US	13M6813	*
BR	13M6833	*
SP	13M6825	*

8430 Windows XP Pro Recovery CDs	FRU #	CRU
US	13M6885	*
FR	13M6890	*
GR	13M6895	*
IT	13M6905	*
SP	13M6900	*
BR	13M6910	*
DK	13M6920	*
NL	74P2610	*
AE	74P2635	*
SV	13M6915	*
HE	74P2615	*
FI	13M7038	*
NO	74P2605	*
PL	74P2620	*
PO	74P2650	*
RU	74P2625	*
HU	74P2645	*
CZ	74P2630	*
TR	74P2640	*
GK	74P2655	*
JP	13M6330	*
SC	88P8777	*
TW	88P8781	*
HK	13M6300	*

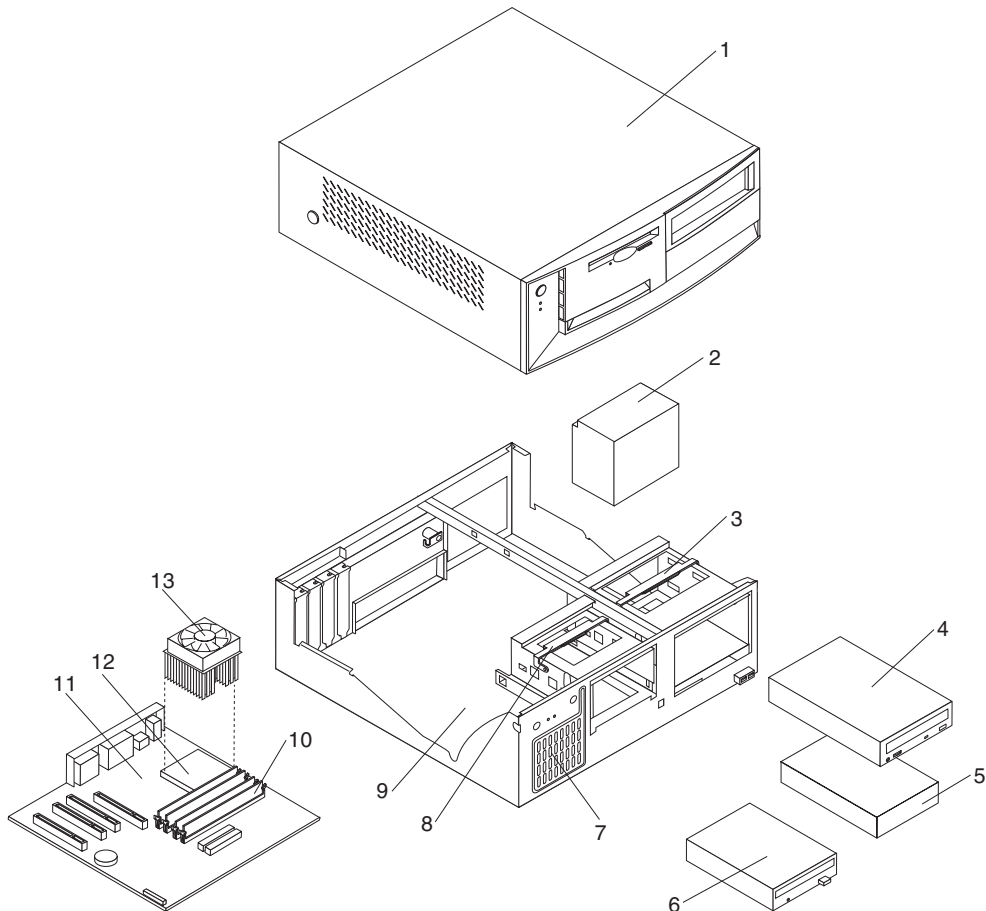
8430 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models KUA KAA KNA KJA KGA)	89P8300	*
Arabic	89P8301	*

8430 Keyboards (Standard PS/2 Black)	FRU#	CRU
Belgian/French	89P8302	*
Belgian/UK	89P8303	*
Bulgarian	89P8305	*
Chinese/US	89P8306	*
Czech	89P8307	*
Danish	89P8308	*
Dutch	89P8309	*
French	89P8310	*
French Canadian	89P8311	*
French Canadian	89P8312	*
German	89P8313	*
Greek	89P8314	*
Hebrew	89P8315	*
Hungarian	89P8316	*
Iceland	89P8317	*
Italian	89P8318	*
Italian	89P8319	*
Japanese (model KJA)	89P8320	*
Korean	89P8321	*
LA Spanish	89P8322	*
Norwegian	89P8323	*
Polish	89P8324	*
Portuguese	89P8325	*
Romanian	89P8326	*
Russian/Cy	89P8327	*
Russian/Cy	89P8328	*
Serbian/Cyrillic	89P8329	*
Slovak	89P8330	*
Spanish	89P8331	*
Swedish/Finn	89P8332	*
Swiss F/G	89P8333	*
Thailand	89P8334	*
Turkish	89P8335	*
Turkish	89P8336	*
UK English	89P8337	*
US International	89P8338	*
Yugoslav/Latin	89P8339	*
Brazil/Portuguese	89P8304	*

8430 Power Cords	FRU#	CRU
Power Cord (models KUA, KGA)	6952301	*

8430 Power Cords	FRU#	CRU
Power Cord	13F9939	*
Power Cord (model KGA)	13F9978	*
Power Cord (model KGA)	14F0032	*
Power Cord (model KGA)	13F9996	*
Power Cord (models KUA, KGA)	14F0068	*
Power Cord	36L8879	*
Power Cord (model KJA)	1838576	*
Power Cord (model KNA)	02K0545	*
Power Cord (model KGA)	14F0086	*
Power Cord (models KAA, KGA)	14F0014	*
Power Cord (model KGA)	14F0050	*

## Type 8431



Item #	8431 FRUs	FRU#	CRU
1	Top cover assembly (all models)	88P5962	**
2	Power supply, 230W	74P4300	N
2	Power supply, 230W (China)	74P4301	N

Item #	8431 FRUs	FRU#	CRU
3	Pivot lock, 5.25 DASD (all models)	09N5747	**
4	CD-ROM Drive 48X - Black (models KUA, KAA, KNA, KJA, KGA)	33P3203	**
4	CD-ROM Drive 48X - Black (models KUA, KAA, KNA, KJA, KGA)	33P3211	**
4	CD-ROM Drive 48X - Black (models KUA, KAA, KNA, KJA, KGA)	33P3215	**
4	CD-ROM Drive 48X - Black (models KUA, KAA, KNA, KJA, KGA)	71P7353	**
4	48X Combo drive	33P3301	**
5	Hard disk drive, 40 GB EIDE (models KUA, KAA, KNA, KJA, KGA)	19K1568	*
6	Diskette drive, 3.5 1.44 MB (all models)	76H4091	**
7	Speaker assembly (all models)	00N5151	*
8	Pivot lock, 3.5 Diskette drive (all models)	09N5748	**
9	Chassis/top cover kit (all models)	88P5963	**
10	512 MB SDRAM (models KUA, KAA, KNA, KJA, KGA)	31P9122	*
11	System board, Gigabit E-net, POV (models KUA, KAA, KNA, KJA, KGA)	73P0596	**
11	System board, Gigabit E-net, POV (supports Prescott CPU) (models KUA, KAA, KNA, KJA, KGA)	13R8930	**
12	Intel P4 2.8 GHz (models KUA, KAA, KNA, KJA, KGA)	88P5869	**
13	Fan sink (models KUA, KAA, KNA, KJA, KGA)	32P4004	**

The FRUs listed in the following table are not illustrated.

8431 FRUs	FRU#	CRU
RFID antenna - velcro	03K9654	*
Cable, C2 assembly	09K9827	*
5.25 EMC shield (all models)	19K5548	*
Retention kit (all models)	88P5915	*
Planar shield kit (all models)	88P5931	*
Cable, Diskette drive (all models)	88P6515	*
Cable, ATA66 1 drop (all models)	88P5967	*
Cable, ATA66 2 drop (all models)	88P5971	*
Cable, SATA (all models)	88P5927	*
Service label (all models)	88P5964	*
Bezel kit (all models)	49P4371	*
Fan bracket assembly	89P6700	*
Korean label	13R9162	*
Misc. hardware kit (all models)	88P5965	*
Cable, CDROM audio (all models)	75H9219	*
Keylock assembly, random	88P5920	*
Hard disk drive mounting bracket assembly (all models)	88P5916	*
Cable assembly, power/LED (all models)	37L5092	*
Cable, second serial port (all models)	49P4530	*
Cable, dual USB 2.0 (all models)	49P4365	*

8431 FRUs	FRU#	CRU
Battery, 3.0 V (all models)	33F8354	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
Mouse, optical wheel (models KUA, KAA, KNA, KJA, KGA)	89P5089	*
RJ11 connector adapter (Spain, Ireland) (all "G" models)	60H6043	*
RJ11 connector adapter (Austria) (all "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (all "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (all "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (all "G" models)	60H6048	*
RJ11 connector adapter (France) (all "G" models)	60H6049	*
RJ11 connector adapter (Germany) (all "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (all "G" "M" "B" "H" models)	60H6051	*
RJ11 connector adapter (Italy) (all "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (all "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (all "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (all "G" models)	60H6055	*

8431 Windows 2000 Recovery CDs	FRU #	CRU
US	13R9673	*
FR	13R9674	*
GR	13R9675	*
IT	13R9677	*
BR	13R9678	*
SP	13R9676	*
DK	13R9680	*
NL	13R9683	*
AE	13R9687	*
SV	13R9679	*
HE	13R9684	*
FI	13R9681	*
NO	13R9682	*
PL	13R9685	*
PO	13R9691	*
RU	13R9688	*
HU	13R9690	*
CZ	13R9686	*
TR	13R9689	*
GK	13R9692	*
SC	13M6421	*
HK	13M6427	*



8431 Windows XP Pro Recovery CDs	FRU #	CRU
US	29R7998	*
FR	29R7999	*
GR	29R8000	*
IT	29R8002	*
SP	29R8001	*
BR	29R8003	*
DK	29R8005	*
NL	29R8008	*
AE	29R8012	*
SV	29R8004	*
HE	29R8009	*
FI	29R8006	*
NO	29R8007	*
PL	29R8010	*
PO	29R8016	*
RU	29R8013	*
HU	29R8015	*
CZ	29R8011	*
TR	29R8014	*
GK	29R8017	*
JP	13M6438	*
SC	27K6907	*
TW	27K6912	*
HK	27K6917	*
KR	13M6405	*

8431 Windows XP Home Recovery CDs	FRU#	CRU
US	29R8098	*
SC	27K6932	*
TW	27K6937	*
HK	27K6942	*

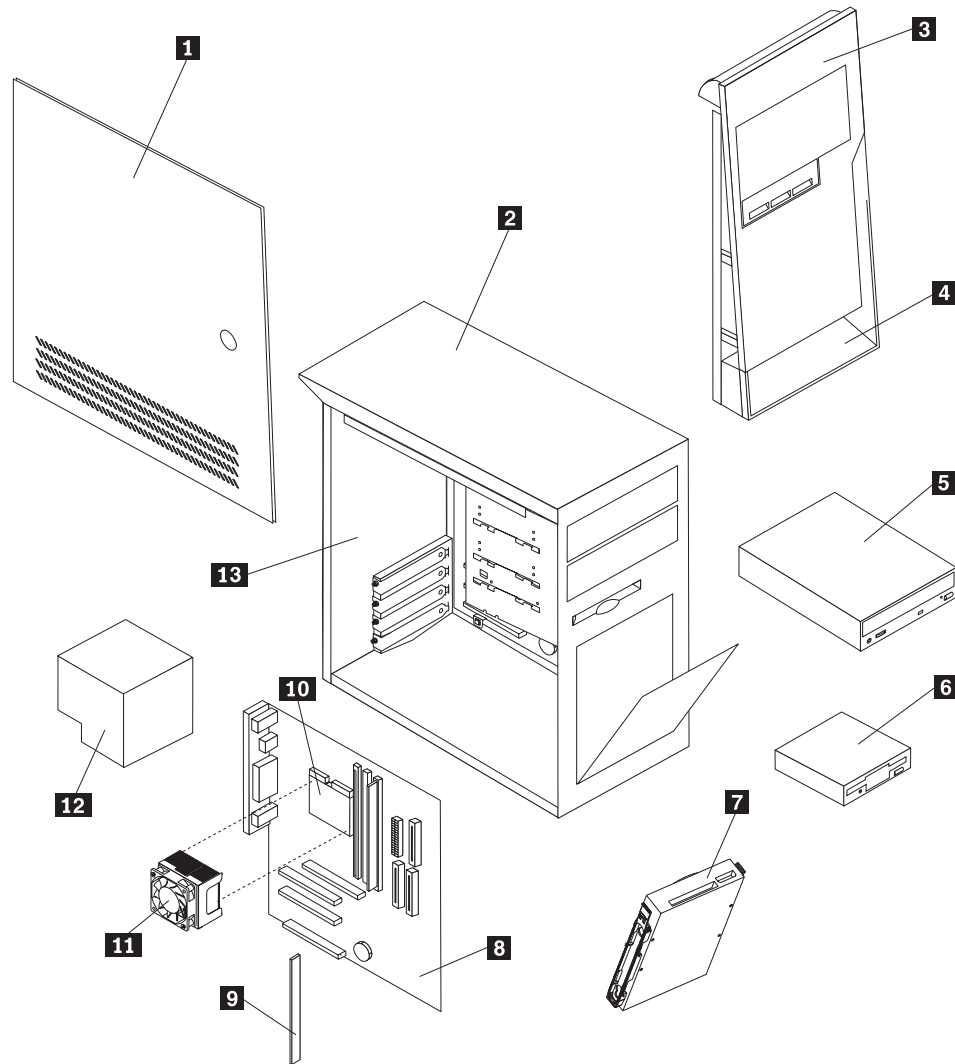
8431 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models KUA, KAA, KNA, KGA)	89P8300	*
Arabic	89P8301	*
Belgian/French	89P8302	*
Belgian/UK	89P8303	*
Bulgarian	89P8305	*
Chinese/US	89P8306	*
Czech	89P8307	*
Danish	89P8308	*

8431 Keyboards (Standard PS/2 Black)	FRU#	CRU
Dutch	89P8309	*
French	89P8310	*
French Canadian	89P8311	*
French Canadian	89P8312	*
German	89P8313	*
Greek	89P8314	*
Hebrew	89P8315	*
Hungarian	89P8316	*
Iceland	89P8317	*
Italian	89P8318	*
Italian	89P8319	*
Japanese (model KJA)	89P8320	*
Korean	89P8321	*
LA Spanish	89P8322	*
Norwegian	89P8323	*
Polish	89P8324	*
Portuguese	89P8325	*
Romanian	89P8326	*
Russian	89P8327	*
Russian/Cy	89P8328	*
Serbian/Cyrillic	89P8329	*
Slovak	89P8330	*
Spanish	89P8331	*
Swedish/Finn	89P8332	*
Swiss F/G	89P8333	*
Thailand	89P8334	*
Turkish	89P8335	*
Turkish	89P8336	*
UK English	89P8337	*
US International	89P8338	*
Yugoslav/Latin	89P8339	*
Brazil/Portuguese	89P8304	*

8431 Power Cords	FRU#	CRU
Power Cord (models KUA, KGA)	6952301	*
Power Cord	13F9939	*
Power Cord (model KGA)	13F9978	*
Power Cord (model KGA)	14F0032	*
Power Cord (model KGA)	13F9996	*
Power Cord (models KUA, KGA)	14F0068	*
Power Cord	36L8879	*

8431 Power Cords	FRU#	CRU
Power Cord (model KJA)	1838526	*
Power Cord (model KNA)	02K0545	*
Power Cord (model KGA)	14F0086	*
Power Cord (models KAA, KGA)	14F0014	*
Power Cord (model KGA)	14F0050	*

## Type 8432



Item #	8432 FRUs	FRU#	CRU
1	Side cover assembly (all models)	59P8547	*
2	"L" cover (all models)	59P8546	N
3	Front bezel assembly (all models)	59P8544	*
4	Trim bezel/label kit (all models)	49P1900	*
5	CD-ROM Drive 48X - Black (models 91U 93U 95U 97U 9FU)	33P3203	*
5	CD-ROM Drive 48X - Black (models 91U 93U 95U 97U 9FU)	33P3211	*

Item #	8432 FRUs	FRU#	CRU
5	CD-ROM Drive 48X - Black (models 91U 93U 95U 97U 9FU)	33P3207	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 9BU 9DU)	71P7367	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 9BU 9DU)	71P7369	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 9BU 9DU)	71P7375	*
5	48X24X48X CD-RW (Black) (models 92U 94U 96U 98U)	33P3289	*
5	CD-RW Drive (48X/32X/48X) (models 99U 9CU 9EU)	71P7347	*
5	CD-RW Drive (48X/32X/48X) (models 99U 9CU 9EU)	71P7349	*
5	48X Combo drive (model 9AU)	33P3301	*
6	Diskette drive, 3.5 1.44 MB (models All 99U 9BU 9CU 9DU 9EU 9FU)	76H4091	*
7	Hard disk drive, 40 GB EIDE (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9BU 9CU 9DU 9EU 9FU)	19K1568	*
7	Hard disk drive, 80 GB EIDE (model 9AU)	24P3665	*
8	System board, 10/100 E-net, no POV (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU)	89P7942	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU 9BU 9CU 9DU 9EU)	41X2825	**
8	System board, 10/100 E-net, no POV (models 9FU)	89P7958	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models 9FU)	41X2833	**
9	256MB NP SDRAM PC2700 (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU 9FU)	31P9121	*
10	Intel P4 2.4 GHz (models 91U 92U)	74P1625	**
10	Intel P4 2.66 GHz (models 95U 96U)	74P1629	**
10	Intel P4 2.8 GHz (model 97U)	74P1631	**
10	Intel P4 3.06 GHz (model 9DU)	74P1633	**
10	Intel P4 2.4 GHz (models 93U 99U)	88P5867	**
10	Intel P4 2.6 GHz (model 94U)	88P5868	**
10	Intel P4 2.8 GHz (models 98U 9AU 9FU)	88P5869	**
10	Intel P4 2.8 GHz (models 9BU 9CU)	19R0292	**
10	Intel P4 3.0 GHz (model 9EU)	19R0294	**
11	Fan sink (for <3.0 Ghz processor) (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU 9FU)	32P4004	**
11	Fan sink (for =>3.0 Ghz processor) (model 9DU)	01R3330	**
11	Fan Sink (for Prescott only) (models 9BU 9CU 9EU)	13R9195	**
11	P4 mounting assembly (all models)	48P6726	*
12	Power supply, 230W (all models)	74P4300	N
13	Chassis assembly (all models)	59P8542	N

The FRUs listed in the following table are not illustrated.

8432 FRUs	FRU#	CRU
Rubber foot (all models)	03K9655	*
Front bezel release (all models)	25P0069	*

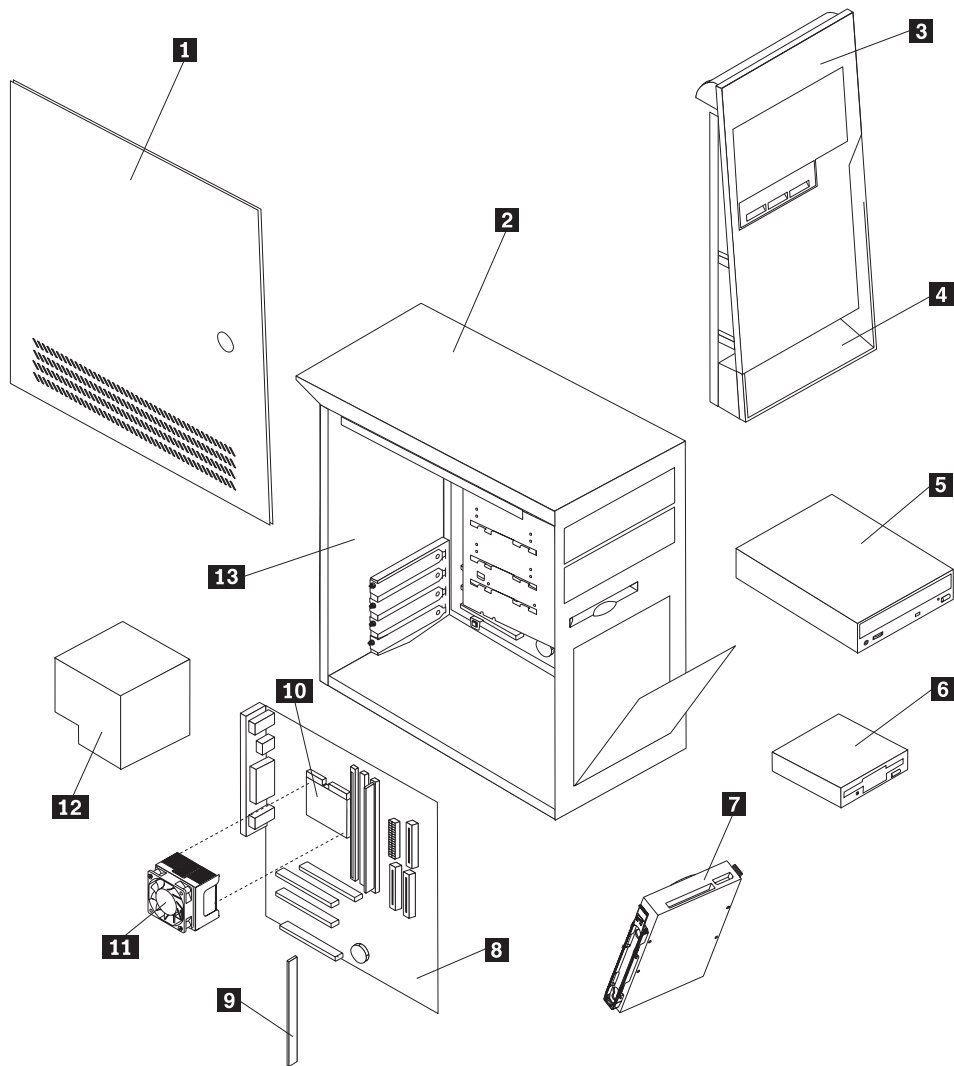
8432 FRUs	FRU#	CRU
Front bezel blanks kit (all models)	25P0068	*
5.25 EMC shield (all models)	19K5548	*
Cable, Diskette drive (all models)	59P8568	*
Cable clip (all models)	59P8584	*
Cable, IDE (ATA66 2 drop) (all models)	37L5098	*
2 drop (close spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8571	*
2 drop (large spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8572	*
Retainer, cards I/O (all models)	59P8564	*
Universal adapter bracket (3.5 - 5.25) (all models)	32P4743	*
Fan assembly, 80 mm, fixed speed (all models)	22P4447	*
Misc. hardware kit (all models)	09N5764	*
Cable, CDROM audio (all models)	75H9219	*
Hard disk drive bracket assembly (all models)	59P8543	*
Hard disk drive tray (dampened) (all models)	59P8549	*
Cable, dual USB 2.0 (all models)	49P4365	*
Power switch assembly (all models)	59P8545	*
Audio cable assembly (ATA) (all models)	49P1933	*
PCMCIA assembly (all models)	59P8587	*
PCMCIA ATA-66 cable (all models)	49P4361	*
2 audio front panel (models 99U 9AU 9BU 9CU 9DU 9EU)	49P1750	*
Bezel Diskette drive (all models)	59P8548	*
Battery, 3.0 V (all models)	33F8354	*
Mouse, optical wheel (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU 9BU 9CU 9DU 9EU 9FU)	89P5089	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*
RJ11 connector adapter (Spain, Ireland) (All "G" models)	60H6043	*
RJ11 connector adapter (Austria) (All "G" models)	60H6045	*
RJ11 connector adapter (Belgium) (All "G" models)	60H6046	*
RJ11 connector adapter (Denmark) (All "G" models)	60H6047	*
RJ11 connector adapter (Norway, Finland) (All "G" models)	60H6048	*
RJ11 connector adapter (France) (All "G" models)	60H6049	*
RJ11 connector adapter (Germany) (All "G" models)	60H6050	*
RJ11 connector adapter (UK, NZ, HK) (All "G", "M", "B", "H" models)	60H6051	*
RJ11 connector adapter (Italy) (All "G" models)	60H6052	*
RJ11 connector adapter (Netherlands) (All "G" models)	60H6053	*
RJ11 connector adapter (Sweden) (All "G" models)	60H6054	*
RJ11 connector adapter (Switzerland) (All "G" models)	60H6055	*

<b>8432 Windows XP Pro Recovery CDs</b>	<b>FRU #</b>	<b>CRU</b>
US (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU 9BU 9CU 9DU 9EU 9FU)	29R7998	*

<b>8432 Keyboards (Standard PS/2 Black)</b>	<b>FRU#</b>	<b>CRU</b>
US English (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU 9BU 9CU 9DU 9EU 9FU)	89P8300	*

<b>8432 Power Cords</b>	<b>FRU#</b>	<b>CRU</b>
Power Cord (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU 9BU 9CU 9DU 9EU 9FU)	6952301	*

## Type 8433



Item #	8433 FRUs	FRU#	CRU
1	Side cover assembly (all models)	59P8547	*
2	"L" cover (all models)	59P8546	N

Item #	8433 FRUs	FRU#	CRU
3	Front bezel assembly (all models)	59P8544	*
4	Trim bezel/label kit (all models)	49P1900	*
5	CD-ROM Drive 48X - Black (models 91U 93U 95U 97U 9FU)	33P3203	*
5	CD-ROM Drive 48X - Black (models 91U 93U 95U 97U 9FU)	33P3211	*
5	CD-ROM Drive 48X - Black (models 91U 93U 95U 97U 9FU)	33P3207	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 9BU 9DU)	71P7367	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 9BU 9DU)	71P7369	*
5	CD-ROM Drive 48X - Black w/o jack & vol (models 9BU 9DU)	71P7375	*
5	48X24X48X CD-RW (Black) (models 92U 94U 96U 98U)	33P3289	*
5	CD-RW Drive (48X/32X/48X) (models 99U 9CU 9EU)	71P7347	*
5	CD-RW Drive (48X/32X/48X) (models 99U 9CU 9EU)	71P7349	*
6	Diskette drive, 3.5 1.44 MB (models All 99U 9BU 9CU 9DU 9EU 9FU)	76H4091	*
7	Hard disk drive, 40 GB EIDE (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9BU 9CU 9DU 9EU 9FU)	19K1568	*
8	System board, 10/100 E-net, no POV (models 91U 92U 93U 94U 95U 96U 97U 98U 99U)	89P7942	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9BU 9CU 9DU 9EU)	41X2825	**
8	System board, 10/100 E-net, no POV (models 9FU)	89P7958	**
8	System board, 10/100 E-net, no POV (supports Prescott CPU) (models 9FU)	41X2833	**
9	256MB NP SDRAM PC2700 (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9BU 9CU 9DU 9EU 9FU)	31P9121	*
10	Intel P4 2.4 GHz (models 91U 92U)	74P1625	**
10	Intel P4 2.66 GHz (models 95U 96U)	74P1629	**
10	Intel P4 2.8 GHz (models 97U)	74P1631	**
10	Intel P4 3.06 GHz (models 9DU)	74P1633	**
10	Intel P4 2.4 GHz (models 93U 99U)	88P5867	**
10	Intel P4 2.6 GHz (models 94U)	88P5868	**
10	Intel P4 2.8 GHz (models 98U 9FU)	88P5869	**
10	Intel P4 2.8 GHz (models 9BU 9CU)	19R0292	**
10	Intel P4 3.0 GHz (model 9EU)	19R0294	**
11	Fan sink (for <3.0 Ghz processor) (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9AU 9FU)	32P4004	**
11	Fan sink (for =>3.0 Ghz processor) (model 9DU)	01R3330	**
11	Fan Sink (for Prescott only) (models 9BU 9CU 9EU)	13R9195	**
11	P4 mounting assembly (all models)	48P6726	*
12	Power supply, 230W (all models)	74P4300	N
13	Chassis assembly (all models)	59P8542	N

The FRUs listed in the following table are not illustrated.

8433 FRUs	FRU#	CRU
Rubber foot (all models)	03K9655	*
Front bezel release (all models)	25P0069	*
Front bezel blanks kit (all models)	25P0068	*
5.25 EMC shield (all models)	19K5548	*
Cable, Diskette drive (all models)	59P8568	*
Cable clip (all models)	59P8584	*
Cable, IDE (ATA66 2 drop) (all models)	37L5098	*
2 drop (close spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8571	*
2 drop (large spacing) ATA 66/100 cable w/ pull tabs (all models)	59P8572	*
Retainer, cards I/O (all models)	59P8564	*
Universal adapter bracket (3.5 - 5.25) (all models)	32P4743	*
Fan assembly, 80 mm, fixed speed (all models)	22P4447	*
Misc. hardware kit (all models)	09N5764	*
Cable, CDROM audio (all models)	75H9219	*
Hard disk drive bracket assembly (all models)	59P8543	*
Hard disk drive tray (dampened) (all models)	59P8549	*
Cable, dual USB 2.0 (all models)	49P4365	*
Power switch assembly (all models)	59P8545	*
Audio cable assembly (ATA) (all models)	49P1933	*
PCMCIA assembly (all models)	59P8587	*
PCMCIA ATA-66 cable (all models)	49P4361	*
2 audio front panel (models 99U 9BU 9CU 9DU 9EU)	49P1750	*
Bezel, Diskette drive (all models)	59P8548	*
Battery, 3.0 V (all models)	33F8354	*
Mouse, optical wheel (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9BU 9CU 9DU 9EU 9FU)	89P5089	*
Monitor cable (all models)	19R3015	*
Dongle (all models)	19R3017	*

8433 Windows XP Pro Recovery CDs	FRU #	CRU
US (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9BU 9CU 9DU 9EU 9FU)	29R7998	*

8433 Keyboards (Standard PS/2 Black)	FRU#	CRU
US English (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9BU 9CU 9DU 9EU 9FU)	89P8300	*

8433 Power Cords	FRU#	CRU
Power Cord (models 91U 92U 93U 94U 95U 96U 97U 98U 99U 9BU 9CU 9DU 9EU 9FU)	6952301	*



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## Chapter 10. Related service information

**Note:** The service procedures are designed to help you isolate problems. They are written with the assumption that you have model-specific training on all computers, or that are familiar with the computers, functions, terminology, and service information provided in this manual.

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### Safety information

The following section contains the safety information that you need to be familiar with before servicing an IBM 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 main units
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine and to lock the wall box in the off position.
- If you need to work on a machine that has exposed electrical circuits, observe the following precautions:
  - Ensure that another person, familiar with the power-off controls, is near you.  
**Remember:** Another person must be there to switch off the power, if necessary.
  - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.  
**Remember:** There must be a complete circuit to cause electrical shock. By observing the above rule, you may prevent a current from passing through your body.
  - When using testers, set the controls correctly and use the approved probe leads and accessories for that tester.
  - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

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

- Regularly inspect and maintain your electrical hand tools for safe operational condition.
- Do not use worn or broken tools and testers.
- *Never assume* that power has been disconnected from a circuit. First, *check* that it has been powered-off.
- Always look carefully for possible hazards in your work area. Examples of these hazards are moist floors, nongrounded power extension cables, power surges, and missing safety grounds.
- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. The surface is conductive; such touching can cause personal injury and machine damage.
- Do not service the following parts with the power on when they are removed from their normal operating places in a machine:
  - Power supply units
  - Pumps
  - Blowers and fans
  - Motor generators
 and similar units. (This practice ensures correct grounding of the units.)
- If an electrical accident occurs:
  - Use caution; do not become a victim yourself.
  - Switch off power.
  - Send another person to get medical aid.

## Safety inspection guide

The intent of this inspection guide is to assist you in identifying potentially unsafe conditions on these products. Each machine, as it was designed and built, had required safety items installed to protect users and service personnel from injury. This guide addresses only those items. However, good judgment should be used to identify potential safety hazards due to attachment of non-IBM 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 non-IBM alterations. Use good judgment as to the safety of any non-IBM alterations.
  6. Check inside the unit for any obvious unsafe conditions, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
  7. Check for worn, frayed, or pinched cables.
  8. Check that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

## Handling electrostatic discharge-sensitive devices

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

### Notes:

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

When handling ESD-sensitive parts:

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

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

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

## Grounding requirements

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

## Safety notices (multi-lingual translations)

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

- English
- Brazilian/Portuguese
- Chinese
- French
- German
- 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 table when installing, moving, or opening covers on this product or attached devices.**

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



**CAUTION:**

When replacing the lithium battery, use only IBM 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.



**CAUTION:**

Do not place any object weighing more than 82 kg (180 lbs.) on top of rack-mounted devices.





## PERIGO

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

Para evitar risco de choque:

- Não conecte ou desconecte cabos e não realize instalação, manutenção ou reconfiguração deste produto durante uma tempestade com raios.
- Conecte todos os cabos de alimentação a tomadas elétricas corretamente instaladas e aterradas.
- Conecte todos os equipamentos ao qual esse produto será conectado a tomadas corretamente instaladas.
- Sempre que possível, utilize apenas uma das mãos para conectar ou desconectar cabos de sinal.
- Nunca ligue qualquer equipamento quando existir evidência de danos por fogo, água ou na estrutura.
- Desconecte cabos de alimentação, sistemas de telecomunicação, redes e modems antes de abrir as tampas dos dispositivos, a menos que especificado de maneira diferente nos procedimentos de instalação e configuração.
- Conecte e desconecte cabos conforme descrito na seguinte tabela, ao instalar ou movimentar este produto ou os dispositivos conectados, ou ao abrir suas tampas.

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



## CUIDADO:

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

Não:

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



Para descartar a bateria, entre em contato com a área de atendimento a clientes IBM, pelo telefone (011) 889-8986, para obter informações sobre como enviar a bateria pelo correio para a IBM.



#### PRECAUCIÓN:

Quando produtos a laser (unidades de CD-ROM, unidades de DVD, dispositivos de fibra ótica, transmissores, etc.) 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. Nenhuma peça localizada no interior do dispositivo pode ser consertada.
- 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 um diodo laser da Classe 3A ou Classe 3B embutido. Observe o seguinte:

Radiação de laser quando aberto. Não olhe diretamente para o raio a olho nu ou com instrumentos óticos, e evite exposição direta ao raio.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

#### CUIDADO:

Ao levantar a máquina, faça-o com segurança.



#### CUIDADO:

Os botões Liga/Desliga localizados no dispositivo e na 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 energia elétrica.



**CUIDADO:**



**CUIDADO:**



Não coloque nenhum objeto com peso superior a 82 kg (180 lbs.) sobre dispositivos montados em rack.

## 重要:

Server Library 中的所有提醒和危险条款前都有一个数字标识。该数字是用来交叉引用一个英文的提醒和危险条款及本部分中的与之对应的已翻译成其它文字的提醒和危险条款。

例如，如果一个提醒条款前的数字为 1，则本部分中相应的译文也带有标号 1。

在执行任何指示的操作之前，请确保您已经阅读了全部提醒和危险条款。

### 声明 1



#### 危险

电源、电话和通信电缆中带有危险电流。

为避免电击:

雷电期间不要拆接电缆或安装、维修及重新配置本产品。

将所有电源线连接至正确布线并已安全接地的电源插座上。

将与本产品连接的所有设备连接至正确布线的插座上。

尽量只使用单手拆接信号电缆。

有水、火及结构损坏迹象时，请勿打开任何设备。

除非在安装配置过程中有明确指示，否则，打开设备机盖前应先断开与电源线、远程通信系统、网络和调制解调器的所有连接。

安装、移动或打开本产品及其附带设备的机盖时，应按下表所述连接和断开电缆。

#### 连接时:

1. 关闭所有设备。

2. 首先将所有电缆连接至设备。

3. 将信号电缆连接至接口。

4. 将电源线连接至插座。

#### 断开连接时:

1. 关闭所有设备。

2. 首先从插座中拔出电源线。

3. 从接口上拔下信号电缆。

## 声明 2



### 警告:

更换锂电池时，只能使用 IBM 产品号 33F8354 或者是厂商推荐的等同类型的电池。

如果系统模块中含有锂电池，则只能使用同一厂商制造的同类型的模块进行更换。电池中含有锂，如果使用、拿放或处理不当，可能会发生爆炸。

请勿对电池进行下列操作：  
扔入或浸入水电  
加热超过 100 ° (212 F)  
进行修理或分解  
请按本地法规要求处理电池。

## 声明 3



### 警告:

安装激光产品（如 CD-ROM、DVD 驱动器、光纤设备或送话器）时，应注意以下事项：

不要拆除外盖。拆除激光产品的外盖可能会导致激光辐射的危险，本设备中没有用户可维修的部件。

非此处指定的其它控制、调整或与性能有关的操作都有可能致激光辐射的危险。



### 危险

某些激光产品中包含内嵌的 3A 级或 3B 级激光二极管。请注意以下事项。  
打开时会产生激光辐射。不要直视光束，不要使用光学仪器直接观看光束，避免直接暴露于光束之下。

声明 4



≥18 kg (37 磅)



≥32 kg (70.5 磅)



≥55 kg (121.2 磅)

警告：  
抬起时请采用安全操作方法。

声明 5



警告：

使用设备上的电源控制按钮和电源上的开关都不能断开本设备上的电流。  
另外，本设备可能带有多条电源线。如要断开设备上的所有电流，请确保所有电源线均已与电源断开连接。



声明 6



警告：

如果在电源线连接设备的一端安装了固定松紧夹，则必须将电源线的另一端连接至使用方便的电源。

声明 7



警告:

如果设备带有外门，则在移动或抬起设备前应将其拆除或固定以避免造成人员伤害。外门支撑不了设备的重量。

声明 8



警告:

不要拆除电源外盖或贴有下列标签的任何部件。



贴有此标签的组件内部存在高电压、高电流的危险。这些组件中没有用户可维修的部件。如果怀疑其中的部件存在问题，应与服务技术人员联系。

声明 9



警告:

为避免人员伤害，拆除设备上的风扇前应拨下热插拔风扇电缆。

声明 10



警告:

机柜安装的设备上面不能放置重于 82kg (180 磅) 的物品。



> 82 kg (180 磅)

声明 11



警告:

下面的标签表明附近有锋利的边、角或接头。



声明 12



警告:

下面的标签表明附近有高热表面。



## 重要資訊：

**Server Library** 中所有「注意」及「危險」的聲明均以數字開始。此一數字是用來作為交互參考之用，英文「注意」或「危險」聲明可在本節中找到相同內容的「注意」或「危險」聲明的譯文。

例如，有一「危險」聲明以數字 1 開始，則該「危險」聲明的譯文將出現在本節的「聲明」1 中。

執行任何指示之前，請詳讀所有「注意」及「危險」的聲明。

### 聲明 1



#### 危險

電源、電話及通信電纜上所產生的電流均有危險性。

欲避免電擊危險：

- 在雷雨期間，請勿連接或切斷本產品上的任何電纜線，或安裝、維修及重新架構本產品。
- 請將電源線接至接線及接地正確的電源插座。
- 請將本產品隨附的設備連接至接線正確的插座。
- 儘可能使用單手來連接或切斷信號電纜線。
- 當設備有火燒或泡水的痕跡，或有結構性損害時，請勿開啓該設備的電源。
- 在安裝及架構之時，若非非常熟悉，在開啓裝置蓋子之前，請切斷電源線、電信系統、網路及數據機。
- 在安裝、移動本產品或附加裝置，或開啓其蓋子時，請依照下表中「連接」及「切斷」電纜線的步驟執行。

#### 連接：

1. 關閉所有開關。
2. 先將所有電纜線接上裝置。
3. 將信號電纜接上接頭。
4. 再將電源線接上電源插座。
5. 開啓裝置的電源。

#### 切斷：

1. 關閉所有開關。
2. 先自電源插座拔掉電源線。
3. 拔掉接頭上的所有信號電纜。
4. 再拔掉裝置上的所有電纜線。

### 聲明 2



#### 注意：

更換鋰電池時，只可使用 IBM 零件編號 33F8354 的電池，或製造商建議之相當類型的電池。若系統中具有包含鋰電池的模組，在更換此模組時，請使用相同廠商製造的相同模組類型。如未正確使用、處理或丟棄含有鋰的電池時，可能會引發爆炸。

請勿將電池：

- 丟入或浸入水中
- 加熱超過 100°C (212°F)
- 修理或拆開

請遵照當地法令規章處理廢棄電池。



聲明 3



注意：

安裝雷射產品(如 CD-ROM、DVD 光碟機、光纖裝置或發射器)時，請注意下列事項：

- 請勿移開蓋子。移開雷射產品的蓋子，您可能會暴露於危險的雷射輻射之下。裝置中沒有需要維修的組件。
- 不依此處所指示的控制、調整或處理步驟，您可能會暴露於危險的輻射之下。



危險

有些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：

開啓時會產生雷射輻射。請勿凝視光束，不要使用光學儀器直接觀察，且應避免直接暴露在光束下。

聲明 4



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

注意：

抬起裝置時，請注意安全措施。

聲明 5



注意：

裝置上的電源控制按鈕及電源供應器上的電源開關均無法關閉裝置上的電流。本裝置可能有一條以上的電源線。如要移除裝置上的所有電流，請確認所有電源線已與電源分離。



聲明 10



注意：

請勿將任何重量超過 82 公斤 (180 磅) 的物品置於已安裝機架的裝置上方。



>82 公斤 (180 磅)



## DANGER

Le courant électrique passant dans les câbles de communication, ou les cordons téléphoniques et d'alimentation peut être dangereux.

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 ou que vous déplacez 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:

**Remplacez la pile au lithium usagée par une pile de référence identique exclusivement - voir la référence IBM - ou par une pile équivalente recommandée par le fabricant. 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 présente donc un risque d'explosion en cas de mauvaise manipulation ou utilisation.**

- Ne la jetez pas à l'eau.
- Ne l'exposez pas à une température supérieure à 100°C.
- Ne cherchez pas à la réparer ou à la démonter.

Pour la mise au rebut, reportez-vous à la réglementation en vigueur.



**ATTENTION:**

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

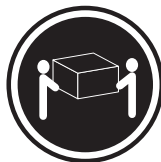
- N'ouvrez pas ces produits pour éviter une exposition directe au rayon laser. Vous ne pouvez effectuer aucune opération de maintenance à l'intérieur.
- Pour éviter tout risque d'exposition au rayon laser, respectez les consignes de réglage et d'utilisation des commandes, ainsi que les procédures décrites dans le présent document.



**DANGER**

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

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



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

**ATTENTION:**

Faites-vous aider pour soulever ce produit.



**ATTENTION:**

Le bouton de mise sous tension/hors tension de l'unité et l'interrupteur d'alimentation du bloc d'alimentation ne coupent pas l'arrivée de courant électrique à l'intérieur de la machine. Il se peut que votre unité dispose de plusieurs cordons d'alimentation. Pour isoler totalement l'unité du réseau électrique, débranchez tous les cordons d'alimentation des socles de prise de courant.



**ATTENTION:**

Ne posez pas d'objet dont le poids dépasse 82 kg sur les unités montées en armoire.



## VORSICHT

Elektrische Spannungen von Netz-, Telefon- und Datenübertragungsleitungen sind gefährlich.

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.
- Signalkabel möglichst einhändig anschließen oder lösen.
- Keine Geräte einschalten, wenn die Gefahr einer Beschädigung durch Feuer, Wasser oder andere Einflüsse besteht.
- Die Verbindung zu den angeschlossenen Netzkabeln, Telekommunikationssystemen, Netzwerken und Modems ist vor dem öffnen des Gehäuses zu unterbrechen. Es sei denn, dies ist in den zugehörigen Installations- und Konfigurationsprozeduren anders angegeben.
- Nur nach den nachfolgend aufgeführten Anweisungen arbeiten, die für Installation, Transport oder öffnen von Gehäusen von Personal Computern oder angeschlossenen Einheiten gelten.

Kabel anschließen:	Kabel lösen:
<ol style="list-style-type: none"><li>1. Alle Geräte ausschalten und Netzstecker ziehen.</li><li>2. Zuerst alle Kabel an Einheiten anschließen.</li><li>3. Signalkabel an Anschlußbuchsen anschließen.</li><li>4. Netzstecker an Steckdose anschließen.</li><li>5. Gerät einschalten.</li></ol>	<ol style="list-style-type: none"><li>1. Alle Geräte ausschalten.</li><li>2. Zuerst Netzstecker von Steckdose lösen.</li><li>3. Signalkabel von Anschlußbuchsen lösen.</li><li>4. Alle Kabel von Einheiten lösen.</li></ol>



## ACHTUNG:

Eine verbrauchte Batterie nur durch eine Batterie mit der IBM Teilenummer 33F8354 oder durch eine vom Hersteller empfohlene Batterie ersetzen. Wenn Ihr System ein Modul mit einer Lithium-Batterie enthält, ersetzen Sie es immer mit dem selben Modultyp vom selben Hersteller. 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:

Wenn ein Laserprodukt (z. B. CD-ROM-Laufwerke, DVD-Laufwerke, Einheiten mit Glasfaserkabeln oder Transmitter) installiert ist, beachten Sie folgendes.

- Das Entfernen der Abdeckungen des CD-ROM-Laufwerks kann zu gefährlicher Laserstrahlung führen. Es befinden sich keine Teile innerhalb des CD-ROM-Laufwerks, die vom Benutzer gewartet werden müssen. Die Verkleidung des CD-ROM-Laufwerks nicht öffnen.
- Steuer- und Einstellelemente sowie Verfahren nur entsprechend den Anweisungen im vorliegenden Handbuch einsetzen. Andernfalls kann gefährliche Laserstrahlung auftreten.



#### VORSICHT

Manche CD-ROM-Laufwerke enthalten eine eingebaute Laserdiode der Klasse 3A oder 3B. Die nachfolgend aufgeführten Punkte beachten.

Laserstrahlung bei geöffneter Tür. Niemals direkt in den Laserstrahl sehen, nicht direkt mit optischen Instrumenten betrachten und den Strahlungsbereich meiden.



≥18 kg



≥32 kg



≥55 kg

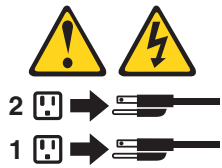
#### ACHTUNG:

Beim Anheben der Maschine die vorgeschriebenen Sicherheitsbestimmungen beachten.



#### ACHTUNG:

Mit dem Betriebsspannungsschalter an der Vorderseite des Servers und dem Betriebsspannungsschalter am Netzteil wird die Stromversorgung für den Server nicht unterbrochen. Der Server könnte auch mehr als ein Netzkabel aufweisen. Um die gesamte Stromversorgung des Servers auszuschalten, muß sichergestellt werden, daß alle Netzkabel aus den Netzsteckdosen herausgezogen wurden.



ACHTUNG:



Keine Gegenstände, die mehr als 82 kg wiegen, auf Rack-Einheiten ablegen.





## PERICOLO

La corrente elettrica circolante nei cavi di alimentazione, del telefono e di segnale è pericolosa.

Per evitare il pericolo di scosse elettriche:

- Non collegare o scollegare i cavi, non effettuare l'installazione, la manutenzione o la riconfigurazione di questo prodotto durante i temporali.
- Collegare tutti i cavi di alimentazione ad una presa elettrica correttamente cablata e munita di terra di sicurezza.
- Collegare qualsiasi apparecchiatura collegata a questo prodotto ad una presa elettrica correttamente cablata e munita di terra di sicurezza.
- Quando possibile, collegare o scollegare i cavi di segnale con una sola mano.
- Non accendere qualsiasi apparecchiatura in presenza di fuoco, acqua o se sono presenti danni all'apparecchiatura stessa.
- Scollegare i cavi di alimentazione, i sistemi di telecomunicazioni, le reti e i modem prima di aprire i coperchi delle unità, se non diversamente indicato nelle procedure di installazione e configurazione.
- Collegare e scollegare i cavi come descritto nella seguente tabella quando si effettuano l'installazione, la rimozione o l'apertura dei coperchi di questo prodotto o delle unità collegate.

Per collegare:	Per scollegare:
1. SPEGNERE tutti i dispositivi.	1. SPEGNERE tutti i dispositivi.
2. Collegare prima tutti i cavi alle unità.	2. Rimuovere prima i cavi di alimentazione dalle prese elettriche.
3. Collegare i cavi di segnale ai connettori.	3. Rimuovere i cavi di segnale dai connettori.
4. Collegare i cavi di alimentazione alle prese elettriche.	4. Rimuovere tutti i cavi dalle unità.
5. ACCENDERE le unità.	



## ATTENZIONE:

Quando si sostituisce la batteria al litio, utilizzare solo una batteria IBM con numero parte 33F8354 o batterie dello stesso tipo o di tipo equivalente consigliate dal produttore. Se il sistema di cui si dispone è provvisto di un modulo contenente una batteria al litio, sostituire tale batteria solo con un tipo di modulo uguale a quello fornito dal produttore. La batteria contiene litio e può esplodere se utilizzata, maneggiata o smaltita impropriamente.

Evitare di:

- Gettarla o immergerla in acqua
- Riscaldarla ad una temperatura superiore ai 100°C
- Cercare di ripararla o smontarla

Smaltire secondo la normativa in vigore (D.Lgs 22 del 5/2/9) e successive disposizioni nazionali e locali.



**ATTENZIONE:**

Quando si installano prodotti laser come, ad esempio, le unità DVD, CD-ROM, a fibre ottiche o trasmettitori, prestare attenzione a quanto segue:

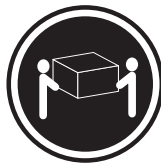
- Non rimuovere i coperchi. L'apertura dei coperchi di prodotti laser può determinare l'esposizione a radiazioni laser pericolose. All'interno delle unità non vi sono parti su cui effettuare l'assistenza tecnica.
- L'utilizzo di controlli, regolazioni o l'esecuzione di procedure non descritti nel presente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



**PERICOLO**

Alcuni prodotti laser contengono all'interno un diodo laser di Classe 3A o Classe 3B. Prestare attenzione a quanto segue:

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



≥18 kg



≥32 kg



≥55 kg

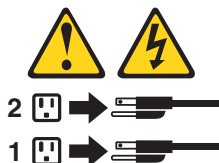
**ATTENZIONE:**

Durante il sollevamento della macchina seguire delle norme di sicurezza.



**ATTENZIONE:**

Il pulsante del controllo dell'alimentazione situato sull'unità e l'interruttore di alimentazione posto sull'alimentatore non disattiva la corrente elettrica fornita all'unità. L'unità potrebbe disporre di più di un cavo di alimentazione. Per disattivare la corrente elettrica dall'unità, accertarsi che tutti i cavi di alimentazione siano scollegati dalla sorgente di alimentazione.



ATTENZIONE:



Non poggiare oggetti che pesano più di 82 kg sulla parte superiore delle unità montate in rack.

## 중요:

본 *Server Library*에 있는 모든 주의 및 위험 경고문은 번호로 시작합니다. 이 번호는 영문 주의 혹은 위험 경고문과 이 절에 나오는 번역된 버전의 주의 혹은 위험 경고문을 상호 참조하는 데 사용됩니다.

예를 들어, 주의 경고문이 번호 1로 시작하면, 번역된 해당 주의 경고문을 본 절의 경고문 1에서 찾아볼 수 있습니다.

모든 지시사항을 수행하기 전에 반드시 모든 주의 및 위험 경고문을 읽으십시오.

### 경고문 1



#### 위험

전원, 전화 및 통신 케이블로부터 출력 나오는 전류는 위험합니다.

#### 전기 충격을 피하려면:

- 뇌우를 동반할 때는 케이블의 연결이나 철수, 이 제품의 설치, 유지보수 또는 재구성을 하지 마십시오.
- 모든 전원 코드를 적절히 배선 및 접지해야 합니다.
- 이 제품에 연결될 모든 장비를 적절하게 배선된 콘센트에 연결하십시오.
- 가능한 한 신호 케이블을 한 손으로 연결하거나 끊으십시오.
- 화재, 수해 또는 구조상의 손상이 있을 경우 장비를 켜지 마십시오.
- 설치 및 구성 프로시저에 다른 설명이 없는 한, 장치 덮개를 열기 전에 연결된 전원 코드, 원거리 통신 시스템, 네트워크 및 모뎀을 끊어 주십시오.
- 제품 또는 접속된 장치를 설치, 이동 및 덮개를 열 때 다음 설명에 따라 케이블을 연결하거나 끊도록 하십시오.

연결하려면:	연결을 끊으려면:
1. 모든 스위치를 끕니다.	1. 모든 스위치를 끕니다.
2. 먼저 모든 케이블을 장치에 연결합니다.	2. 먼저 콘센트에서 전원 코드를 뽑습니다.
3. 신호 케이블을 커넥터에 연결합니다.	3. 신호 케이블을 커넥터에서 제거합니다.
4. 콘센트에 전원 코드를 연결합니다.	4. 장치에서 모든 케이블을 제거합니다.
5. 장치 스위치를 켭니다.	

### 경고문 2



#### 주의:

리튬 배터리를 교체할 때는 IBM 부품 번호 33F8354 또는 제조업체에서 권장하는 동등한 유형의 배터리를 사용하십시오. 시스템에 리튬 배터리를 갖고 있는 모듈이 있으면 동일한 제조업체에서 생산된 동일한 모듈 유형으로 교체하십시오. 배터리에 리튬이 있을 경우 제대로 사용, 처리 또는 처분하지 않으면 폭발할 수 있습니다.

다음은 주의하십시오.

- 던지거나 물에 담그지 않도록 하십시오.
- 100°C(212°F) 이상으로 가열하지 마십시오.
- 수리하거나 분해하지 마십시오.

지역 법령이나 규정의 요구에 따라 배터리를 처분하십시오.

경고문 3



주의:  
레이저 제품(CD-ROMs, DVD 드라이브, 광 장치 또는 트랜스미터 등과 같은)이 설치되어 있을 경우 다음을 유의하십시오.

- 덮개를 제거하지 마십시오. 레이저 제품의 덮개를 제거했을 경우 위험한 레이저 광선에 노출될 수 있습니다. 이 장치 안에는 서비스를 받을 수 있는 부품이 없습니다.

- 여기에서 지정하지 않은 방식의 제어, 조절 또는 실행으로 인해 위험한 레이저 광선에 노출될 수 있습니다.



위험

일부 레이저 제품에는 클래스 3A 또는 클래스 3B 레이저 다이오드가 들어 있습니다. 다음을 주의하십시오.

열면 레이저 광선에 노출됩니다. 광선을 주시하거나 광학 기계를 직접 쳐다보지 않도록 하고 광선에 노출되지 않도록 하십시오.

경고문 4



≥18 kg (37 lbs)



≥ 32 kg (70.5 lbs)



≥ 55 kg (121.2 lbs)

주의:

기계를 들 때는 안전하게 들어 올리십시오.

경고문 5



주의:

장치의 전원 제어 버튼 및 전원 공급기의 전원 스위치는 장치에 공급되는 전류를 차단하지 않습니다. 장치에 둘 이상의 전원 코드가 연결되어 있을 수도 있습니다. 장치에서 모든 전류를 차단하려면 모든 전원 코드가 전원으로부터 차단되어 있는 지 확인하십시오.



경고문 10



주의:

서랍형 모델의 장치 상단에 82 kg(180 lbs.)이 넘는 물체를 올려 놓지 마십시오.



>82 kg (180 lbs)



## PELIGRO

La corriente eléctrica de los cables telefónicos, de alimentación y de comunicaciones es perjudicial.

Para evitar una descarga eléctrica:

- No conecte ni desconecte ningún cable ni realice las operaciones de instalación, mantenimiento o reconfiguración de este producto durante una tormenta.
- Conecte cada cable de alimentación a una toma de alimentación eléctrica con conexión a tierra y cableado correctos.
- Conecte a tomas de alimentación con un cableado correcto cualquier equipo que vaya a estar conectado a este producto.
- Si es posible, utilice una sola mano cuando conecte o desconecte los cables de señal.
- No encienda nunca un equipo cuando haya riesgos de incendio, de inundación o de daños estructurales.
- Desconecte los cables de alimentación, sistemas de telecomunicaciones, redes y módems conectados antes de abrir las cubiertas del dispositivo a menos que se indique lo contrario en los procedimientos de instalación y configuración.
- Conecte y desconecte los cables tal como se describe en la tabla siguiente cuando desee realizar una operación de instalación, de traslado o de apertura de las cubiertas para este producto o para los dispositivos conectados.

Para la conexión	Para la desconexión
1. APÁGUELO todo.	1. APÁGUELO todo.
2. En primer lugar, conecte los cables a los dispositivos.	2. En primer lugar, retire cada cable de alimentación de la toma de alimentación.
3. Conecte los cables de señal a los conectores.	3. Retire los cables de señal de los conectores.
4. Conecte cada cable de alimentación a la toma de alimentación.	4. Retire los cables de los dispositivos.
5. ENCIENDA el dispositivo.	



## PRECAUCIÓN:

Cuando desee sustituir la batería de litio, utilice únicamente el número de pieza 33F8354 de IBM o cualquier tipo de batería equivalente que recomiende el fabricante. Si el sistema tiene un módulo que contiene una batería de litio, sustitúyalo únicamente por el mismo tipo de módulo, que ha de estar creado por el mismo fabricante. La batería contiene litio y puede explotar si el usuario no la utiliza ni la maneja de forma adecuada o si no se desprende de la misma como corresponde.

No realice las acciones siguientes:

- Arrojarla al agua o sumergirla

- Calentarla a una temperatura que supere los 100°C (212°F)
- Repararla o desmontarla

Despréndase de la batería siguiendo los requisitos que exija el reglamento o la legislación local.



**PRECAUCIÓN:**

Cuando instale productos láser (como, por ejemplo, CD-ROM, unidades DVD, dispositivos de fibra óptica o transmisores), tenga en cuenta las advertencias siguientes:

- No retire las cubiertas. Si retira las cubiertas del producto láser, puede quedar expuesto a radiación láser perjudicial. Dentro del dispositivo no existe ninguna pieza que requiera mantenimiento.
- El uso de controles o ajustes o la realización de procedimientos que no sean los que se han especificado aquí pueden dar como resultado una exposición perjudicial a las radiaciones.



**PELIGRO**

Algunos productos láser contienen un diodo de láser incorporado de Clase 3A o de Clase 3B. Tenga en cuenta la advertencia siguiente.

Cuando se abre, hay radiación láser. No mire fijamente el rayo ni lleve a cabo ningún examen directamente con instrumentos ópticos; evite la exposición directa al rayo.



≥18 kg



≥32 kg



≥55 kg

**PRECAUCIÓN:**

Tome medidas de seguridad al levantar el producto.



**PRECAUCIÓN:**



El botón de control de alimentación del dispositivo y el interruptor de alimentación de la fuente de alimentación no apagan la corriente eléctrica suministrada al dispositivo. Es posible también que el dispositivo tenga más de un cable de alimentación. Para eliminar la corriente eléctrica del dispositivo, asegúrese de desconectar todos los cables de alimentación de la fuente de alimentación.



**PRECAUCIÓN:**



No coloque ningún objeto que pese más de 82 kg (180 libras) encima de los dispositivos montados en bastidor.

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## Send us your comments!

We want to know your opinion about this manual (part number 74P2661). Your input will help us to improve our publications.

Please photocopy this survey, complete it, and then fax it to **IBM HMM Survey** at **919-543-8167 (USA)**.

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1. Do you like this manual?

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\_\_\_\_\_  
\_\_\_\_\_

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\_\_\_\_\_  
\_\_\_\_\_

3. What is your service experience level?

Less than five years

More than five years

4. Which computers do you service most?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Thank you for your response!**

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## 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 fail?
  - 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?
- Reference/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 Reference/Diagnostics Diskette (version)
7. Have the same configuration options set in the system
8. Have the same setup for the operation system control files

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

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