



IBM 11U Office Enablement Kit Installation and User's Guide





IBM 11U Office Enablement Kit
Installation and User's Guide

Note: Before using this information and the product it supports, read the general information in Appendix C, "IBM Statement of Limited Warranty Z125-4753-10 08/2008," on page 37 and "Notices" on page 57; and read the *IBM Safety Information* and the *IBM Systems Environmental Notices and User Guide* on the *IBM Documentation CD*.

First Edition (May 2009)

© Copyright International Business Machines Corporation 2009.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Safety	v
Rack safety statements	vi

Chapter 1. Introduction	1
--	----------

Chapter 2. Planning for the Office Enablement Kit.	3
Physical dimensions and clearances.	3

Chapter 3. Installation considerations	5
Installation guidelines	6
System reliability guidelines	6

Chapter 4. Setting up the Office Enablement Kit.	9
Removing the Office Enablement Kit from the pallet	10
Removing the front door	11
Installing the stabilizer bracket	12
Extending the stabilizer bracket.	13

Chapter 5. Installing optional devices	15
Installing an uninterruptible power supply	16
Installing a System x server	17
Installing a BladeCenter chassis.	17
Shipping the BladeCenter S chassis in an Office Enablement Kit	18
Installing a flat-panel monitor console kit	21
Installing a blank filler panel	22
Installing the front door	23
Installing the rear door	24

Chapter 6. Managing cables	25
---	-----------

Appendix A. Office Enablement Kit components	27
Parts listing	27
Replacing a door lock	28
Replacing the hinge bracket and door latch.	29
Replacing casters	30

Replacing the stabilizer bracket assembly	31
---	----

Appendix B. Getting help and technical assistance	33
Before you call	33
Using the documentation.	34
Getting help and information from the World Wide Web	34
Hardware service and support	34
Software service and support	34
IBM Taiwan product service.	35

Appendix C. IBM Statement of Limited Warranty Z125-4753-10 08/2008	37
Part 1 - General Terms.	37
Part 2 - Country-unique Terms	41
Part 3 - Warranty Information	53

Notices	57
Trademarks	58
Important notes	58
Electronic emission notices	59
Federal Communications Commission (FCC) statement	59
Industry Canada Class A emission compliance statement	59
Avis de conformité à la réglementation d'Industrie Canada	60
Australia and New Zealand Class A statement	60
United Kingdom telecommunications safety requirement	60
European Union EMC Directive conformance statement	60
Taiwanese Class A warning statement	60
Chinese Class A warning statement	61
Japanese Voluntary Control Council for Interference (FCS) statement.	61

Index	63
------------------------	-----------

Safety

Before installing this product, read the Safety Information.

قبل تركيب هذا المنتج، يجب قراءة الملاحظات الأمنية

Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 **Safety Information**
(安全信息)。

安裝本產品之前，請先閱讀「安全資訊」。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας
(safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto, lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

Rack safety statements

These statements provide the caution and danger information used in this documentation.

Important:

Each caution and danger statement in this document is labeled with a number. This number is used to cross reference an English-language caution or danger statement with translated versions of the caution or danger statement in the *IBM Rack Safety Information* document.

For example, if a caution statement is labeled "Statement 1," translations for that caution statement are in the *IBM NetBAY Safety Information* document under "Statement 1."

Be sure to read all caution and danger statements in this document before you perform the procedures. Read any additional safety information that comes with your system or optional device before you install the device.

Statement 1



CAUTION:

To ensure safety, all configurations of the rack cabinet must be certified by a nationally recognized testing laboratory in order to verify compliance with country-specific safety regulations. This process ensures that the end product remains safe for the operator and service personnel under normal and foreseeable misuse conditions.

Statement 2



DANGER

- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- Always install servers and optional devices starting from the bottom of the rack cabinet.
- Always install the heaviest devices in the bottom of the rack cabinet.

Statement 3



DANGER

- Do not extend more than one sliding device at a time.
- The maximum allowable weight for devices on slide rails is 80 kg (176 lb). Do not install sliding devices that exceed this weight.

Statement 4



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:
1. Turn everything OFF.	1. Turn everything OFF.
2. First, attach all cables to devices.	2. First, remove power cords from outlet.
3. Attach signal cables to connectors.	3. Remove signal cables from connectors.
4. Attach power cords to outlet.	4. Remove all cables from devices.
5. Turn device ON.	

Statement 5



≥ 18 kg (39.7 lb)



≥ 32 kg (70.5 lb)



≥ 55 kg (121.2 lb)

CAUTION:
Use safe practices when lifting.

Statement 6



CAUTION:
Do not place any object on top of a rack-mounted device unless that rack-mounted device is intended for use as a shelf.

Statement 8



DANGER

- Plug power cords from devices in the rack cabinet into electrical outlets that are located near the rack cabinet and are easily accessible.
- Each rack cabinet might have more than one power cord. Be sure to disconnect all power cords in the rack cabinet before servicing any device in the rack cabinet.
- Install an emergency-power-off switch if more than one power device (power distribution unit or uninterruptible power supply) is installed in the same rack cabinet.
- Connect all devices installed in a rack cabinet to power devices installed in the same rack cabinet. Do not plug a power cord from a device installed in one rack cabinet into a power device installed in a different rack cabinet.

Chapter 1. Introduction

The IBM 11U Office Enablement Kit is an 11U-high rack cabinet designed to enable the use of servers, such as IBM System x servers, and IBM BladeCenter systems in an office environment.

Note: One U is equal to 4.45 cm (1.75 inches).

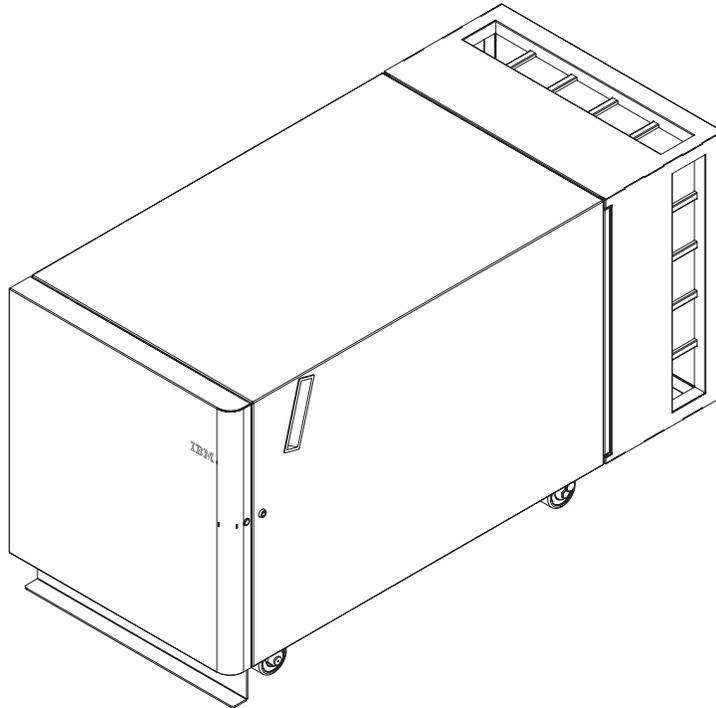


Figure 1. The Office Enablement Kit

Features of the Office Enablement Kit include:

- Acoustics. The rear door of the Office Enablement Kit is an acoustical module that helps to ensure that the devices in the rack cabinet are quiet enough for office environments while providing easy access to system components.
- Security. The Office Enablement Kit provides a front and rear locking door.
- Flexibility. The Office Enablement Kit includes additional space for the installation of other components that you may need in addition to System x servers or a BladeCenter system.
- Mobility. Lockable wheels are provided with the Office Enablement Kit; you can easily move it to the location where it is needed.

Chapter 2. Planning for the Office Enablement Kit

Use physical dimensions and clearance guidelines to plan for the Office Enablement Kit.

Note: Make sure that you install the Office Enablement Kit on a flat, even surface.

Physical dimensions and clearances

Make sure that you have sufficient space to set up the Office Enablement Kit.

Physical dimensions and weight

The Office Enablement Kit has the following physical dimensions and weight:

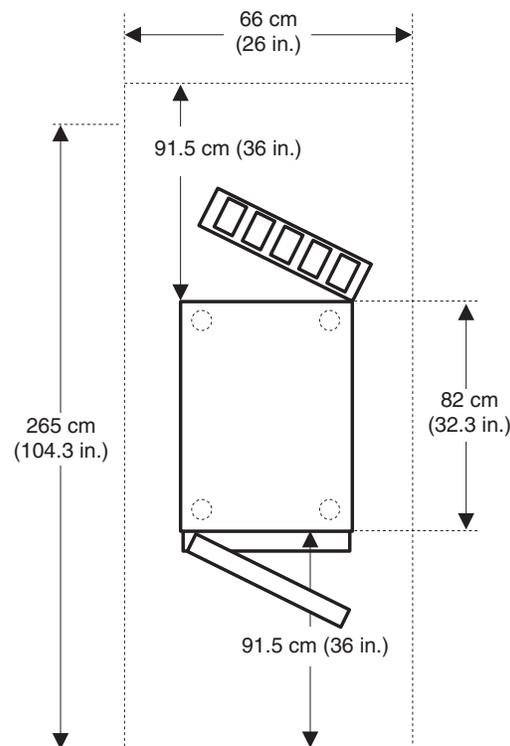
Table 1. Office Enablement Kit physical dimensions and weight

Dimensions	61.1 x 51.8 x 115.5 cm (24 x 20.4 x 45.5 in)
Weight - empty	40.8 kg (90 lb)
Weight - populated	222.8 kg (491 lb)

Note: The populated weight is when the Office Enablement Kit is loaded to maximum capacity when in the final location (not shippable). The Office Enablement Kit is designed to be rolled, not lifted, when being moved.

Service and Operational clearances

The Office Enablement Kit has the following clearance requirements:



Chapter 3. Installation considerations

Within the Office Enablement Kit, you can include multiple components in addition to servers or a BladeCenter chassis.

Note: All components are optional.

Figure 2 on page 6 shows an example configuration for components within the Office Enablement Kit based on the following dimensions:

- 1U is used for the flat-panel monitor console kit. To ensure ease of access to the monitor and keyboard, install the flat-panel monitor console kit in the highest location.
- 7U is used for the BladeCenter chassis, such as the BladeCenter S chassis or the BladeCenter E chassis.

Note: Servers, such as System x servers, use less space than 7U. Therefore, if you install servers instead of a BladeCenter chassis, make sure that you fill any open space in the rack cabinet by installing filler panels.

- 3U is used for an uninterruptible power supply (UPS), tape autoloader, or blank filler panels.

Statement 2



DANGER

- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- Always install servers and optional devices starting from the bottom of the rack cabinet.
- Always install the heaviest devices in the bottom of the rack cabinet.

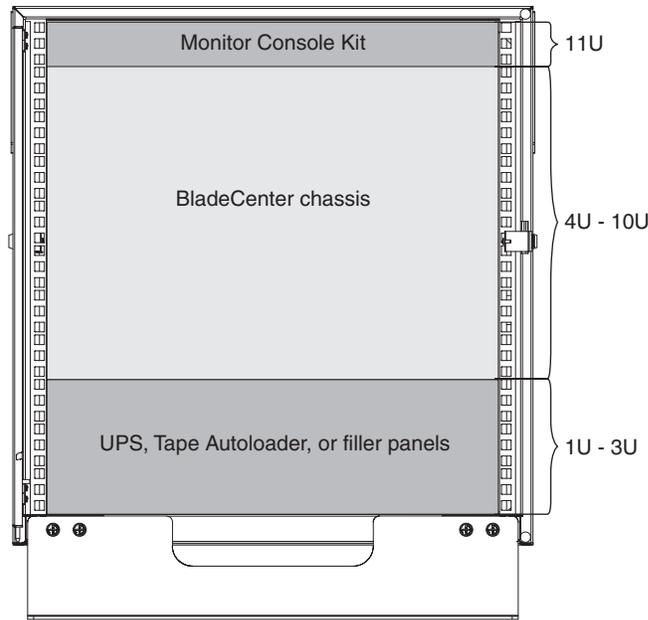


Figure 2. Example of component configuration in the Office Enablement Kit

Installation guidelines

Read the installation guidelines that come with the device that you are installing in the Office Enablement Kit, such as the System x server or the BladeCenter chassis, before you install the device in the Office Enablement Kit.

System reliability guidelines

To help ensure proper system cooling and system reliability, make sure the following requirements are met.

BladeCenter chassis

- Each of the module bays on the front and rear of the BladeCenter chassis has either a module or a module bay filler installed in it.
- Each of the blade bays on the front of the BladeCenter chassis has either a blade server or a blade bay filler installed in it.
- Each of the BladeCenter S system storage module bays has a storage module or storage module filler installed in it. If a storage module is installed, each of the drive bays has a hard disk drive or a hard disk drive bay filler installed in it.
- Each of the drive bays in a blade server storage expansion option has either a hot-swap drive or a filler panel installed.
- You have followed the cabling instructions that come with optional adapters.
- Cables for the optional modules are routed correctly.
- A failed fan module is replaced as soon as possible.

System x servers

- Each of the drive bays has a drive or a filler panel and electromagnetic compatibility (EMC) shield installed in it.
- If the server has redundant power, each of the power-supply bays has a power supply installed in it.
- There is adequate space around the server to allow the server cooling system to work properly. Leave approximately 50 mm (2.0 in.) of open space around the front and rear of the server. Do not place objects in front of the fans. For proper cooling and airflow, replace the server cover before you turn on the server. Operating the server for extended periods of time (more than 30 minutes) with the server cover removed might damage server components.
- You have followed the cabling instructions that come with optional adapters.
- You have replaced a failed fan within 48 hours.
- You have replaced a hot-swap fan within 30 seconds of removal.
- You have replaced a hot-swap drive within 2 minutes of removal.
- You do not operate the server without the air baffles installed. Operating the server without the air baffles might cause the microprocessors to overheat.
- Microprocessor 2 air baffle and DIMM air baffle are installed.
- The light path diagnostics panel is not pulled out of the server.

Chapter 4. Setting up the Office Enablement Kit

To set up the Office Enablement Kit, remove it from the pallet, install the stabilizer bracket, remove the front door, and install devices in the Office Enablement Kit. Then install the front door and the rear door.

Note: Make sure that you install the Office Enablement Kit on a flat, even surface.

Figure 3 shows an overview of the Office Enablement Kit installation process.

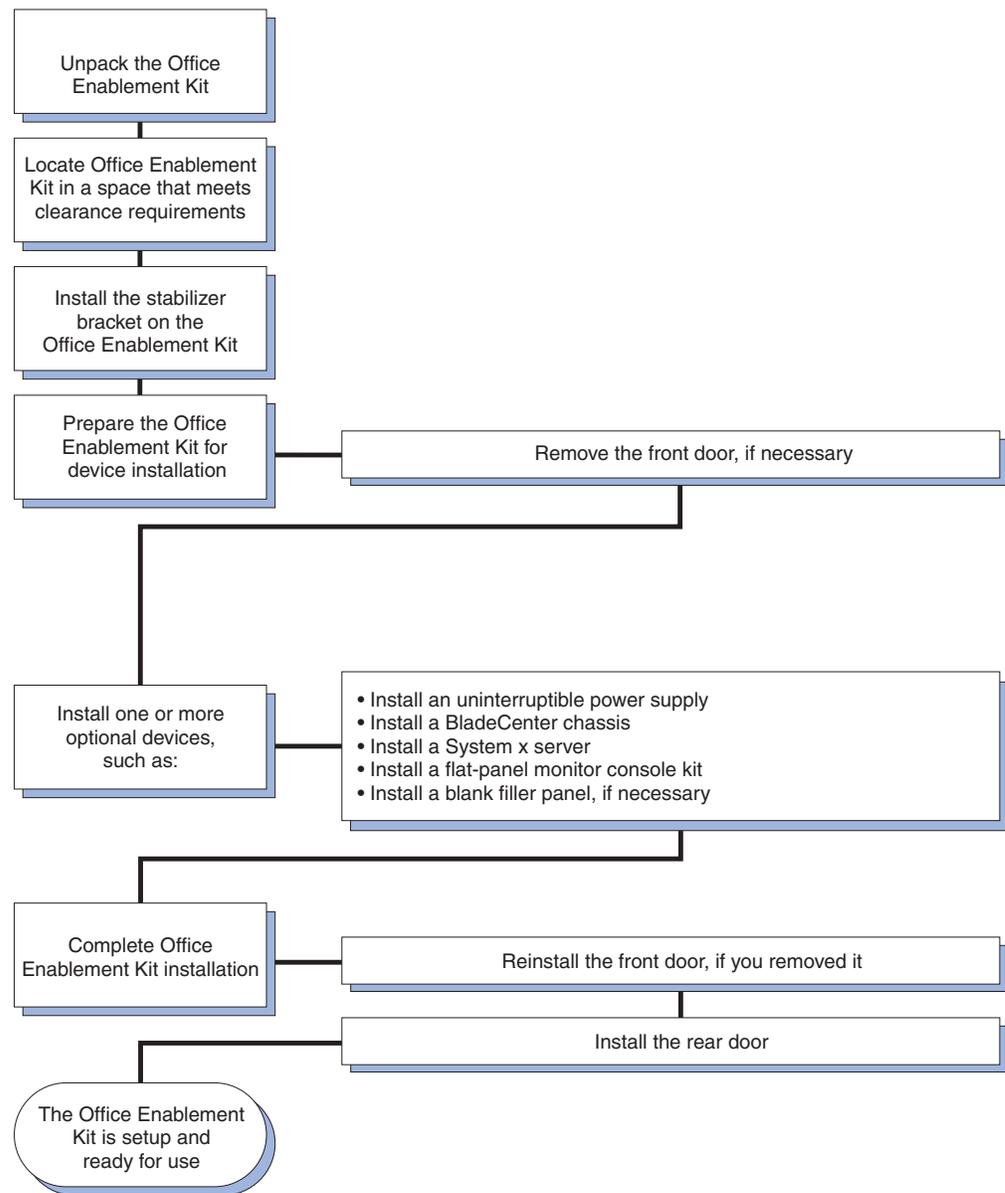
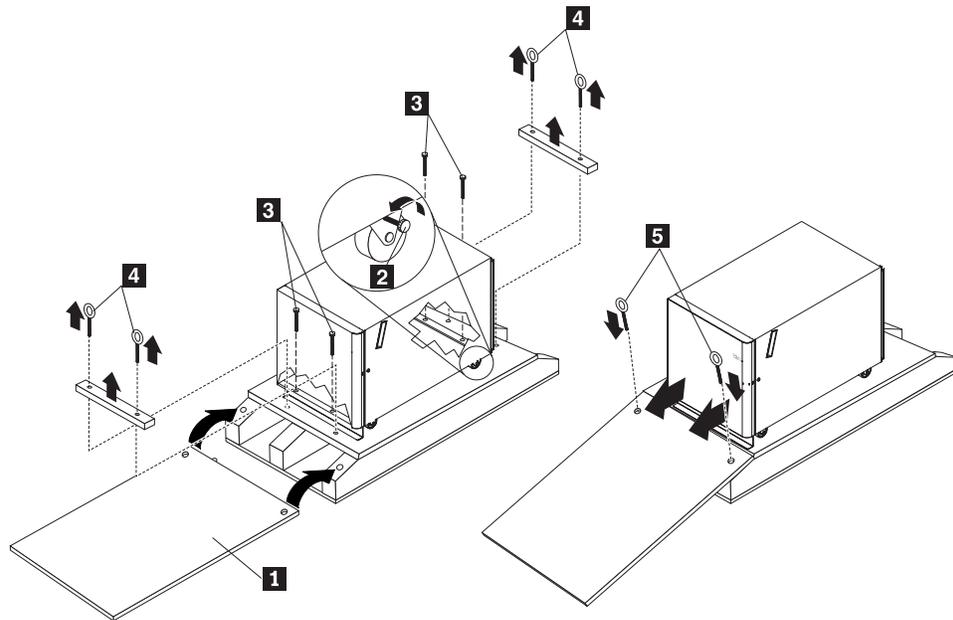


Figure 3. Installing the Office Enablement Kit and devices overview

Removing the Office Enablement Kit from the pallet

Use the ramp to remove the Office Enablement Kit from the pallet.



Complete the following steps to remove the Office Enablement Kit from the pallet.

1. Place the ramp **1** on the front or rear of the pallet.
2. Loosen the caster locking screw **2** on each of the four casters so that you can roll the Office Enablement Kit on its casters.
3. Remove the bolts **3** that secure the Office Enablement Kit to the pallet.
4. Remove the bolts **4** that hold the front and rear retaining board in place.
5. Secure the ramp to the pallet using two of the bolts **5** that you removed from the Office Enablement Kit in step 4.

Attention: Do not roll the Office Enablement Kit off the side of the pallet that does not have a ramp installed.



6. With one person on each side of the Office Enablement Kit, carefully roll it toward the front of the pallet; then, carefully roll the Office Enablement Kit down the ramp until the rear casters are on the floor.
7. You can now move the Office Enablement Kit to the installation site.

Removing the front door

The Office Enablement Kit comes with the front door installed. You may need to remove it when installing devices in the Office Enablement Kit if part of the rack cabinet is obstructed by the door as you install a device.

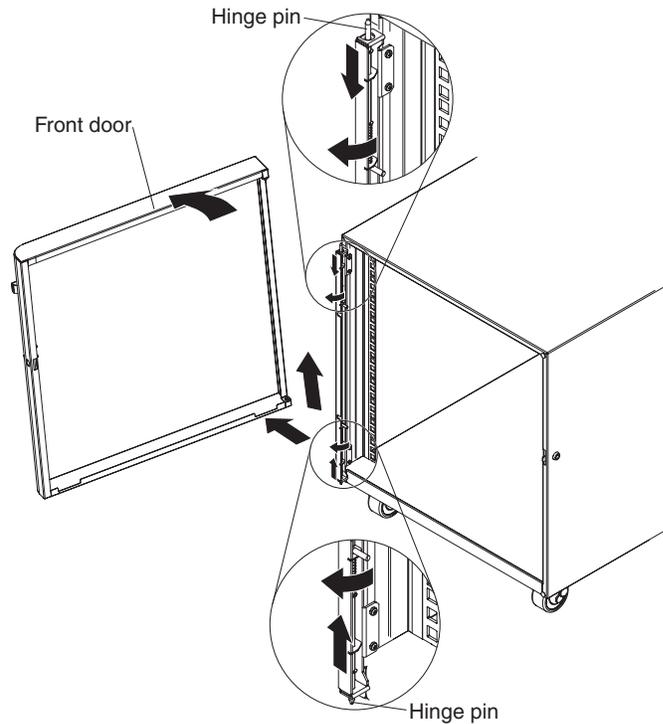


Figure 4. Removing the front door from the rack cabinet

Complete the following steps to remove the front door from the Office Enablement Kit:

1. Unlock and open the door as wide as it will go.
2. While supporting the door, push the bottom hinge pin up and to the left to lock it in place.

Note: Make sure that you push up the bottom hinge pin **before** you pull down the top hinge pin. Otherwise, the door may fall.

3. Pull the top hinge pin down and to the left to lock it in place.
4. Pull the door away from the rack cabinet and set the door aside.

Installing the stabilizer bracket

After placing the Office Enablement Kit in the desired location, lock the casters in place and install the stabilizer bracket for added stability.

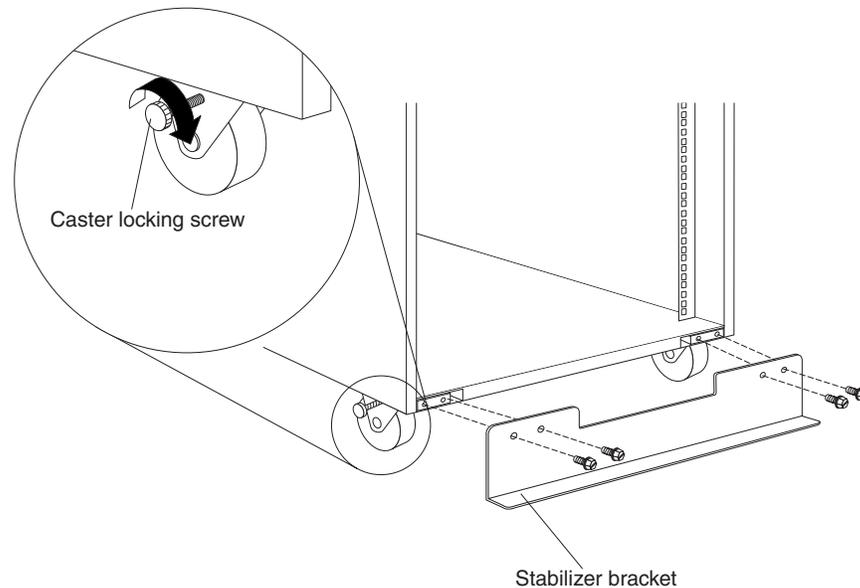


Figure 5. Locking the casters and installing the stabilizer bracket

Complete the following steps to install the stabilizer bracket:

1. Tighten the caster locking screw on each of the four casters to prevent the Office Enablement Kit from rolling.
2. Attach the stabilizer bracket to the front of the Office Enablement Kit with the screws that come with the bracket.

Note: You must extend the stabilizer bracket when you install heavy devices in the rack cabinet or when you extend existing devices to service them.

Extending the stabilizer bracket

If you install sliding devices inside the Office Enablement Kit, you must extend the stabilizer bracket before you extend any other sliding device.

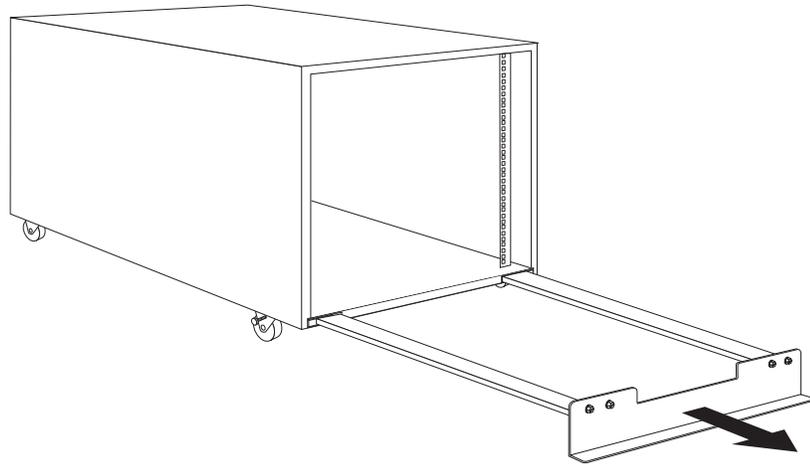


Figure 6. Extending the stabilizer bracket

Complete the following steps to extend the stabilizer bracket:

1. Grasp the center of the stabilizer bracket firmly; then, extend the stabilizer bracket to its maximum position.
2. Install a device in the Office Enablement Kit, or service an extended sliding device; then, ensure that the device is fully inside of the rack cabinet.
3. Push the stabilizer bracket under the Office Enablement Kit when you are not installing or servicing a device in the Office Enablement Kit.

Chapter 5. Installing optional devices

There are many optional devices that you can install in the Office Enablement Kit. Always read the documentation that comes with the optional device for detailed installation instructions.

For example, Figure 7 shows optional devices that you might install if you install an IBM BladeCenter System in the Office Enablement Kit.

Statement 2



DANGER

- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- Always install servers and optional devices starting from the bottom of the rack cabinet.
- Always install the heaviest devices in the bottom of the rack cabinet.

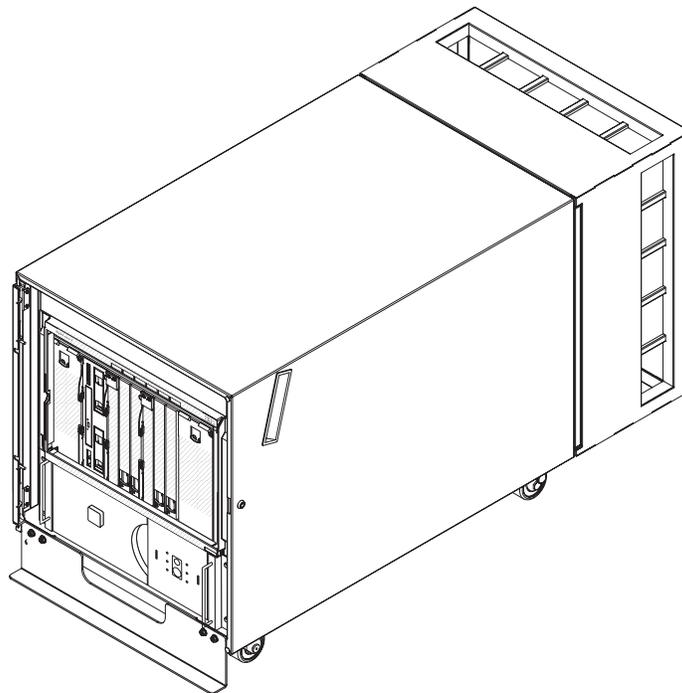


Figure 7. Installing optional devices in the Office Enablement Kit

See the installation documentation that is provided with each of the components to be installed for specific installation instructions.

Installing an uninterruptible power supply

The uninterruptible power supply comes with standard rack mounting brackets installed and can occupy 2U or more of space in the rack cabinet, depending upon the model. See the uninterruptible power supply documentation for detailed installation instructions.

Attention: The batteries inside of the uninterruptible power supply are disconnected before packaging the uninterruptible power supply. In some uninterruptible power supply models, the batteries are not installed. See the documentation that comes with the uninterruptible power supply for detailed instructions on how to install and connect the batteries before you turn on or install the uninterruptible power supply in the rack cabinet.

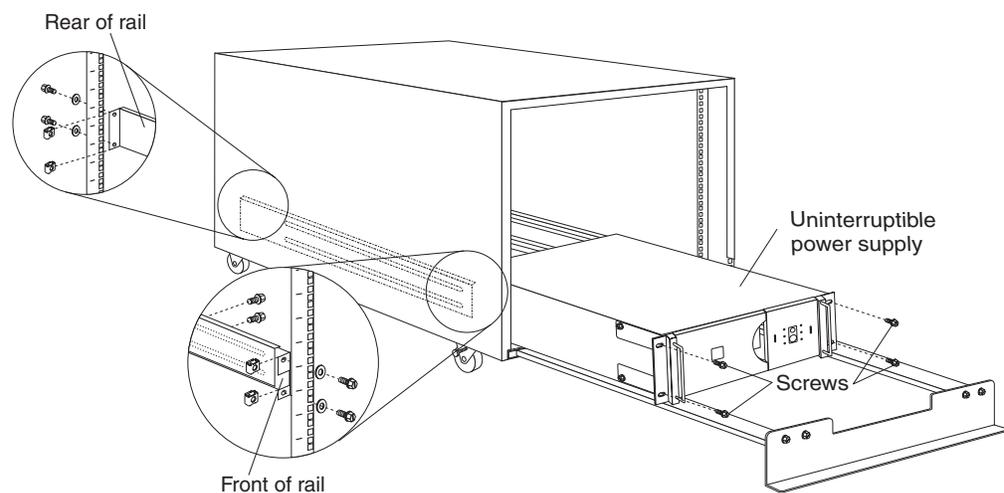


Figure 8. Installing an uninterruptible power supply

Complete the following general steps to install an uninterruptible power supply in an Office Enablement Kit:

Note: For specific installation instructions, see the documentation that came with the uninterruptible power supply that you are installing.

1. Attach the rails to the front and rear of the rack cabinet, adjusting the length of the rails to fit the depth of the rack cabinet, if required.
2. Slide the uninterruptible power supply onto the rails; then, attach the front of the uninterruptible power supply to the rack mounting flanges with cage nuts and M6 screws.
3. See the uninterruptible power supply documentation for information on how to connect cables.

Installing a System x server

Complete these general steps to install a System x server in the Office Enablement Kit.

Note: For detailed instructions on installing a System x server, see the *Installation and User's Guide* provided with the server.

1. Attach the rails to the front and rear of the Office Enablement Kit, adjusting the length of the rails to fit the depth of the rack cabinet. Use the cage nuts that are provided with the BladeCenter chassis.
2. Extend the rails and install the server in the rack.
3. Cable all components in the server to the appropriate external devices.
4. Slide the server into the rack until it slides into place.
5. Connect the server to power.

Installing a BladeCenter chassis

Complete these steps to install a BladeCenter chassis in an Office Enablement Kit.

Note: For detailed instructions on installing a BladeCenter chassis, see the *Installation and User's Guide* provided with the BladeCenter chassis.

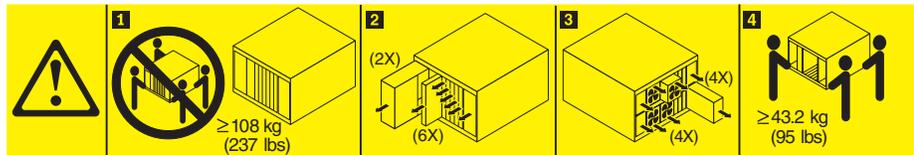
1. Remove components that are installed in the BladeCenter chassis to decrease the weight, making it easier to install in a rack.

Statement 32



CAUTION:

To avoid personal injury, before lifting the unit, remove all the blades, power supplies, and removable modules to reduce the weight.

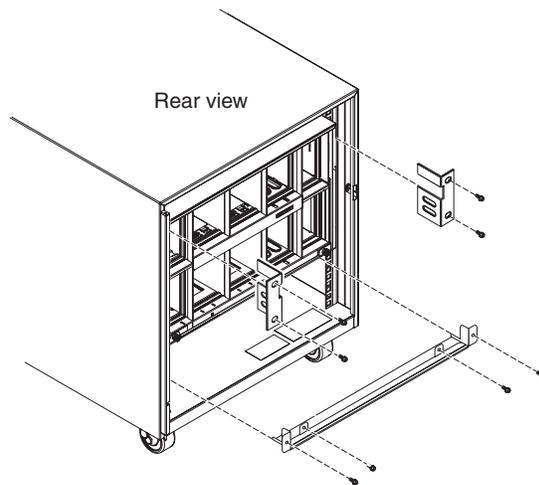


2. Attach the rails to the front and rear of the Office Enablement Kit, adjusting the length of the rails to fit the depth of the rack cabinet. Use the cage nuts that are provided with the BladeCenter chassis.
3. Extend the rails and install the BladeCenter chassis in a rack.
4. Install the components that you removed (and any other components or optional devices that you have ordered).
5. Cable all components in the BladeCenter chassis to the appropriate external devices.
6. Connect the BladeCenter chassis to power.

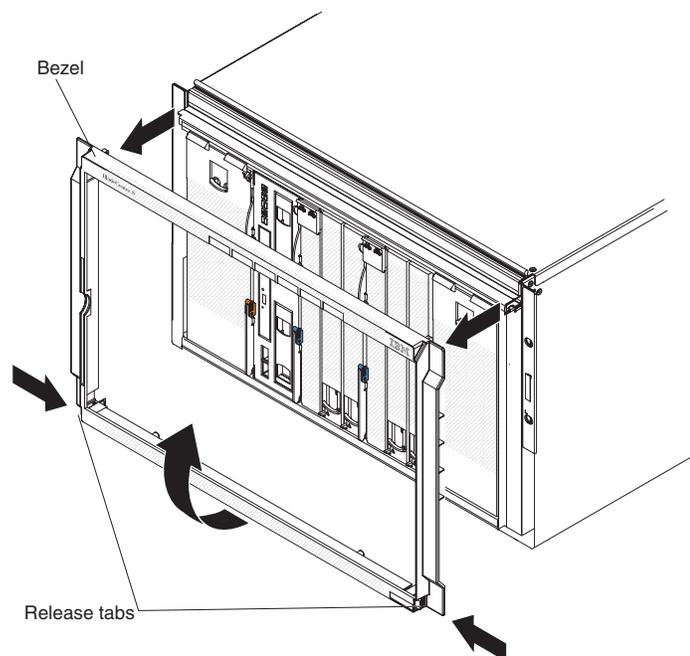
Shipping the BladeCenter S chassis in an Office Enablement Kit

To ship a BladeCenter S chassis in an Office Enablement Kit, you will need to install the two upper shipping brackets and M5 screws (provided in the BladeCenter S chassis rack installation kit) and the lower shipping bracket (provided with the Office Enablement Kit).

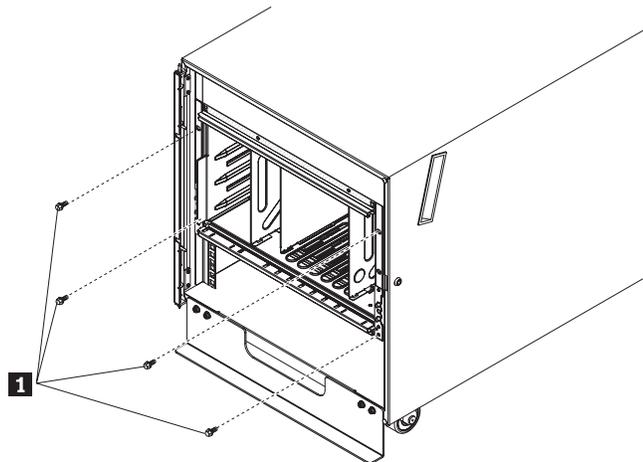
M5 screws are used to secure the lower shipping bracket to the BladeCenter S chassis and are provided with the BladeCenter S chassis rack installation kit. M6 screws are used to secure the shipping brackets to the rack cabinet and are provided with the BladeCenter S chassis rack installation kit as well as the Office Enablement Kit.



1. Install the cage nuts for the upper left, upper right, and lower shipping brackets (if you did not install them when initially installing the BladeCenter S chassis in the Office Enablement Kit).
 - a. Remove the bezel for the BladeCenter S chassis.



- b. Remove the screws that secure the front of the BladeCenter S chassis to the rails.



- c. From the rear of the BladeCenter S chassis, carefully push the chassis forward to provide enough clearance to install the cage nuts.

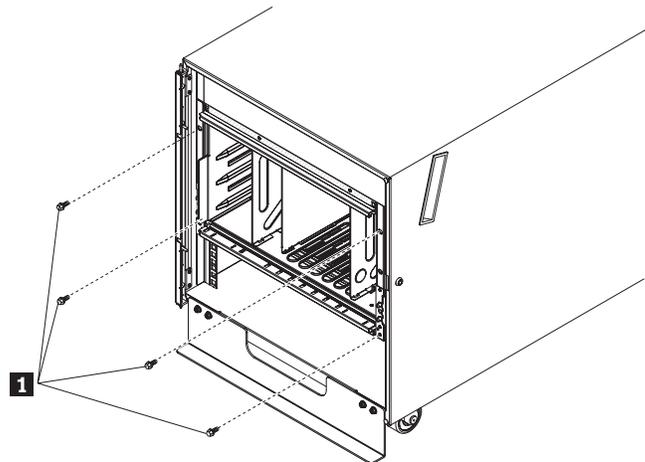
Important: When pushing the BladeCenter S chassis, grasp the top and bottom of the chassis. Pushing on the components within a chassis could damage the components.

- d. Install the cage nuts for the upper left, upper right, and lower shipping brackets.
- e. From the front of the BladeCenter S chassis, carefully push the chassis back into the Office Enablement Kit.

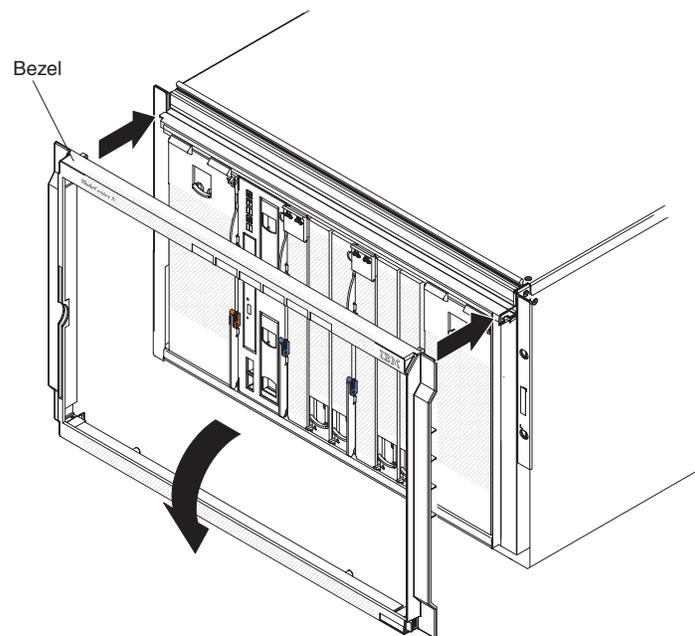
Important: When pushing the BladeCenter S chassis, grasp the top and bottom of the chassis. Pushing on the components within a chassis could damage the components.

2. Install the upper right shipping bracket (as you are facing the rear of the BladeCenter S chassis).
 - a. Align the shipping bracket so that the bottom of the shipping bracket will fit into the slot to the right of power module bay 1.
 - b. Align the holes in the shipping bracket with the cage nuts in the rack cabinet.
 - c. Insert the shipping bracket into the chassis slot.
 - d. Secure the shipping bracket to the rack cabinet with the M6 screws that are provided.
3. Repeat these steps to install the upper left shipping bracket.
4. Install the lower shipping bracket.
 - a. Position the lower shipping bracket so that it is flush with the bottom of the BladeCenter S chassis.
 - b. Slide the lower shipping bracket beneath the BladeCenter S chassis until the raised holes in the lower shipping bracket are flush with the rear of the BladeCenter S chassis. The holes in the lower shipping bracket should align with the cage nuts in the rack cabinet rails.
 - c. Secure the lower shipping bracket to the rack cabinet rails using the M6 screws that are provided.
 - d. Secure the lower shipping bracket to the BladeCenter S chassis by installing the M5 screws in the raised holes of the lower shipping bracket.

5. Insert four M6 screws in the front of the BladeCenter S chassis to secure it to the rack cabinet.



6. Install the bezel on the BladeCenter S chassis.



Installing a flat-panel monitor console kit

A flat panel monitor console kit typically occupies 1 U or more of space in the Office Enablement Kit. Consider installing the flat panel monitor console kit at the top of the mounting space to make it easier to use the monitor, mouse, and keyboard.

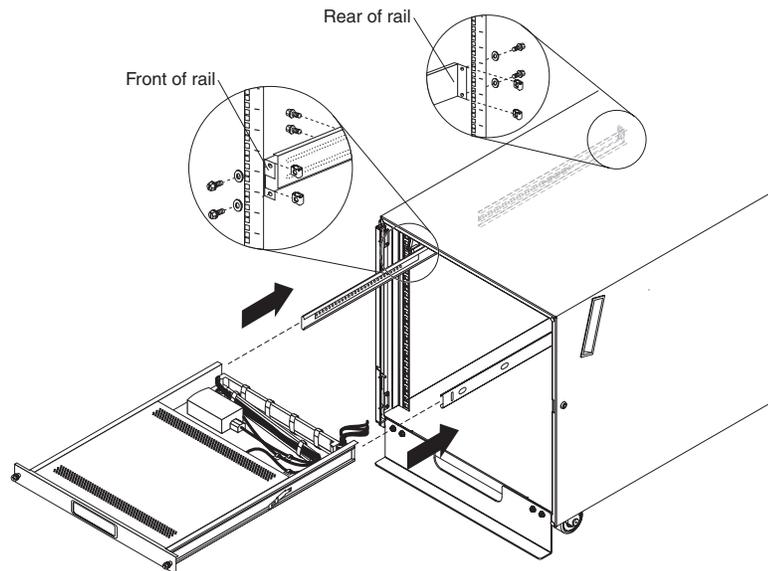


Figure 9. Installing a monitor console kit

Complete the following general steps to install a flat-panel monitor console kit in the Office Enablement Kit.

Note: For specific installation instructions, see the documentation provided with the flat-panel monitor console kit that you are installing.

1. Raise the flat-panel monitor to the full upright position.
2. Place the keyboard in the tray, removing the rubber pads from the bottom of the keyboard, if necessary.
3. Route the keyboard-and-mouse cable through the cord clip on the bottom, up through the opening on the right side of the tray, and toward the cable management arm.
4. Attach the rails to the front and rear of the Office Enablement Kit, adjusting the length of the rails to fit the depth of the rack cabinet. Use the cage nuts that are provided with the flat-panel monitor console kit.
5. Install the rail-alignment spacer.
6. Extend the inner part of the outer rails and slide the ball-bearing assemblies forward to the front of the outer rails.
7. Slide the flat panel monitor and keyboard tray into the ball-bearing assemblies in the rails.
8. Press the release latches and push the flat panel monitor and keyboard tray completely into the rack.
9. Use the documentation provided with the flat-panel monitor console kit to complete cable routing and the connection of the video, keyboard, and mouse connectors.

Installing a blank filler panel

Four 1U blank filler panels are provided with the Office Enablement Kit. Use these filler panels to cover the front of the rack cabinet and conceal unused rack mounting space. These filler panels also help to ensure proper circulation of air inside the rack cabinet.

You can order additional filler panel kits:

- IBM 1U Quick Install Filler Panel Set (25R5559). Includes five 1U filler panels
- IBM 3U Quick Install Filler Panel Set (25R5560). Includes five 3U filler panels

Attention: Do not leave open spaces above or below an installed server in your rack cabinet. To help prevent damage to server components, always install a blank filler panel to cover the open space and to help ensure proper air circulation.

Complete the following steps to install a blank filler panel on a rack cabinet:

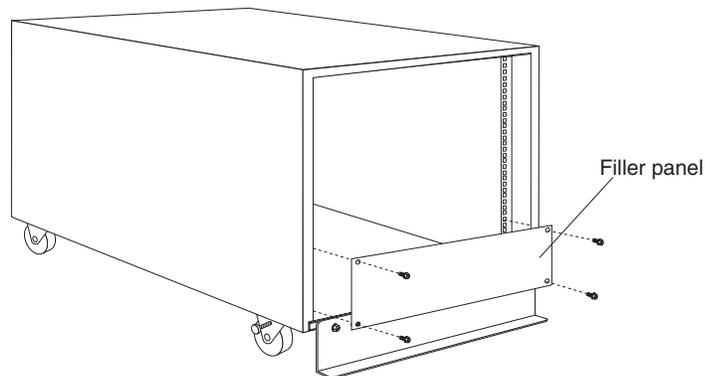


Figure 10. Installing a blank filler panel

1. Determine the number of blank filler panels that you need to cover the open space in the rack cabinet.
2. Attach the blank filler panel with M6 screws and cage nuts.

Installing the front door

Complete these steps to install the front door from the Office Enablement Kit.

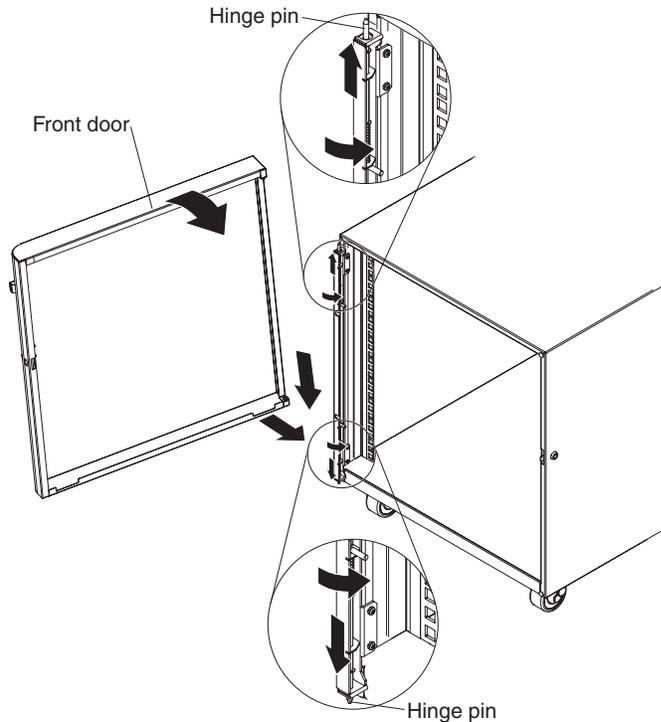


Figure 11. Installing the front door

Note: Before you begin, both hinge pins (top and bottom) should be locked in place. Turn them to the left and make sure that they are in the hinge pin slot located on the hinge.

1. Hold the door perpendicular to the front of the Office Enablement Kit and slightly to the left of the opening.
2. Position the hold in the top of the door over the top hinge pin opening on the Office Enablement Kit hinge.
3. Rotate the top hinge pin to the right and push up on the hinge pin until it is engaged with the top of the door.
4. While supporting the door, slide the bottom of the door to position the bottom hinge pin opening on the door over the bottom hinge pin opening on the Office Enablement Kit hinge.
5. Rotate the bottom hinge pin to the right and push down on the hinge pin until it is engaged with the bottom of the door.
6. While supporting the door, push the bottom hinge pin down and to the right to engage the hinge pin.
7. Close and lock the door.

Installing the rear door

Complete these steps to install the rear door on the Office Enablement Kit.

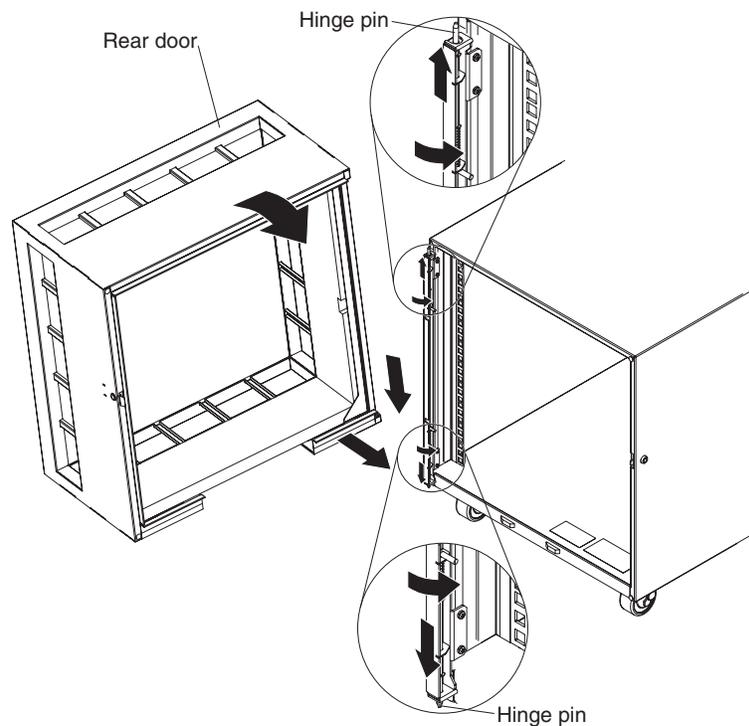


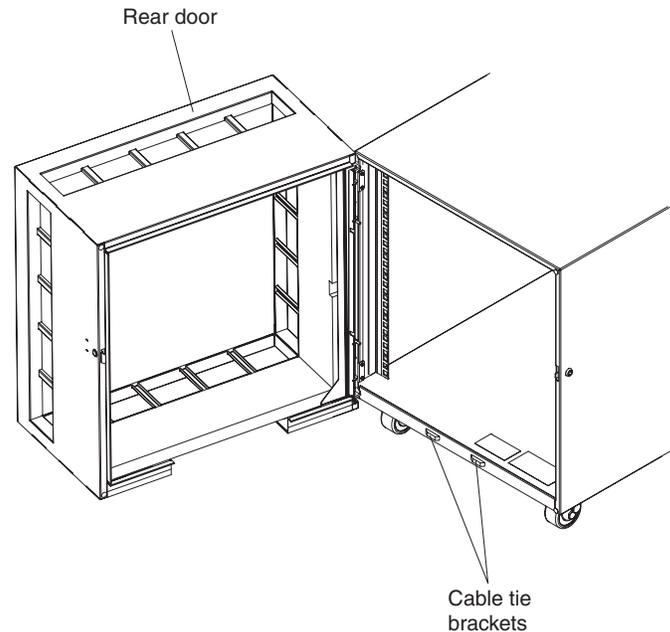
Figure 12. Installing the rear door

1. Hold the door perpendicular to the front of the Office Enablement Kit and slightly to the left of the opening.
2. Position the hold in the top of the door over the top hinge pin opening on the Office Enablement Kit hinge.
3. Rotate the top hinge pin to the right and push up on the hinge pin until it is engaged with the top of the door.
4. While supporting the door, slide the bottom of the door to position the bottom hinge pin opening on the door over the bottom hinge pin opening on the Office Enablement Kit hinge.
5. Rotate the bottom hinge pin to the right and push down on the hinge pin until it is engaged with the bottom of the door.
6. While supporting the door, push the bottom hinge pin down and to the right to engage the hinge pin.
7. Close and lock the door.

Chapter 6. Managing cables

Always read the instructions that come with your server or optional device for detailed cable-management information.

There are two cable tie brackets at the rear Office Enablement Kit. You can use these brackets to secure cable bundles so that they can be routed through the opening in the bottom of the rear door.



Group the cables into two bundles to ensure that there is sufficient clearance so that you can close the rear door. For each cable bundle, use a cable tie and run the cable tie through the cable tie bracket on the Office Enablement Kit to secure the cable bundle to the rack cabinet.

In addition, use the following general guidelines when cabling servers or optional devices that you install in a rack cabinet:

- Do not run cables in front of or behind other devices that will prevent service access to those devices.
- Do not bend fiber-optic cable beyond its limited specifications.
- Label all cables so that they are clearly distinguishable from each other.
- When installing devices mounted on slide rails, such as servers:
 - Run the cables neatly along equipment cable-management arms and secure the cables to the arms using provided cable straps.
 - Leave enough extra cable so that the device can fully extend without straining the cables.
 - Secure the cables so that the device can retract without pinching or cutting the cables.
- When installing devices mounted on fixed rails:
 - Run the cables neatly along the posts or side rails in the rack cabinet out of the way of other installed devices.

- Secure the cables with the provided cable straps.
- Ensure that the cables cannot be pinched or cut by other devices in the rack cabinet.

Appendix A. Office Enablement Kit components

There are three types of replaceable components: Tier 1 CRU, Tier 2 CRU, and FRU, based on who is responsible for installing the component.

- **Tier 1 customer replaceable unit (CRU).** Replacement of Tier 1 CRUs is your responsibility. If IBM® installs a Tier 1 CRU at your request, you will be charged for the installation.
- **Tier 2 customer replaceable unit.** You can install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service that is designed for your computer.
- **Field replaceable unit (FRU).** FRUs must be installed only by trained service technicians.

For information about the terms of the warranty, see Appendix C, “IBM Statement of Limited Warranty Z125-4753-10 08/2008,” on page 37 and for information about getting service and assistance, see Appendix B, “Getting help and technical assistance,” on page 33.

Parts listing

This table provides a list of all part numbers that are available for the Office Enablement Kit.

Note: IBM® part numbers are subject to change without notice.

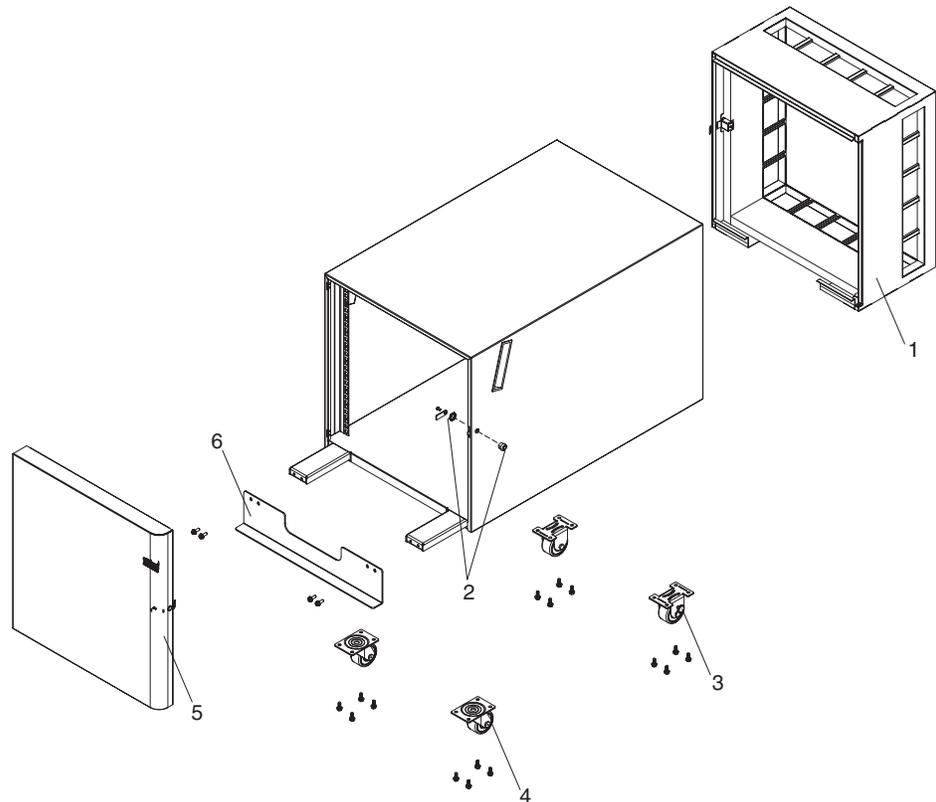


Table 2. Office Enablement Kit parts list

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)	FRU part number
1	Rear door assembly	44X2069		
2	Security lock kit (shipped as matching pair)	44X2067		
3	Fixed caster (for rear of Office Enablement Kit)			41Y0804
4	Swivel caster (for front of rack cabinet)			41Y0805
5	Front door assembly	44X2068		
6	Stabilizer bracket assembly (includes stabilizer bracket and extensions)	44X2070		
	Miscellaneous hardware kit (includes hinge assembly, hinge pin, door handle, and door spring latch)	44X2071		
	Filler panel kit (includes 1U, 3U, and 5U filler panels)	12J4473		

Replacing a door lock

There are two locks available on the Office Enablement Kit, one for the front door and one for the rear door. The process for replacing a door lock is the same for both doors.

Complete the following steps to replace a front door lock on the Office Enablement Kit:

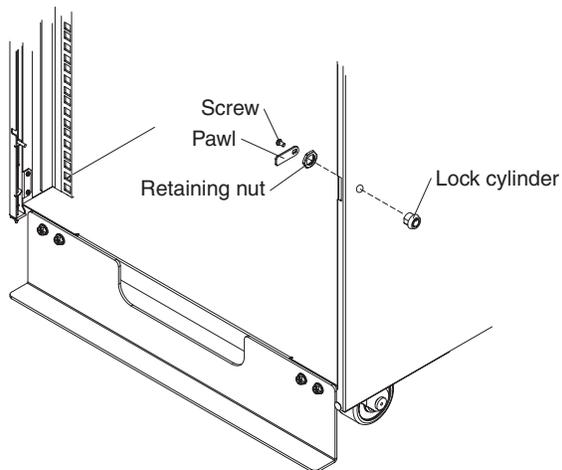


Figure 13. Replacing a front door lock

1. If applicable, unlock and open the front door.
2. Remove the screw, pawl, and retaining nut from the inside of the Office Enablement Kit.
3. Remove the old lock assembly from the cabinet and discard the old parts.
4. Insert the new lock from the outside of the cabinet and hold the locking mechanism against the inside of the cabinet.
5. Tighten the nut that comes with the new lock.

6. Install the pawl; then secure the lock with the screw.

Replacing the hinge bracket and door latch

There are two hinge brackets and door latches, one for the front of the Office Enablement Kit and one for the rear. The procedure for replacing hinge brackets and door latches is the same.

Complete the following steps to replace a hinge bracket and door latch on the Office Enablement Kit:

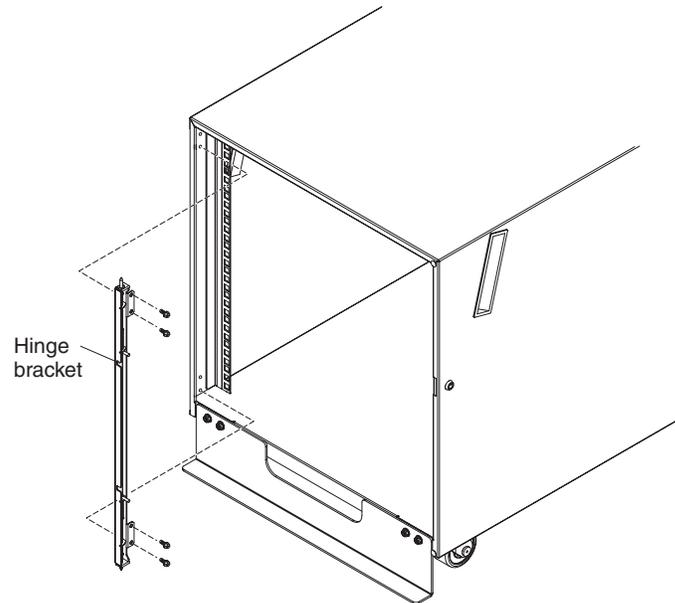


Figure 14. Replacing the hinge bracket

1. Remove the front door from the Office Enablement Kit. See “Removing the front door” on page 11.
2. To replace the hinge bracket:
 - a. Remove the four screws that secure the old hinge bracket to the rack cabinet; then, discard the old parts.
 - b. Install the new hinge bracket using the four screws that come with the new hinge bracket.
3. To replace the door latch:

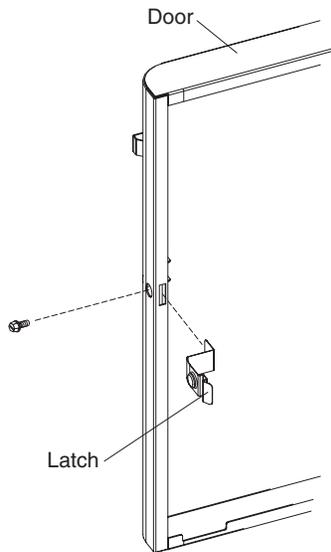


Figure 15. Replacing the door latch

- a. Remove the screw that secures the old latch to the door assembly; then, discard the old parts.
 - b. Install the new door latch using the screw that comes with the new door latch.
4. Install the front door on the Office Enablement Kit. See “Installing the front door” on page 23.

Replacing casters

The Office Enablement Kit comes with swivel casters installed on the front and fixed casters installed on the rear of the Office Enablement Kit. Make sure that you install the same type of caster that you removed from the Office Enablement Kit.

Complete the following steps to replace casters on the Office Enablement Kit:

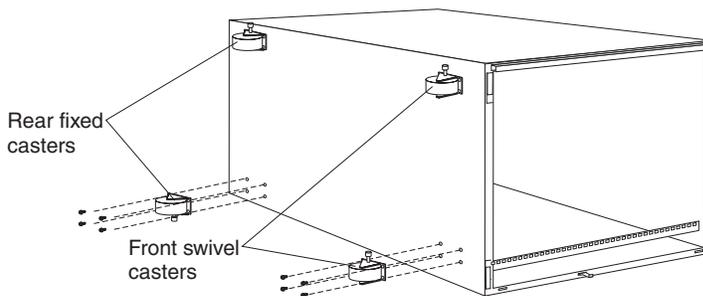


Figure 16. Replacing casters

1. Turn off any installed devices in the Office Enablement Kit according to the documentation that comes with those devices; then, disconnect the cables from those devices and remove them from the Office Enablement Kit.
2. Carefully turn the empty Office Enablement Kit onto the side.
3. To remove an old caster, remove the four screws that secure the caster in place; then, discard the old parts.
4. Install a new caster using the screws that come with the new caster.

5. Repeat step 3 and step 4 for all casters that you need to replace.
6. Carefully turn the empty Office Enablement Kit upright; then, install and connect all of the devices that you removed previously.

Replacing the stabilizer bracket assembly

Use this procedure to replace a stabilizer bracket assembly.

Complete the following steps to replace the stabilizer bracket assembly on the Office Enablement Kit:

1. Turn off any installed devices in the rack cabinet according to the documentation that comes with those devices; then, disconnect the cables from those devices and remove them from the Office Enablement Kit.
2. Remove the four screws that secure the old stabilizer bracket to the front of the Office Enablement Kit; then, discard the old parts.

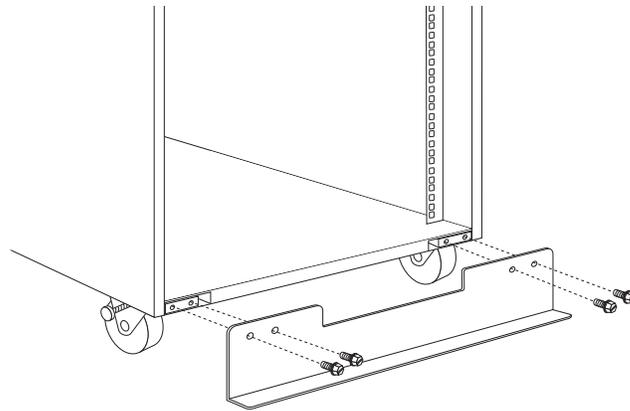


Figure 17. Removing the stabilizer bracket

3. Carefully turn the empty rack cabinet onto the side.
4. Remove both front casters from the rack cabinet according to “Replacing casters” on page 30.
5. Pull the old stabilizer bracket extensions from the front of the rack cabinet until they are completely removed from the rack cabinet; then, discard the old parts.

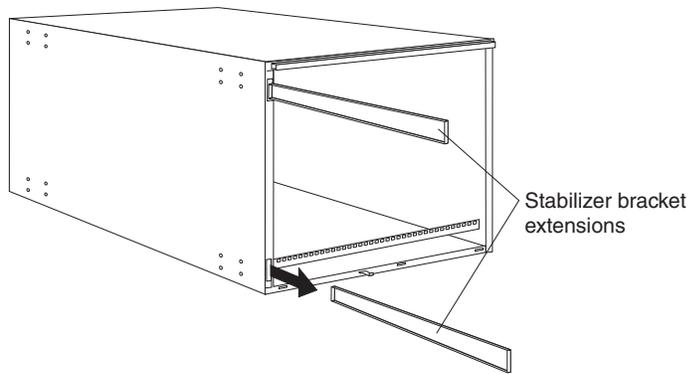


Figure 18. Removing the stabilizer bracket extensions

6. Carefully slide the new stabilizer bracket extensions until they are fully inside the Office Enablement Kit..
7. Install the two front casters that you removed earlier.
8. Carefully turn the empty upright; then, install the new stabilizer bracket to the front of the using the four screws that come with the new bracket.
9. Install and connect all of the devices that you removed previously.

Appendix B. Getting help and technical assistance

If you need help, service, or technical assistance or just want more information about IBM products, you will find a wide variety of sources available from IBM to assist you.

Use this information to obtain additional information about IBM and IBM products, determine what to do if you experience a problem with your BladeCenter product or optional device, and determine whom to call for service, if it is necessary.

Before you call

Before you call, make sure that you have taken these steps to try to solve the problem yourself.

If you believe you require IBM to perform warranty service on your IBM product, the IBM Service Technicians will be able to assist you more efficiently if you prepare before you call.

- Have you checked for updated BIOS, firmware, or operating system device drivers for your system? The IBM Warranty terms and conditions state that you, the owner of the IBM product, are responsible for maintaining and updating all software and firmware of the product (unless covered by an additional maintenance contract). Your IBM Service Technician will request that you upgrade your software/firmware if your issue has a documented solution within a software upgrade.

You can obtain the latest downloads for your system from the IBM BladeCenter support site at <http://www.ibm.com/systems/support/>.

- Have you added new hardware or installed new software in your environment? The ServerProven site at <http://www.ibm.com/servers/eserver/serverproven/compat/us/> shows you what hardware and software is supported by BladeCenter systems.
- Use the troubleshooting information in your system documentation, and use the diagnostic tools that come with your system. Information about diagnostic tools is in the *Problem Determination and Service Guide* on the IBM Documentation CD that comes with your system.
- Go to the IBM support site at <http://www.ibm.com/systems/support/> to check for information to help you solve the problem.
- Gather the following information to provide to IBM Service. This data will assist IBM in quickly providing a solution to your issue, and ensure you receive the appropriate level service for which you may have contracted.
 - Hardware and Software Maintenance agreement contract numbers, if appropriate
 - Machine Type number (IBM 4 digit machine identifier)
 - Machine model number
 - Machine serial number
 - Current system BIOS and firmware levels
 - Other pertinent information such as error messages and logs
- Submit an Electronic Service Request.

1. Go to <http://www.ibm.com/support>.
2. Under Systems support, click **Open service request**.
3. Follow the prompts.

Submitting an Electronic Service Request will start the process of determining a solution to your issue by getting all the pertinent information in the hands of IBM Service quickly and efficiently. IBM Service technicians can start working on your solution as soon as you have completed and submitted an Electronic Service Request.

Using the documentation

Information about devices installed in the Office Enablement Kit is available in the documentation that comes with the product. That documentation can include printed documents, online documents, readme files, and help files. See the troubleshooting information in your system documentation for instructions for using the diagnostic programs. The troubleshooting information or the diagnostic programs might tell you that you need additional or updated device drivers or other software. IBM maintains pages on the World Wide Web where you can get the latest technical information and download device drivers and updates. To access these pages, go to <http://www.ibm.com/support/>.

Getting help and information from the World Wide Web

On the World Wide Web, the IBM Web site has up-to-date information about IBM BladeCenter systems, optional devices, services, and support at <http://www.ibm.com/systems/support>.

Hardware service and support

You can receive hardware service through IBM Services or through your IBM reseller, if your reseller is authorized by IBM to provide warranty service.

See <http://www.ibm.com/planetwide/> for support telephone numbers, or in the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

In the U.S. and Canada, hardware service and support is available 24 hours a day, 7 days a week. In the U.K., these services are available Monday through Friday, from 9 a.m. to 6 p.m.

Software service and support

Through IBM Support Line, you can get telephone assistance, for a fee, with usage, configuration, and software problems with BladeCenter products.

For information about which products are supported by Support Line in your country or region, see <http://www.ibm.com/services/sl/products/>.

For more information about Support Line and other IBM services, see <http://www.ibm.com/services/> or see <http://www.ibm.com/planetwide/> for support telephone numbers. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

IBM Taiwan product service

Use this information to contact IBM Taiwan product service.

台灣 IBM 產品服務聯絡方式：
台灣國際商業機器股份有限公司
台北市松仁路7號3樓
電話：0800-016-888

IBM Taiwan product service contact information:

- IBM Taiwan Corporation
- 3F, No 7, Song Ren Rd.
- Taipei, Taiwan
- Telephone: 0800-016-888

Appendix C. IBM Statement of Limited Warranty Z125-4753-10 08/2008

Part 1 - General Terms

This Statement of Limited Warranty includes Part 1 - General Terms, Part 2 - Country-unique Terms, and Part 3 - Warranty Information. The terms of Part 2 replace or modify those of Part 1. For purposes of this Statement of Limited Warranty, "IBM" means the IBM entity that provided your Machine to you or to your reseller—for example, International Business Machines Corporation in the U.S. or IBM World Trade Corporation or the local IBM entity in your country.

The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you purchase for your use, and not for resale. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently, or otherwise.**g NOTHING IN THIS STATEMENT OF LIMITED WARRANTY AFFECTS ANY STATUTORY RIGHTS OF CONSUMERS THAT CANNOT BE WAIVED OR LIMITED BY CONTRACT.**

This Statement of Limited Warranty is available, in multiple languages, at the following IBM Internet website: http://www.ibm.com/systems/support/machine_warranties/.

What this Warranty Covers

IBM warrants that each Machine is free from defects in materials and workmanship and conforms to its Specifications. "Specifications" is information specific to a Machine in a document entitled "Official Published Specifications", which is available upon request.

During the warranty period, IBM provides repair and exchange service for the Machine under the type of warranty service IBM designates for the Machine. The warranty period for the Machine is a fixed period starting on its original Date of Installation. The date on your purchase invoice or sales receipt is the Date of Installation unless IBM or your reseller informs you otherwise. The warranty period, type of warranty, and service level that apply to your Machine are designated in Part 3.

Many features, conversions, or upgrades involve the removal of parts and their return to IBM. An IBM part that replaces a removed part will assume the warranty service status of the removed part. An IBM part that is added to a Machine without replacing a previously-installed part is subject to warranty effective on its Date of Installation. Unless IBM specifies otherwise, the warranty period, type of warranty, and service level of such part is the same as the Machine on which it is installed.

Unless IBM specifies otherwise, these warranties apply only in the country or region in which you purchased the Machine.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED,

INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTY OF TITLE OR NON-INFRINGEMENT. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD. SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

What this Warranty Does not Cover

This warranty does not cover the following:

- a. failure or damage resulting from misuse (including, but not limited to, use of any Machine capacity or capability, other than that authorized by IBM in writing), accident, modification, unsuitable physical or operating environment, operation in other than the specified operating environment or improper maintenance by you or a third party;
- b. failure due to events beyond IBM's control;
- c. failure caused by a product for which IBM is not responsible;
- d. any non-IBM products, including those provided with, or installed on, an IBM Machine at your request;
- e. accessories, supply items and consumables (e.g. batteries and printer cartridges), and structural parts (e.g. frames and covers);
- f. service of Machine alterations; and
- g. service of a Machine on which you are using capacity or capability, other than that authorized by IBM in writing.

The warranty is voided by removal or alteration of identification labels on the Machine or its parts.

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

Any technical or other support provided for a Machine under warranty, such as assistance with "how-to" questions and those regarding Machine set-up and installation, is provided WITHOUT WARRANTIES OF ANY KIND.

How to Obtain Warranty Service

If the Machine does not function as warranted during the warranty period, refer to the service documentation that shipped with your Machine for support assistance and problem determination procedures. A copy of the service documentation for your Machine can also be found at the following IBM website:
<http://www.ibm.com> under "Support and downloads".

If you are unable to resolve your problem with the service documentation, contact IBM or your reseller to obtain warranty service. Contact information for IBM is provided in Part 3. If you do not register the Machine with IBM, you may be required to present proof of purchase as evidence of your entitlement to warranty service.

What IBM Will Do to Correct Problems

IBM will attempt to diagnose and resolve your problem over the telephone or electronically by access to an IBM Internet website. Certain Machines contain remote support capabilities for direct problem reporting, remote problem determination, and resolution with IBM. When you contact IBM for service, you must follow the problem determination and resolution procedures that IBM specifies. Following problem determination, if IBM determines on-site service is required, a service technician will be scheduled for service at your location.

You are responsible for downloading or obtaining from IBM, and installing designated Machine Code (microcode, basic input/output system code (called "BIOS"), utility programs, device drivers, and diagnostics delivered with an IBM Machine) and other software updates in a timely manner from an IBM Internet website or from other electronic media, and following the instructions that IBM provides. You may request IBM to install Machine Code changes, however, you may be charged for that service.

Some parts of IBM Machines are designated as Customer Replaceable Units ("CRUs"). If your problem can be resolved with a CRU (e.g. keyboard, memory, hard disk drive), IBM will ship the CRU to you for you to install.

If the Machine does not function as warranted during the warranty period and your problem cannot be resolved over the telephone or electronically, through your application of Machine Code or software updates, or with a CRU, IBM or its subcontractor or a reseller that has been approved by IBM to provide warranty service, will either, at its discretion, 1) repair it to make it function as warranted, or 2) replace it with one that is at least functionally equivalent. If IBM or its subcontractor or the reseller is unable to do either, you may return the Machine to your place of purchase and your money will be refunded.

IBM or its subcontractor or the reseller will also manage and install selected engineering changes that apply to the Machine.

Exchange of a Machine or Part

When the warranty service involves the exchange of a Machine or part, the item IBM or its subcontractor or the reseller replaces becomes IBM's property, and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item.

Your Additional Responsibilities

You agree:

- a. before IBM or its subcontractor or the reseller exchanges a Machine or part, to remove all features, parts, options, alterations, and attachments not under warranty service and ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
- b. to obtain authorization from the owner to have IBM or its subcontractor or the reseller service a Machine that you do not own;

- c. where applicable, before service is provided:
 1. follow the service request procedures that IBM or its subcontractor or its reseller provides;
 2. backup and secure all programs, data, and funds contained in the Machine; and
 3. inform IBM or its subcontractor or the reseller of changes in the Machine's location;
- d. to provide IBM or its subcontractor or the reseller with sufficient and safe access to your facilities to permit IBM to fulfill its obligations;
- e. to allow IBM or its subcontractor or the reseller to install mandatory engineering changes, such as those required for safety;
- f. when the type of warranty service requires that you deliver a failing Machine to IBM, you agree to ship it suitably packaged, as IBM specifies, to a location IBM designates. After the Machine has been repaired or exchanged, IBM will return the repaired Machine or provide a replacement Machine to you at its expense, unless IBM specifies otherwise. IBM is responsible for loss of, or damage to, your Machine only while it is 1) in IBM's possession; or 2) in transit in those cases where IBM is responsible for the transportation charges; and
- g. to securely erase from any Machine you return to IBM for any reason all programs not provided by IBM with the Machine, and data, including without limitation the following: 1) information about identified or identifiable individuals or legal entities ("Personal Data"); and 2) your confidential or proprietary information and other data. If removing or deleting Personal Data is not possible, you agree to transform such information (e.g., by making it anonymous or encrypting it) so that it no longer qualifies as Personal Data under applicable law. You also agree to remove all funds from Machines returned to IBM. IBM is not responsible for any funds, programs not provided by IBM with the Machine, or data contained in a Machine that you return to IBM. You acknowledge that, to perform its responsibilities under this Statement of Limited Warranty, IBM may ship all or part of the Machine or its software to other IBM or third party locations around the world, and you authorize IBM to do so.

Limitation of Liability

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. Regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), except for any liability that cannot be waived or limited by applicable laws, IBM's entire liability for all claims in the aggregate arising from or related to each Product will not exceed:

- a. damages for bodily injury (including death) and damage to real property and tangible personal property; and
- b. the amount of any other actual direct damages, up to the charges (if recurring, 12 months' charges apply) for the Machine that is subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

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

UNDER NO CIRCUMSTANCES IS IBM OR ITS SUPPLIERS, SUBCONTRACTORS, OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING EVEN IF INFORMED OF THEIR POSSIBILITY: 1) THIRD PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, DATA; 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR 4) LOST PROFITS, BUSINESS, REVENUE, GOODWILL OR ANTICIPATED SAVINGS. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Governing Law

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

THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR JURISDICTION TO JURISDICTION.

Jurisdiction

All of our rights, duties, and obligations are subject to the courts of the country in which you acquired the Machine.

Part 2 - Country-unique Terms

AMERICAS

Jurisdiction:

The following sentence is added to this section as it applies to countries in bold print below:

Any litigation arising from this Statement of Limited Warranty will be settled exclusively by 1) in **Argentina**; the Ordinary Commercial Court of the city of Buenos Aires; 2) in **Bolivia**; the courts of the city of La Paz; 3) in **Brazil**; court of Rio de Janeiro, RJ; 4) in **Chile**; the Civil Courts of Justice of Santiago; 5) in **Colombia**; the Judges of the Republic of Colombia; 6) in **Ecuador**; the civil judges of Quito for executory or summary proceedings (as applicable); 7) in **Mexico**; the courts located in Mexico City, Federal District; 8) in **Paraguay**; the courts of the city of Asuncion; 9) in **Peru**; the judges and tribunals of the judicial district of Lima, Cercado; 10) in **Uruguay**; the courts of the city of Montevideo; 11) in Venezuela; the courts of the metropolitan area of the city of Caracas.

BRAZIL

Exchange of a Machine or Part:

Delete the last sentence:

The replacement assumes the warranty service status of the replaced item.

CANADA

What this Warranty Covers:

The following replaces the 2nd paragraph to this section:

During the warranty period, IBM provides repair and exchange service for the Machine under the type of warranty service IBM designates for the Machine. The warranty period for the Machine is a fixed period starting on its original Date of Installation. The date on your purchase invoice or sales receipt is the Date of Installation unless IBM informs you otherwise. The warranty period, type of warranty, and service level that apply to your Machine are designated in Part 3.

Limitation of Liability:

The following replaces item a and item b of this section:

- a. damages for bodily injury (including death) or physical harm to real property and tangible personal property caused by IBM's negligence; and
- b. the amount of any other actual direct damages, up to the greater of \$100,000.00 or the charges (if recurring, 12 months' charges apply) for the Machine that is subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

Governing Law:

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

laws in the Province of Ontario.

PERU

Limitation of Liability:

The following is added at the end of this section:

In accordance with Article 1328 of the Peruvian Civil Code the limitations and exclusions specified in this section will not apply to damages caused by IBM's willful misconduct ("dolo") or gross negligence ("culpa inexcusable").

UNITED STATES

Governing Law:

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

laws of the State of New York

ASIA PACIFIC

AUSTRALIA

What this Warranty Covers:

The following paragraph is added to this section:

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

Limitation of Liability:

The following is added to this section:

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

Governing Law:

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

laws of the State or Territory

CAMBODIA AND LAOS**Governing Law:**

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

laws of the State of New York, United States of America

CAMBODIA, INDONESIA AND LAOS**Arbitration:**

The following is added under this heading:

Disputes arising out of or in connection with this Statement of Limited Warranty shall be finally settled by arbitration which shall be held in Singapore in accordance with the Arbitration Rules of Singapore International Arbitration Center ("SIAC Rules") then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law.

The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the SIAC. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

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

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

HONG KONG S.A.R.

As applies to transactions initiated and performed in Hong Kong S.A.R., phrases throughout this Agreement containing the word “country” (for example, “country of purchase” and “country of Installation”) are replaced with “Hong Kong S.A.R.”

INDIA

Limitation of Liability:

The following replaces item a and item b of this section:

- a. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM’s negligence; and
- b. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Limited Warranty, the charge paid by you for the individual Machine that is the subject of the claim. For purposes of this item, the term “Machine” includes Machine Code and Licensed Internal Code (“LIC”).

Arbitration:

The following is added under this heading:

Disputes arising out of or in connection with this Statement of Limited Warranty shall be finally settled by arbitration which shall be held in Bangalore, India in accordance with the laws of India then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law.

The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the Bar Council of India. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

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

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

JAPAN

Governing Law:

The following sentence is added to this section:

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

MACAU S.A.R.

As applies to transactions initiated and performed in Macau S.A.R., phrases throughout this Agreement containing the word “country” (for example, “country of purchase” and “country of Installation”) are replaced with “Macau S.A.R.”

MALAYSIA

Limitation of Liability:

The word “SPECIAL” in item 3 of the last paragraph is deleted.

NEW ZEALAND

What this Warranty Covers:

The following paragraph is added to this section:

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

Limitation of Liability:

The following is added to this section:

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

PEOPLE’S REPUBLIC OF CHINA (PRC)

Governing Law:

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

laws of the State of New York, United States of America (except when local law requires otherwise).

PHILIPPINES

Limitation of Liability:

Item 3 in the last paragraph is replaced by the following:

SPECIAL (INCLUDING NOMINAL AND EXEMPLARY DAMAGES), MORAL, INCIDENTAL, OR INDIRECT DAMAGES FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; OR

Arbitration:

The following is added under this heading:

Disputes arising out of or in connection with this Statement of Limited Warranty shall be finally settled by arbitration which shall be held in Metro Manila, Philippines in accordance with the laws of the Philippines then in effect. The arbitration award shall be final and binding for the parties without appeal and shall be in writing and set forth the findings of fact and the conclusions of law.

The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator. The two arbitrators appointed by the parties shall appoint a third arbitrator who shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the Philippine Dispute Resolution Center, Inc. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

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

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The English language version of this Statement of Limited Warranty prevails over any other language version.

SINGAPORE

Limitation of Liability:

The words "SPECIAL" and "ECONOMIC" in item 3 in the last paragraph are deleted.

EUROPE, MIDDLE EAST, AFRICA (EMEA)

THE FOLLOWING TERMS APPLY TO ALL EMEA COUNTRIES:

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

How to Obtain Warranty Service:

*Add the following paragraphs in **Western Europe** (Andorra, Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, Vatican State, and any country subsequently added to the European Union, as from the date of accession):*

The warranty for Machines acquired in Western Europe shall be valid and applicable in all Western Europe countries provided the Machines have been announced and made available in such countries.

If you purchase a Machine in one of the Western European countries, as defined above, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM, provided the Machine has been announced and made available by IBM in the country in which you wish to obtain service.

If you purchase a Machine in a Middle East or African country, you may obtain warranty service for that Machine from the IBM entity within the country of purchase, if that IBM entity provides warranty service in that country, or from an IBM reseller, approved by IBM to perform warranty service on that Machine in that country. Warranty service in Africa is available within 50 kilometers of an IBM approved service provider. You are responsible for transportation costs for Machines located outside 50 kilometers of an IBM approved service provider.

Governing Law:

The phrase "the laws of the country in which you acquired the Machine" is replaced by:

1) "the laws of Austria" in **Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, FYR Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan;** 2) "the laws of France" in **Algeria, Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Comoros, Congo Republic, Djibouti, Democratic Republic of Congo, Equatorial Guinea, French Guiana, French Polynesia, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Libya, Madagascar, Mali, Mauritania, Mauritius, Mayotte, Morocco, New Caledonia, Niger, Reunion, Senegal, Seychelles, Togo, Tunisia, Vanuatu, and Wallis & Futuna;** 3) "the laws of Finland" in **Estonia, Latvia, and Lithuania;** 4) "the laws of England" in **Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, the United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe;** 5) "the laws of South Africa" in **South Africa, Namibia, Lesotho and Swaziland;** 6) "the laws of Switzerland" in **Liechtenstein;** and 7) "the laws of Czech republic" in **Czech republic.**

Jurisdiction:

The following exceptions are added to this section:

1) In **Austria;** the choice of jurisdiction for all disputes arising out of this Statement of Limited Warranty and relating thereto, including its existence, will be the competent court of law in Vienna, Austria (Inner-City); 2) in **Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe;** all disputes arising out of this Statement of Limited Warranty or related to its execution, including summary proceedings, will be submitted to the exclusive jurisdiction of the English courts; 3) in **Belgium and Luxembourg;** all disputes arising out of this Statement of Limited Warranty or related to its interpretation or

its execution, the law, and the courts of the capital city, of the country of your registered office and/or commercial site location only are competent; 4) in **France, Algeria, Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Comoros, Congo Republic, Djibouti, Democratic Republic of Congo, Equatorial Guinea, French Guiana, French Polynesia, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Libya, Madagascar, Mali, Mauritania, Mauritius, Mayotte, Morocco, New Caledonia, Niger, Reunion, Senegal, Seychelles, Togo, Tunisia, Vanuatu, and Wallis & Futuna**; all disputes arising out of this Statement of Limited Warranty or related to its violation or execution, including summary proceedings, will be settled exclusively by the Commercial Court of Paris; 5) in **South Africa, Namibia, Lesotho and Swaziland**; both of us agree to submit all disputes relating to this Statement of Limited Warranty to the jurisdiction of the High Court in Johannesburg; 6) in **Turkey**; all disputes arising out of or in connection with this Statement of Limited Warranty shall be resolved by the Istanbul Central (Sultanahmet) Courts and Execution Directorates of Istanbul, the Republic of Turkey; 7) in each of the following specified countries, any legal claim arising out of this Statement of Limited Warranty will be brought before, and settled exclusively by, the competent court of a) Athens for Greece, b) Tel Aviv-Jaffa for **Israel**, c) Milan for **Italy**, d) Lisbon for **Portugal**, and e) Madrid for **Spain**; 8) in **the United Kingdom**; both of us agree to submit all disputes relating to this Statement of Limited Warranty to the exclusive jurisdiction of the English courts; 9) in **Liechtenstein**; all of our rights, duties, and obligations are settled exclusively by the competent court of Zurich; and 10) “to the competent courts of Czech republic”.

Arbitration:

The following is added under this heading:

In **Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Libya, FYR Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan** all disputes arising out of this Statement of Limited Warranty or related to its violation, termination or nullity will be finally settled under the Rules of Arbitration and Conciliation of the International Arbitral Center of the Federal Economic Chamber in Vienna (Vienna Rules) by three arbitrators appointed in accordance with these rules. The arbitration will be held in Vienna, Austria, and the official language of the proceedings will be English. The decision of the arbitrators will be final and binding upon both parties. Therefore, pursuant to paragraph 598 (2) of the Austrian Code of Civil Procedure, the parties expressly waive the application of paragraph 595 (1) figure 7 of the Code. IBM may, however, institute proceedings in a competent court in the country of installation.

In **Estonia, Latvia and Lithuania** all disputes arising in connection with this Statement of Limited Warranty will be finally settled in arbitration that will be held in Helsinki, Finland in accordance with the arbitration laws of Finland then in effect. Each party will appoint one arbitrator. The arbitrators will then jointly appoint the chairman. If arbitrators cannot agree on the chairman, then the Central Chamber of Commerce in Helsinki will appoint the chairman.

EUROPEAN UNION (EU) BATTERY DIRECTIVE



Notice: This mark applies only to countries within the European Union (EU).

Batteries or packaging for batteries are labeled in accordance with European Directive 2006/66/EC concerning batteries and accumulators and waste batteries and accumulators. The Directive determines the framework for the return and recycling of used batteries and accumulators as applicable throughout the European Union. This label is applied to various batteries to indicate that the battery is not to be thrown away, but rather reclaimed upon end of life per this Directive.

In accordance with the European Directive 2006/66/EC, batteries and accumulators are labeled to indicate that they are to be collected separately and recycled at end of life. The label on the battery may also include a chemical symbol for the metal concerned in the battery (Pb for lead, Hg for mercury, and Cd for cadmium). Users of batteries and accumulators must not dispose of batteries and accumulators as unsorted municipal waste, but use the collection framework available to customers for the return, recycling, and treatment of batteries and accumulators. Customer participation is important to minimize any potential effects of batteries and accumulators on the environment and human health due to the potential presence of hazardous substances.

The retail price of batteries, accumulators and power cells includes the cost of the environmental management of their waste. For proper collection and treatment, contact your local IBM representative.

THE FOLLOWING TERMS APPLY TO ALL EU COUNTRIES:

The warranty for Machines acquired in EU countries is valid and applicable in all EU countries provided the Machines have been announced and made available in such countries.

DENMARK, FINLAND, GREECE, ITALY, LIECHTENSTEIN, NETHERLANDS, NORWAY, PORTUGAL, SPAIN, SWEDEN AND SWITZERLAND

Limitation of Liability:

The following replaces the terms of this section in its entirety:

Except as otherwise provided by mandatory law:

- a. IBM's liability for any damages and losses that may arise as a consequence of the fulfillment of its obligations under or in connection with this Statement of Limited Warranty or due to any other cause related to this Statement of Limited Warranty is limited to the compensation of only those damages and losses proved and actually arising as an immediate and direct consequence of the non-fulfillment of such obligations (if IBM is at fault) or of such cause, for a maximum amount equal to the charges you paid for the Machine. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

The above limitation shall not apply to damages for bodily injuries (including death) and damages to real property and tangible personal property for which IBM is legally liable.

- b. **UNDER NO CIRCUMSTANCES IS IBM, OR ITS SUPPLIERS, SUBCONTRACTORS, OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY: 1) LOSS OF, OR DAMAGE TO, DATA; 2) INCIDENTAL OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; 3) LOST PROFITS, EVEN IF THEY ARISE AS AN IMMEDIATE CONSEQUENCE OF THE EVENT THAT GENERATED THE DAMAGES; OR 4) LOSS OF BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.**

FRANCE AND BELGIUM

Limitation of Liability:

The following replaces the terms of this section in its entirety:

Except as otherwise provided by mandatory law:

- a. IBM's liability for any damages and losses that may arise as a consequence of the fulfillment of its obligations under or in connection with this Statement of Limited Warranty is limited in the aggregate to the compensation of only those damages and losses proved and actually arising as an immediate and direct consequence of the non-fulfillment of such obligations (if IBM is at fault), for a maximum amount equal to the charges you paid for the Machine that has caused the damages. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code ("LIC").

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

The above limitation shall not apply to damages for bodily injuries (including death) and damages to real property and tangible personal property for which IBM is legally liable.

- b. **UNDER NO CIRCUMSTANCES IS IBM, OR ITS SUPPLIERS, SUBCONTRACTORS, OR RESELLERS LIABLE FOR ANY OF THE FOLLOWING, EVEN IF INFORMED OF THEIR POSSIBILITY: 1) LOSS OF, OR DAMAGE TO, DATA; 2) INCIDENTAL OR INDIRECT DAMAGES, OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES; 3) LOST PROFITS, EVEN IF THEY ARISE AS AN IMMEDIATE CONSEQUENCE OF THE EVENT THAT GENERATED THE DAMAGES; OR 4) LOSS OF BUSINESS, REVENUE, GOODWILL, OR ANTICIPATED SAVINGS.**

THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:

AUSTRIA AND GERMANY

What this Warranty Covers:

The following replaces the first sentence of the first paragraph of this section:

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

The following paragraph is added to this section:

The minimum warranty period for Machines is 12 months. In case IBM or your reseller is unable to repair an IBM Machine, you can alternatively ask for a price reduction as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

The second paragraph does not apply.

What IBM Will Do to Correct Problems:

The following is added to this section:

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

Limitation of Liability:

The following paragraph is added to this section:

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

The following sentence is added to the end of item "b":

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

IRELAND**What this Warranty Covers:**

The following is added to this section:

Except as expressly provided in these terms and conditions or Section 12 of the Sale of Goods Act 1893 as amended by the Sale of Goods and Supply of Services Act, 1980 ("the 1980 Act"), all conditions or warranties (express or implied, statutory or otherwise) are hereby excluded including, without limitation, any warranties implied by the Sale of Goods Act 1893 as amended by the 1980 Act (including, for the avoidance of doubt, section 39 of the 1980 Act).

Limitation of Liability:

The following replaces the terms of this section in its entirety:

For the purposes of this section, a "Default" means any act, statement, omission, or negligence on the part of IBM in connection with, or in relation to, the subject

matter of this Statement of Limited Warranty in respect of which IBM is legally liable to you, whether in contract or tort. A number of Defaults which together result in, or contribute to, substantially the same loss or damage will be treated as one Default occurring on the date of occurrence of the last such Default.

Circumstances may arise where, because of a Default, you are entitled to recover damages from IBM.

This section sets out the extent of IBM's liability and your sole remedy.

- a. IBM will accept unlimited liability for death or personal injury caused by the negligence of IBM.
- b. Subject always to the **Items for Which IBM is Not Liable** below, IBM will accept unlimited liability for physical damages to your tangible property resulting from the negligence of IBM.
- c. Except as provided in items "a" and "b" above, IBM's entire liability for actual damages for any one Default will not in any event exceed the greater of 1) EUR 125,000, or 2) 125% of the amount you paid for the Machine directly relating to the Default.

Items for Which IBM is Not Liable

Save with respect to any liability referred to in item "a" above, under no circumstances is IBM, its suppliers or resellers liable for any of the following, even if IBM or they were informed of the possibility of such losses:

- a. loss of, or damage to, data;
- b. special, indirect, or consequential loss; or
- c. loss of profits, business, revenue, goodwill, or anticipated savings.

SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND

Limitation of Liability:

The following is added to this section:

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

TURKEY

What this Warranty Covers:

The following is added to this section:

The minimum warranty period for Machines is 2 years.

UNITED KINGDOM

Limitation of Liability:

The following replaces the terms of this section in its entirety:

For the purposes of this section, a "Default" means any act, statement, omission, or negligence on the part of IBM in connection with, or in relation to, the subject matter of this Statement of Limited Warranty in respect of which IBM is legally liable to you, whether in contract or tort. A number of Defaults which together result in, or contribute to, substantially the same loss or damage will be treated as one Default.

Circumstances may arise where, because of a Default, you are entitled to recover damages from IBM.

This section sets out the extent of IBM's liability and your sole remedy.

- a. IBM will accept unlimited liability for:
 1. death or personal injury caused by the negligence of IBM; and
 2. any breach of its obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982, or any statutory modification or re-enactment of either such Section.
- b. IBM will accept unlimited liability, subject always to the Items for Which IBM is Not Liable below, for physical damage to your tangible property resulting from the negligence of IBM.
- c. IBM's entire liability for actual damages for any one Default will not in any event, except as provided in items a and b above, exceed the greater of 1) Pounds Sterling 75,000, or 2) 125% of the total purchase price payable or the charges for the Machine directly relating to the Default.

These limits also apply to IBM's suppliers and resellers. They state the maximum for which IBM and such suppliers and resellers are collectively responsible.

Items for Which IBM is Not Liable

Save with respect to any liability referred to in item a above, under no circumstances is IBM or any of its suppliers or resellers liable for any of the following, even if IBM or they were informed of the possibility of such losses:

- a. loss of, or damage to, data;
- b. special, indirect, or consequential loss;
- c. loss of profits, business, revenue, goodwill, or anticipated savings; or
- d. third party claims against you for damages.

Part 3 - Warranty Information

IBM 11U Office Enablement Kit

Country of Purchase	Warranty Period	Type of Warranty Service*	Service Level*
Worldwide	3 years	5	1
* See "Types of Warranty Service" and "Service Levels" for explanations of warranty-service types and service levels.			

Scheduling of a warranty service will depend upon the following: 1) the time your request for service is received, 2) Machine technology and redundancy, and 3)

availability of parts. Contact your local IBM representative or the subcontractor or reseller performing services on behalf of IBM for country and location specific information.

Types of Warranty Service

Type 1 - Customer Replaceable Unit (“CRU”) Service

IBM provides replacement CRUs to you for you to install. CRU information and replacement instructions are shipped with your Machine and are available from IBM at any time on your request. CRUs are designated as being either a Tier 1 (mandatory) or a Tier 2 (optional) CRU. Installation of a Tier 1 CRU is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service designated for your Machine. IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM. When return is required, 1) return instructions and a container are shipped with the replacement CRU, and 2) you may be charged for the replacement CRU if IBM does not receive the defective CRU within 15 days of your receipt of the replacement.

Type 5 - CRU and On-site Service

At IBM’s discretion you will receive CRU service or IBM or your reseller will repair the failing Machine at your location and verify its operation. You must provide suitable working area to allow disassembly and reassembly of the IBM Machine. The area must be clean, well lit and suitable for the purpose.

Type 6 - CRU and Courier or Depot Service

At IBM’s discretion you will receive CRU service or you will disconnect the failing Machine for collection arranged by IBM. IBM will provide you with a shipping container for you to return your Machine to a designated service center. A courier will pick up your Machine and deliver it to the designated service center. Following its repair or exchange, IBM will arrange the return delivery of the Machine to your location. You are responsible for its installation and verification of operation.

Type 7 - CRU and Customer Carry-In or Mail-In Service

At IBM’s discretion you will receive CRU service or you will deliver or mail as IBM specifies (prepaid unless IBM specifies otherwise) the failing Machine suitably packaged to a location IBM designates. After IBM has repaired or exchanged the Machine, IBM will make it available for your collection or, for Mail-in Service, IBM will return it to you at IBM’s expense, unless IBM specifies otherwise. You are responsible for its installation and verification of operation.

Type 8 - CRU and Machine Exchange Service

At IBM’s discretion you will receive specified CRU service or IBM will initiate shipment of a replacement Machine to your location. You must pack the failing Machine into the shipping container that contained the replacement Machine and return the failing Machine to IBM. Transportation charges, both ways, are paid by IBM. You may be charged for the replacement Machine if IBM does not receive the failing Machine within 15 days of your receipt of the replacement Machine. You are responsible for its installation and verification of operation.

Service Levels

Service levels specified below are response-time objectives only and are not guarantees. The specified service level may not be available in all worldwide locations. Charges may apply outside IBM's normal service area. Response times are based on local standard business days and working hours. Unless otherwise specified, all responses are measured from the time the customer contacts IBM for problem determination until IBM has resolved the problem remotely or scheduled service to be performed. Same Business Day Warranty Service (SBD) is based on local standard business days and working hours. Next Business Day Warranty Service (NBD) is based on commercially reasonable effort.

IBM encourages you to use available remote support technologies. Failure to install and use available remote connectivity tools and equipment for direct problem reporting, remote problem determination and resolution may result in an increased service level response-time due to resource requirements.

1. Next Business Day (NBD), 9X5
2. Same Business Day (SBD), 9X5
3. Same Day (SD), 24X7

IBM Contact Information

For IBM in Canada or the United States, call 1-800-IBM-SERV (or 1-800-426-7378). For IBM in the European Union (EU), Asia Pacific, and Latin America countries, contact IBM in that country or visit the IBM Directory of Worldwide Contacts at the following IBM Internet website: <http://www.ibm.com/planetwide/>.

Notices

This information was developed for products and services offered in the U.S.A.

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

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product, and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Trademarks

IBM, the IBM logo, and [ibm.com](http://www.ibm.com) are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol ([®] or [™]), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries.

A current list of IBM trademarks is available on the Web at “Copyright and trademark information” at <http://www.ibm.com/legal/copytrade.shtml>.

Adobe and PostScript are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc., in the United States, other countries, or both and is used under license therefrom.

Intel, Intel Xeon, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc., in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, and Windows NT are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product, or service names may be trademarks or service marks of others.

Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

CD or DVD drive speed is the variable read rate. Actual speeds vary and are often less than the possible maximum.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1024 bytes, MB stands for 1,048,576 bytes, and GB stands for 1,073,741,824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1,000,000 bytes, and GB stands for 1,000,000,000 bytes. Total user-accessible capacity can vary depending on operating environments.

Maximum internal hard disk drive capacities assume the replacement of any standard hard disk drives and population of all hard disk drive bays with the largest currently supported drives that are available from IBM.

Maximum memory might require replacement of the standard memory with an optional memory module.

IBM makes no representation or warranties regarding non-IBM products and services that are ServerProven[®], including but not limited to the implied warranties of merchantability and fitness for a particular purpose. These products are offered and warranted solely by third parties.

IBM makes no representations or warranties with respect to non-IBM products. Support (if any) for the non-IBM products is provided by the third party, not IBM.

Some software might differ from its retail version (if available) and might not include user manuals or all program functionality.

Electronic emission notices

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

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

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

Industry Canada Class A emission compliance statement

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

Avis de conformité à la réglementation d'Industrie Canada

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

Australia and New Zealand Class A statement

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

United Kingdom telecommunications safety requirement

Notice to Customers

This apparatus is approved under approval number NS/G/1234/J/100003 for indirect connection to public telecommunication systems in the United Kingdom.

European Union EMC Directive conformance statement

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a nonrecommended modification of the product, including the fitting of non-IBM option cards.

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

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

European Community contact:

IBM Technical Relations
Pascalstr. 100, Stuttgart, Germany 70569
Telephone: 0049 (0)711 785 1176
Fax: 0049 (0)711 785 1283
E-mail: tjahn@de.ibm.com

Taiwanese Class A warning statement

警告使用者：
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Chinese Class A warning statement

聲 明
此為 A 級產品。在生活環境中，該產品可能會造成無線電干擾。在這種情況下，可能需要用戶對其干擾採取切实可行的措施。

Japanese Voluntary Control Council for Interference (FCS) statement

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Index

A

assistance, getting 33
Australia Class A statement 60

B

blade filler panel, installing 22
BladeCenter chassis, installing 17
BladeCenter S chassis, installing 17

C

cables, managing 25
caster
 part numbers 27
 replacing 30
castors, locking 12
chassis, installing 17
Chinese Class A warning statement 61
Class A electronic emission notice 59
clearances 3
component locations 5
country-unique warranty terms 41
courier or depot service 54
CRU part numbers 27
CRU service 54
customer carry-in service 54
customer replaceable unit service 54

D

depot or courier service 54
device locations 5
documentation
 using 34
door latch, replacing 29
door lock, replacing 28

E

electronic emission Class A notice 59
Electronic emission notices 59
European Union EMC Directive
 conformance statement 60
exchanging a machine or part 39

F

FCC Class A notice 59
filler panel, installing 22
filter panel
 part numbers 27
fixed casters, replacing 30
flat-panel monitor console kit,
 installing 21
front door
 installing 23
 part numbers 27

front door (*continued*)
 removing 11
front door lock, replacing 28
FRU part numbers 27

G

getting help 34
guidelines
 cable management 25
 installation 6
 system reliability 6

H

hardware service and support telephone
 numbers 34
height 3
help
 getting 33
 help, World Wide Web 34
 hinge bracket, replacing 29
 hinge pins, door installation 23
 hinge pins, door removal 11

I

IBM Taiwan product service 35
important notices 58
Industry Canada Class A emission
 compliance statement 59
information center 34
installation considerations 5
installation guidelines 6

J

Japanese Voluntary Control Council for
 Interference (FCS) statement 61

K

keyboard, installing 21

L

length 3
liability, limitation of 40
limitation of liability 40
lock, replacing 28

M

machine exchange service 54
machine, exchanging 39
mail-in service 54
monitor console kit, installing 21

N

New Zealand Class A statement 60
next business day service level 55
notes, important 58
notices 57
 electronic emission 59
 FCC, Class A 59

O

Office Enablement Kit
 overview 1
 shipping with aBladeCenter S chassis
 installed 18
on-site service 54
operational clearances 3

P

pallet 10
part, exchanging 39
parts listing 27
phone numbers 55
physical dimensions 3
product service, IBM Taiwan 35

R

ramp 10
rear door
 installing 24
 part numbers 27
rear door lock, replacing 28
reliability, system 6
removing from the pallet 10

S

safety v
safety statements v
same business day service level 55
same day service level 55
security lock kit
 part number 27
service and support
 before you call 33
 hardware 34
 software 34
service clearances 3
service levels 55
software service and support telephone
 numbers 34
stabilizer bracket
 extending 13
 installing 12
 part numbers 27
 replacing 31
stabilizer bracket extensions
 replacing 31

swivel casters, replacing 30
system reliability guidelines 6
System x server, installing 17

T

Taiwanese Class A warning
statement 60
trademarks 58
typical component installation
overview 5

U

uninterruptible power supply,
installing 16
United Kingdom telecommunications
safety requirement 60
United States electronic emission Class A
notice 59
United States FCC Class A notice 59
UPS, installing 16

W

warranty service type 54
warranty service, obtaining 38
warranty terms, country-unique 41
web site
directory of worldwide contacts 55
weight 3
width 3



Part Number: 46M1387

Printed in USA

(1P) P/N: 46M1387

