



IBM Netfinity 8Ux24D Tower-to-Rack Kit

**Installation Instructions**





IBM Netfinity 8Ux24D Tower-to-Rack Kit

**Installation Instructions**

**Note**

Before using this information and the product it supports, please be sure to read the general information under "Product warranties and notices" on page 19.

**First Edition (March 2000)**

**The following paragraph does not apply to the United Kingdom or any country where such provisions are inconsistent with local law:** 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 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 publication 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.

This publication was developed for products and services offered in the United States of America. IBM may not offer the products, services, or features discussed in this document in other countries, and the information is subject to change without notice. Consult your local IBM representative for information on the products, services, and features available in your area.

Requests for technical information about IBM products should be made to your IBM reseller or IBM marketing representative.

© **Copyright International Business Machines Corporation 2000. All rights reserved.**

Note to U.S. Government Users — Documentation related to restricted rights — Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

---

# Contents

<b>Safety information</b> .....	v
<b>8Ux24D Tower-to-Rack Kit Introduction</b> .....	1
Tool requirements .....	1
Installation overview .....	2
<b>Removing the server from a NetBAY3 enclosure or glide feet</b> .....	3
<b>Installing the server in a rack cabinet</b> .....	12
<b>Getting help, service, and information</b> .....	18
<b>Product warranties and notices</b> .....	19
Warranty Statements .....	19
IBM Statement of Limited Warranty for United States, Puerto Rico, and Canada (Part 1 - General Terms) .....	19
IBM Statement of Warranty Worldwide except Canada, Puerto Rico, Turkey, United States (Part 1 - General Terms) .....	21
Part 2 - Worldwide Country-Unique Terms .....	23
Notices .....	25
Trademarks .....	25

---

## Figures

1.	Removing the cover, bezel, and caster stabilizer . . . . .	4
2.	Removing the Netfinity 5500 series information-panel cover and window assembly . . . . .	5
3.	Removing the top cover . . . . .	5
4.	Moving the information panel . . . . .	6
5.	Removing the information-panel window from the assembly . . . . .	6
6.	Installing the information-panel window on the server . . . . .	7
7.	Installing the server top cover . . . . .	7
8.	Installing the server lift handles . . . . .	8
9.	Removing the glide feet . . . . .	9
10.	Removing the server from the enclosure . . . . .	10
11.	Removing the side-cover brackets . . . . .	11
12.	Replacing the power supply bracket on Netfinity 5500 series servers . . . . .	11
13.	Locating cage nuts or clip nuts on the front and rear of a rack cabinet . . . . .	13
14.	Installing the release-latch-bracket assemblies . . . . .	14
15.	Adjusting the length of the rails . . . . .	14
16.	Installing the slide rails in the rack . . . . .	15
17.	Assembling and installing the cable-management arms . . . . .	15
18.	Installing the server on the slide rails . . . . .	16
19.	Attaching and routing server cables . . . . .	17
20.	Securing the server inside the rack . . . . .	17

## Safety information



Before installing this product, read the Safety Information.

مج، يجب قراءة دات السلامة

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)。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

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.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

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.

安裝本產品之前，請先閱讀「安全資訊」。





---

## 8Ux24D Tower-to-Rack Kit Introduction

The IBM® Netfinity® 8Ux24D Tower-to-Rack Kit converts an 8U server that is 61.0 cm (24 in.) deep from a tower model to a rack model. You can then install the server into a rack cabinet that is at least 61.0 cm (24 in.) deep.

The following parts come with the 8Ux24D Tower-to-Rack Kit:

- Two release-latch-bracket assemblies (One left and one right)
- Two slide rails
- One cable-management arm assembly:
  - Two rigid cable-management arms
  - One flexible cable-management arm
  - One hinge bracket
  - Four hinge pins
- Four server lift handles
- One Netfinity 5500 series server power supply bracket
- Cable straps
- Miscellaneous hardware kit (includes screws, cage nuts, and clip nuts to install the server in a rack cabinet)
- *IBM Safety Information* booklet
- One rack installation template
- This documentation

**Note:** The illustrations in this documentation might be slightly different from your hardware.

---

## Tool requirements

You will need the following tools to install the 8Ux24D Tower-to-Rack Kit:

- A small flat-blade screwdriver
- A medium phillips screwdriver
- An 8-mm open-end or box wrench
- A 10-mm nut driver or a 10-mm open-end or box wrench

---

## Installation overview

Use the following general steps to prepare your server and install the 8Ux24D Tower-to-Rack Kit:

- 1** If your server is already installed on a NetBAY3 enclosure or on glide feet, remove it according to “Removing the server from a NetBAY3 enclosure or glide feet” on page 3.
- 2** Prepare the server for the conversion kit and install the server in a rack cabinet according to “Installing the server in a rack cabinet” on page 12.
- 3** Attach all cables and neatly route them before turning On your server.

---

## Removing the server from a NetBAY3 enclosure or glide feet

Use the following steps to remove your server from an enclosure or off of glide feet:

1. Refer to your server documentation for detailed information.
2. Shut down the server operating system and remove all media from the drives, such as diskettes, CDs, optical disks, or tapes.

1



### 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:

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

#### To Disconnect:

1. Turn everything OFF.
2. First, remove power cords from outlet.
3. Remove signal cables from connectors.
4. Remove all cables from devices.

3. Turn Off the server and any attached devices.
4. Disconnect all power cords from the rack, server, and electrical outlets.
5. Disconnect all communication cables from external devices that are connected to your server.
6. Note the location of any remaining cables; then, disconnect all other cables from the back of the server.
7. If your server is installed on a NetBAY3 enclosure, remove the caster stabilizer **D** (if installed) so that you will be able to move the enclosure if required; then, remove the enclosure bezel **C**.

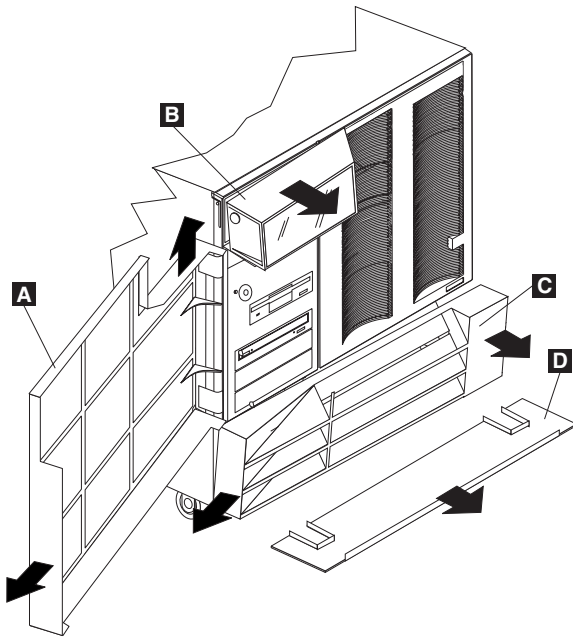


Figure 1. Removing the cover, bezel, and caster stabilizer

8. Unlock the right-side cover if keys came with your server; then, open the server door **A** and remove it by lifting upwards and pulling the door away from the server.
9. If your server is not a Netfinity 5500 series model, remove its information-panel cover and window assembly as shown below:
  - a. To remove the information-panel cover and window assembly **B**, lift and pull outwards on the assembly until it disengages from the server.
  - b. Save the information-panel cover and window assembly for use in step 14 on page 6; then, skip to step 11 on page 5 to continue the installation.

10. If your server is a 5500 series model, remove its information-panel cover and window assembly as shown below:

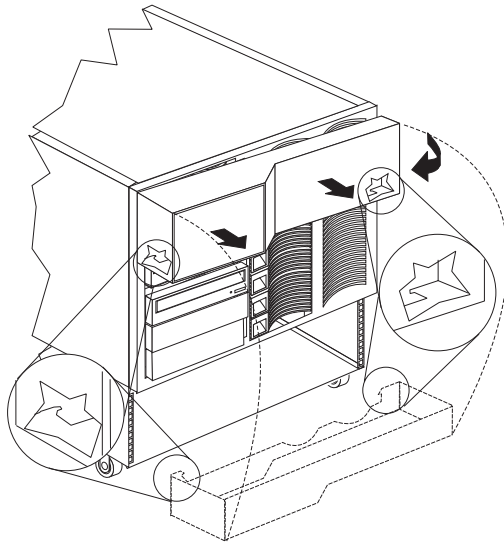


Figure 2. Removing the Netfinity 5500 series information-panel cover and window assembly

- a. Disengage the right side of the information-panel cover and window assembly; then, pivot it away from the right side of the server.
  - b. Disengage the latch tab on the left side of the cover from the server and remove the assembly. Save the information-panel cover and window assembly for use in step 14 on page 6.
11. Loosen the two screws on the back edge of the top cover **A**; then, slide the cover toward the rear of the server to remove it and set it aside for later reinstallation in step 16 on page 7.

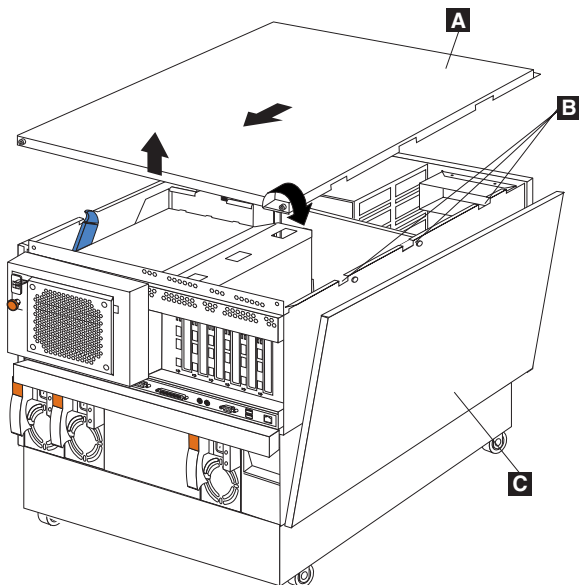


Figure 3. Removing the top cover

**Note:** You must have the top cover in place for proper cooling and airflow. Operating the server for extended periods of time without the top cover might damage server components.

12. Disengage each side cover **C** from the three slots **B** on each side of the server; then, pivot the side covers away from the server to remove them.

13. Move the information panel to its recessed mounting position as shown below:

- a. Remove the two M3.5 screws **A**.

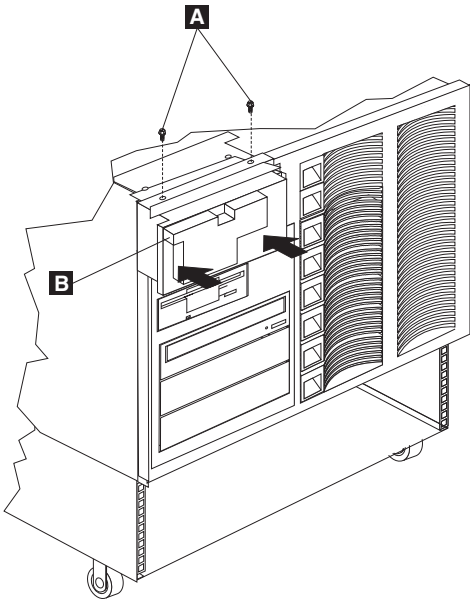
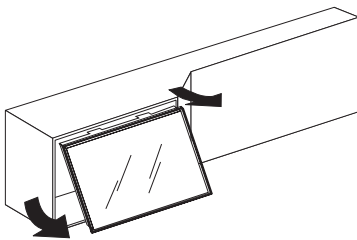


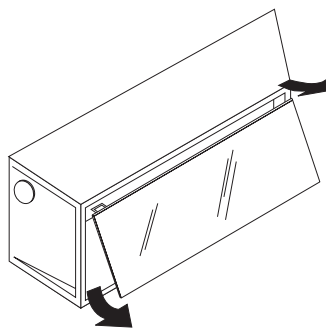
Figure 4. Moving the information panel

- b. Move the panel **B** toward the back of the server until the screw holes align with the recessed mounting position; then, replace and tighten both screws.

14. To remove the information-panel window from the information-panel cover and window assembly, carefully push outward from the inside of the assembly until the window disengages from the assembly.



Netfinity 5500 series



Non Netfinity 5500 series

Figure 5. Removing the information-panel window from the assembly

15. Align the top of the information-panel window with the slots in the opening above the information panel; then, swing the window toward the server and push until it snaps into place.

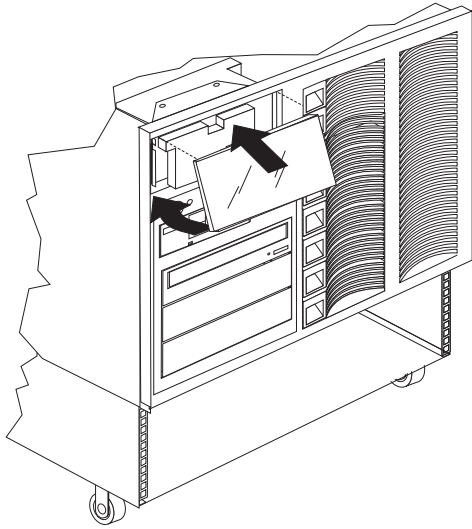


Figure 6. Installing the information-panel window on the server

16. Install the server top cover that you removed in step 11 on page 5:

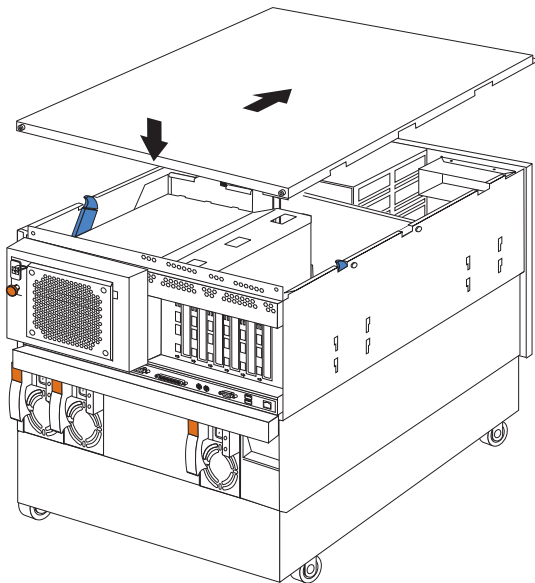


Figure 7. Installing the server top cover

**Note:** You must have the top cover in place for proper cooling and airflow. Operating the server for extended periods of time without the top cover might damage server components.

- a. Verify that all cables, adapters, and other components are installed and seated correctly inside of the server. Also verify that no loose parts or tools are inside of the server.
- b. Lower the cover with the rear edge of the cover about 2.5 cm (1 in.) from the rear of the server.
- c. Slide the cover toward the front of the server; then, tighten the two screws on the cover.

17. Locate the four server lift handles that come with the 8Ux24D Tower-to-Rack Kit; then, attach two handles to each side of the server, making sure that they lock into place:
- Press in on the sides of the lift handle near the tabs and insert the handle tabs into the slots on the side of the server.

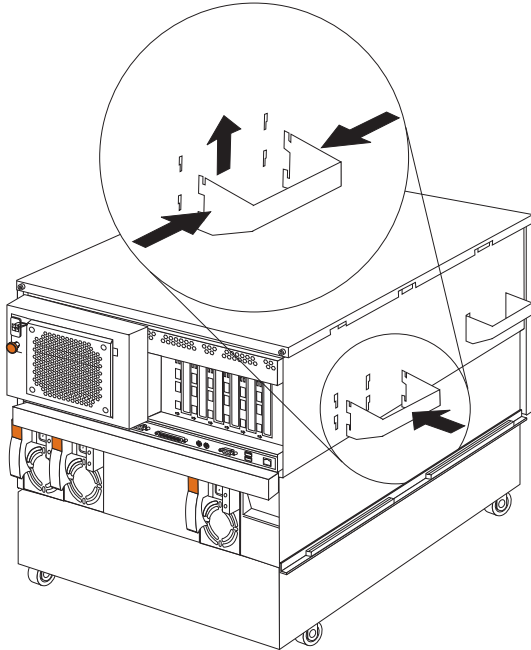


Figure 8. Installing the server lift handles

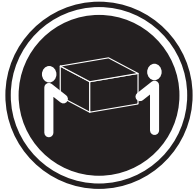
- Move the handle up in the slots until the hooked part of each tab is inside the server.
- Release the pressure on the sides of the handle.

Your server might already be installed on a NetBAY3 enclosure or on glide feet. Refer to step 18 on page 9 for glide feet removal or step 19 on page 10 for NetBAY3 enclosure removal.



18. Remove the glide feet from the server:

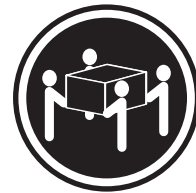
4



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

**CAUTION:**  
Use safe practices when lifting.

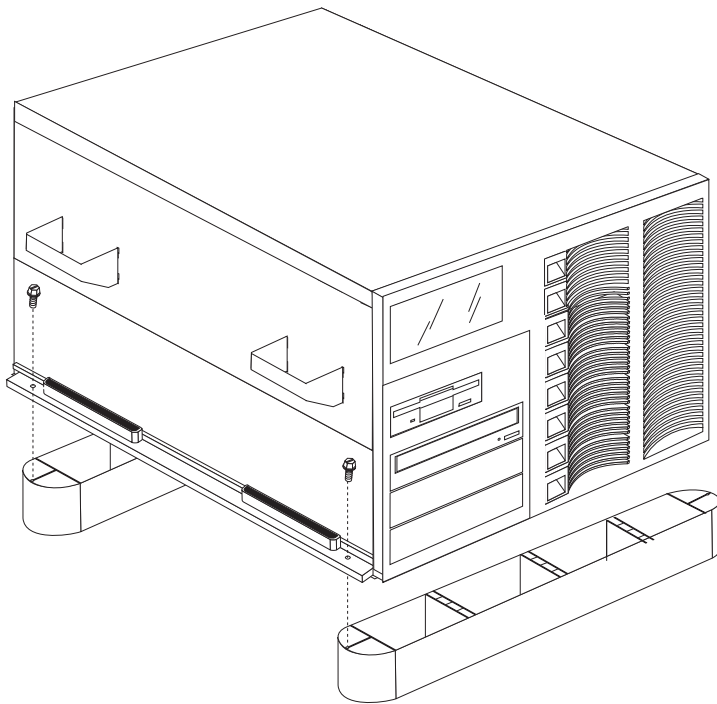


Figure 9. Removing the glide feet

- a. Remove the four M4.2 screws (two per side) that secure the server to the glide feet.
- b. Using the lift handles, remove the server from the glide feet and set the server on a flat surface.
- c. Skip to step 20 on page 11 to continue the installation.

19. Remove the server from a NetBAY3 enclosure:

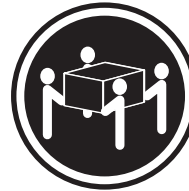
4



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

**CAUTION:**  
Use safe practices when lifting.

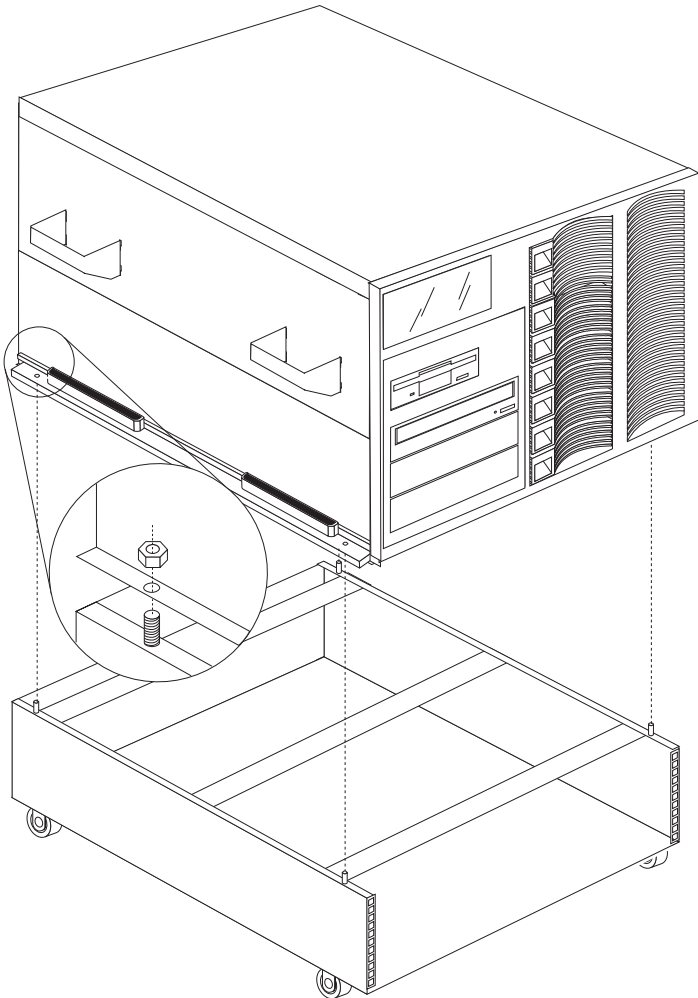


Figure 10. Removing the server from the enclosure

- a. Remove the four M5 nuts (two per side) that secure the server to the enclosure.
- b. Using the lift handles, remove the server from the enclosure and set the server on a flat surface.

20. Remove the four screws per side-cover bracket on each side of the server.

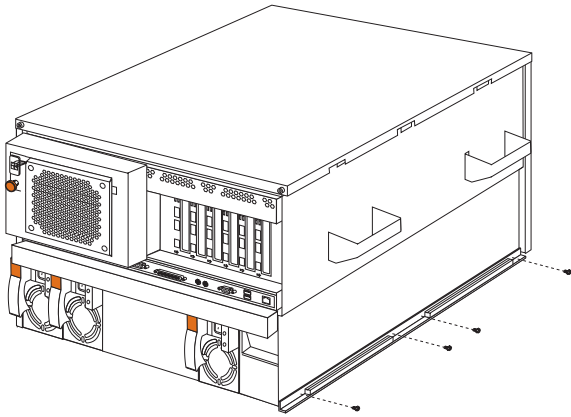


Figure 11. Removing the side-cover brackets

21. If your server is a Netfinity 5500 series model, and there are two screws **A** in the power supply bracket instead of just one screw **C**, then you must replace the bracket with the one that comes with this kit as shown below:

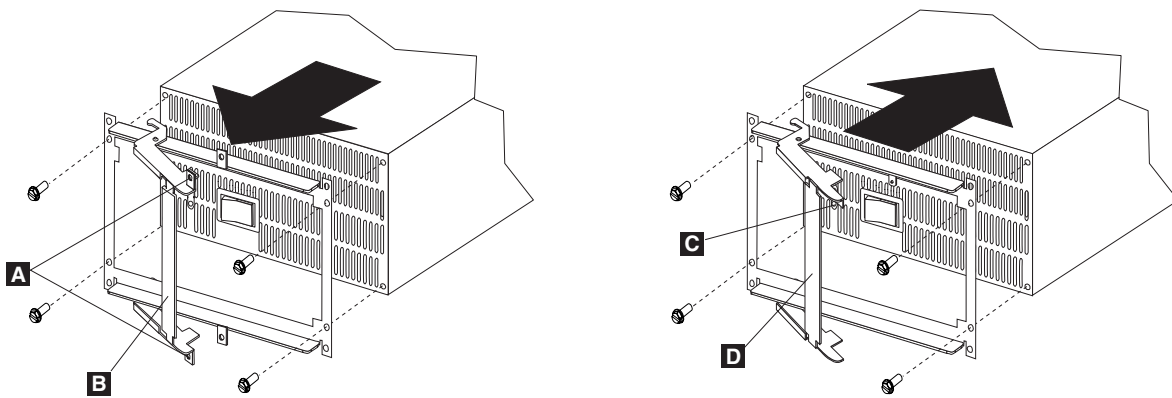


Figure 12. Replacing the power supply bracket on Netfinity 5500 series servers

- a. Pull out on the release-lever **B** to remove the power supply from the server.
- b. Loosen and remove the four screws that secure the power supply to its bracket.
- c. Use the same four screws to install the new power supply bracket that comes with this kit.
- d. Reinstall the power supply in your server and push it into place until the release-lever **D** is locked and touches the bracket.

Proceed with “Installing the server in a rack cabinet” on page 12 to prepare the server for the 8Ux24D Tower-to-Rack Kit and install it in a rack cabinet.

---

## Installing the server in a rack cabinet

### Important:

Review the documentation that comes with your rack enclosure for safety and cabling considerations.

When installing your server in a rack, the following considerations should be made:

- The server should be installed in a maximum 35 degree C environment
- To ensure proper air flow, it is recommended that the air vents not be blocked, usually 15 cm (6 in.) of air space is sufficient
- To ensure stability, precautions should be taken to prevent uneven loading of the rack; loading of the rack should begin at the bottom
- When multiple components are installed in a rack, precautions should be taken to prevent overloading of power outlets
- The server should always be connected to a properly grounded outlet

Use the following basic steps to install your server in a rack cabinet:

1. Refer to your server and rack documentation for detailed installation information.

**Note:** Removing rack doors and side panels makes it easier to install the server.

2. Use the rack installation template that comes with the 8Ux24D Tower-to-Rack Kit to mark the holes on your rack cabinet for cage nut or clip nut, according to your rack installation.

**Note:** The rack installation template contains full instructions to complete server installation. Steps are repeated here in case your template is not available. See Figure 13 on page 13 for cage nut or clip nut locations on the front (release latch retaining screws **D** and slide rails **C**) and rear (cable-management arm hinge bracket **A** and slide rails **B**) of your rack.

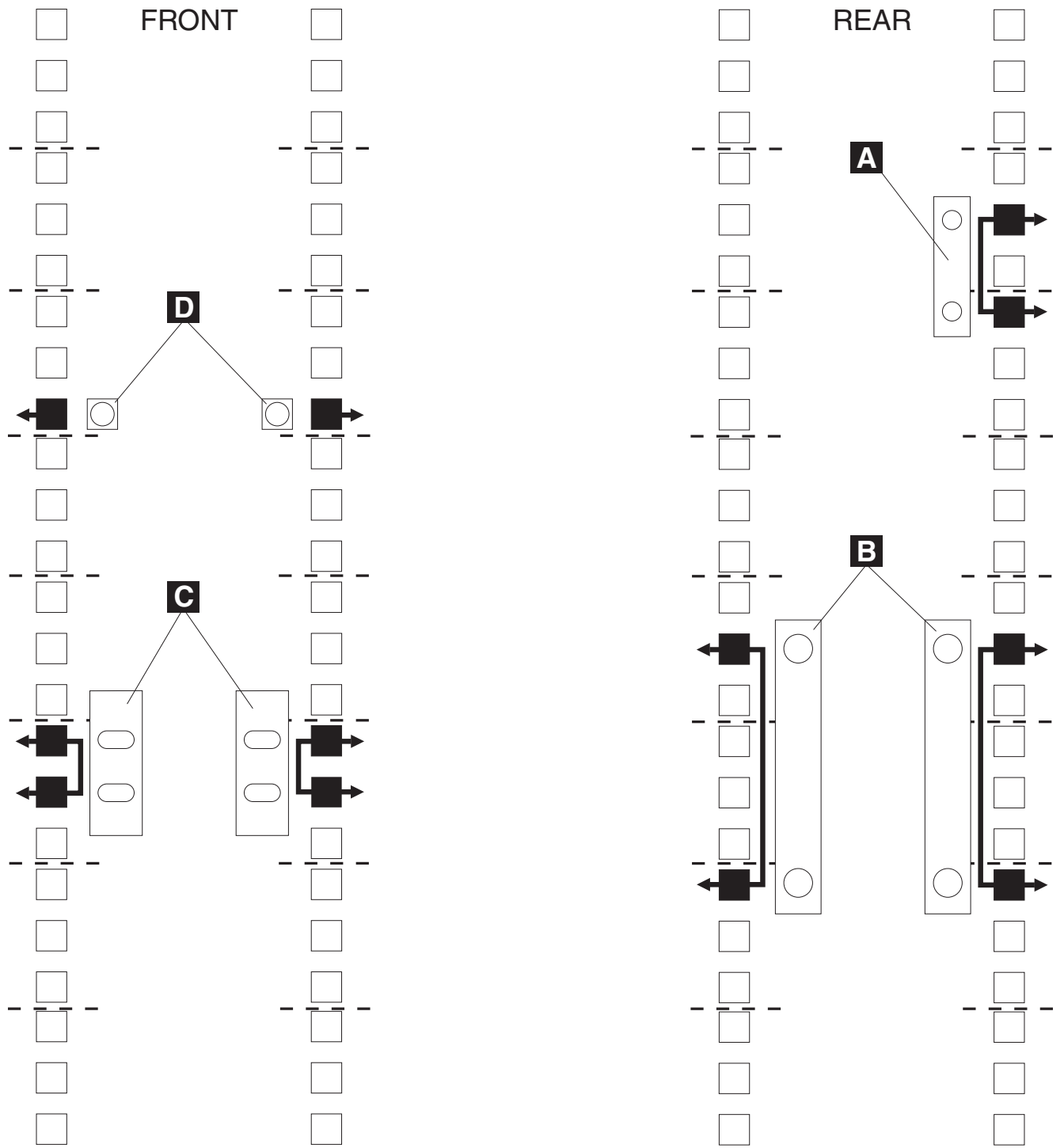


Figure 13. Locating cage nuts or clip nuts on the front and rear of a rack cabinet

3. If they are not already installed, install the four lift handles that come with your server. Make sure that the handles lock into place.
  - a. Press in on the sides of the lift handle near the tabs and insert the handle tabs into the slots on the side of the server.
  - b. Move the handle up in the slots until the hooked part of each tab is inside the server.
  - c. Release the pressure on the sides of the handle.
4. Install the left and right release-latch-bracket assemblies **A** on the corresponding sides of the server with the supplied M3.5 screws (two per bracket).

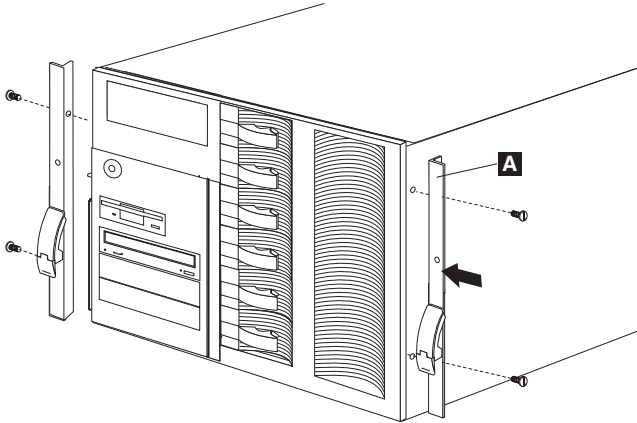


Figure 14. Installing the release-latch-bracket assemblies

5. If required, loosen the adjustment screws **B** on the slide rails so that you can adjust the length of the rails to fit the depth of your rack cabinet; then, use the pin **A** on the rear of the slide rail to align the rail to the rack.

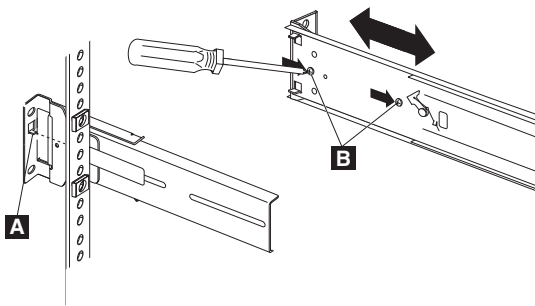


Figure 15. Adjusting the length of the rails

6. Secure the front **A** and rear **B** of the slide rails to your rack with M6 screws.

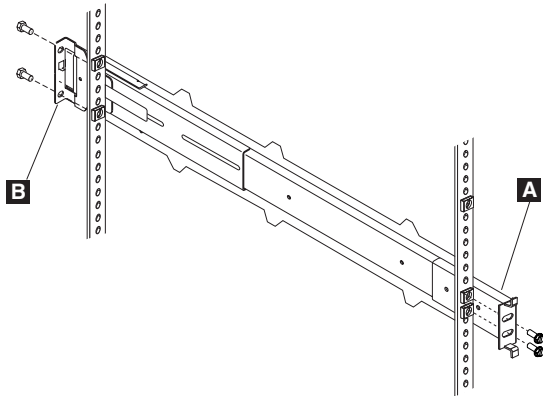


Figure 16. Installing the slide rails in the rack

Once both rails have been secured to the rack, tighten the adjustment screws on each rail, if you loosened them.

7. Install the cable-management arm assembly:

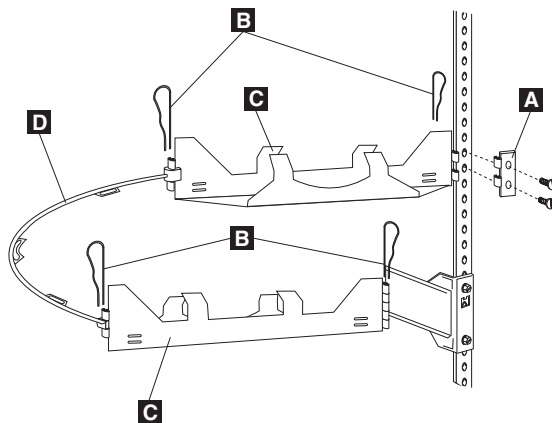


Figure 17. Assembling and installing the cable-management arms

a. Secure the hinge bracket **A** to the right rear of the rack, above the slide rail, with two M6 screws.

b. Connect the rigid cable-management arms **C** to the right slide rail and hinge bracket with two hinge pins **B**.

**Note:** You must position the rigid cable-management arms **C** as shown in Figure 17.

c. Connect the flexible cable-management arm **D** between the two rigid arms with the other two hinge pins **B**.

8. Extend both slide rails all the way out of the rack.

**Note:** When the slide rails are fully extended, safety latches lock the rails in place. To release the safety latches, press them in toward the server.

4



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

**CAUTION:**

**Use safe practices when lifting.**

9. Using the lift handles **A**, carefully lift the server and set it on the fully extended slide rails **C**. Make sure that the slots in the server are properly aligned with the flanges **B** on the rails.

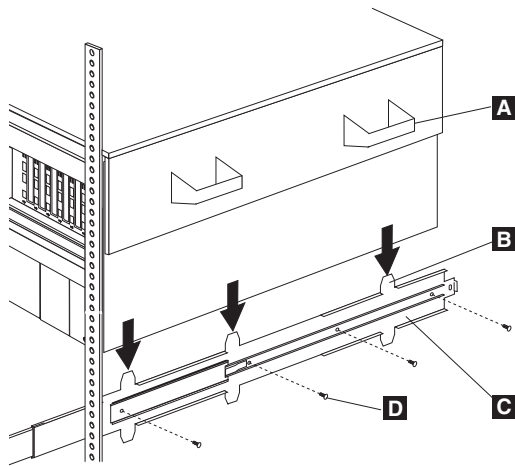


Figure 18. Installing the server on the slide rails

10. Secure the server to the slide rails with four M4 pan-head screws **D** per side.



11. Connect all server and device cables and connectors; then, route them along the rigid cable-management arms **B** and the flexible arm **C** and secure them to the arm with the cable straps **A** that come with the 8Ux24D Tower-to-Rack Kit.

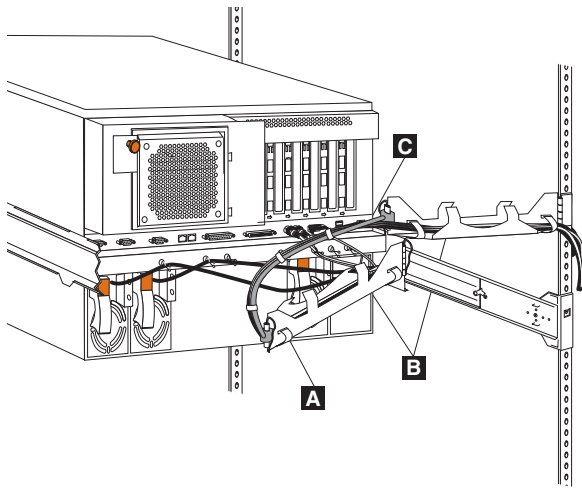


Figure 19. Attaching and routing server cables

12. Slide the server fully into the rack until the left and right release latches **A** engage on the slide rails.

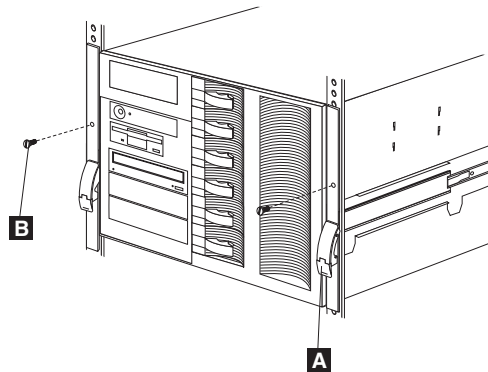


Figure 20. Securing the server inside the rack

13. Install the M6 server retaining screws **B** to provide added stability to your server, especially if you are moving the rack or the rack is located in a vibration-prone area.

The 8Ux24D Tower-to-Rack Kit installation is complete.

---

## Getting help, service, and information

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

With the original purchase of an IBM hardware product, you have access to extensive support coverage. During the IBM hardware product warranty period, you may call the IBM Personal Computer HelpCenter (1-800-772-2227 in the U.S.) for hardware product assistance covered under the terms of the IBM Statement of Limited Warranty.

The following services are available during the warranty period:

- Problem Determination - Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- IBM Hardware Repair - If the problem is determined to be caused by IBM hardware under warranty, trained service personnel are available to provide the applicable level of service.
- Engineering Change Management - Occasionally, there might be changes that are required after a product has been sold. IBM or your reseller, if authorized by IBM, will make Engineering Changes (ECs) available that apply to your hardware.

Be sure to retain your proof of purchase to obtain warranty service. Refer to the IBM hardware warranty for a full explanation of IBM's warranty terms.

Please have the following information ready when you call:

- Machine Type and Model
- Serial numbers of your IBM hardware products
- Description of the problem
- Exact wording of any error messages
- Hardware and software configuration information

On the World Wide Web, the IBM Personal Computing Web site has up-to-date information about IBM Personal Computer products and support.

Some helpful addresses are:

<a href="http://www.ibm.com">http://www.ibm.com</a>	Main IBM home page
<a href="http://www.ibm.com/pc">http://www.ibm.com/pc</a>	IBM Personal Computing
<a href="http://www.ibm.com/pc/support">http://www.ibm.com/pc/support</a>	IBM Personal Computing Support
<a href="http://www.ibm.com/pc/us/accessories">http://www.ibm.com/pc/us/accessories</a>	Options by IBM (U.S.)
<a href="http://www.ibm.com/pc/us/netfinity">http://www.ibm.com/pc/us/netfinity</a>	IBM Netfinity Servers (U.S.)
<a href="http://www.ibm.com/pc/techconnect">http://www.ibm.com/pc/techconnect</a>	IBM TechConnect

You can select a country-specific Web site from these pages.

If you select Profile from the support page, you can create a customized support page that is specific to your hardware, complete with Frequently Asked Questions, Parts Information, Technical Hints and Tips, and Downloadable Files. You will have the information you need, all in one place. In addition, you can choose to receive e-mail notifications whenever new information becomes available about your registered products. You also can access online support forums, which are community sites monitored by IBM support staff.

---

## Product warranties and notices

This section contains important product warranty and notice information about your product.

---

### Warranty Statements

The warranty statements consist of two parts: Part 1 and Part 2. Part 1 varies by country. Part 2 is the same for both statements. Be sure to read both the Part 1 that applies to your country and Part 2.

- **United States, Puerto Rico, and Canada (Z125-4753-05 11/97)**  
(Part 1 - General Terms on page 19)
- **Worldwide except Canada, Puerto Rico, Turkey, and United States (Z125-5697-01 11/97)**  
(Part 1 - General Terms on page 21)
- **Worldwide Country-Unique Terms**  
(Part 2 - Country-Unique Terms on page 23)

### IBM Statement of Limited Warranty for United States, Puerto Rico, and Canada (Part 1 - General Terms)

---

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

**Machine** - IBM Netfinity 8Ux24D Tower-to-Rack Kit

**Warranty Period\*** - Three Years

*\*Contact your place of purchase for warranty service information. Some IBM Machines are eligible for On-site warranty service depending on the country where service is performed.*

#### The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

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

#### Extent of Warranty

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

**THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM**

**JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.**

### **Items Not Covered by Warranty**

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

Unless specified otherwise, IBM provides non-IBM machines **WITHOUT WARRANTIES OF ANY KIND**.

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

### **Warranty Service**

To obtain warranty service for the Machine, contact your reseller or IBM. In the United States, call IBM at 1-800-772-2227. In Canada, call IBM at 1-800-565-3344. You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. IBM may repair the failing Machine or exchange it at its discretion.

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

Any feature, conversion, or upgrade IBM or your reseller services must be installed on a Machine which is 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to

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

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

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

### **Production Status**

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's appropriate warranty terms apply.

### **Limitation of Liability**

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

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

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

## **IBM Statement of Warranty Worldwide except Canada, Puerto Rico, Turkey, United States (Part 1 - General Terms)**

*This Statement of Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 may replace or modify those of Part 1. The warranties provided by IBM in this Statement of Warranty apply only to Machines you purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.*

**Machine** - IBM Netfinity 8Ux24D Tower-to-Rack Kit

**Warranty Period\*** - Three Years

*\*Contact your place of purchase for warranty service information. Some IBM Machines are eligible for On-site warranty service depending on the country where service is performed.*

### **The IBM Warranty for Machines**

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

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

### **Extent of Warranty**

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

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

### **Items Not Covered by Warranty**

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

Unless specified otherwise, IBM provides non-IBM machines **WITHOUT WARRANTIES OF ANY KIND.**

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

## Warranty Service

To obtain warranty service for the Machine, contact your reseller or IBM. You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. IBM may repair the failing Machine or exchange it at its discretion.

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

Any feature, conversion, or upgrade IBM or your reseller services must be installed on a Machine which is 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided
  - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides,
  - b. secure all programs, data, and funds contained in a Machine,
  - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfil their obligations, and
  - d. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

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

## Production Status

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's appropriate warranty terms apply.

## Limitation of Liability

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

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

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

## Part 2 - Worldwide Country-Unique Terms

---

### **ASIA PACIFIC**

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

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

**Extent of Warranty:** The following replaces the first and second sentences of this Section:

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, operation in other than the Specified Operating Environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible.

**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, 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.

**PEOPLE'S REPUBLIC OF CHINA: Governing Law:** The following is added to this Statement:

The laws of the State of New York govern this Statement.

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

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

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

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

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

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

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

**The following terms apply to all EMEA countries.**

The terms of this Statement of Warranty apply to Machines purchased from an IBM reseller. If you purchased this Machine from IBM, the terms and conditions of the applicable IBM agreement prevail over this warranty statement.

#### **Warranty Service**

If you purchased an IBM Machine in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

If you purchased an IBM Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kirghizia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

The applicable laws, Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided. However, the laws of Austria govern this Statement if the warranty service is provided in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Federal Republic of Yugoslavia, Georgia, Hungary, Kazakhstan, Kirghizia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, and Ukraine.

**The following terms apply to the country specified:**

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

2. as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

**FRANCE: Limitation of Liability:** The following replaces the second sentence of the first paragraph of this Section:  
In such instances, regardless of the basis on which you are entitled to claim damages from IBM, IBM is liable for no more than: (items 1 and 2 unchanged).

**GERMANY: The IBM Warranty for Machines:** The following replaces the first sentence of the first paragraph of this Section:  
The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

The following paragraphs are added to this Section:  
The minimum warranty period for Machines is six months.

In case IBM or your reseller are unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

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

**Warranty Service:** The following is added to this Section:  
During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

**Production Status:** The following paragraph replaces this Section:  
Each Machine is newly manufactured. It may incorporate in addition to new parts, re-used parts as well.

**Limitation of Liability:** The following is added to this Section:  
The limitations and exclusions specified in the Statement of Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

In item 2, replace "U.S. \$100,000" with "1.000.000 DEM."

The following sentence is added to the end of the first paragraph of item 2:  
IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

**IRELAND: Extent of Warranty:** The following is added to this Section:  
Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods Act 1893 or the Sale of Goods and Supply of Services Act 1980 are hereby excluded.

**Limitation of Liability:** The following replaces items one and two of the first paragraph of this Section:  
1. death or personal injury or physical damage to your real property solely caused by IBM's negligence; and 2. the amount of any other actual direct damages, up to the greater of Irish Pounds 75,000 or 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

Applicability of suppliers and resellers (unchanged).

The following paragraph is added at the end of this Section:  
IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

**ITALY: Limitation of Liability:** The following replaces the second sentence in the first paragraph:  
In each such instance unless otherwise provided by mandatory law, IBM is liable for no more than: (item 1 unchanged) 2) as to any other actual damage arising in all situations involving non-performance by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

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

**SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND: Limitation of Liability:** The following is added to this Section:  
IBM's entire liability to you for actual damages arising in all situations involving nonperformance by IBM in respect of the subject matter of this Statement of Warranty will be limited to the charge paid by you for the individual Machine that is the subject of your claim from IBM.



**TURKIYE: Production Status:** The following replaces this Section:

IBM fulfils customer orders for IBM Machines as newly manufactured in accordance with IBM's production standards.

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

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence;
2. the amount of any other actual direct damages or loss, up to the greater of Pounds Sterling 150,000 or 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

The following item is added to this paragraph:

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

Applicability of suppliers and resellers (unchanged).

The following is added to the end of this Section:

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

## **NORTH AMERICA**

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

To obtain warranty service from IBM, call **1-800-565-3344**.

**UNITED STATES OF AMERICA: Warranty Service:** The following is added to this Section:

To obtain warranty service from IBM, call **1-800-772-2227**.

---

## **Notices**

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. 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. Subject to IBM's valid intellectual property or other legally protectable rights, any functionally equivalent product, program, or service may be used instead of the IBM product, program, or service. The evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the responsibility of the user.

IBM may have patents or pending patent applications covering subject matter 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.

---

## **Trademarks**

The following terms are trademarks of the IBM Corporation in the United States or other countries or both:

IBM  
Netfinity

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



Part Number: 37L6980

Printed in U.S.A.

37L6980

