

System x3100 Tower to Rack Conversion Kit for 5U
Tower



Installation Instructions

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Tower



Installation Instructions

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.

Bu ürünü kurmadan önce güvenlik bilgilerini okuyun.

ཐོག་རྒྱུ་འདི་བདེ་སྤྱད་མ་བྱས་གོང་། རྒྱུ་ལེན་གྱི་ཡིད་གཟབ་
བྱ་འདྲ་མིན་ཡིད་པའི་འོད་སྤེར་བལྟ་དགོས།

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مەزكۇر مەھسۇلاتنى ئورنىتىشتىن بۇرۇن بىخەتەرلىك ئۇچۇرلىرىنى ئوقۇپ چىقىڭ.

Youq mwngz yungh canjbinj neix gaxgonq, itdingh aeu doeg aen
canjbinj soengq cungj vahgangj ancien siusik.

Statement 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.

Statement 4



≥18 kg (39.7 lb)



≥32 kg (70.5 lb)



≥55 kg (121.2 lb)

CAUTION:

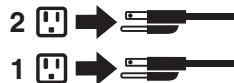
Use safe practices when lifting.

Statement 5:



CAUTION:

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



Statement 10:



CAUTION:

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



>82 kg (180 lb)

Statement 13:



DANGER

Overloading a branch circuit is potentially a fire hazard and a shock hazard under certain conditions. To avoid these hazards, ensure that your system electrical requirements do not exceed branch circuit protection requirements. Refer to the information that is provided with your device for electrical specifications.

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Chapter 1. 5Ux20D Tower-to-Rack Kit introduction

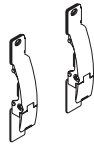
The Lenovo 5Ux20D Tower-to-Rack Kit contains the parts that you need to convert a 5 U computer or server that is 50.8 cm (20 in.) deep from a tower model to a rack model. You can then install the system in a rack cabinet that is 58.4 cm to 71.1 cm (23 to 28 in.) deep.

Notes:

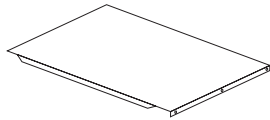
1. Throughout this book, the word *system* refers to a computer or server.
2. This kit is designed for use on several types of systems and might contain parts that are not needed for your specific system configuration.
3. The illustrations in this documentation might differ from your hardware. See the documentation that comes with your system for additional component removal and installation information.

The following parts come with the 5Ux20D Tower-to-Rack Kit:

- Two release-latch-bracket assemblies (one left and one right)



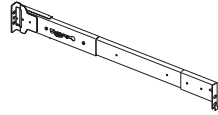
- One system bottom cover



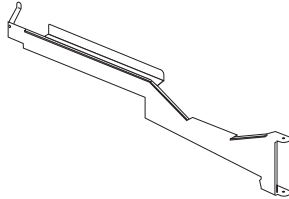
- Four rack-support wheels



- Two slide rails



- One cable-management arm



- One hinge bracket



- One hinge pin



- One rack-installation template and rack-mounting instructions
- Warranty information (contained in this document)
- Miscellaneous hardware kit (includes screws, cage nuts, and clip nuts to install the system in a rack cabinet)
- Cable straps

Tool requirements

You will need the following tools to install the 5Ux20D Tower-to-Rack Kit:

- A small flat-blade screwdriver
- A medium Phillips screwdriver
- A 10-mm nut driver

Installation overview

Use the following general steps to prepare your system and install the 5Ux20D Tower-to-Rack Kit:

1. Read the safety information that begins on page iii and “Handling static-sensitive devices” on page 3. This information will help you work safely.
2. Follow the instructions in Chapter 2, “Installing the tower-to-rack kit,” on page 5 to prepare your system.
3. Use the rack-installation template and instructions that come with this kit to install your system in a rack cabinet.
4. Attach all cables and neatly route them before you turn on the system.

Handling static-sensitive devices

Attention: Static electricity can damage the system and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.

To reduce the possibility of electrostatic discharge, observe the following precautions:

- Limit your movement. Movement can cause static electricity to build up around you.
- Handle the device carefully, holding it by its edges or its frame.
- Do not touch solder joints, pins, or exposed printed circuitry.
- Do not leave the device where others can handle and damage it.
- While the device is still in its static-protective package, touch it to an unpainted metal part of the system unit for at least 2 seconds. This drains static electricity from the package and from your body.
- Remove the device from its package and install it directly into the system without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the system cover or on a metal surface.
- Take additional care when you handle devices during cold weather. Heating reduces indoor humidity and increases static electricity.

Chapter 2. Installing the tower-to-rack kit

This chapter provides instructions for preparing the system and installing the tower-to-rack kit.

Preparing the system

To prepare the system, complete the following steps:

1. Shut down the operating system and remove all media from the drive cages, such as diskettes, CDs, optical disks, or tapes.

Statement 1:



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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.

2. Turn off the system and attached devices.

Statement 5:



CAUTION:

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



3. Disconnect all power cords from the system and electrical outlets.
4. Note the location of the remaining cables; then, disconnect the cables from the system.

Removing the covers and screws from the bottom of the chassis

This section provides instructions for performing the following procedures:

- Removing the left-side cover
- Removing the screws from the bottom of the chassis
- Removing the right-side cover

To remove the covers and screws from the bottom of the chassis, complete the following steps:

1. Unlock the left-side cover if necessary; then, press the cover-release latch down, and lift the left-side cover off the system and set it aside.

Note: The illustrations in this document might differ slightly from your hardware.

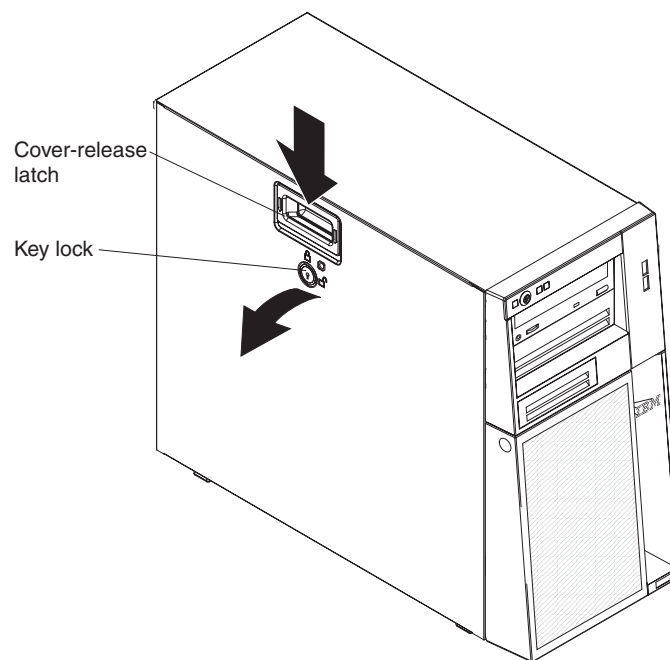


Figure 1. Removing the left-side cover

2. Carefully turn the system on its side with the open side up on a flat surface, and remove the screws from the bottom of the chassis. (These screws act as fillers and do not secure any components within the system.)

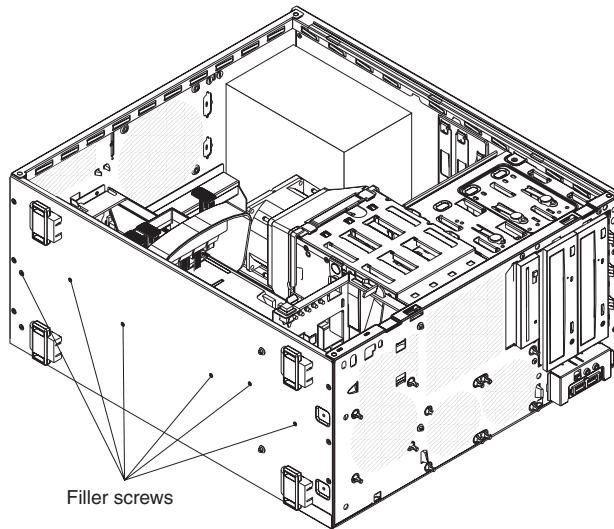


Figure 2. Removing the six screws from the bottom of the system

3. Remove the right-side cover:
 - a. From the rear of the system, remove the screws (three or four, depending on the system) that hold the right-side cover in place. Save all screws for installing the new bottom cover.

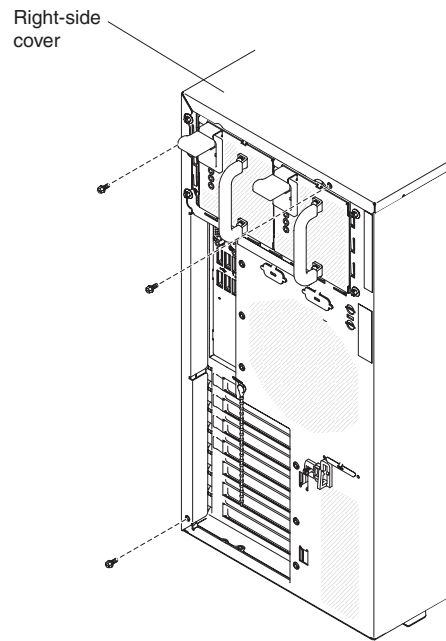


Figure 3. Removing the right-side cover

- b. Slide the right-side cover toward the rear of the system to remove it. Store the cover for possible future use.

Installing the hardware and covers

This section provides instructions for performing the following procedures:

- Reinstalling the removable-media drives and hard disk drives to a rack orientation
- Installing the new bottom cover
- Installing the top cover (the left-side cover that was removed earlier)
- Installing the release-latch bracket assembly
- Attaching the rack-support wheels

To install the hardware and covers, complete the following steps:

1. Install the new bottom cover that comes with this kit:
 - a. Carefully turn the system so that the cover-release handle side is down on a flat surface; then, align the bottom cover with the frame of the system.

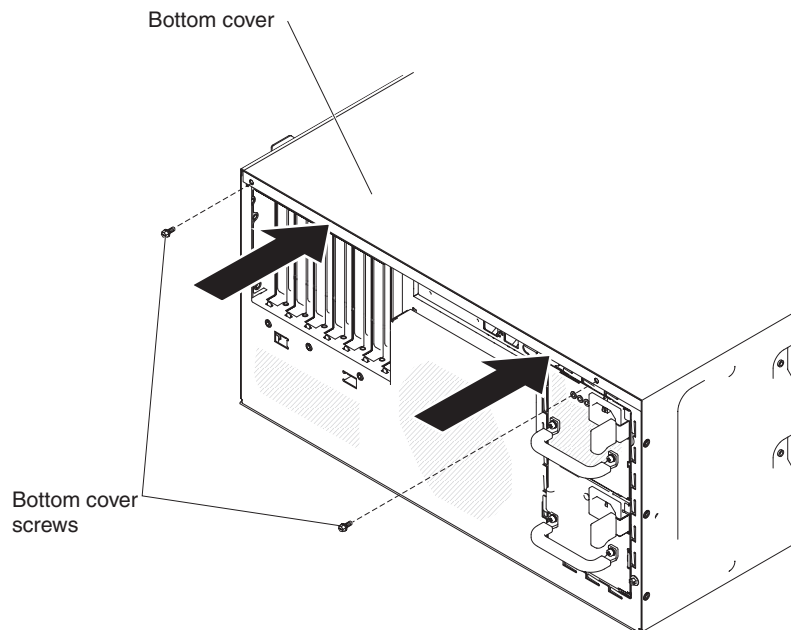


Figure 4. Installing the new bottom cover

- b. Slide the cover toward the front of the system, making sure that the tabs on the front and rear of the cover fit into the slots on the system.

Note: The new bottom cover might have screw holes for use with multiple system configurations. Use only the holes in the bottom cover that match up with the threaded screw holes on the system chassis.

- c. Use two of the screws that you removed earlier to secure the bottom cover.

2. Install the top cover. (This is the left-side cover that you removed at the beginning of the conversion procedure.)
 - a. Insert the tabs inside the cover into the slots on the server chassis.

Note: Make sure that each tab on the side cover is in its corresponding slot before you close the cover-release latch.

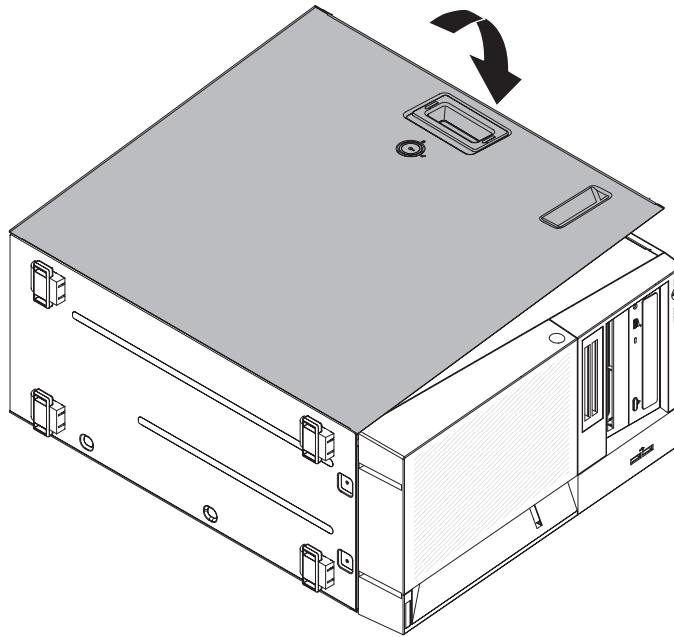


Figure 5. Installing the top cover

- b. Close the cover-release latch to secure the side cover in place.
 - c. Lock the side cover.

3. Install the release-latch-bracket assemblies on the system:
 - a. Align the bracket with the holes on the left side of the system; then, use two of the M3.5 screws that come with this kit to attach the bracket to the system.

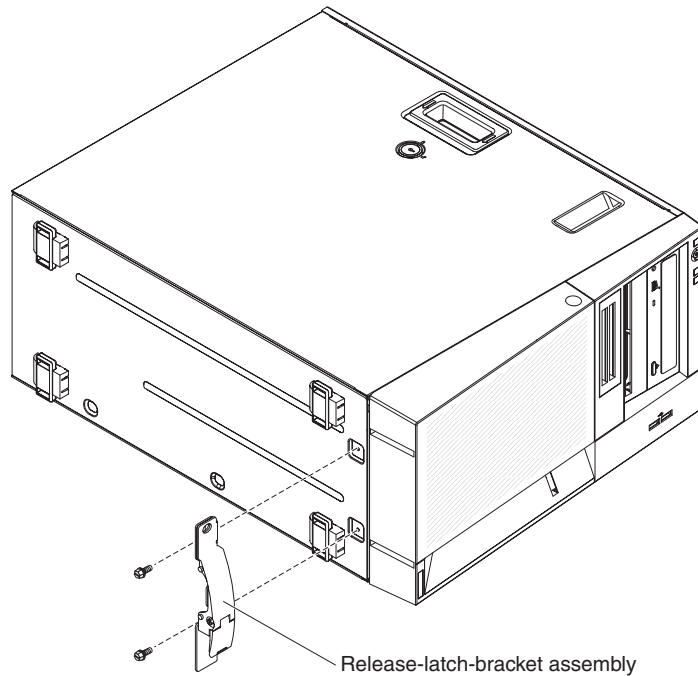


Figure 6. Installing the release-latch-bracket assemblies

- b. Repeat step 3a to install the other release-latch-bracket assembly on the right side of the system.

4. Attach the four rack-support wheels to the uppermost holes on the sides of the system.

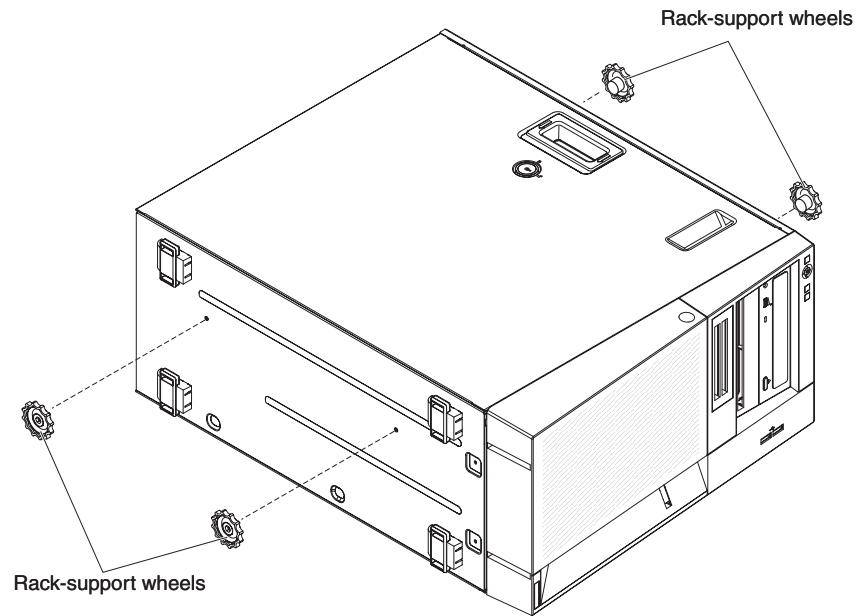


Figure 7. Attaching the rack-support wheels

5. Using the rack-installation template and rack-mounting instructions that come with this kit, install the system in a rack cabinet.
6. Before turning on the system, attach all signal cables; then, attach all power cables. Make sure that all cables are neatly routed.



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Printed in USA

(1P) P/N: 00MV504

