Rack to Tower and Tower to Rack System Conversion Guide

HP Integrity rx2620

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1 About This Document

This document describes rack to tower and tower to rack system conversion for your HP Integrity rx2620 server.

The document printing date and part number indicate the document's current edition. The printing date will change when a new edition is printed. Minor changes may be made at reprint without changing the printing date. The document part number will change when extensive changes are made.

Document updates may be issued between editions to correct errors or document product changes. To ensure that you receive the updated or new editions, you should subscribe to the appropriate product support service. See your HP sales representative for details.

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What's in This Document

The *Rack to Tower and Tower to Rack System Conversion Guide – HP Integrity rx2620,* contains these chapters:

- **Chapter 2, "Important Warnings."** Use this chapter to learn about important warnings.
- **Chapter 3, "Converting a Rack System to a Tower System."** Use this chapter to learn about converting rack to tower conversion.
- **Chapter 4, "Converting a Tower System to a Rack System."** Use this chapter to learn about tower to rack conversion.

Typographical Conventions

This document uses the following conventions.

Title	The title of a document or a CD.
KeyCap	The name of a keyboard key. Note that **Return** and **Enter** both refer to the same key.
Emphasis	Text that is emphasized.
Bold	Text that is strongly emphasized, such as the summary text in bulleted paragraphs.
`ComputerOut`	Text displayed by the computer.
`UserInput`	Commands and other text that you type.
`Command`	A command name or qualified command phrase.

Related Documents

The *HP Server Documentation CD-ROM* has been provided with your server. It contains a complete documentation set for the server, including localized versions of key documents. Included on the CD-ROM are the *Site Preparation Guide*, *Operations Guide, Installatio0n Guide,* and *Maintenance Guide*, which contain in-depth troubleshooting, installation, and repair information.

The CD will autorun when you insert it into a Windows workstation, or, point your browser at the index.htm file located under the **Start** directory of the CD. All users, including UNIX/Linux, can access a complete manual set by viewing the directory **manuals**. The manuals are in Adobe Acrobat Reader (pdf) format.

IMPORTANT The latest versions of these documents, and any updates to these documents, are posted under the appropriate server at http://docs.hp.com.

HP Encourages Your Comments

HP encourages your comments concerning this document. We are truly committed to providing documentation that meets your needs.

Please send any comments by contacting us at http://docs.hp.com/assistance/index.html.

Please include document title, manufacturing part number, and any comment, error found, or suggestion for improvement you have concerning this document.

Where to Get Help

For online access to technical support information, self-solve tools, online assistance, community forums of IT experts, broad multivendor knowledge base, and monitoring and diagnostic tools, go to http://www.hp.com/support.

For the latest information on HP-UX patches, check the HP IT Resource Center at http://itrc.hp.com.

Information to Collect Before You Contact Support

Before you contact HP support, you should:

Step 1. Check information on troubleshooting and attempt to solve the problem. Refer to “Troubleshooting” in the *Operation and Maintenance Guide* for your system, available at http://docs.hp.com.

- Note failure symptoms and error indications (LEDs and messages) by checking the SEL and FPL logs.
- Try to determine precisely what did or did not happen.

Step 2. Collect the following information:

- The model number of your server (for example, rx2620).
- The product number of your server. This can be found on the identification label, which is found at the front of the unit.
- The serial number of your server. This can be found on the identification label.

Step 3. Become familiar with your system configuration:

- Are you using the LAN, RS232, or web interface to monitor the server?
- How many processors, DIMMs, and PCI cards have been installed?
- What versions of processor, memory, and PCI cards are used and where are they installed?
- What accessories are installed?

Step 4. Determine the following:

- Which firmware versions are in use?
- When did the problem start?
- Have recent changes been made to the system?
- Which operating system and version is in use?

2 Important Warnings

Avoid Electrical Shocks

WARNING **To avoid electrical shock, do not open the power supply. There are no user-serviceable parts inside.**

To avoid electrical shock and harm to your eyes by laser light, do not open the laser module. The laser module should be serviced by service personnel only. Do not attempt to make any adjustment to the laser unit. Refer to the label on the CD-ROM for power requirements and wavelength. This product is a class I laser product.

Electrical

WARNING **For your safety always connect the equipment to a grounded wall outlet. Always use a power cord with a properly grounded plug, such as the one provided with the equipment, or one in compliance with your national safety standards. This equipment can be disconnected from the power by removing the power cord from the power outlet. This means the equipment must be located close to an easily accessible power outlet.**

Removing And Replacing The Cover

WARNING **You can remove system covers to remove or replace hot-swappable devices, such as hard disk drives, optical drives and fans. However, when removing components other than hot-swappable devices, never remove the system cover without first disconnecting the power cord from the power outlet and removing any connection to a telecommunications network. Always replace the cover before switching the system on again.**

CAUTION The HP Integrity rx2620 server depends on the system cover for proper cooling of internal components. Operating the system with the system cover removed can cause the system to quickly overheat.

Static Electricity

CAUTION Static electricity can damage electronic components. Turn off all equipment when removing or adding components. Don't let your clothes touch the accessory. To equalize the static electricity, rest the accessory bag on top of the system while you are removing the accessory from the bag. Handle the accessory as little as possible and with care.

Potential Metallic Particulate Contamination

Metallic particulates can be especially harmful around electronic equipment. This type of contamination may enter the data center environment from a variety of sources, including, but not limited to, raised floor tiles, worn air conditioning parts, heating ducts, rotor brushes in vacuum cleaners or printer component wear. Because metallic particulates conduct electricity, they have an increased potential for creating short circuits in electronic equipment. This problem is exaggerated by the increasingly dense circuitry of electronic equipment.

Over time, very fine whiskers of pure metal can form on electroplated zinc, cadmium, or tin surfaces. If these whiskers are disturbed, they may break off and become airborne, possibly causing failures or operational interruptions. For over 50 years, the electronics industry has been aware of the relatively rare, but possible, threat posed by metallic particulate contamination. During recent years, a growing concern has developed in computer rooms where these conductive contaminants are formed on the bottom of some raised floor tiles.

Although this problem is relatively rare, it may be an issue within your computer room. Since metallic contamination can cause permanent or intermittent failures on your electronic equipment, Hewlett-Packard strongly recommends that your site be evaluated for metallic particulate contamination before installation of electronic equipment.

Tools Required

You will need a T-15 Torx driver to remove the pedestal mounting screws.

3 Converting a Rack System to a Tower System

This chapter explains how to convert your HP Integrity rx2620 rack system to a tower system.

Process for Converting Your Rack System to a Tower System

This section covers the sequence of procedures necessary for converting your rack system to a tower system. Here is a high-level summary of these steps:

1. Removing the system from its rack enclosure
2. Removing the system's rack latch brackets
3. Installing the system's pedestal
4. Installing the system's access panels

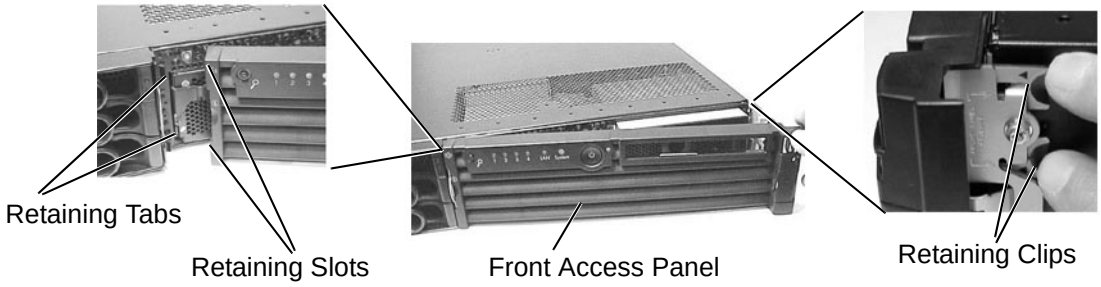
Removing the System from its Rack Enclosure

To remove a rack system from its rack enclosure, reverse the instructions in the document *Installation Guide for Midweight Slide Kit* that was shipped with your rack installation kit.

Removing the System's Front Access Panel

To remove the rack system's front access panel, press in on the front access panel's retaining clips (located on the right side of the system) and rotate the front panel approximately 45 degrees away from the system's chassis. Next, disconnect the front access panel's retaining slots from their retaining tabs on the system's chassis. See Figure 3-1.

Figure 3-1 Remove the Front Access Panel



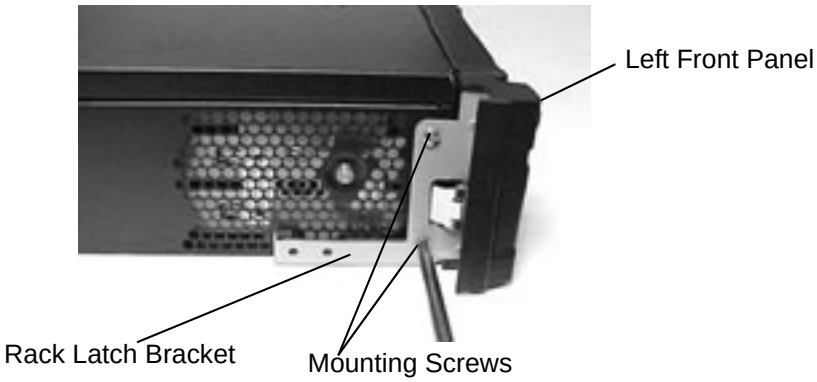
Removing the System's Rack Latch Brackets

The rack system has two rack latch brackets for the purpose of securing the system in the rack enclosure. The left rack latch bracket has the left front panel attached to it.

Here are the required steps for removing the rack system's rack latch brackets:

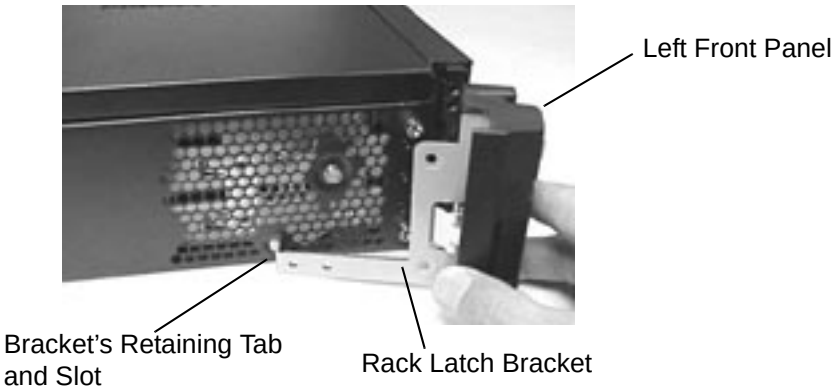
Step 1. Unscrew the left-side rack latch bracket's screws from the system's chassis. See Figure 3-2.

Figure 3-2 Unscrew the Left-side Rack Latch Bracket's Screws



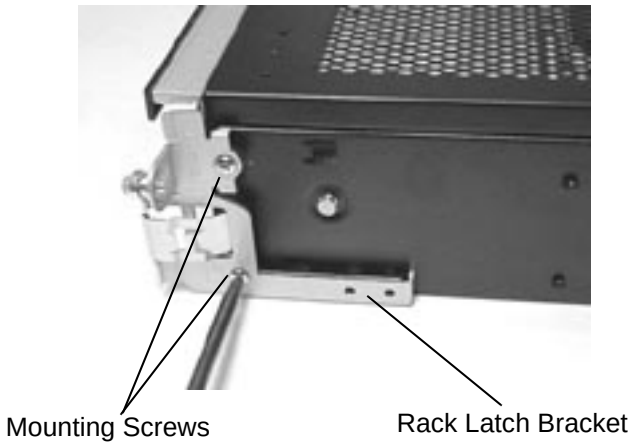
Step 2. Rotate the rack latch bracket assembly away from the chassis and remove the left-side rack latch bracket's retaining tab from its retaining slot on the system's chassis. See Figure 3-3.

Figure 3-3 Remove the Left-side Rack Latch Bracket's Retaining Tab from Its Slot



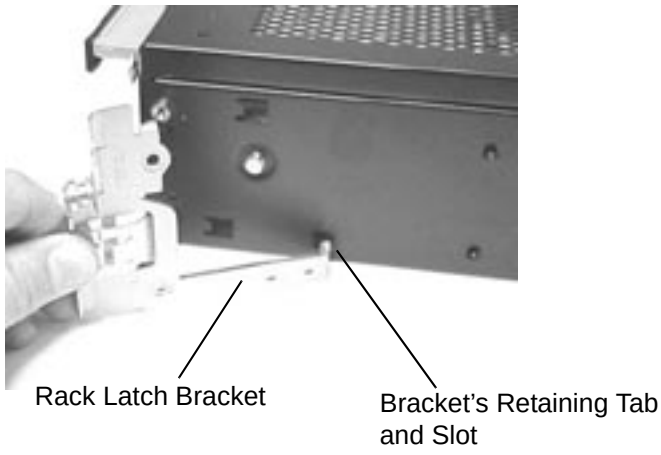
Step 3. Unscrew the right-side rack latch bracket's screws from the system's chassis. See Figure 3-4.

Figure 3-4 Unscrew the Left-side Rack Latch Bracket's Screws



Step 4. Rotate the rack latch bracket assembly away from the chassis and remove the right-side rack latch bracket's retaining tab from its retaining slot on the system's chassis. See Figure 3-5.

Figure 3-5 Remove the Right-side Rack Latch Bracket's Retaining Tab from Its Slot

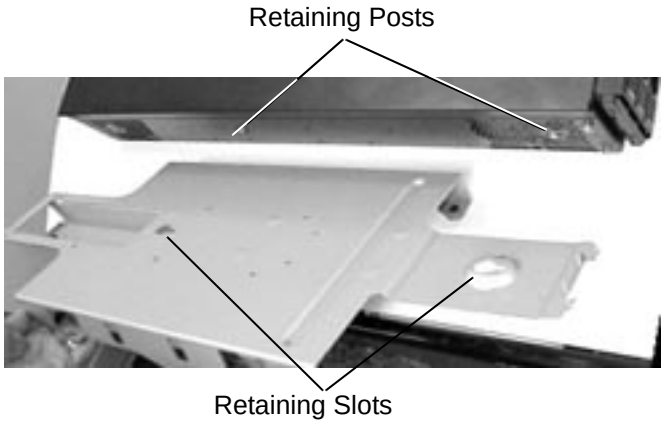


Installing the System's Pedestal

Here are the steps required to install the tower system's pedestal:

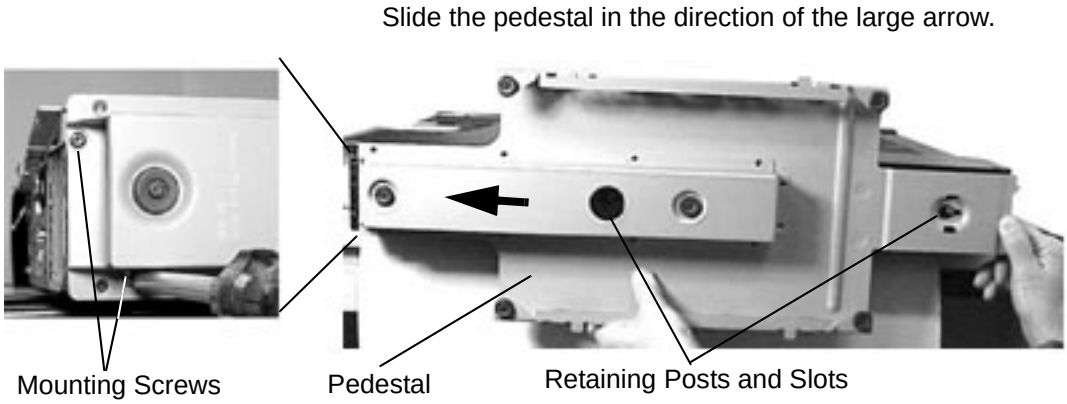
Step 1. Place the pedestal's retaining slots on their retaining posts. See Figure 3-6.

Figure 3-6 Place the Pedestal Retaining Slots on their Retaining Posts



Step 2. Slide the pedestal in the direction of the large arrow to lock it in place and screw in the pedestal's mounting screws. See Figure 3-7.

Figure 3-7 Install the Pedestal Mounting Screws

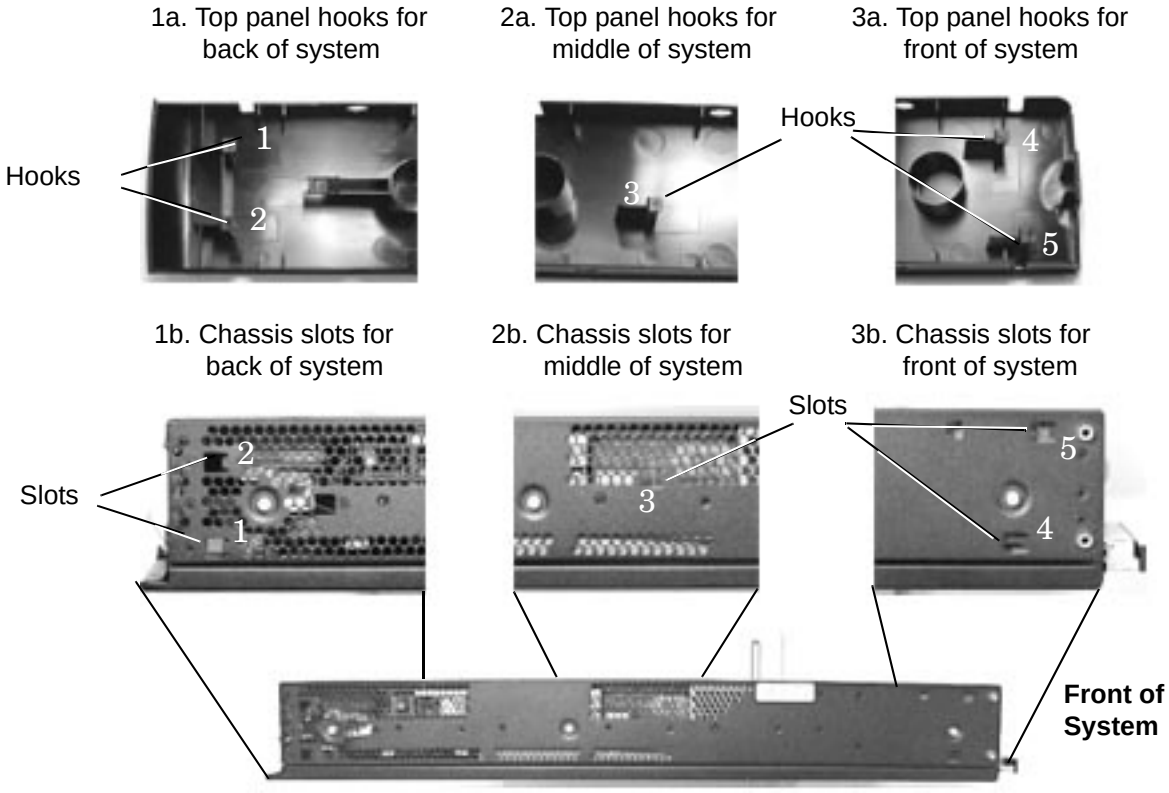


Installing the System's Access Panels

Here are the steps required to install the access panels on the tower system:

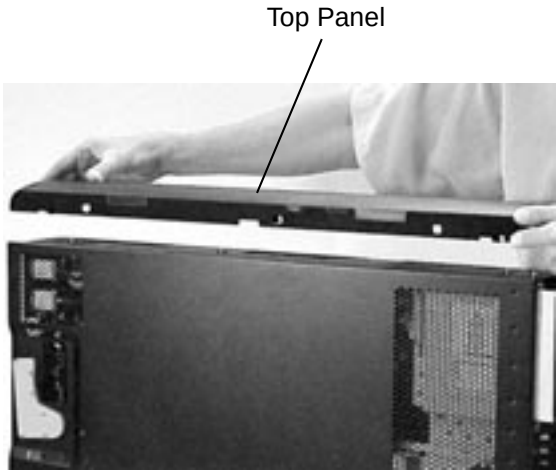
Step 1. Locate of the top access panel retaining hooks and their associated retaining slots on the system's chassis. You must align the retaining snaps with their retaining slots. See Figure 3-8.

Figure 3-8 Locate the Top Access Panel's Retaining Snaps and Slots



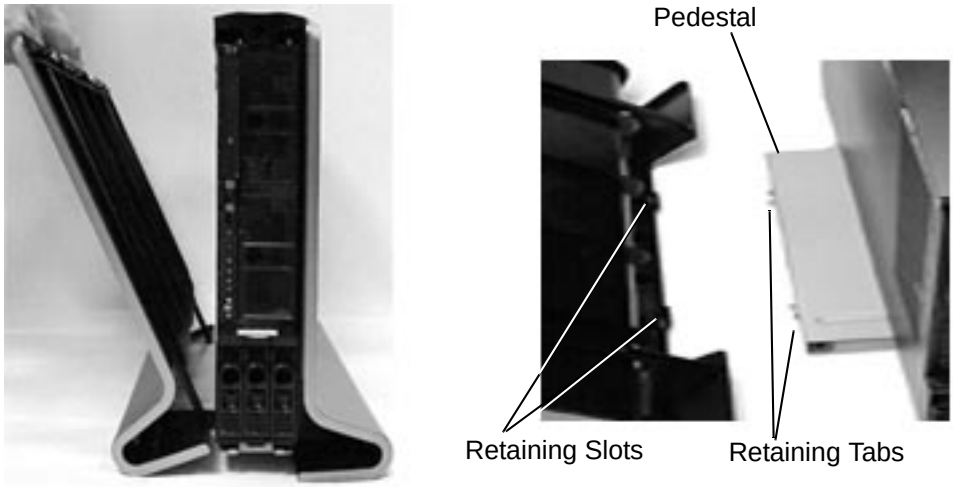
Step 2. Place the top access panel on the system's chassis, press downward and slide the top panel toward the front of the system until it snaps into place. See Figure 3-9. Ensure that all hooks are in place.

Figure 3-9 Slide the Top Access Panel onto the System's Chassis



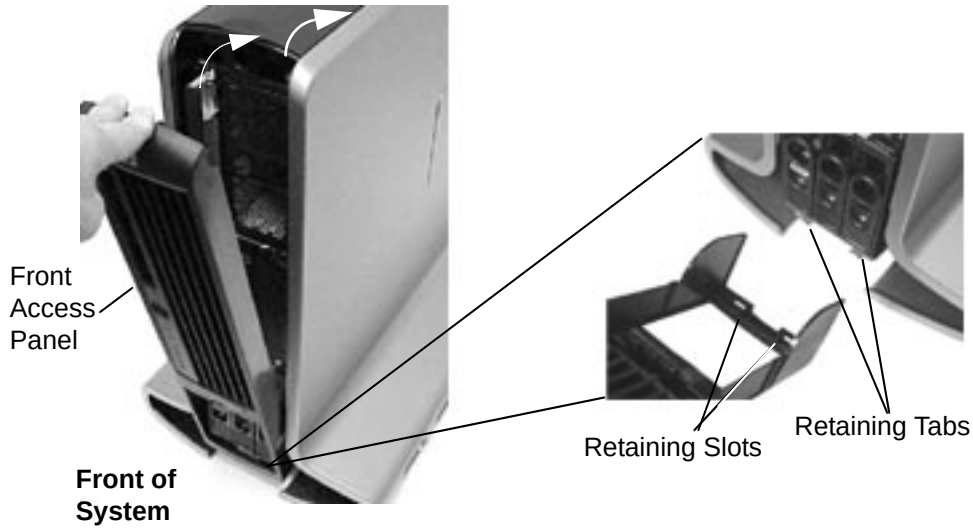
Step 3. Position the left-side access panel at an approximate 45 degree angle with the left side of the system and insert its retaining slots on their retaining tabs, which are located on the pedestal. See Figure 3-10. Rotate panel inward until it snaps in place. Note that the right-side access panel is installed in this same manner.

Figure 3-10 Install the Left-side and Right-side Access Panels



Step 4. Position the front access panel at an approximate 45 degree angle with the front of the system and insert its retaining slots onto the retaining tabs located on the system's chassis. See Figure 3-11. Rotate the front access panel inward until it snaps in place.

Figure 3-11 Install the Front Panel



Step 5. Connect all of the system's power and external cables and turn the system on.

4 Converting a Tower System to a Rack System

This chapter explains how to convert your HP Integrity rx2620 tower system to a rack system. For information on installing your system in a rack enclosure, read the document *Installation Guide for Midweight Slide Kit* (HP Part Number: 5064-9640).

Process for Converting Your Tower System to a Rack System

This section covers the sequence of procedures necessary for converting your tower system to a rack system. Here is a high-level summary of these steps:

1. Removing the tower system's access panels
2. Removing the system's pedestal
3. Installing the system's rack latches
4. Installing the system's right front access panel
5. Installing the system in its rack enclosure

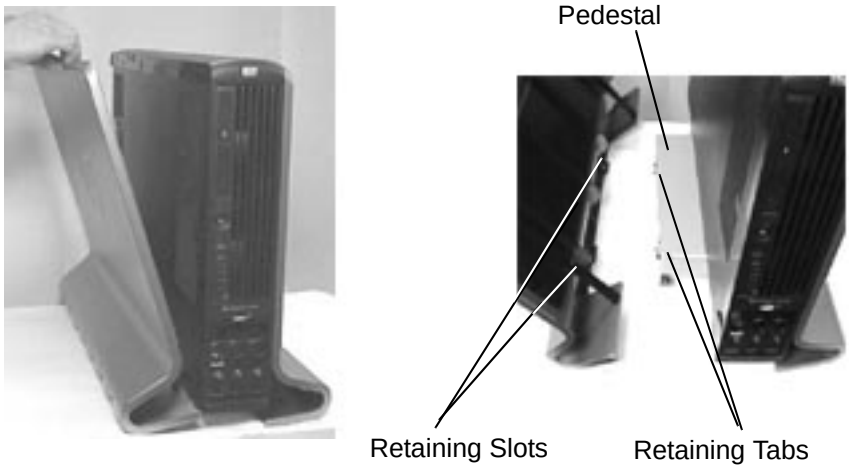
Removing the Tower System's Access Panels

Your tower system has external and internal access panels that need to be removed before placing the system in a rack enclosure. Here are the steps for removing those panels.

Step 1. Turn the system's power off and disconnect all of its power and external cables.

Step 2. Use the indentations located on the top edge of the left-side access panel and pull outward to un-snap and rotate it away from system. See Figure 4-1. After an approximate 45 degree rotation, lift the left-side panel upwards and off of the two lower retaining tabs. Note that the right-side access panel is removed in this same manner.

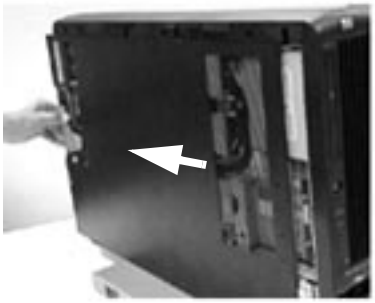
Figure 4-1 Removing the Left-side and Right-side Access Panels



Step 3. Rotate the blue release handle toward the back of the system and slide the internal panel in the direction of the arrow. See Figure 4-2 a. Next, lift the access panel off of the system's chassis. See Figure 4-2 b.

Figure 4-2 Removing the Internal Access Panel

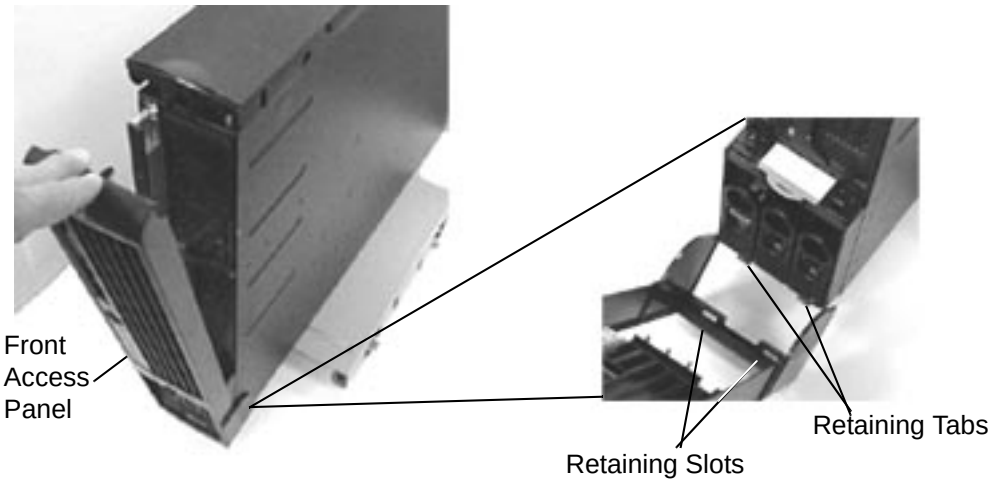
a. Slide Access Panel in the direction of arrow



b. Lift Access Panel off of the system's chassis

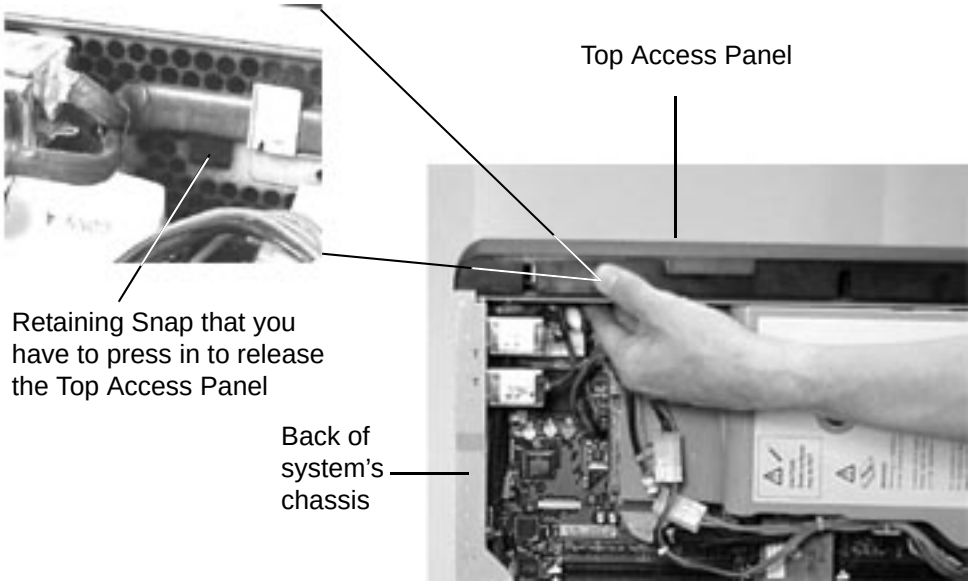
Step 4. Use the indentation on the top edge of the front access panel and pull outward to un-snap and rotate it away from the system. See Figure 4-3. After an approximate 45 degree rotation, lift the front access panel upwards and off of the two lower retaining tabs.

Figure 4-3 Removing the Front Access Panel



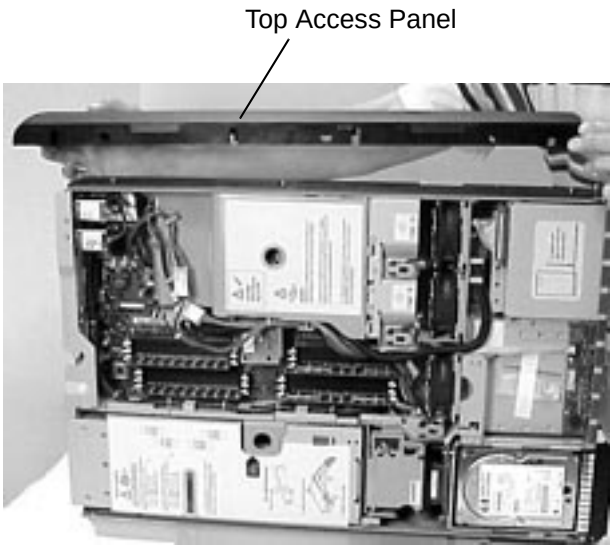
Step 5. Press in on the top panel's retaining snap to release it and slide the top panel toward the back of the system's chassis. See Figure 4-4.

Figure 4-4 Slide the Top Access Panel Toward the Back of the System's Chassis



Step 6. Lift the top panel off of the system's chassis. See Figure 4-5.

Figure 4-5 Lift the Top Access Panel off of the System's Chassis

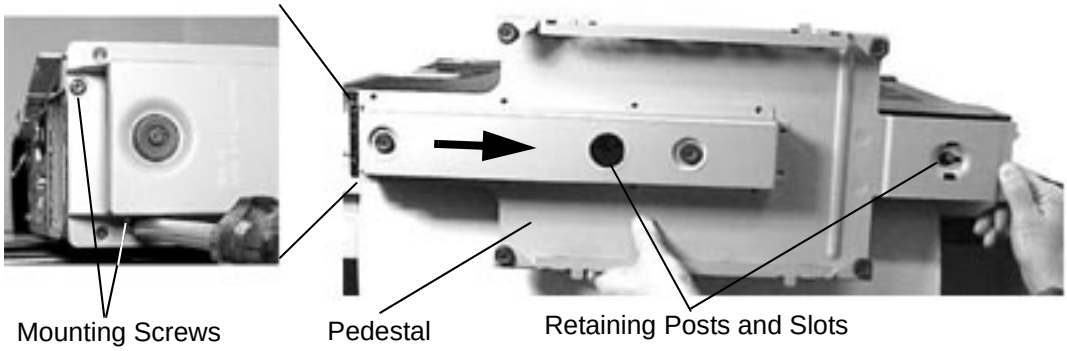


Removing the System's Pedestal

Here are the steps required to remove the tower system's pedestal:

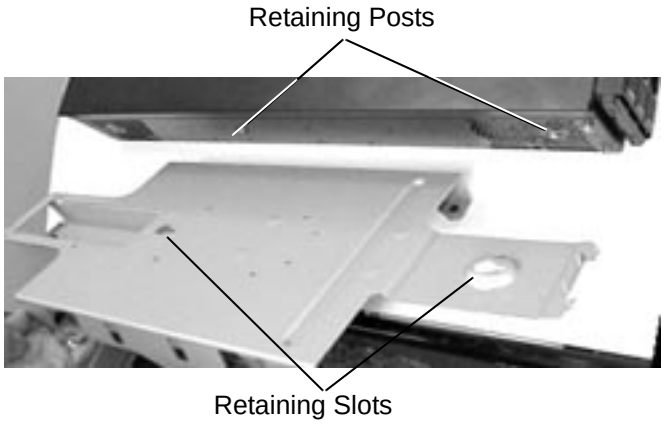
Step 1. Remove the pedestal mounting screws and slide the pedestal in the direction of the large arrow. See Figure 4-6.

Figure 4-6 Remove the Pedestal Mounting Screws



Step 2. Remove the pedestal from the system's chassis. See Figure 4-7.

Figure 4-7 Removing the Pedestal



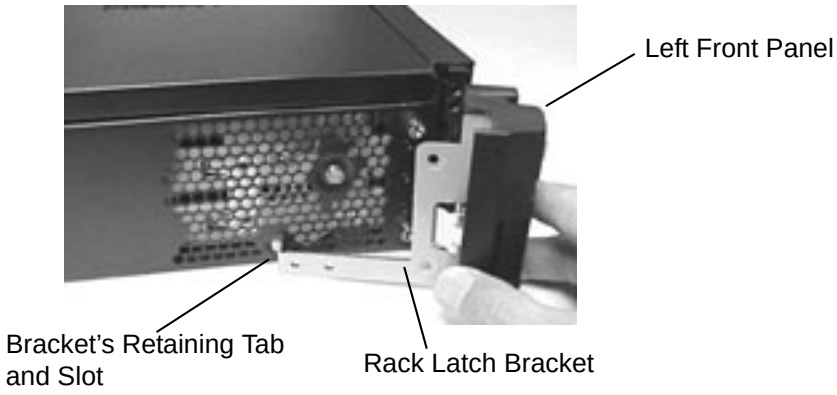
Installing the System's Rack Latches

The rack system has two rack latch brackets for the purpose of securing the system in the rack enclosure. The left bracket has the left front panel attached to it and the right bracket does not.

Here are the required steps for installing the rack system's rack latches:

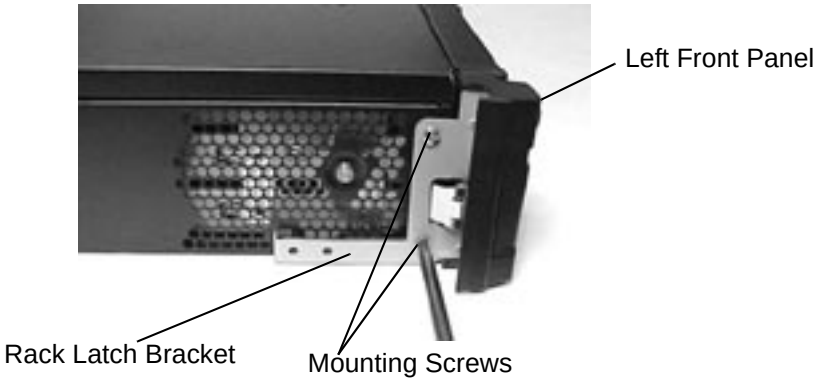
Step 1. Insert the left-side rack latch bracket's retaining tab into its retaining slot on the system's chassis. See Figure 4-8.

Figure 4-8 Inserting the Left-side Rack Latch Bracket's Retaining Tab into Its Slot



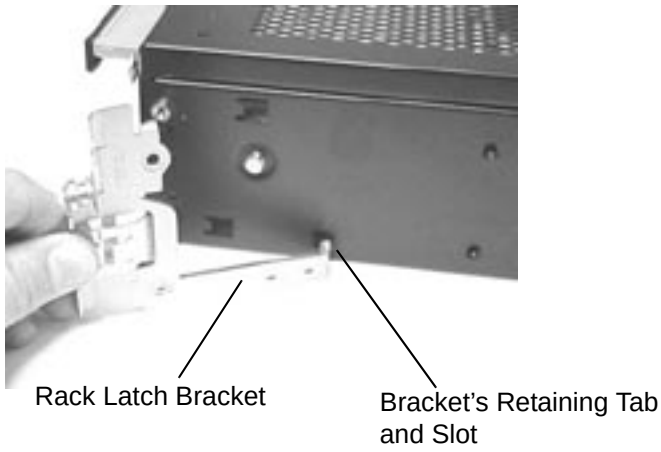
Step 2. Connect the left-side rack latch bracket to the system's chassis by screwing in its mounting screws. See Figure 4-9.

Figure 4-9 Connecting the Left-side Mounting Bracket to the System's Chassis



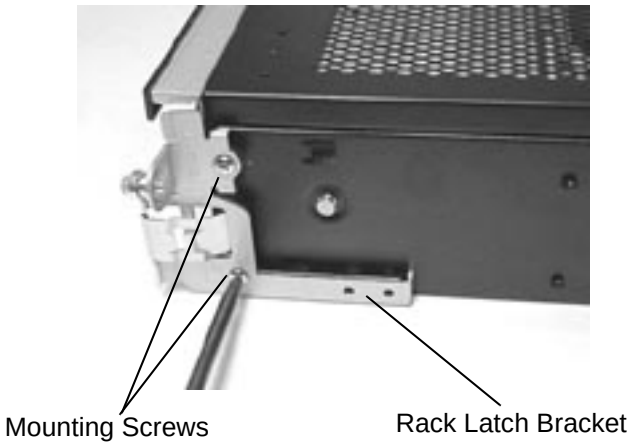
Step 3. Insert the right-side rack latch bracket's retaining tab into its retaining slot on the system's chassis. See Figure 4-10.

Figure 4-10 Inserting the Right-side Rack Latch Bracket's Retaining Tab into Its Slot



Step 4. Connect the right-side rack mounting bracket to the system's chassis by screwing in its mounting screws. See Figure 4-11.

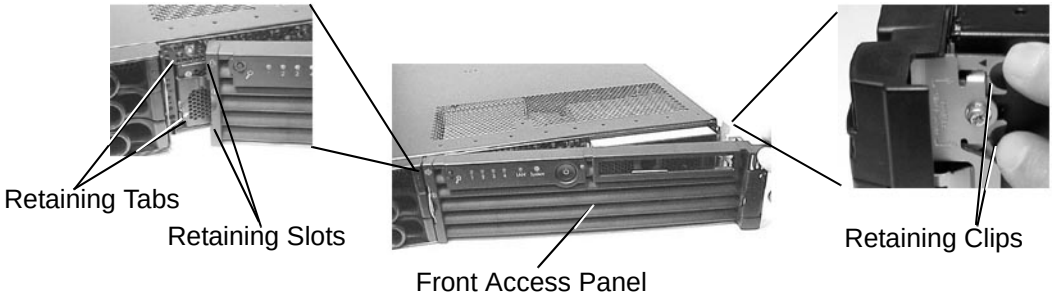
Figure 4-11 Connecting the Right-side Rack Latch Bracket to the System's Chassis



Installing the System's Right Front Access Panel

To install the rack system's right front access panel, position the panel at approximately 45 degrees to the front of the system and place the panel's retaining slots onto the chassis retaining tabs. Rotate the panel inward until its retaining clips snap in place. See Figure 4-12.

Figure 4-12 Installing the Right Front Access Panel



Installing the System in its Rack Enclosure

To complete the installation of the rack system in the rack enclosure, follow the instructions in the document *Installation Guide for Midweight Slide Kit* that is shipped with your rack installation kit.

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