IBM

IBM Systems

Quick start guide for IBM System p5 505 (9115-505)

1 Before you begin

This Quick start guide contains an abbreviated set of setup instructions designed to help you quickly unpack and set up a standard system. Users unfamiliar with this IBM®hardware should use the fully detailed setup instructions that you can find in the IBM Systems Hardware Information Center. For details about how to access the information center, see task 12 *Finish your system setup*.

The exclamation mark surrounded by a gray triangle denotes caution. A CAUTION notice indicates the presence of a hazard that has the potential of causing moderate or minor personal injury. Before doing a step that contains a caution icon, read and understand the caution statement that accompanies it.

Rack-mounted devices are not to be used as a shelf or workspace. Do not place any object on top of rack-mounted devices.
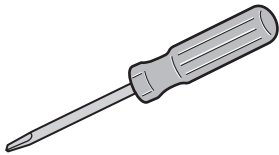
Use safe practices when lifting.

CAUTION: This part or unit is heavy, but has a weight smaller than 18 kg (39.7 lb). Use care when lifting, removing, or installing this part or unit (C008)

Tools needed (Rack installation only)	
	Flat-blade screwdriver

2 Inventory

2.1 Complete an inventory of the external parts.

Locate the kitting report (inventory list) in the bag that contains the information center CD (SK3T-8159). Make sure you received all of the parts that you ordered. Your order information should be located in an envelope adhered to the outside of your system box. You can also obtain order information from your marketing representative or IBM Business Partner.

If you have incorrect, missing, or damaged parts, contact any of the following resources:
- Your IBM reseller
- IBM Rochester manufacturing automated information line at 1-800-300-8751 (United States only)
- Directory of worldwide contacts at www.ibm.com/planetwide. Select your location to view the service and support contact information.
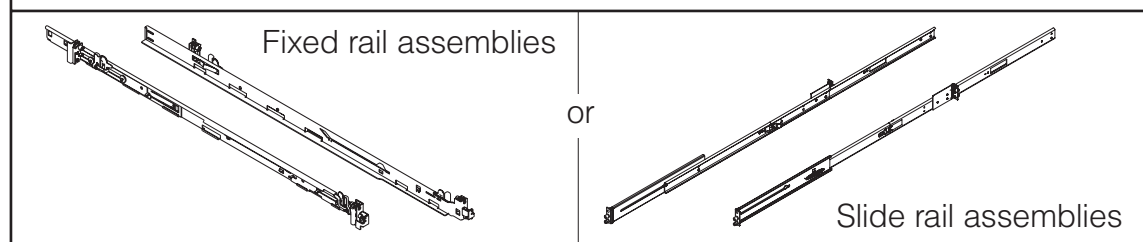
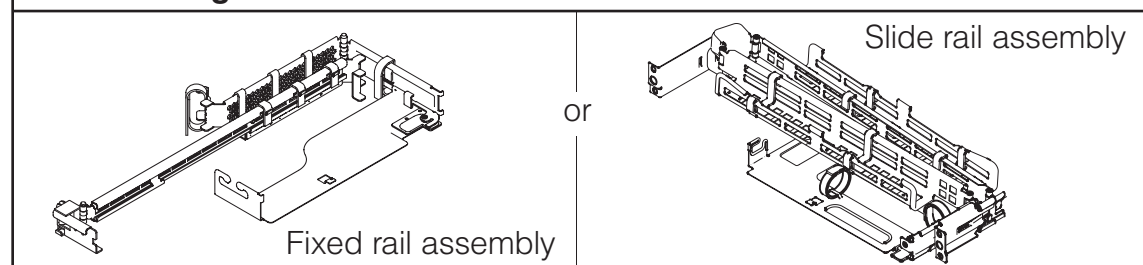**2.2** To install your server into a rack, you will need the following parts:

Rack-mounting hardware kit		
	8	Retaining screws
	8	Clips (fixed rail assemblies only)
	2	Latch strike (slide rail assemblies only)

System rail assemblies

Fixed rail assemblies

or

Slide rail assemblies

Cable-management arm

Slide rail assembly

or

Fixed rail assembly

3 Prepare the rack for installation

3.1 If you are installing your server into a new rack, ensure that you have completed the unpacking instructions that were provided with the rack.

If your server is already installed into a rack, skip to task 10 *Cable the HMC and the server.*

3.2 Place the rack in the location of the installation.
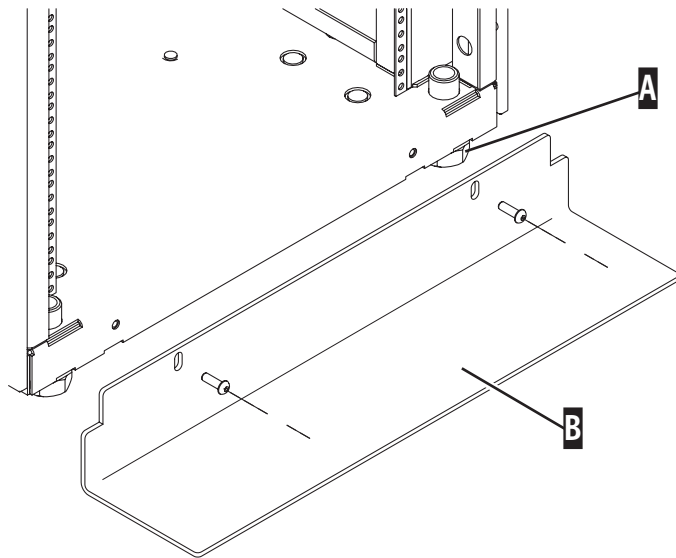
3.3 Use the wrench that was provided with your rack to level the rack by raising or lowering the front and back leveling feet **A**.

3.4 Install the stabilizer bracket **B** on the front of the rack.

Tip: If necessary, remove any trim kit pieces that were previously installed on the rack. Removing the trim kit pieces allows you to read the EIA units on the rack.

4 Install the fixed rail assemblies

If you are installing your server using slide rails, go to task 7 *Install the slide rail assemblies.*

If you do not have enough space around your rack to open the front and back doors completely, remove the doors before starting this task to allow adequate access.

If you are installing your server into a tapped-hole rack, follow the instructions in the IBM Systems Hardware Information Center, then return to task 10 *Cable the HMC and the server* in this guide. For details about how to access the information center, see task 12 *Finish your system setup.*
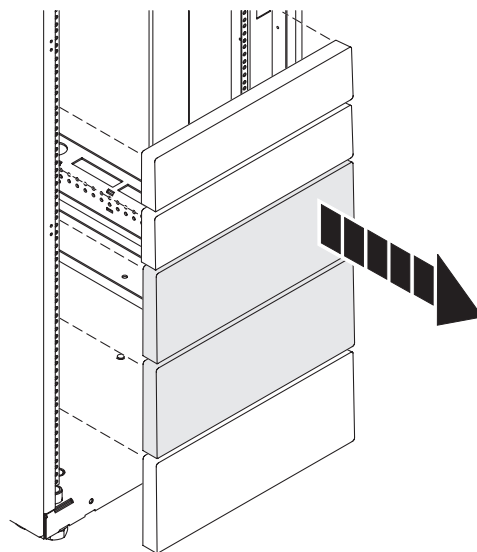
4.1 Locate the rack-mounting hardware kit, the cable-management arm, and the fixed rail assemblies that were included with your server.

4.2 Determine where in the rack to place the server. Remove any filler panels necessary to allow adequate access to the location where you will install your server.
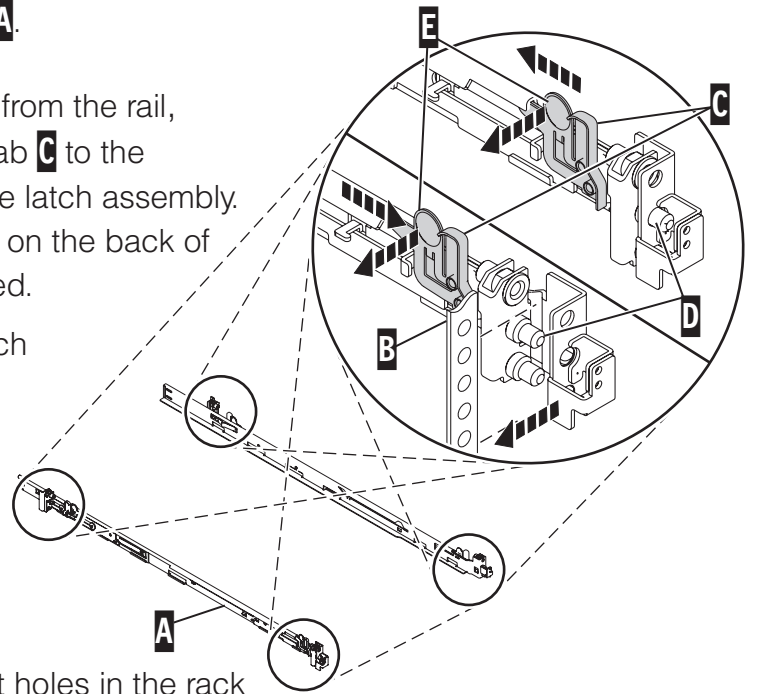
Note: Install units into the lower part of the rack first. Place larger and heavier units in the lower part of the rack.
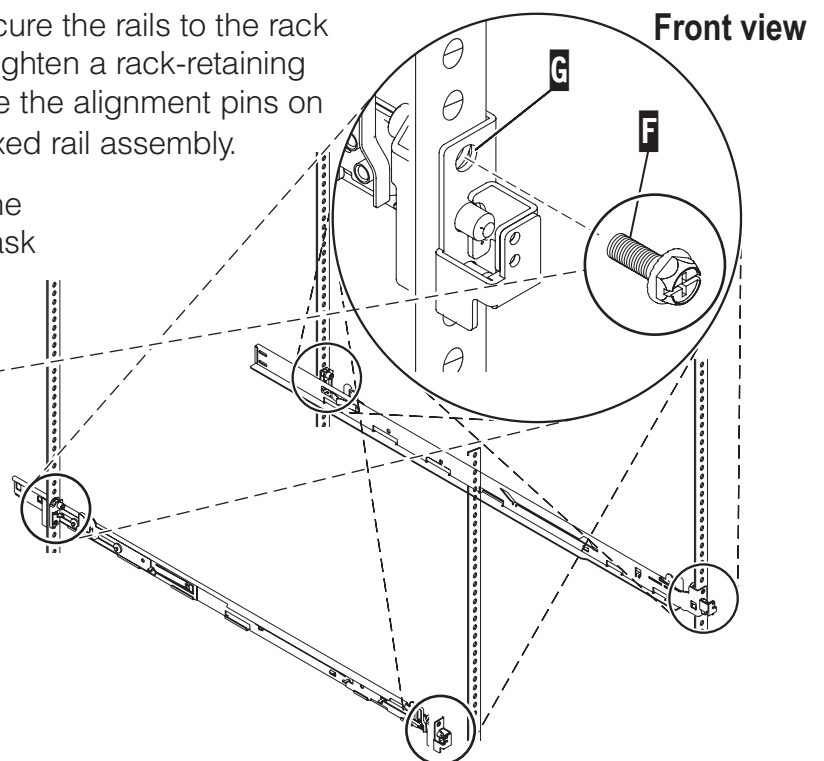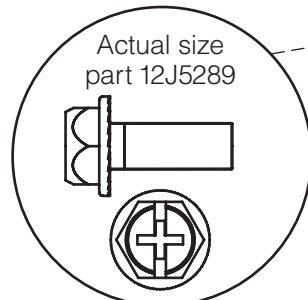
4.3 Install the fixed rail assemblies **A**.

1. Press the release tab **E** away from the rail, and pull the latch assembly tab **C** to the retracted position and lock the latch assembly. The alignment pins **D** located on the back of the rail should be fully retracted.

2. Repeat step 1 for the front latch assembly.

3. From the back of the rack, place the rack flange **B** between the rail flange and the retracted alignment pins **D**.

4. Align the pins with the correct holes in the rack flange, and press the latch assembly release tab **E** to extend the alignment pin **D** into the back of the rack.

5. Repeat steps 1 through 4 for the other fixed rail assembly.

6. From the front of the rack, slide the front latch assembly to the front rack flange, and repeat steps 3 and 4 to attach the front of the rail to the rack.

4.4 If you plan to transport the rack cabinet with the server installed, you must secure the rails to the rack flange. Using a screwdriver, tighten a rack-retaining screw **F** into the hole **G** above the alignment pins on the front and back of each fixed rail assembly.

You have finished installing the fixed rail assemblies. Go to task 5 *Install the server onto the fixed rail assemblies.*

Front view

Actual size
part 12J5289

5 Install the server onto the fixed rail assemblies

⚠️ **Before installing the server onto the fixed rail assembly, ensure that the leveling feet are extended and that the stabilizer bracket is correctly installed to prevent the rack from falling forward.**
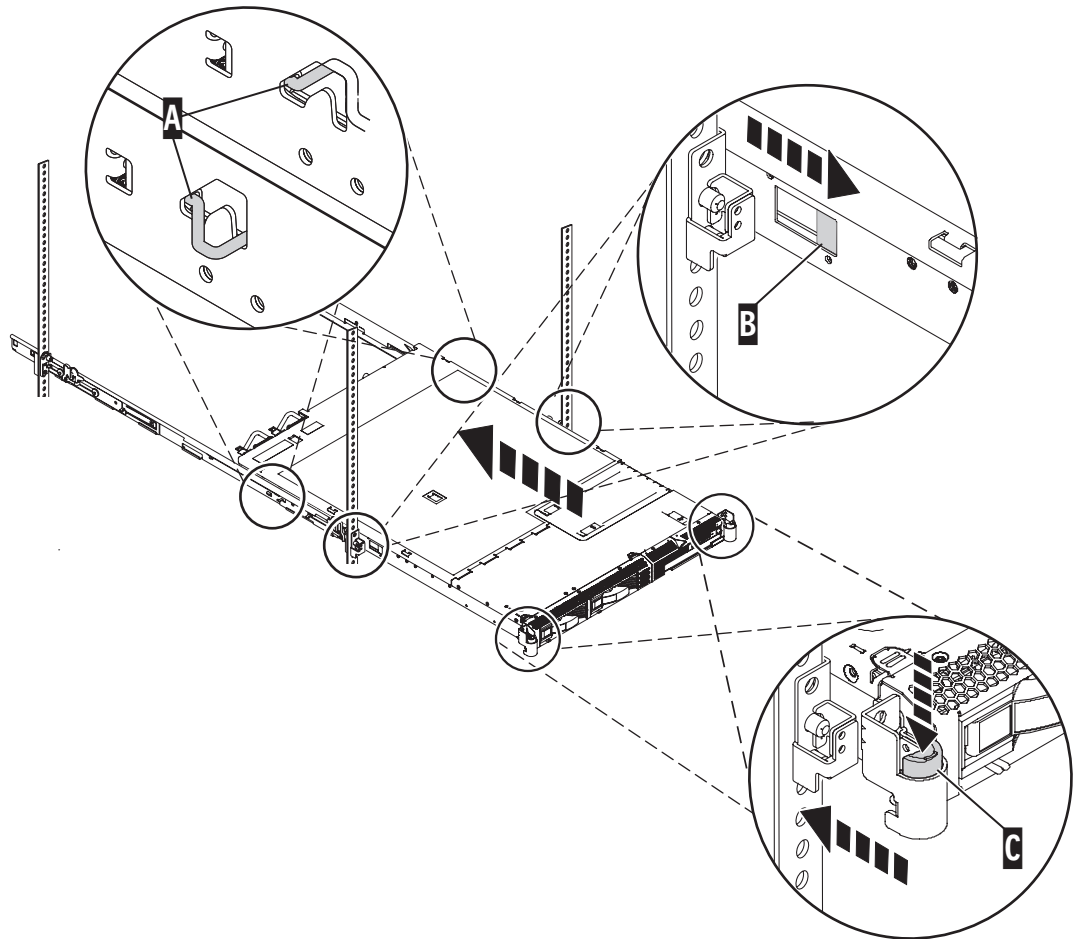
Tip: Read this entire task before completing any individual steps.

5.1 From the front of the rack, align the server on the rails and push the server into the rack cabinet. If the rail-lock pins **A** are extended out, pull the side release latches **B** toward you, which lifts up the rail-lock pins. Push the server into the rack the remainder of the way. As you push the server into the rack, the rail-lock pins extend out and lock into place.
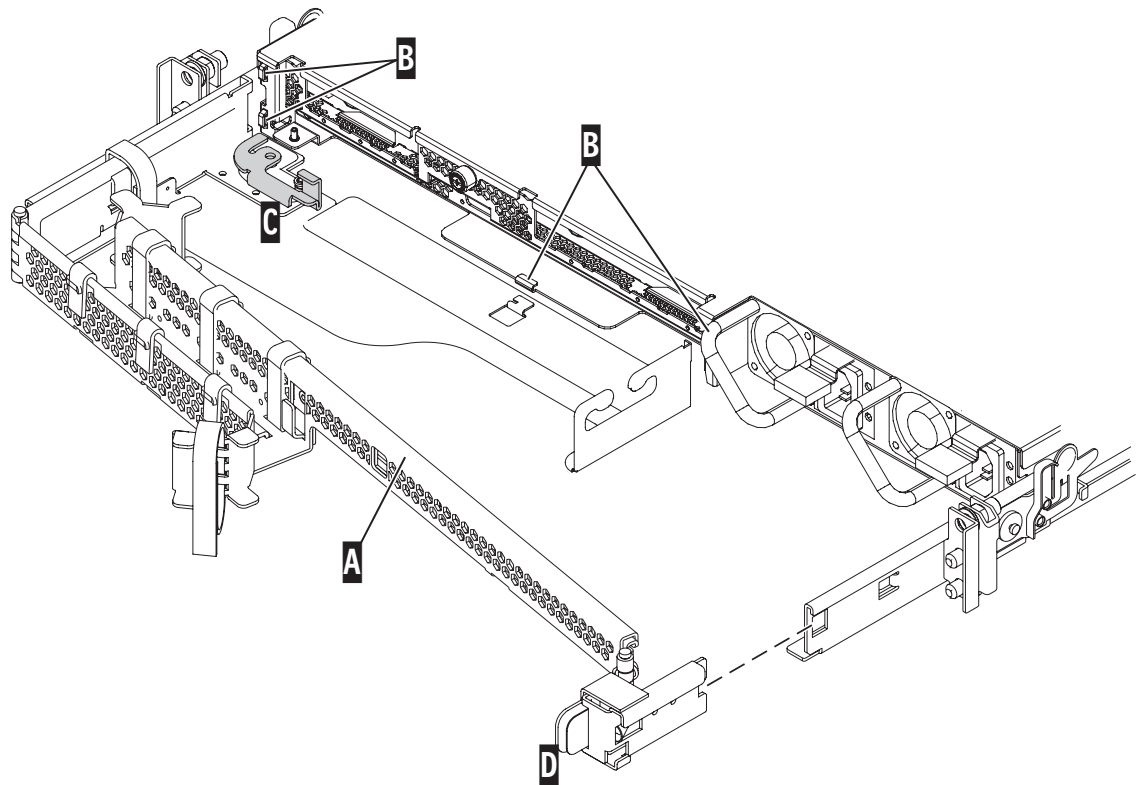
5.2 If the server does not snap in place, press down on the rack release buttons **C** and push the server into the rack the remainder of the way.

You have finished installing the server onto the fixed rail assemblies. Go to task 6 *Install the cable-management arm.*

6 Install the cable-management arm

6.1 Insert the cable-management arm **A** into the four slots **B** in the back of the server.

Tip: If space is limited inside the rack, slide an adjacent server out partway to install the cable-management arm.

6.2 When the cable-management arm is seated into all four slots, slide the cable-management arm to the left, and lock it into place by pulling the locking cam **C** back, away from the server.

6.3 Align the latch **D** with the rail on the right and snap the latch onto the rail.

Tip: After you have cabled your server, use the straps that are attached to the cable-management arm to secure the cables.

You have finished installing the server into the rack. Go to task 10 *Cable the HMC and the server*.

7 Install the slide rail assemblies

If you do not have enough space around your rack to open the front and back doors completely, remove the doors before starting this task to allow adequate access.

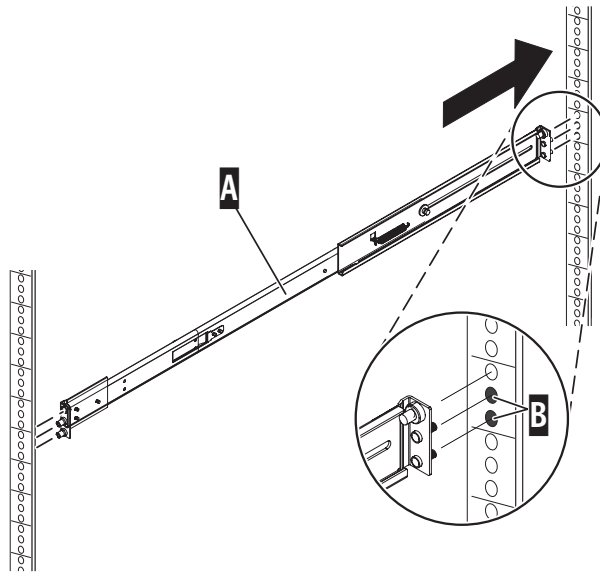If you are installing your server using fixed rails, go to task 4 *Install the fixed rail assemblies.*

7.1 Locate the rack-mounting hardware kit, the cable-management arm, and the slide rail assemblies that were included with your server.

7.2 Determine where in the rack to place the server. Remove any filler panels necessary to allow adequate access to the location where you will install your server.

7.3 Insert the right slide rail **A** into the back-right rack mounting flange **B** holes, with the rail pins protruding through the flange.
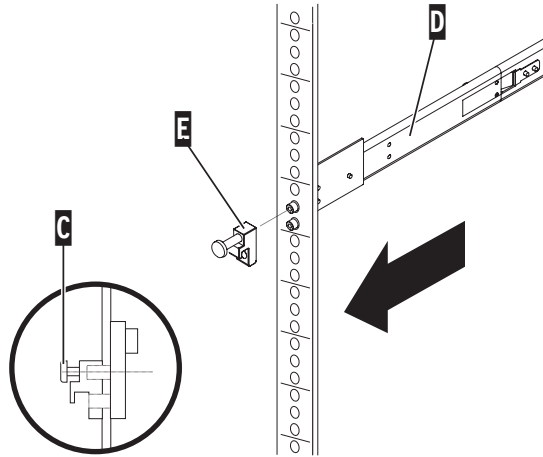

7.4 Press on the end of the slide rail **A** to compress the spring-loaded mechanism, and insert the slide rail into the front-right rack mounting flange **B** holes.

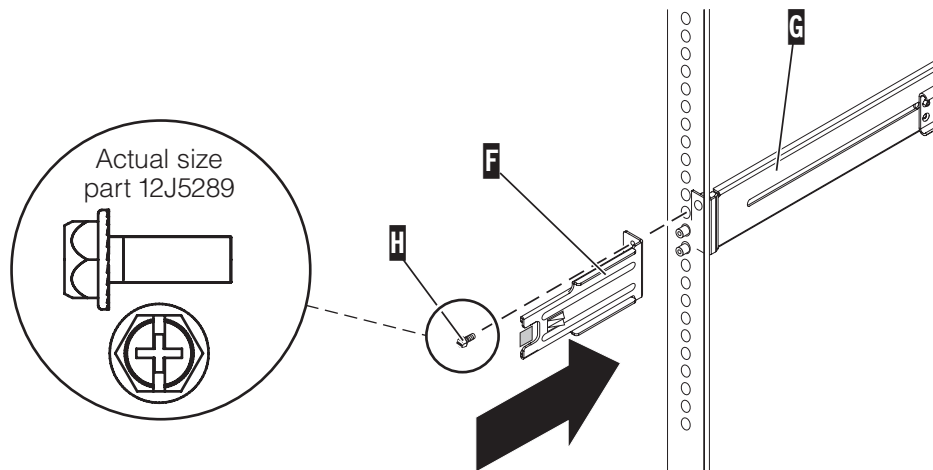**7.5** Repeat steps 7.3 and 7.4 for the left slide rail.

7.6 From the front of the rack, install the latch strike **E** onto the front of each slide rail **D** using the captive screw **C**. Finger-tighten the captive screw **C**.
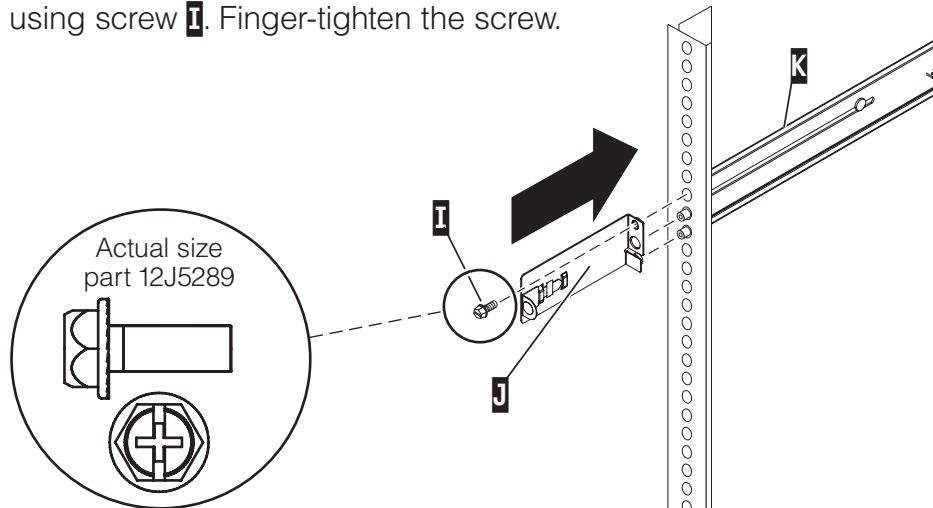
7.7 From the back of the rack, attach the cable-management arm mounting bracket **F** to the back-left rail **G**, using screw **H**. Finger-tighten the screw.

Actual size
part 12J5289

7.8 Attach the cable-management arm support bracket **J** to the back-right rail **K**, using screw **I**. Finger-tighten the screw.

Actual size
part 12J5289

You have finished installing the slide rail assemblies. Go to task 8 *Install the server onto the slide rail assemblies.*

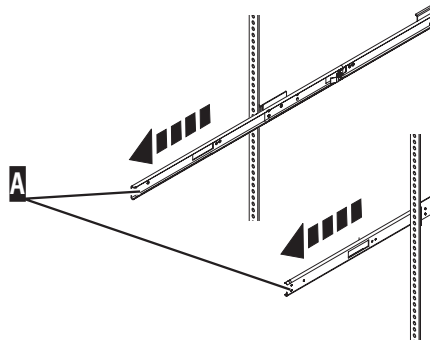# 8 Install the server onto the slide rail assemblies

⚠️ **Before installing the server onto the slide rail assembly, ensure that the leveling feet are extended and that the stabilizer bracket is correctly installed to prevent the rack from falling forward.**

Tip: Read this entire task before completing any individual steps.

8.1 From the back of the rack, fully extend the slide rails **A** until the rails lock into the extended position.
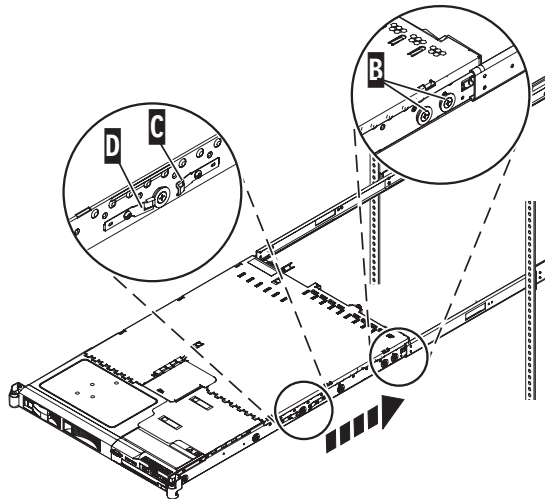
Important: The latch strikes on the front of the slide rail and the cable-management arm brackets must be installed before installing a server onto the rails. If these parts are not installed, the installation may cause the rails to compress and the server might fall out of the rack.

8.2 Lift the server to the height of the slides, and position the set of wheels **B** at the back of the system between the rail guides.

CAUTION: This part or unit is heavy but has a weight smaller than 18 kg (39.7 lb). Use care when lifting, removing, or installing this part or unit. (C008)

8.3 Push the server into the slide rails until the rear slide release latches **C** click into place, locking the server into the slide rails.
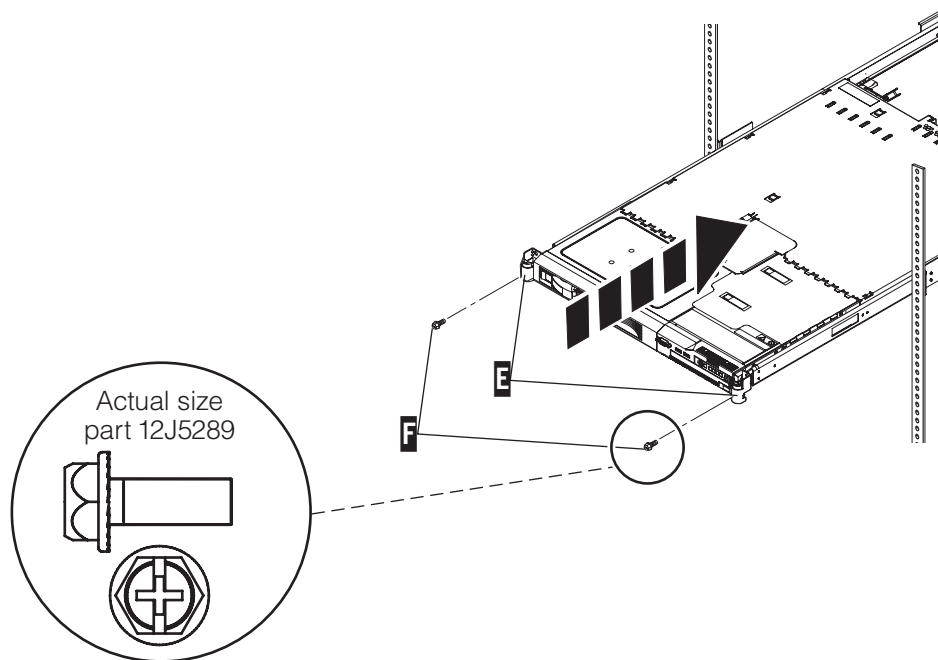
8.4 Press the front slide release latches **D** on both sides of the server, and move the server into the rack cabinet and back out to verify that the server moves freely.

Tip: Use caution to avoid pinching your fingers between the release latch and the rack flange as you move the server in and out of the rack.

8.5 Push the server all the way into the rack cabinet until the rack latches **E** click into place.

Actual size
part 12J5289

8.6 Using a screwdriver, tighten the screws that you installed in steps 7.7 through 7.8.

8.7 If you are securing the server to the rack for transport, insert and tighten the two screws **F** to secure the server into the rack.
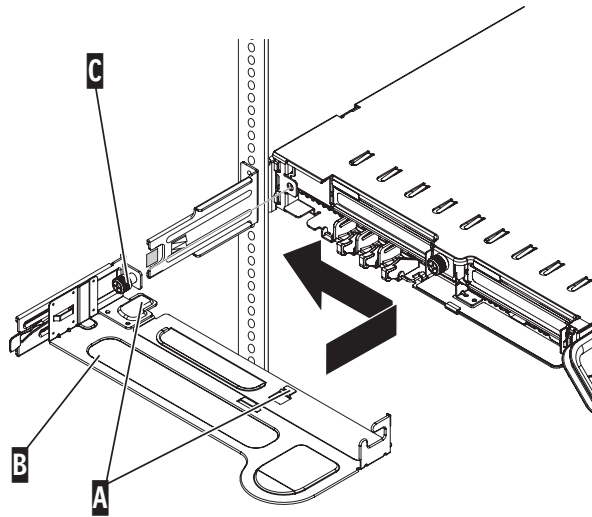
You have finished installing the server onto the slide rail assemblies. Go to task 9 *Install the cable-management arm.*
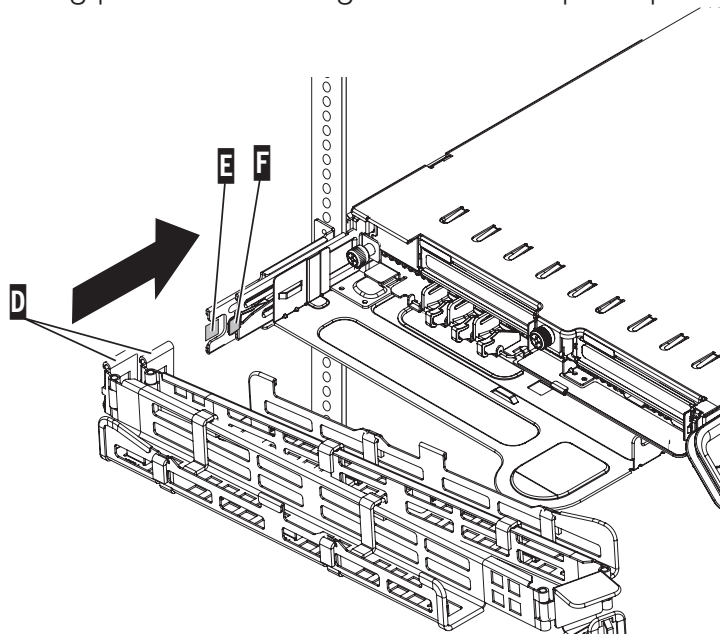
9 Install the cable-management arm

9.1 Align the tabs **A** on the cable-management arm mounting plate **B** with the slots on the back of the server. Slide the mounting plate **B** to the left to engage the tabs. Tighten the thumbscrew **C** to secure the mounting plate to the server.
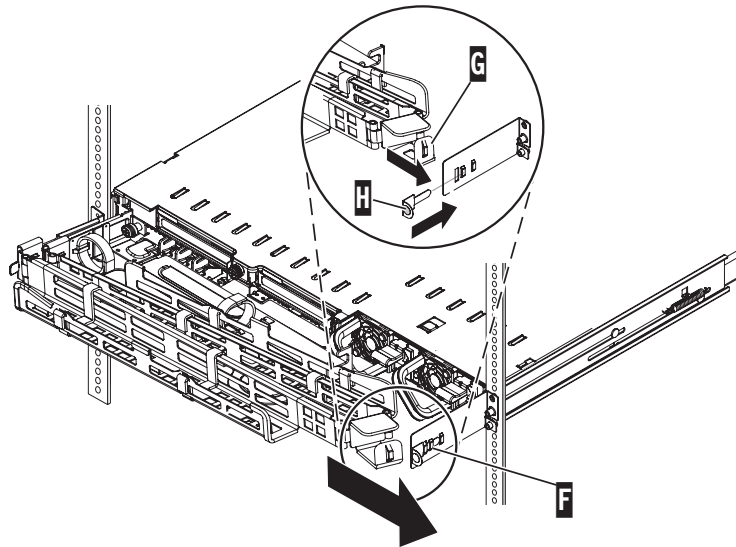
9.2 Slide the left hinge brackets **D** onto the cable-management arm mounting bracket **E** that you installed in step 7.7 and the mounting bracket **F** on the cable-management arm mounting plate until the hinge brackets snap into place.

9.3 For additional stability when you move or ship the rack, secure the cable-management arm to the support bracket **I** by inserting the tab **G** into the support bracket **I** and installing the latch pin **H**.

Important: Performing this step prevents the server from sliding out of the rack. You must remove the latch pin **H** prior to sliding the server out of the rack.

Tip: After you have cabled your server, use the straps that are attached to the cable-management arm to secure the cables.

You have finished installing the cable-management arm. Go to task 10 *Cable the HMC and the server.*

10 Cable the HMC and the server

A Hardware Management Console (HMC) is a system that connects to the server and manages it through a network.

f you are not using an HMC to manage your server, you can use the Integrated Virtualization Manager (IVM), a graphics terminal, or an ASCII terminal. If you plan to use IVM, which allows you to create and manage partitions, skip to task 11 *Cable the server and access the Integrated Virtualization Manager*. For information about the other console options, go to the IBM Systems Hardware Information Center. For details about how to access the information center, see task 12 *Finish your system setup*.

If you are using a rack-mounted HMC, these steps assume it is already installed in the rack.
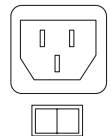
If you need to install the HMC into the rack, follow the instructions in the IBM Systems Hardware Information Center, and return to this guide when you are ready to begin cabling your HMC. For details about how to access the information center, see task 12 *Finish your system setup.*

10.1 If you are using any optional adapters, connect the cables to the appropriate adapter connectors in the PCI slots of your server and HMC.

10.2 Route the power cords through the rings or clamps, if available, on the back of the server, and connect to the server, monitor, and HMC. **Do not connect the power cords to a power source until you are instructed to do so.**
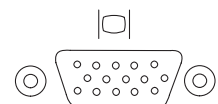
> **Important:** If there is a voltage switch next to the power connector on the monitor, ensure that it is in the appropriate position for the voltage used in your geography.
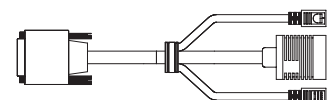
10.3 Connect the mouse and keyboard cables to the appropriate ports on the back of the HMC. If your mouse and keyboard use Universal Serial Bus (USB) cables, you can connect these to the ports on the front of the HMC.

10.4 Attach the monitor cable to the monitor connector on the HMC and tighten the screws.

> **Tip:** If you are using the rack-mounted LCD monitor and keyboard (7316-TF3), use the C2T-to-KVM adapter breakout cable to attach to the HMC.
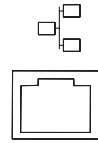
10.5 If you are not using a modem, skip to step 10.6.

If you are using the integrated HMC modem, connect the telephone cable to the modem and to the analog jack on the wall. If you are using an external modem, connect the modem data cable to the external modem and to a serial port on the HMC. Then connect the telephone cable to the external modem and to the analog jack on the wall.

10.6 Connect the Ethernet cable to the Ethernet port on the HMC and to the Ethernet port labeled HMC1 on the server.

For a stand-alone HMC, use the integrated Ethernet port. For the 7310-CR2 rack-mounted HMC, use the bottom-right Ethernet port. For the 7310-CR3 rack-mounted HMC, use the left port of the two planar board Ethernet ports.

10.7 If using an external modem, plug the power cord into the modem.

CAUTION: This product is equipped with a 3-wire (two conductors and a ground) power cable and plug. Use this power cable with a properly grounded electrical outlet to avoid electrical shock. (C018)

10.8 Plug the power cords for the monitor, HMC, and external modem into a power source. Do not connect the server to a power source until instructed to do so.

10.9 Route the cables through the cable-management arm on the server, and secure the cables with the straps provided.
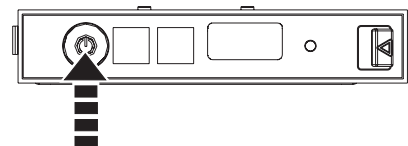
10.10 Start and configure the HMC, which includes the Guided Setup Wizard. You can find the instructions for configuring the HMC in the IBM Systems Hardware Information Center. For details about how to access the information center, see task 12 *Finish your system setup.*

10.11 Connect the server to a power source and wait for the control panel on the front of the server to display 01. This might take several minutes.

10.12 Press the white Power On button on the control panel.

You have completed the basic setup. Go to task 12 *Finish your system setup.*
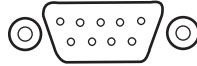
11 Cable the server and access the Integrated Virtualization Manager

11.1 Connect one end of a serial cable to the system port on your server, and the other end to a serial port on a PC that has Microsoft® Internet Explorer 6.0, Netscape 7.1, or Opera 7.23 installed.
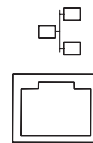
CAUTION: This product is equipped with a 3-wire (two conductors and a ground) power cable and plug. Use this power cable with a properly grounded electrical outlet to avoid electrical shock. (C018)

11.2 Route the power cords through the rings or clamps, if available, on the back of the server, and connect the server to a power source. Wait for the control panel on the front of the server to display 01. This might take several minutes.

11.3 Connect an Ethernet cable from the PC to the port labeled HMC1 on the back of the server. If HMC1 is occupied, use the port labeled HMC2.

11.4 If you are using any optional adapters, connect the cables to the appropriate adapter connectors in the PCI slots of your server and PC.

11.5 Route the cables through the cable-management arm, and secure the cables to the cable-management arm.

11.6 Configure the Ethernet interface on the PC to an IP address and subnet mask within the same subnet as the server. This is the IP address for the service processor.

> **Note:** If you do not know how to do this, see the instructions in the IBM Systems Hardware Information Center. For details about how to access the information center, see task 12 *Finish your system setup.*

Possible values:

Server connector	Subnet mask	IP address
HMC1	255.255.255.0	192.168.2.147
HMC2	255.255.255.0	192.168.3.147

For example, if you connected your PC to HMC1, the IP address for your service processor might be 192.168.2.1 and the subnet mask would be 255.255.255.0. Set the gateway IP address to the same IP address as that of the PC.

11.7 Using a Web browser, enter the IP address into the **Address** field that corresponds to the port to which your PC is connected. For example, enter https://192.168.2.147.

11.8 At the login prompt, enter the following default user ID and password:

User ID	Password
admin	admin

11.9 When you are prompted, change the default password.

11.10 Change the state of the system server firmware.

1. In the navigation area, expand **Power/Restart Control**.

2. Click **Power On/Off System**.

3. Select **Standby** in the Boot to system server firmware field.

4. Click **Save settings and power on**.

11.11 After the system has reached the firmware standby state, enable the Advanced POWER™ Virtualization feature.

1. In the navigation area, expand **On Demand Utilities**.

2. Click **CoD Activation**.

3. Enter the activation key into the field. This key was included with the printed material inside your system box.

4. Click **Continue**. The Advanced POWER Virtualization feature is enabled.

11.12 Change the partition mode.

1. In the navigation area, expand **Power/Restart Control**.

2. Click **Power On/Off System**.

3. Select **Boot to SMS menu** in the AIX/Linux partition mode boot field.

4. Select **Running** in the Boot to system server firmware field.

5. Click **Save settings and continue system server firmware boot**.

11.13 Open a terminal session on the PC, using an application such as HyperTerminal, and wait for the SMS menu to be displayed. Be sure the line speed is set to 19,200 bits per second to communicate with the system.

11.14 Change the partition mode back so that the server continues to load the operating system during startup.

1. In the ASMI navigation area, expand **Power/Restart Control**.

2. Click **Power On/Off System**.

3. Select **Continue to operating system** in the AIX/Linux partition mode boot field.

4. Click **Save settings**.

11.15 Insert the Virtual I/O Server CD into the optical drive of the system.

11.16 When the system management services (SMS) menu is displayed in the terminal session over the connection that you set up in step 11.1, choose **Select Boot Options** and follow the menu options to set the optical drive as the initial boot device.

11.17 Install the Virtual I/O Server.

1. Select the console, and press Enter.

2. Select a language for the BOS menus, and press Enter.

3. Select **Start Install Now with Default Settings**.

4. Select **Continue with Install**. The managed system restarts after the installation is complete, and the login prompt is displayed on the ASCII terminal.

Tip: Additional Information about the Virtual I/O Server, such as how to check for updates, configure network connections, and configure partitions, is located in the IBM Systems Hardware Information Center.

You have completed the basic setup. Continue to task 12 *Finish your system setup.*

12 Finish your system setup

You have completed the basic tasks to set up your server.

You can now access the IBM Systems Hardware Information Center. Follow these steps to create a customized checklist that helps you configure your server and console, install software, apply fixes, and establish connections with your service provider:

12.1 Using a Web browser, go to www.ibm.com/systems/infocenter/hardware or go to the preinstalled version on the HMC.

12.2 From the navigation bar, click **Systems Hardware information** > **System p information** > **Initial server setup** > **Create a customized initial server setup checklist.**

12.3 Answer the questions in the interactive interview, and follow the procedures in the resulting checklist.

If you cannot access the online version of the information center, it is also provided on a CD (SK3T-8159) with your system.

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