



IBM Systems



**Quick start guide for the rack-mounted
Hardware Management Console
(7310-CR2, 7310-CR3, 7310-CR4)**

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 Hardware Management Console (HMC). 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 11 *Finish your HMC setup*.

If you are installing this HMC as part of a new server installation, complete the steps in this guide and then refer to the instructions that are included with the server.



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.

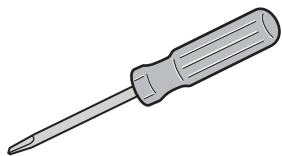


Use safe practices when lifting.



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 shipping container. 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.

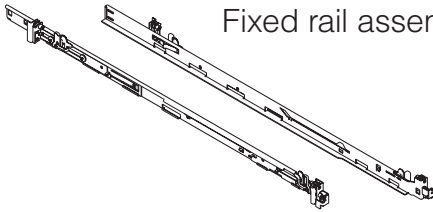
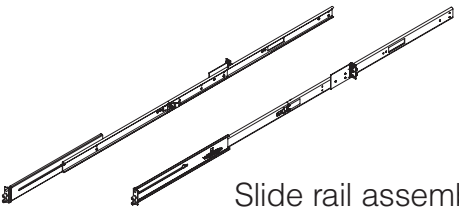
If you have incorrect, missing, or damaged parts, contact any of the following resources:

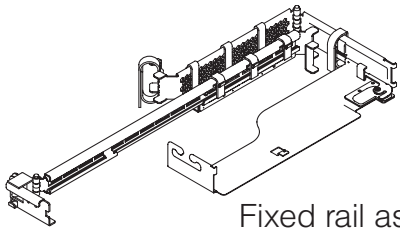
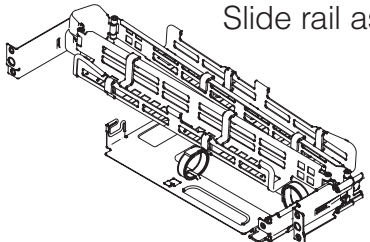
- Your IBM reseller
- IBM Rochester manufacturing automated information line at 1-800-300-8751 (United States only)
- Directory of worldwide contacts at www.ibm.com/planetwide. Select your location to view the service and support contact information.

2.2

To install your HMC 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 | | |
|--|----|---|
|  Fixed rail assembly | or |  Slide rail assembly |

3

Prepare the rack for installation

3.1

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

If your HMC 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.

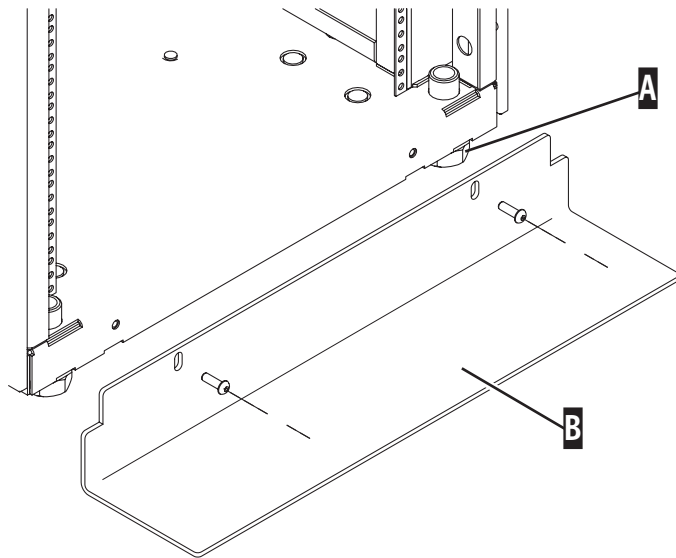
3.3

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 HMC 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 HMC 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 11 *Finish your HMC setup*.

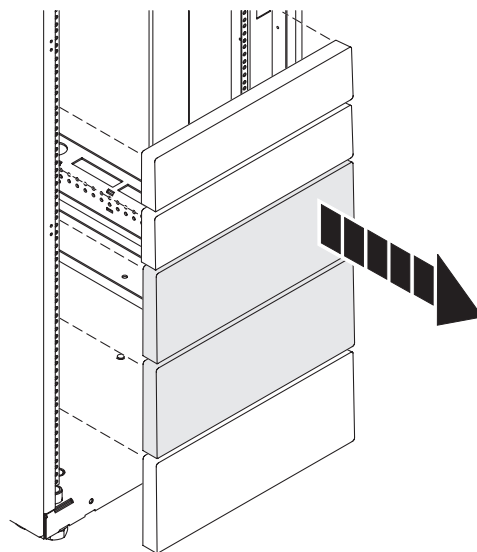
4.1

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

4.2

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

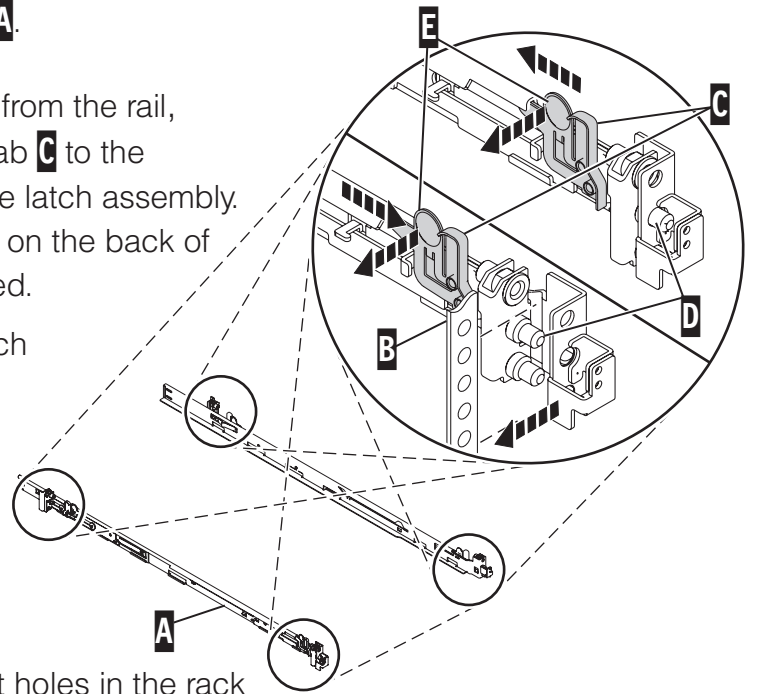
Note: Install units into the lower part of the rack first. Place larger and heavier units in the lower part of the rack.



4.3

Install the fixed rail assemblies **A**.

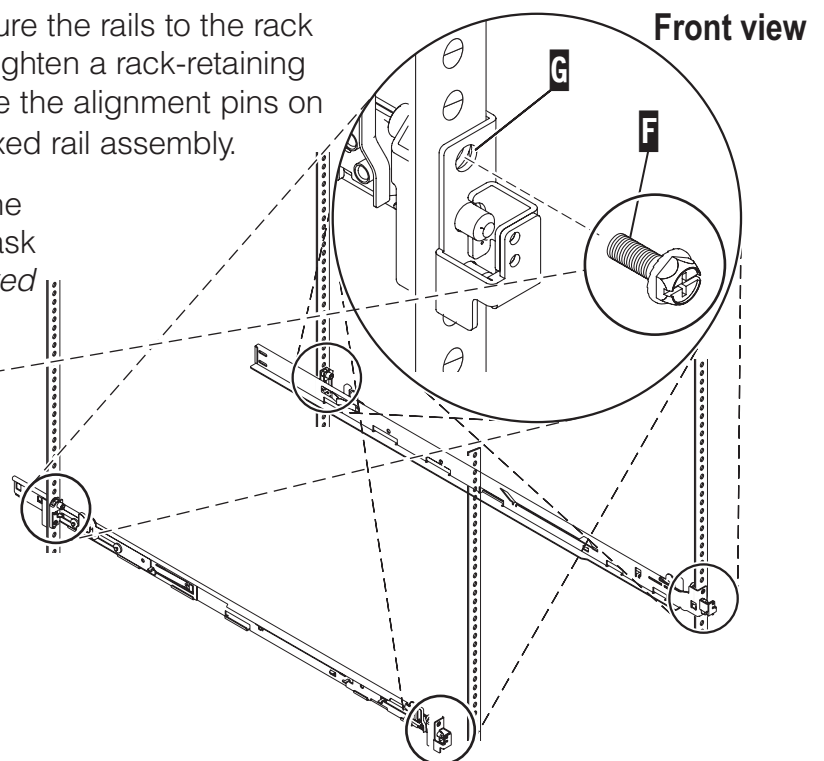
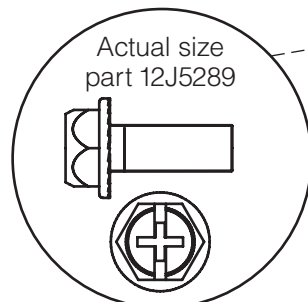
1. Press the release tab **E** away from the rail, and pull the latch assembly tab **C** to the retracted position and lock the latch assembly. The alignment pins **D** located on the back of the rail should be fully retracted.
2. Repeat step 1 for the front latch assembly.
3. From the back of the rack, 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 HMC 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 HMC onto the fixed rail assemblies.*



5

Install the HMC onto the fixed rail assemblies



Before installing the HMC 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.

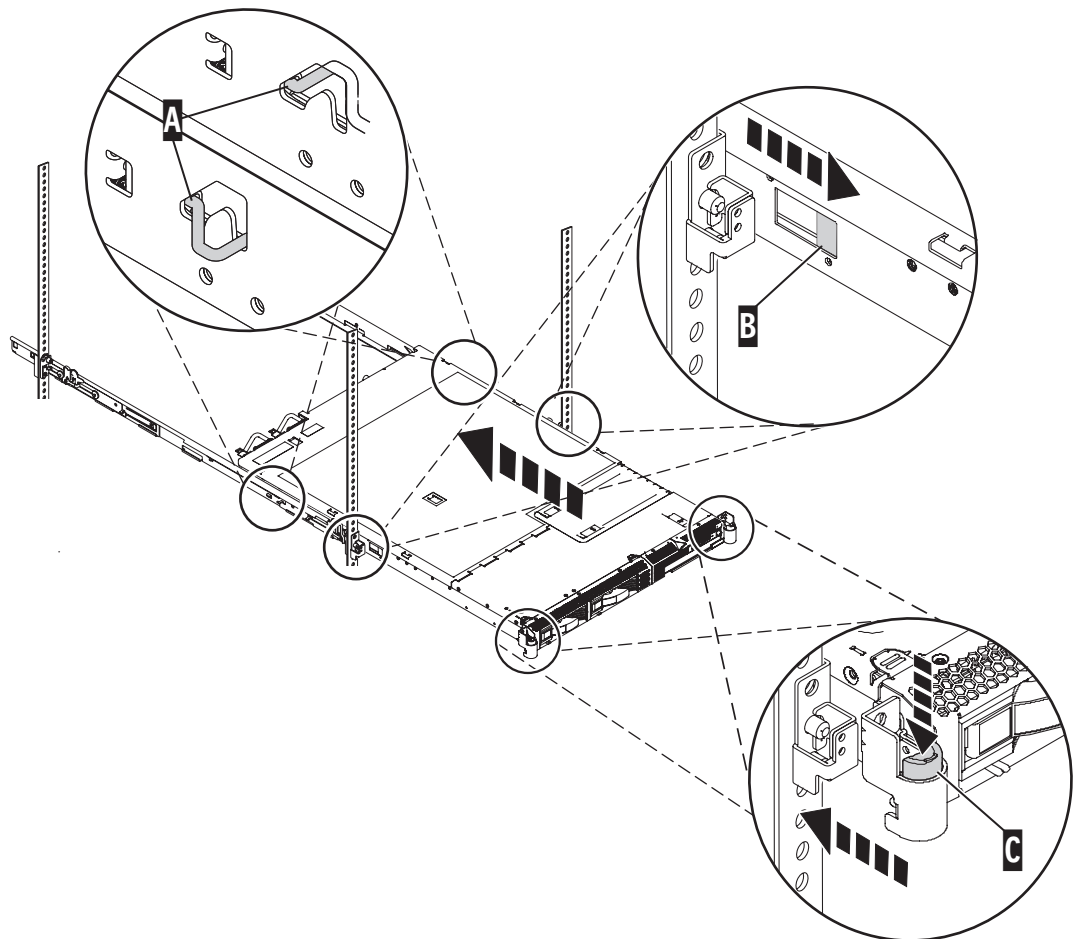
Before you begin: Read this entire task before completing any individual steps.

5.1

From the front of the rack, align the HMC on the rails and push the HMC 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 HMC into the rack the remainder of the way. As you push the HMC into the rack, the rail-lock pins extend out and lock into place.

5.2

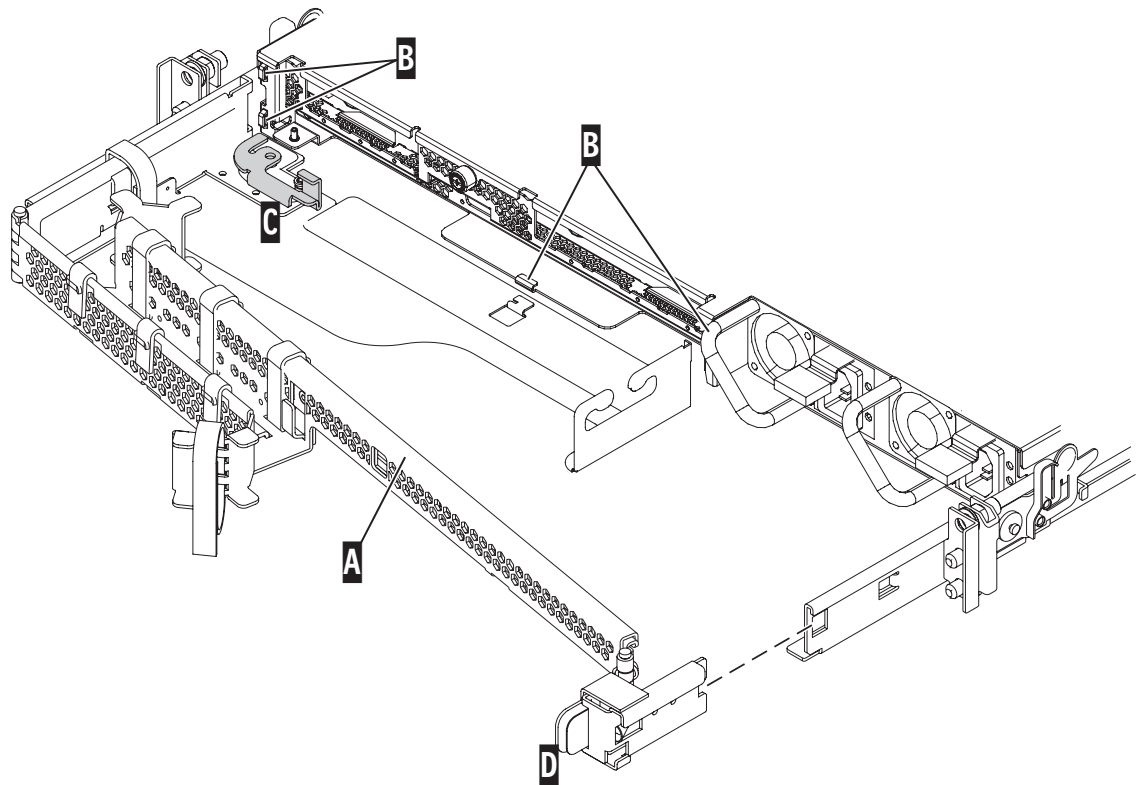
If the HMC does not snap in place, press down on the rack release buttons **C**, and push the HMC into the rack the remainder of the way.



You have finished installing the HMC 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 HMC.

Tip: If space is limited inside the rack, slide an adjacent unit 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 HMC, use the straps that are attached to the cable-management arm to secure the cables.

You have finished installing the HMC 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 HMC using fixed rails, go to task 4 *Install the fixed rail assemblies*.

7.1

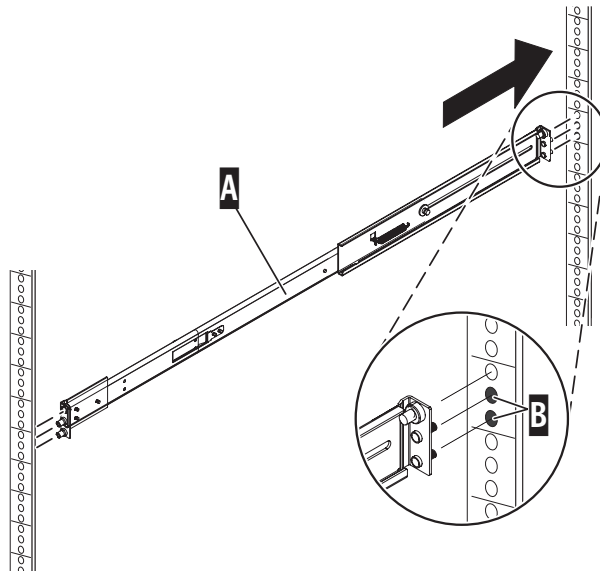
Locate the rack-mounting hardware kit, the cable-management arm, and the slide rail assemblies that were included with your HMC.

7.2

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

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

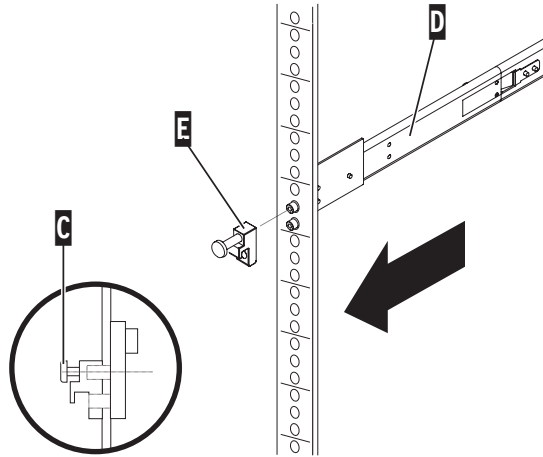
Press on the end of the slide rail **A** to compress the spring-loaded mechanism, and insert the slide rail into the front-right rack mounting flange **B** holes.

7.5

Repeat steps 7.3 and 7.4 for the left slide rail.

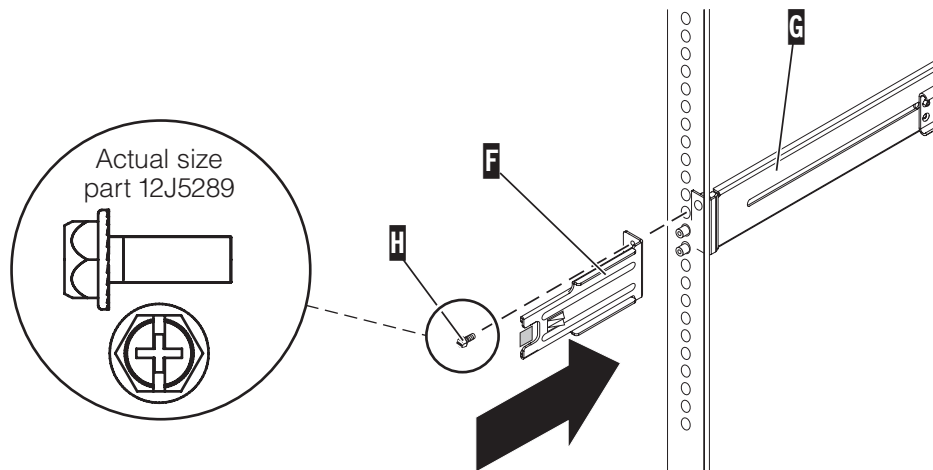
7.6

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**.



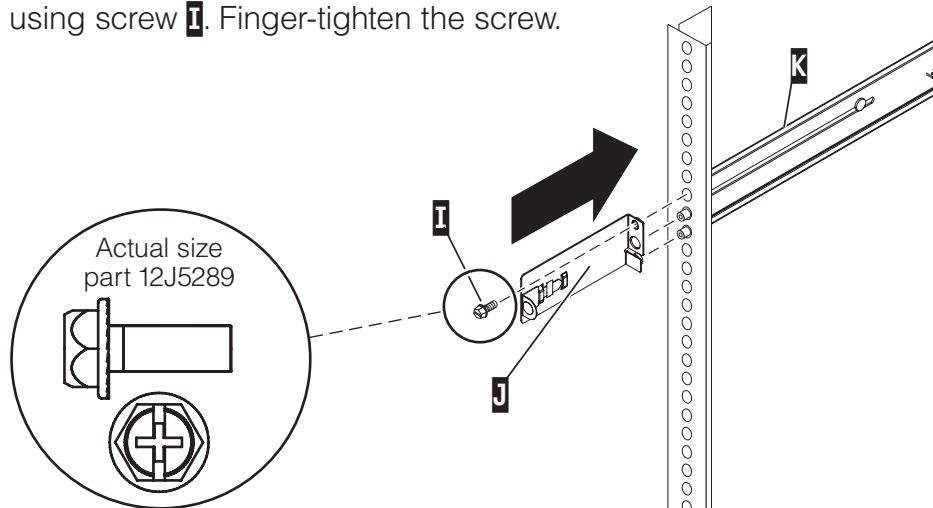
7.7

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.



7.8

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



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

8

Install the HMC onto the slide rail assemblies



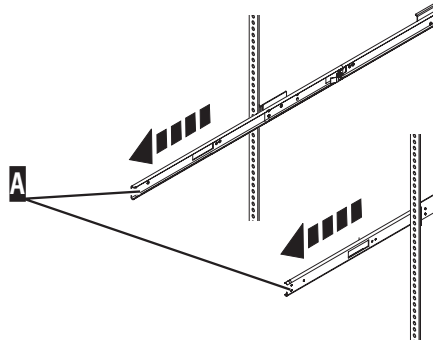
Before installing the HMC onto the slide rail assembly, ensure that the leveling feet are extended and that the stabilizer bracket is correctly installed to prevent the rack from falling forward.

Before you begin: 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.

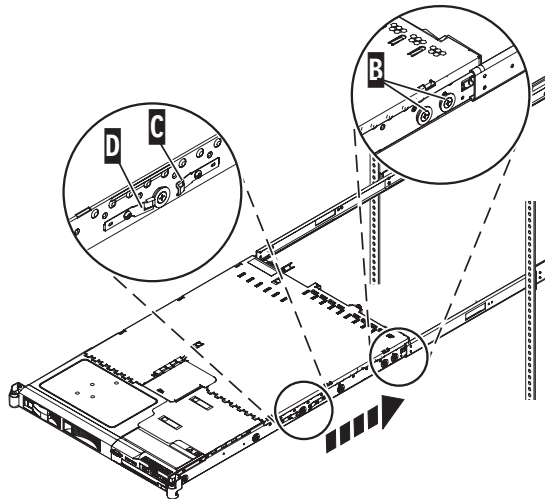
Important: The latch strikes on the front of the slide rail and the cable-management arm brackets must be installed before installing the HMC onto the rails. If these parts are not installed, the installation might cause the rails to compress and the HMC might fall out of the rack.



8.2

Lift the HMC to the height of the slides, and position the set of wheels **B** at the back of the HMC 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 HMC into the slide rails until the rear slide release latches **C** click into place, locking the HMC into the slide rails.

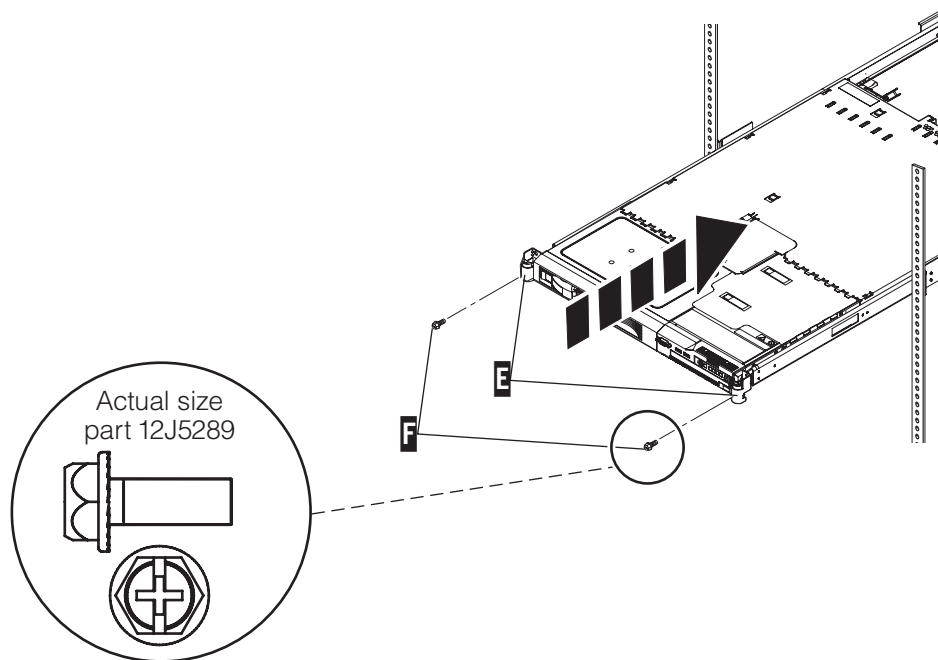
8.4

Press the front slide release latches **D** on both sides of the HMC, and move the HMC into the rack cabinet and back out to verify that the HMC moves freely.

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

8.5

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



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 HMC to the rack for transport, insert and tighten the two screws **F** to secure the HMC into the rack.

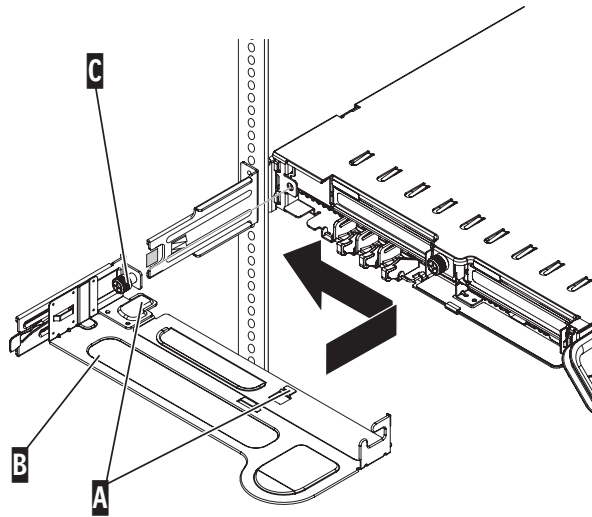
You have finished installing the HMC onto the slide rail assemblies. Go to task 9 *Install the cable-management arm.*

9

Install the cable-management arm

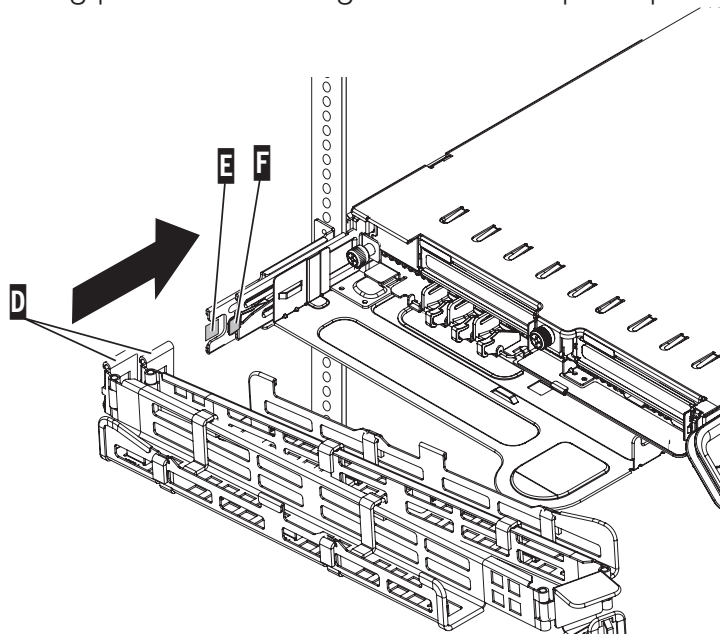
9.1

Align the tabs **A** on the cable-management arm mounting plate **B** with the slots on the back of the HMC. Slide the mounting plate **B** to the left to engage the tabs. Tighten the thumbscrew **C** to secure the mounting plate to the HMC.



9.2

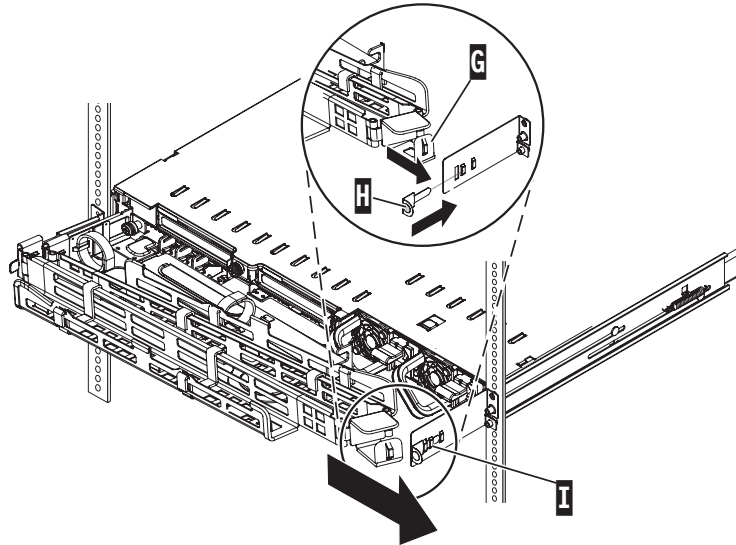
Slide the left hinge brackets **D** onto the cable-management arm mounting bracket **E** that you installed in step 7.7 and the mounting bracket **F** on the cable-management arm mounting plate until the hinge brackets snap into place.



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 HMC from sliding out of the rack. You must remove the latch pin **H** prior to sliding the HMC out of the rack.



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

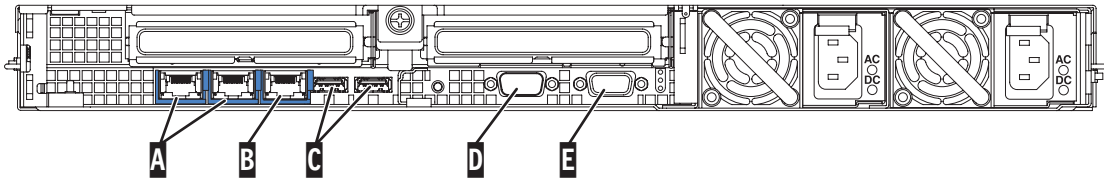
You have finished installing the cable-management arm. Go to task 10 *Cable the HMC and the server*.

10

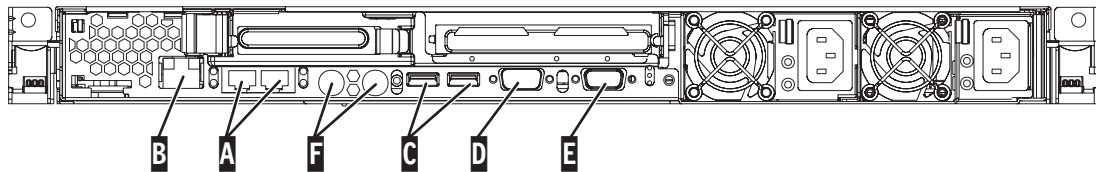
Cable the HMC and the server

Use the following illustrations to identify the location of the connectors described in these instructions:

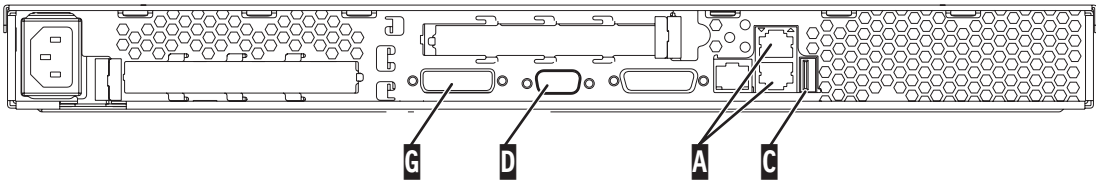
7310-CR4



7310-CR3



7310-CR2



10.1 Connect the monitor, keyboard, and mouse.

7310-CR4

Connect the monitor to the monitor connector **E**. Connect the mouse and the keyboard to the Universal Serial Bus (USB) connectors **C**.

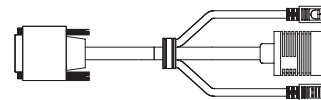
7310-CR3

Connect the monitor to the monitor connector **E**. Connect the mouse and the keyboard to the USB connectors **C** or the PS/2-type connectors **F**.

7310-CR2

Connect the monitor, keyboard, and mouse to the C2T-to-KVM adapter breakout cable.

Connect the C2T-to-KVM adapter breakout cable to the C2T IN port **G**.

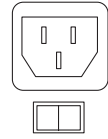


If your mouse and keyboard use USB connections, connect them to the USB connectors **C** in either the back or front of the HMC.

10.2

Connect the power cord to the monitor.

Important: Ensure that if there is a voltage switch next to the power connector on the monitor, it is in the appropriate position for the voltage used in your geographical area.



10.3

Connect the power cord to the HMC. **Do not connect the power cord to a power source until you are instructed to do so.**

10.4

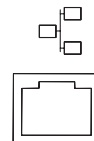
If you are not using a modem, skip to step 10.5.

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 **D** on the HMC. Then connect the telephone cable to the external modem and to the analog jack on the wall.

10.5

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

Important: For the 7310-CR3, use the left Ethernet port. For the 7310-CR2, use the lower-right Ethernet port.



10.6

If you are using an external modem, plug the power cord into the



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)

10.7

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 you are instructed to do so.**

10.8

Route the cables through the cable-management arm on the HMC, and secure the cables with the straps provided.

10.9

You have completed the basic setup of your HMC. Continue to task 11 *Finish your HMC setup.*

11

Finish your HMC setup

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

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 HMC, install software, apply fixes, and establish connections with your service provider:

11.1

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

11.2

Under Popular topics, click **Create a customized initial server setup checklist.**

11.3

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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Attention Department DDR
3605 Highway 52 North
Rochester, MN U.S.A. 55901-7829

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