



IBM 42U 1100 mm Enterprise V2 Dynamic Rack and Expansion Rack and IBM PureFlex System 42U Rack and Expansion Rack Unpacking Instructions

This document provides unpacking information for the IBM® 42U 1100 mm Enterprise V2 Dynamic Rack and Dynamic Expansion Rack and the IBM PureFlex™ System 42U Rack and 42U Expansion Rack. The IBM 42U racks *Installation Guide*, which is on the IBM *Documentation* CD that comes with the rack, contains instructions for installing the rack.

Important: You will need a minimum of 3 m (10 ft) in front of the pallet to unpack the rack.

Tool requirements and rack contents

You will need a utility knife or scissors to unpack the rack. The package contains the following items:

- One of the following racks:
 - IBM 42U 1100 mm Enterprise V2 Dynamic Rack
 - IBM 42U 1100 mm Enterprise V2 Dynamic Expansion Rack
 - IBM PureFlex System 42U Rack
 - IBM PureFlex System 42U Expansion Rack
- Front and rear rack doors
- Side covers (expansion racks do not come with side covers)
- Ramp

Note: To move a configured rack over a long distance, you must install the outriggers and package the rack using the original pallet, ramp, and packaging material. If the stability of the configuration is unknown, remove components from the top of the rack to make sure that the configured rack is safe to move (see safety Statement 11 on page 7).

- Keys for the rack doors and side covers
- Hardware kit containing miscellaneous rack components (located inside the rack, on the bottom, if the rack comes empty)
 - Wrench (used to raise the leveling pads and remove the bolts that attach the rack to the pallet)
 - One front stabilizer bracket
 - Miscellaneous parts (includes screws, nuts, tools, and other hardware)
 - Hardware kit for attaching racks in a suite (expansion rack only)
 - IBM *Documentation* CD, which includes the *IBM 42U 1100 mm Enterprise V2 Dynamic Rack and Expansion Rack* and *IBM PureFlex System 42U Rack and Expansion Rack, Types 7953 and 9363 Installation Guide* and the *IBM Rack Safety Information* document

If documentation updates are available, you can download them from the IBM website. The rack might have features that are not described in the documentation that comes with the product, and the documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the rack documentation. To check for updates, go to <http://www.ibm.com/supportportal/>.

For more information about racks and options, see <http://www.ibm.com/systems/xbc/cog/rackcabinetoptions/rackcabinetoptions.html>.

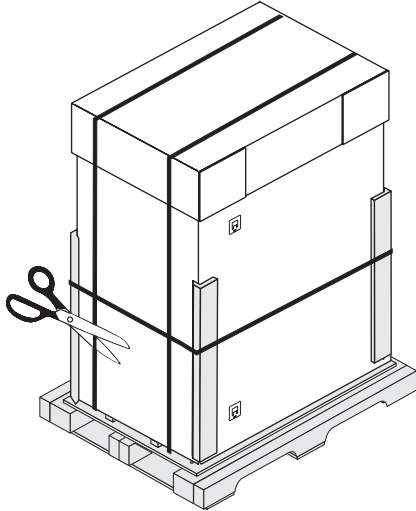
Unpacking a standard or expansion rack

This section describes how to unpack and prepare the rack to be moved to its installation site.

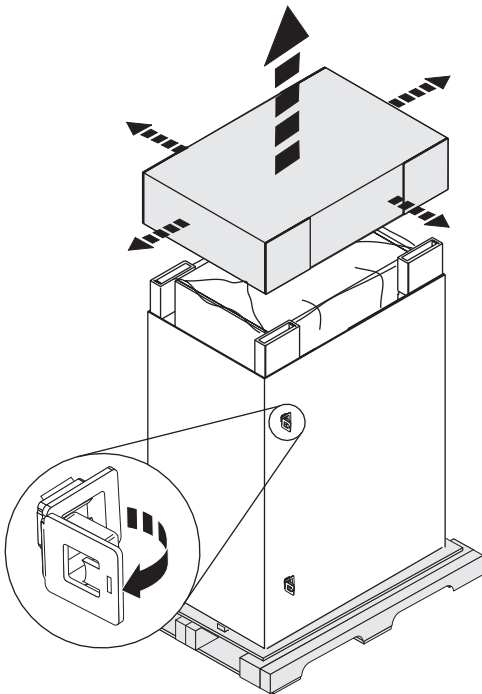
Removing the packaging material

To remove the protective packaging from the rack, complete the following steps:

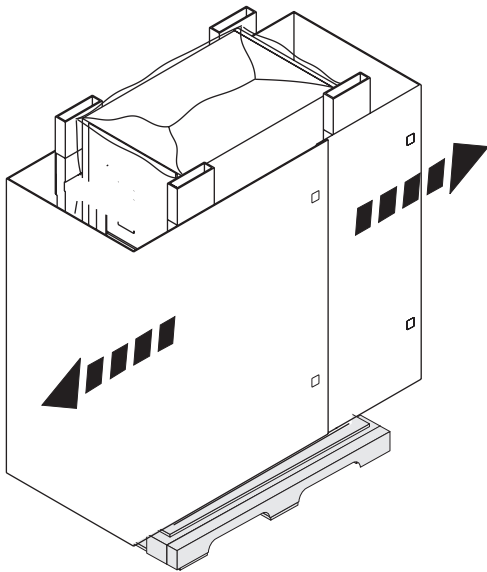
1. Cut the two vertical bands and one horizontal band from around the rack packaging. Remove the four cardboard corner frames.



2. Pull the cardboard cap off the top of the rack; then, open the four plastic clips on the sides of the rack.

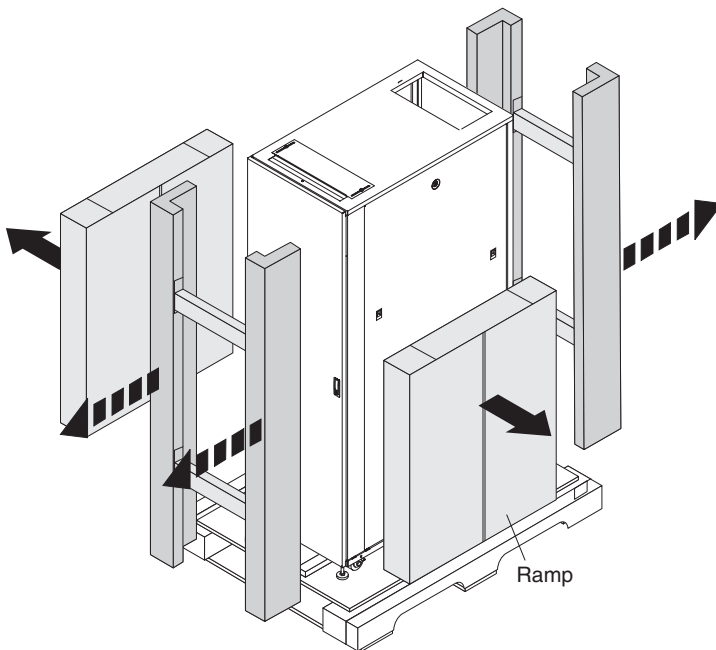


3. Remove the cardboard packaging that surrounds the rack.



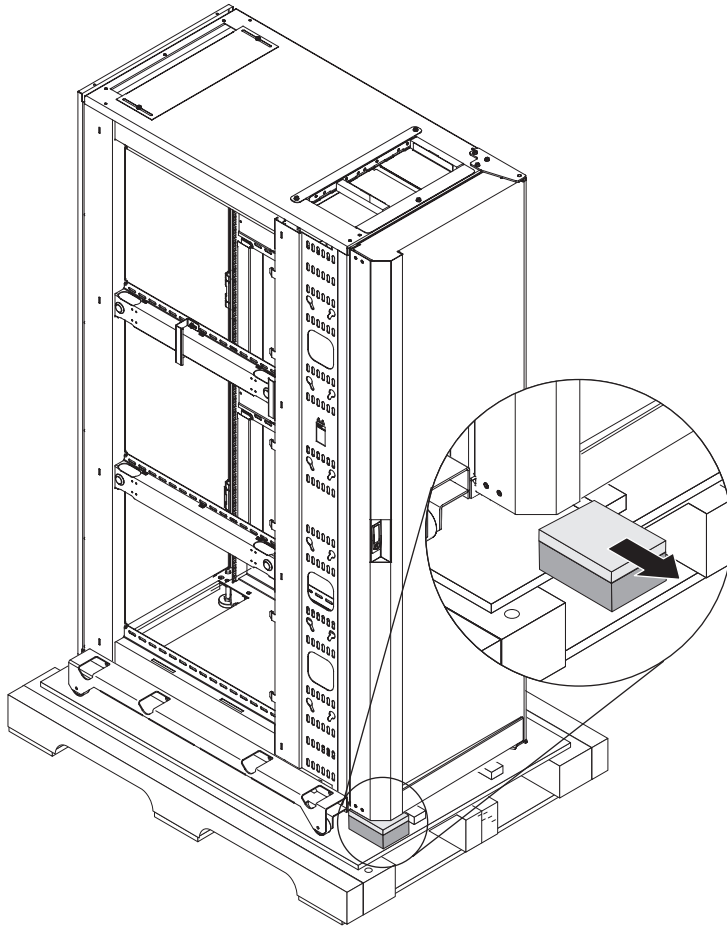
4. Cut the shrink wrap that surrounds the rack.
5. The ramp is packaged in a separate cardboard box on the side of the rack. Cut the strapping tape that secures the two protective cardboard frames and the ramp box to the side of the rack, making sure that you hold the ramp so that it does not fall. Set the ramp aside to use later in the procedure. Remove the two protective cardboard frames from the front and rear of the rack.

Note: In some rack models, there is a second cardboard box that is secured to the other side of the rack. This box contains miscellaneous parts that are required for the rack configuration. Make sure that this box does not fall when the strapping tape is cut. Set this box aside.



6. Remove the plastic bag that covers the rack.

7. If the rack has a rear door heat exchanger, hold the rear door heat exchanger closed and remove the foam block that is under the left side.



Removing the rack from the pallet

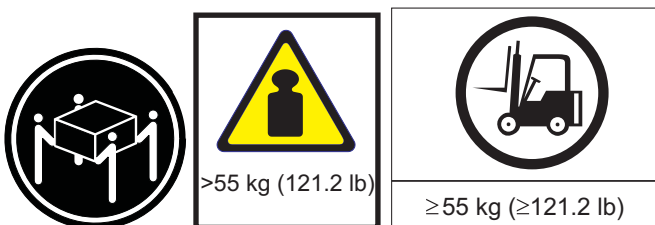
Before you move the rack off the pallet and to its final location, read the following important safety guidelines.

Statement 13:

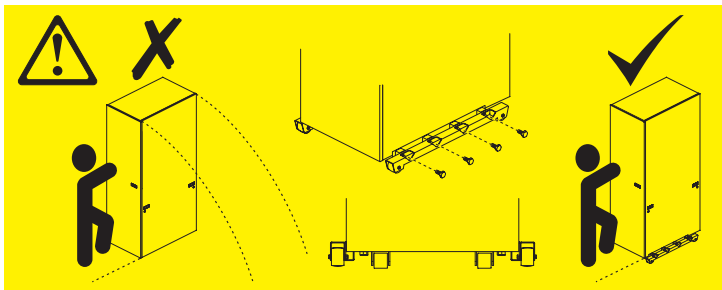


CAUTION:

The weight of this part or unit is more than 55 kg (121.2 lb). It takes specially trained persons, a lifting device, or both to safely lift this part or unit.



 	<p>Use Only Professional Movers!</p> <p>يجب الاستعانة بخبرات نقل متخصصة</p> <p>Utilizar somente transportadores profissionais</p> <p>Faire appel à des professionnels seulement pour déplacer l'équipement.</p> <p>只能使用专业搬运机</p> <p>Maak gebruik van professionele verhuizers</p> <p>Faites exclusivement appel à des déménageurs professionnels.</p> <p>Nur professionelle Transportunternehmen mit der Durchführung beauftragen.</p> <p>Να μετακινείται μόνο από επαγγελματίες μεταφορείς</p> <p>העזרו במובילים מקצועיים בלבד</p> <p>Csak hivatásos szállítóval költöztessé</p> <p>Avvalersi solo di trasportatori esperti</p>
 	<p>機器を移動する際には専門の業者に依頼してください。</p> <p>전문 운송 인력만이 이동시킬 수 있습니다.</p> <p>Należy korzystać wyłącznie z usług wyspecjalizowanych firm.</p> <p>El traslado del equipo debe realizarlo personal especializado</p> <p>Trebaju raditi samo profesionalni transportni radnici</p> <p>Použijte pouze profesionální stěhováky</p> <p>Brug kun professionelle flyttefolk.</p> <p>Käytä vain ammattitaitoista kuljetusliikettä</p> <p>Utstyret må kun flyttes av godkjent flyttepersonell</p> <p>Contacte apenas transportadoras profissionais</p> <p>Используйте только профессиональных грузчиков</p> <p>Na presun použite len profesionálov</p> <p>Använd endast professionell flyttpersonal</p>



Statement 11:



CAUTION:

Removing components from the upper positions in the rack cabinet improves rack stability during relocation. Follow these general guidelines whenever you relocate a populated rack cabinet within a room or building:

- Reduce the weight of the rack cabinet by removing equipment starting at the top of the rack cabinet. When possible, restore the rack cabinet to the configuration of the rack cabinet as you received it. If this configuration is not known, you must do the following:
 - Remove all devices in the 22U position and above.
 - Ensure that the heaviest devices are installed in the bottom of the rack cabinet.
 - Ensure that there are no empty U-levels between devices installed in the rack cabinet below the 22U level.
- If the rack cabinet you are relocating is part of a suite of rack cabinets, detach the rack cabinet from the suite.
- Inspect the route that you plan to take to eliminate potential hazards.
- Verify that the route that you choose can support the weight of the loaded rack cabinet. Refer to the documentation that comes with your rack cabinet for the weight of a loaded rack cabinet.
- Verify that all door openings are at least 760 x 2083 mm (30 x 82 in.)
- Ensure that all devices, shelves, drawers, doors, and cables are secure.
- Ensure that the four leveling pads are raised to their highest position.
- Ensure that there is no stabilizer bracket installed on the rack cabinet.
- Do not use a ramp inclined at more than ten degrees.
- Once the rack cabinet is in the new location, do the following:
 - Lower the four leveling pads.
 - Install stabilizer brackets on the rack cabinet.
 - If you removed any devices from the rack cabinet, repopulate the rack cabinet from the lowest position to the highest position.

If a long distance relocation is required, restore the rack cabinet to the configuration of the rack cabinet as you received it. Pack the rack cabinet in the original packaging material, or equivalent. Also, lower the leveling pads to raise the casters off of the pallet and strap the rack cabinet to the pallet.

To remove the rack from the pallet, complete the following steps:

1. Read the safety information before you move the rack off the pallet.
2. Know the weight of the rack cabinet. To help determine the weight of the rack, see the *Installation Guide*. A general guideline is to assume a weight of 23 kg (50 lb) per rack U-space.
3. Use the following weight limit guidelines:
 - If the rack is empty, at least two people are required to move the rack.
 - If the rack weight is between 142 and 227 kg (between 313 and 500 lb), three or four people are required to move the rack.
 - If the rack weight is greater than 227 kg (500 lb), professional movers are required to move the rack.

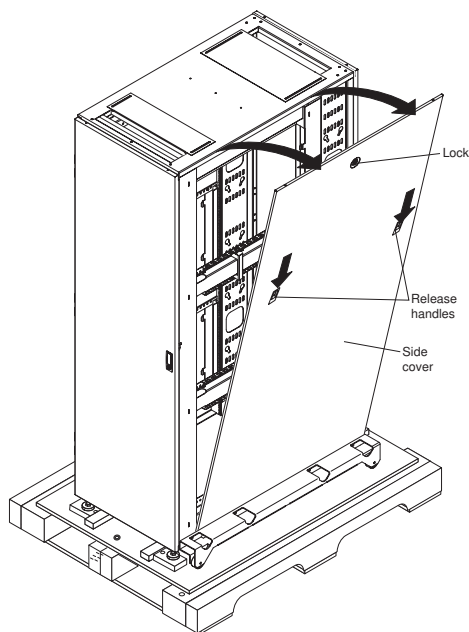
For a configured rack with a rear door heat exchanger: Remove the side covers and front door to enable the specially trained persons to push on the rigid frame of the rack and move it down the ramp and to its final location. The side covers are not designed to be pushed on when a configured rack is moved on its casters. Removing the side covers also reduces the weight of the rack and enables easier handling. Do *not* remove the rear door heat exchanger.

For all other configured racks: Remove the side covers, front door, and rear door to enable the specially trained persons to push on the rigid frame of the rack and move it down the ramp and to its final location. The side covers are not designed to be pushed on when a configured rack is moved on its casters. Removing the side covers also reduces the weight of the rack and enables easier handling. Do *not* remove the rear door heat exchanger.

To remove the side covers, rear door, and front door, see step 4 through step 6 on page 10.

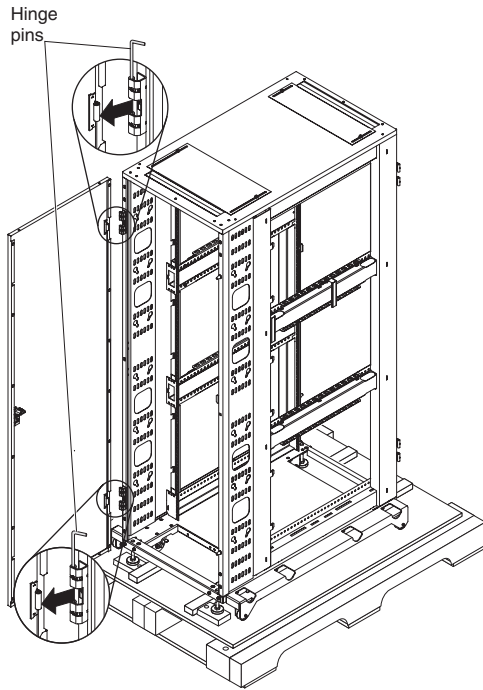
4. Remove the side covers:

- a. Unlock the button lock on a side cover. The keys are attached with a cable tie inside the front door.



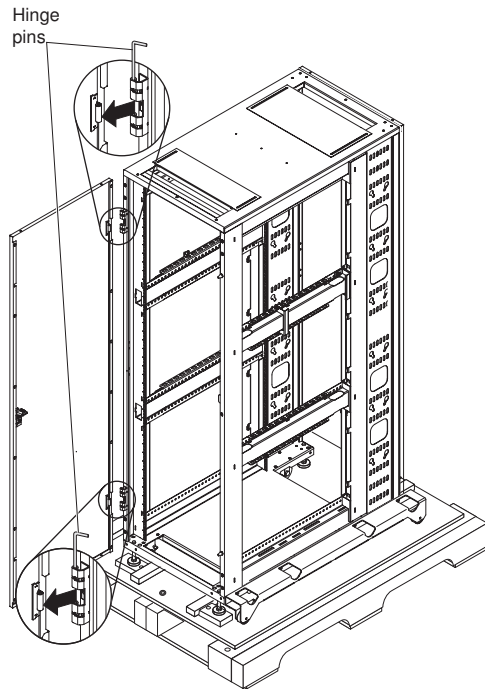
- b. Press down on both release handles, and tilt the top of the side cover slightly toward you; then, lift the side cover up and away from the ridge on the bottom of the rack.
- c. Repeat this procedure to remove the second side cover.

5. Remove the rear door (all rack models, except if the rack has a rear door heat exchanger). Do *not* remove the rear door heat exchanger.
 - a. Open the rear door.



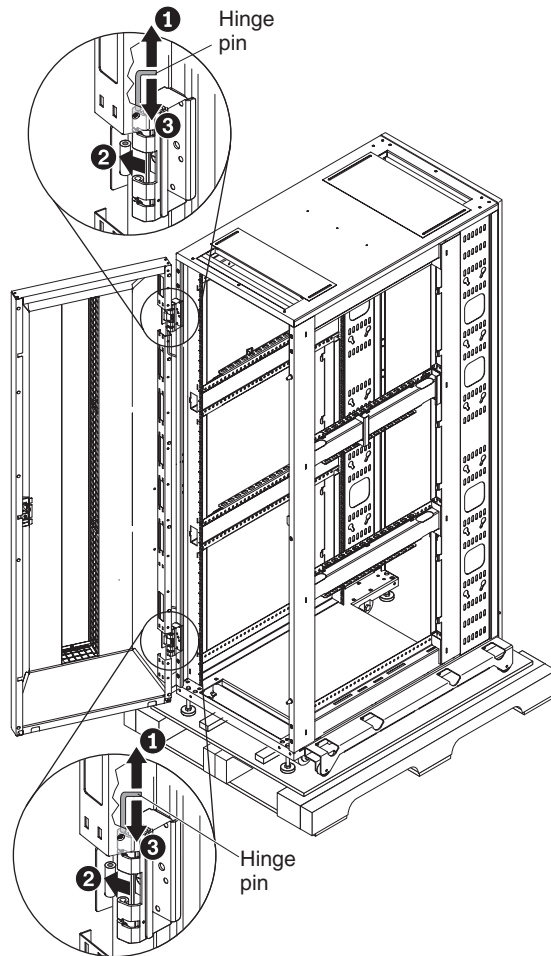
- b. Holding the door firmly with one hand, lift each hinge pin until it locks in the open position. This releases the door from the hinges.
 - c. Grasp the door firmly with both hands and pull it away from the hinges; then, set the door aside.

6. Remove the front door according to your rack model:
- For an Enterprise V2 Dynamic rack, complete the following steps:
 - a. Open the front door.



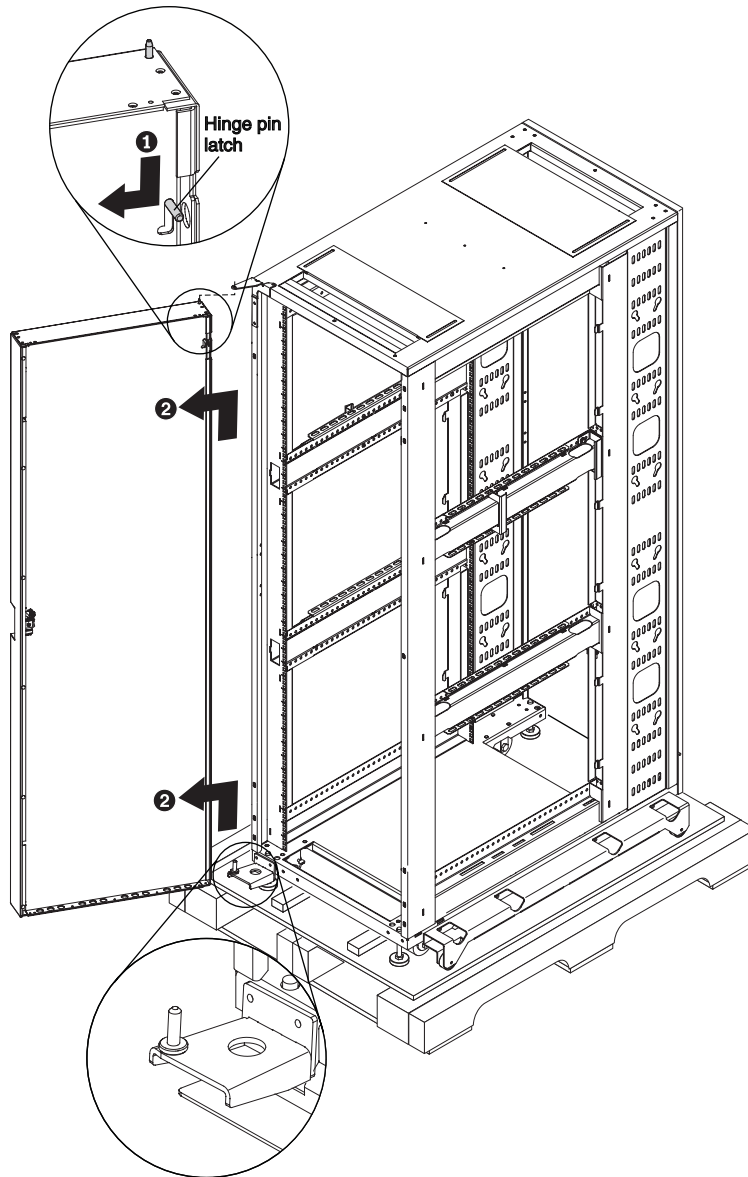
- b. Holding the door firmly with one hand, lift each hinge pin until it locks in the open position. This releases the door from the hinges.
- c. Grasp the door firmly with both hands and pull it away from the hinges; then, set the door aside.
- d. Repeat this procedure to remove the rear door.

- For an IBM PureFlex System rack (9363-4AX and 9363-4BX), complete the following steps:
 - a. Open the door.



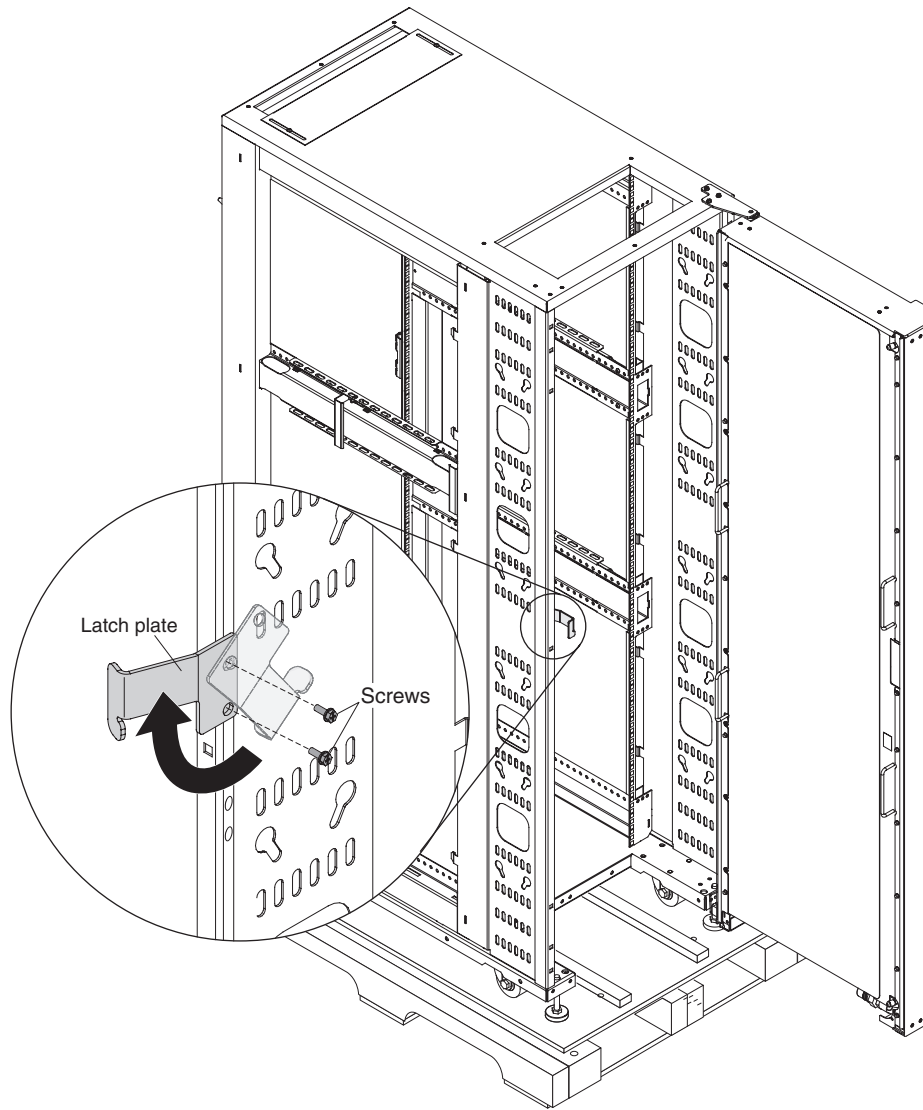
- b. To release the door from the hinges, lift up each hinge pin until it locks in the open position **1**.
- c. Hold the door with one hand and move the door so that the hinges are no longer aligned **2**.
- d. Push the hinge pins back into the frame **3**. The door cannot be removed if the hinge pins are not pushed back down.
- e. Remove the door and set it aside.

- For an IBM PureFlex System rack (9363-4CX and 9363-4DX), complete the following steps:
 - a. Open the front door.
 - b. Holding the door firmly with one hand, push the top hinge pin latch down and to the left to release the hinge pin **1**.

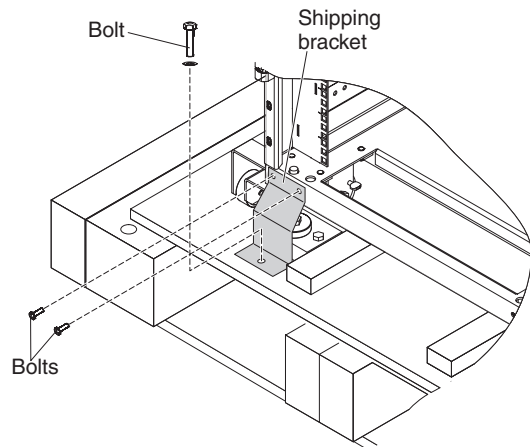


- c. Grasp the door firmly with both hands and lift it up and off the bottom hinge pin and pull it away from the rack **2**; then, set the door aside.

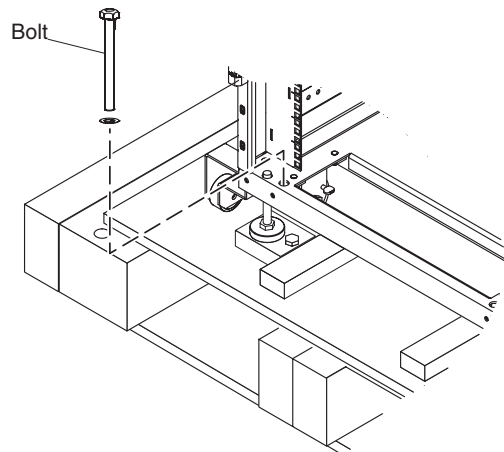
7. **For a rack with a rear door heat exchanger**, move the rear door heat exchanger latch plate to its correct position. Remove the two screws from the latch plate, orient the latch plate as shown in the illustration, and align the holes in the latch plate with the holes on the rack flange. Secure the latch plate to the rack frame with the two screws. Close the door and make sure that it latches securely.



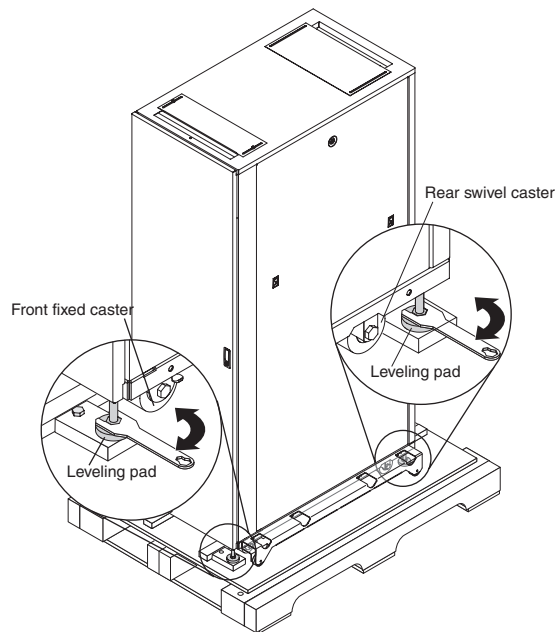
8. Use the wrench (comes in the hardware kit) to remove the bolts from the two shipping brackets on the front of the rack. The shipping brackets secure the rack to the pallet in the front. There are three bolts in each bracket. Save one of the short bolts to attach the ramp to the pallet later in this procedure.



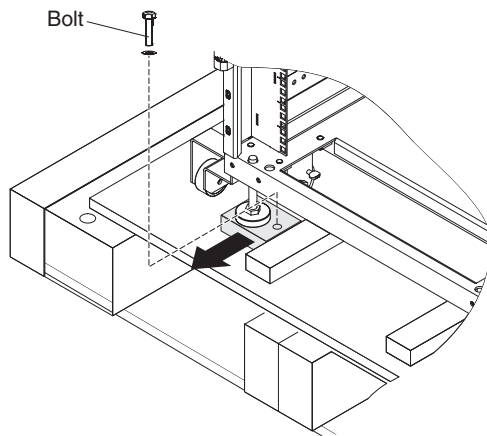
9. Use the wrench to remove the two corner bolts that secure the rear of the rack to the pallet.



10. Use the wrench to raise the four leveling pads (one per corner) to their highest position so that you can roll the rack on its casters.

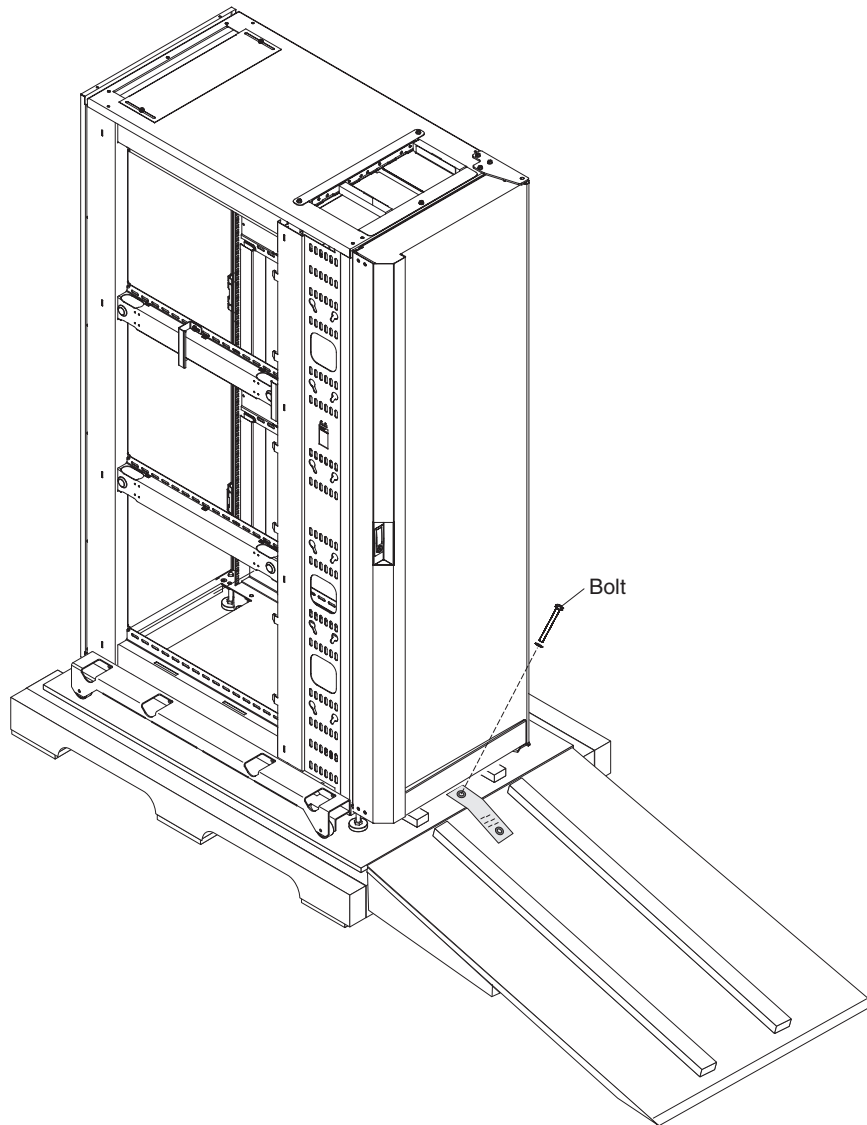


11. Use the wrench to remove the bolt that secures the wooden block that is under the leveling pad. Slide the block toward you to remove it. Repeat this step to remove each wooden block.



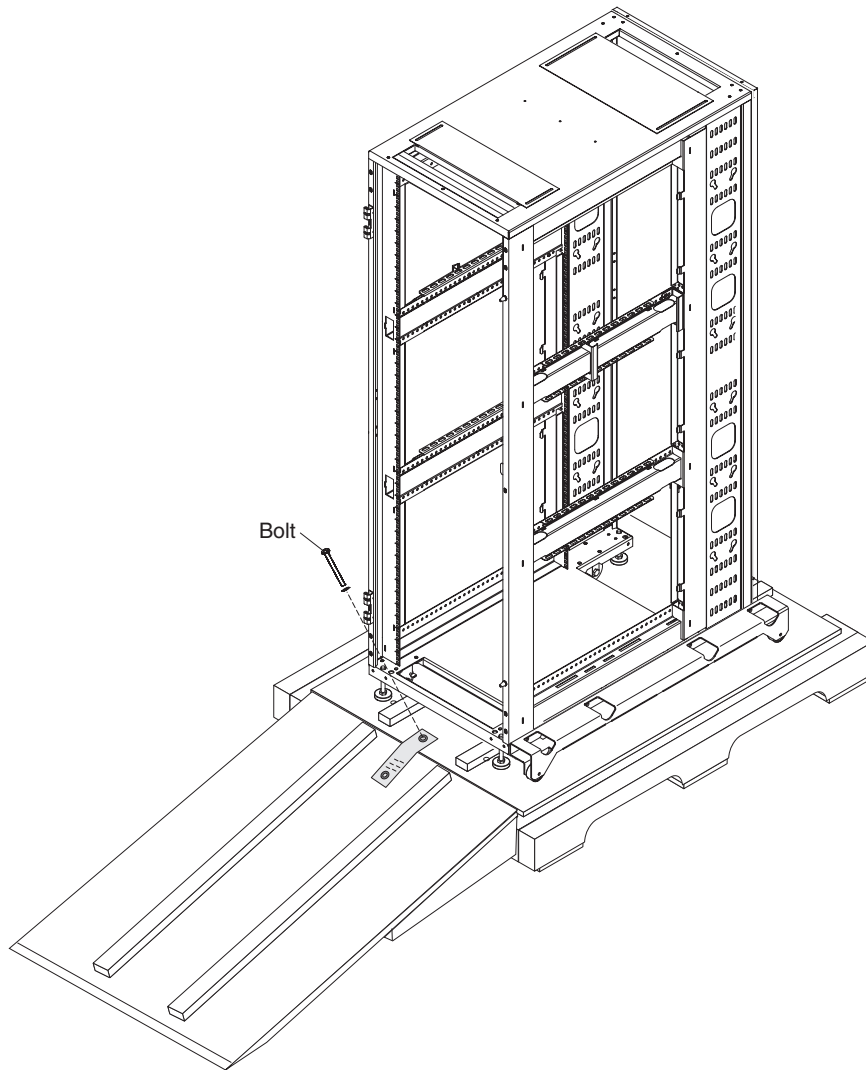
12. Attach the ramp to the pallet.

For a rack with a rear door heat exchanger, install the ramp on the rear of the rack.



- a. Unpack the ramp from the cardboard packaging.
- b. Position the angled end of the ramp away from the pallet.
- c. Push the ramp so that it is flush against the edge of the pallet.
- d. Align the hole in the plastic strap that is attached to the ramp with the hole in the pallet.
- e. Use one short bolt that you removed in step 8 on page 14 and insert it through the hole in the plastic strap and the hole in the pallet.

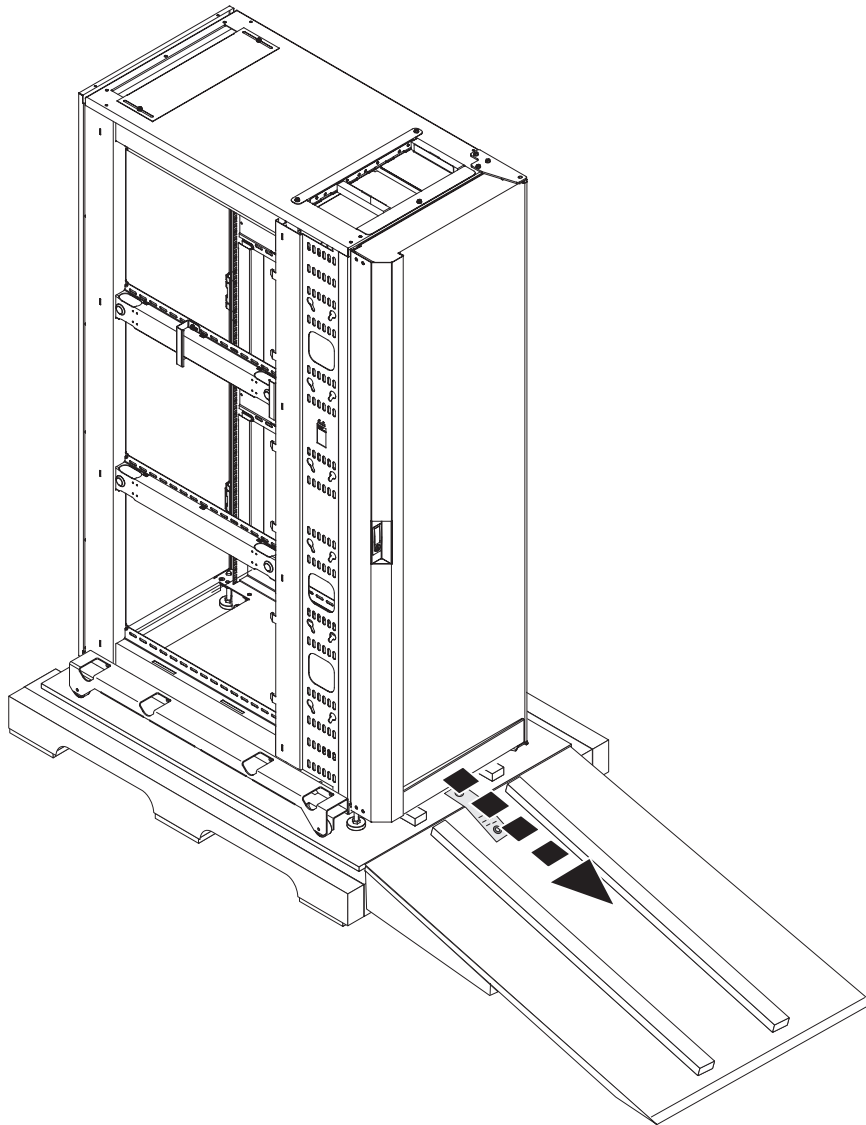
For all other racks, you can install the ramp on either the front or rear of the rack.



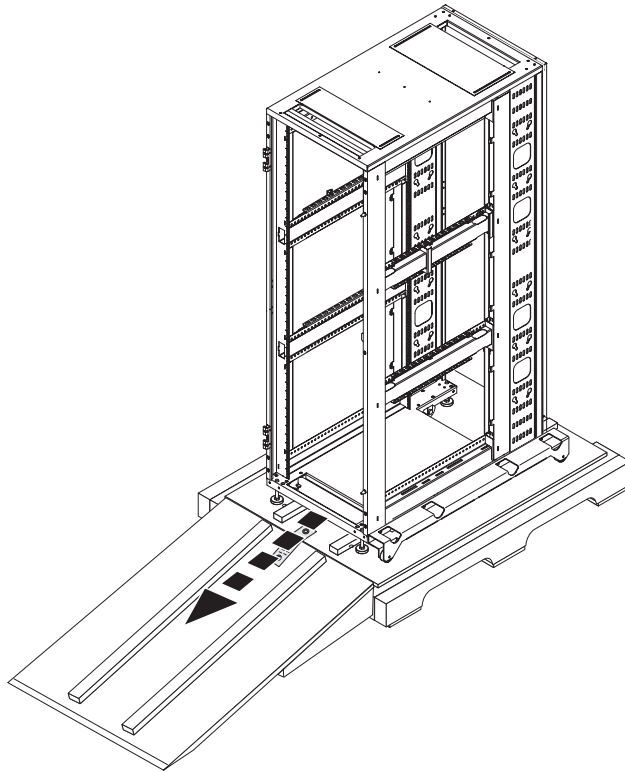
- Unpack the ramp from the cardboard packaging.
- Position the angled end of the ramp away from the pallet.
- Push the ramp so that it is flush against the edge of the pallet.
- Align the hole in the plastic strap that is attached to the ramp with the hole in the pallet.
- Use one short bolt that you removed in step 8 on page 14 and insert it through the hole in the plastic strap and the hole in the pallet.

13. Moving the rack down the ramp:

For a rack with a rear door heat exchanger: Make sure that one specially trained person holds onto the rear door heat exchanger and guides the rack down the ramp. The other specially trained persons must guide the rack down the ramp by holding onto the rack frame. Slowly roll the rack down the ramp until the casters are on the floor. Move the rack to the final location.



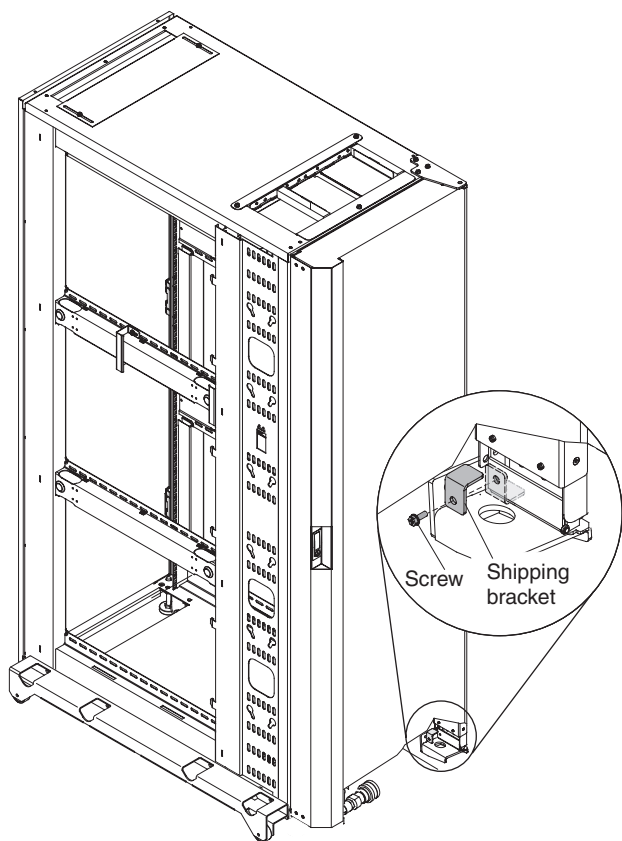
For all other racks: Make sure that the specially trained persons guide the rack down the ramp by holding onto the rack frame. Slowly roll the rack down the ramp until the casters are on the floor. Move the rack to the final location.



14. Reinstall the side covers, front door, and rear door (if you removed it). For more information, see the *Installation Guide* on the IBM Documentation CD that comes with the rack.

Store the pallet, ramp, and packaging material for use in the future if you have to relocate the rack.

For a rack with a rear door heat exchanger, unscrew the shipping bracket, rotate it 180°, and screw the bracket to the rear door heat exchanger.



To complete the final tasks for a rack with a rear door heat exchanger (for example, installing the inner and outer access panels), see the *IBM Rear Door Heat eXchanger Installation and Maintenance Guide* that comes with the rear door heat exchanger or go to <http://www.ibm.com/supportportal> to check for updates.

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