



2-Post Rack Mount Kit Installation Instructions

Review the documentation that comes with your rack for safety and cabling information. Before installing your IBM® BladeCenter® HT unit in a rack, review the following guidelines:

- Make sure that the room air temperature is below 40°C (104°F).
- Do not block any air vents; usually, 15 cm (6 in.) of air space in the rear and 5 cm (2 in.) in the front provides proper airflow.
- Plan the device installation starting at the bottom of the rack cabinet.
- Make sure that your 2-post rack supports the weight of the BladeCenter HT. A fully configured BladeCenter HT weighs approximately 158.8 kg (350 lb). See the documentation that comes with your 2-post rack for more information.
- Install the heaviest device in the bottom of the rack cabinet.
- Do not extend more than one device out of the rack cabinet at the same time.
- Remove the rack doors and side panels to provide easier access during installation.
- Connect the server to a properly grounded outlet.
- Four or more people are required to install the device in a rack.
- Use shear plates for any unused U spaces within a rack.
- For information on connecting the BladeCenter HT Type 8740 and 8750 unit to a power source, see "Supplying power to the BladeCenter HT unit" in the *Installation and User's Guide*.
- The BladeCenter HT unit is designed to be rack-compatible with NEBS-compliant 2-post racks that have size 12-24 tapped holes.

Rack Safety Information, Statement 2



DANGER

- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- Always install servers and optional devices starting from the bottom of the rack cabinet.
- Always install the heaviest devices in the bottom of the rack cabinet.

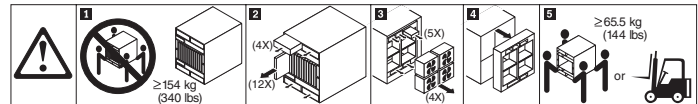
Rack Safety Information, Statement 9



DANGER

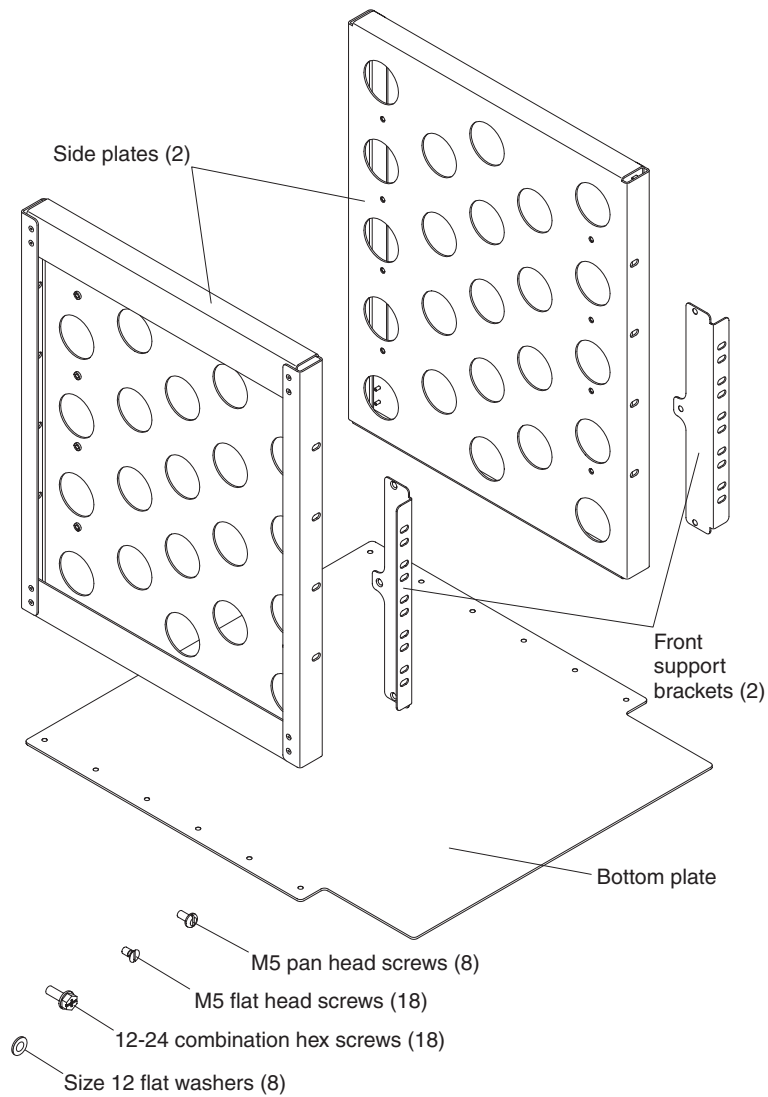
Overloading a branch circuit is potentially a fire hazard and a shock hazard under certain conditions. To avoid these hazards, ensure that your system electrical requirements do not exceed branch circuit protection requirements. Refer to the information that is provided with your device for electrical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

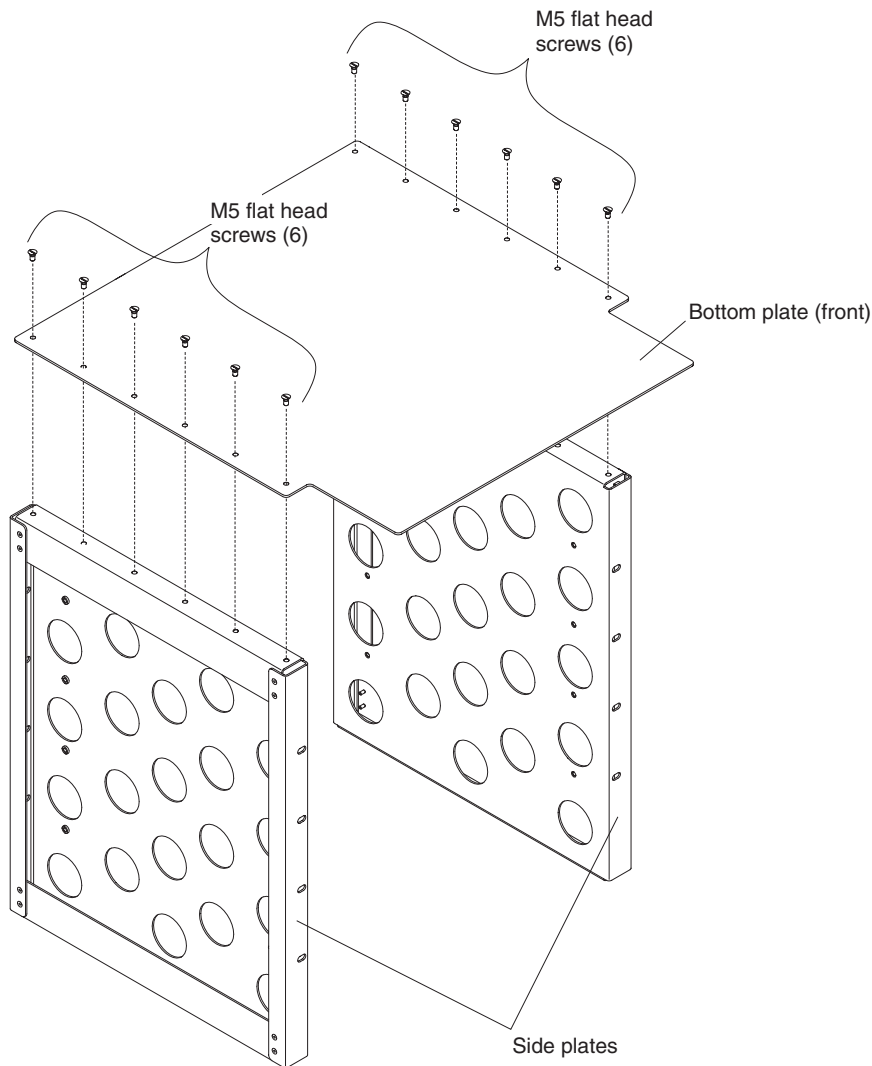
Safety Information, Statement 20



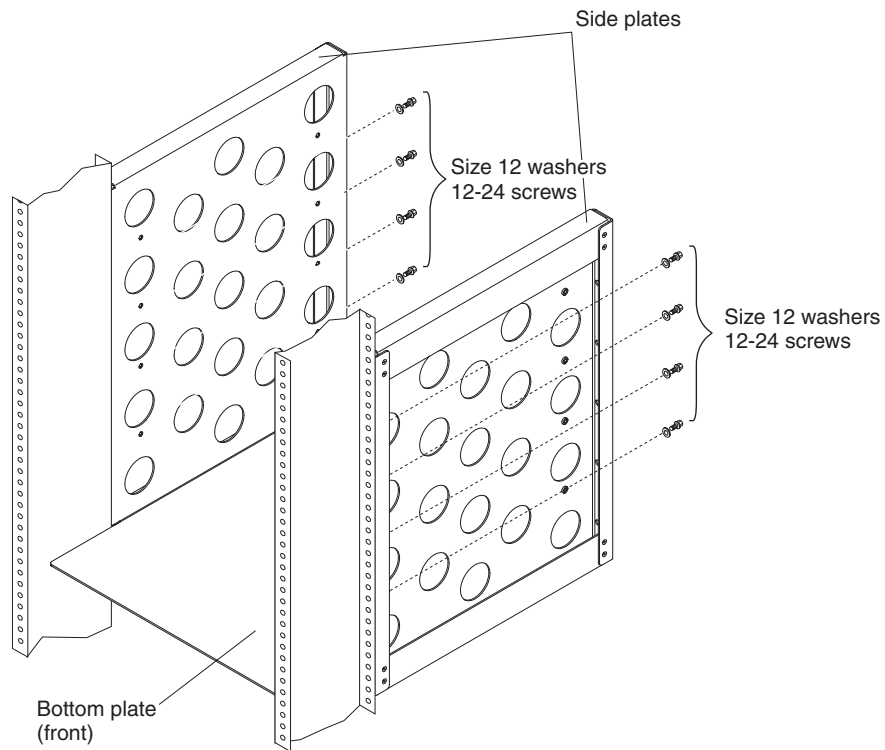
To avoid personal injury, before lifting the unit, remove all the blades, power modules, and blowers to reduce the weight.

The following illustration shows the items contained in the IBM BladeCenter HT 2-Post Rack Installation Kit. If any items are missing or damaged, contact your place of purchase.

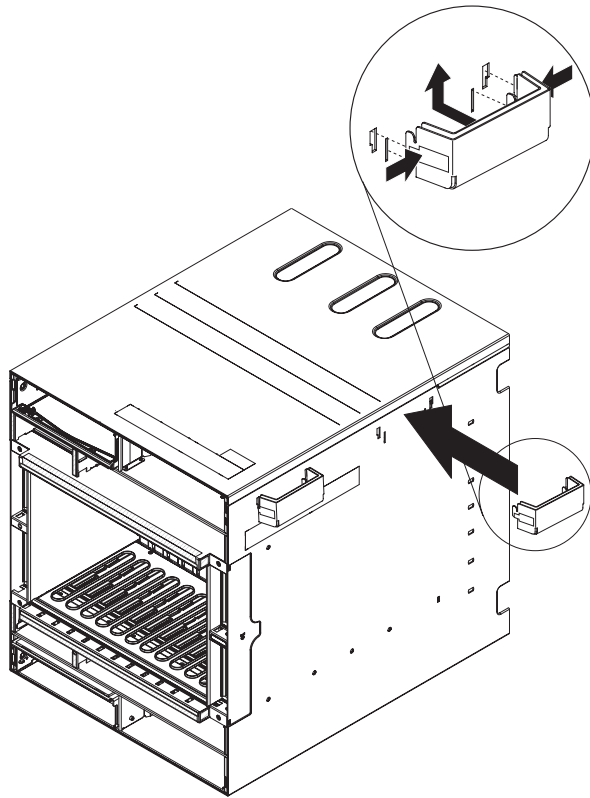




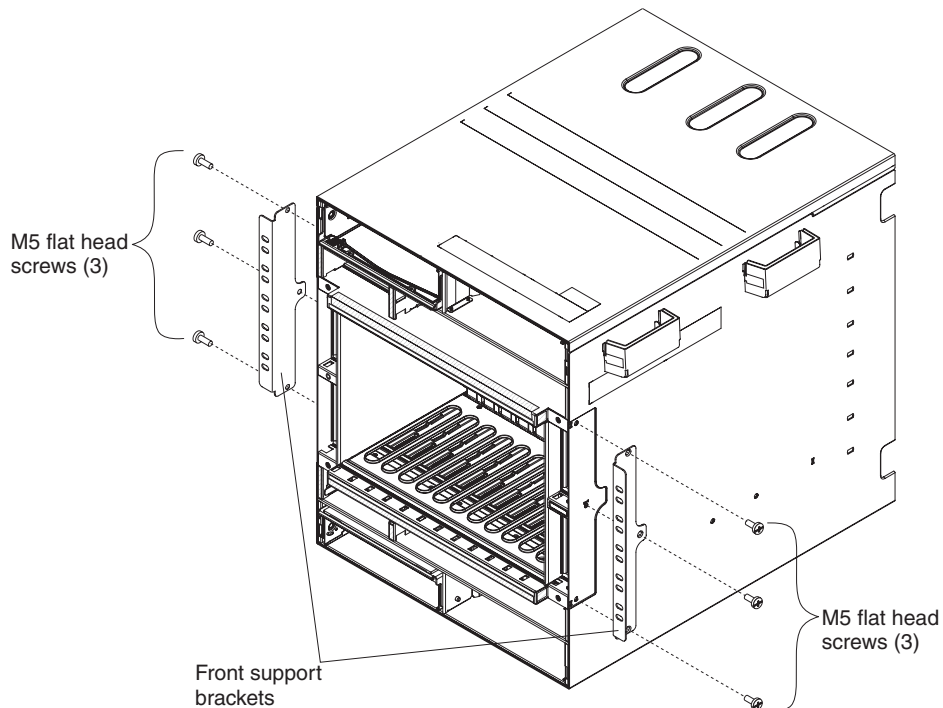
1. Orient the side plates so that the surface with the large holes face each other and the six circular (M5 size) screw holes face upward.
2. Orient the bottom plate so that the M5 screw holes are aligned with the M5 screw holes on the side plates.
3. Secure the bottom plate to the side plates using six M5 flat head screws for each side plate.
4. Position the 2-post rack template on the rear of the rack posts so that the edges of the template do not overlap any other devices that are installed. The rack template will indicate which holes require a 12-24 self-tapping combination hex screw.
5. Mark the holes indicated by the rack template so that they can easily be identified while mounting the rack kit to the rack.
6. Thread the mounting holes indicated by the rack template:
 - a. Thread the mounting holes in the rack by partially installing eight 12-24 self-tapping combination hex screws into the locations indicated by the rack template.
 - b. Remove the screws from the rack and store them for later use.
7. Orient the rack kit so that the bottom plate is on the bottom and the front edge of the bottom plate is positioned towards the front of the rack.
8. Align the mounting holes on each side plate with the marked mounting holes on the rear of the rack.



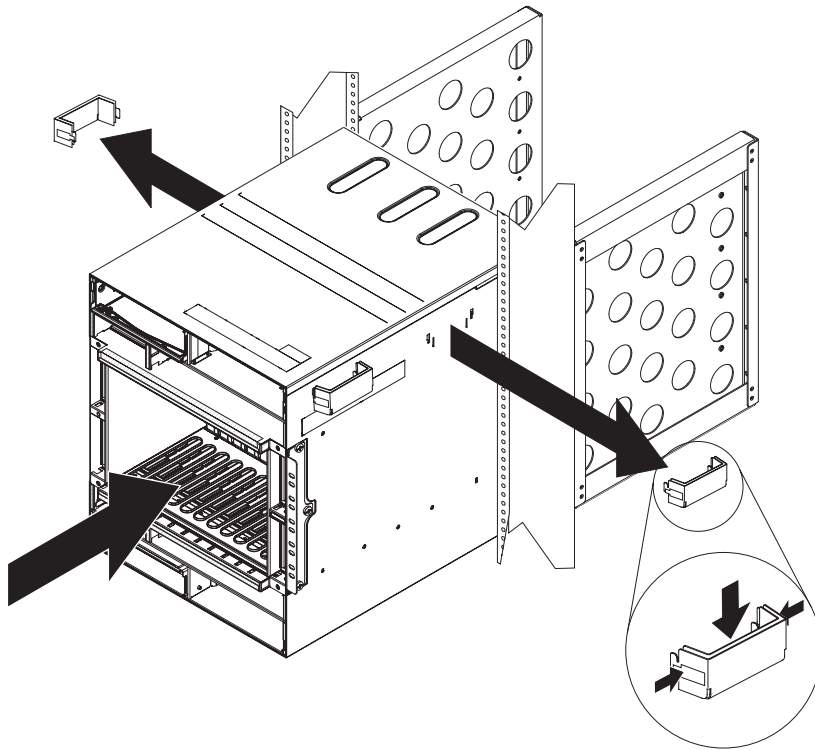
9. Install a size 12 washer on each of the 12-24 combination hex screws and then install them through the side plate mounting holes and into the marked rack mounting holes. Do not fully tighten the 12-24 combination hex screws.
10. Reduce the weight of your BladeCenter HT unit by removing the blade servers, power modules, I/O modules, management modules, media trays, fan modules and the fan shuttle. See "Installing the BladeCenter HT unit in a rack" in the *Installation and User's Guide* for more information.



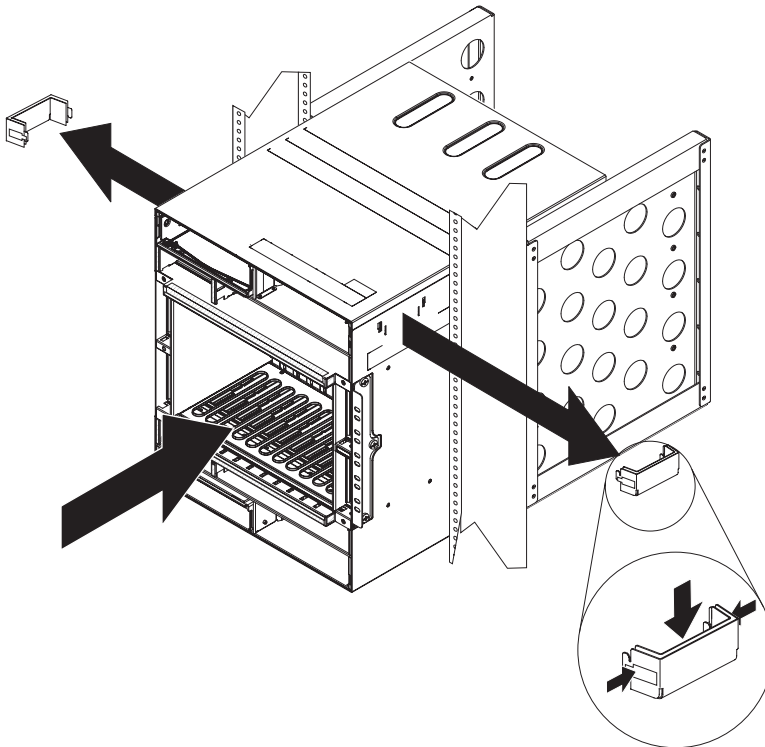
11. Install the lift handles that come with the BladeCenter HT unit on the chassis.



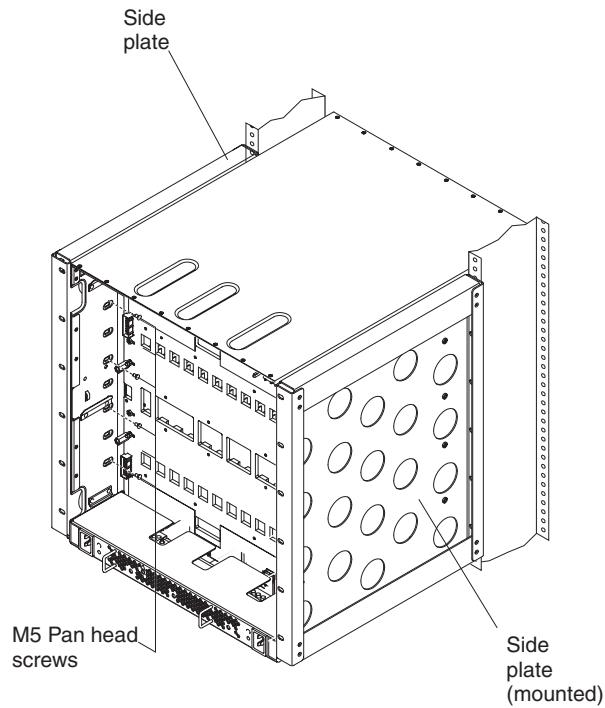
12. Install the front support brackets onto the BladeCenter HT chassis, using three M5 combination flat-head screws for each bracket.
13. Using the lift handles, lift the chassis; then, slide the rear of the chassis into the front of the rack until the rear lift handles almost touch the front of the rack posts.



14. Remove the rear lift handles and push the chassis into the rack until the front handles almost touch the front of the rack posts.



15. Remove the front lift handles and push the chassis all the way into the rack.

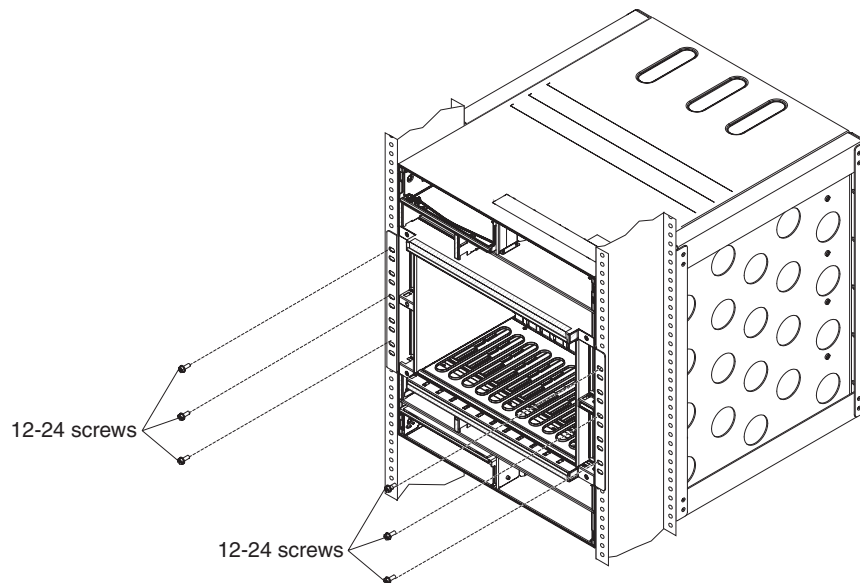


16. Secure the chassis to the side plates:

- a. Look through the rear of the chassis and align the mounting holes on the inside of the chassis with the mounting holes on the side of each side plate.
- b. Install an M5 pan-head screw into the first, third, fifth, and seventh holes of each side of the chassis to secure the chassis to each side plate.

Note: The M5 pan-head screws are installed from inside the chassis and are screwed into the side plate.

17. Tighten the 12-24 combination hex screws that were installed in step 9 to secure the side plates to the rack.



18. Install a 12-24 combination hex screw into the first, fifth, and ninth holes from the top of each front support bracket to secure the chassis to the front of the rack.

19. Reinstall the fan shuttle and any modules that were removed before installation. See "Installing components into a BladeCenter HT unit" in the *Installation and User's Guide* for more information.
20. Install the cable management trays or the IBM BladeCenter HT Bezel. See the *IBM BladeCenter HT Type 8740 and 8750 Installation and User's Guide* and the *IBM BladeCenter HT Bezel Installation Instructions* for more information.
21. Attach any cabling that will be used to the BladeCenter HT unit. Use cable ties and cable straps to secure the cables to the rack.

Notes:

- a. Allow slack in all cables to avoid tension in the cables and to allow you to remove adjacent modules without uncabling the BladeCenter HT unit.
 - b. While routing and securing the cables, avoid blocking the airflow from the fan modules.
22. Supply power to the BladeCenter HT unit. See "Supplying power to the BladeCenter HT unit" in the *IBM BladeCenter HT Type 8740 and 8750 Installation and User's Guide* for more information.

To remove the BladeCenter HT unit from the rack, reverse these instructions. Store this information with your BladeCenter HT documentation for future use.

First Edition (April 2007)

Printed in the U.S.A.

IBM and BladeCenter are trademarks of the IBM Corporation in the United States, other countries, or both.

© Copyright International Business Machines Corporation 2007. All rights reserved.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

(1P) P/N: 31R1686

