Dell™ PowerEdge™ 1800 Systems

Installing the Tower-to-Rack and Rack-to-Tower Kits

Notes, Notices, and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your computer.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

Abbreviations and Acronyms

For a complete list of abbreviations and acronyms, see the "Glossary" in the *User's Guide*.

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Contents

Safety Instructions **5**
SAFETY: Rack Mounting of Systems 5

Tower-to-Rack Kit Instructions **6**
Removing the Bezel 6
Removing the System Stabilizer Feet 7
Attaching the Rack-Adapter Plate 8
Attaching the Rack Handles 10
Attaching the Slide-Shoulder Screws 10

Rack-to-Tower Kit Instructions **11**
Removing the Slide-Shoulder Screws 12
Removing the Rack Handles 13
Attaching the Side Cover 13
Attaching the System Stabilizer Feet 15
Installing the Bezel 16
Stabilizing the Tower System 16

Figures

Figure 1-1. Tower-to-Rack Kit Contents 6
Figure 1-2. Removing the Bezel 7
Figure 1-3. Removing the System Stabilizer Feet 8
Figure 1-4. Removing the Right-Side Cover 9
Figure 1-5. Installing the Rack-Adapter Plate 9
Figure 1-6. Installing the Rack Handles 10
Figure 1-7. Installing the Slide-Shoulder Screws 11
Figure 1-8. Rack-to-Tower Kit Contents 12
Figure 1-9. Removing the Slide-Shoulder Screws 12
Figure 1-10. Removing the Rack Handles 13
Figure 1-11. Removing the Rack-Adapter Plate 14

Figure 1-12. Installing the System Side Cover 14
Figure 1-13. Attaching the System Stabilizer Feet 15
Figure 1-14. Rotating the Tower System Stabilizer Feet 16

Safety Instructions

Use the following safety guidelines to ensure your own personal safety and to help protect your system and working environment from potential damage. For complete safety information, see your *Product Information Guide*.

SAFETY: Rack Mounting of Systems

Observe the following precautions for rack stability and safety.

Systems are considered to be components in a rack. Thus, "component" refers to any system as well as to various peripherals or supporting hardware.

CAUTION: Installing systems in a rack without the front and side stabilizers installed could cause the rack to tip over, potentially resulting in bodily injury under certain circumstances. Therefore, always install the stabilizers before installing components in the rack.

After installing system/components in a rack, never pull more than one component out of the rack on its slide assemblies at one time. The weight of more than one extended component could cause the rack to tip over and injure someone.

NOTE: Your system is safety-certified as a free-standing unit and as a component for use in a rack cabinet using the customer rack kit when both the rack cabinet and rack kit were designed for your system. The installation of your system and rack kit in any other rack cabinet has not been approved by any safety agencies. It is your responsibility to have the final combination of system and rack kit in a cabinet evaluated for suitability by a certified safety agency. The manufacturer disclaims all warranties and liability in connection with such combinations.

- System rack kits are intended to be installed in an approved rack by trained service technicians. If you install the kit in any other rack, be sure that the rack meets the specifications.
- Before you work on the rack, ensure that the stabilizers are secured to the rack, extended to the floor, and that the full weight of the rack rests on the floor. Install front and side stabilizers on a single rack or front stabilizers for joined multiple racks before working on the rack.
- Always load the rack from the bottom up, and load the heaviest item in the rack first.
- Ensure that the rack is level and stable before extending a component from the rack.
- Use caution when pressing the component rail release latches and sliding a component into or out of a rack; the slide rails can pinch your fingers.
- After a component is inserted into the rack, carefully extend the rail into a locking position, and then slide the component into the rack.
- Do not overload the AC power supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.
- Ensure that proper airflow is provided to components in the rack.
- Do not step on or stand on any system/component when servicing other components in a rack.

Tower-to-Rack Kit Instructions

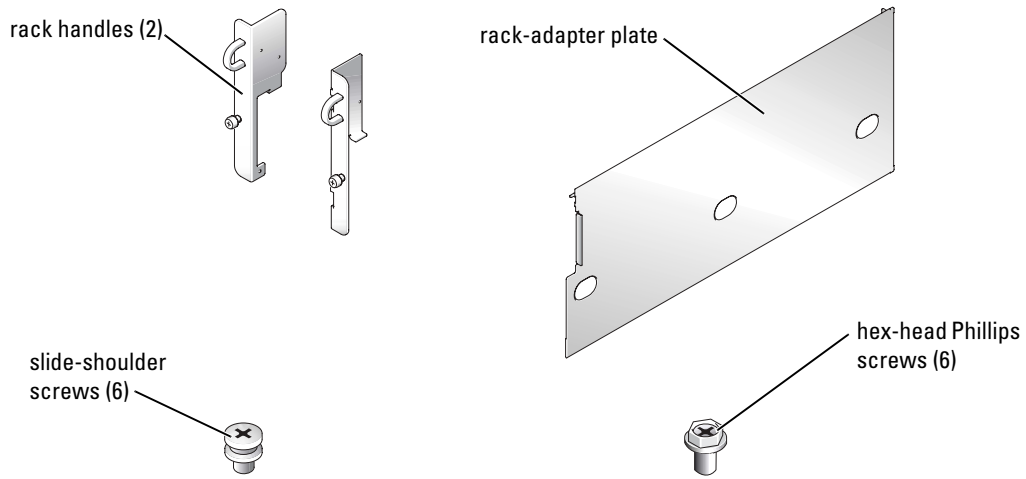
NOTE: For instructions on how to install the rack-to-tower kit, see "Rack-to-Tower Kit Instructions."

This section provides instructions on how to install the tower-to-rack kit. After you install this kit on your system, see the documentation that came with your rack kit for instructions on how to install the system into the rack.

The tower-to-rack kit includes the items listed below. See Figure 1-1.

- Two rack handles with attached thumbscrews.
- One rack-adapter plate.
- Six hex-head Phillips screws.
- Six slide-shoulder screws.

Figure 1-1. Tower-to-Rack Kit Contents



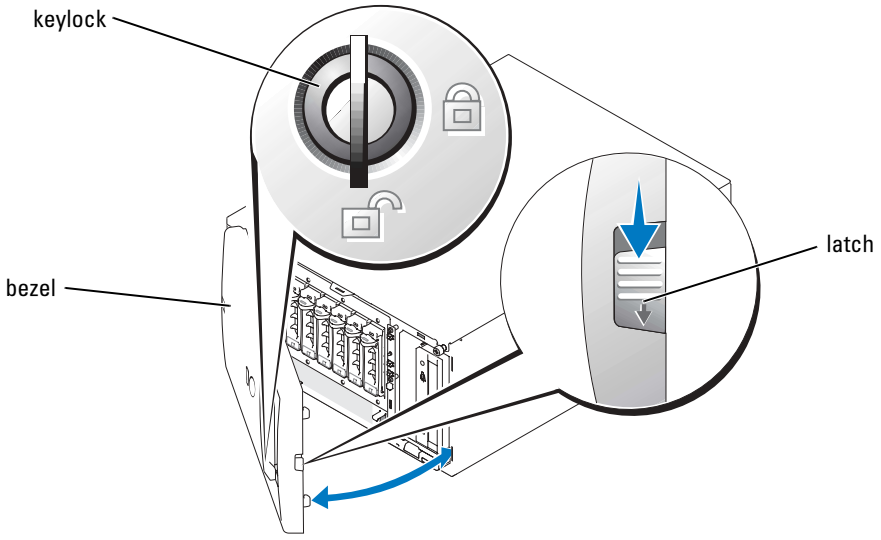
Removing the Bezel

1. Turn off the system, including any attached peripherals, and disconnect the system from the electrical outlet.
2. Rotate the four bottom-panel system stabilizer feet inward. and lay the system on its side. See Figure 1-2.
3. Use the system key to unlock the front bezel.
4. Slide the latch down and pull the right edge of the bezel away from the front panel.

5 Pivot the bezel outward until it is at a right angle to the front panel.

6 Remove the bezel from the slots on the front panel.

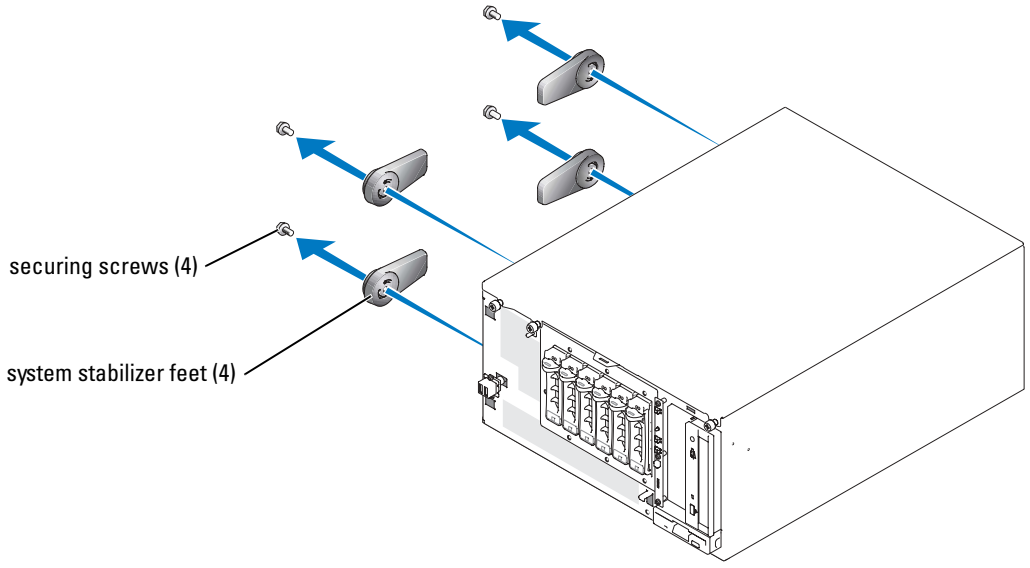
Figure 1-2. Removing the Bezel



Removing the System Stabilizer Feet

Remove the screws that secure the system stabilizer feet to the chassis. See Figure 1-3.

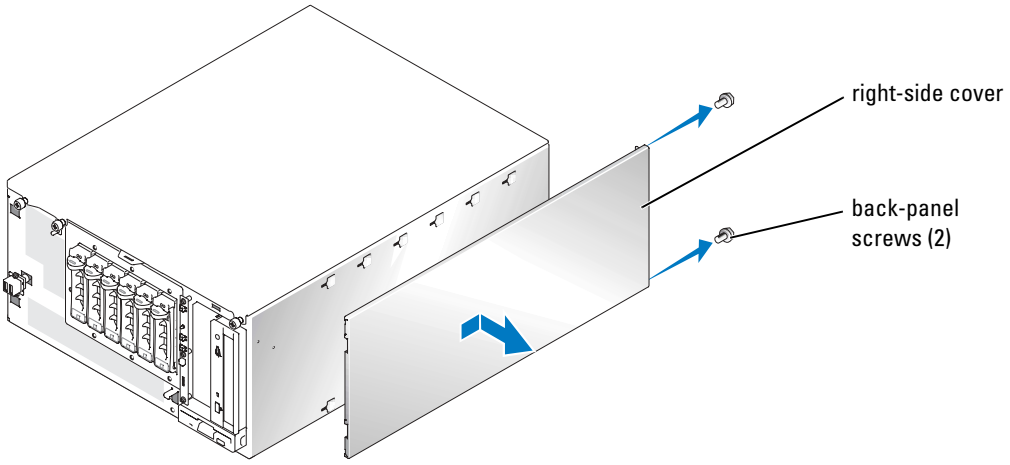
Figure 1-3. Removing the System Stabilizer Feet



Attaching the Rack-Adapter Plate

1. Remove the system's right-side cover:
   a. Remove the two back-panel screws that secure the right-side cover to the chassis. See Figure 1-4.
   b. Slide the right-side cover toward the back of the system and then lift it away from the chassis.

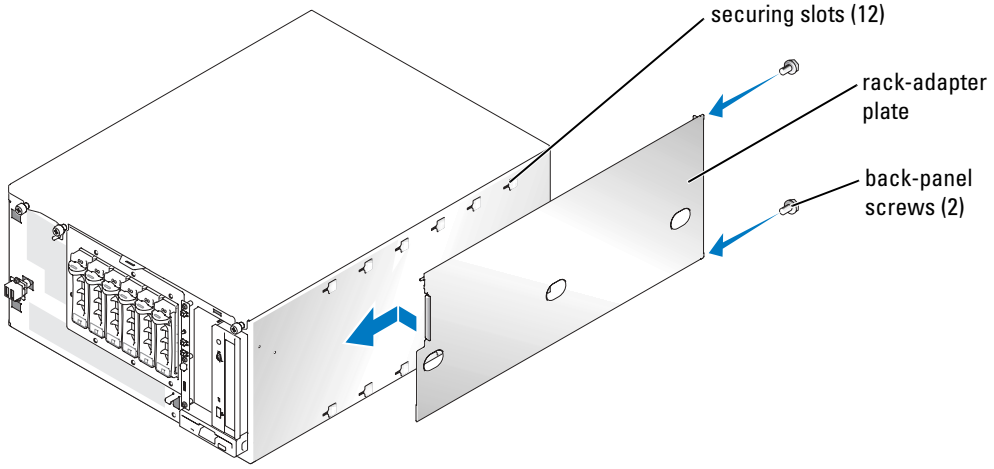
Figure 1-4. Removing the Right-Side Cover



2 Install the rack-adapter plate:

- **a** Align the 12 securing tabs on the rack-adapter plate with the 12 securing slots on the chassis. See Figure 1-5.
- **b** Slide the rack-adapter plate toward the front of the system.
- **c** Replace the two back-panel screws to secure the rack-adapter plate to the chassis.

Figure 1-5. Installing the Rack-Adapter Plate

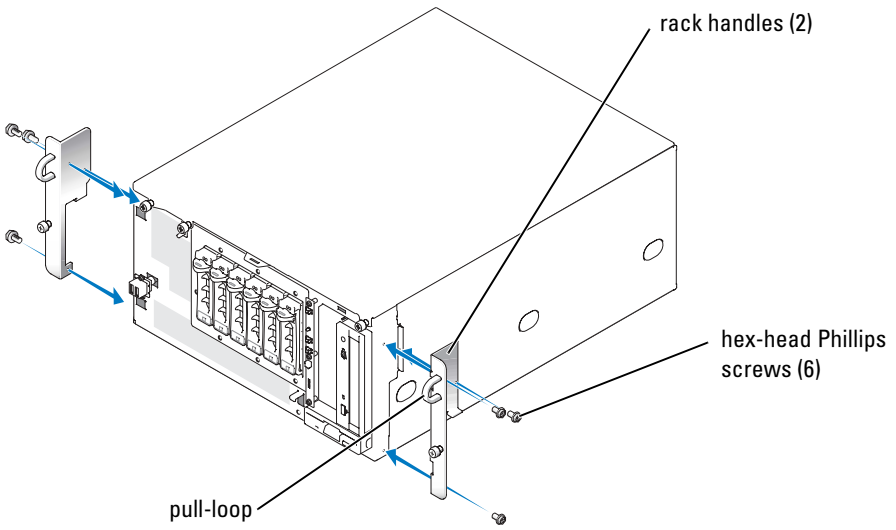


Attaching the Rack Handles

1. Position one rack handle on the side of the chassis so that the handle's pull-loop is nearest the top of the system. See Figure 1-6.
2. Align the three screw holes on the rack handle with the three screw holes on the side of chassis.
3. Use three of the hex-head Phillips screws that are supplied with your kit to secure the rack handle to the chassis.

   NOTE: To obtain proper alignment of the rack handle, tighten the top screw first, the bottom screw second, and the middle screw last.
4. Repeat step 1 through step 3 to attach the other rack handle.

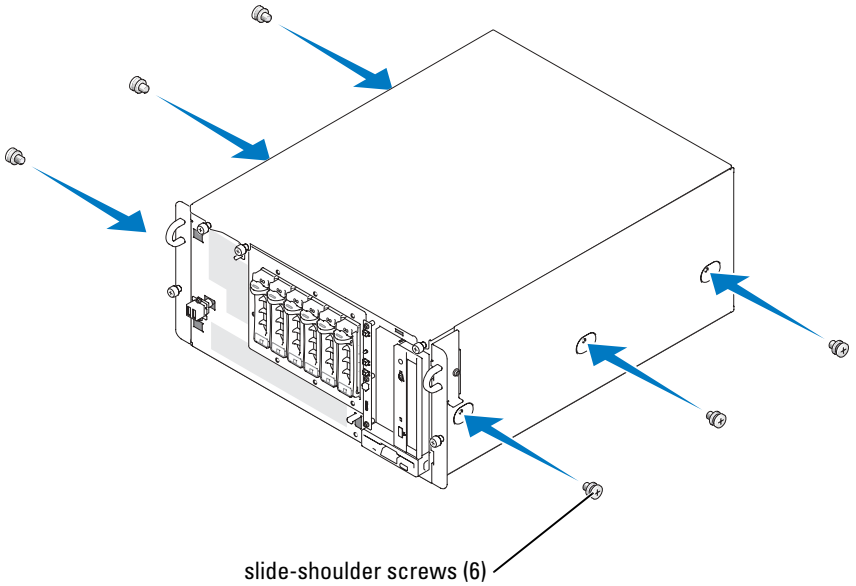
Figure 1-6. Installing the Rack Handles



Attaching the Slide-Shoulder Screws

Your kit includes six shoulder screws that enable the system to be attached to rack slides. Attach three slide-shoulder screws to each side of the chassis. See Figure 1-7.

Figure 1-7. Installing the Slide-Shoulder Screws



The system is now ready to be installed into a rack. See the documentation that came with your rack for more information.

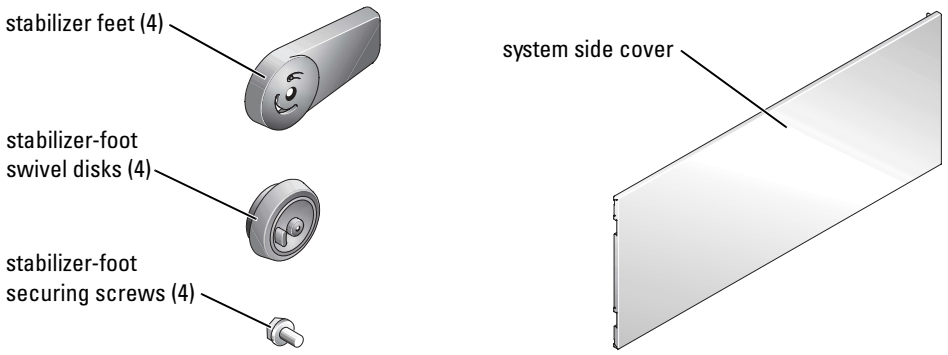
Rack-to-Tower Kit Instructions

NOTE: For instructions on how to install the tower-to-rack kit, see "Tower-to-Rack Kit Instructions."

This section provides instructions on how to install the rack-to-tower kit. The rack-to-tower kit includes the items listed below. See Figure 1-8.

- One system side cover
- Four stabilizer feet
- Four stabilizer-foot swivel disks
- Four stabilizer-foot securing screws

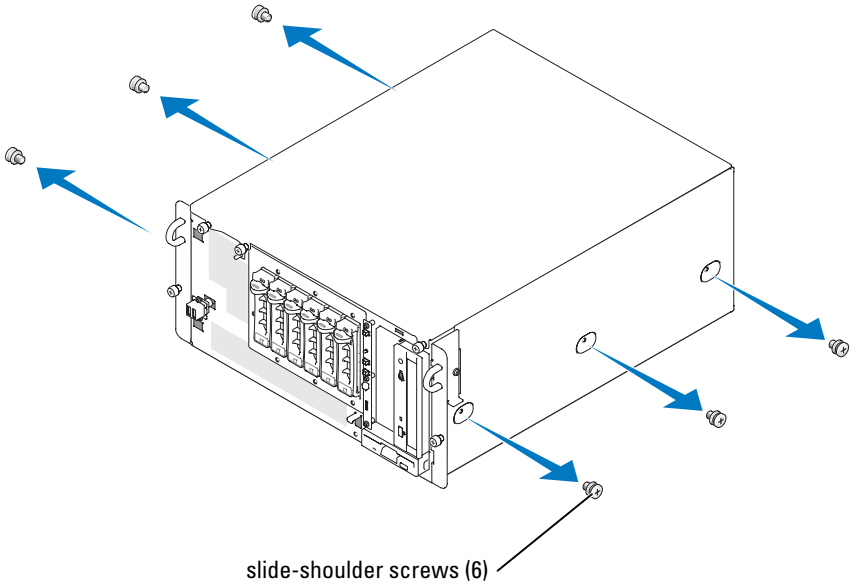
Figure 1-8. Rack-to-Tower Kit Contents



Removing the Slide-Shoulder Screws

Remove the three slide-shoulder screws from each side of the chassis. See Figure 1-9.

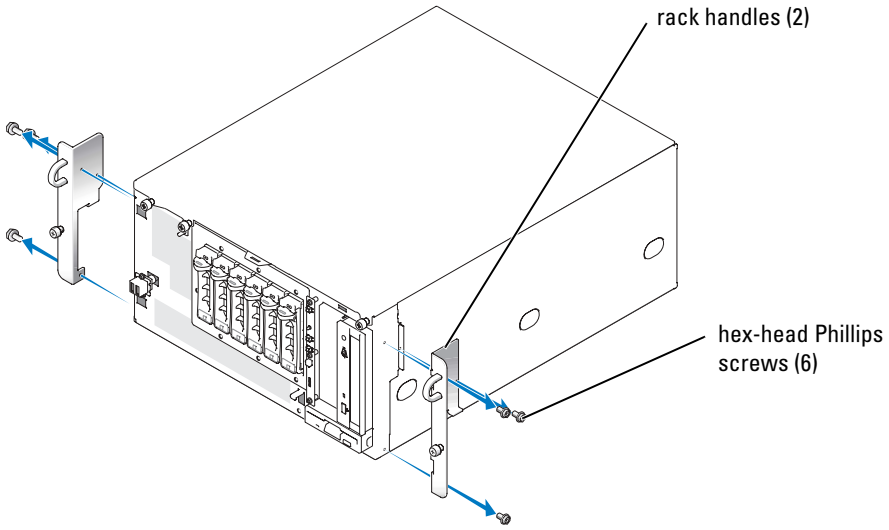
Figure 1-9. Removing the Slide-Shoulder Screws



Removing the Rack Handles

Remove the three hex-head Phillips screws that secure each rack handle to the chassis. See Figure 1-10.

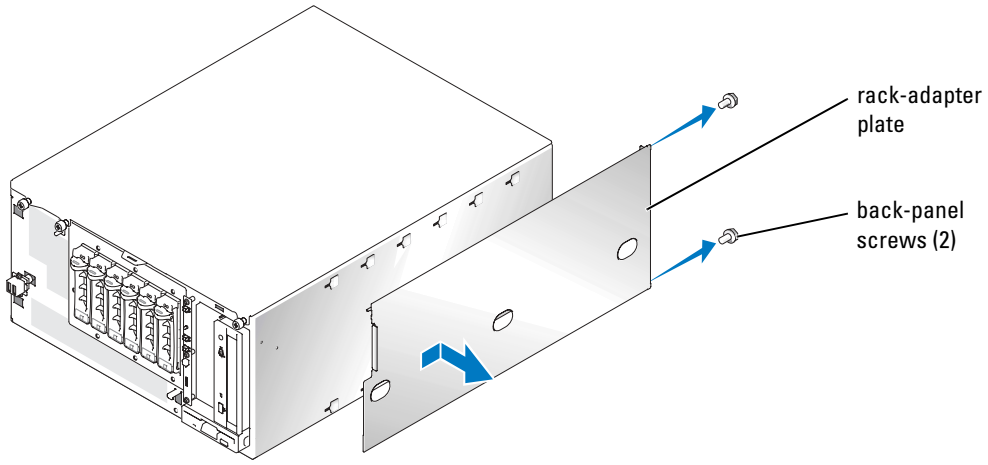
Figure 1-10. Removing the Rack Handles



Attaching the Side Cover

1. Remove the rack-adapter plate:
   a. Remove the two back-panel screws that secure the rack-adapter plate to the chassis. See Figure 1-11.
   b. Slide the rack-adapter plate toward the back of the system and then lift it away from the chassis.

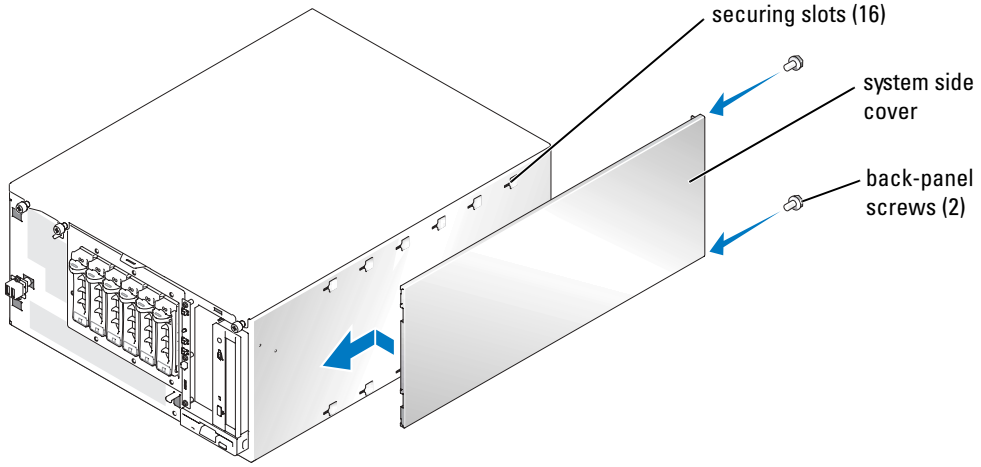
Figure 1-11. Removing the Rack-Adapter Plate



2 Install the system side cover:

- **a** Align the 16 securing tabs on the side edges and the front edge of the side cover with the 16 securing slots on the chassis. See Figure 1-12.
- **b** Slide the side cover toward the front of the system.
- **c** Replace the two back-panel screws to secure the side cover to the chassis.

Figure 1-12. Installing the System Side Cover

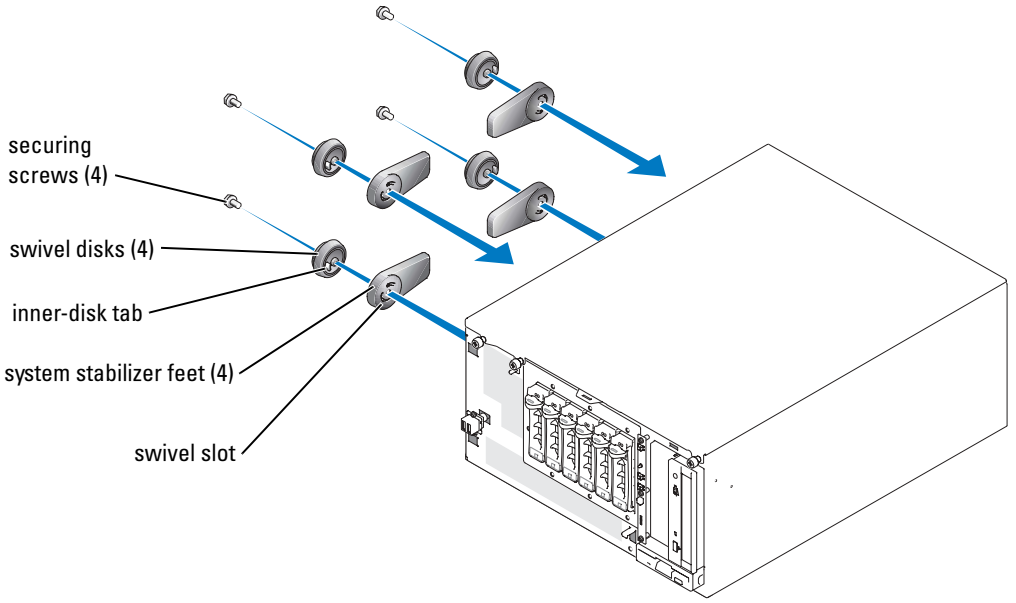


Attaching the System Stabilizer Feet

1. Locate a stabilizer foot, a circular swivel disk, and a Phillips screw from the rack-to-tower kit.
2. Place the circular swivel disk inside the circular cavity on the bottom of the stabilizer foot and rotate it until it seats completely inside the cavity.

   The swivel disk properly seats inside the cavity when the inner-disk tab on the swivel disk inserts into the swivel slot on the stabilizer foot. See Figure 1-13.
3. Attach the stabilizer feet to the left side of the chassis:
   a. Position each stabilizer foot as shown in Figure 1-13.
   b. Insert the inner-disk tab on the swivel disk into the slot in the chassis.
   c. Secure the stabilizer foot to the chassis with a Phillips screw.
4. Repeat step 1 through step 3 to attach the other three stabilizer feet.

Figure 1-13. Attaching the System Stabilizer Feet



Installing the Bezel

1 Insert the two tabs on the inside left edge of the bezel into the corresponding slots on the system front panel, and pivot the bezel inward to its closed position.

NOTE: When you are closing the right side of the rack-mount system's bezel, hold the bezel's left side so that the inside bezel tabs remain properly engaged in the front-panel bezel slots.

2 Use the system key to lock the bezel.

Stabilizing the Tower System

CAUTION: The tower system has four stabilizer feet on its bottom panel that can be rotated outward to help properly stabilize the system. Ensure that the four stabilizer feet are rotated outward before you operate the system. See Figure 1-14.

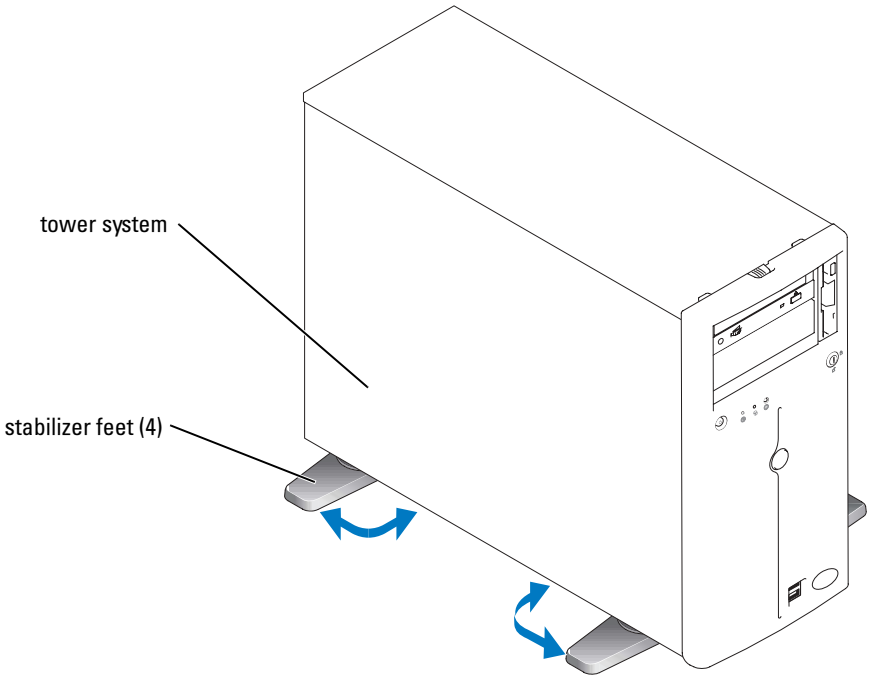



Figure 1-14. Rotating the Tower System Stabilizer Feet