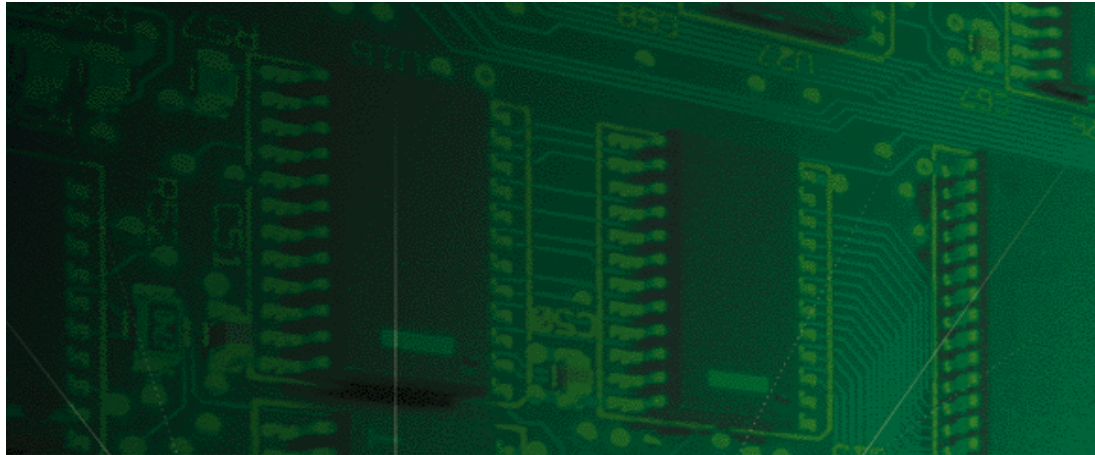




70 and 130 Amp AC and DC Total Control Chassis

Getting Started Guide



Part No. 1.024.1311-01

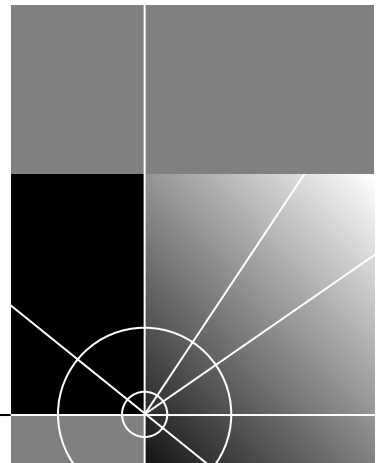


70 and 130 Amp AC and DC Total Control Chassis

Getting Started Guide

<http://www.3com.com/>

Part No. 1.024.1311-01



3Com Corporation
5400 Bayfront Plaza
Santa Clara, California
95052-8145

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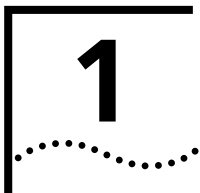
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OVERVIEW

This chapter provides contact information and document conventions, and describes the 70 and 130 Amp AC and DC Total Control chassis.

Contacting 3Com

Call the appropriate number listed below for technical support.

- If you are calling from the United States or Canada
Dial 1.800.231.8770
- If you are calling from Europe, Middle East, or Africa
Dial 353.1.823.7700
- If you are calling from all other locations
Dial (your international carrier code) 847.797.6600





Refer to the Total Control Hub Documentation CD-ROM for more information regarding product warranty.



For information about Customer Service, including support, training, contracts, and documentation, visit our website at <http://totalservice.usr.com>

Document Conventions

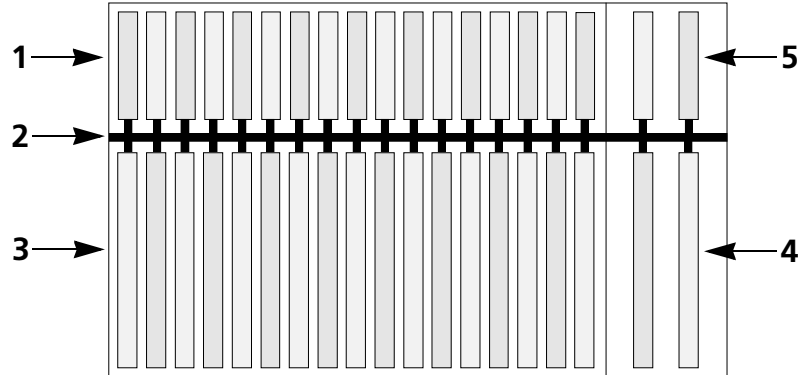
The following table lists conventions used throughout this guide.

Icon	Notice Type	Description
	Information note	Information that contains important features or instructions.
	Caution	Information to alert you to potential damage to a program, system, or device.
	Warning	Information to alert you to potential personal injury or fatality. May also alert you to potential electrical hazard.
	ESD	Information to alert you to take proper grounding precautions before handling a product.

Product Description

The chassis contains the following:

- Slots for two front-loaded AC or DC power supply units (PSUs) and their respective rear-loaded AC or DC power supply interfaces (PSIs).
- Slots for up to 17 front-loaded network application cards (NACs) and their respective rear-loaded network interface cards (NICs).
- Integrated fan tray.
- Two power cord strain reliefs—one for each power supply interface.
- Three electro static discharge (ESD) plugs—two on the front mounting flanges and one on the rear.



1	Rear-loaded Network Interface Cards (NICs)
2	Chassis Midplane
3	Front-loaded Network Application Cards (NACs)
4	Front-loaded Power Supply Units (PSUs)
5	Rear-loaded Power Supply Interfaces (PSIs)

Various chassis configurations operate with both analog or digital phone services. In addition, the chassis is fully manageable via Simple Network Management Protocol (SNMP) through the Network Management Card (NMC) placed in slot 17 of the chassis.

2

INSTALLATION

This chapter contains 70 and 130 Amp AC and DC Total Control chassis installation information.

Supplies

To install the chassis you will need:

- A flat-head screwdriver
- A #2 Phillips screwdriver
- Fasteners (nuts, bolts, screws) compatible with the rack

Optional:

- Extender brackets (23-inch rack or mid-mount installation)

Conditions

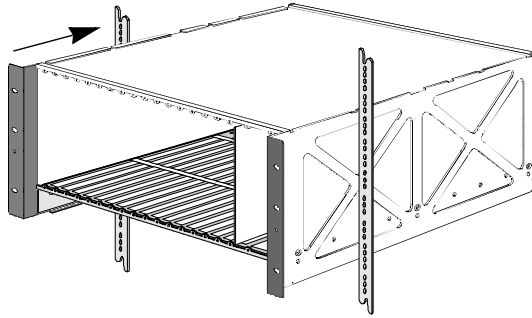
Optimal chassis installation conditions:

Temperature	25 °C
Chassis per Rack	Six
Ventilation Recommendation	Chassis installed approximately 1.71 inches ("1U" gap) from each other

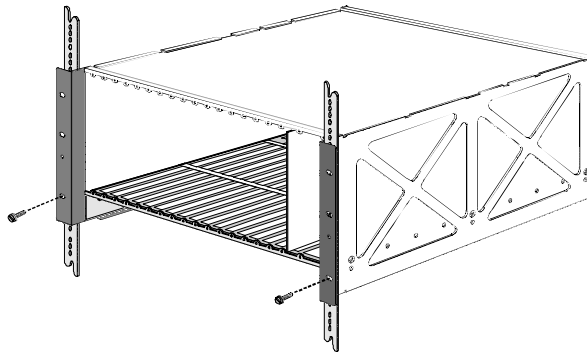
Installing a Chassis in a 19-inch Rack

To install the chassis:

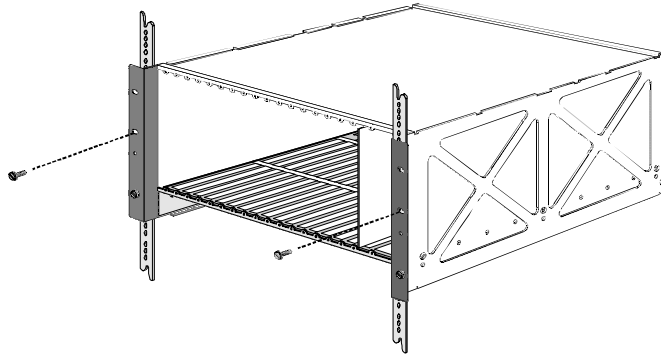
- 1 Remove the fan tray; refer to the *Installing and Removing the Fan Tray* section.
- 2 Slide the chassis into the rack, until the front of the chassis is flush with the front of the rack.



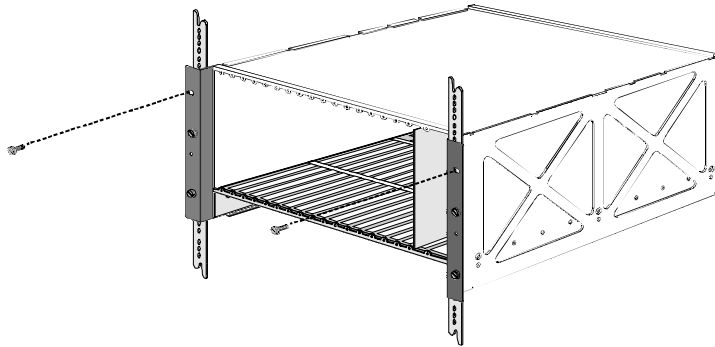
- 3 Secure the chassis mounting flange to the front vertical rails of the rack.
 - a Insert the two bottom fasteners (screws).



- b** Insert the two middle fasteners (screws).



- c** Insert the two top fasteners (screws).



- 4** Re-install the fan tray; refer to the *Installing and Removing the Fan Tray* section.

Mid-mounting a Chassis in a 19-inch Rack

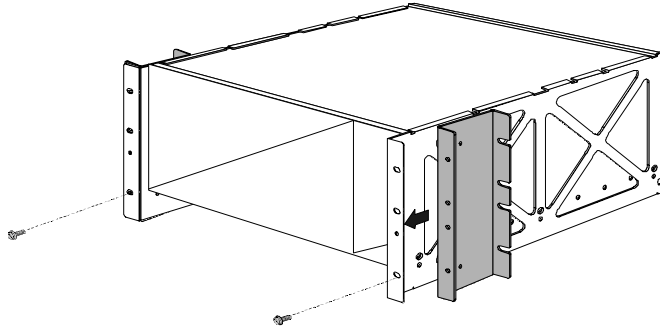
To mid-mount the chassis:

- 1 Remove the fan tray; refer to the *Installing and Removing the Fan Tray* section.
- 2 Secure the extender brackets to the chassis mounting flanges.

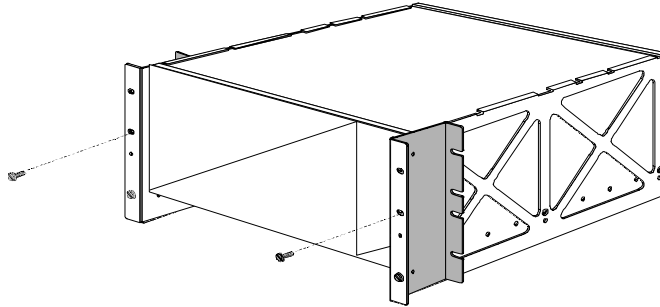


Mid-mount brackets must be used if you wish to adhere to the Bellcore Standard on Earthquakes NEBS TR-NWT-000063, Sections 5.5.7 and 5.5.9, Issue 5.

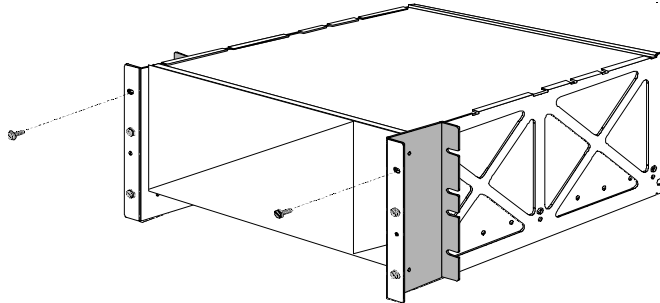
a Insert the two bottom fasteners (screws).



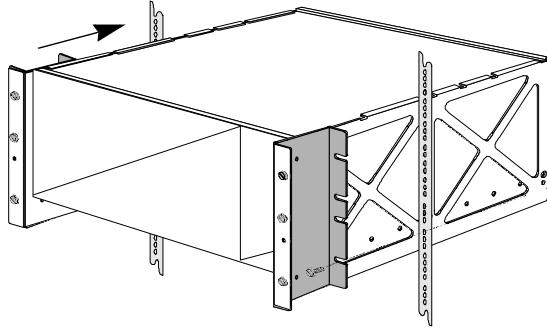
b Insert the two middle fasteners (screws).



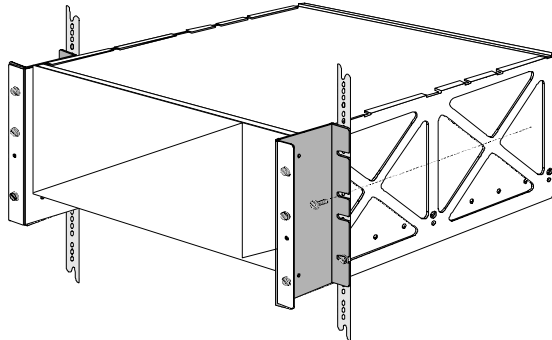
c Insert the two top fasteners (screws).



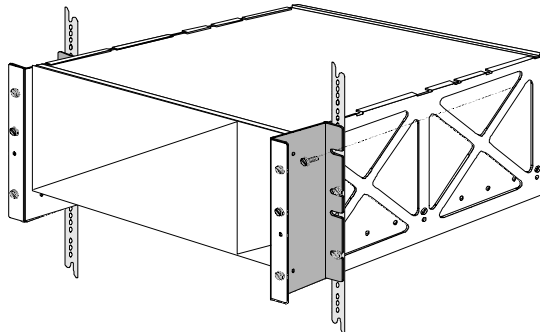
- 3 Secure the extender brackets and chassis to the mounting rails of the rack.
 - a Insert the two bottom fasteners (screws).



- b Insert the two middle fasteners (screws).



- c Insert the two top fasteners (screws).

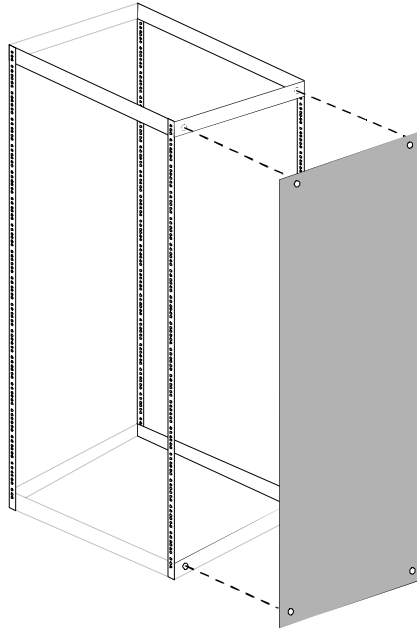


- 4 Re-install the fan tray; refer to the *Installing and Removing the Fan tray* section.

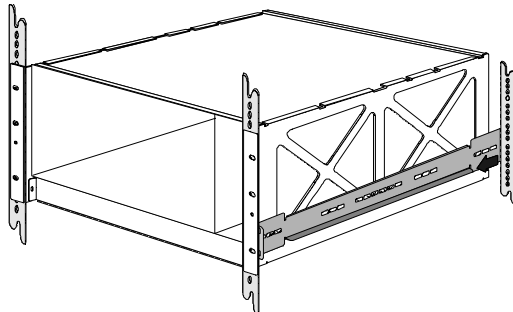
Rear-mounting a Chassis in a 19-inch Rack

To rear-mount the chassis:

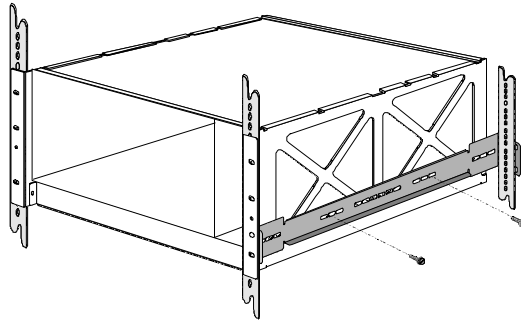
- 1 Remove the equipment rack sides.



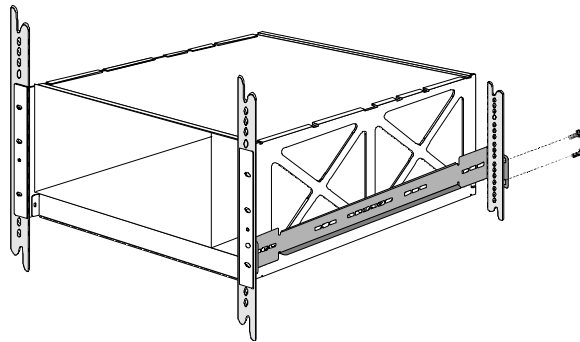
- 2 Install the chassis; refer to the *Chassis Installation: 19-inch Rack* section.
- 3 Slide the rear-mounting bracket into the back of the rack. Line the bracket mounting holes with the threaded mounting holes on the chassis side, ensuring the bracket rear mounting flange meets the rack rear mounting rail.



- 4 Secure the bracket to the chassis.



- 5 Repeat *Step 3* and *Step 4* for the other chassis side.
- 6 Secure the bracket rear-mounting flanges to the rack rear mounting rails.

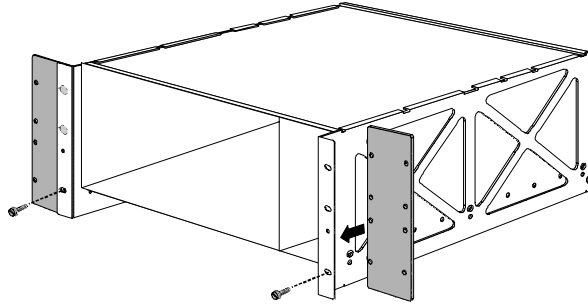


Installing a Chassis in a 23-inch Rack

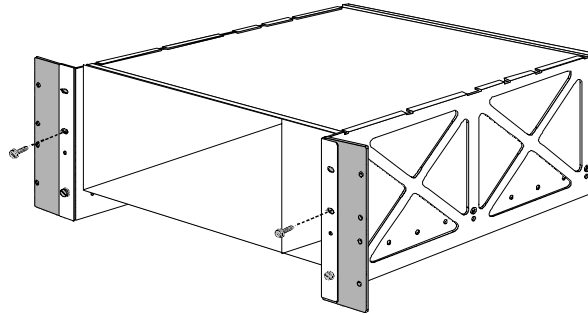
To install the chassis:

- 1 Remove the fan tray; refer to the *Installing and Removing the Fan Tray* section.
- 2 Secure the extender brackets to the chassis mounting flanges.

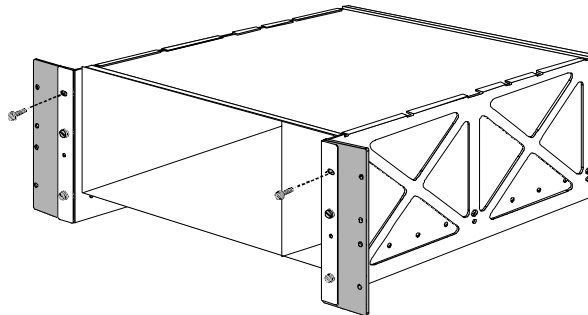
a Insert the two bottom fasteners (screws).



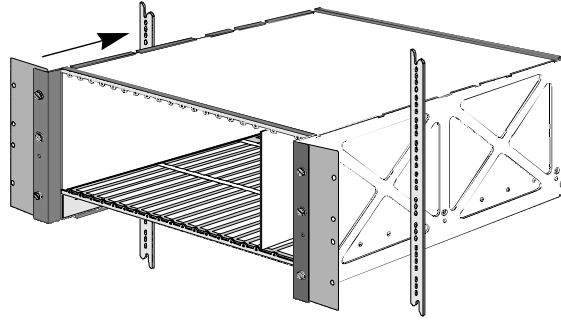
b Insert the two middle fasteners (screws).



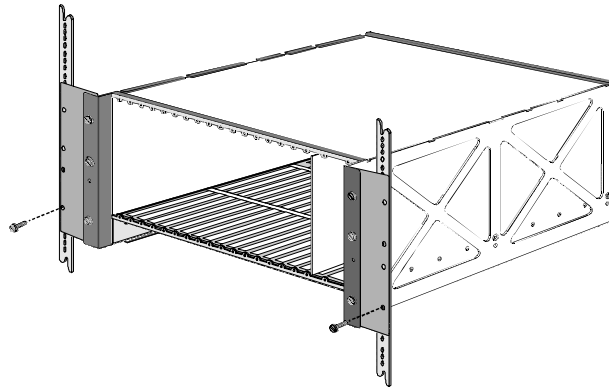
c Insert the two top fasteners (screws).



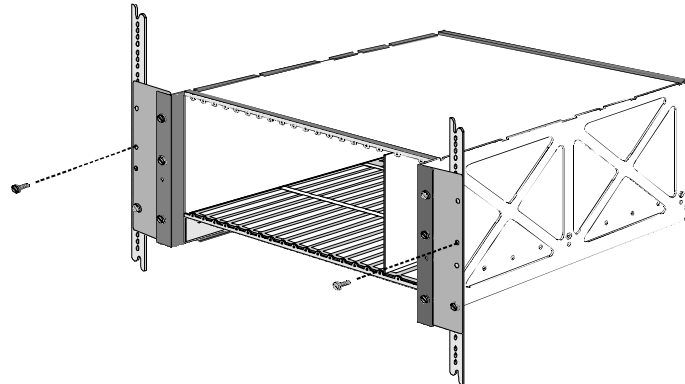
- 3 Slide the chassis into the rack, until the front of the chassis is flush with the front of the rack.



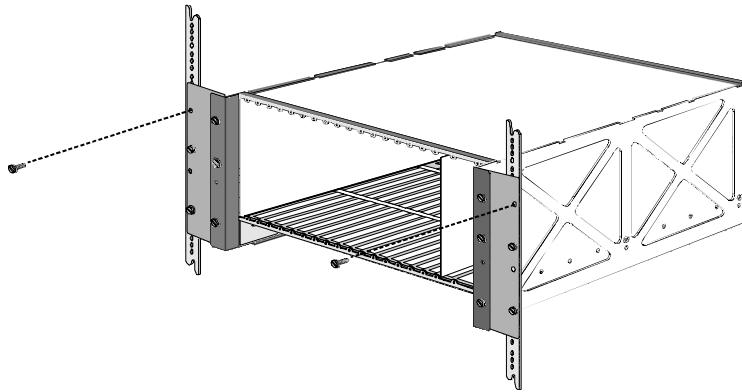
- 4 Secure the extender brackets and chassis to the mounting rails of the rack.
 - a Insert the two bottom fasteners (screws).



- b Insert the two middle fasteners (screws).



- c Insert the two top fasteners (screws).



- 5 Re-install the fan tray; refer to the *Installing and Removing the Fan Tray* section.

Mid-mounting a Chassis in a 23-inch Rack

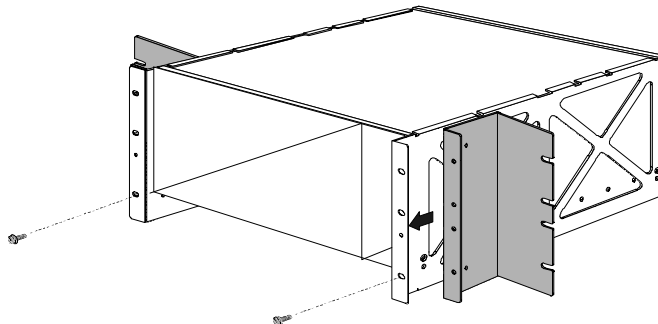
To mid-mount the chassis:

- 1 Remove the fan tray; refer to the *Installing and Removing the Fan Tray* section.
- 2 Secure the extender brackets to the chassis mounting flanges.

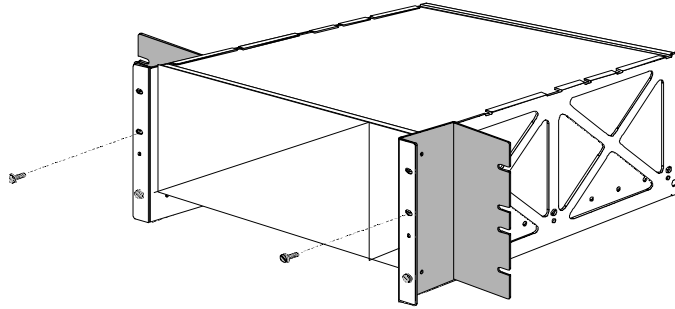


Mid-mount brackets must be used if you wish to adhere to the Bellcore Standard on Earthquakes NEBS TR-NWT-000063, Sections 5.5.7 and 5.5.9, Issue 5.

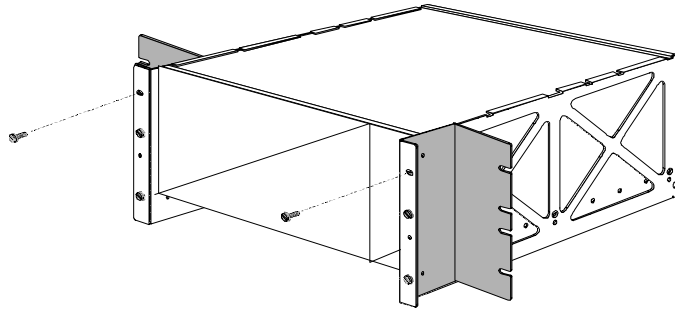
- a Insert the two bottom fasteners (screws).



- b** Insert the two middle fasteners (screws).

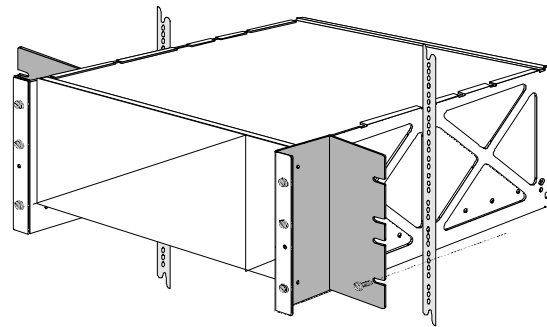


- c** Insert the two top fasteners (screws).

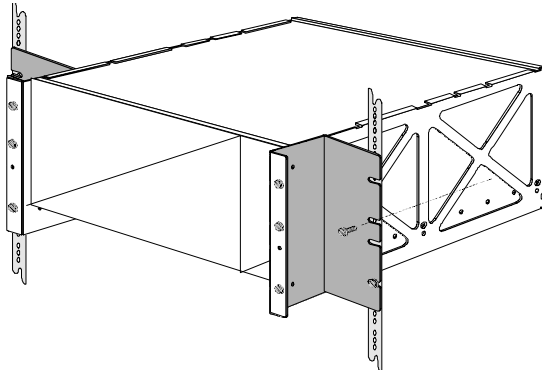


- 3** Secure the extender brackets and chassis to the mounting rails of the rack.

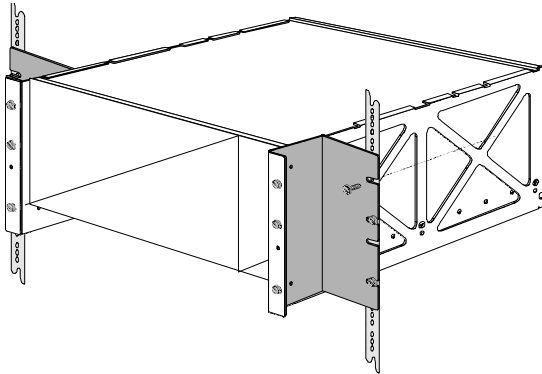
- a** Insert the two bottom fasteners (screws).



b Insert the two middle fasteners (screws).



c Insert the two top fasteners (screws).

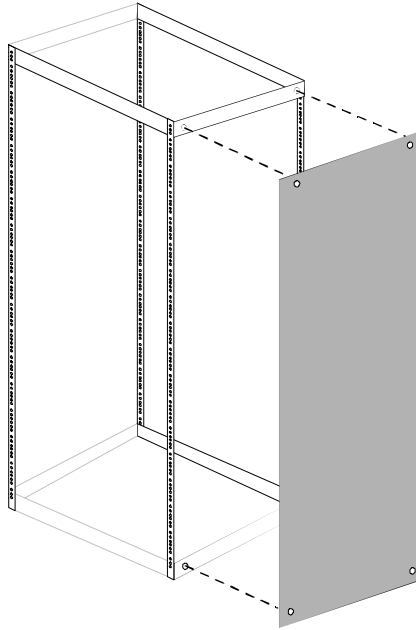


4 Re-install the fan tray; refer to the *Installing and Removing the Fan Tray* section.

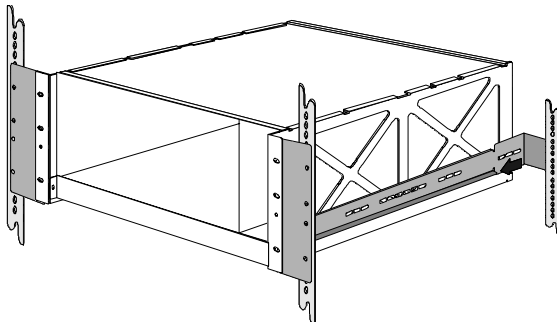
Rear-mounting a Chassis in a 23-inch Rack

To rear-mount the chassis:

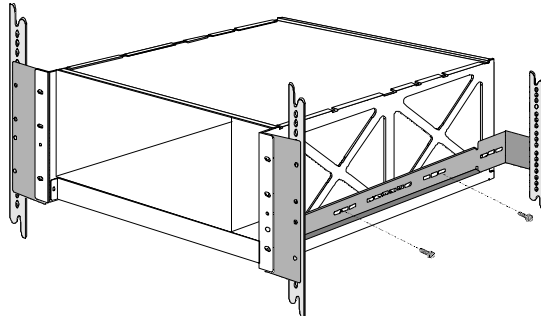
- 1 Remove the equipment rack sides.



- 2 Install the chassis; refer to the *Chassis Installation: 23-inch Rack* section.
- 3 Slide the rear-mounting bracket into the back of the rack. Line the bracket mounting holes with the threaded mounting holes on the chassis side, ensuring the bracket rear mounting flange meets the rack rear mounting rail.

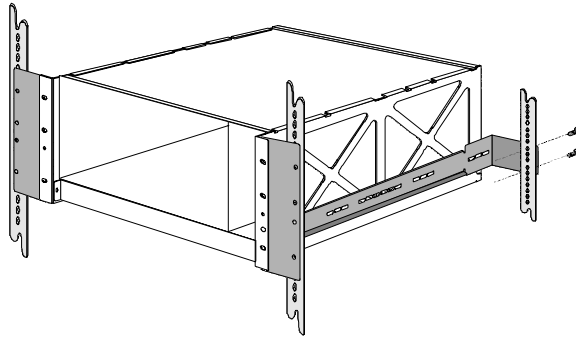


- 4 Secure the bracket to the chassis.



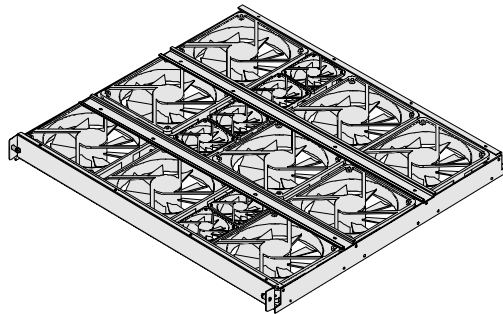
- 5 Repeat *Step 3* and *Step 4* for the other chassis side.

- 6 Secure the bracket rear-mounting flanges to the rack rear mounting rails.



Installing and Removing the Fan Tray

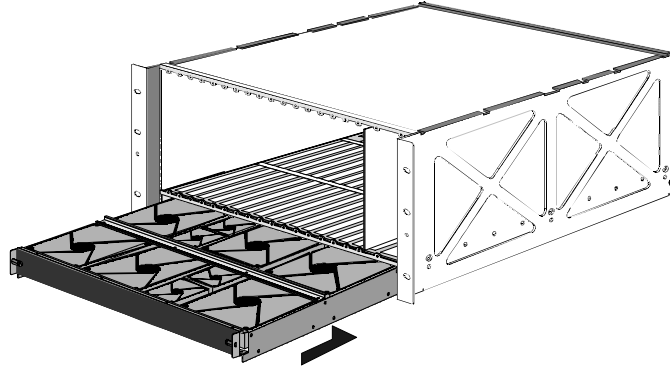
The chassis integrated fan tray is factory-installed. Located at the bottom of the chassis, each fan tray has 15 individual fans. Screws are located on the front of the tray and must remain fastened during chassis operation.



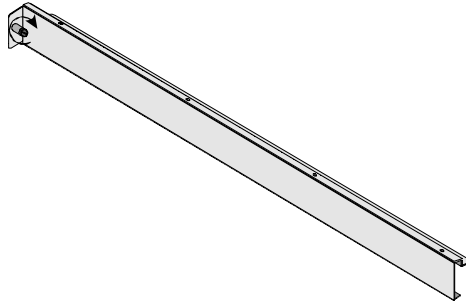
WARNING: Do not operate a loaded chassis without the fan tray. Doing so even for short periods of time can potentially cause thermal shutdown.

Installation To install the fan tray:

- 1 Insert the fan tray into the front of the chassis. Slide the fan tray along the guide rails until it is snug against the rear of the chassis. Keep the fan tray level with the guide rails for best results.

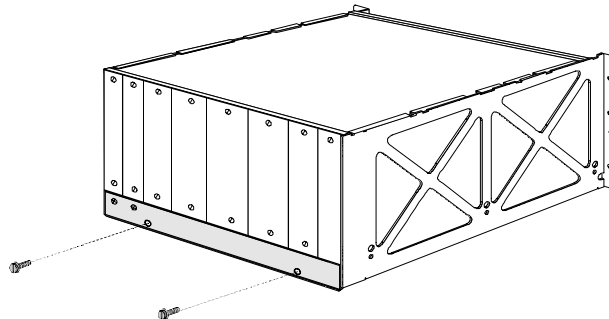


- 2 Tighten the two screws at the front of the chassis.

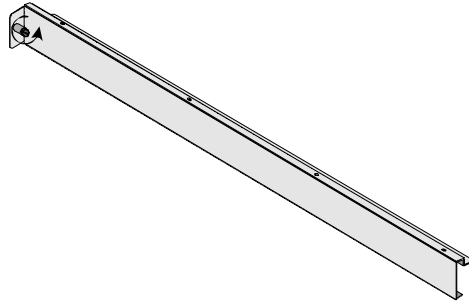


Removal To remove the fan tray:

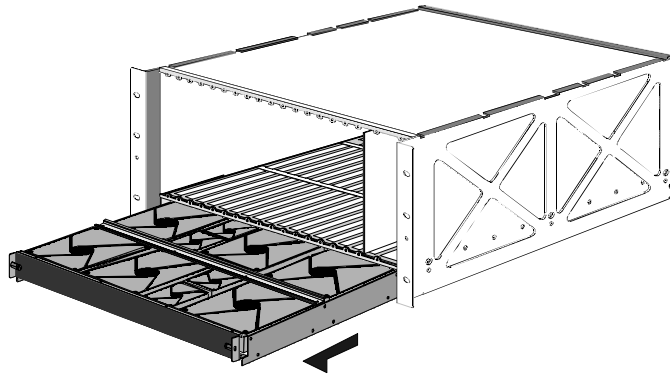
- 1 Remove the shipping screws located at the rear of the chassis.



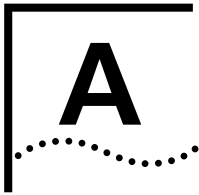
- 2 Loosen the two fan tray screws at the front of the chassis.



- 3 Remove the fan tray by sliding it toward the front of the chassis. Keep the tray level during removal—do not tilt.



WARNING: *The individual fans may continue to spin as you remove the tray. Grip the sides of the fan tray, and do not touch the individual fans until they have stopped spinning.*



TECHNICAL SPECIFICATIONS

Certification

Complies with FCC Part 15 Class A EMI/RFI requirements; complies with FCC Part 68; UL-listed; CSA-approved; IC-certified.

This product also complies with the European EMC directive and bears the “CE” mark.

Regulatory Compliance Statements

United States

FCC Part 15 Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Chassis Dimensions

	Length	Width	Height
Inches	18.590	19.000	8.719
Centimeters	47.219	48.260	22.15

Environment

Shipping and Storage

Temperature:

- -25° C to 75° C
- -13° F to 167° F

Humidity:

- 0 to 95%, non-condensing

Operating

Temperature:

- 0 to 40° C
- 32° F to 104° F

Humidity:

- 0 to 95%, non-condensing
-

Integrated Fan Tray

Environment

- Maximum ambient temperature of 40° C
- 1.7-inch space between chassis (optimal)
- Approximate ventilation of 948 cfm

Shipping and Storage

- - 40° C to 70° C at 65% relative humidity

Operating

- - 40° C to 70° C at 65% relative humidity

Dimensions

	Length	Width	Height
Inches	18.000	19.000	1.68



3Com Corporation
5400 Bayfront Plaza
P.O. Box 58145
Santa Clara, CA
95052-8145

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p/n 1.024.1311-01