



Mounting the Brackets on the NCS 2015 Shelf

This chapter describes how to mount the brackets on Cisco NCS 2015 shelf.



Caution Use only the fastening hardware provided with the NCS 2015 shelf to prevent loosening, deterioration, and electromechanical corrosion of the hardware and joined material.



Caution When mounting the NCS 2015 shelf in a frame with a nonconductive coating (such as paint, lacquer, or enamel) either use the thread-forming screws provided with the NCS 2015 shipping kit, or remove the coating from the threads to ensure electrical continuity.



Warning **Stability hazard. The rack stabilizing mechanism must be in place, or the rack must be bolted to the floor before you slide the unit out for servicing. Failure to stabilize the rack can cause the rack to tip over.** Statement 1048



Warning **This product requires short-circuit (overcurrent) protection, to be provided as part of the building installation. Install only in accordance with national and local wiring regulations.** Statement 1045



Warning **This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 40A and between -40.5 VDC to -57.6 VDC.** Statement 1005



Warning **This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 10A-20A, 100-240 VAC~.** Statement 1005



Warning To prevent the system from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of: 131°F (55°C). Statement 1047



Warning Take care when connecting units to the supply circuit so that wiring is not overloaded. Statement 1018



Warning To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- This unit should be mounted at the bottom of the rack if it is the only unit in the rack.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
- If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack. Statement 1006



Warning To prevent airflow restriction, allow clearance around the ventilation openings to be at least:1 inch (25.4 mm) Statement 1076



Warning To comply with EN50121-4:2006 - Railway applications, Electromagnetic compatibility, a shielded cable must be used to connect to the EMS port. This cable must be less than 30 meters in length and not placed in the 3 meter boundary, as defined in EN50121-4:2006, Table 2, note 1. Statement 8010



Warning To comply with EN50121-4:2006 - Railway applications, Electromagnetic compatibility, DC power cables must be less than 30 meter long. Statement 8011

The sections are:

- [NTP-L48 Mounting Brackets on NCS 2015 Shelf for ANSI Rack Configuration, on page 2](#)
- [NTP-L49 Mounting Brackets on NCS 2015 Shelf for ETSI Rack Configuration, on page 6](#)

NTP-L48 Mounting Brackets on NCS 2015 Shelf for ANSI Rack Configuration

Purpose	This procedure helps in mounting the brackets on the NCS 2015 shelf for ANSI rack configuration. The mounting brackets can be installed in the middle position of the chassis.
---------	--

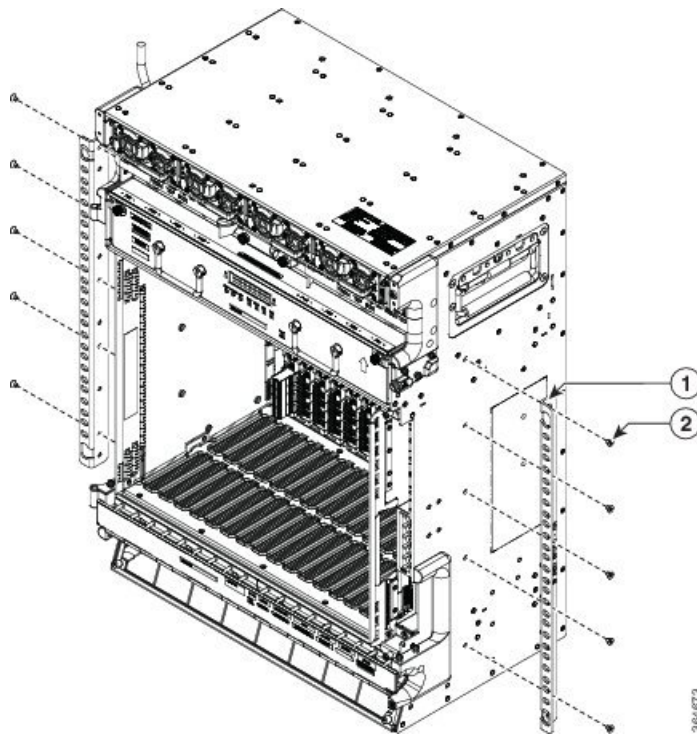
Tools/Equipment	<ul style="list-style-type: none"> • #2 Phillips Dynamometric screwdriver • Medium slot-head screwdriver • Small slot-head screwdriver • 10 M4 x 6mm flat-head Phillips screws
Prerequisite Procedures	DLP-L62 Unpacking and Verifying the Shelf DLP-L63 Inspecting the Shelf
Required/As Needed	Required
Onsite/Remote	Onsite
Security Level	None

Procedure

- Step 1** Align the mounting bracket screw holes against the shelf screw holes.
- Step 2** Insert the screws and tighten them to a torque value of 11.5 in-lb (1.3 N-m).
- Step 3** Repeat steps 1 and 2 for the mounting bracket on the opposite side.

The following figure shows the mounting of brackets for a 19-inch (482.6-mm) configuration.

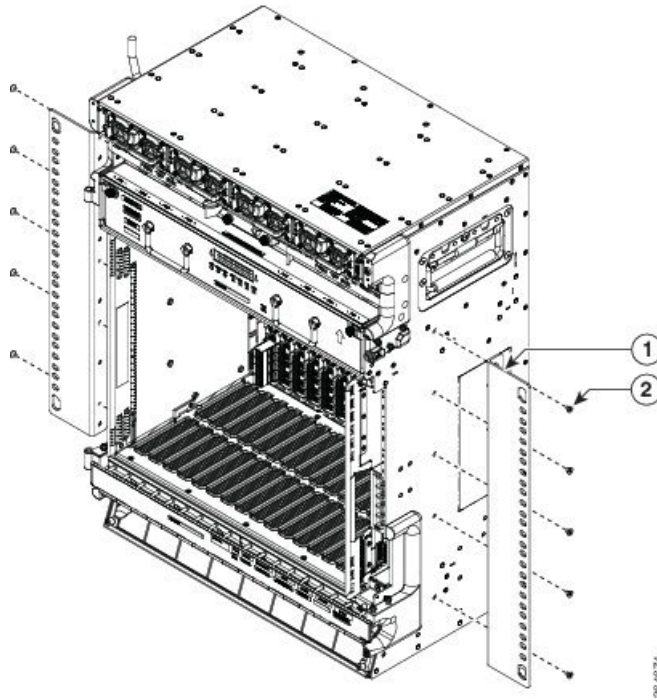
Figure 1: Mounting the Brackets on the NCS 2015 DC Shelf for a 19-inch (482.6-mm) ANSI Configuration



1	Mounting bracket in 19-inch position	2	Screw
---	--------------------------------------	---	-------

The following figure shows the mounting of brackets for a 23-inch (584.2-mm) configuration.

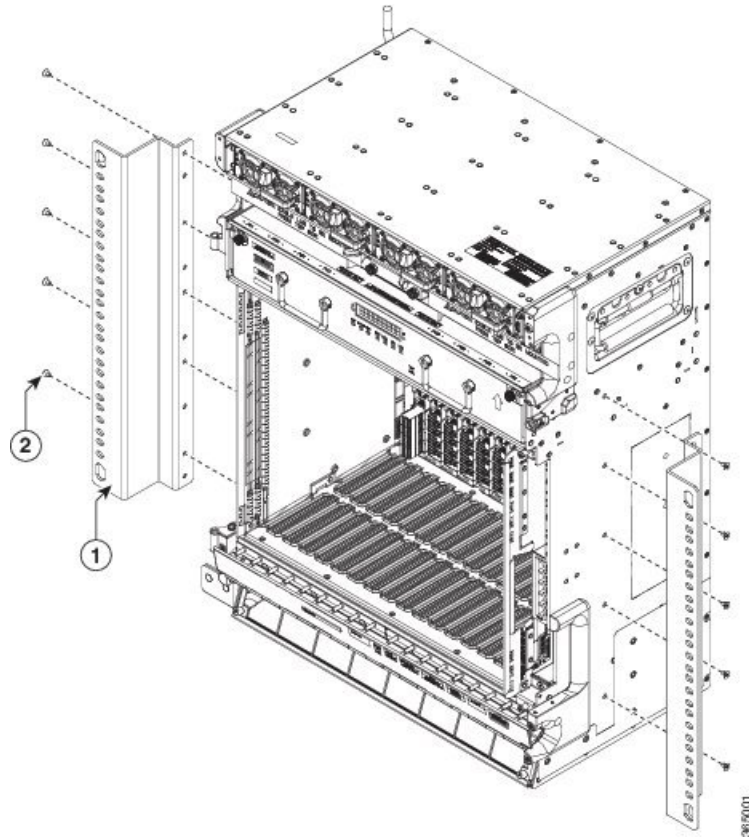
Figure 2: Mounting the Brackets on the NCS 2015 DC Shelf for a 23-inch (584.2-mm) ANSI Configuration



1	Mounting bracket in 23-inch position	2	Screw
---	--------------------------------------	---	-------

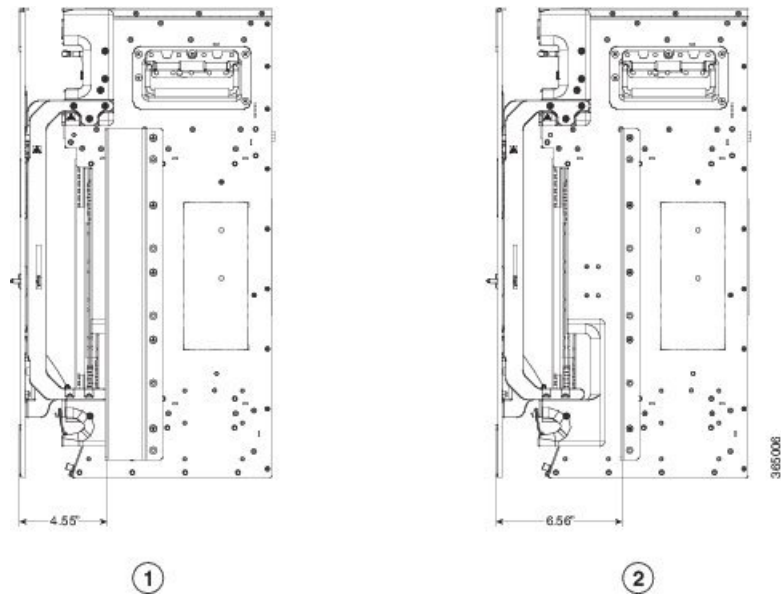
The following figure shows the mounting of Z-brackets for a 23-inch (584.2-mm) configuration.

Figure 3: Mounting the Z-Brackets on the NCS 2015 DC Shelf for a 23-inch (584.2-mm) ANSI Configuration



1	Z-bracket in 23-inch position	2	Screw
---	-------------------------------	---	-------

Figure 4: Comparison of the Deep Door Extension



1	Deep door extension of 4.55 inches when a 23-inch Z-bracket is used	2	Deep door extension of 6.56 inches when a 23-inch standard bracket is used
---	---	---	--

Stop. You have completed this procedure.

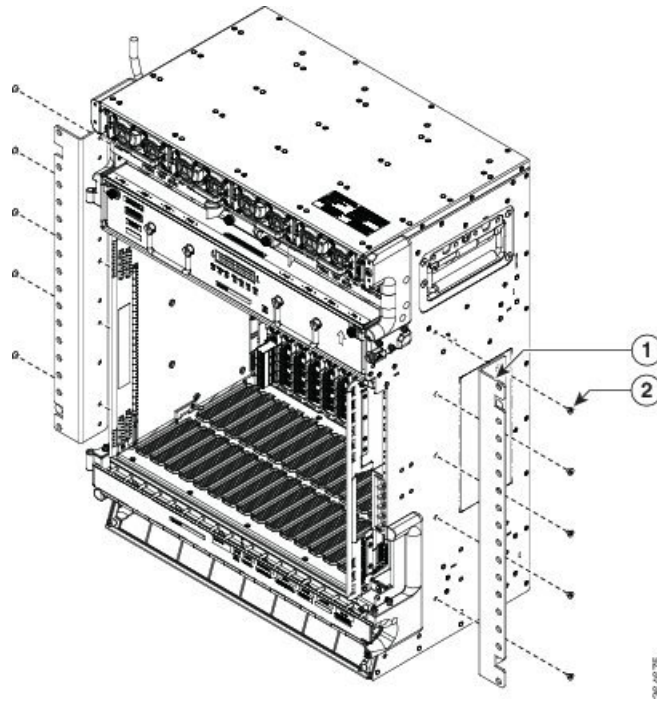
NTP-L49 Mounting Brackets on NCS 2015 Shelf for ETSI Rack Configuration

Purpose	This procedure helps in mounting the brackets on the NCS 2015 shelf for ETSI rack configuration. The mounting brackets can be installed in the middle position of the chassis.
Tools/Equipment	<ul style="list-style-type: none"> • #2 Phillips Dynamometric screwdriver • Medium slot-head screwdriver • Small slot-head screwdriver • 10 M4 x 6 flat-head Phillips mounting screws
Prerequisite Procedures	DLP-L62 Unpacking and Verifying the Shelf DLP-L63 Inspecting the Shelf
Required/As Needed	Required
Onsite/Remote	Onsite
Security Level	None

Procedure

- Step 1** Place the mounting bracket flush against the shelf as shown in the figure below.
- Step 2** Align the mounting bracket screw holes against the shelf screw holes.
- Step 3** Insert the screws and tighten them to a torque value of 11.5 in-lb (1.3 N-m).
- Step 4** Repeat steps 1 through 3 for the mounting bracket on the opposite side.

Figure 5: Mounting the Brackets on the NCS 2015 DC Shelf for ETSI Rack Configuration



1	Mounting bracket	2	Screw
---	------------------	---	-------

Stop. You have completed this procedure.

