SPARC Enterprise M3000 Server

Rail Kit and CMA Mounting Instruction Guide
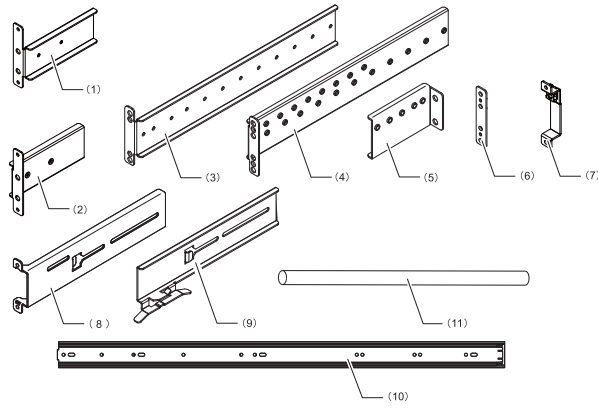
Part No. E22104-01
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This document describes the procedures for assembling and attaching the rail kit and cable management arm (CMA) to the SPARC Enterprise M3000 server, in preparation for installing the M3000 server in a rack.
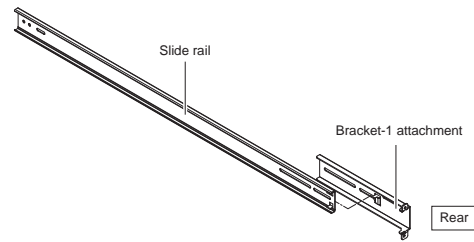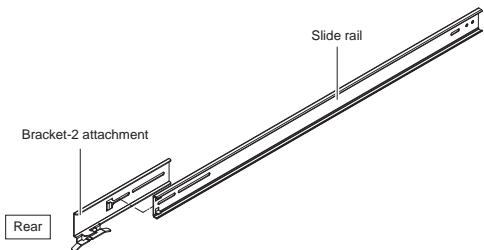
Components Check List

● Slide rail kit

	Parts name / CA drawing number	Parts position	Required number	Remarks
1	Middle-sized bracket / CA32476-Y711	Left front	1	
2	Middle-sized bracket / CA32476-Y712	Right front	1	
3	Large-sized bracket / CA32476-Y715	Right rear	1	
4	Large-sized bracket / CA32476-Y713	Left rear	1	
5	Small-sized bracket / CA32476-Y705	Left rear	1	
6	Large-sized bracket attachment / CA32476-Y714	Rear	2	Same articles for right and left
7	Front chassis bracket bar / CA32476-C710	Front	2	Same articles for right and left
8	Bracket -1 attachment / CA32476-Y700	Left rear	1	
9	Bracket -2 attachment / CA32476-Y703	Right rear	1	
10	Slide rail / CA32287-0145	Side surface	2	Same articles for right and left
11	Jig	Rear	1	

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● Slide rail kit (screws)

	Parts name / CA drawing number	Parts position	Required number	Remarks
12	M3 flathead screw / F6-SSA3-08121		4	M3 x 8 mm
13	M6 screw / F6-SW2N6-16121		10	M6 x 16 mm
14	M5 screw / F6-SW2N5-16121		6	M5 x 16 mm
15	M4 bind screw (short type) / F6-SBD4-05121		12	M4 x 5 mm
16	M4 bind screw (long type) / F6-SBD4-08121		4	M4 x 8 mm
17	M4 screw (short type) / F6-SW2N4-08121		1	M4 x 8 mm
18	M4 screw (long type) / F6-SW2N4-10121		4	M4 x 10 mm

There are two types of rack columns depending on whether or not the rack column has the threaded holes on it; and the way of attaching the bracket differs accordingly.

● Types of Rack Columns

* Threaded holes on rack columns will require all 10 M6 screws.

* Non-threaded hole rack columns will require:
  - the large sized bracket attachments and M3 flathead screws.
  - four M6 screws on the front surface of the rack.
  - six M5 screws on the rear surface of the rack.

● Cable management arm kit

	Parts name / CA drawing number	Parts position	Required number	Remarks
19	Cable management arm / CA32476-C750		1	
20	Inner slide rail holding bracket / CA32476-Y763	Left rear	1	
21	Velcro fastener / CA32476-Y764		6	
22	M4 bind screw (long type) / F6-SBD4-08121		2	M4 x 8 mm
23	M4 screw / F6-SW2N4-08121		2	M4 x 8 mm

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Attaching the Slide Rails

1 Draw out the inner slide rails from the slide rails.

The slide rail consists of outer slide rail, middle slide rail, and inner slide rail.
Inner slide rails are to be attached to both side surfaces of the server.

Move the locking lever on the inner slide rail to release the lock and pull out the inner slide rails.

Locking lever

Outer slide rail

Middle slide rail

Inner slide rail

2 Attach the large, middle and small-sized brackets to the rack columns.

a. Attach the large-sized bracket attachment to the large-sized bracket.

Large-sized bracket
Large-sized bracket attachment
Right rear
Left rear
Large-sized bracket
M3 flathead screw
Large-sized bracket attachment
M3 flathead screw

b. Attach the front chassis bracket bar to the middle-sized bracket. *1
c. Attach the middle-sized brackets to the front columns.
d. Attach the large-sized brackets to the rear columns. *1 *2

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3 Attach the bracket-1 attachment to the end of the right slide rail, as viewed from the rear of the rack.

Slide rail
Bracket-1 attachment
Rear
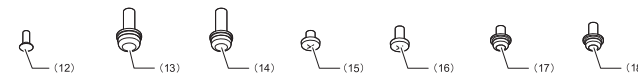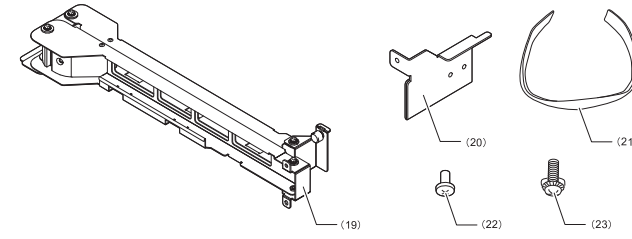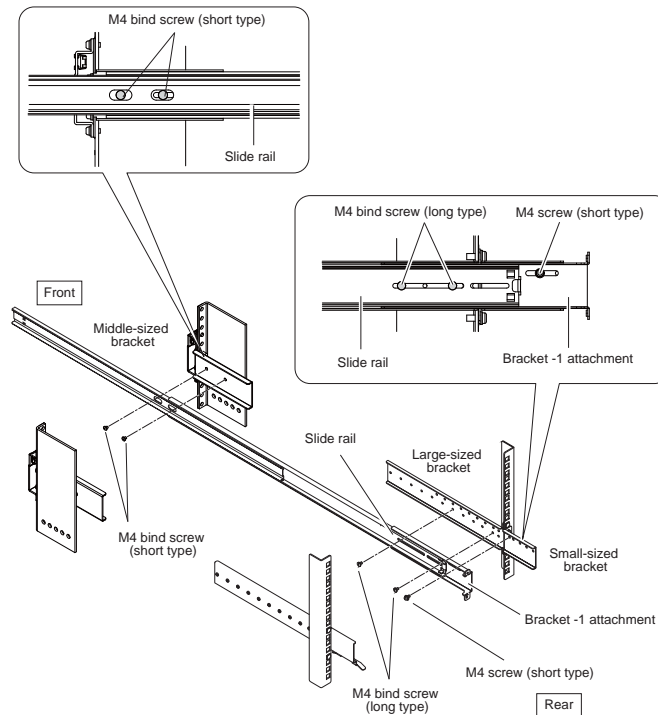
In the same manner, attach the bracket-2 to the end of the left slide rail, as viewed from the rear of the rack.

Slide rail
Bracket-2 attachment
Rear

Note - The left and right brackets are different in shape. Each bracket must be installed in its proper position.

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4 Attach the slide rail fitted with the bracket-1 attachment to the middle and large-sized brackets that are secured to the right column, as viewed from the rear.

a. Attach the slide rails to the middle-sized brackets. *1
b. Attach the slide rails to the large-sized brackets. *2
c. Attach the slide rails to the small-sized bracket.

M4 bind screw (short type)
Slide rail
M4 bind screw (long type) M4 screw (short type)
Slide rail Bracket -1 attachment
Front
Middle-sized bracket
Slide rail
Large-sized bracket
M4 bind screw (short type)
Small-sized bracket
Bracket -1 attachment
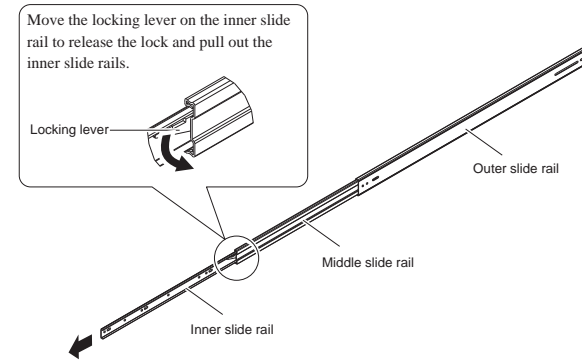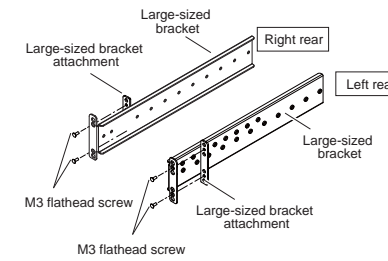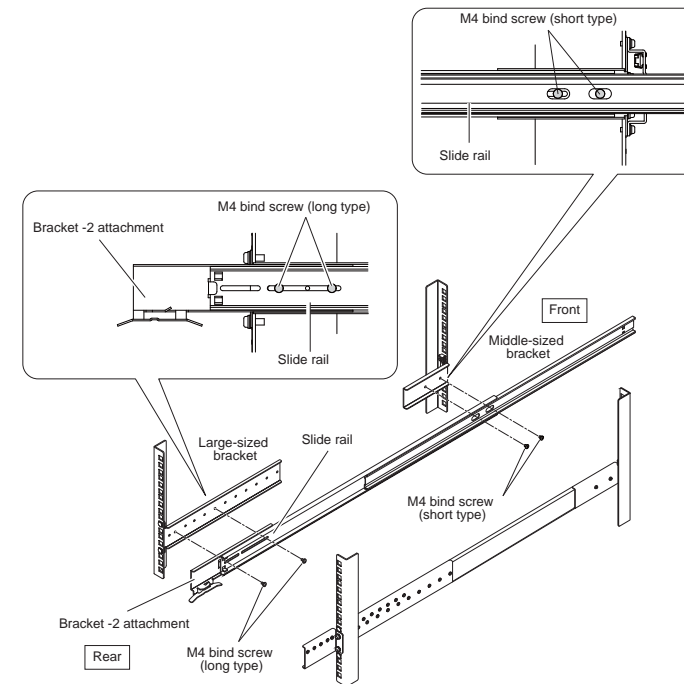M4 bind screw (long type)
M4 screw (short type)
Rear

*1: To secure the middle-sized bracket to the slide rail, use the center of the oval hole on the rail.
*2: When multiple screw holes are available on the large-sized bracket, use the holes that are nearest to and farthest from the rear column.
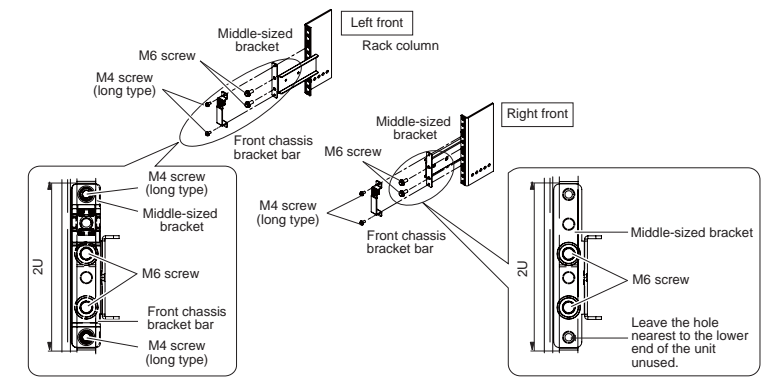
- 6 -

5 Attach the slide rail fitted with the bracket-2 attachment to the middle and large-sized brackets that are secured to the left column, as viewed from the rear.

a. Attach the slide rails to the middle-sized brackets. *1
b. Attach the slide rails to the large-sized brackets. *2

M4 bind screw (short type)
Slide rail
Bracket -2 attachment
M4 bind screw (long type)
Front
Middle-sized bracket
Large-sized bracket
Slide rail
M4 bind screw (short type)
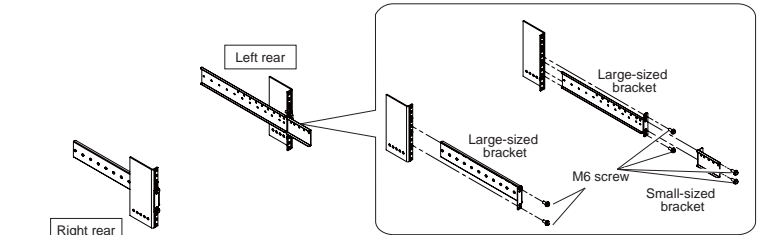Bracket -2 attachment
Rear
M4 bind screw (long type)

*1: To secure the middle-sized bracket to the slide rail, use the center of the oval hole on the rail.
*2: When multiple screw holes are available on the large-sized bracket, use the holes that are nearest to and farthest from the rear column.
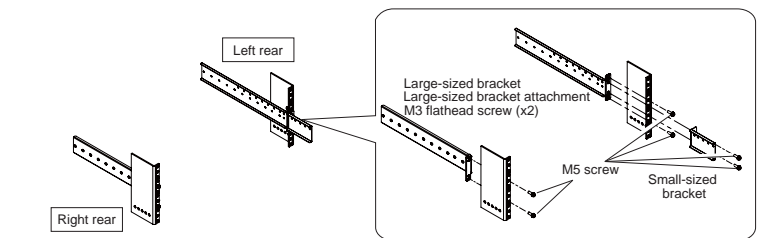
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Middle-sized bracket Left front Rack column
M6 screw
M4 screw (long type)
Front chassis bracket bar
M4 screw (long type)
Middle-sized bracket
M6 screw
Middle-sized bracket Right front
M4 screw (long type)
Front chassis bracket bar
Middle-sized bracket
M6 screw
M6 screw
Front chassis bracket bar
M4 screw (long type)
2U
Middle-sized bracket
M6 screw
2U
Leave the hole nearest to the lower end of the unit unused.

● The rack column with the threaded holes:

Left rear
Large-sized bracket
Large-sized bracket
M6 screw
Small-sized bracket
Right rear

● The rack column without the threaded holes:

Left rear
Large-sized bracket
Large-sized bracket attachment
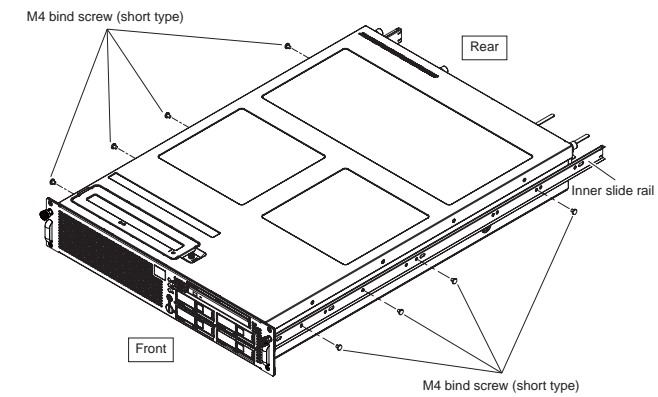M3 flathead screw (x2)
M5 screw
Small-sized bracket
Right rear

*1: The right and left large-sized brackets have different shapes. Each bracket must be installed in the proper position.
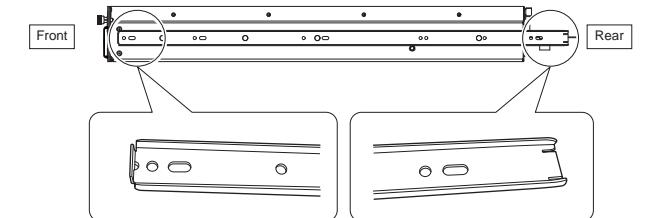*2: Procedures for attaching brackets vary based on rack column type: "threaded holes" or "non threaded holes".

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6 Attach the inner slide rails in place on the server.

To attach the inner slide rail, use four M4 bind screws (short type) on each side surface of the server.
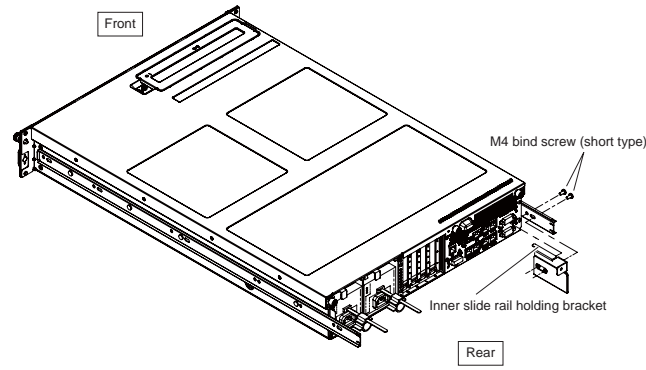

M4 bind screw (short type)
Rear
Inner slide rail
Front
M4 bind screw (short type)

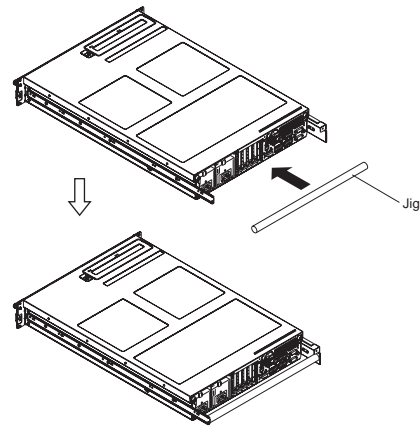● Right side view

Front
Rear

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7 Attach the inner slide rail holding bracket to the inner slide rail.

To secure the inner slide rail holding bracket, put two M4 bind screws (short type) on the inner slide rail and tighten up toward the server.

Front

M4 bind screw (short type)

Inner slide rail holding bracket

Rear

8 Put the jig to the end of both inner slide rails (use the jig as a prop stick and sandwich it between the rails at the farthest possible point from the server).
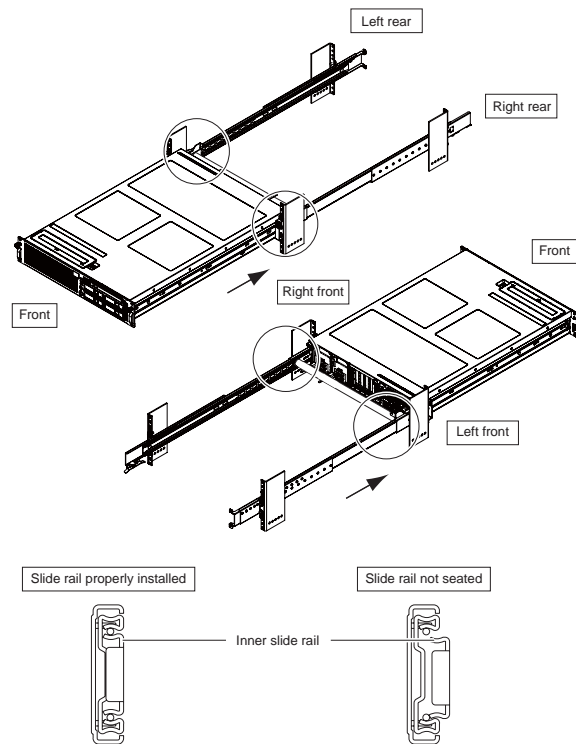
Jig

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9 Insert the middle slide rail into the outer slide rails until fully seated.

Middle slide rail

Locking lever

When the middle slide rails are stopped on the way, move the locking lever on the middle slide rail and insert the rails all the way until fully seated into the outer slide rails.

Rear

Front

Rear

Front

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10 Slide the bearing board (thin metal sheet with oval holes) that is housed in the rails, near the front surface of the rack.

Position the bearing board so that the round projection on the middle rail is visible through the first front oval hole.

Bearing board

Projection

Rear

Front

Note - Ensure that the bearing board is properly positioned to avoid damage to the server when the server is installed in or extended from the rack.

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11 Release the locking lever on the inner slide rails and insert the server into the rack.

⚠ Caution - Ensure that the bearing board is properly positioned to avoid damage to the server when the server is installed in or extended from the rack.

a. Place the tip of the inner slide rail to the groove on the middle slide rail and insert the server into the rack.

Rear

Middle slide rail

Front

Outer slide rail

Inner slide rail

b. While inserting the server in the rack, a click should be heard to indicate the server is in locked position.

c. Move the locking lever on the inner slide rails to release the lock, and continue to carefully insert the server in the rack until fully seated.

Locking lever

Checking of Installed Slide Rails

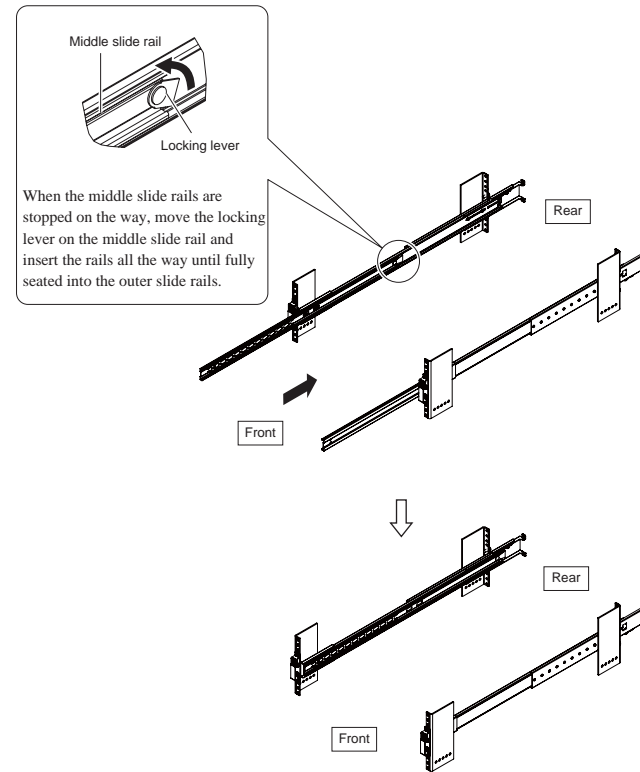Note - To avoid possible damage to the server, follow these procedures carefully.

1 Check the placement of the slide rails at both front and rear ends of the right and the left rails.

Left rear

Right rear

Front

Right front

Front

Left front

Slide rail properly installed

Slide rail not seated

Inner slide rail

Note - With the server extended fully out on the rails and firmly supported by two people, gently shake it to make sure the server does not come off from the slide rails.
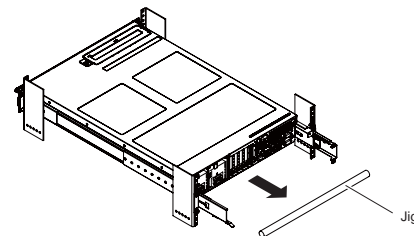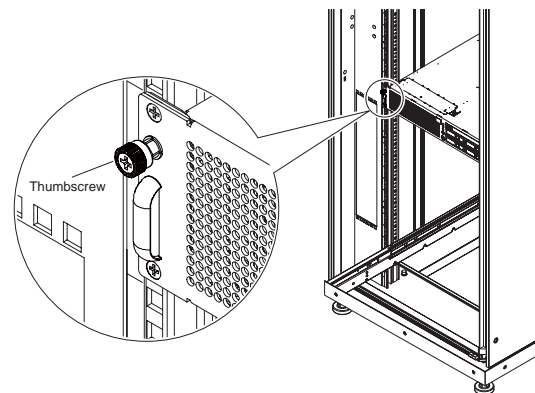
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2 In case the slide rails are not properly installed, rework from Step 9.

3 After you check that the slide rails are properly installed, remove the jig.
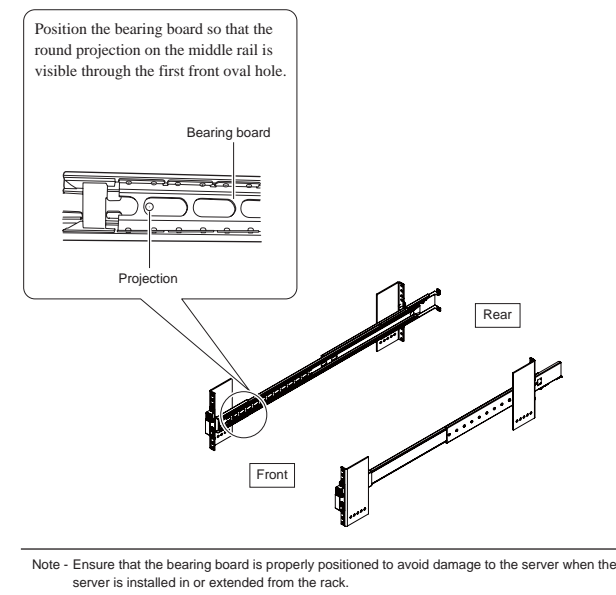
Jig

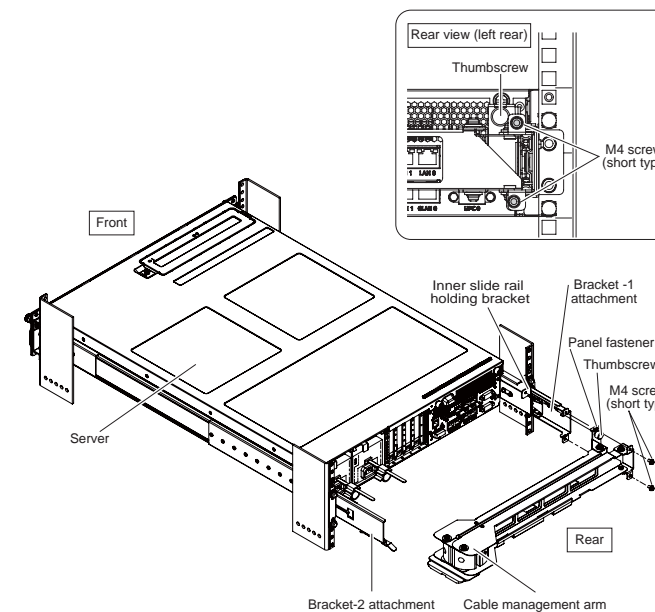**4** Tighten the two thumbscrews on the front bezel to secure the server to the rack.

Thumbscrew

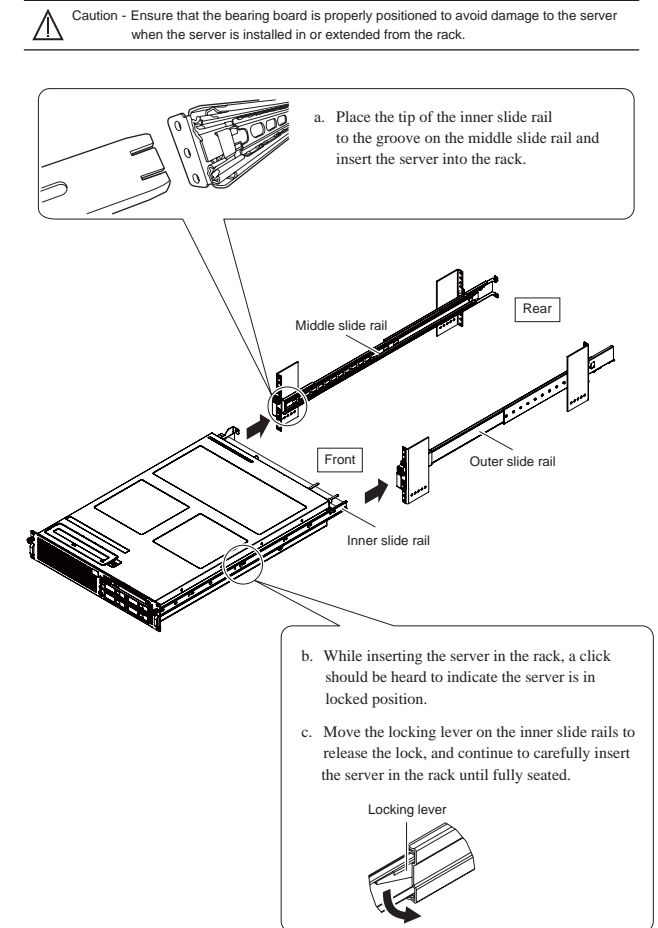
Attaching the Cable Management Arm

1 Place the arm end of the CMA into the bracket-1 attachment.

At the same time, hook the hinge part of CMA to the bracket-2 attachment.

2 Use two M4 screws (short type) to secure the CMA to the bracket-1 attachment.

3 Slide the CMA to move it into the bracket-2 attachment.

4 Use the thumbscrew to attach the panel fastener of the CMA to the inner slide rail holding bracket that is secured to right rear rack column, as viewed from the rear of the rack.

Rear view (left rear)

Thumbscrew

M4 screw (short type)

Front

Inner slide rail holding bracket

Bracket -1 attachment

Panel fastener

Thumbscrew

M4 screw (short type)

Server

Rear

Bracket-2 attachment   Cable management arm
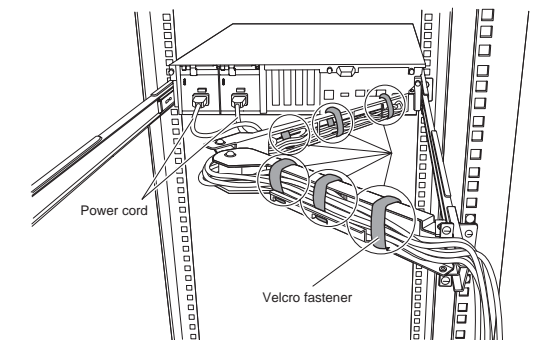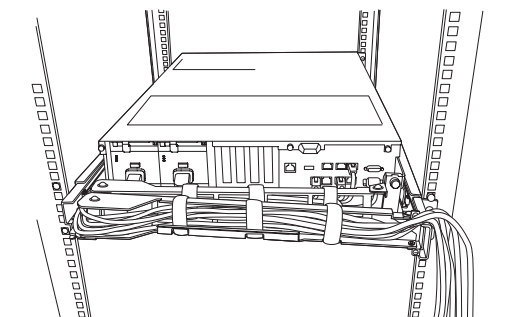
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5 Connect the power cord to the rear of the server.

6 Pass the Velcro fasteners through the six cut-outs on the CMA to secure the cables such as power cord and LAN cables in a bundle.

In so doing, pull the server out to the front to give the cables the excess length.

● Status of cables when the server is pulled out

Power cord

Velcro fastener

● Status of cables when the server is stored in the rack