IBM

IBM Power® System S822LC (8335-GCA and 8335-GTA) Quick Install Guide

Read all precautions and instructions before you start working on the system and its parts.

Use normal electrostatic discharge (ESD) procedures when working on the system and parts. IBM recommends wearing gloves and an ESD wrist strap to avoid possible damage to the equipment.

The information about the 8335-GCA and 8335-GTA systems is available online in the IBM Knowledge Center.

| 8335-GCA information: https://ibm.biz/QR8335-GCA	8335-GTA information: https://ibm.biz/QR8335-GTA

8335-GCA and 8335-GTA parts

Use this information to find the field-replaceable unit (FRU) part number.

After you identify the part number of the part that you want to order, go to Advanced Part Exchange Warranty Service. Registration is required. If you are not able to identify the part number, go to Contacting IBM® service and support.
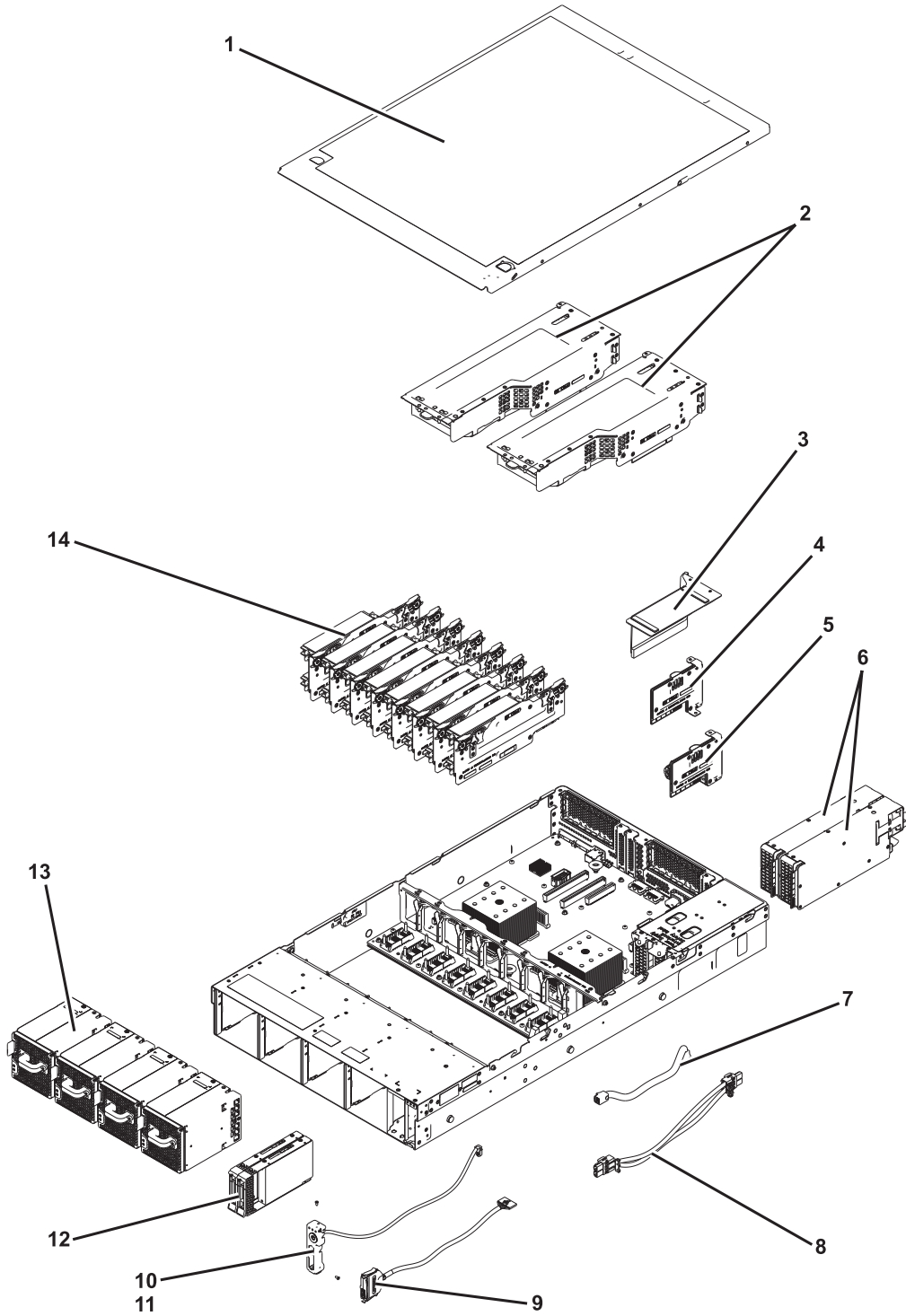
Rack final assembly
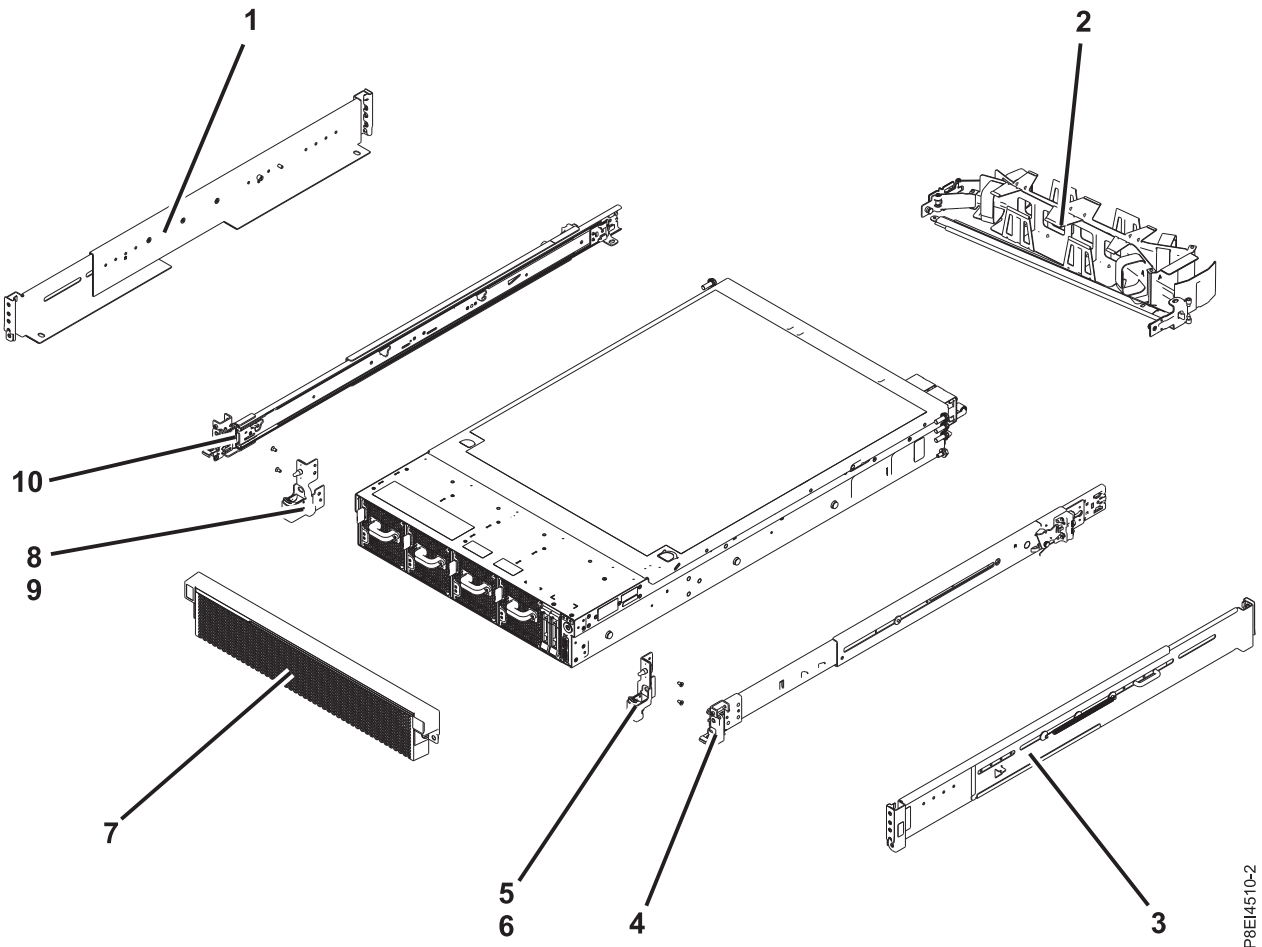
Figure 1. Rack final assembly

Table 1. Rack final assembly part numbers

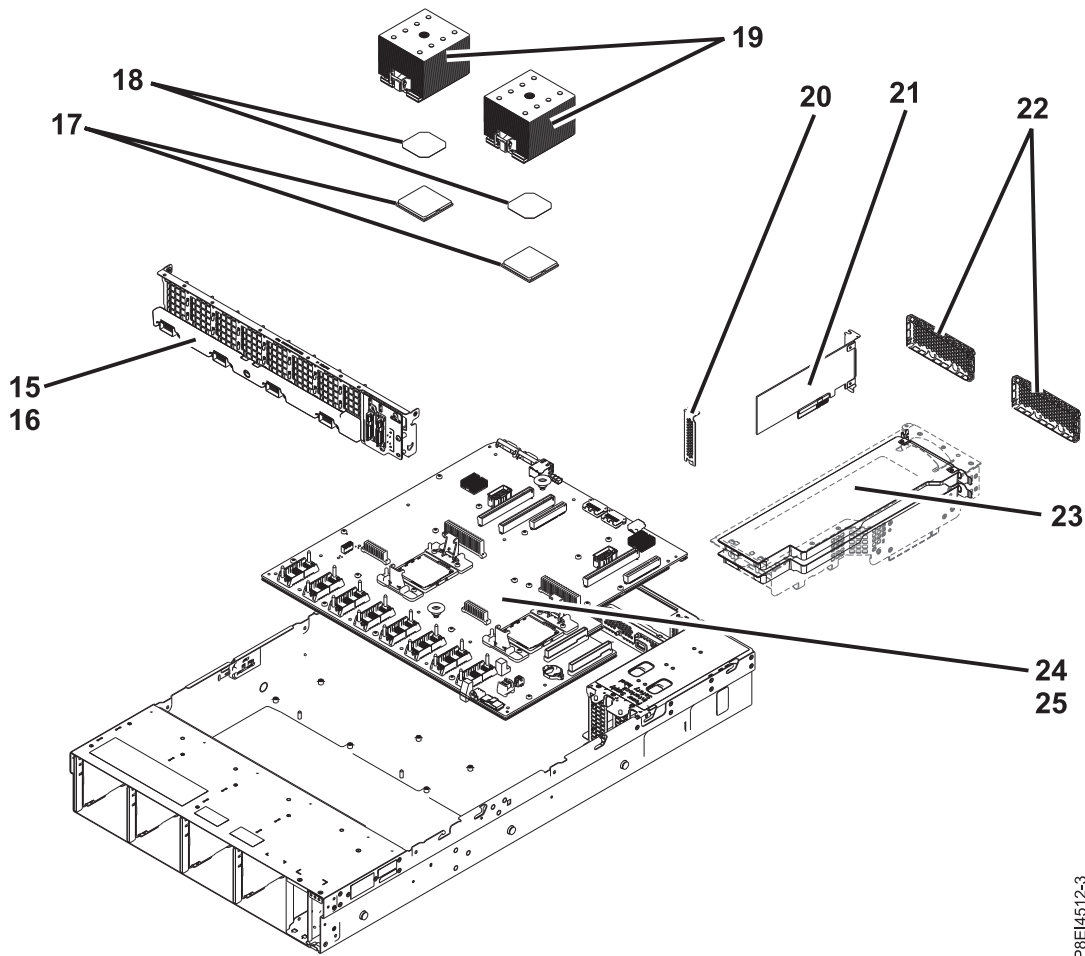| Index number	Part number	Units per assembly	Description
1	45W8836	1	Fixed rail kit - contains left and right fixed rails and attaching screws
2	74Y9063	1	Cable management arm assembly
3	45W8836	1	Fixed rail kit - contains left and right fixed rails and attaching screws
4	00E4260	1	Slide rail kit - contains left and right slide rails and attaching screws
5		1	Electronic Industries Association (EIA) bracket (right side)
6		2	Attaching screw for EIA bracket (right side)
7	00E4501	1	Bezel
8		1	EIA bracket (left side)
9		2	Attaching screw for EIA bracket (left side)
10	00E4260	1	Slide rail kit - contains left and right slide rails and attaching screws

System parts

Figure 2. System parts

P8EI4511-2

Table 2. System parts

Index number	Part number	Units per assembly	Description
1		1	Top access cover assembly
2	00E4485	1	Graphics processing unit (GPU) riser with GPU
	00E4484	2	GPU riser without GPU **Note:** Requires two riser fillers. See index 23 in Table 3 on page 5 for the riser filler part number.
	00E4475	2	PCIe riser **Notes:** • If a PCIe adapter is present, one riser filler is required. See index 21 in Table 3 on page 5 for PCIe adapter part numbers and index 23 in Table 3 on page 5 for the riser filler part number. • If a PCIe adapter is not present, two riser fillers are required. See index 23 in Table 3 on page 5 for the riser filler part number.
3		1	Power riser cover
4	00E4473	1	Power riser without time-of-day battery slot
5	00E4474	1	Power riser with time-of-day battery slot **Note:** The power riser part number does not include the time-of-day battery. The time-of-day battery is a CR2450N lithium battery.
6	01AF370	2	Power supply
7	00E4482	1	Disk and fan signal cable
8	00E4481	1	Fan power cable
9	00E4483	1	Front USB cable with connector
10	00E4525	1	Power switch and power switch cable
11		2	Screw
12	00E4252	2	Drive filler
	00LY266	2	1 TB disk drive
	00LY418	2	2 TB disk drive
	00LY409	2	480 GB solid-state drive
	00LY410	2	480 GB solid-state drive
	00LY411	2	960 GB solid-state drive
	00LY412	2	960 GB solid-state drive
	00LY423	2	1.92 TB solid-state drive
	00YL438	2	3.84 TB solid-state drive
13	00E4256	4	Fan

Table 2. System parts (continued)

Index number	Part number	Units per assembly	Description
14	00E4251	8	Memory riser filler
	00LY064	8	Memory riser
	78P4489	32	4 GB, 1600 Mhz DDR3 RDIMM
	78P4490	32	8 GB, 1600 Mhz DDR3 RDIMM
	78P4491	32	16 GB, 1600 Mhz DDR3 RDIMM
	78P4492	32	32 GB, 1333 Mhz DDR3 RDIMM **Note:** The DIMM FRU might include a heat spreader. DIMMs with heat spreaders and DIMMs without heat spreaders can be used together in the system.

Additional system parts

Figure 3. Additional system parts

Table 3. Additional system parts.

Index number	Part number	Units per assembly	Description
15	00E4472	1	Disk drive and fan card

Table 3. Additional system parts (continued).

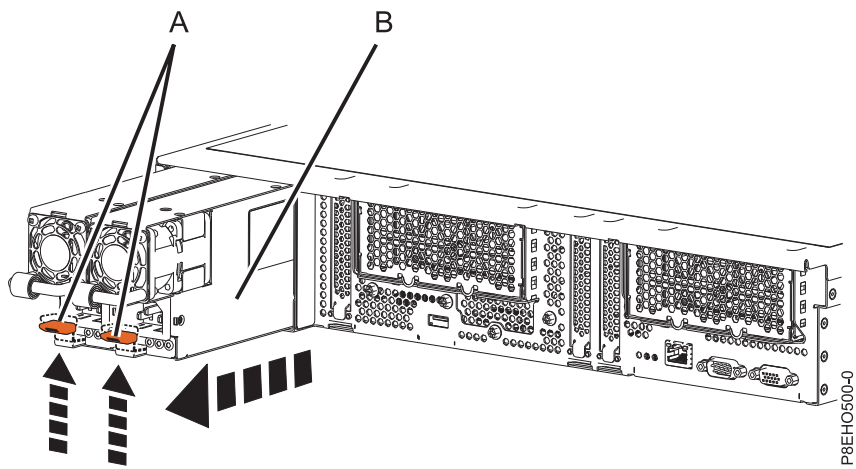| Index number	Part number	Units per assembly	Description
16	00E4476	1	Screw kit **Note:** The screw kit includes 12 screws for the disk drive and fan card and 16 screws for the system backplane.
17	01AF287	2	8 core 3.625 GHz system processor module
	01AF288	2	10 core 3.259 GHz system processor module
18	01AF286	2	Heat sink kit (includes heat sink and thermal interface material)
19	01AF286	2	Heat sink kit (includes heat sink and thermal interface material)
20	46K5109	3	PCI filler
21		3	PCIe adapters. Use the feature type of the adapter to find the FRU part number in PCIe adapter information by feature type for the 8335-GCA or 8335-GTA.
22	00E4255	2	Graphics processing unit (GPU) shield
23	00E4514	2	Riser fillers for the GPU riser or the PCIe riser
24	00E4470	1	System backplane
25	00E4476	1	Screw kit **Note:** The screw kit includes 12 screws for the disk drive and fan card and 16 screws for the system backplane.

8335-GCA and 8335-GTA ports
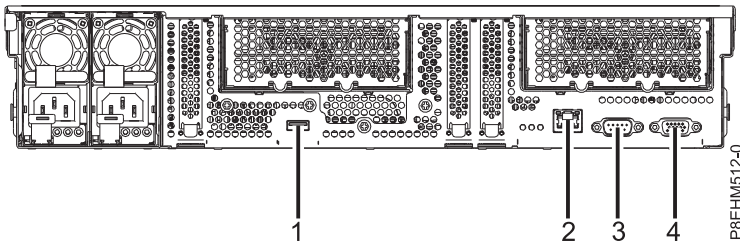
Figure 4. Rear view of the system with ports displayed

Table 4. Port callouts

Identifier	Description
1	USB 3.0
2	Ethernet
3	Intelligent Platform Management Interface (IPMI)
4	Video Graphics Array (VGA). Text based capability is only supported at this time.

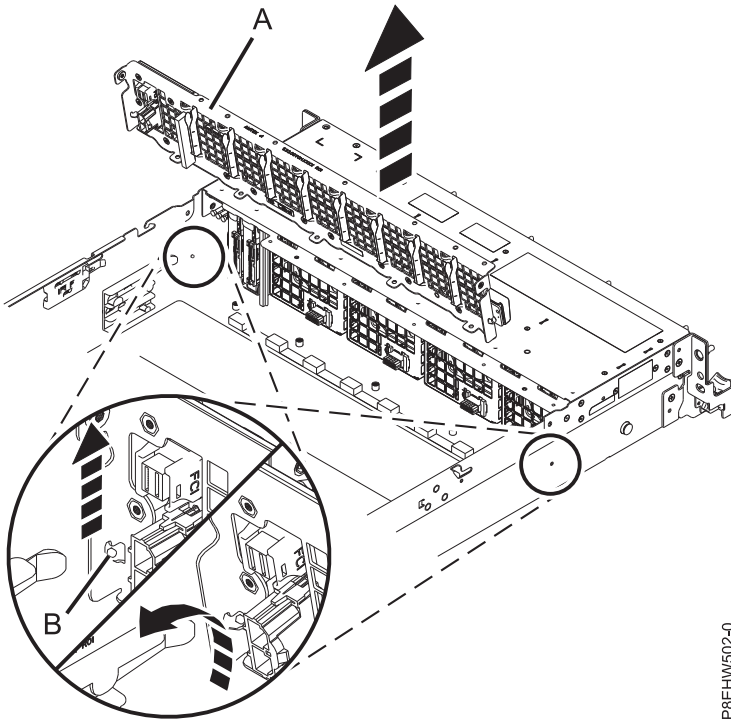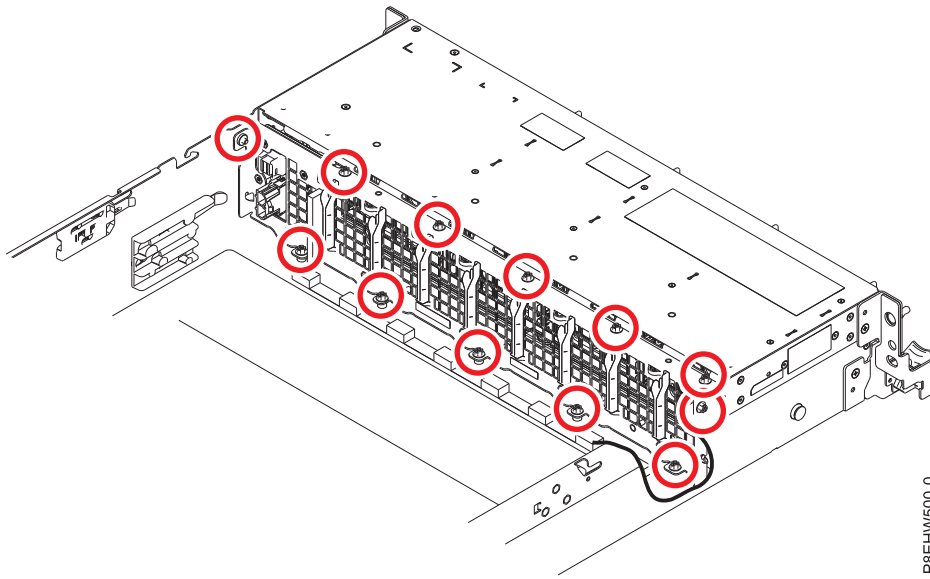# Installing and removing 8335-GCA and 8335-GTA parts

Power supplies:

A   B

P8EHO500-0

Top cover:

B A

C

P8EI1502-0

Disks:

P8EHN502-0

Fans:

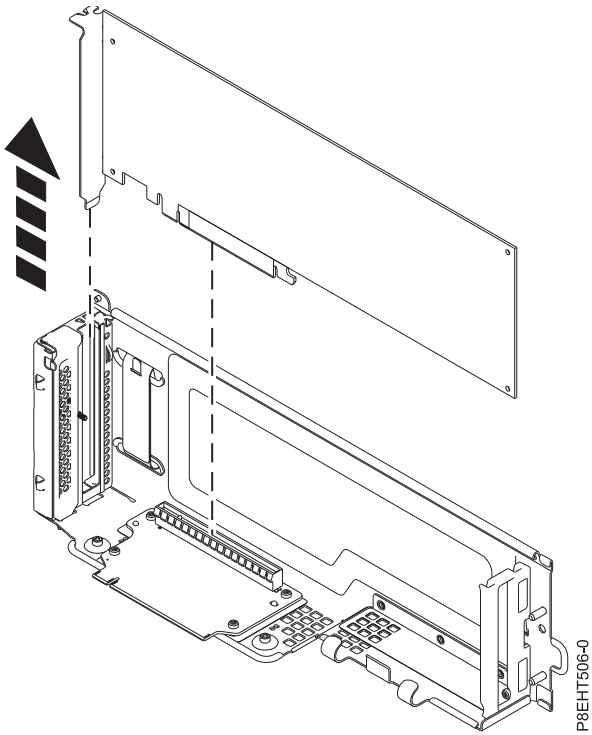P8EHP501-0

Disk drive fan card:

P8EHW500-0

P8EHW502-0
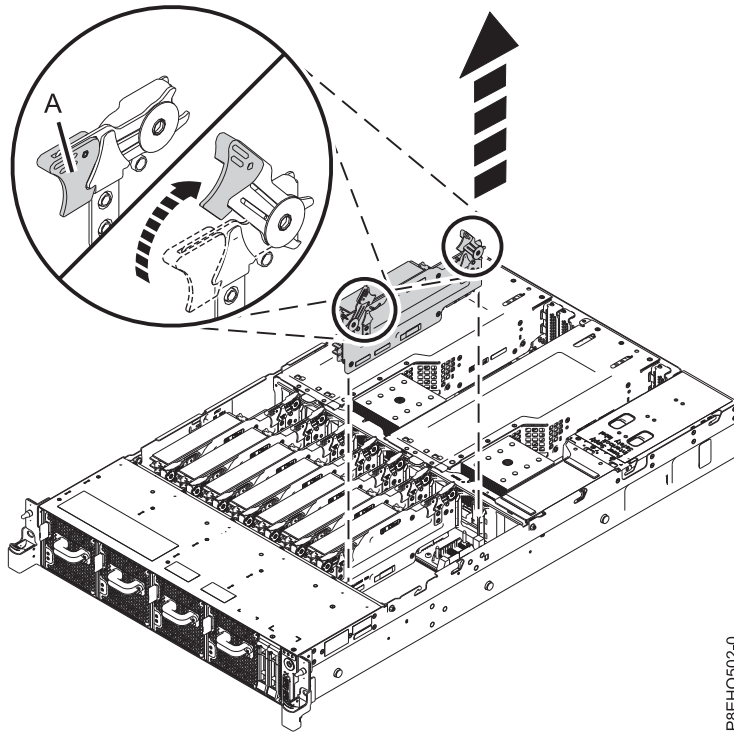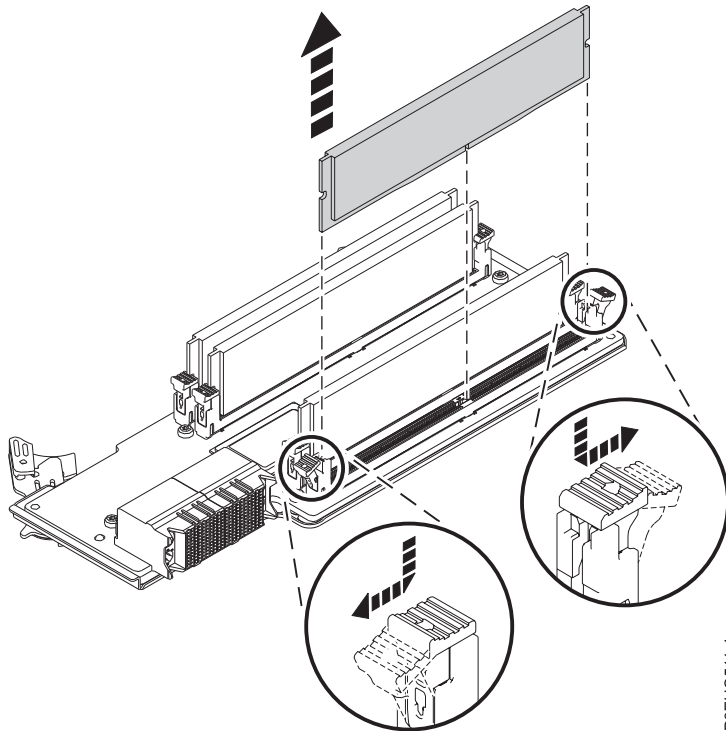
9

Graphics processing unit:

A

B
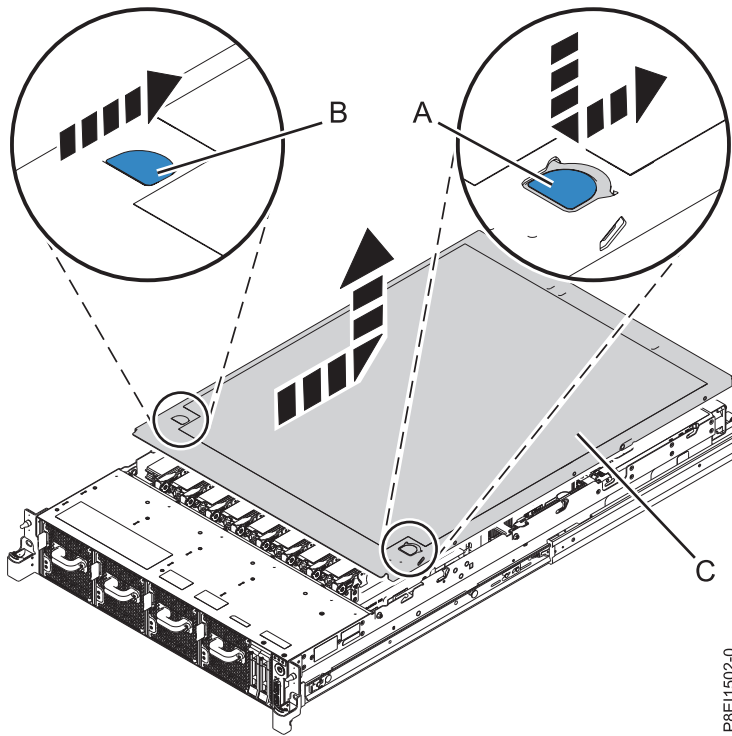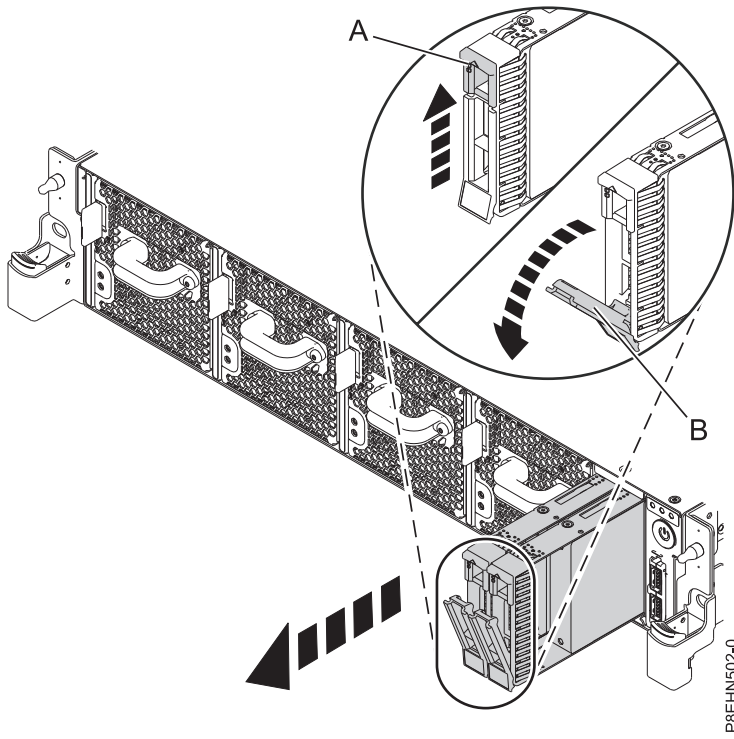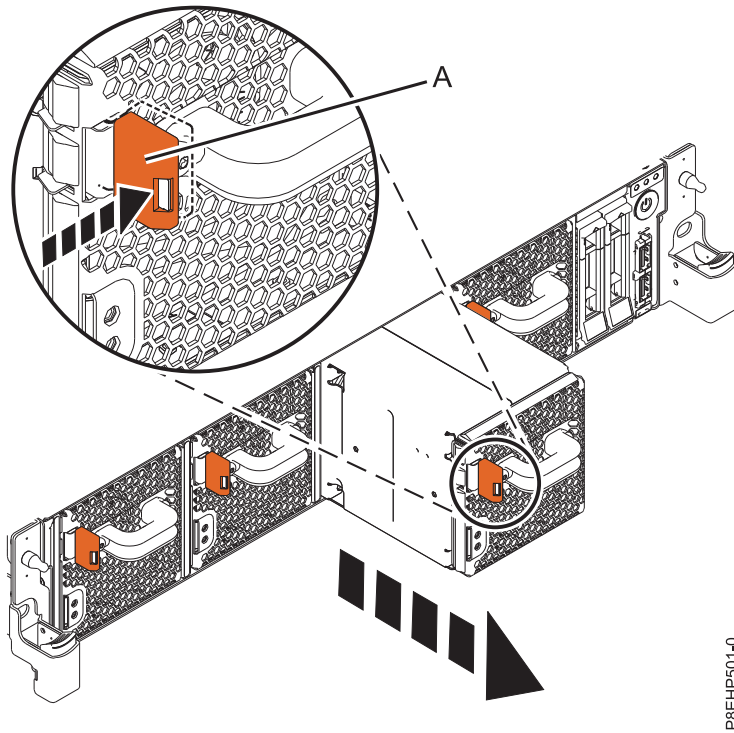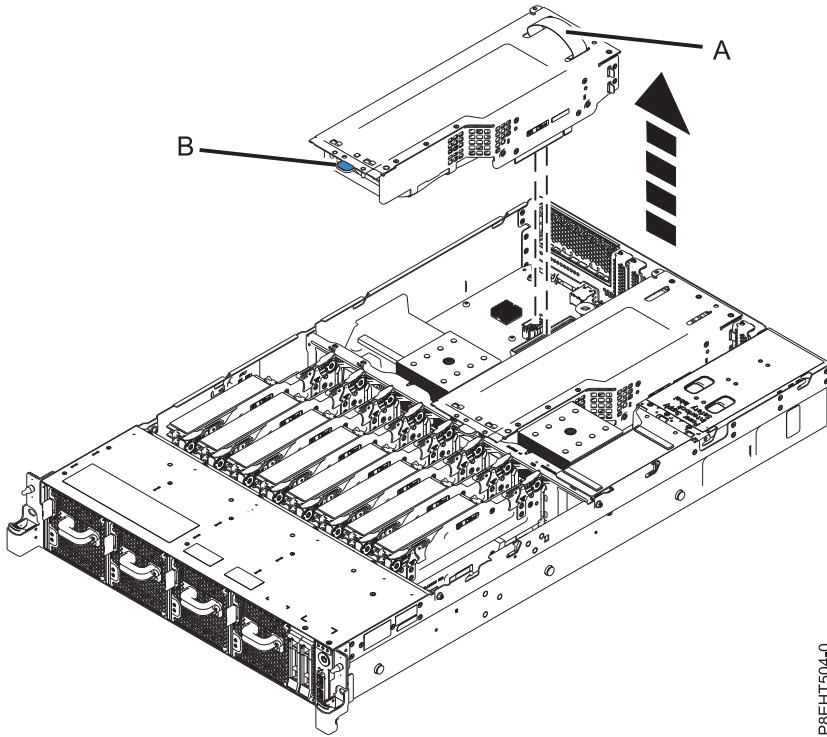
P8EHT504-0

P8EHT506-0

Memory and memory risers:

A

P8EHQ502-0

P8EHQ511-1
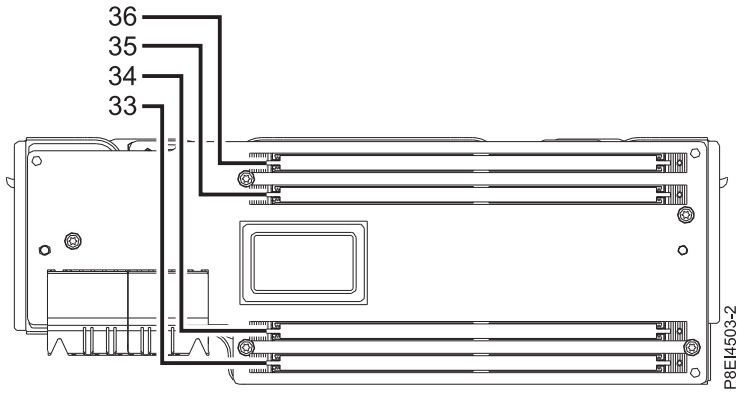
Table 5. Memory locations on memory riser cards

Index number	Memory riser card	FRU description
33	Memory riser 1	DIMM 1
	Memory riser 2	DIMM 5
	Memory riser 3	DIMM 9
	Memory riser 4	DIMM 13
	Memory riser 5	DIMM 17
	Memory riser 6	DIMM 21
	Memory riser 7	DIMM 25
	Memory riser 8	DIMM 29
34	Memory riser 1	DIMM 2
	Memory riser 2	DIMM 6
	Memory riser 3	DIMM 10
	Memory riser 4	DIMM 14
	Memory riser 5	DIMM 18
	Memory riser 6	DIMM 22
	Memory riser 7	DIMM 26
	Memory riser 8	DIMM 30
35	Memory riser 1	DIMM 3
	Memory riser 2	DIMM 7
	Memory riser 3	DIMM 11
	Memory riser 4	DIMM 15
	Memory riser 5	DIMM 19
	Memory riser 6	DIMM 23
	Memory riser 7	DIMM 27
	Memory riser 8	DIMM 31

Table 5. Memory locations on memory riser cards (continued)

Index number	Memory riser card	FRU description
36	Memory riser 1	DIMM 4
	Memory riser 2	DIMM 8
	Memory riser 3	DIMM 12
	Memory riser 4	DIMM 16
	Memory riser 5	DIMM 20
	Memory riser 6	DIMM 24
	Memory riser 7	DIMM 28
	Memory riser 8	DIMM 32

Table 6. Memory DIMM feature codes

Supported feature codes (FC)	Size
EM50	16 GB RDIMMS, 1333 MHZ, 4 GBIT DDR3 DRAM
EM51	32 GB RDIMMS, 1333 MHZ, 4 GBIT DDR3 DRAM
EM52	64 GB RDIMMS, 1333 MHZ, 4 GBIT DDR3 DRAM
EM53	128 GB RDIMMS, 1066 MHZ, 4 GBIT DDR3 DRAM

Table 7. 8335-GCA memory configuration as a function of the number of DIMMs and risers. You read this table by selecting the individual DIMM size row in the leftmost column, then move to the right and select the columns for the memory capacity. The riser quantity value that is listed is the quantity of the memory feature code that can be ordered, which corresponds to the DIMM size in the leftmost column.

	32 GB		64 GB		128 GB		256 GB		512 GB		1024 GB	
DIMM Size	DIMMs	Risers	DIMMs	Risers	DIMMs	Risers	DIMMs	Risers	DIMMs	Risers	DIMMs	Risers
4 GB	8^1	2	16^2	4	32	8						
8 GB			8^1	2	16^2	4	32	8				
16 GB					8^1	2	16^1	4	32	8		
32 GB											32	8
Notes:												
1. Default configurations for the listed memory capacity												
2. Field upgrade for the 64 GB configuration												

The memory risers must be installed in the sequence: **(1)**, then **(2)**, then **(3)**, as shown in Figure 5 on page 14. By default, the first positions **(1)** are always populated.
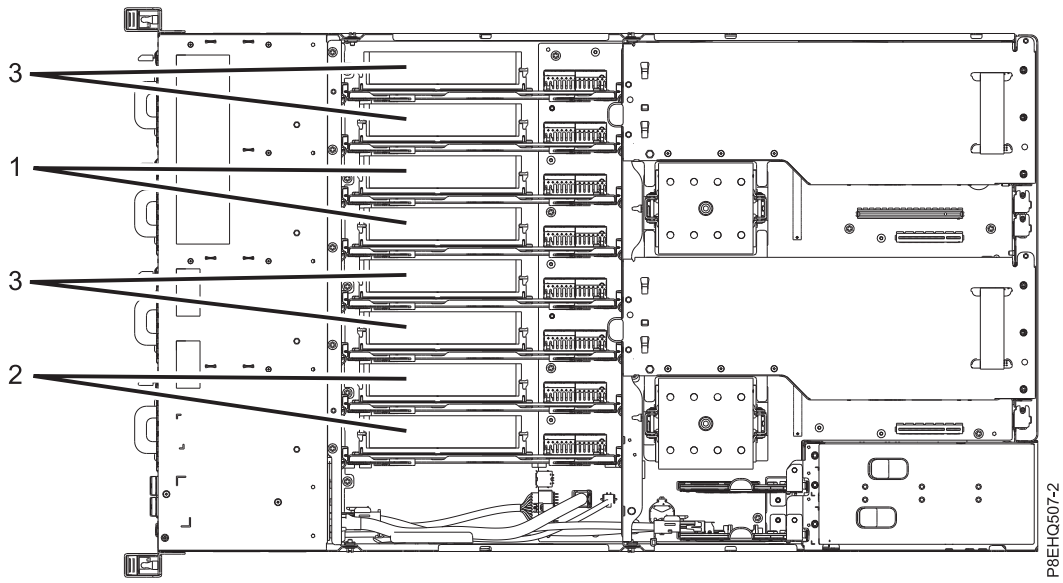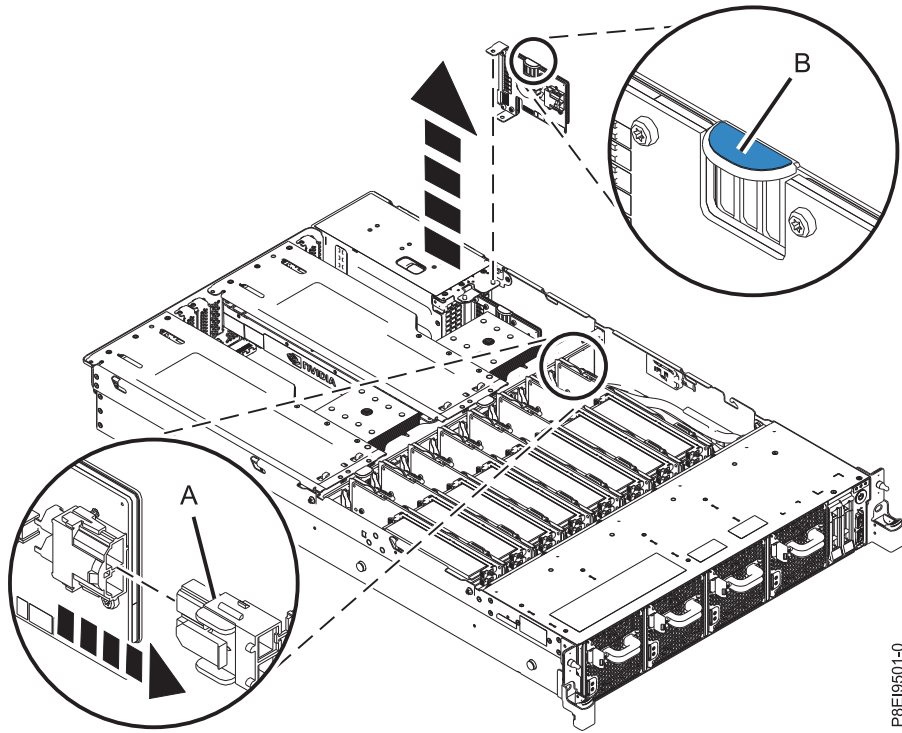
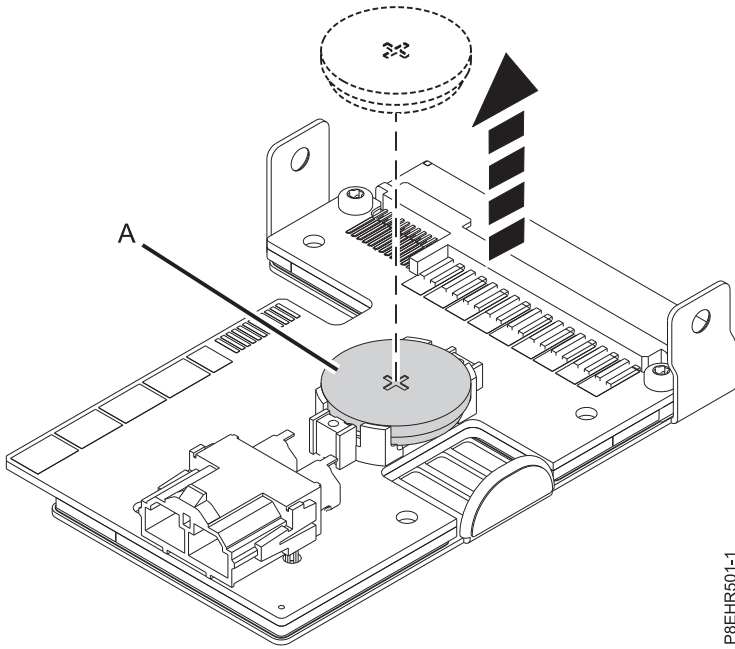*Figure 5. Installation sequence for 8335-GCA memory risers*

PCIe adapters:
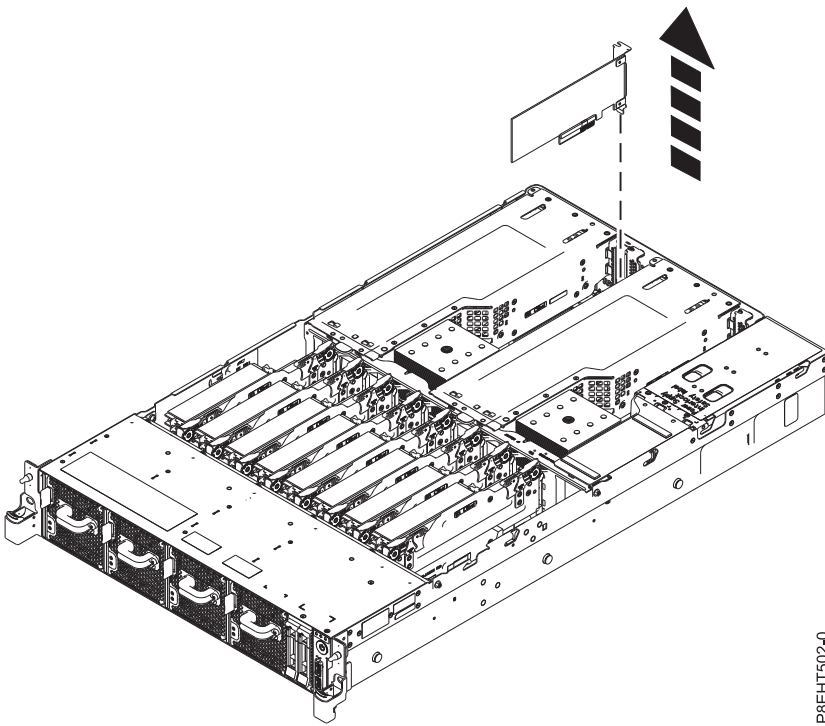
Power risers and time-of-day battery:

B

A

P8EI9501-0

A

P8EHR501-1
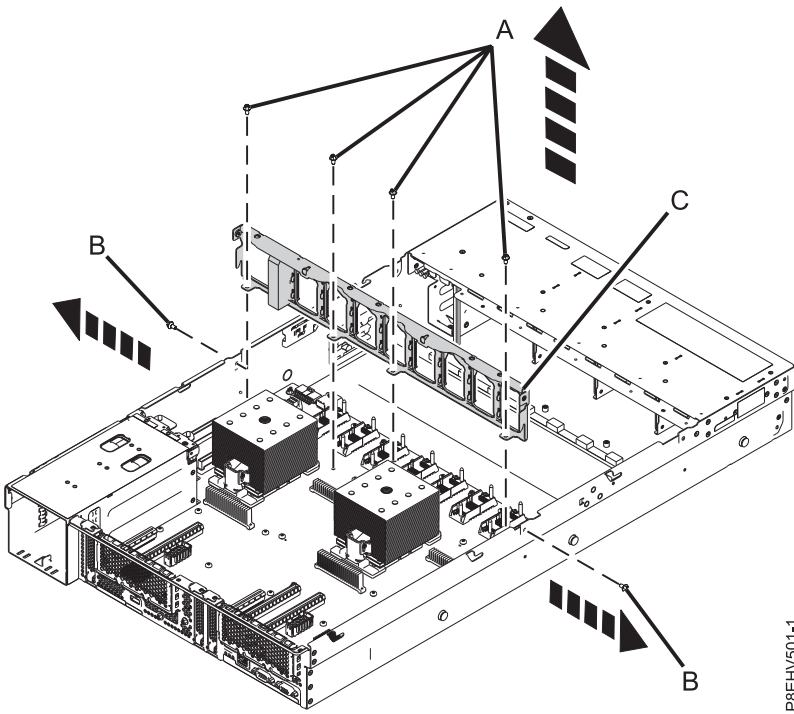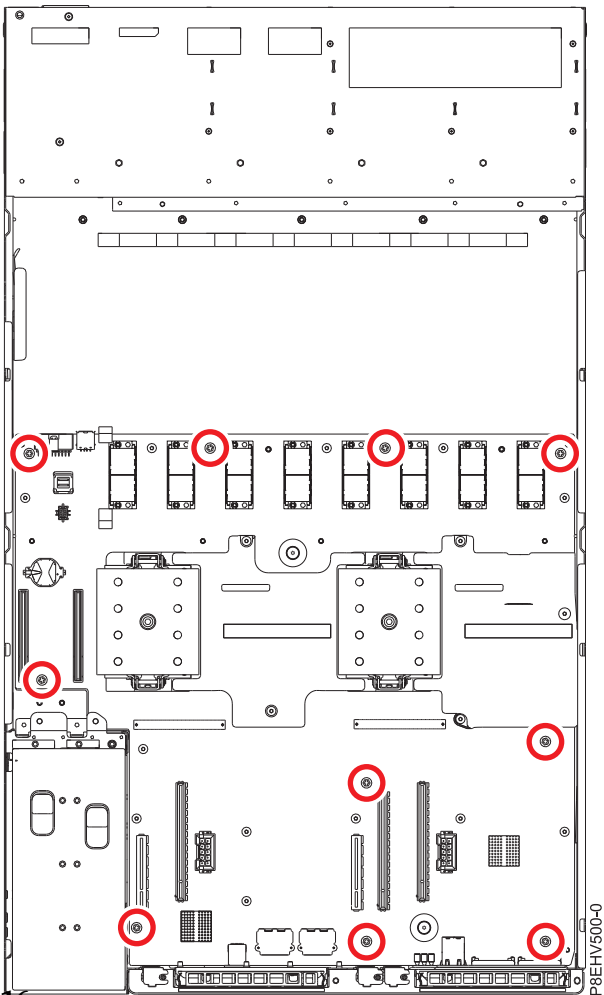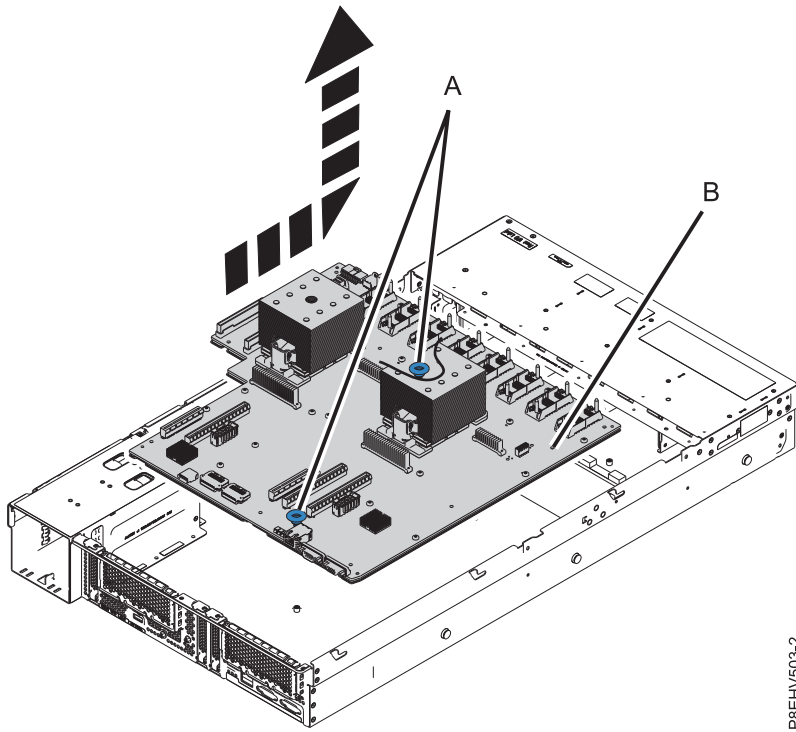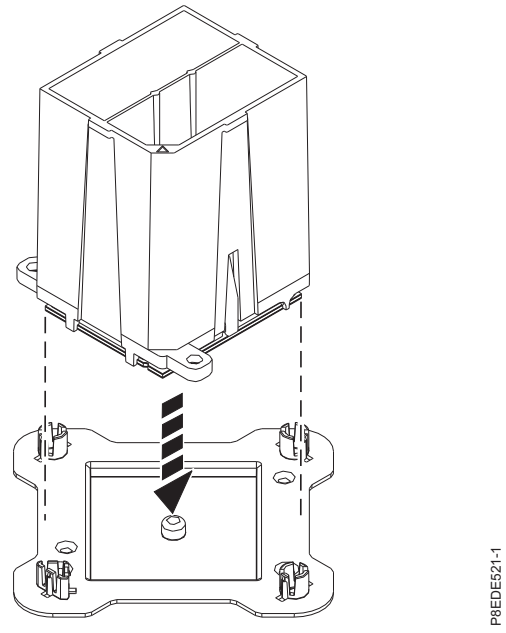
System backplane:

A

C

B

B

P8EHV501-1

Front

P8EHV500-0

16

System backplane *(continued)*:

P8EHV503-2
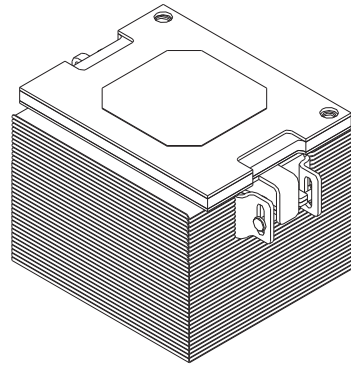
System processor modules:

P8EDE520-2

P8EHS504-0

System processor modules:

P8EHS501-0

P8EHS508-0

P8EHS509-0

P8EDE521-1

18
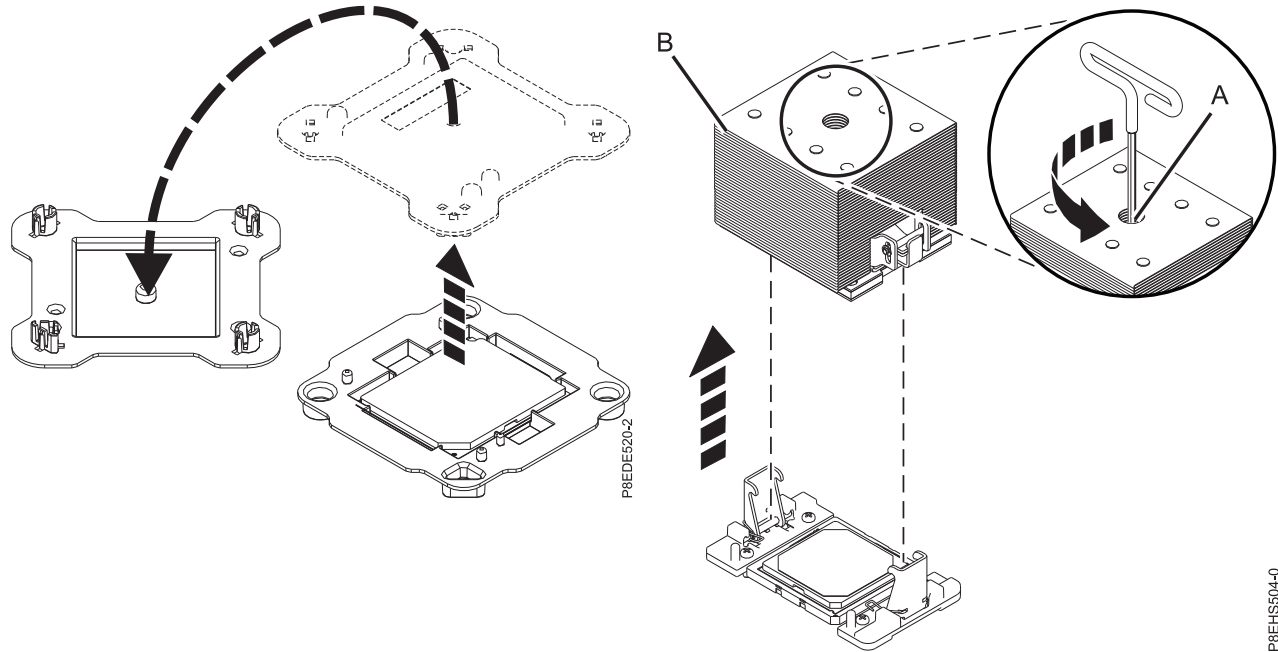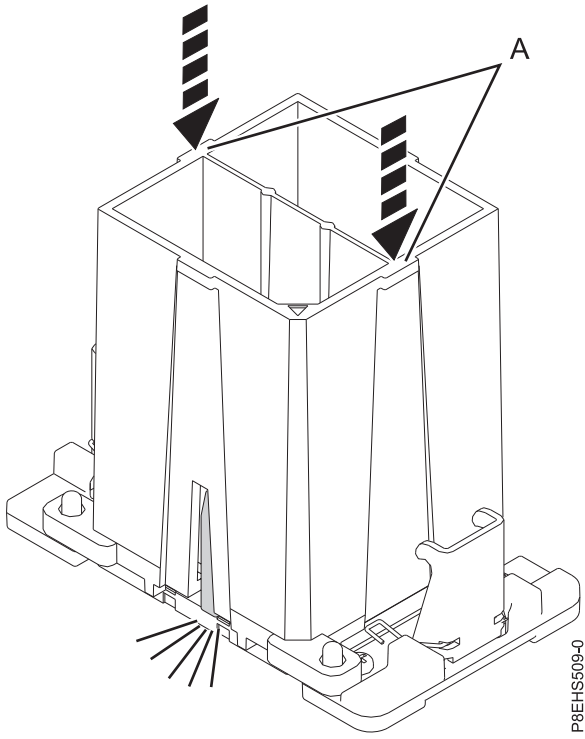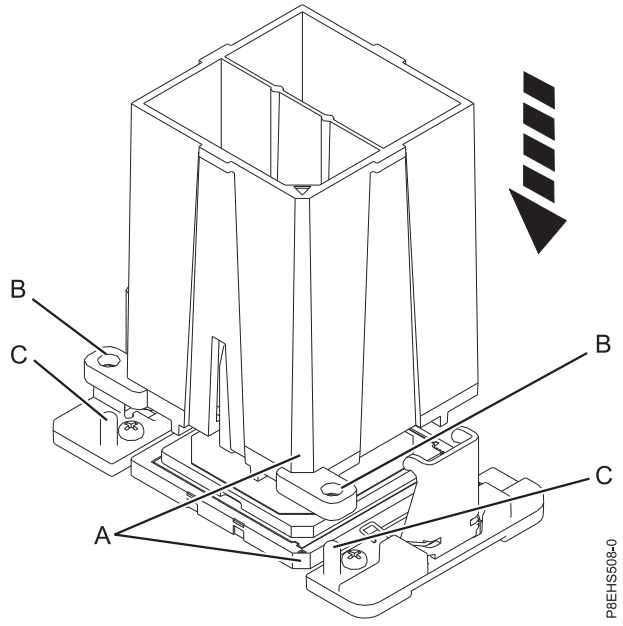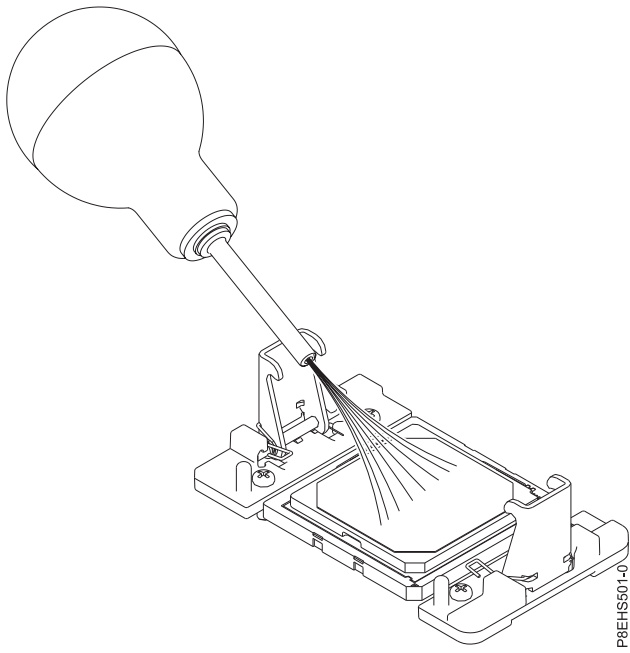
System processor modules:
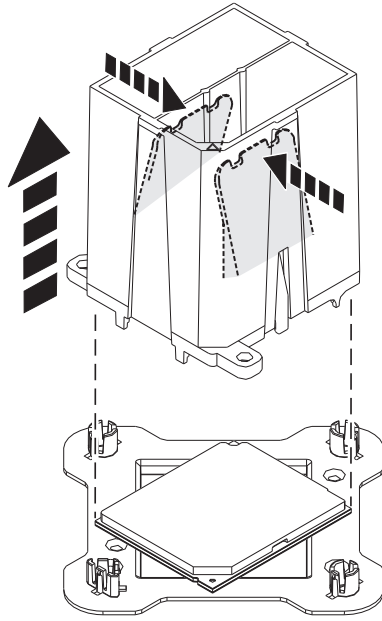
If the thermal interface material is damaged, replace it.

P8EDE522-1

P8EHS502-0

P8EHS503-1

A

A

B

P8EHS506-0