IBM
Power System LC921
(9006-12C) Quick Install
Guide

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The IBM Knowledge Center is available online from: http://www.ibm.com/support/knowledgecenter/POWER8/p8hdx/9006_12c_landing.htm.

- Read all precautions and instructions before you start working on key parts.
- Use normal electrostatic discharge (ESD) procedures when working on the system and parts. IBM recommends wearing gloves and an anti-static wrist strap to avoid possible damage to the equipment.

9006-12C information: https://ibm.biz/9006-12CQR

9006-12C 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

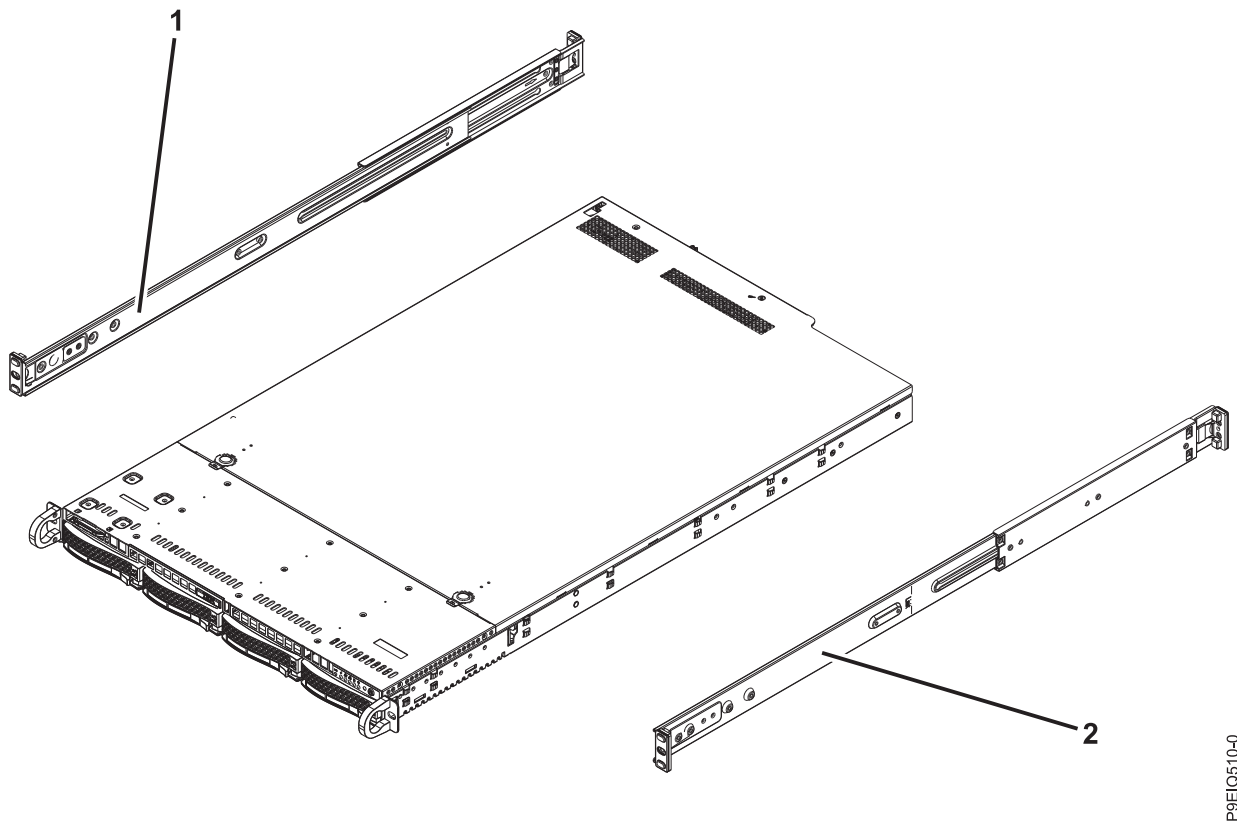

Figure 1. Rack final assembly

Table 1. Rack final assembly part numbers

Index number	Part number	Units per assembly	Description
1	MCP-290-00052-0N	1	Slide rail kit - contains left and right slide rails and attaching screws
2	MCP-290-00052-0N	1	Slide rail kit - contains left and right slide rails and attaching screws

System parts

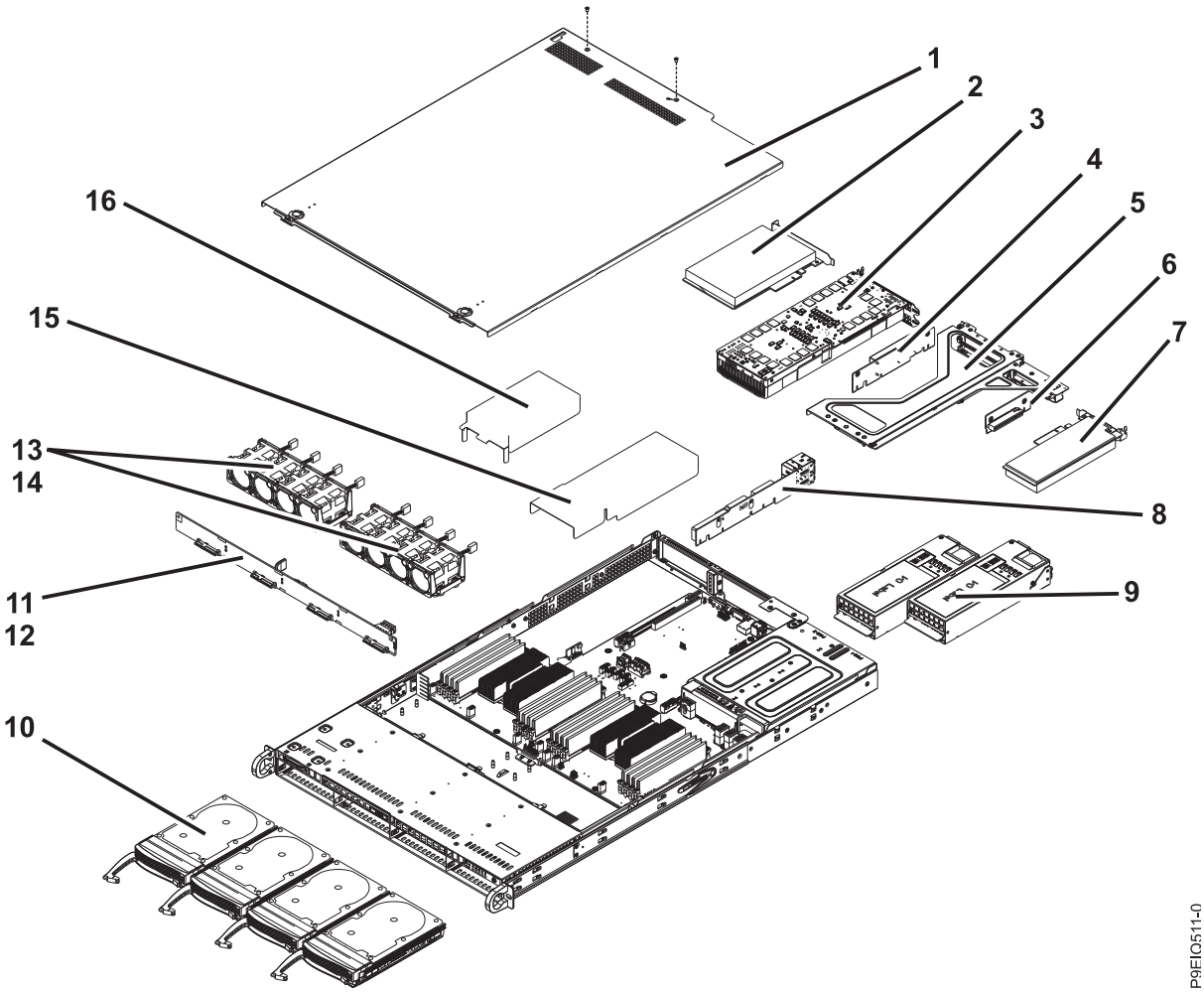

Figure 2. System parts

Table 2. System parts

Index number	Part number	Units per assembly	Description
1		1	Top cover assembly
		2	Screws
2		2	PCIe adapters. Use the feature type of the adapter to find the FRU number in PCIe adapter information by feature type for the 9006-12C.
3		1	GPU. Use the feature type of the GPU to find the FRU number in PCIe adapter information by feature type for the 9006-12C.
4	RSC-W-66P	1	PCIe riser for PCIe adapters or GPU. Use the feature type of the adapter to find the FRU number in PCIe adapter information by feature type for the 9006-12C.
5		1	PCIe cage
6	RSC-R1UW-E8R-IB001	1	PCIe riser

Table 2. System parts (continued)

Index number	Part number	Units per assembly	Description
7		1	PCIe adapter. Use the feature type of the adapter to find the FRU number in PCIe adapter information by feature type for the 9006-12C
8	AOC-UR-i4XTF	1	1U UIO NIC PCIe adapter with integrated 4-port 10 GbE Base-T, Intel XL710, and CAPI **Note:** This PCIe adapter is also a PCIe riser.
9	PWS-1K02A-1R	2	800 W 110 VAC Power supply assembly **Note:** This power supply does not support GPUs.
	PWS-1K02A-1R	2	1000 W 220 VAC Power supply assembly

Table 2. System parts (continued)

Index number	Part number	Units per assembly	Description
10	HDD-KIT-2A-ST1200S-IB001	4	1.2 TB 10k (512 block size) 2.5 inch SAS disk drive
	HDD-KIT-2A-ST1800S-IB001	4	1.8 TB 10k (512 block size) 2.5 inch SAS disk drive
	HDD-A2000-ST2000NM003401 or HDD-A2000-ST2000NM0135	4	2.0 TB 7.2K (512 block size) 3.5 inch SAS disk drive
	HDD-A4000-ST4000NM0125	4	4.0 TB 7.2K (512 block size) 3.5 inch SAS disk drive
	HDD-A8000-ST8000NM0075	4	8.0 TB 7.2K (512 block size) 3.5 inch SAS disk drive
	HDD-A10T-ST10000NM0096	4	10.0 TB 7.2K (512 block size) 3.5 inch SAS disk drive
	HDD-A4000-ST4000NM0075	4	4.0 TB 7.2K (4k block size) 3.5 inch self-encrypting SAS disk drive
	HDD-A8000-ST8000NM0095	4	8.0 TB 7.2K (4k block size) 3.5 inch self-encrypting SAS disk drive
	HDD-T2000-ST2000NM002401 or HDD-T2000-ST2000NM0125	4	2.0 TB 7.2K (512 block size) 3.5 inch SATA disk drive
	HDD-T4000-ST4000NM002401 or HDD-T4000-ST4000NM0115	4	4.0 TB 7.2K (512 block size) 3.5 inch SATA disk drive
	HDD-T8000-ST8000NM0055	4	8.0 TB 7.2K (512 block size) 3.5 inch SATA disk drive
	HDD-T10T-ST10000NM0086	4	10.0 TB 7.2K (512 block size) 3.5 inch SATA disk drive
	HDS-KIT-2A-1920-IB001	4	1.92 TB 2.5 inch SAS solid-state drive (1 drive write per day)
	HDS-KIT-2A-3840-IB001	4	3.84 TB 2.5 inch SAS solid-state drive (1 drive write per day)
	HDS-KIT-2A-ST960-IB001	4	960 GB 2.5 inch SAS solid-state drive (3 drive writes per day)
	HDS-KIT-2A-ST1920-IB001	4	1.92 TB 2.5 inch SAS solid-state drive (3 drive writes per day)
	HDS-KIT-2A-7680S-IB001	4	7.68 TB 2.5 inch SAS solid-state drive (1 drive write per day)
	HDS-KIT-2A-1920S-IB001	4	1.92 TB 2.5 inch self-encrypting SAS solid-state drive (1 drive write per day)
	HDS-KIT-2A-3840S-IB001	4	3.84 TB 2.5 inch self-encrypting SAS solid-state drive (1 drive write per day)
	HDS-KIT-2T-240-IB001	4	240 GB 2.5 inch self-encrypting SATA solid-state drive (0.78 drive writes per day)
	HDS-KIT-2T-960-IB001	4	960 GB 2.5 inch SATA solid-state drive (0.6 drive writes per day)
	HDS-KIT-2T-3800-IB001	4	3.84 TB 2.5 inch self-encrypting SATA solid-state drive (0.78 drive writes per day)
	HDS-KIT-2T-1900-IB001	4	1.92 TB 2.5 inch self-encrypting SATA solid-state drive (0.78 drive writes per day)

Table 2. System parts (continued)

Index number	Part number	Units per assembly	Description
11	BPN-SAS3-815TQ-N4	1	Disk drive backplane
12		2	Screws
13	FAN-0141L4	8	Fan
14		2	Fan holder
15		1	CPU 1 air baffle
16		1	CPU 2 air baffle

Additional system parts

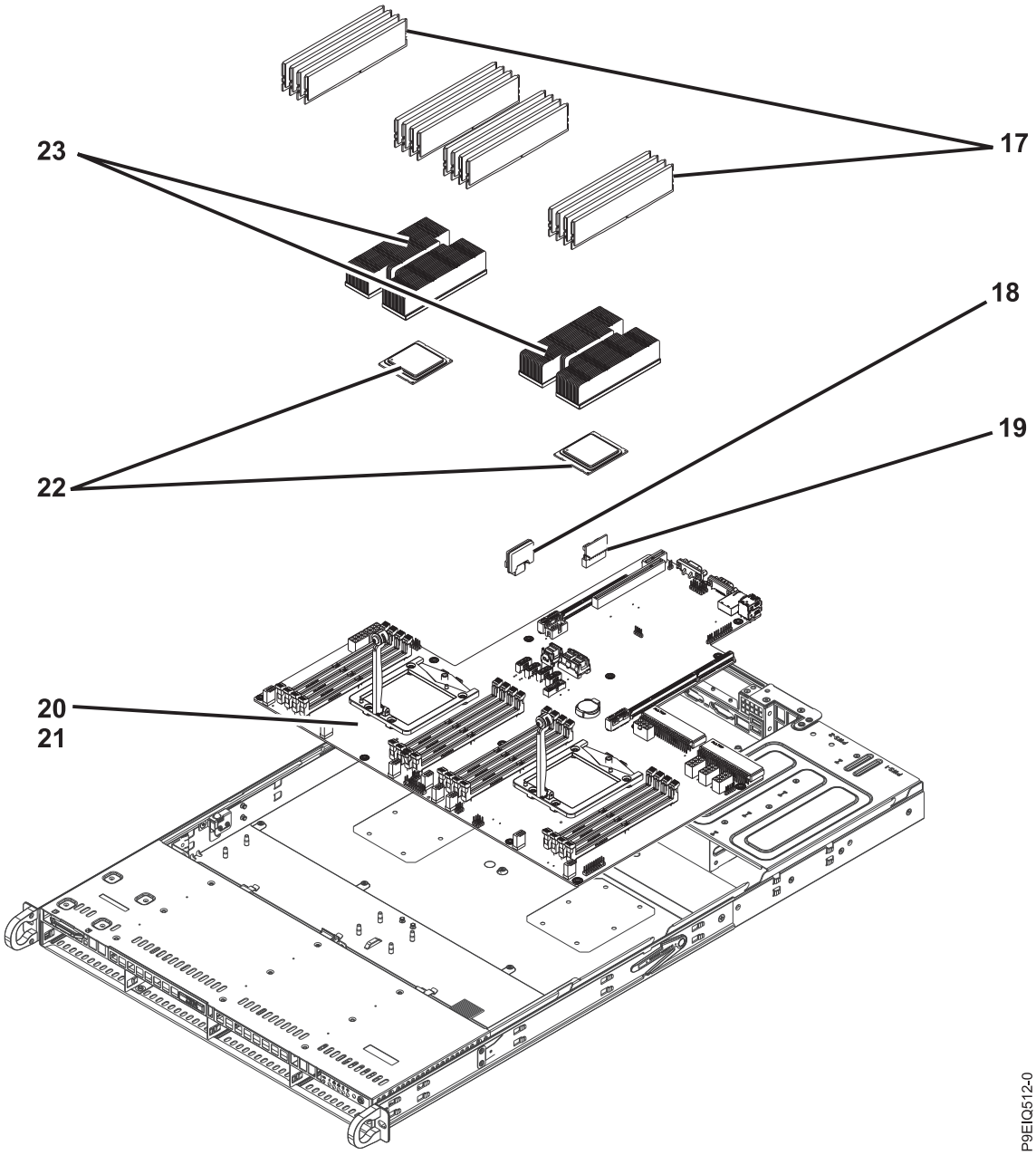

Figure 3. Additional system parts

Table 3. Additional system parts

Index number	Part number	Units per assembly	Description
17	MEM-DR480L-049	16	8 GB, 2666 MHz 1RX4 DDR4 RDIMM*
	MEM-DR416L-066	16	16 GB, 2666 MHz 1RX4 DDR4 RDIMM*
	MEM-DR432L-028	16	32 GB, 2666 MHz 2RX4 DDR4 RDIMM*
	MEM-DR464L-SL01-ER26	16	64 GB, 2666 MHz 4RX4 DDR4 RDIMM*

Table 3. Additional system parts (continued)

Index number	Part number	Units per assembly	Description
18	SSD-DM128-SMCMVN1	0-2	128 GB SATA drive on module (DOM)
19	AOM-TPM-T650V	1	Trusted platform module (TPM) card
20	MBD-P9DSU-C-P	1	System backplane
21		14	Screws
22		1-2	16 core 2.9 GHz system processor module
		1-2	20 core 2.9 GHz system processor module
23	SNK-P0052P-IB001	2	Heat sink kit (includes heat sink and thermal interface material)

*All of the memory in a 9006-12C system must be the same size and from the same supplier. The 9006-12C system does not support mixing different sizes of memory or mixing memory from different suppliers.

Rear ports

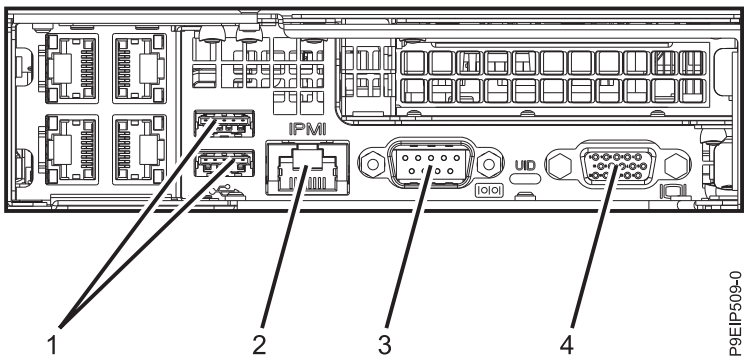

Figure 4. Rear ports

Table 4. Input and output ports

Identifier	Description
1	USB 2.0 used for keyboard and mouse. Certain USB drives might be too wide to fit properly into the USB ports on the rear of the system. Test the fit your USB drive before proceeding.
2	Ethernet Intelligent Platform Management Interface (IPMI)
3	Serial IPMI
4	Video Graphics Array (VGA) used for monitor. Only the 1024 x 768 at 60 Hz VGA setting is supported. Only up to a 3-meter cable is supported. Text based capability is only supported at this time.

Installing and Removing

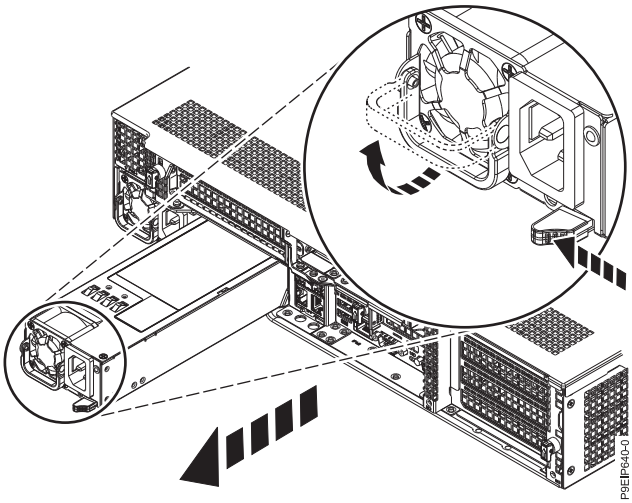

Figure 5. Removing a power supply from the system

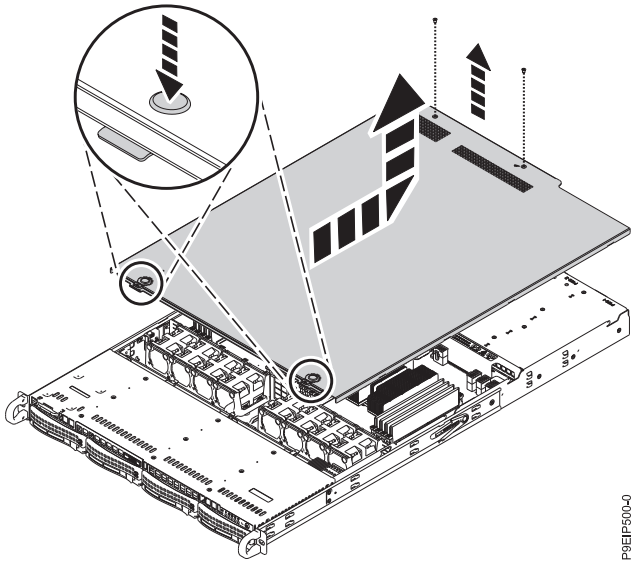

Figure 6. Releasing and opening the cover

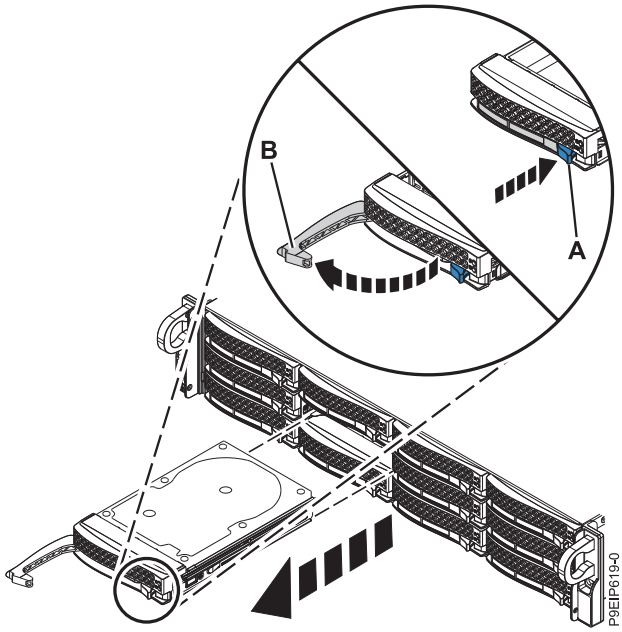

Figure 7. Removing a front drive

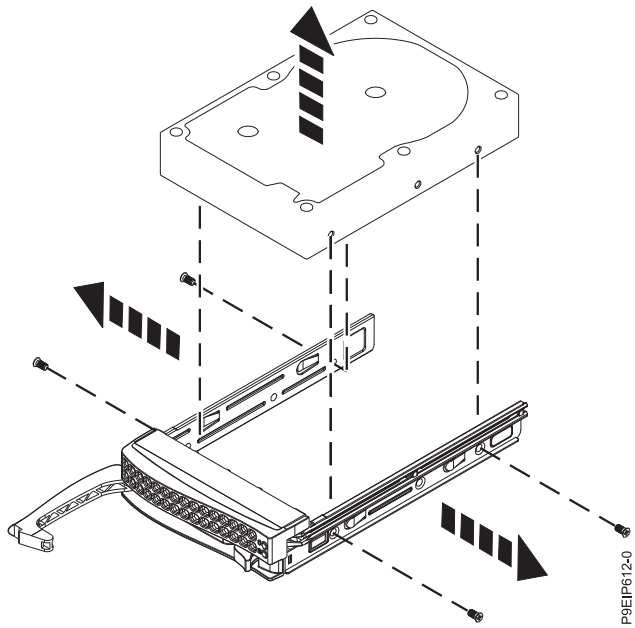

Figure 8. Removing the 3.5-inch drive from the tray

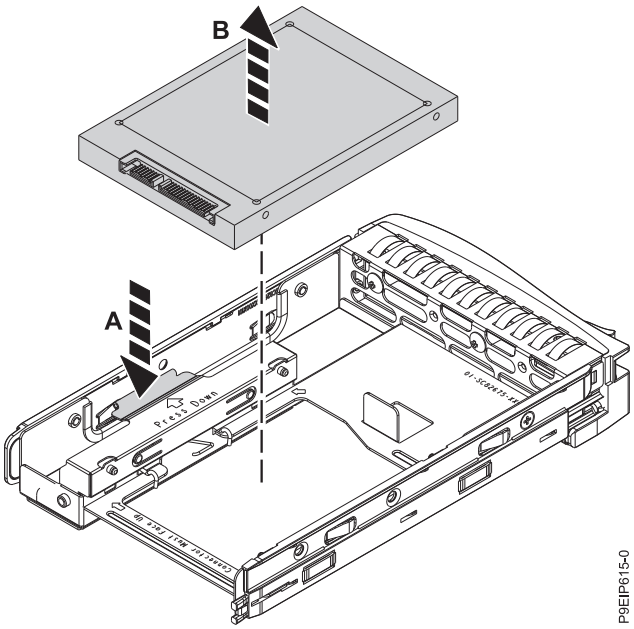

Figure 9. Removing the 2.5-inch drive from the tray

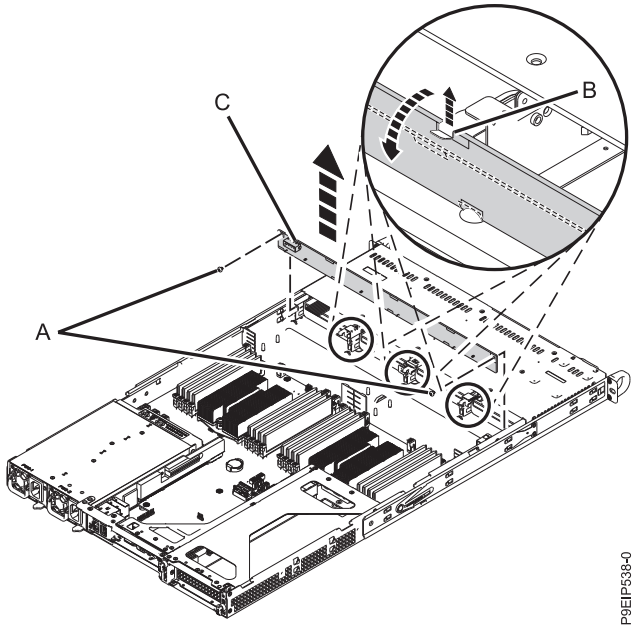

Figure 10. Removing the disk drive backplane and screws

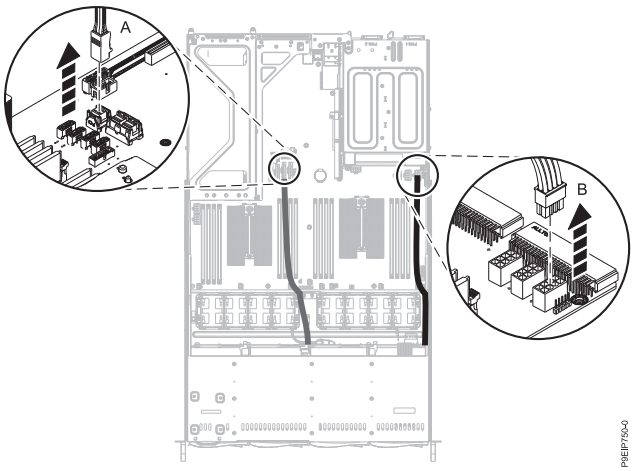

Figure 11. Disconnecting the drive signal and power cables

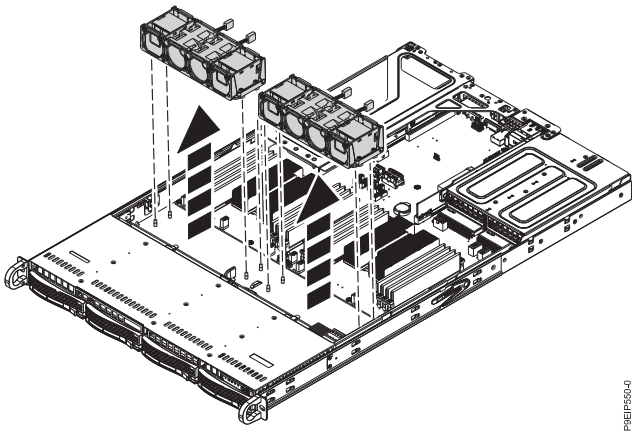

Figure 12. Removing the fan holder

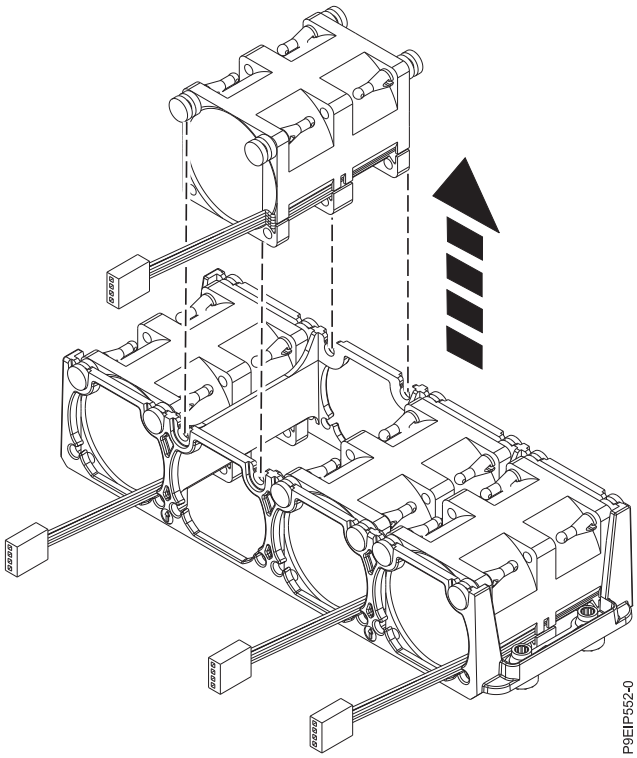

Figure 13. Removing a fan

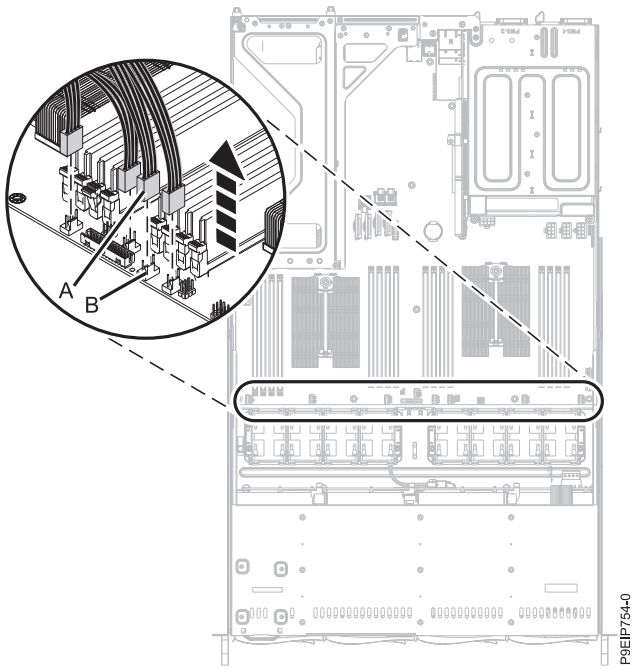

Figure 14. Disconnecting the fan cable

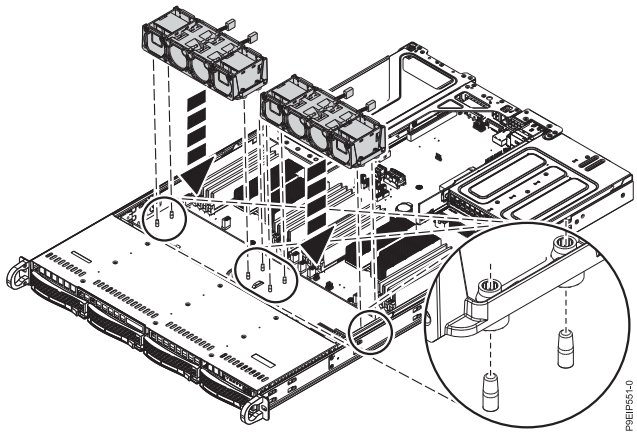

Figure 15. Aligning the fan holder

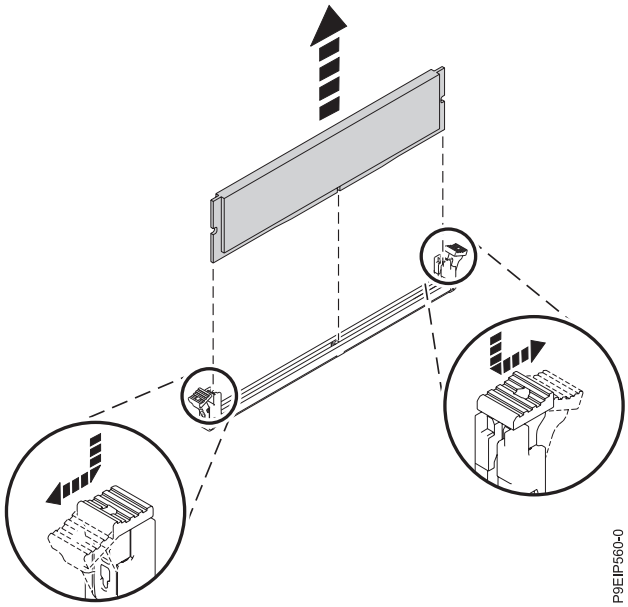

Figure 16. Removing the memory

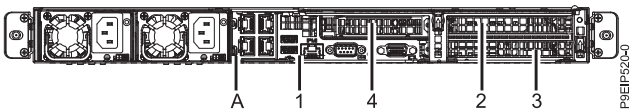

Figure 18. 9006-12C PCIe adapter positions

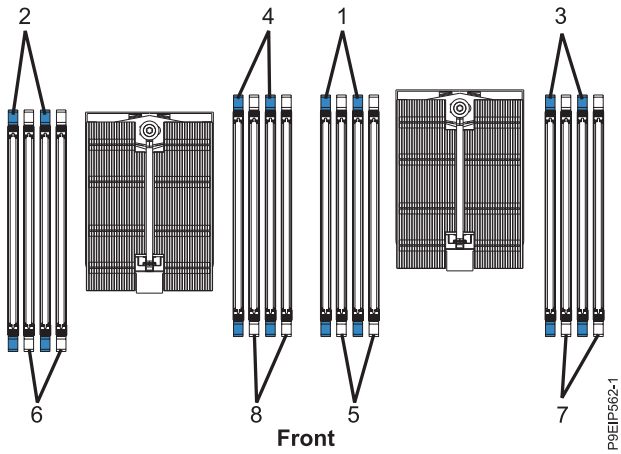

Figure 17. Two processor memory plugging sequence

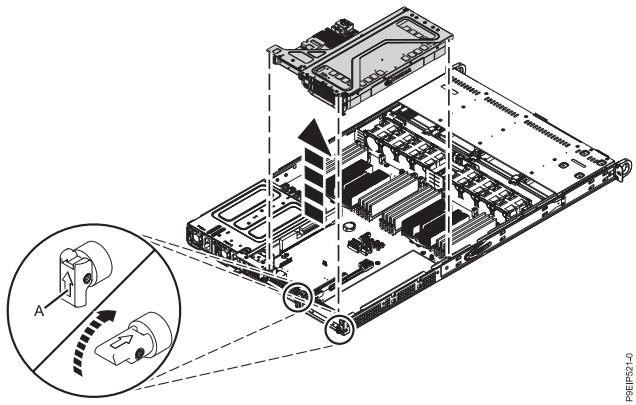

Figure 19. Removing the PCIe riser

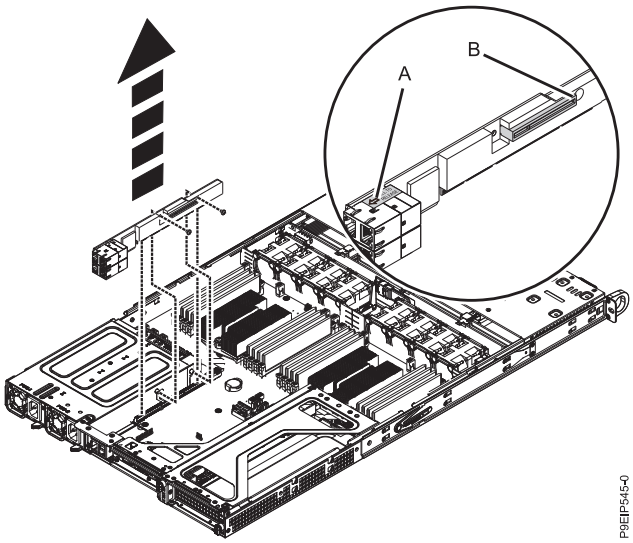

Figure 20. Removing the UIO Network screws

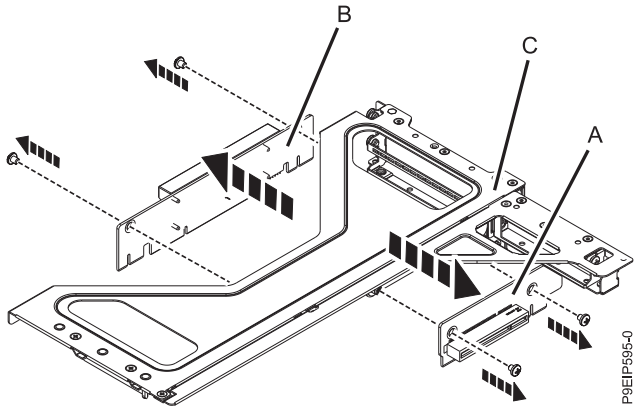

Figure 21. Removing the PCIe riser cards from the adapter cage

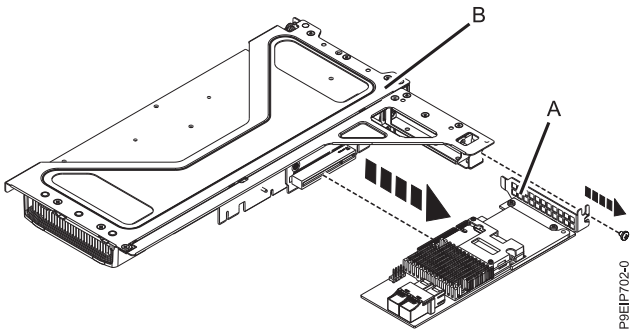

Figure 22. Removing a PCIe adapter from position 3 of the riser

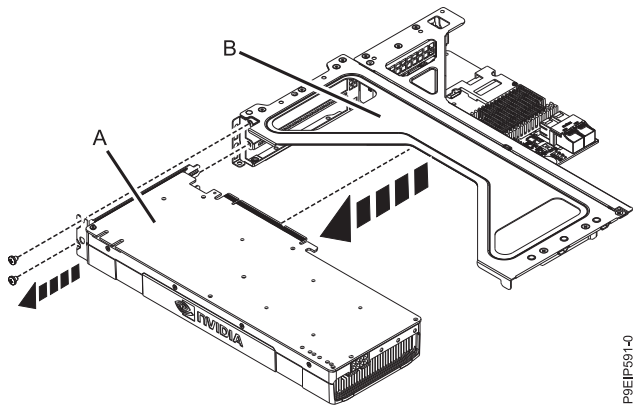

Figure 23. Removing the GPU from the riser

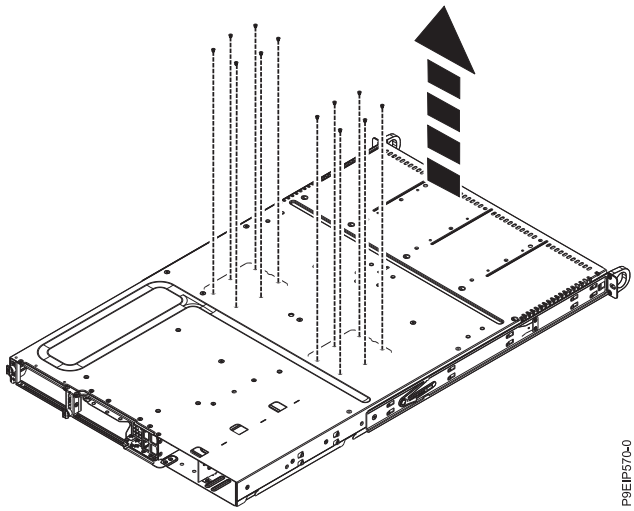

Figure 24. Processor socket screws on bottom of chassis

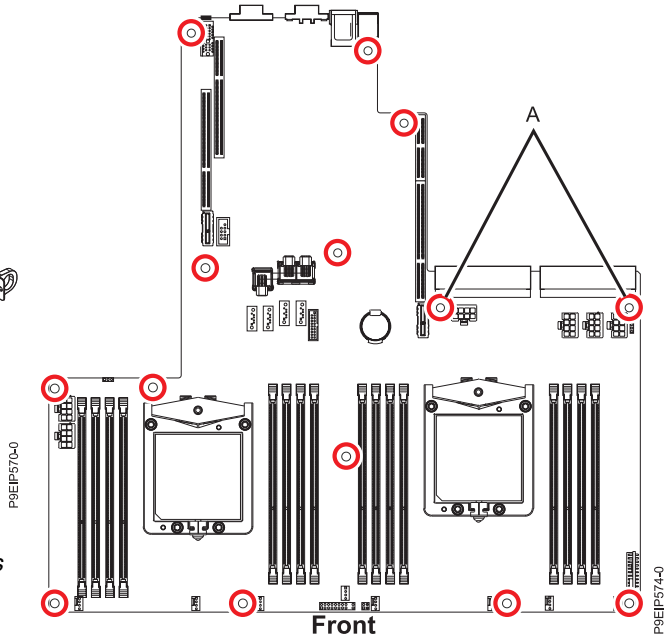

Figure 25. Screw locations

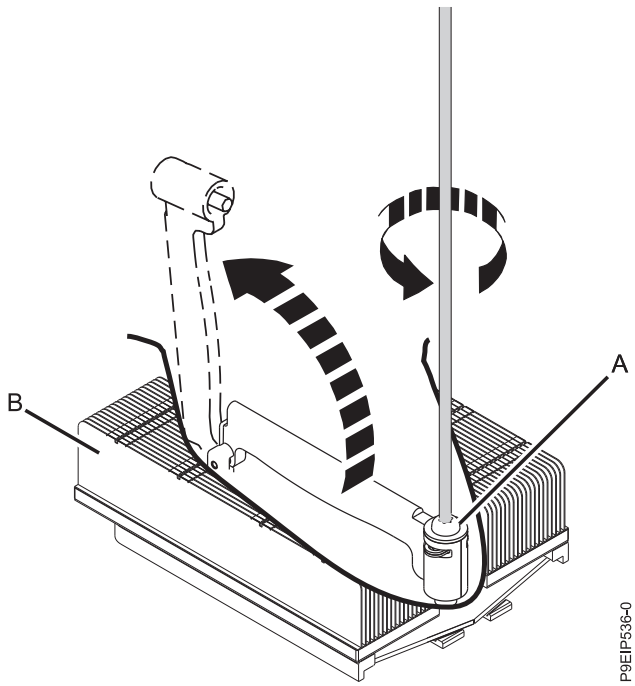

Figure 26. Loosening heat sink load arm screw

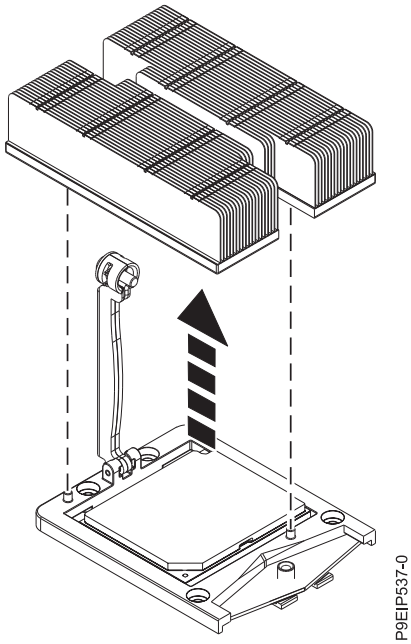

Figure 27. Removing the heat sink

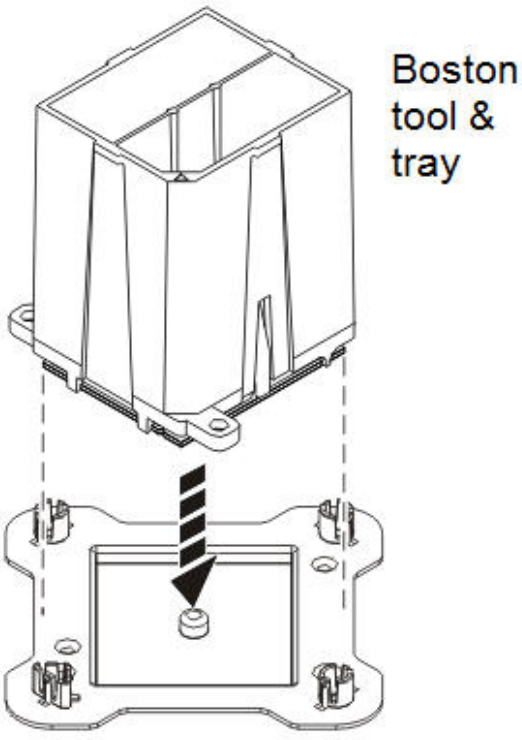

Figure 28. Placing the processor at an angle on the top cover of the packaging

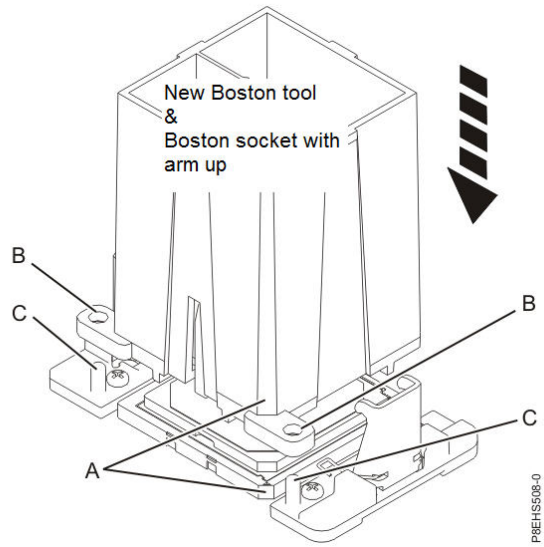

Figure 29. Installing the system processor module

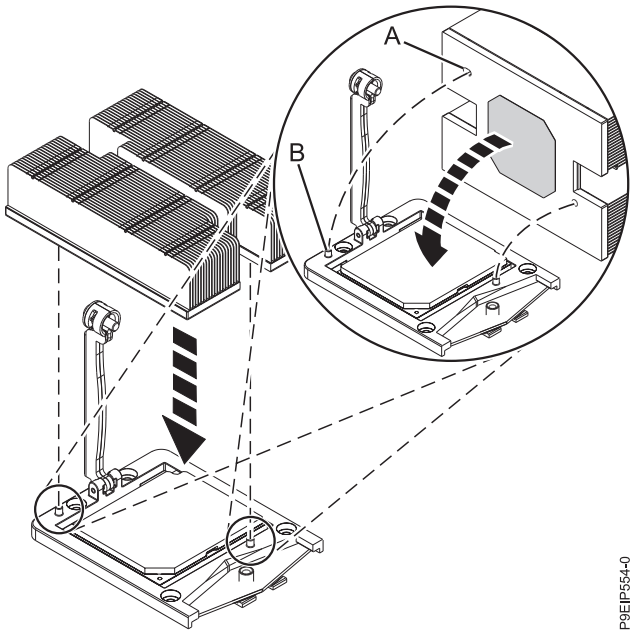

Figure 30. Installing the heat sink

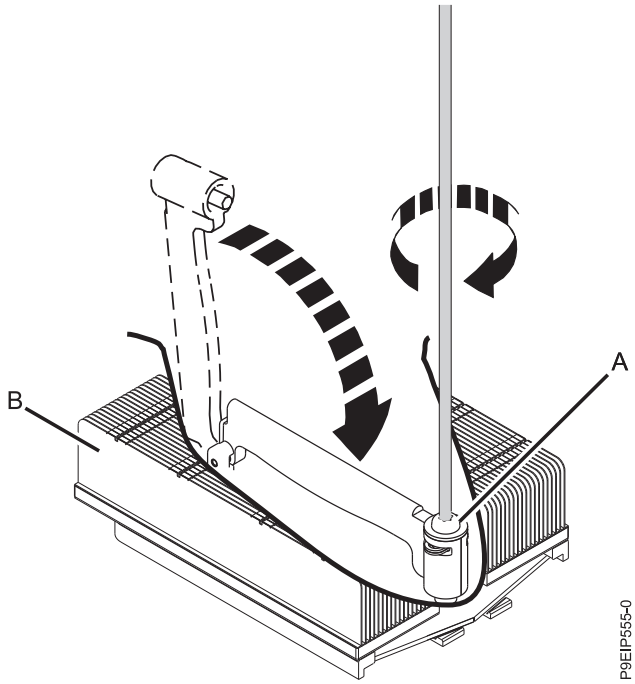

Figure 31. Tightening the load arm screw

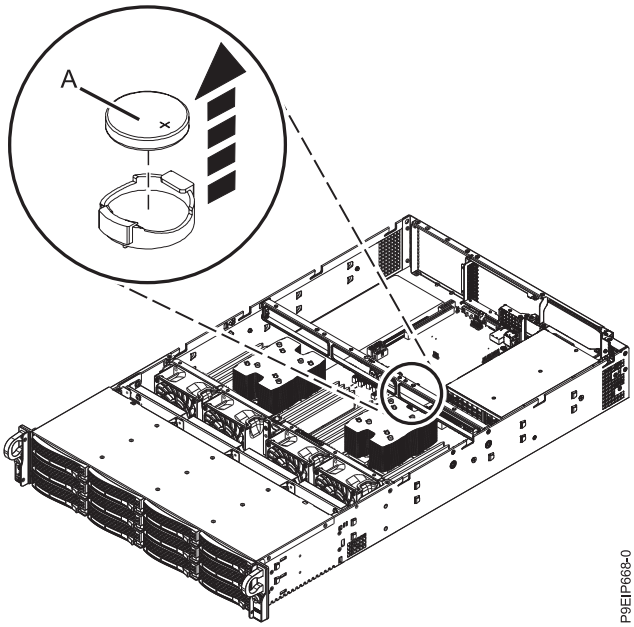

Figure 32. Time-of-day battery location

This September 14, 2017 edition applies to IBM Power Systems servers that contain the POWER8 processor and to all associated models.