## IBM Power System LC922 (9006-22C) Quick Install Guide



## IBM Power® System LC922 (9006-22C) Quick Install Guide

The IBM Knowledge Center is available online from: http://www.ibm.com/support/knowledgecenter/POWER8/p8hdx/9006\_22c\_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.

9006-22C information: https://ibm.biz/9006-22CQR

### 9006-22C 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

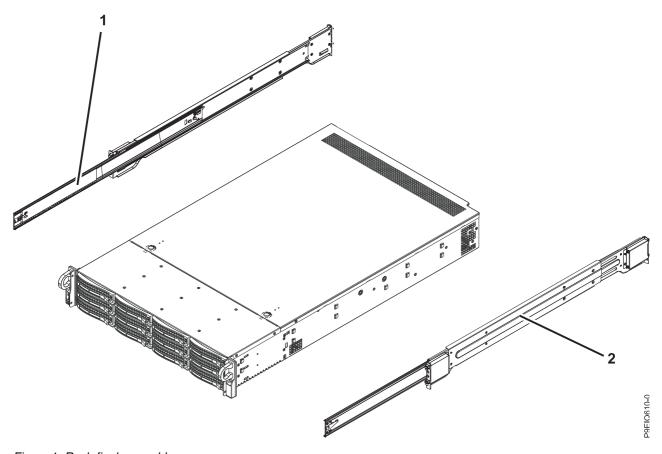


Figure 1. Rack final assembly

Table 1. Rack final assembly part numbers

Index number	Part number	Units per assembly	Description
1	MCP-290- 00057-0N	1	Slide rail kit - contains left and right slide rails and attaching screws
2	MCP-290- 00057-0N	1	Slide rail kit - contains left and right slide rails and attaching screws

### System parts

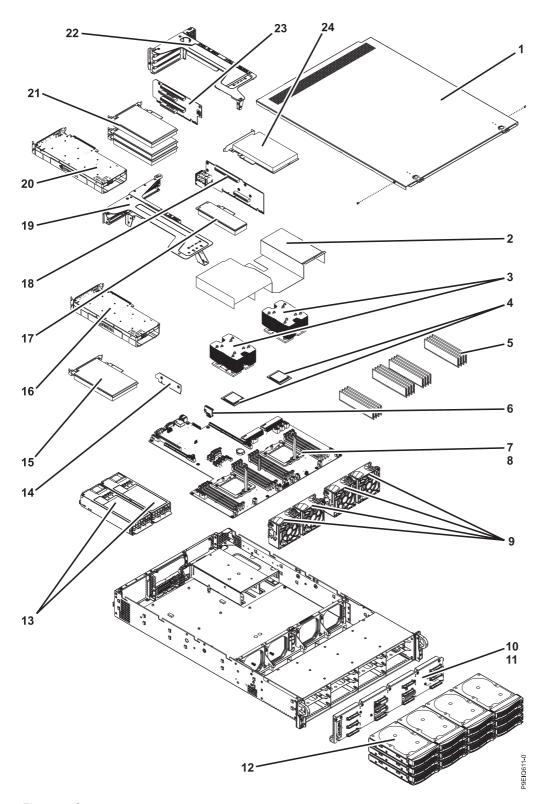


Figure 2. System parts

Table 2. System parts

Index number	Part number	Units per assembly	Description
1		1	Top cover assembly
		2	Screws
2	MCP-310-82914-0B	1	CPU air baffle
3		2	Heat sink kit (includes heat sink and thermal interface material)
4		1-2	16 core 2.9 GHz system processor module
		1-2	20 core 2.9 GHz system processor module
5	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*
6	SSD-DM128- SMCMVN1	2	128 GB SATA drive on module (DOM)
7	MBD-P9DSU-C-P	1	System backplane
8		10	Screws
9		1	Trusted platform module
10	FAN-0166L4	4	Fan
11	BPN-SAS3-826A	1	Disk drive backplane (supports 12 SAS or SATA drives and 4 NVMe drives)
	BPN-SAS3-826EL1- N4	1	Disk drive backplane (supports 12 SAS or SATA drives and 4 NVMe drives)
12		7	Screws

Table 2. System parts (continued)

Index number	Part number	Units per assembly	Description
13	HDD-KIT-2A- ST1200S-IB001	12	1.2 TB 10k (512 block size) 2.5 inch SAS disk drive
	HDD-KIT-2A- ST1800S-IB001	12	1.8 TB 10k (512 block size) 2.5 inch SAS disk drive
	HDD-A2000- ST2000NM003401 or HDD-A2000- ST2000NM0135	12	2.0 TB 7.2K (512 block size) 3.5 inch SAS disk drive
	HDD-A4000- ST4000NM0125	12	4.0 TB 7.2K (512 block size) 3.5 inch SAS disk drive
	HDD-A8000- ST8000NM0075	12	8.0 TB 7.2K (512 block size) 3.5 inch SAS disk drive
	HDD-A10T- ST10000NM0096	12	10.0 TB 7.2K (512 block size) 3.5 inch SAS disk drive
	HDD-A4000- ST4000NM0075	12	4.0 TB 7.2K (4k block size) 3.5 inch self-encrypting SAS disk drive
	HDD-A8000- ST8000NM0095	12	8.0 TB 7.2K (4k block size) 3.5 inch self-encrypting SAS disk drive
	HDD-T2000- ST2000NM002401 or HDD-T2000- ST2000NM0125	12	2.0 TB 7.2K (512 block size) 3.5 inch SATA disk drive
	HDD-T4000- ST4000NM002401 or HDD-T4000- ST4000NM0115	12	4.0 TB 7.2K (512 block size) 3.5 inch SATA disk drive
	HDD-T8000- ST8000NM0055	12	8.0 TB 7.2K (512 block size) 3.5 inch SATA disk drive
	HDD-T10T- ST10000NM0086	12	10.0 TB 7.2K (512 block size) 3.5 inch SATA disk drive
	HDS-KIT-2A-1920- IB001	12	1.92 TB 2.5 inch SAS solid-state drive (1 drive write per day)
	HDS-KIT-2A-3840- IB001	12	3.84 TB 2.5 inch SAS solid-state drive (1 drive write per day)
	HDS-KIT-2A-ST960- IB001	12	960 GB 2.5 inch SAS solid-state drive (3 drive writes per day)
	HDS-KIT-2A-ST1920- IB001	12	1.92 TB 2.5 inch SAS solid-state drive (3 drive writes per day)
	HDS-KIT-2A-7680S- IB001	12	7.68 TB 2.5 inch SAS solid-state drive (1 drive write per day)
	HDS-KIT-2A-1920S- IB001	12	1.92 TB 2.5 inch self-encrypting SAS solid-state drive (1 drive write per day)
	HDS-KIT-2A-3840S- IB001	12	3.84 TB 2.5 inch self-encrypting SAS solid-state drive (1 drive write per day)
	HDS-KIT-2T-240- IB001	12	240 GB 2.5 inch self-encrypting SATA solid-state drive (0.78 drive writes per day)
	HDS-KIT-2T-960- IB001	12	960 GB 2.5 inch SATA solid-state drive (0.6 drive writes per day)
	HDS-KIT-2T-3800- IB001	12	3.84 TB 2.5 inch self-encrypting SATA solid-state drive (0.78 drive writes per day)
	HDS-KIT-2T-1900- IB001	12	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
14	PWS-1K62A-1R	1	Power supply
15	RSC-R1UW-E8R- IB001	1	PCIe riser for PCIe adapter 4 (WIO-R Slot)
16		1	PCI adapter. Use the feature type of the adapter to find the FRU number in PCIe adapter information by feature type for the 9006-22C
17		1	GPU. Use the feature type of the GPU to find the FRU number in PCIe adapter information by feature type for the 9006-22C.
18		1	PCI adapter. Use the feature type of the adapter to find the FRU number in PCIe adapter information by feature type for the 9006-22C
19	AOC-2UR66-i4XTF - IB001	1	2U UIO NIC PCIe adapter with integrated 4-port 10 GbE Base-T, Intel XL710, and CAPI <b>Note:</b> This PCIe adapter is also a PCIe riser.
20		1	PCIe cage
21		1	GPU. Use the feature type of the GPU to find the FRU number in PCIe adapter information by feature type for the 9006-22C.
22		3	PCI adapters. Use the feature type of the adapter to find the FRU number in PCIe adapter information by feature type for the 9006-22C.
23		1	PCIe riser
24	RSC-W2-688P - IB001	1	PCIe riser for PCIe adapter 3 or GPU 2 (WIO Slot1), PCIe adapter 5 (WIO Slot2), and PCIe adapter 6 (WIO Slot3)
25		1	PCI adapter. Use the feature type of the adapter to find the FRU number in PCIe adapter information by feature type for the 9006-22C

<sup>\*</sup>All of the memory in a 9006-22C system must be the same size and from the same supplier. The 9006-22C system does not support mixing different sizes of memory or mixing memory from different suppliers.

### **Rear ports**

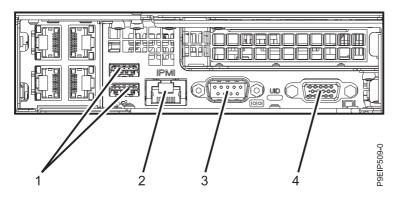


Figure 3. Rear ports

Table 3. 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**

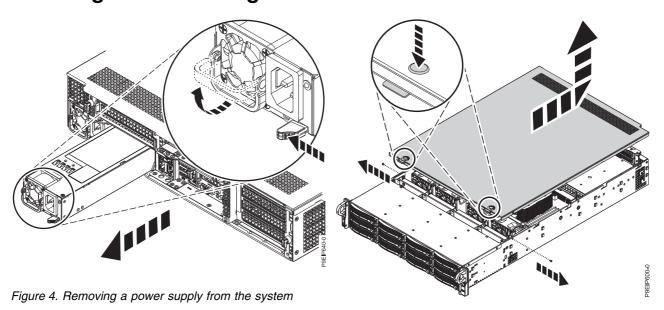


Figure 5. Releasing and opening the cover

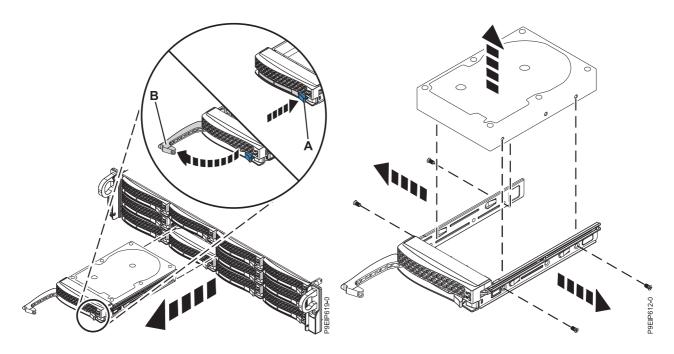


Figure 6. Removing a front drive

Figure 7. Removing the 3.5-inch drive from the tray

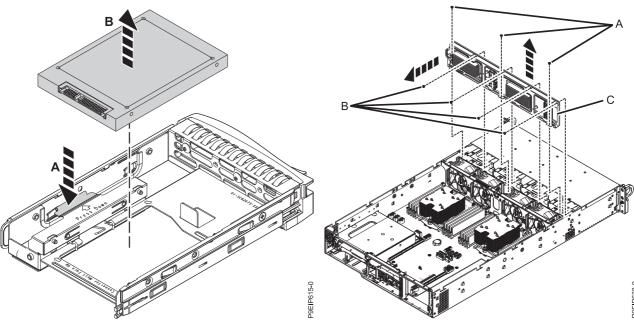
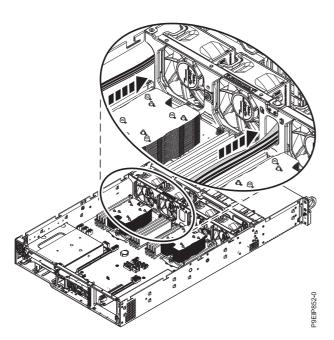


Figure 8. Removing the 2.5-inch drive from the tray

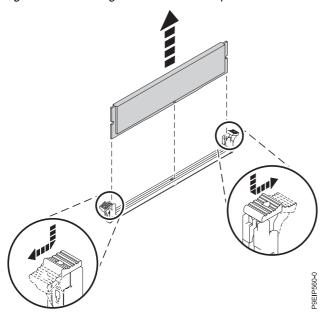
Figure 9. Removing the disk drive backplane and screws



Consequence of the contract of

Figure 11. Removing a fan

Figure 10. Removing the disk drive backplane cables



7 Front

Figure 13. Two processor memory plugging sequence

Figure 12. Removing the memory

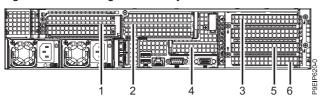


Figure 14. 9006-22C PCIe adapter positions

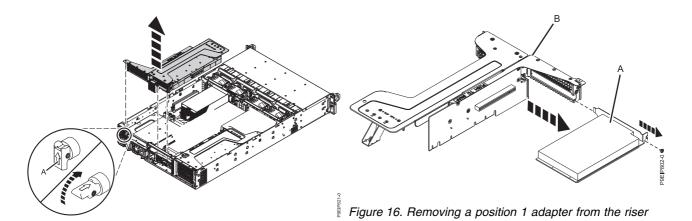


Figure 15. Removing the PCIe riser

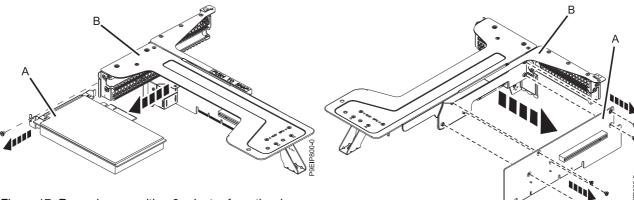


Figure 17. Removing a position 2 adapter from the riser

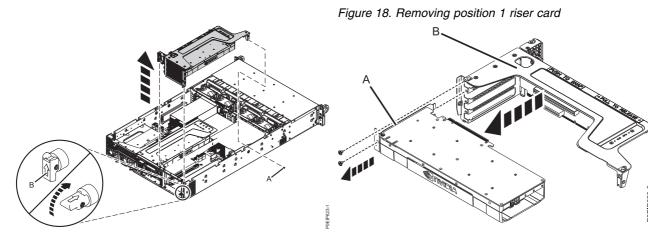


Figure 19. Removing the PCIe riser

Figure 20. Removing the GPU from the riser

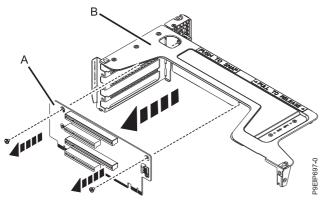


Figure 21. Removing position 3, 5, and 6 riser card

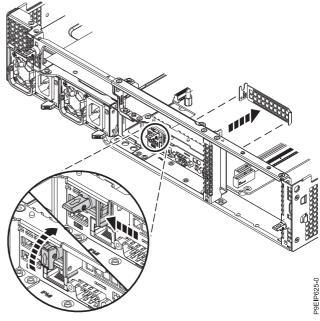


Figure 22. Releasing the tail-stock

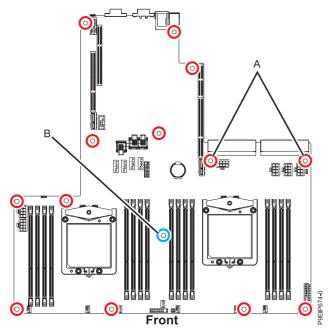


Figure 23. Screw locations

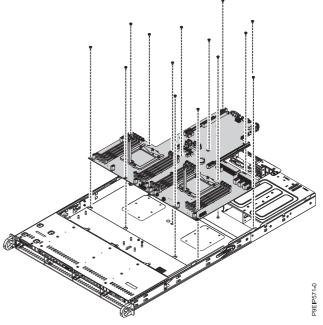


Figure 24. Lifting out the system backplane

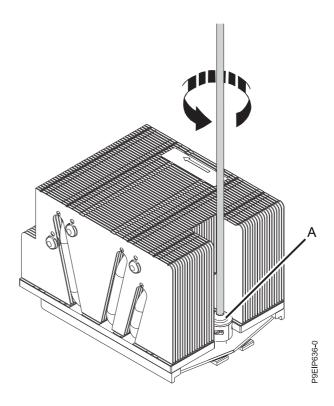


Figure 25. Loosening the load arm screw of the heat sink

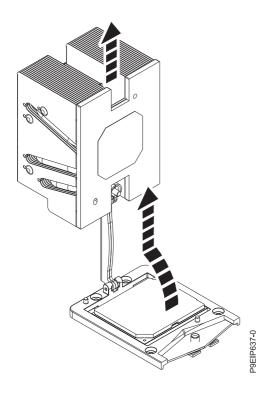


Figure 26. Lifting the heat sink from the load arm

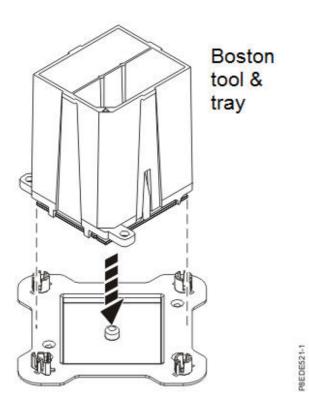


Figure 27. Placing the processor at an angle on the top cover of the packaging

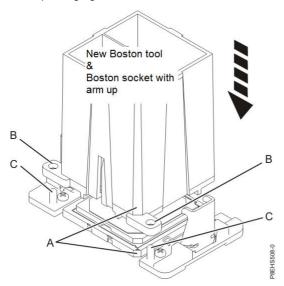


Figure 28. Installing the system processor module

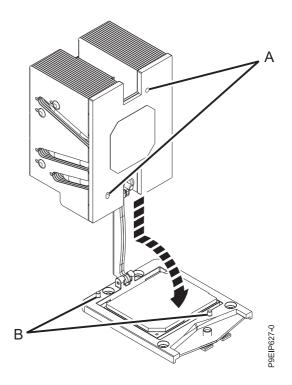


Figure 29. Installing the heat sink

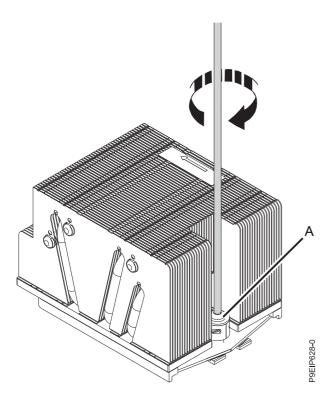


Figure 30. Tightening the load arm screw

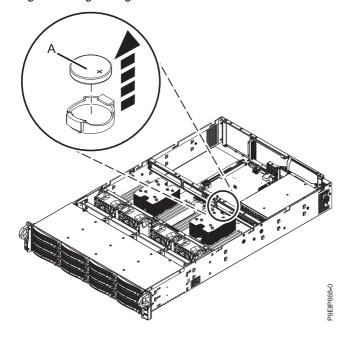


Figure 31. Time-of-day battery location

