IBM Z

*8562 Parts Catalog*

Level 00b

**IBM**

**Note:**

Before you use this information and the product it supports, read the information in "Safety" on page v, Appendix A, "Notices," on page 25, and *IBM Systems Environmental Notices and User Guide*, Z125–5823.

# Contents

# Safety

## Safety notices

Safety notices may be printed throughout this guide. **DANGER** notices warn you of conditions or procedures that can result in death or severe personal injury. **CAUTION** notices warn you of conditions or procedures that can cause personal injury that is neither lethal nor extremely hazardous. **Attention** notices warn you of conditions or procedures that can cause damage to machines, equipment, or programs.

The following **DANGER** notices appear in this installation manual:

**DANGER:** To prevent a possible shock from touching two surfaces with different protective ground (earth), use one hand, when possible, to connect or disconnect signal cables. (D001)

**DANGER:** If the receptacle has a metal shell, do not touch the shell until you have completed the voltage and grounding checks. Improper wiring or grounding could place dangerous voltage on the metal shell. If any of the conditions are not as described, *STOP*. Ensure the improper voltage or impedance conditions are corrected before proceeding. (D003)

**DANGER:** An electrical outlet that is not correctly wired could place hazardous voltage on the metal parts of the system or the devices that attach to the system. It is the responsibility of the customer to ensure that the outlet is correctly wired and grounded to prevent an electrical shock. (D004)

**DANGER:** Heavy equipment — personal injury or equipment damage might result if mishandled. (D006)

**DANGER:** When working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- If IBM supplied a power cord(s), connect power to this unit only with the IBM provided power cord. Do not use the IBM provided power cord for any other product.

- Do not open or service any power supply assembly.

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.

- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.

- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.

- Connect any equipment that will be attached to this product to properly wired outlets.

- When possible, use one hand only to connect or disconnect signal cables.

- Never turn on any equipment when there is evidence of fire, water, or structural damage.

- Do not attempt to switch on power to the machine until all possible unsafe conditions are corrected.

- Assume that an electrical safety hazard is present. Perform all continuity, grounding, and power checks specified during the subsystem installation procedures to ensure that the machine meets safety requirements.

- Do not continue with the inspection if any unsafe conditions are present.

- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.

- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

  To disconnect:

  1. Turn off everything (unless instructed otherwise).

  2. Remove the power cords from the outlets.

  3. Remove the signal cables from the connectors.

  4. Remove all cables from the devices.

  To connect:

  1. Turn off everything (unless instructed otherwise).

  2. Attach all cables to the devices.

  3. Attach the signal cables to the connectors.

  4. Attach the power cords to the outlets.

  5. Turn on the devices.

- Sharp edges, corners and joints may be present in and around the system. Use care when handling equipment to avoid cuts, scrapes and pinching.   (D005)

The following **CAUTION** notices appear in this installation manual:

**CAUTION:** Data processing environments can contain equipment transmitting on system links with laser modules that operate at greater than Class 1 power levels. For this reason, never look into the end of an optical fiber cable or open receptacle. (C027)

**CAUTION:** This product contains a Class 1M laser. Do not view directly with optical instruments. (C028)

**CAUTION:** The doors and covers to the product are to be closed at all times except for service by trained service personnel. All covers must be replaced and doors locked at the conclusion of the service operation. (C013)

**CAUTION:** Ensure the building power circuit breakers are turned off BEFORE you connect the power cord or cords to the building power. (C023)

**CAUTION:** The battery contains lithium. To avoid possible explosion, do not burn or charge the battery.

Do not: Throw or immerse into water, heat to more than 100°C (212°F), repair or disassemble. (C003)

# World trade safety information

Several countries require the safety information contained in product publications to be presented in their translation. If this requirement applies to your country, a safety information booklet is included in the publications package shipped with the product. The booklet contains the translated safety information with references to the US English source. Before using a US English publication to install, operate, or service this product, you must first become familiar with the related safety information in the *Systems Safety Notices*, G229-9054. You should also refer to the booklet any time you do not clearly understand any safety information in the US English publications.

# Laser safety information

All IBM Z® (Z) and IBM® LinuxONE (LinuxONE) models can use I/O cards such as FICON®, Open Systems Adapter (OSA), RoCE Express, Integrated Coupling Adapter (ICA SR), zHyperLink Express, or other I/O features which are fiber optic based and utilize lasers (short wavelength or long wavelength lasers).

## Laser compliance

All lasers are certified in the US to conform to the requirements of DHHS 21 CFR Subchapter J for Class 1 or Class 1M laser products. Outside the US, they are certified to be in compliance with IEC 60825 as a Class 1 or Class 1M laser product. Consult the label on each part for laser certification numbers and approval information.

**Laser Notice:** U.S. FDA CDRH NOTICE if low power lasers are utilized, integrated, or offered with end product systems as applicable. Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.

**CAUTION: Data processing environments can contain equipment transmitting on system links with laser modules that operate at greater than Class 1 power levels. For this reason, never look into the end of an optical fiber cable or open receptacle. (C027)**

**CAUTION: This product contains a Class 1M laser. Do not view directly with optical instruments. (C028)**

# About this publication

This Parts Catalog contains listings and illustrations of replaceable assemblies and detailed parts of the 8562.

IBM has prepared this manual for the use of IBM customer service representatives in the installation, maintenance, and repair of the specific machines indicated. IBM makes no representations that it is suitable for any other purpose.

Unless otherwise stated, throughout this document "8562" refers to the IBM z15™ Model T02 or IBM LinuxONE III Model LT2.

## How to send your comments

Your feedback is important in helping to provide the most accurate and high-quality information. Send your comments by using Resource Link® at http://www.ibm.com/servers/resourcelink. Click **Feedback** on the navigation bar on the left. You can also send an email to reslink@us.ibm.com. Be sure to include the name of the book, the form number of the book, the version of the book, if applicable, and the specific location of the text you are commenting on (for example, a page number, table number, or a heading).

## Accessibility

Accessible publications for this product are offered in EPUB format and can be downloaded from Resource Link at http://www.ibm.com/servers/resourcelink.

If you experience any difficulty with the accessibility of any IBM Z and IBM LinuxONE information, go to Resource Link at http://www.ibm.com/servers/resourcelink and click **Feedback** from the navigation bar on the left. In the **Comments** input area, state your question or comment, the publication title and number, choose **General comment** as the category and click **Submit**. You can also send an email to reslink@us.ibm.com providing the same information.

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

### Accessibility features

The following list includes the major accessibility features in IBM Z and IBM LinuxONE documentation, and on the Hardware Management Console and Support Element console:

- Keyboard-only operation
- Interfaces that are commonly used by screen readers
- Customizable display attributes such as color, contrast, and font size
- Communication of information independent of color
- Interfaces commonly used by screen magnifiers
- Interfaces that are free of flashing lights that could induce seizures due to photo-sensitivity.

### Keyboard navigation

This product uses standard Microsoft Windows navigation keys.

### Consult assistive technologies

Assistive technology products such as screen readers function with our publications, the Hardware Management Console, and the Support Element console. Consult the product information for the specific assistive technology product that is used to access the EPUB format publication or console.

**ix**

# IBM and accessibility

See http://www.ibm.com/able for more information about the commitment that IBM has to accessibility.

# Summary of changes

Summary of changes for the *8562 Parts Catalog*, GC28-7012.

*Table 1. Summary of changes*

| Release level | Changes in level |
|---|---|
| 00b | This revision contains editorial changes and the following technical changes:<br><br>• Parts for *8U Reserved Space (LinuxONE III only)* feature added to "Assembly 22.1: Cable assemblies (Miscellaneous)" on page 23. |
| 00a | This revision contains editorial changes and the following technical changes:<br><br>• Corrected part number in "Assembly 1: A frame assembly, side covers, mounting hardware" on page 3.<br>• Updated assembly in "Assembly 8: Earthquake Kit, frame tie down, non-raised floor" on page 11.<br>• New power cord added to "Assembly 14: Power cords" on page 19. |

# Chapter 1. FRU list

Use the following procedure to determine the part numbers of the FRUs within the system or a CPC drawer.

1. Ensure that you are logged on the Support Element in service mode.

   On the Support Element workplace window:

   a. Click **Tasks Index** on the left-hand navigation pane.

   b. From the tasks index, click **View Hardware Configuration**.

2. On the **View Hardware Configuration** window:

   a. Select the part location from the menu.

   b. Select **Details**.

3. The Part Details window shows information about the selected part. When complete:

   a. Click **OK**.

   b. On the **View Hardware Configuration** window, click **Cancel**.

# Chapter 2. Catalog section

## Assembly 1: A frame assembly, side covers, mounting hardware
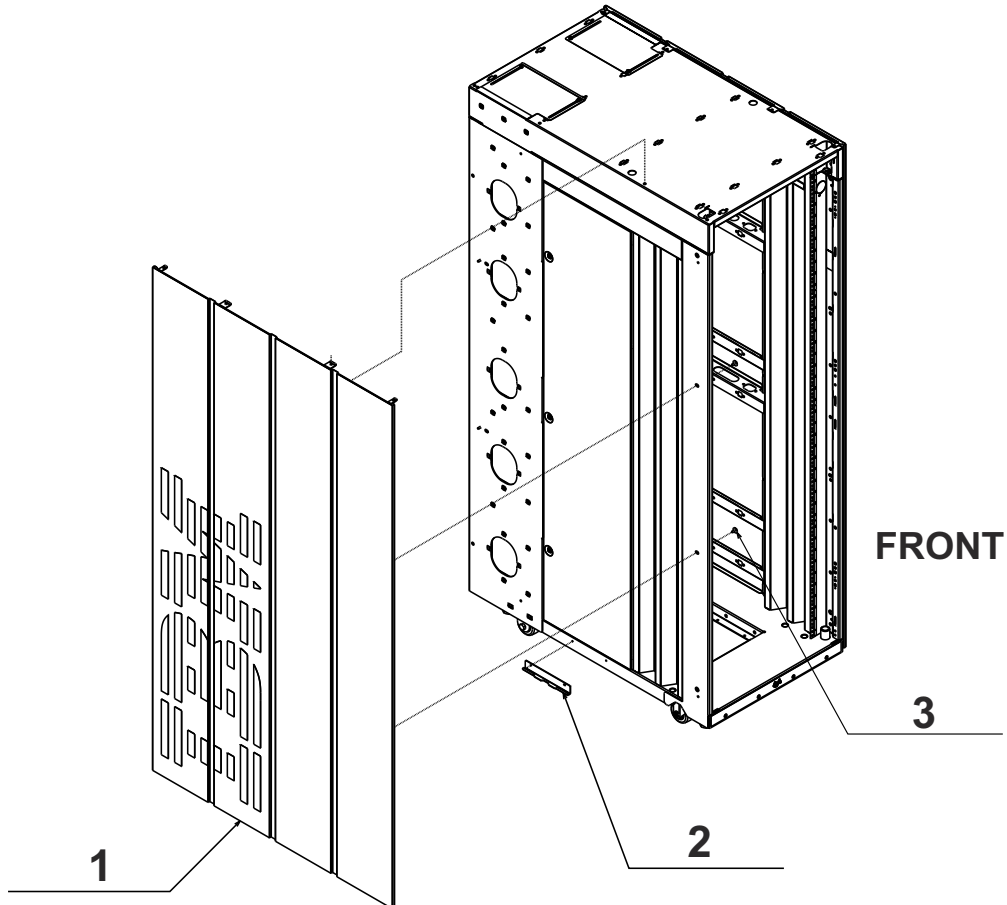


| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| 1 | 01EL900 | 2 | Side cover<br>Use 46K4282, (4) screw |
| 2 | 42V2119 | 2 | J-Bracket<br>Use 46K4284, (2) screw |
| 3 | 01KV618 | 4 | Screw with washer |

## Assembly 2: A frame assembly, hinges, door latch
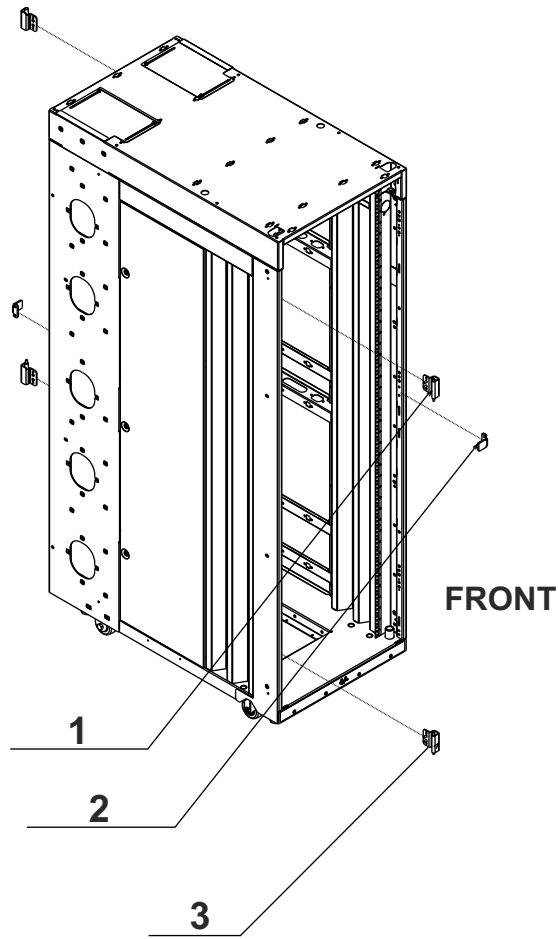


| Index | Part Number | Units | Description |
|---|---|---|---|
| 1 | 01KU112 | 2 | Hinge, upper<br>Use 46K4284, (2) screw |
| 2 | 02WN792 | 2 | Door latch<br>Use 46K4284, (2) screw |
| 3 | 01KU111 | 2 | Hinge, lower<br>Use 46K4284, (2) screw |

# Assembly 3: A frame, front and rear covers
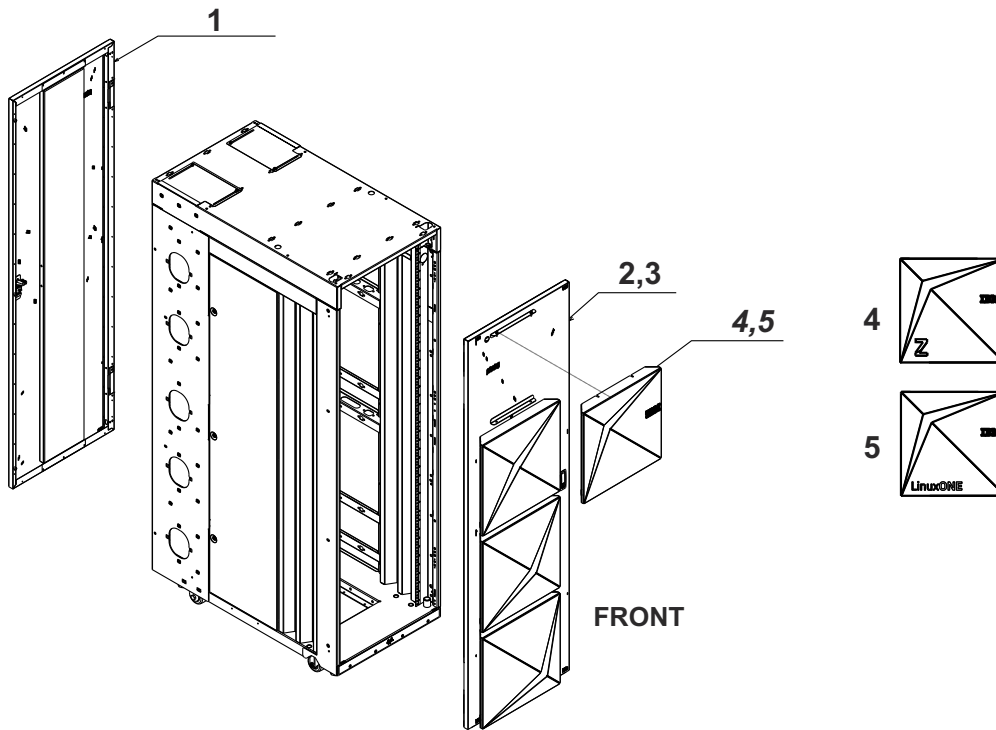


| Index | Part Number | Units | Description |
|---|---|---|---|
| 1 | 01PP001 | 1 | Cover Assembly, rear |
| 2 | 02ED326 | 1 | Cover assembly, front (IBM - Blue) |
| 3 | 02ED327 | 1 | Cover assembly, front (LinuxONE - Orange) |
| 4 | 02ED332 | 1 | Top square panel, front - IBM Z Logo |
| 5 | 02ED352 | 1 | Top square panel, front - IBM LinuxONE Logo |

# Assembly 4: Power Distribution Units (PDUs)



**REAR**
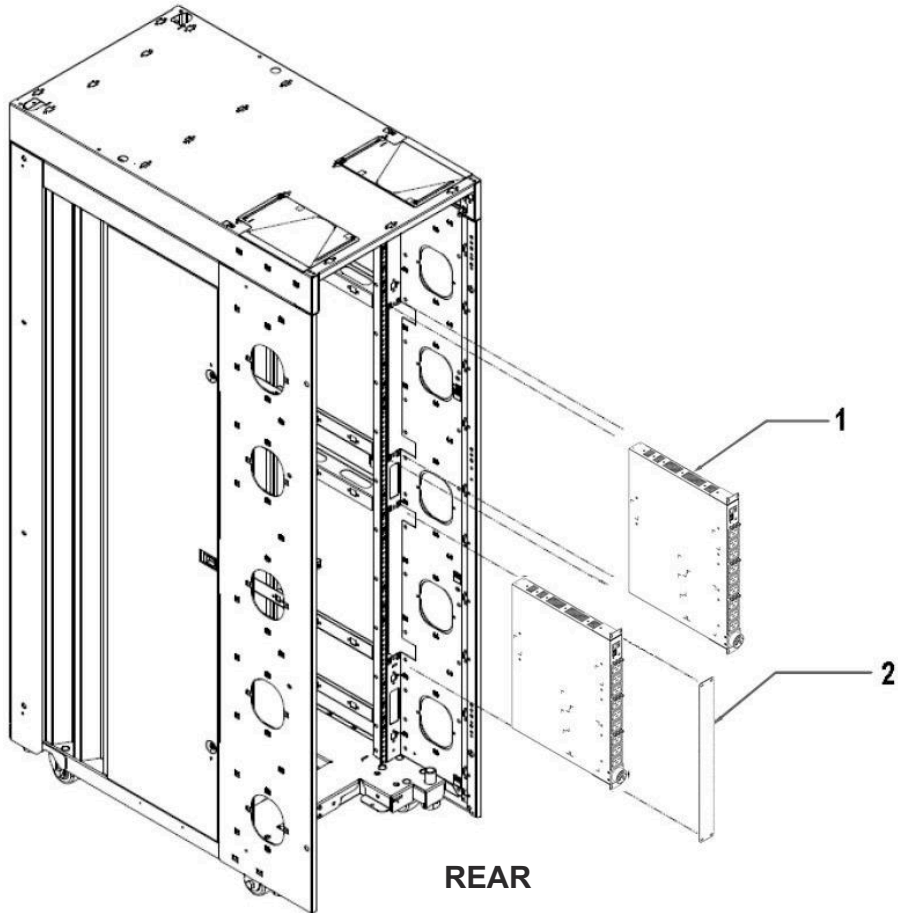
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| 1 | 02FJ750 **or** 02FJ751 | 2 or 4 | Smart PDU<br>Use 51J2558, (4) nut clip<br>Use 46K4284, (4) screw |
| 2 | 02CX110 | AR | Filler Plate, PDU "as required"<br>Use 51J2558, (4) nut clip<br>Use 46K4284, (4) screw |

# Assembly 5: PCIe+ I/O drawer assembly
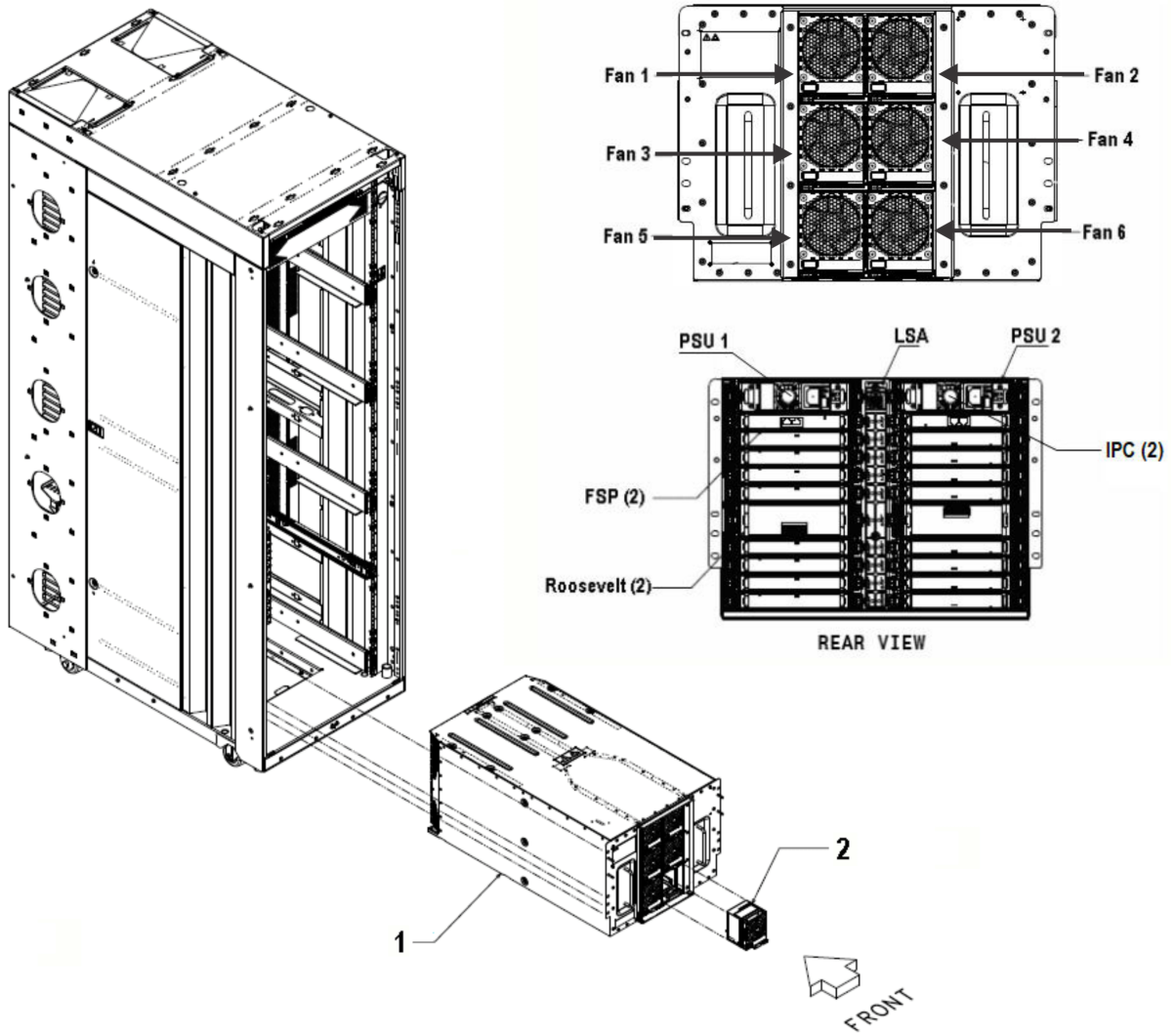
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| 1 | 02WN931 | 1 - 4 | PCIe+ I/O Drawer<br>Use 46K4284, (8) Screw<br>Use 74F1823 (8), Nut Clip |
| 2 | 02ED368 | 6 | Fan |

# Assembly 6: CPC drawer assembly

Fan 1  Fan 2  Fan 3  Fan 4  Fan 5

OSC/FSP 1

PPC 1

OSC/FSP 2

PPC 2

CPC Front View
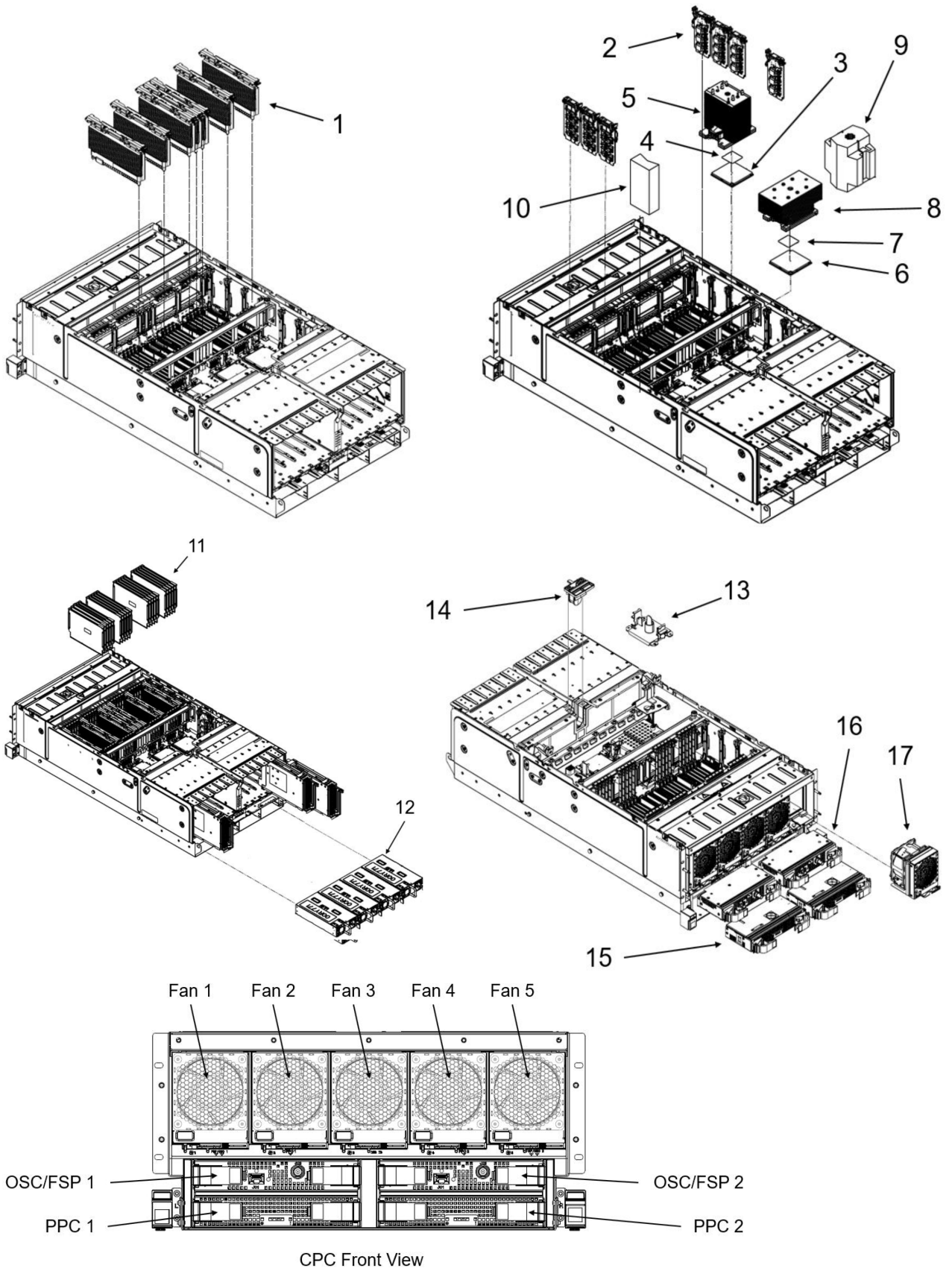
| Table 2. Assembly 12: CPC drawer assembly | | | |
|---|---|---|---|
| **Index** | **Part Number** | **Units** | **Description** |
| 1 | 02WN974 | 7 | POL Card |
| 2 | 02WN508 | 6-7 | VRS Card |
| 3 | - | 1-4 | CP Logic Module |
| 4 | 01EL446 | 1-4 | Indium Foil TIM |
| 5 | 03FM799 | 1-4 | CP Heat Sink |
| 6 | - | 1 | SC Logic Module |
| 7 | 01EL446 | 1 | Indium Foil TIM |
| 8 | 02EA716 | 1 | SC Heat Sink |
| 9 | 03FM979 | 1-3 | Dummy Heat Sink |
| 10 | 03FM822 | 1 | Foam Block |
| 11 | - | AR | DIMM Card |
| 12 | 00RY771 | 2, 4 | PSU |
| 13 | 01KL620 | AR | LGA Cover Assembly |
| 14 | 02EC289 | 1 | Bridge Block Filler Assembly |
| 15 | 02WN510 | 2 | PPC Assembly |
| 16 | 00L5430 | 2 | OSC / FSP Assembly |
| 17 | 02ED368 | 5 | Fan |

# Assembly 7: CPC rails



**FRONT**
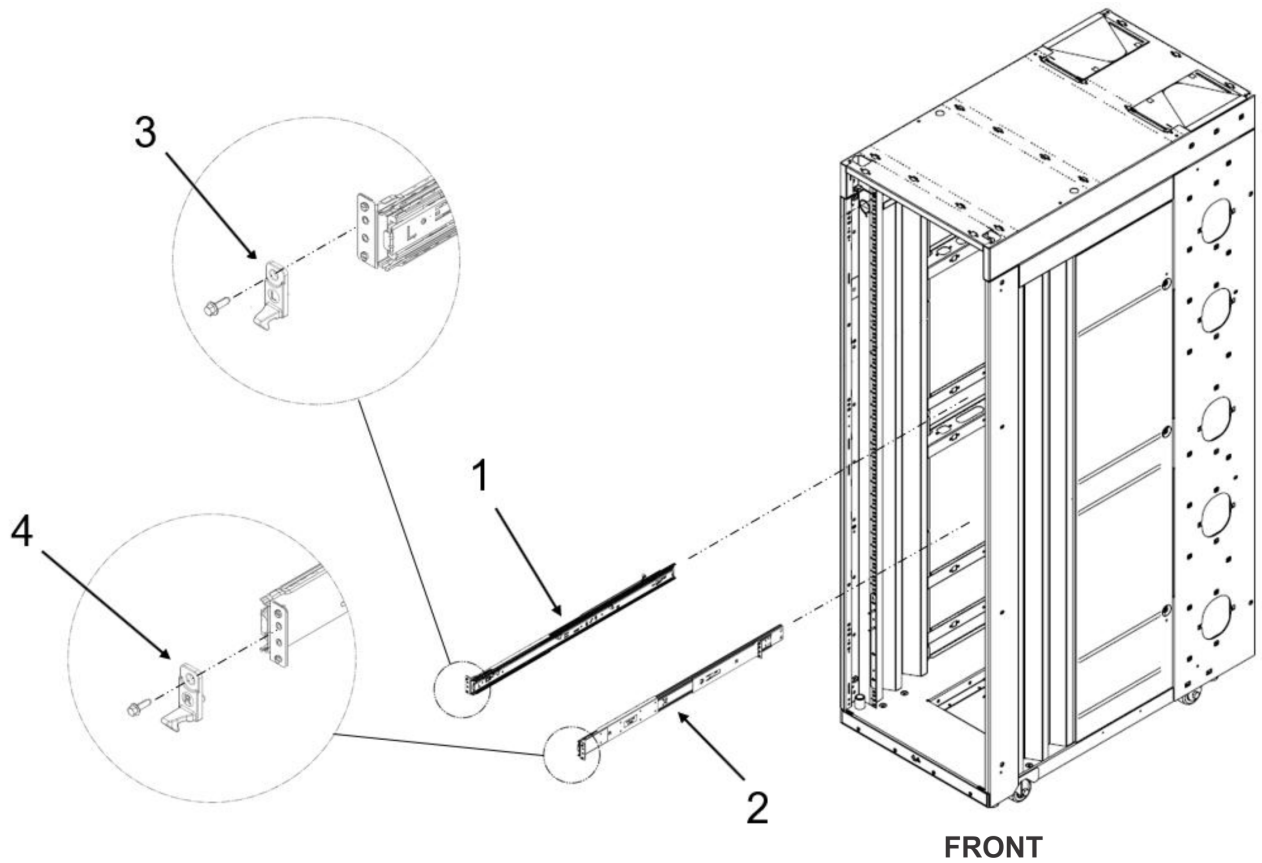
| Asm-Index | Part Number | Units | Description |
|-----------|-------------|-------|-------------|
| 1 | 02DE500 | 1 | CPC Rail, Left<br>Use 46K4284, (2) Screw |
| 2 | 02DE501 | 1 | CPC Rail, Right<br>Use 46K4284, (2) Screw |
| 3 | 02DE511 | 1 | Latch, Left<br>Use 46K4284, (1) Screw |
| 4 | 02DE510 | 1 | Latch, Right<br>Use 46K4284, (1) Screw |

# Assembly 8: Earthquake Kit, frame tie down, non-raised floor

airflow plate (P/N 01PP565)

nut (P/N 03GN703)

threaded rod (P/N 03GN702)

washer (P/N 45D1614)

spacer (P/N 12R7498)

jam nut
leveler

lockdown plate (P/N 01EL927)

REAR

nut (P/N 03GN703)

threaded rod (P/N 03GN702)

washer (P/N 45D1614)

spacer (P/N 12R7498)

jam nut
leveler

lockdown plate (P/N 01EL927)
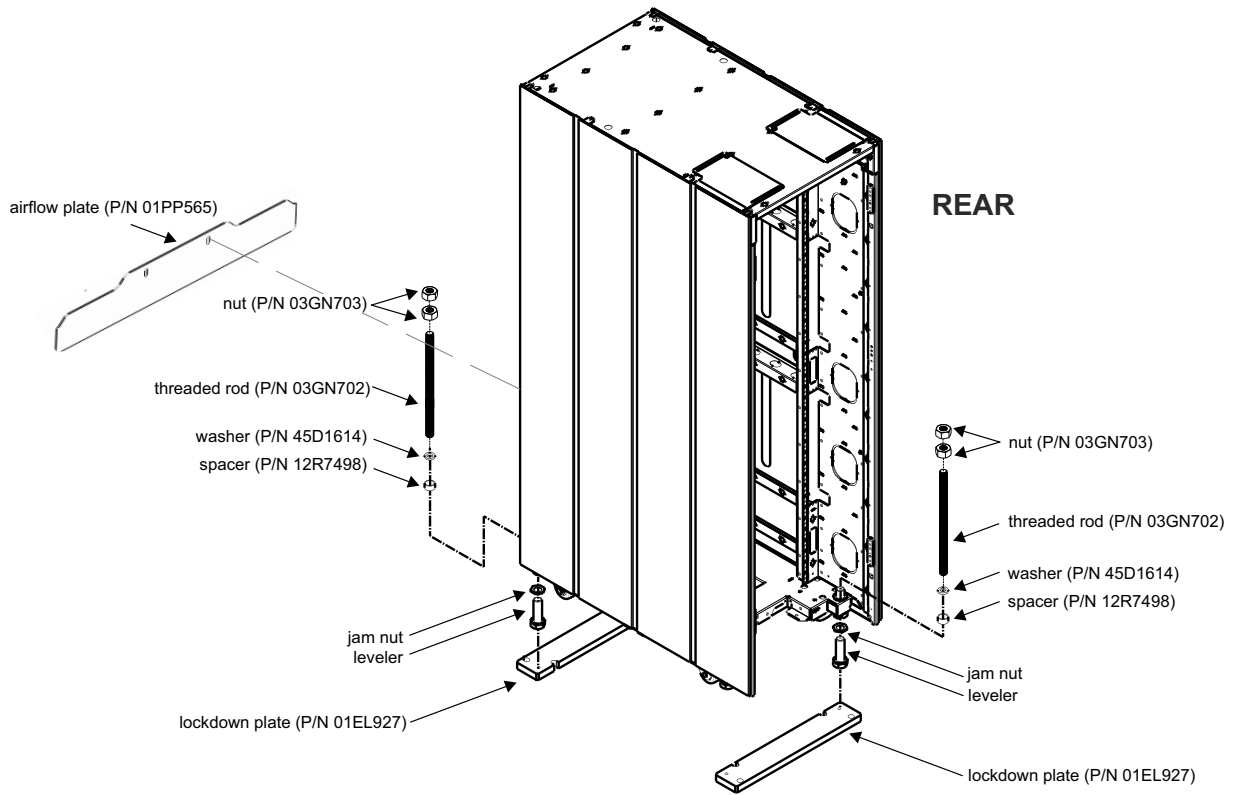
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| - | 01EL923 | AR | Earthquake Kit, frame tie down (non-raised floor) |
| - | 01EL927 | 2 | Lockdown plate |
| - | 03GN702 | 4 | Threaded rod |
| - | 03GN703 | 8 | Nut |
| - | 45D1614 | 4 | Washer |
| - | 12R7498 | 4 | Spacer |
| - | 01PP565 | 1 | Airflow plate<br>Use 01KL446, (2) M6 Flathead Screw |

# Assembly 9: Earthquake Kit, frame tie down, raised floor



**FRONT**

**1**
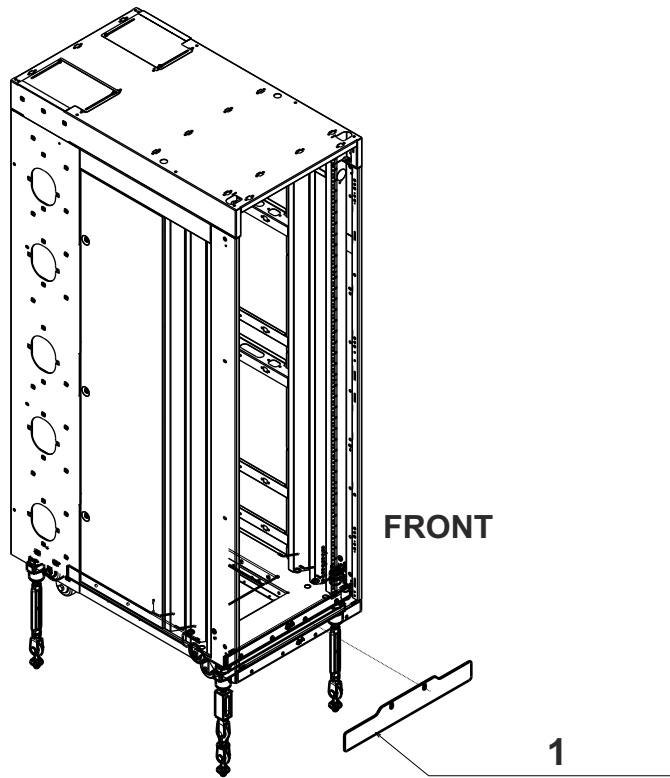
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| - | 02WN693 | AR | Earthquake Kit, frame tie down (non-raised floor) |
| 1 | 01KL479 | 1 | Airflow plate<br>Use 01KL446, (2) M6x10 Flathead screw |

# Assembly 10: Earthquake Kit, frame stiffening assembly



**FRONT**  (*same installation in rear*)
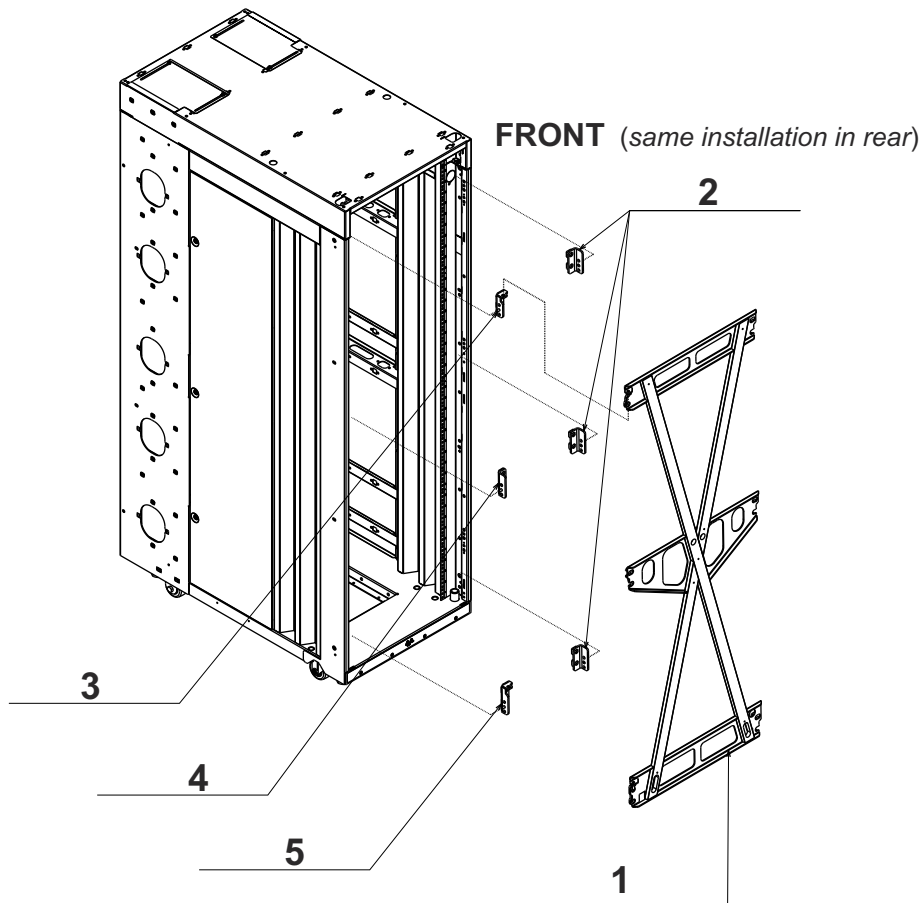
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| 1 | 02EA977 | 2 | Frame stiffener bracket - *Use 01KV711, (11) screw* |
| 2 | 01EL908 | 6 | Latch bracket, latch side - *Use 46K4337, (6) screw* |
| 3 | 01KV358 | 2 | Hinge bracket, hinge side - *Use 46K4337, (2) screw* |
| 4 | 01KU054 | 2 | Latch bracket, hinge side - *Use 46K4337, (2) screw* |
| 5 | 01KV643 | 2 | Hinge bracket, bottom - *Use 46K4337, (2) screw* |

# Assembly 11: Top exit I/O mounting

top exit kit

MPT dummy plate

MPT assembly (P/N 01KU546)

top exit kit (P/N 01PP053)

cable retainer bracket

**REAR**

**REAR**
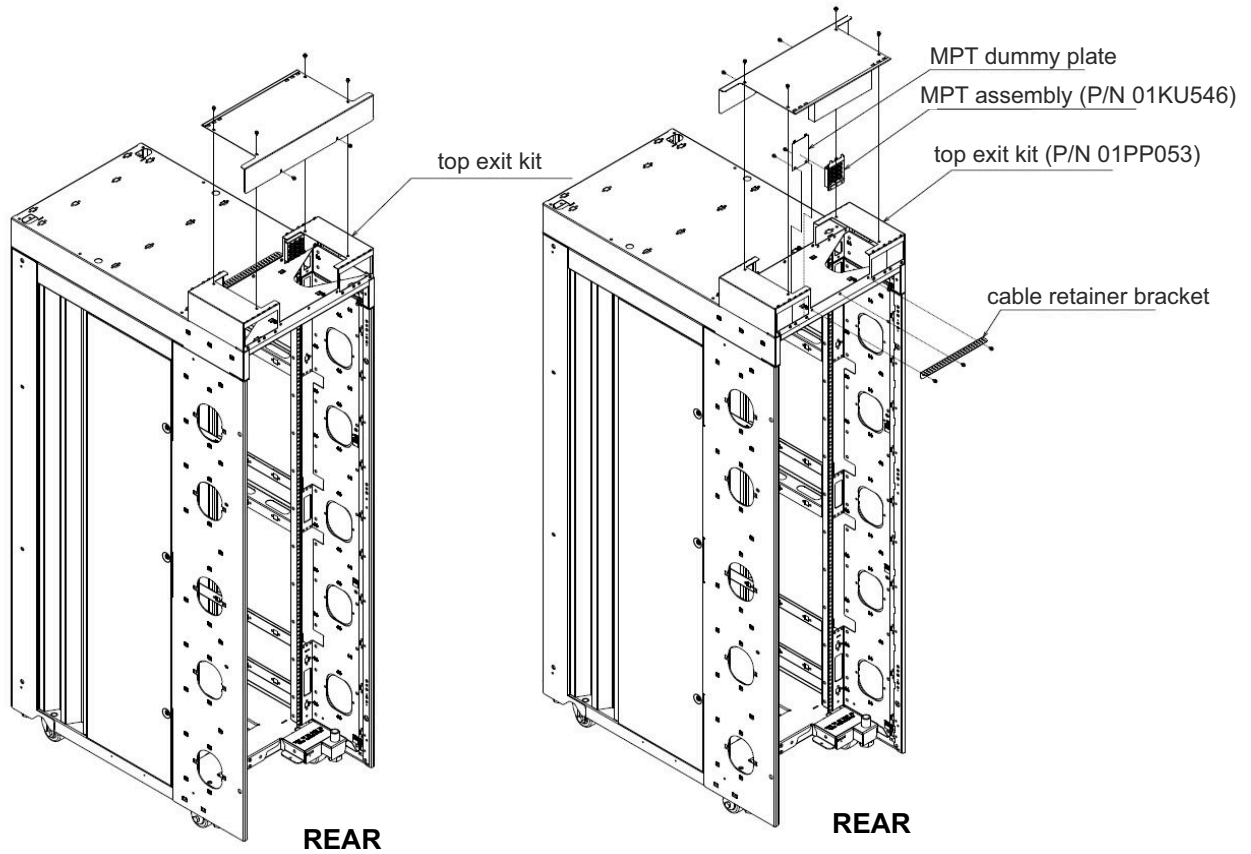
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| - | 01PP053 | 1 | Top Exit I/O, assembly<br>Use 1624775, (6) Screw |

# Assembly 12: Raised floor tailgate mounting

Detail A

3, 4

A

2

REAR

1
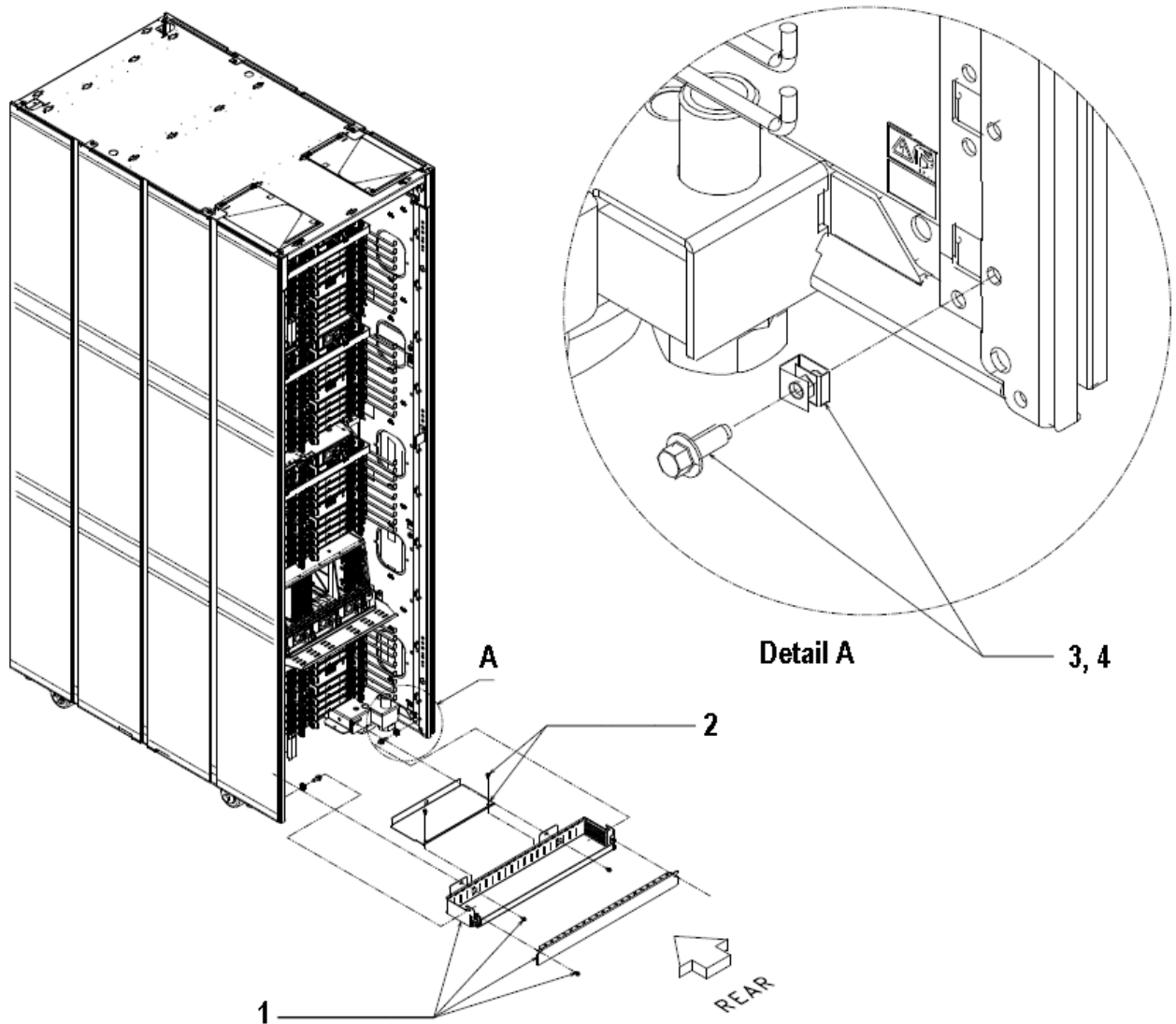
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| 1 | 02EC452 | 1 | Tailgate Kit - *Use 46K4282, (4) screw* |
| 2 | 01KU403 | 1 | Filler plate, Tailgate - *Use 46K4282, (2) screw* |
| 3 | 00N8709 | 2 | Nut clip |
| 4 | 46K4308 | 2 | Screw |

# Assembly 13: Compact KMM (keyboard, monitor, mouse) assembly



**FRONT**
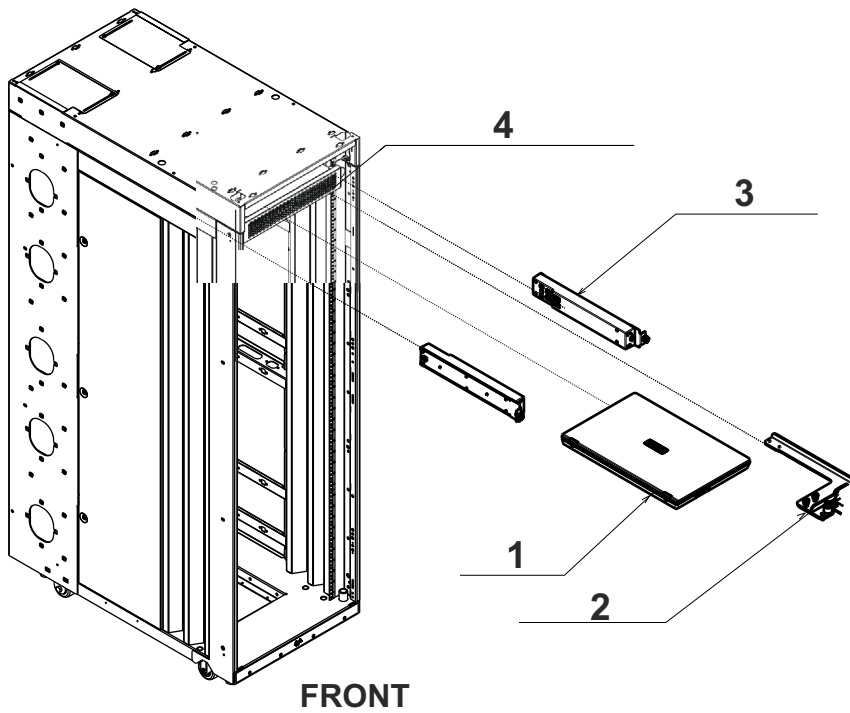
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| 1 | 03FM329 | 1 | Compact Keyboard/Monitor/Mouse (KMM) |
| 2 | 02WN998 | 1 | Support arm hardware |
| 3 | 03FM966 | 2 | Interface Adapter/Hub |
| 4 | 03FM971 | 1 | KMM Storage box cover |

# Assembly 14: Support Elements
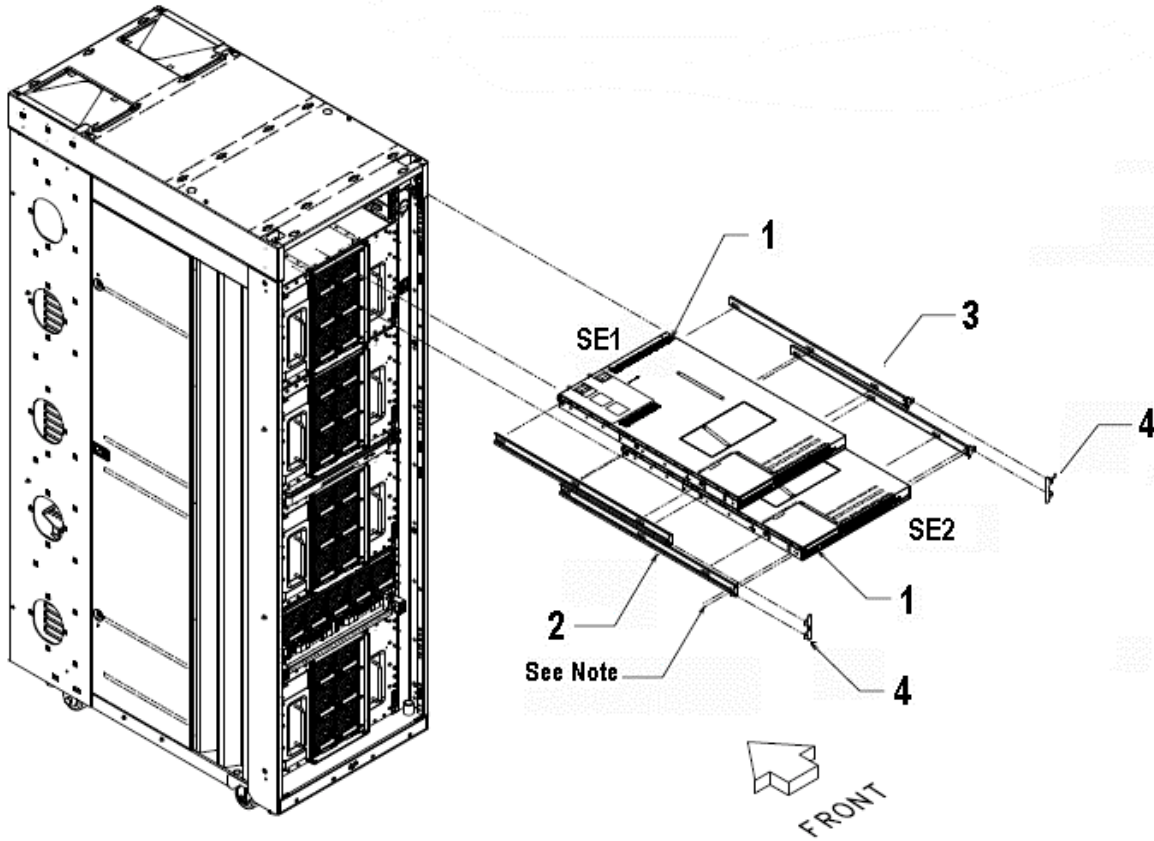


| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| 1 | 00RY862 | 2 | Support Element Server, Front, A Frame<br>Use 46K4284, (8) Screw |
| 2 | 02EA717 | 2 | Support Element Rail, Left<br>Use 46K4284, (2) Screw (no Nut Clip on left rail) |
| 3 | 02EA717 | 2 | Support Element Rail, Right<br>Use 46K4284, (2) Screw<br>Use 74F1823, (2) Nut Clip |
| 4 | 01KV745 | 2 | Bracket<br>Use 46K4284, (2) Screw |

**Note:** Reuse screw (2) from kit.

# Assembly 15: Ethernet Switches



Switch 1

Switch 2

REAR
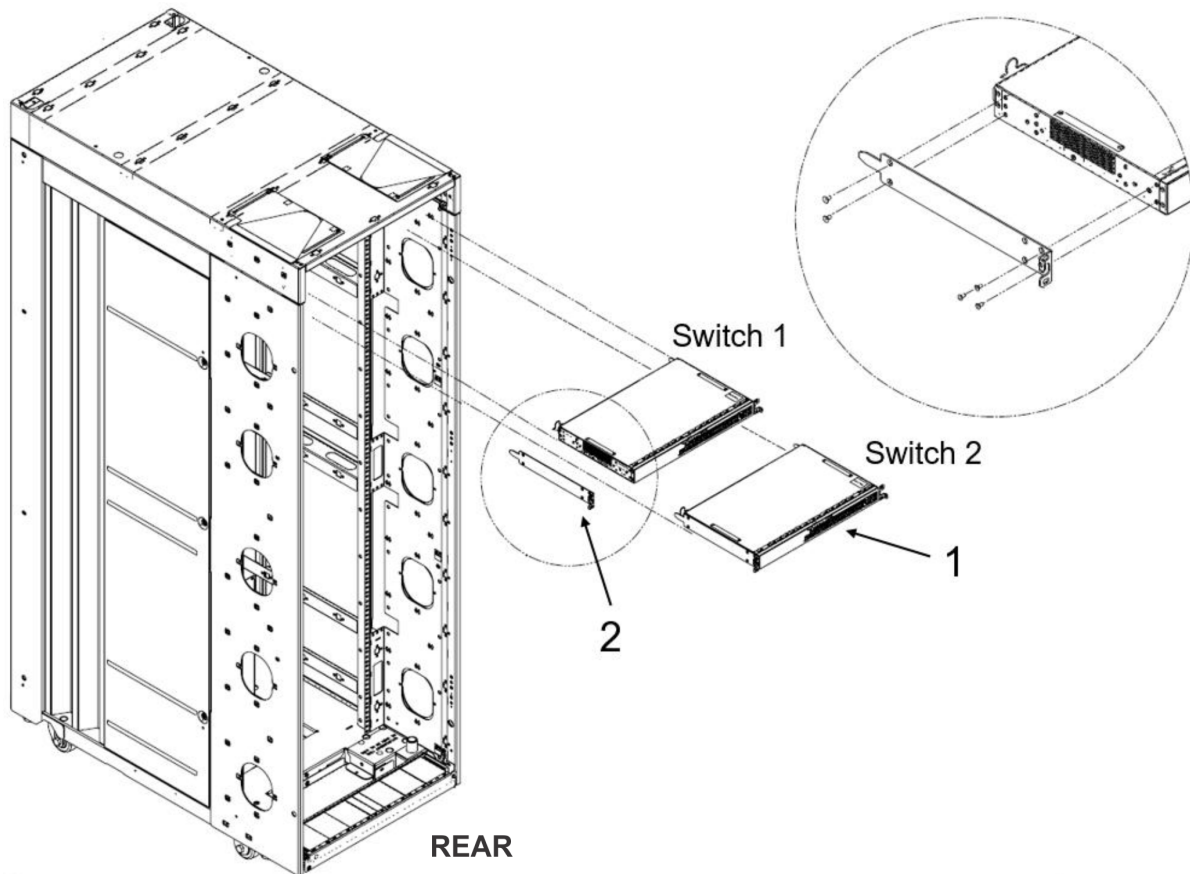
| Index | Part Number | Units | Description |
|-------|-------------|-------|-------------|
| 1 | 03FM460 | 2 | Ethernet Switch |
| 2 | 01KV440 | 4 | Bracket<br>Use 74Y1262, (10) Screw |

# Chapter 3. Cable guide

**Note:** In the following tables, "AR" is an abbreviation for "As Required".

## Assembly 14: Power cords

| Table 3. PDU power cords | | | |
|---|---|---|---|
| **Index** | **Part Number** | **Units** | **Description** |
| **30 amp / 400V AC power cord - Three-phase (WYE)** | | | |
| - | 03FM499 | AR | Power Cord, 14ft, USA, CNN, Japan, Three-Phase<br>30A / 400V AC, Hubbell Plug, IEC 309, 4P-5W |
| **32 amp / 380 - 415V AC power cord - Three-phase (WYE)** | | | |
| - | 03FM990 | AR | Power Cord, 14ft, World Trade, Three-Phase<br>32A / 380-415V AC, Cut End |
| - | 03FM501 | AR | Power Cord, 14ft, World Trade, Three-Phase<br>32A / 380-415V AC (LZSH), Cut End, low smoke, halogen-free |
| **30 amp / 250V AC power cord - Three-phase (Delta)** | | | |
| - | 03FM497 | AR | Power Cord, 14ft, USA, CNN, Japan, Three-Phase<br>30A / 250V AC, Hubbell Plug, IEC 309,3P-4W |
| - | 03FM498 | AR | Power Cord, 14ft, World Trade, Three-Phase<br>30A / 250V AC, Cut End |
| **30 amp / 200-208V & 240V AC power cord - Single-phase** | | | |
| - | 03FM870 | AR | Power Cord, 14ft, USA, CNN, Japan, Single-Phase<br>200-208V & 240V AC, Twist-Lock Plug<br>30A / 250V NEMA L6-30 |
| - | 03FM871 | AR | Power Cord, 14ft, USA, CNN, Japan, Single-Phase<br>200-208V & 240V AC, RussellStoll (Water-Tight) Plug<br>30A / 250V RussellStoll 3750DP |
| **30 amp / 240V AC power cord - Single-phase** | | | |
| - | 03GN144 | AR | Power Cord, 14ft, USA, CAN, Single-Phase<br>240V AC, Twist-Lock Plug<br>30A / NEMA L25-30P |
| **32 amp / 230V AC power cord - Single-phase (EMEA)** | | | |
| - | 03FM872 | AR | Power Cord, 14ft, EMEA, Single-Phase<br>IEC 309 Plug & "HAR" Bulk Wire<br>32A / 220-240V IEC 309 Hubbell C332P6W |
| - | 03FM873 | AR | Power Cord, 14ft, EMEA (LSZH), Single-Phase<br>IEC 309 Plug & "HAR / Low Smoke Zero Halogen" Bulk Wire<br>32A / 220-240V IEC 309 Hubbell C332P6W |
| **32 amp / 230-240V AC power cord - Single-phase (Australia and New Zealand)** | | | |

| Table 3. PDU power cords (continued) | | | |
|---|---|---|---|
| **Index** | **Part Number** | **Units** | **Description** |
| - | 03FM874 | AR | Power Cord, 14ft, Australia & New Zealand<br>Single-Phase Plug & "HAR" Bulk Wire<br>32A / 250V PDL 56P332 |
| **32 amp / 220V AC power cord - Single-phase (Korea)** | | | |
| - | 03FM875 | AR | Power Cord, 14ft, Korea<br>Single-Phase Plug & "HAR" Bulk Wire<br>30A / 250V Shinju SJ-P3302 |

# Assembly 22: Cable assemblies

| Index | Part Number | Units | Description |
|---|---|---|---|
| *Table 4. Cable assemblies* | | | |
| **Servers and switches (red)** | | | |
| - | 02EC513 | AR | Cable Assembly: Switch #1 P05 to Switch #2 P05 |
| - | 02EC514 | AR | Cable Assembly: Switch #1 P06 to Switch #2 P06 |
| - | 02WN458 | AR | Cable Assembly: Switch #1 P15 to SE Server #1 (A42) MGMT1 |
| - | 02WN459 | AR | Cable Assembly: Switch #1 P17 to SE Server #1 (A42) LAN1 |
| - | 02WN460 | AR | Cable Assembly: Switch #2 P15 to SE Server #1 (A42) MGMT2 |
| - | 02WN461 | AR | Cable Assembly: Switch #2 P17 to SE Server #1 (A42) LAN2 |
| - | 02WN462 | AR | Cable Assembly: Switch #1 P16 to SE Server #2 (A41) MGMT1 |
| - | 02WN463 | AR | Cable Assembly: Switch #1 P18 to SE Server #2 (A41) LAN1 |
| - | 02WN464 | AR | Cable Assembly: Switch #2 P16 to SE Server #2 (A41) MGMT2 |
| - | 02WN465 | AR | Cable Assembly: Switch #2 P18 to SE Server #2 (A41) LAN2 |
| - | 02EC523 | AR | Cable Assembly: Switch #1 P04 to iPDU #1 (ET) |
| - | 02EC524 | AR | Cable Assembly: Switch #2 P04 to iPDU #2 (ET) |
| - | 02EC525 | AR | Cable Assembly: Switch #1 P03 to iPDU #3 (ET) |
| - | 02EC526 | AR | Cable Assembly: Switch #2 P03 to iPDU #4 (ET) |
| **Power (red)** | | | |
| - | 02EC666 | AR | Cable Assembly: SE Server #1 (A42) PSU2 to iPDU1-P01 |
| - | 02EC667 | AR | Cable Assembly: SE Server #1 (A42) PSU1 to iPDU2-P01 |
| - | 02ED432 | AR | Cable Assembly: SE Server #2 (A41) PSU1 to iPDU1-P04 |
| - | 02ED433 | AR | Cable Assembly: SE Server #2 (A41) PSU2 to iPDU2-P04 |
| - | 03FM715 | AR | Cable Assembly: Switch #1 (A40) PWR to iPDU2-P02 |
| - | 03FM716 | AR | Cable Assembly: Switch #2 (A39) PWR to iPDU1-P02 |
| **CPC0 (red) A10** | | | |
| - | 03FM165 | AR | Cable Assembly: Switch #1 P09 to OSCFSP0-P01 (FSP1) |
| - | 03FM166 | AR | Cable Assembly: Switch #2 P09 to OSCFSP1-P01 (FSP2) |
| - | 02ED441 | AR | Cable Assembly: iPDU1-P09 to PSU2 |
| - | 02ED442 | AR | Cable Assembly: iPDU2-P09 to PSU3 |
| - | 02EC695 | AR | Cable Assembly: iPDU1-P06 to PSU1 |
| - | 02EC696 | AR | Cable Assembly: iPDU2-P06 to PSU4 |

| Index | Part Number | Units | Description |
|---|---|---|---|
| *Table 4. Cable assemblies (continued)* | | | |
| **CPC1 (blue) A15** | | | |
| - | 03FM167 | AR | Cable Assembly: Switch #1 P14 to OSCFSP0-P01 (FSP1) |
| - | 03FM168 | AR | Cable Assembly: Switch #2 P14 to OSCFSP1-P01 (FSP2) |
| - | 02ED446 | AR | Cable Assembly: iPDU1-P03 to PSU2 |
| - | 02ED447 | AR | Cable Assembly: iPDU2-P03 to PSU3 |
| - | 02ED443 | AR | Cable Assembly: iPDU3-P09 to PSU1 |
| - | 02ED444 | AR | Cable Assembly: iPDU4-P09 to PSU4 |
| **PCIe+ I/O Drawer 1 - A15 (blue)** | | | |
| - | 03FM175 | AR | Cable Assembly: Switch #1 P14 to LG01-P01 (FSP1) |
| - | 03FM177 | AR | Cable Assembly: Switch #2 P14 to LG11-P01 (FSP2) |
| - | 02ED434 | AR | Cable Assembly: iPDU3-P08 to PSU1 |
| - | 02ED435 | AR | Cable Assembly: iPDU4-P08 to PSU2 |
| **PCIe+ I/O Drawer 3 - A23 (yellow)** | | | |
| - | 03FM178 | AR | Cable Assembly: Switch #1 P11 to LG01-P01 (FSP1) |
| - | 03FM179 | AR | Cable Assembly: Switch #2 P11 to LG11-P01 (FSP2) |
| - | 02ED436 | AR | Cable Assembly: iPDU3-P05 to PSU1 |
| - | 02ED437 | AR | Cable Assembly: iPDU4-P05 to PSU2 |
| **PCIe+ I/O Drawer 4 - A31 (green)** | | | |
| - | 03FM180 | AR | Cable Assembly: Switch #1 P12 to LG01-P01 (FSP1) |
| - | 03FM181 | AR | Cable Assembly: Switch #2 P12 to LG11-P01 (FSP2) |
| - | 03FM993 | AR | Cable Assembly: iPDU3-P04 to PSU1 |
| - | 03FM994 | AR | Cable Assembly: iPDU4-P04 to PSU2 |
| **PCIe+ I/O Drawer 2 - A01 (purple)** | | | |
| - | 03FM534 | AR | Cable Assembly: Switch #1 P13 to LG01-P01 (FSP1) |
| - | 03FM535 | AR | Cable Assembly: Switch #2 P13 to LG11-P01 (FSP2) |
| - | 03FM536 | AR | Cable Assembly: iPDU1-P05 to PSU1 |
| - | 03FM537 | AR | Cable Assembly: iPDU2-P05 to PSU2 |

## Assembly 22.1: Cable assemblies (Miscellaneous)

| Index | Part Number | Units | Description |
|---|---|---|---|
| Table 5. Cable assemblies (Miscellaneous) | | | |
| PCIe+ Fanout | | | |
| - | 02EC799 | AR | Cable Assembly: 1.0 meter Long, Rev #1 |
| - | 02EC800 | AR | Cable Assembly: 1.5 meter Long, Rev #1 |
| - | 02EC801 | AR | Cable Assembly: 2.0 meter Long, Rev #1 |
| SMP-8 (2 nodes/CPC drawers) | | | |
| - | 00LU550 | AR | Cable Assembly: SMP 0.90m |
| HMC | | | |
| - | 01PP718 | AR | Cable assembly: Ethernet Cat 5e w/FT-4 (50ft Long) |
| Ensemble feature | | | |
| - | 01KU230 | AR | Cable Assembly: Switch #1 P07 to I/O Card |
| - | 01KU231 | AR | Cable Assembly: Switch #2 P08 to I/O Card |
| Compact Keyboard/Monitor/Mouse (KMM) cables | | | |
| - | 02EC952 | AR | Cable Display Port |
| - | 02EC953 | AR | Cable USB-2 |
| - | 02EC954 | AR | USB Type-C M to F |
| - | 02EC955 | AR | Cable Power Input PDP-30 Din |
| - | 02WN958 | AR | Cable Display Port |
| - | 02WN959 | AR | Cable USB-2 |
| - | 02WN960 | AR | Cable Power Input 4FT PDP-30 Din |
| 8U Reserved Space (LinuxONE III only) | | | |
| - | 39M5392 | AR | SAN Switch Jumper Power Cord |
| - | 03JJ394 | AR | Label Sheet for Jumper Power Cords |
| - | 41U8365 | AR | Clear Tape Strips |
| - | 15R8270 | AR | Push-Pull Tool |
| - | 00RR794 | AR | Hook-and-Loop Cable Tie Wraps "Puck" |
| - | 00LR054 | AR | Vinyl Tape |
| Field spares | | | |
| - | 00LU389 | AR | Cable assembly: E/Net 1.0 m |
| - | 00LU390 | AR | Cable assembly: E/Net 2.0 m |
| - | 00LU391 | AR | Cable assembly: E/Net 3.0 m |

| Table 5. Cable assemblies (Miscellaneous) (continued) | | | |
|---|---|---|---|
| **Index** | **Part Number** | **Units** | **Description** |
| - | 00LU392 | AR | Cable assembly: E/Net 4.0 m |
| - | 00LU393 | AR | Cable assembly: E/Net 4.7 m |
| - | 02EC719 | AR | Jumper power cord (C19) for PDU / 0.9 m |
| - | 02EC731 | AR | Jumper power cord (SAF-D-Grid) for PDU / 1.9 m |
| - | 02EC754 | AR | Jumper power cord (C13) for PDU / 1.5 m |
| - | 02EC755 | AR | Jumper power cord (C13) for PDU / 2.775 m |
| **FTS for FICON (single-mode)** | | | |
| - | 45D7165 | AR | FTS Trunk: 2.0m / 6.6 ft |
| - | 15R7525 | AR | FTS Trunk: 2.6m / 8.5 ft |
| - | 01KU546 | AR | FTS Tail-Gate Bracket, MTP Holder Asm |
| **Power cord label (Dual)** | | | |
| - | 02WN987 | AR | Label for Power Cords (PDU and BPA) *BPA labels not used on the 8562.* |
| **Power cord label (Demark)** | | | |
| - | 45D2199 | AR | Label for Power Cords (Denmark) |
| **Wrap plugs** | | | |
| - | 10N7405 | AR | Wrap Plug: 1GB E/Net (Copper) |
| - | 15R7536 | AR | Wrap Plug: LC Dual Wrap (Fiber) |
| **Wrap plug for ICA-SR (Coupling)** | | | |
| - | 74Y0792 | AR | Wrap Plug: 24 pos MTP Wrap (Fiber) |
| **Wrap plug for Coupling Express LR (Coupling)** | | | |
| - | 12R9544 | AR | Fiber Optic assembly: SM LC to LC (2.0m) |

# Appendix A. Notices

This information was developed for products and services offered in the US.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing*
*IBM Corporation*
*North Castle Drive, MD-NC119*
*Armonk, NY 10504-1785*
*US*

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you provide in any way it believes appropriate without incurring any obligation to you.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to actual people or business enterprise is entirely coincidental.

## Trademarks

IBM, the IBM logo, and ibm.com® are trademarks or registered trademarks of International Business Machines Corporation, in the United States and/or other countries. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on http://www.ibm.com/trademark.

# Class A Notices

The following Class A statements apply to this IBM product. The statement for other IBM products intended for use with this product will appear in their accompanying manuals.

## Federal Communications Commission (FCC) Statement

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## Industry Canada Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

## Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

## European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 2014/30/EU on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to European Standard EN 55032. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

European Community contact:
IBM Deutschland GmbH
Technical Regulations, Department M372
IBM-Allee 1, 71139 Ehningen, Germany
Tele: +49 (0) 800 225 5423 or +49 (0) 180 331 3233
email: halloibm@de.ibm.com

**Warning:** This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

## VCCI Statement - Japan

> この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。　　VCCI-A

The following is a summary of the Japanese VCCI statement above:

This is a Class A product based on the standard of the VCCI Council. If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions.

## Japan JIS C 61000-3-2 Compliance

> （一社）電子情報技術産業協会 高調波電流抑制対策実施
> 要領に基づく定格入力電力値：　Knowledge Centerの各製品の
> 仕様ページ参照

For products less than or equal to 20 A per phase, the following statement applies:

> 高調波電流規格　JIS C 61000-3-2 適合品

For products greater than 20 A, single-phase, the following statements apply:

> 高調波電流規格　JIS C 61000-3-2 準用品

> 本装置は、「高圧又は特別高圧で受電する需要家の高調波抑制対策ガイドライン」対象機器（高調波発生機器）です。
> 回路分類：6（単相、ＰＦＣ回路付）
> 換算係数：0

For products greater than 20 A per phase, three-phase, the following statements apply:

> 高調波電流規格　JIS C 61000-3-2 準用品

> 本装置は、「高圧又は特別高圧で受電する需要家の高調波抑制対策ガイドライン」対象機器（高調波発生機器）です。
> 回路分類　：5（3相、ＰＦＣ回路付）
> 換算係数　：0

**Electromagnetic Interference (EMI) Statement - People's Republic of China**

声　明

此为 A 级产品，在生活环境中，
该产品可能会造成无线电干扰，
在这种情况下，可能需要用户对其
干扰采取切实可行的措施。

**Declaration:** This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may need to perform practical action.

**Electromagnetic Interference (EMI) Statement - Taiwan**

警告使用者：
這是甲類的資訊產品，在
居住的環境中使用時，可
能會造成射頻干擾，在這
種情況下，使用者會被要
求採取某些適當的對策。

The following is a summary of the Taiwan EMI statement above:

**Warning:** This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user will be required to take adequate measures.

**IBM Taiwan Contact Information:**

台灣IBM 產品服務聯絡方式：
台灣國際商業機器股份有限公司
台北市松仁路7號3樓
電話：0800-016-888

**Electromagnetic Interference (EMI) Statement - Korea**

이 기기는 업무용(A급)으로 전자파적합등록을 한 기기이오니
판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의
지역에서 사용하는 것을 목적으로 합니다.

**Germany Compliance Statement**

**Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit**

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2014/30/EU zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55032 Klasse A ein.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der IBM empfohlene Kabel angeschlossen werden. IBM übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung von IBM verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung von IBM gesteckt/eingebaut werden.

EN 55032 Klasse A Geräte müssen mit folgendem Warnhinweis versehen werden:

"Warnung: Dieses ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funk-Störungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen zu ergreifen und dafür aufzukommen."

**Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten**

Dieses Produkt entspricht dem "Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG)". Dies ist die Umsetzung der EU-Richtlinie 2014/30/EU in der Bundesrepublik Deutschland.

**Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) (bzw. der EMC EG Richtlinie 2014/30/EU) für Geräte der Klasse A**

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen.

Verantwortlich für die Einhaltung der EMV Vorschriften ist der Hersteller:
International Business Machines Corp.
New Orchard Road
Armonk, New York 10504
Tel: 914-499-1900

Der verantwortliche Ansprechpartner des Herstellers in der EU ist:
IBM Deutschland GmbH
Technical Regulations, Abteilung M372
IBM-Allee 1, 71139 Ehningen, Germany
Tel: +49 (0) 800 225 5423 or +49 (0) 180 331 3233
email:  halloibm@de.ibm.com

Generelle Informationen:

**Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55032 Klasse A**.

**Electromagnetic Interference (EMI) Statement - Russia**

ВНИМАНИЕ! Настоящее изделие относится к классу А.
В жилых помещениях оно может создавать радиопомехи, для
снижения которых необходимы дополнительные меры

**IBM.**