IBM

@server

iSeries

43xx Disk Unit,
7104 Disk Expansion Unit,
7123 and 7127 Disk Unit Enclosure
Installation Instruction
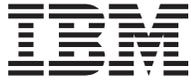
Version 5

SENG-4308-01

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> **Note**
>
> Before using this information and the product it supports, be sure to read the "Safety and Environmental Notices" on page iii and the "Notices" on page 53.

Safety and Environmental Notices

Danger Notices

A danger notice calls attention to a situation that is potentially lethal or extremely hazardous to people.

DANGER

> **To prevent a possible electrical shock during an electrical storm, do not connect or disconnect cables or station protectors for communications lines, display stations, printers, or telephones. (RSFTD003)**

DANGER

> **To prevent a possible electrical shock from touching two surfaces with different electrical grounds, use one hand, when possible, to connect or disconnect signal cables. (RSFTD004)**

DANGER

> **An electrical outlet that is not correctly wired could place hazardous voltage on metal parts of the system or the products that attach to the system. It is the customer's responsibility to ensure that the outlet is correctly wired and grounded to prevent an electrical shock. (RSFTD201)**

DANGER

> **To prevent a possible electrical shock when adding or removing any devices to or from the system, ensure that the power cords for those devices are unplugged before the signal cables are connected or disconnected. If possible, disconnect all power cords from the existing system before you add or remove a device. (RSFTD203)**

Caution Notices

A caution notice calls attention to a situation that is potentially hazardous to people because of some existing condition.

CAUTION:
Telecommunications Statement: This unit contains over-voltage circuits between the ac power outlet and the unit. These circuits meet the standard limits described in International Electrical Commission (IEC) 664, installation category II. It is the customer's responsibility to ensure that the power outlet meets the standards of IEC 664, installation category II. (RSFTC214)

Laser Safety Information

CAUTION:
This product may contain a CD-ROM which is a class 1 laser product. (RSFTC240)

Product Recycling and Disposal

Components of the system, such as structural parts and circuit cards, can be recycled where recycling facilities exist. IBM does not currently collect and recycle used IBM products from customers in the United States other than those products that are involved in trade-in programs. Companies are available to disassemble, reutilize, recycle, or dispose of electronic products. Contact an IBM account representative for more information.

The system unit contains batteries and circuit boards with lead solder. Before you dispose of this unit, these batteries and circuit boards must be removed and discarded according to local regulations or recycled where facilities exist. This book contains specific information on each battery type where applicable.

Battery Return Program

In the United States, IBM has established a collection process for reuse, recycling, or proper disposal of used IBM batteries and battery packs. For information on proper disposal of the batteries in this unit, please contact IBM at 1-800-426-4333. Please have the IBM part number that is listed on the battery available when you make your call. For information on battery disposal outside the United States, contact your local waste disposal facility.

Environmental Design

The environmental efforts that have gone into the design of the system signify IBM's commitment to improve the quality of its products and processes. Some of these accomplishments include the elimination of the use of Class I ozone-depleting chemicals in the manufacturing process, reductions in manufacturing wastes, and increased product energy efficiency. For more information, contact an IBM account representative.

Chapter 1. You have received your ordered disk unit (feature 43xx)

This feature is customer installed. It will take approximately 1 hour to install the hardware. If you elect not to do this installation yourself, contact IBM® or an Authorized Dealer to make arrangements for them to perform the feature installation for a fee.

You need to allow additional time to complete your jobs, back up your system, initial program load (IPL) your system, and verify your hardware configuration.

When you use these instructions, you may do the following:
- Remove the system unit covers.
- Install your new hardware.
- Install covers.
- IPL your operating system.
- Verify your new hardware configuration.

Note: Do NOT remove or move disk units already installed in your unit. Contact your service representative before moving or removing disk units.

Some of the pictures in these instructions may not look exactly like the system unit that you have. However, the steps to perform the task are the same.

Do the following before you begin.
__ 1. **Ensure that you have a current backup of your system (including operating system, licensed programs, and data).**
__ 2. Ensure that you take a few minutes to become familiar with these instructions.
__ 3. If there are incorrect, missing parts or visibly damaged parts, contact one of the following:
   - Your authorized dealer
   - IBM Rochester Manufacturing Automated Information Line (R-MAIL)
     – 1-800-300-8751 (United States and Canada)
     – 1-507-253-5242 (worldwide)
__ 4. If you encounter difficulties during the installation, contact your authorized service provider or your authorized dealer.
__ 5. Determine if there are any existing PTF prerequisites before you install your new feature. Go to this Web site and locate your feature number and OS/400® release and check the prerequisites.

   `http://as400service.ibm.com/s_dir/slkbase.NSF/`

   Then do the following to get to the Customer Install Features Prerequisites:
   a. Select **All Documents**
   b. Select **Collapse**
   c. Select **General Information**
   d. Select **Offerings**
   e. Select **Feature Prerequisites**

f. Select **Customer Install Features Prerequisites**

The following installation instructions are in this document. Go to the instruction for the feature you plan to install:

Chapter 2. Installing 43xx disk units

This feature is customer-installable. If you elect not to do this installation yourself, contact IBM or an Authorized Dealer to make arrangements for them to perform the installation for a fee.

- Your unit can either be powered off (non-concurrent) or powered on (concurrent) when you install your disk unit.

  __ 1. Be sure you understand the complexity of the powered on (concurrent) procedures before you begin ("Your system is powered on during installation"). If you do not feel comfortable using the concurrent procedure, go to "Your system is powered off during installation" on page 8.

  __ 2. Decide which way you want to install your disk unit—"Your system is powered on during installation" on page 3 or "Your system is powered off during installation" on page 8.

- System areas allowing customer access are blue in your system (for instance– latches, handles, and so forth).

- A disk unit placement tool is available on the Internet. Go to:

  http://www.ibm.com/iseries/cif

  After you have used the tool to determine the disk unit placement, return to these instructions to install the disk unit.

Your system is powered on during installation

Attention: Disk units are fragile. Handle with care.

__ 1. Remove the unit front cover. Refer to "Removing the front cover" on page 17.

__ 2. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.**

   Notes:

   a. Follow the same precautions you would use without the wrist strap. The 2209 Disposable Wrist Strap is for static control. It will not increase nor decrease your risk of receiving electric shock when using or working on electrical equipment.

   b. Discard the wrist strap immediately and contact your dealer for a replacement, if the disposable wrist strap appears damaged or is cut off. Do not continue until a new wrist strap is available.

   c. Remove the liner from the copper foil at the end, when you unroll the wrist strap.

   d. Attach the copper foil to an **exposed, unpainted** metal surface on the frame of the system unit (electrical ground).

__ 3. Find the disk unit locations in your system unit or your expansion unit. Refer to "Disk unit locations" on page 21.

__ 4. Remove the disk unit cover(s). Squeeze the blue latch and pull out.

__ 5. Look at the front of the system unit or the expansion unit and determine the next available position. When you have a system unit with an expansion unit, **fill the slot positions in the base unit first**.

__ 6. Write down the position where the new disk will be installed _____ (for example; D03).

__ 7. Write down the Frame ID where you will be installing the disk unit here _____ . You will need it later. The base system Frame ID is 1. The Frame ID for each external expansion unit is displayed on the front display (for example: 02)

__ 8. Be sure you are signed on **with service authority**.

__ 9. Type `strsst` on the command line of the iSeries session and press Enter.

__ 10. Type `your service tools userid and service tools password` on the *System Service Tools (SST) Sign On* display. Press Enter.

__ 11. Select **Start a service tool** from the *System Service Tools (SST)* display. Press Enter.

__ 12. Select **Hardware service manager** from the *Start a Service Tool* display. Press Enter.

__ 13. Select **Device Concurrent Maintenance** from the display. Press Enter.

__ 14. Type the **Physical Location** (Frame ID and position) where you will be installing the new disk unit. Refer to step 7 and step 3 on page 3.

In this example, `Physical Location: Frame ID 1____ Position D06____` , you would install a disk unit in frame 1 (base system), disk unit position 6.

__ 15. Select option **2** (Install device for the action to be performed.)

__ 16. Set the time delay for one minute—01.

__ 17. Find the package that contains the new disk unit assembly and remove it from the static-protective package. Write the serial number (use the last four digits) of the disk unit here _____ before you install it.

Serial Number

RV5B003-0
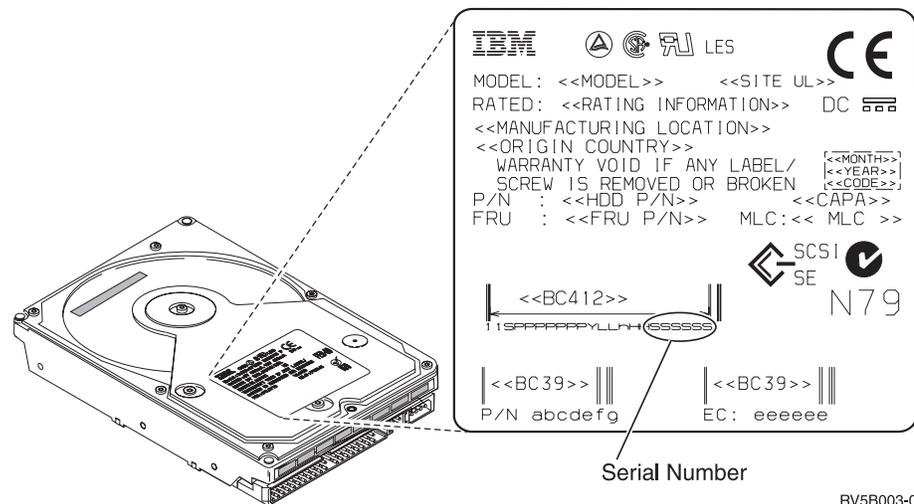
__ 18. Unlock the blue handle by pulling it out toward you and down before you install the disk unit. If the handle is not all the way down, the disk unit

will not slide into the system unit or the expansion unit.
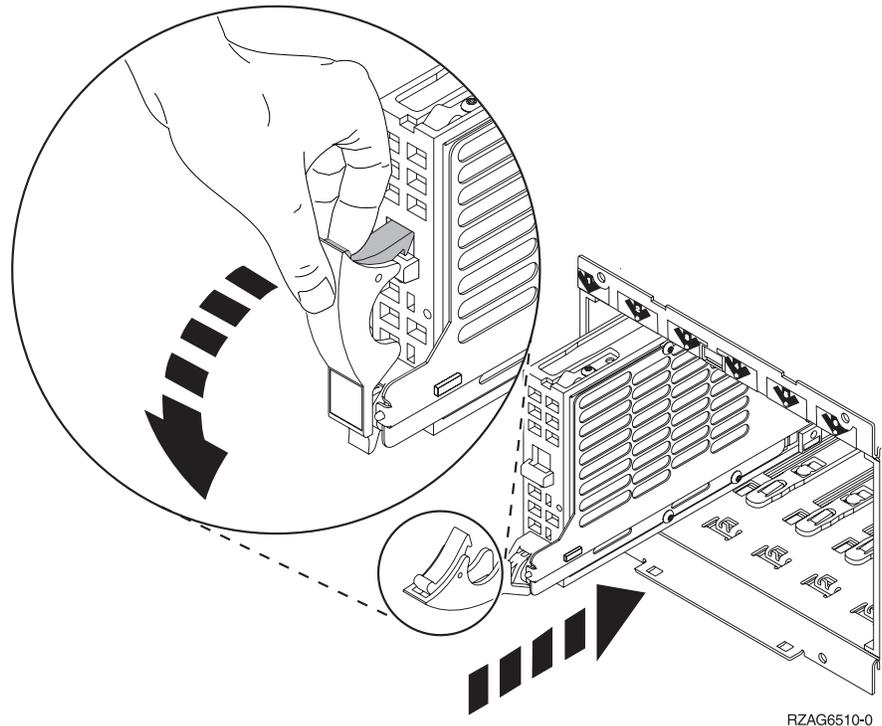
RZAG6510-0

__ 19. Support the disk unit assembly as you slide it half way into the system unit or the expansion unit. Do not push it any further.

   Note: You install the disk units horizontally in the 7123 disk unit enclosure.

__ 20. Locate the light in the numbered arrow by the disk unit you are installing. When Enter is pressed in the next step, the light comes on and begins to blink rapidly. You will have nine seconds to slide the disk unit forward and push in the handle on the disk unit.

__ 21. Press Enter on the console.

__ 22. When the light starts blinking, after the one minute delay, slide the disk unit in and lock it in place by closing the latch.

__ 23. The light stops blinking and remains solid when you have installed the disk unit properly.

__ 24. Return to the console and wait until the *Concurrent Maintenance Results* display appears.

   Press Enter.

__ 25. Do you have another disk unit to install?

   No   **Yes**

   ↓   Look at the front of the system unit or the expansion unit and determine the next available position. Repeat steps 13 on page 4 through 24.

__ 26. When the *Hardware Service Manager* display appears, **press F12**.

__ 27. Select **Work with Disk Units** on the *System Service Tool* display.

   Press Enter.

__ 28. Select **Display disk configuration** on the *Work with Disk Units* display.

Press Enter.

__ 29. Select **Display non-configured units** on the *Display disk configuration* display.

Press Enter.

__ 30. The disk unit that you installed should be listed. The serial number should match the serial number you wrote in step 17 on page 4.

> **Note:** If the disk unit is not listed, ensure that the disk unit was properly installed. Repeat steps "Your system is powered on during installation" on page 3 through 24 on page 5.

__ 31. Press F12, twice.

__ 32. Select **Work with disk configuration** on the *Work with Disk Units* display.

Press Enter.

__ 33. Are you adding a disk unit to an existing device parity set? If you need more information about device parity, go to the *Backup and Recovery*, SC41-5304-05.

Yes   No

↓   Go to step 51 on page 7.

__ 34. Select **Include unit in device parity protection** on the *Work with disk configuration* display.

Press Enter.

__ 35. Did the **Include Device Parity Protection Failed** display appear?

Yes   No

↓   Go to step 39.

__ 36. The following conditions must be met before you can start device parity protection. Including the disk unit in device parity protection may fail for one or more reasons.

- If there are enough disk units available to create a new parity set, the units will be eligible for *Start Device Parity Protection* operation and not for the *Include Device Parity Protection* operation. For more information, go to the *Backup and Recovery*, SC41-5304-05.
- **All disk units in a parity set must be the same capacity with a minimum number of 4 disk units and maximum of 10 units in the resulting parity set.**
- Not all disk units attached to an advanced function input/output processor have reported to the system. Retry the operation.
- The type/model of the disk units is not supported for the requested operation.

__ 37. When the above conditions are met, select F12 to return to the *Work with disk configuration* display.

__ 38. Select **Include unit in device parity protection** on the *Work with disk configuration* display.

Press Enter.

__ 39. Select the disk units to include in Device Parity Protection. Type a **1** in the *Option* column on the *Include Disk Units in Device Parity Protection* display.

Press Enter.

__ 40. Press Enter to confirm your choice. The configuration will start and may take 30 minutes to complete.

__ 41. When the device parity protection is complete, the message "Selected unit(s) have been included successfully" appears on the *Work with disk configuration* display.

__ 42. Select **Display disk configuration** on the *Work with disk configuration* display and press Enter.

__ 43. Select **Display disk configuration status** on the *Display disk configuration* display and press Enter.

__ 44. If you have more than one ASP, determine the auxiliary storage pool (ASP) to add the disk units.

__ 45. Press F12, twice.

__ 46. Select **Add units to the ASPs and balance data** on the **Work with disk configuration** display.

Press Enter.

__ 47. Specify the ASP you determined in step 44 on the **Specify ASPs to Add Units to** display.

Press Enter.

__ 48. The **Confirm Add Units** display appears showing the configuration your system will have when the add completes.

  Note: If you have selected the wrong ASP, press F12 to change your options.
  Press the Enter key to continue. The add process will take several minutes to complete.

__ 49. When the message "Selected units have been added successfully" appears, return to the *Main Menu*. (Press F3 three times and press Enter.)

__ 50. Go to step 61 on page 8.

__ 51. Select **Display disk configuration** on the *Work with Disk Configuration* display.

__ 52. Press Enter.

__ 53. Select **Display disk configuration status** on the *Display Disk Configuration* display.

__ 54. Press Enter.

__ 55. If you have more than one ASP, determine the auxiliary storage pool (ASP) to add the disk units.

__ 56. Press F12, twice.

__ 57. Select **Add units to ASPs** on the *Work with Disk Configuration* display.

Press Enter.

__ 58. Specify the number the ASP to which you want to add the disk unit. The system ASP is **ASP 1**.

Press Enter.

__ 59. The *Confirm Add Units* display appears showing the configuration your system will have when the add completes.

  Note: If you have selected the wrong ASP, press F12 to change your options.
  Press the Enter key to continue. The add process will take several minutes to complete.

__ 60. When the message "Selected units have been added successfully" appears, return to the *Main Menu*. (Press F3 three times and press Enter.)

__ 61. Install the disk unit cover(s). Align the tabs on the disk unit cover with the slots in the system unit. Push the cover in until it latches.

__ 62. Install the system unit or expansion unit front cover.

__ 63. If you have a printer, print the configuration list. A service representative may refer to the configuration list in the future.

　　　__ a. You need to sign on with service authority.

　　　__ b. Type **strsst** on the *Main Menu* command line and press Enter.

　　　__ c. Type **your service tools userid and service tools password** on the *System Service Tools (SST) Sign On* display and press Enter.

　　　__ d. Select **Start a service tool** on the *System Service Tools (SST)* display and press Enter.

　　　__ e. Select **Hardware service manager** on the *Start a Service Tool* display and press Enter.

　　　__ f. Select **Print configuration** from the *Hardware Service Manager* display.

　　　__ g. Press F3 (Exit) twice to return to the *Main Menu* and press Enter.

　　　__ h. Place the configuration list where you can reference it in the future.

__ 64. For information on how to make your disk unit operational, go to the *iSeries Information Center*. You can access the Information Center from the*iSeries Information Center*, SK3T-4091-00 or from the following Web site:

　　　http://www.ibm.com/eserver/iseries/infocenter

__ 65. The installation of the disk unit is complete.

Your system is powered off during installation

__ 1. **Attention:** Disk units are fragile. Handle with care.

__ 2. Ensure that all jobs are complete.

__ 3. When all jobs are complete, type **pwrdwnsys *immed** on an iSeries command line and press Enter.

__ 4. When the iSeries is completely powered down, disconnect all PCs from the system unit. Power off all devices, such as printers and displays, that are connected to the system unit.

__ 5. Unplug any power cords, such as printers and displays, from electrical outlets.

__ 6. Unplug the system unit and expansion unit power cords from the electrical outlets.

__ 7. Remove the unit front cover. Refer to "Removing the front cover" on page 17.

__ 8. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** Attach the adhesive part of the foil to an unpainted surface.

　　　Notes:

　　　a. Follow the same precautions you would use without the wrist strap. The 2209 Disposable Wrist Strap is for static control. It will not increase nor decrease your risk of receiving electric shock when using or working on electrical equipment.

　　　b. Discard the wrist strap immediately and contact your dealer for a replacement, if the disposable wrist strap appears damaged or is cut off. Do not continue until a new wrist strap is available.

　　　c. Remove the liner from the copper foil at the end, when you unroll the strap.

d. Attach the copper foil to an **exposed, unpainted** metal surface on the frame of the system unit (electrical ground).

__ 9. Find the disk unit locations in your system unit or your expansion unit. Refer to "Disk unit locations" on page 21.

__ 10. Remove the disk unit cover(s). Squeeze the blue latch and pull out.

__ 11. Look at the front of the system unit or the expansion unit and determine the next available position. When you have a system unit with an expansion unit, **fill the slot positions sequentially in the base unit first**.

__ 12. Find the package that contains the new disk unit assembly and remove it from the static-protective package. Write the serial number (use the last four digits) of the disk unit here _____ before you install it.

Serial Number
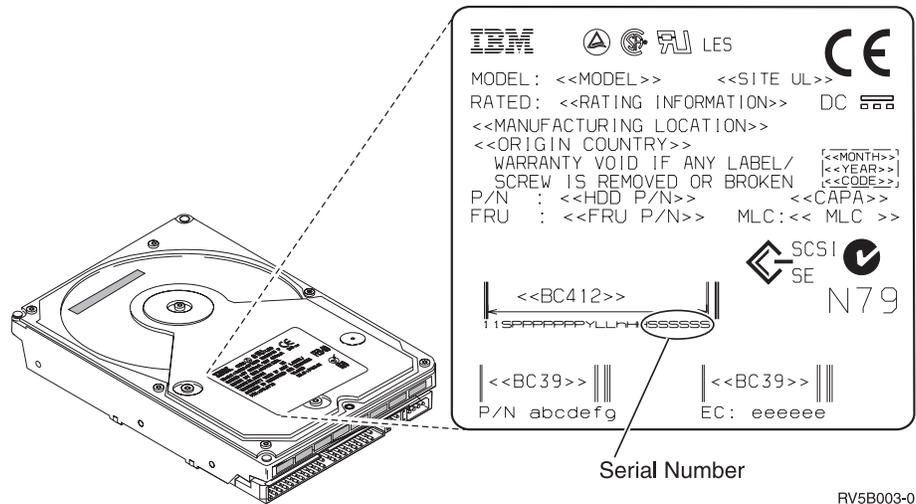
RV5B003-0

__ 13. Pull the blue handle out toward you and down before you install the disk unit. If the handle is not all the way down, the disk unit will not slide into

the system unit or the expansion unit.

RZAG6510-0
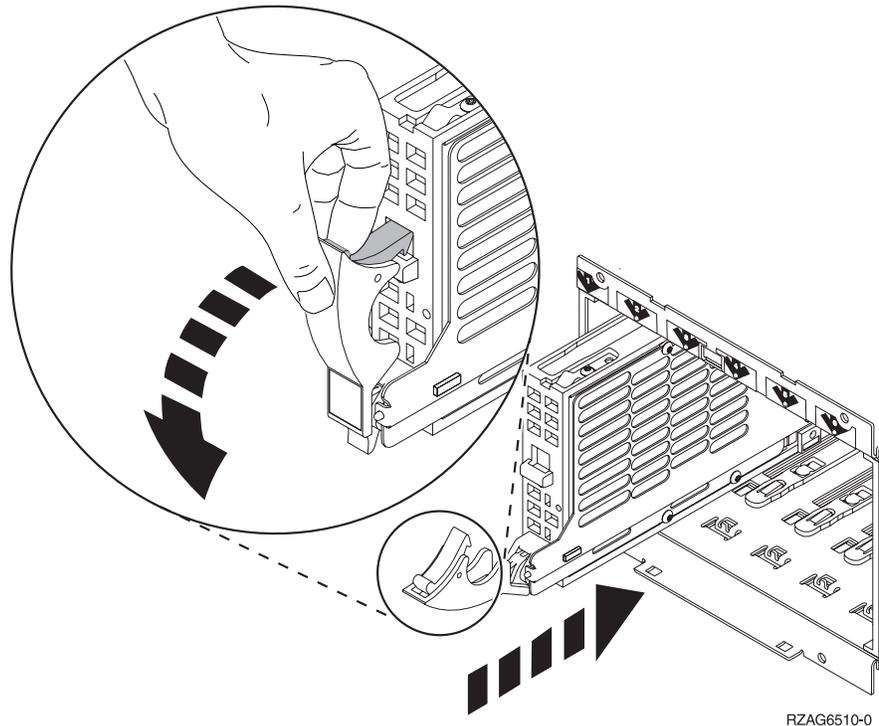
__ 14. Support the bottom of the disk unit assembly as you slide it forward and install it into the system unit or the expansion unit. Do not hold the disk unit by the blue handle.

__ 15. Align the disk unit assembly with the next available slot and slide it into the system or expansion unit until it **stops**. Make sure that the handle is fully extended when sliding into the system unit or the expansion unit.

__ 16. Lift the disk unit handle firmly locking it into place.

__ 17. Do you have another disk unit to install?

No   **Yes**

↓   Repeat steps 9 on page 9 through 16.

__ 18. Do you have any other adapter cards or devices to install?

No   **Yes**

↓   If you have another device such as an adapter card, a tape unit, or a memory card to install, go to the instructions that came with that device.

__ 19. Install the disk unit cover(s). Align the tabs on the disk unit enclosure cover with the slots on the system unit enclosure. Push the cover in until it latches.

__ 20. Remove the disposable wrist strap.

__ 21. Install or close the unit front cover.

__ 22. **DANGER**

> **An electrical outlet that is not correctly wired could place hazardous voltage on metal parts of the system or the products that attach to the system. It is the customer's responsibility to ensure that the outlet is correctly wired and grounded to prevent an electrical shock. (RSFTD201)**

Plug the following power cords into an electrical outlet.

- System unit
- System unit console
- Expansion units

__ 23. Plug in and power on all attached devices, such as printers and displays.

__ 24. Is your system unit an iSeries 270, 820, 830 or 840?

270   820, 830 or 840

↓   Go to step 28 on page 12.

__ 25. Look at the Function/Data display on the control panel. Refer to "System unit control panel" on page 29.

__ 26. Did you just install a 7104 Expansion Unit?

No   Yes

↓

__ a. Press the Increment/Decrement push button until **02** appears in the Function/Data display.

__ b. Press the Enter push button on the control panel.

__ c. Press the Increment/Decrement push button until **B** appears in the Function/Data display.

__ d. Press the Enter push button on the control panel.

__ e. Press the Increment/Decrement push button until **M** appears in the Function/Data display.

__ f. Press the Enter push button on the control panel.

__ g. Press the Increment/Decrement push button until **S** appears in the Function/Data display.

__ h. Press the Enter push button on the control panel.

__ i. Press the Increment/Decrement push button until **07** appears in the Function/Data display.

__ j. Press the Enter push button on the control panel.

__ k. Press the Increment/Decrement push button until **07A9** appears in the Function/Data display.

__ l. Press the Enter push button on the control panel.

__ m. Press the Increment/Decrement push button until **0701** appears in the Function/Data display.

__ n. Press the Enter push button on the control panel.

__ o. Press the Increment/Decrement push button until **0795** appears in the Function/Data display.

__ p. Press the Enter push button on the control panel.

01 B M V=F should appear in the Function/Data display. If it does not, repeat steps 26a through 26p.

__ q. Go to step 30 on page 12.

__ 27. Does **01 B M V=S** appear in the Function/Data display?

Yes   No

↓   Do the following:

__ a. Press the Increment/Decrement push button until **02** appears in the Function/Data display.

__ b. Press the Enter push button on the control panel.

__ c. Press the Increment/Decrement push button until **B** appears in the Function/Data display.

__ d. Press the Enter push button on the control panel.

__ e. Press the Increment/Decrement push button until **M** appears in the Function/Data display.

__ f. Press the Enter push button on the control panel.

__ g. Press the Increment/Decrement push button until **S** appears in the Function/Data display.

__ h. Press the Enter push button on the control panel.

__ i. Press the Increment/Decrement push button until **01** appears in the Function/Data display.

__ j. Press the Enter push button on the control panel.

01 B M S should appear in the Function/Data display. If it does not, repeat steps 27a through 27j.

__ k. Go to step 30.

Go to step 30.

__ 28. Look at the Function/Data display on the control panel.

__ 29. Does **01 B V=S** appear in the Function/Data display and the Manual mode indicator (a small hand) lit?

Yes   No

↓   Do the following:

__ a. Press the Mode Select button until the Manual mode indicator (a small hand) lights up.

__ b. Press the Increment/Decrement push button until **02** appears in the Function/Data display.

__ c. Press the Enter push button on the control panel.

__ d. Press the Increment/Decrement push button until **B** appears in the Function/Data display.

__ e. Press the Enter push button on the control panel.

__ f. Press the Increment/Decrement push button until **S** appears in the Function/Data display

__ g. Press the Enter push button on the control panel.

__ h. Press the Increment/Decrement push button until **01** appears in the Function/Data display.

__ i. Press the Enter push button on the control panel.

01 B S should appear in the Function/Display panel. If it does not appear, repeat steps 29a through 29h.

__ 30. Press the Power push button that is located on the iSeries control panel. There is approximately a 10 second delay before the power-on light comes on, and data appears in the Function/Data display.

Note: The system takes approximately 5 to 10 minutes to power on and complete an IPL. When the IPL is complete, the *IPL or Install the System* display should appear on your system unit console.

__ 31. Do the following to verify your disk unit configuration:

__ a. Select **Use Dedicated Service Tools (DST)** when the *IPL or Install the System* display appears.

Press Enter.

__ b. Enter your DST userid and password.

Press Enter.

__ c. Select **Work with disk units** on the *Use Dedicated Service Tools (DST)* display.

Press Enter.

__ d. Select **Work with disk configuration** on the *Work with Disk Units* display.

Press Enter.

__ e. Select **Display disk configuration** on the *Work with Disk Configuration* display.

Press Enter.

__ f. Select **Display non-configured units** on the *Display Disk Configuration* display.

Press Enter.

__ g. The disk units that you installed should be listed. The serial number should match the serial number you wrote in step 12 on page 9.

Note: If the disk unit is not listed, ensure that the disk unit is properly installed.

__ h. Return to the *Work with Disk Configuration* display (press F12 two times).

__ 32. Are you adding a disk unit to an existing device parity set? If you need more information about device parity, go to the book, *Backup and Recovery*, SC41-5304-05.

Yes   No

↓   Go to step 51 on page 14.

__ 33. Select **Work with device parity protection** on the *Work with Disk Configuration* display.

Press Enter.

__ 34. Select **Include unit in device parity protection** on the *Work with Device Parity Protection* display.

Press Enter.

__ 35. Did the *Include Device Parity Protection Failed* display appear?

Yes   No

↓   Go to step 38 on page 14.

__ 36. The following conditions must be met before you can start device parity protection. Including the disk unit in device parity protection may fail for one or more reasons.

- If there are enough disk units available to create a new parity set, the units will be eligible for **Start Device Parity Protection** operation and

not for the **Include Device Parity Protection** operation. For more information, refer to *Backup and Recovery*, SC41-5304-05.

- **All disk units in a parity set must be the same capacity with a minimum number of 4 disk units and maximum of 10 units in the resulting parity set.**
- Not all disk units attached to an advanced function input/output processor have reported to the system. Retry the operation.
- The type/model of the disk units is not supported for the requested operation.

__ 37. When the above conditions are met, press F12 twice to return to the *Work with Disk Configuration* display.

__ 38. On the *Include Disk Units in Device Parity Protection* display, select the disk units to be included in Device Parity Protection. Type a **1** in the **Option** column.

Press Enter.

__ 39. Press Enter to confirm your choice.

__ 40. When the device parity protection is complete, the message "Selected unit(s) have been included successfully" appears on the *Work with device parity protection* display.

Press F12.

__ 41. Select **Display disk configuration** on the *Work with disk configuration* display.

Press Enter.

__ 42. Select **Display disk configuration status** on the *Display disk configuration* display.

__ 43. If you have more than one ASP, determine the auxiliary storage pool (ASP) to add the disk unit.

__ 44. Press F12, twice.

__ 45. Select **Work with ASP configuration** on the *Work with disk configuration* display.

Press Enter.

__ 46. Select **Add units to ASP's** on the *Work with ASP configuration* display.

Press Enter.

__ 47. Specify the ASP you determined in step 44 on the *Specify ASPs to Add Units to* display.

Press Enter.

__ 48. Press Enter to confirm.

__ 49. When the message "Selected units have been added successfully" appears, return to the *Main Menu*.

__ 50. Go to step 55 on page 15.

__ 51. Select **Work with ASP configuration** on the *Work with Disk Configuration* display and press Enter.

__ 52. Select **Add units to ASPs** on the *Work with ASP configuration* display.

Press Enter.

__ 53. Specify the number of the ASP which you want to add the disk unit. The system ASP is **ASP 1**.

Press Enter.

__ 54. The *Confirm Add Units* display appears showing the configuration your system will have when the add completes.

> **Note:** If you have selected the wrong ASP, press F12 to change your
> options.
>
> Press the Enter key to continue. The add process will take several minutes
> to complete.

__ 55. Press F12 three times to return to the *Use Dedicated Service Tools (DST)*
display.

__ 56. Select **Perform an IPL** on the *Use Dedicated Service Tools (DST)* display.

Press Enter.

__ 57. If you have a printer, print the configuration list. A service representative
may refer to the configuration list in the future.

    __ a. You need to sign on with service authority.

    __ b. Type **strsst** on the *Main Menu* command line.

       Press Enter.

    __ c. Type **your service tools userid and service tools password** on
the *System Service Tools (SST) Sign On* display.

       Press Enter.

    __ d. Select **Start a service tool** on the *System Service Tools (SST)* display.

       Press Enter.

    __ e. Select **Hardware service manager** on the *Start a Service Tool* display.

       Press Enter.

    __ f. Press F6 (print the configuration) from the *Hardware Service Manager*
display.

    __ g. To return to the *Main Menu*, press F3 (Exit) twice and then press
Enter.

    __ h. Place the configuration list where you can reference it in the future.

__ 58. For information on how to make your disk unit operational, go to the
iSeries Information Center. You can access the Information Center from the,
iSeries Information Center, SK3T-4091-00 CD or from the following Web site:

    http//www.ibm.com/eserver/iseries/infocenter

__ 59. The installation of the disk unit is complete.
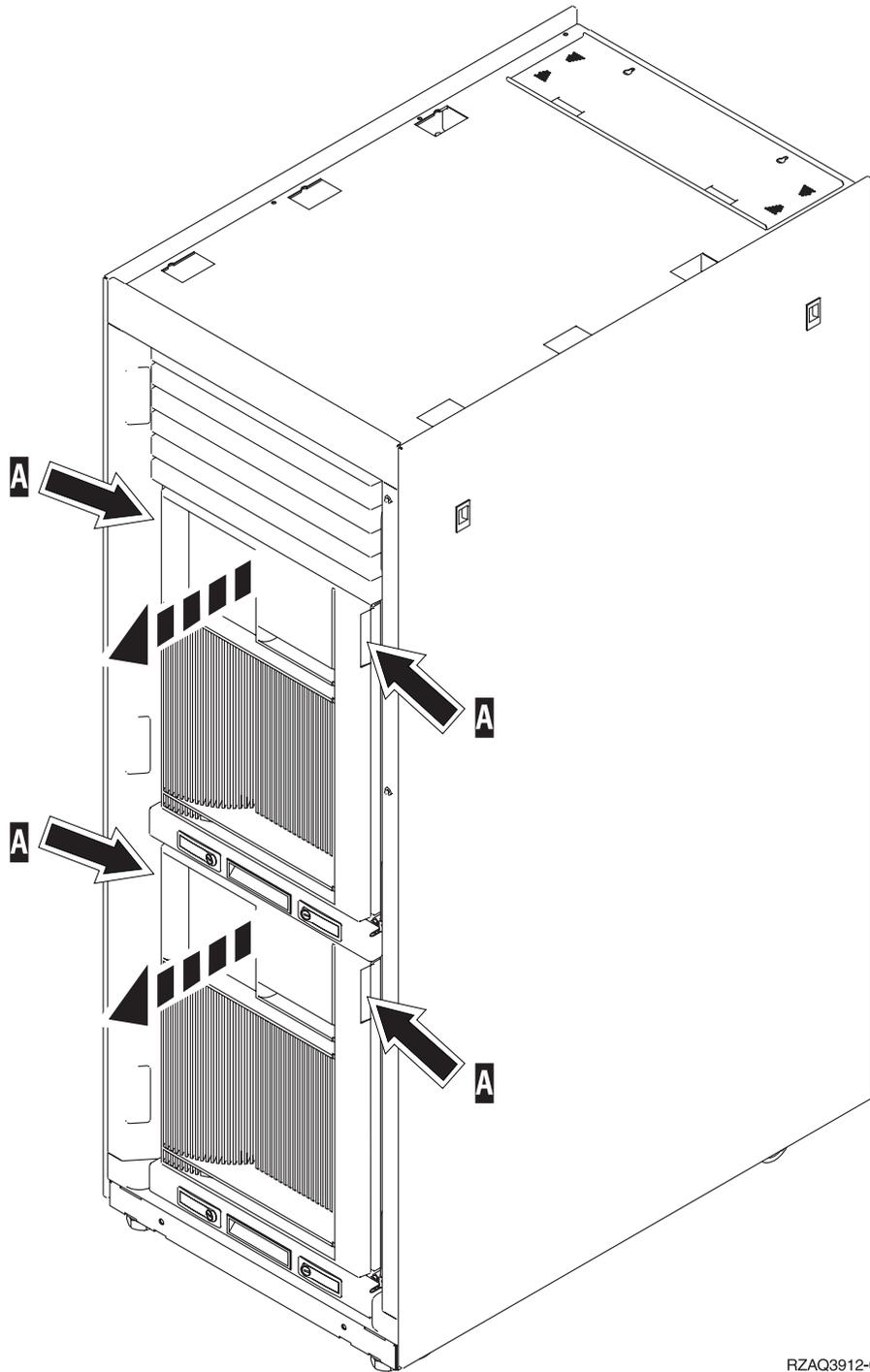
Removing the front cover

270, 820 and 5075 front cover

Remove the system unit or expansion unit front cover by gripping the sides of the cover **A** and pulling the cover toward you.
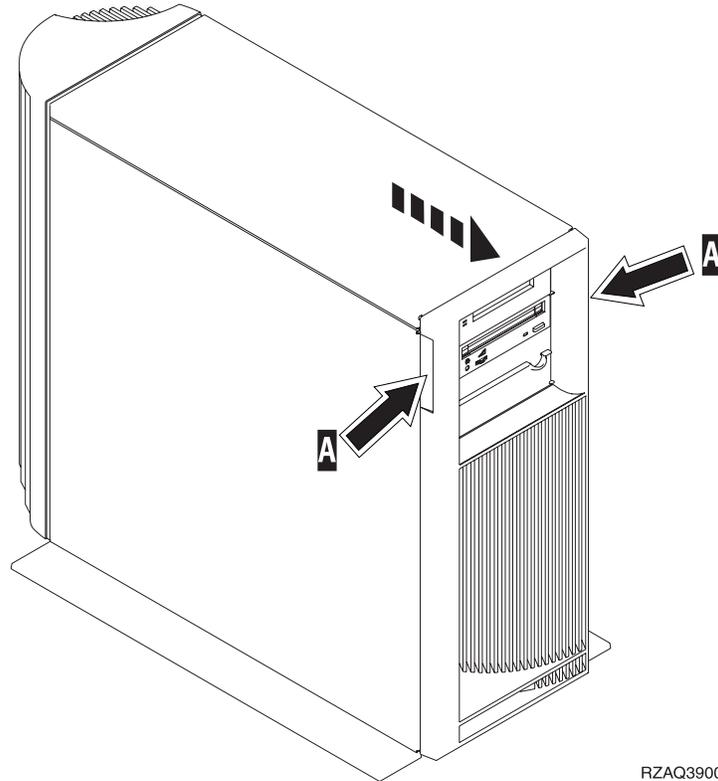
RZAQ3900-0

270 in a rack

RZAQ3912-0

830, 840 , 5074 and 5079

Use latch A to open the front cover. If needed, use latch B to remove the front cover.

RZAG6503-0
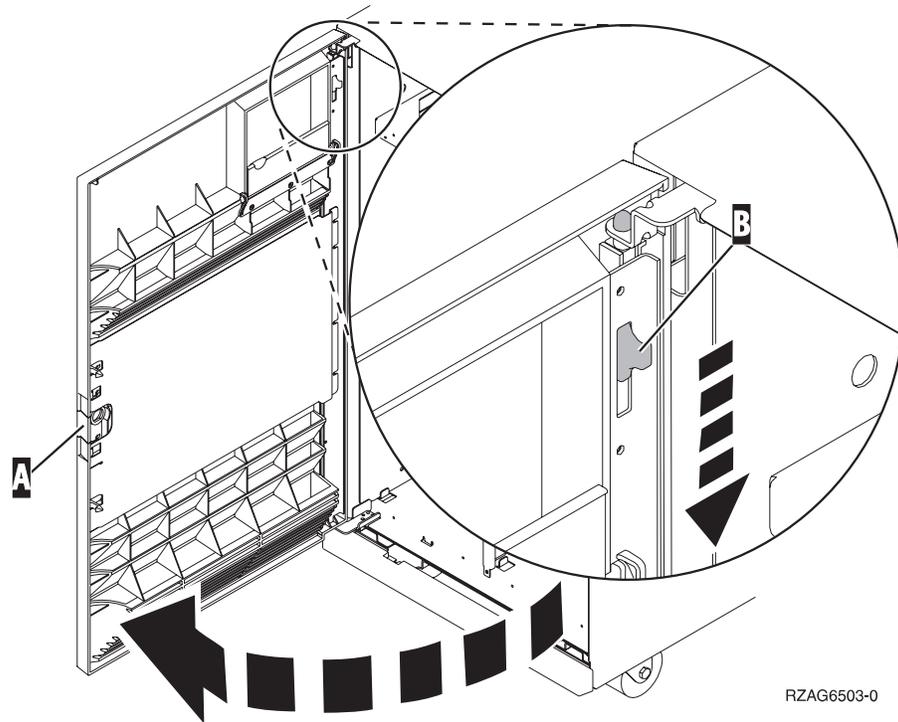
Disk unit locations

Locate your system or expansion unit in the following pages.

270 System Unit

```
Back                          Left                                    Front

C07          System Unit Backplane          Tape         D08   Tape
C06                     MB1                  Optical      D07   Optical
C05
C04
C03                                                       OP Panel
C02                                                         NB1
C01
                                                           AMD
                                                           B02

                                                           AMD
A1    A0      M02  Processor Card                          B01

             M01  Memory Riser Card
                                                    Disk Unit Disk Unit Disk Unit Disk Unit Disk Unit Disk Unit
                                         D B 1  Disk Unit Cage

Power Supply  Power Supply                                D01 D02 D03 D04 D05 D06
   P01           P01
```
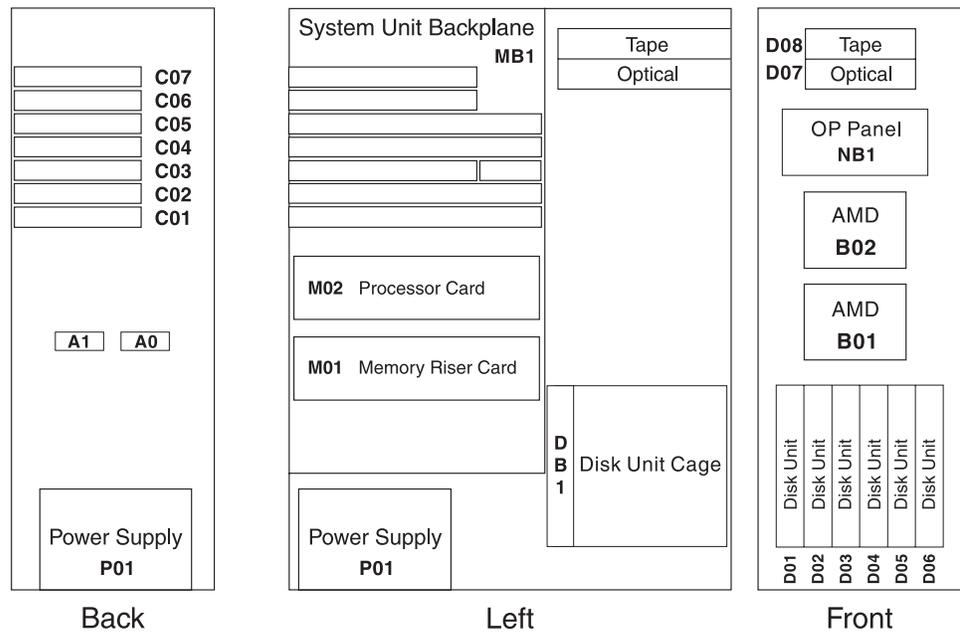
RZAQ2502-5

7104 Expansion Unit

```
Front                          Right

Disk Unit   D20
Disk Unit   D19
Disk Unit   D18    Disk Unit Cage   D B 3
Disk Unit   D17                              AMD
Disk Unit   D16                              B03
Disk Unit   D15


Disk Unit   D14
Disk Unit   D13
Disk Unit   D12    Disk Unit Cage   D B 2    Power Supply
Disk Unit   D11                                 P02
Disk Unit   D10
Disk Unit   D09
```
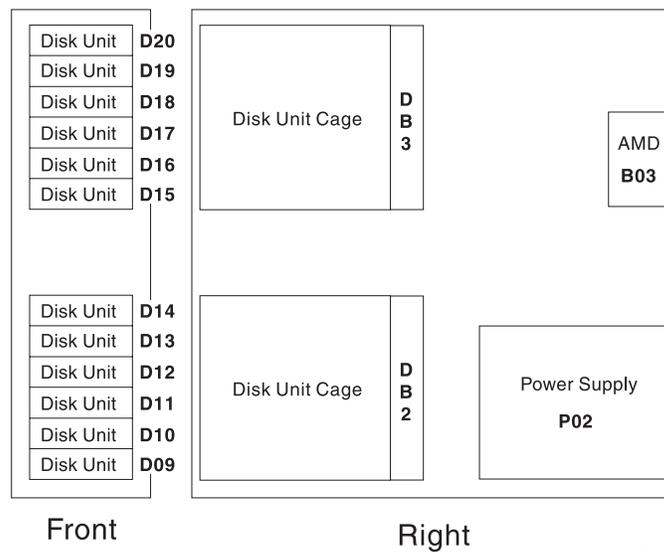
RZAQ2522-0

820 System Unit

Front

Tape	**D14**
Optical	**D13**
OP Panel	**NB1**

AMD B04

AMD B03

AMD B02

AMD B01

Disk Unit	Disk Unit	Disk Unit	Disk Unit	Disk Unit
D07	**D08**	**D09**	**D10**	**D11**	**D12**

DB2

Disk Unit	Disk Unit	Disk Unit	Disk Unit	Disk Unit
D01	**D02**	**D03**	**D04**	**D05**	**D06**

DB1

Front

Right

Tape
Optical
OP Panel

Disk Unit Cage

DB2

Disk Unit Cage

DB1

Power Supply **P03**

Power Supply **P02**

Power Supply **P01**

Right

Back

C12
C11
C10
C09
C08
C07
C06
C05
C04
C03
C02
C01

A1   **A0**
High Speed Link Connectors

(RPO)   J11   J15   (SPCN0)
(UPS)   J14   J16   (SPCN1)

JTAG   C/E

Back

Left

System Unit Backplane

MB1

Processor Card	**M03**
Memory Riser Card	**M02**
Memory Riser Card	**M01**

AMD B04

AMD B03

AMD B02

AMD B01

Left   RZAQ2503-6

830 System Unit

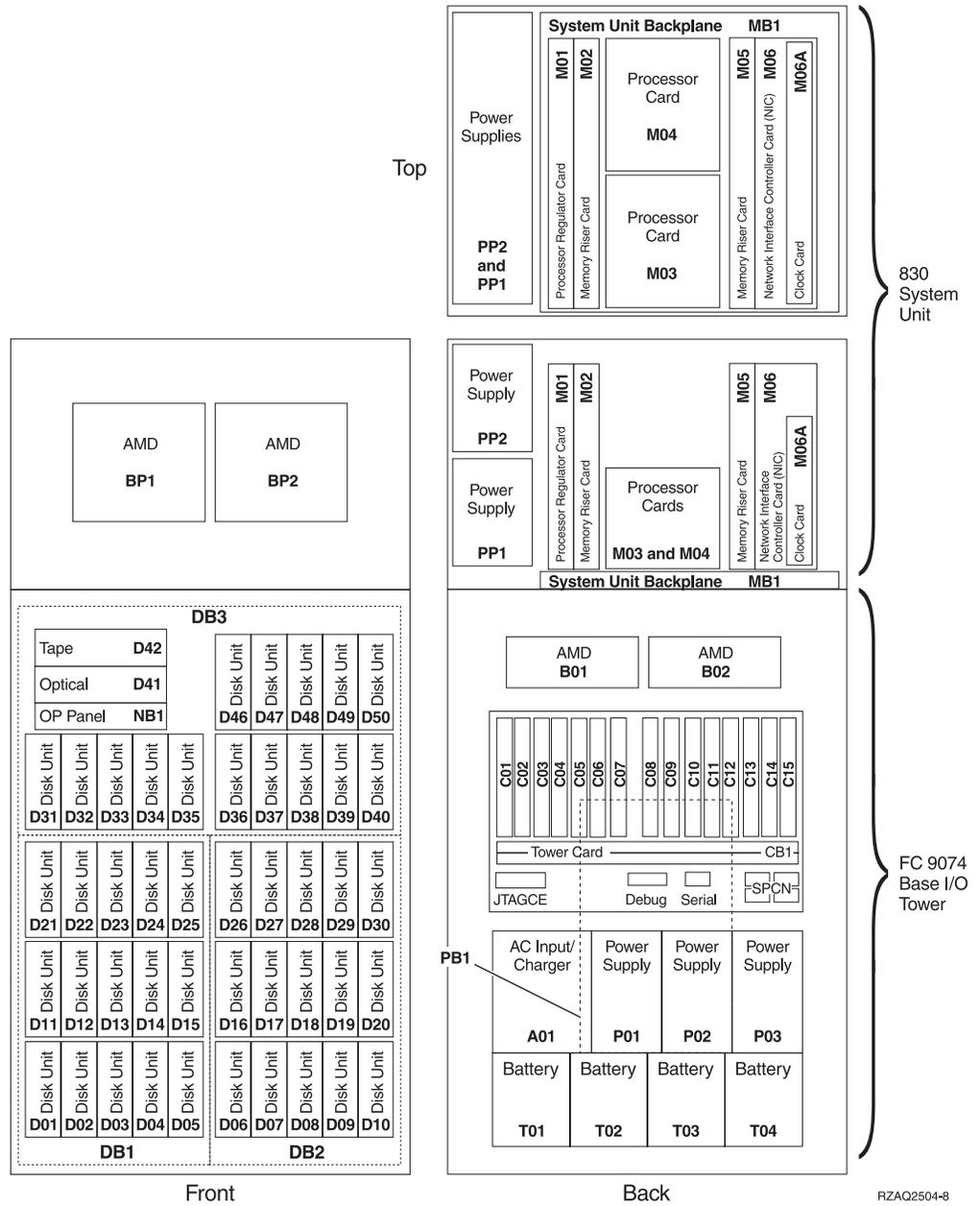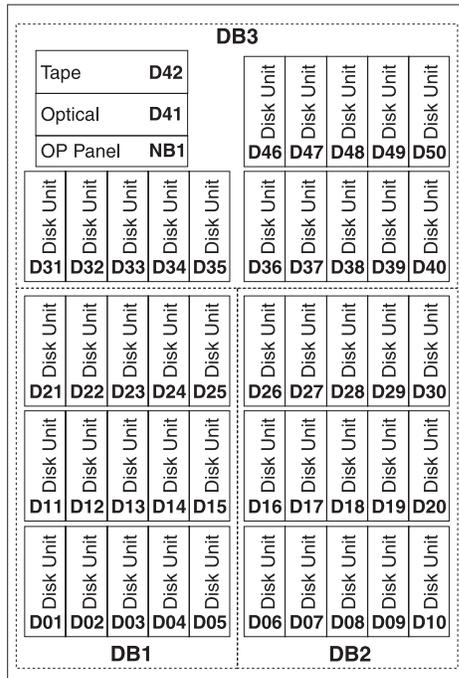**Note:** DASD plug sequence for optimum performance: D31, D36, D46, D32, D37, D47, ... D50, (add 2nd adaptor), D01, D11, D21, D02, ... D25, (add 3rd adaptor), D06, D16, D26, D07, ... D30.

840 System Unit

DB3

Tape	**D42**
Optical	**D41**
OP Panel	**NB1**

Disk Unit **D46** | Disk Unit **D47** | Disk Unit **D48** | Disk Unit **D49** | Disk Unit **D50**

Disk Unit **D31** | Disk Unit **D32** | Disk Unit **D33** | Disk Unit **D34** | Disk Unit **D35** — Disk Unit **D36** | Disk Unit **D37** | Disk Unit **D38** | Disk Unit **D39** | Disk Unit **D40**

Disk Unit **D21** | Disk Unit **D22** | Disk Unit **D23** | Disk Unit **D24** | Disk Unit **D25** — Disk Unit **D26** | Disk Unit **D27** | Disk Unit **D28** | Disk Unit **D29** | Disk Unit **D30**

Disk Unit **D11** | Disk Unit **D12** | Disk Unit **D13** | Disk Unit **D14** | Disk Unit **D15** — Disk Unit **D16** | Disk Unit **D17** | Disk Unit **D18** | Disk Unit **D19** | Disk Unit **D20**

Disk Unit **D01** | Disk Unit **D02** | Disk Unit **D03** | Disk Unit **D04** | Disk Unit **D05** — Disk Unit **D06** | Disk Unit **D07** | Disk Unit **D08** | Disk Unit **D09** | Disk Unit **D10**

DB1   **DB2**

Front

AMD **B01**   AMD **B02**

C01 C02 C03 C04 C05 C06 C07 C08 C09 C10 C11 C12 C13 C14 C15

Tower Card

JTAGCE CEC SPCN
JTAGA   Debug Serial SPCN

PB1

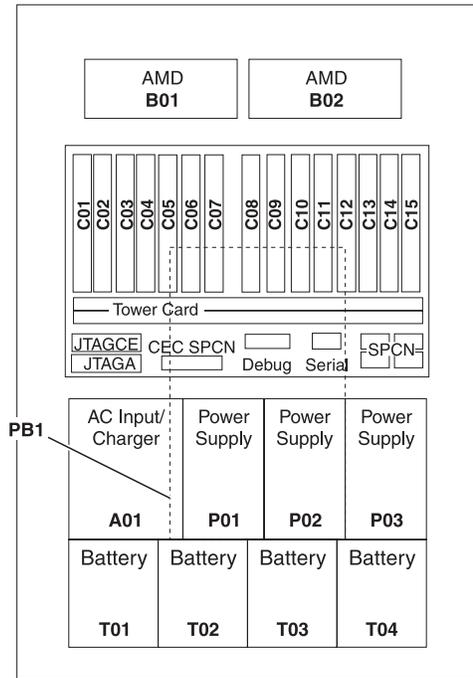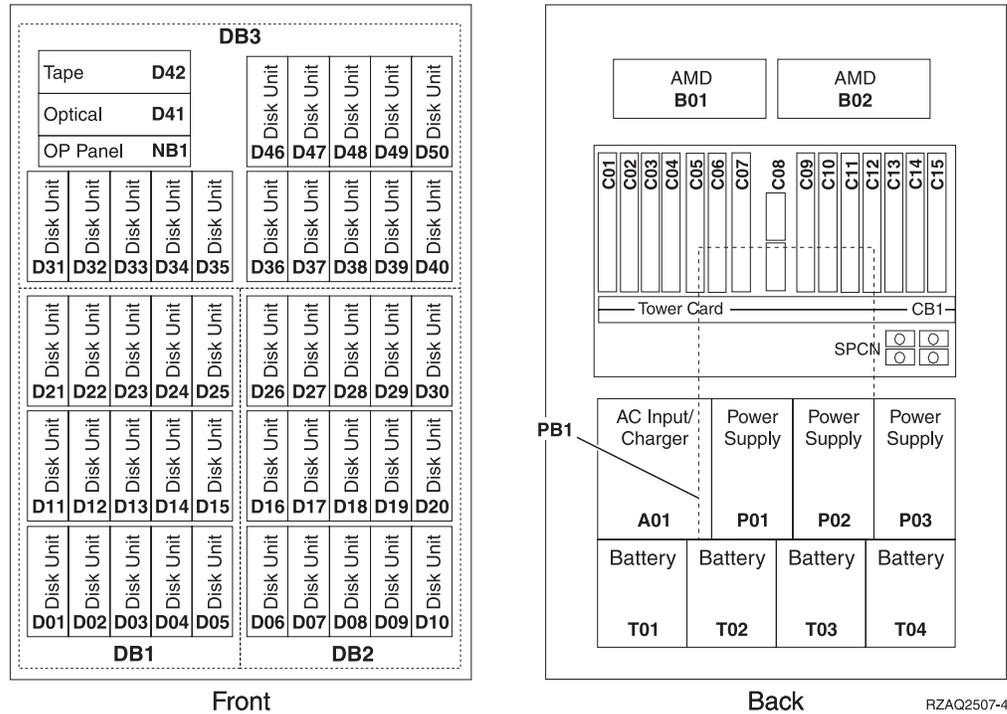| AC Input/ Charger	Power Supply	Power Supply	Power Supply
A01	**P01**	**P02**	**P03**
Battery **T01**	Battery **T02**	Battery **T03**	Battery **T04**

Back   RZAQ2518-1

Note: DASD plug sequence for optimum performance: D31, D36, D46, D32, D37, D47, ... D50, (add 2nd adaptor), D01, D11, D21, D02, ... D25, (add 3rd adaptor), D06, D16, D26, D07, ... D30.

5074 Expansion Unit

DB3 — Tape D42, Optical D41, OP Panel NB1

Disk Units (Front): D46 D47 D48 D49 D50; D31 D32 D33 D34 D35; D36 D37 D38 D39 D40; D21 D22 D23 D24 D25; D26 D27 D28 D29 D30; D11 D12 D13 D14 D15; D16 D17 D18 D19 D20; D01 D02 D03 D04 D05; D06 D07 D08 D09 D10

DB1   DB2

Front   Back   RZAQ2507-4

Selecting the optimal disk unit position for 5074 and 5079 units

When you install disk units, you should evenly distribute the disk units on the disk controllers. Evenly distributing the disk units will optimize them for maximum performance.

Note for 5079 users: The 5079 consists of two independent expansion units: 5079–001 and 5079–002. Installation rules and procedures apply to each expansion unit independently.

Note: If you are installing feature 4331 1.65 GB Read Cache, solid-state disk units, you can only install them in position one of your disk unit enclosures. You can install three of these features (if you have three disk unit controllers) in the expansion unit, for example, in positions D31, D01, and D06.

Refer to the label on the inside of the front cover and install the disk units in this order:

__ 1. First fill all the disk unit positions that are controlled by the first high-speed disk unit controller.

    __ a. Fill the slot **1**'s: D31, D36, D46

    __ b. Fill the slot **2**'s D32, D37, D47

    __ c. Fill the slot **3**'s: D33, D38, D48

    __ d. Fill the slot **4**'s: D34, D39, D49

    __ e. Fill the slot **5**'s: D35, D40, D50

__ 2. Your expansion unit requires a second high speed disk unit controller before you can install disk units into the following positions. Contact IBM or an

Authorized Dealer if your expansion unit does not have a second high speed disk unit controller (IOA Card 2).
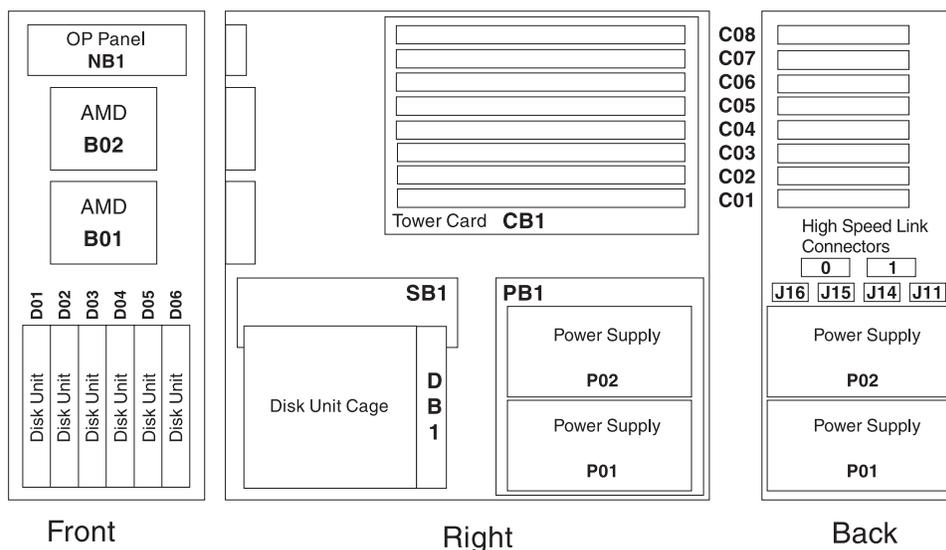
Next fill the positions in (IOA Card 2) this sequence:

__ a. Fill the slot **1**'s: D01, D11, D21

__ b. Fill the slot **2**'s: D02, D12, D22

__ c. Fill the slot **3**'s: D03, D13, D23

__ d. Fill the slot **4**'s: D04, D14, D24

__ e. Fill the slot **5**'s: D05, D15, D25

__ 3. Your expansion unit requires a third high speed disk unit controller before you can install disk units into the following positions. Contact IBM or an Authorized Dealer if your expansion unit does not have a third high speed disk unit controller (IOA Card 3).
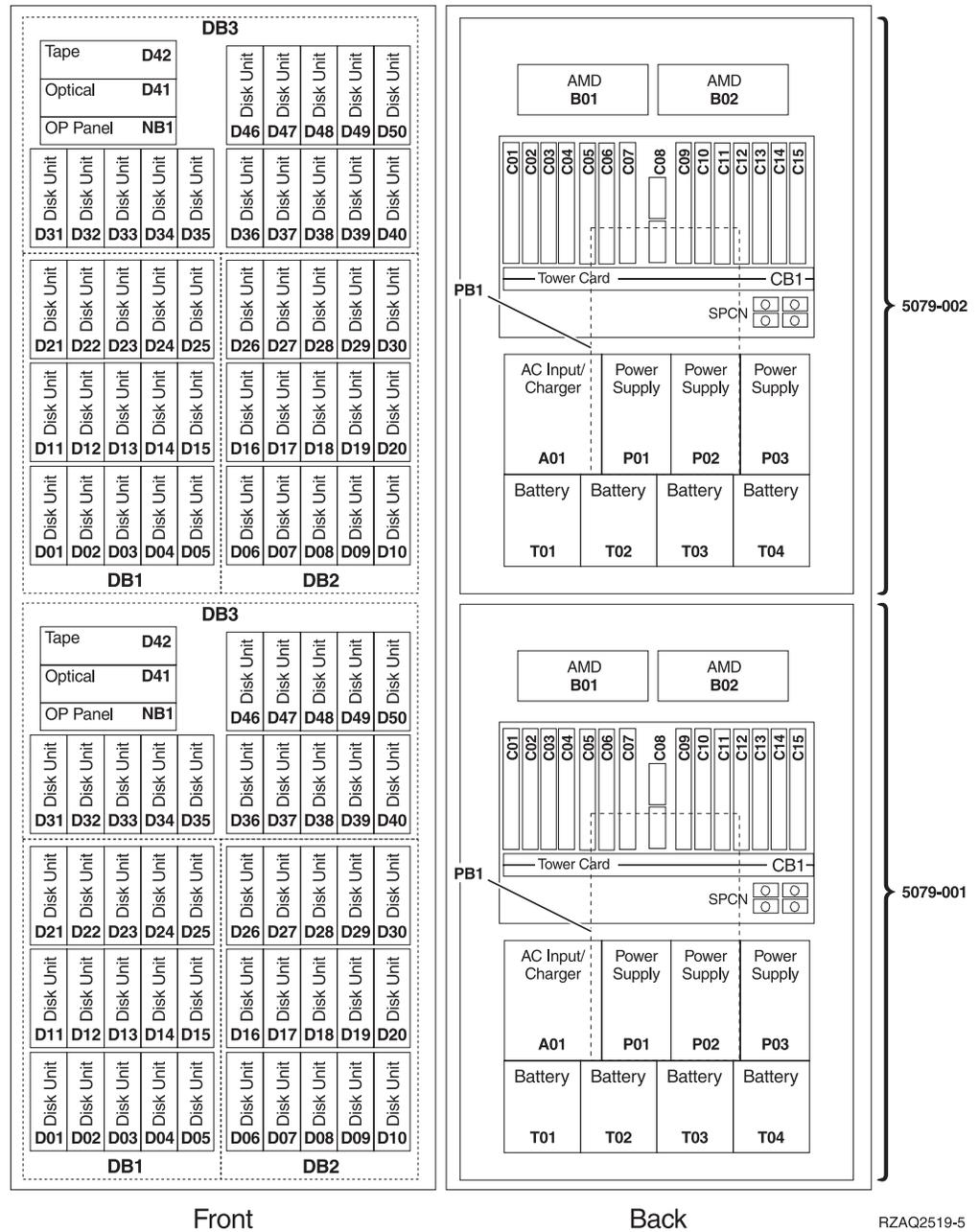
Last fill the positions in (IOA Card 3) this sequence:

__ a. Fill the slot **1**'s: D06, D16, D26

__ b. Fill the slot **2**'s: D07, D17, D27

__ c. Fill the slot **3**'s: D08, D18, D28

__ d. Fill the slot **4**'s: D09, D19, D29

__ e. Fill the slot **5**'s: D10, D20, D30

5075 Expansion Unit

Front   Right   Back

RZAQ2500-4

5079 Expansion Unit

Front

DB3

Tape	D42
Optical	D41
OP Panel	NB1

Disk Unit D46 | Disk Unit D47 | Disk Unit D48 | Disk Unit D49 | Disk Unit D50

Disk Unit D31 | Disk Unit D32 | Disk Unit D33 | Disk Unit D34 | Disk Unit D35 — Disk Unit D36 | Disk Unit D37 | Disk Unit D38 | Disk Unit D39 | Disk Unit D40

Disk Unit D21 | Disk Unit D22 | Disk Unit D23 | Disk Unit D24 | Disk Unit D25 — Disk Unit D26 | Disk Unit D27 | Disk Unit D28 | Disk Unit D29 | Disk Unit D30

Disk Unit D11 | Disk Unit D12 | Disk Unit D13 | Disk Unit D14 | Disk Unit D15 — Disk Unit D16 | Disk Unit D17 | Disk Unit D18 | Disk Unit D19 | Disk Unit D20

Disk Unit D01 | Disk Unit D02 | Disk Unit D03 | Disk Unit D04 | Disk Unit D05 — Disk Unit D06 | Disk Unit D07 | Disk Unit D08 | Disk Unit D09 | Disk Unit D10

DB1   **DB2**

DB3

Tape	D42
Optical	D41
OP Panel	NB1

Disk Unit D46 | Disk Unit D47 | Disk Unit D48 | Disk Unit D49 | Disk Unit D50

Disk Unit D31 | Disk Unit D32 | Disk Unit D33 | Disk Unit D34 | Disk Unit D35 — Disk Unit D36 | Disk Unit D37 | Disk Unit D38 | Disk Unit D39 | Disk Unit D40

Disk Unit D21 | Disk Unit D22 | Disk Unit D23 | Disk Unit D24 | Disk Unit D25 — Disk Unit D26 | Disk Unit D27 | Disk Unit D28 | Disk Unit D29 | Disk Unit D30

Disk Unit D11 | Disk Unit D12 | Disk Unit D13 | Disk Unit D14 | Disk Unit D15 — Disk Unit D16 | Disk Unit D17 | Disk Unit D18 | Disk Unit D19 | Disk Unit D20

Disk Unit D01 | Disk Unit D02 | Disk Unit D03 | Disk Unit D04 | Disk Unit D05 — Disk Unit D06 | Disk Unit D07 | Disk Unit D08 | Disk Unit D09 | Disk Unit D10

DB1   **DB2**

Back

5079-002

AMD B01 | AMD B02

C01 C02 C03 C04 C05 C06 C07 C08 C09 C10 C11 C12 C13 C14 C15

PB1 — Tower Card — CB1

SPCN

| AC Input/ Charger A01 | Power Supply P01 | Power Supply P02 | Power Supply P03 |
| Battery T01 | Battery T02 | Battery T03 | Battery T04 |

5079-001

AMD B01 | AMD B02

C01 C02 C03 C04 C05 C06 C07 C08 C09 C10 C11 C12 C13 C14 C15

PB1 — Tower Card — CB1

SPCN

| AC Input/ Charger A01 | Power Supply P01 | Power Supply P02 | Power Supply P03 |
| Battery T01 | Battery T02 | Battery T03 | Battery T04 |

RZAQ2519-5

Selecting the optimal disk unit position for 5074 and 5079 units

When you install disk units, you should evenly distributing the disk units on the disk controllers. Evenly distributing the disk units will optimize them for maximum performance.

Note for 5079 users: The 5079 consists of two independent expansion units: 5079–001 and 5079–002. Installation rules and procedures apply to each expansion unit independently.

Note: If you are installing feature 4331 1.65 GB Read Cache, solid-state disk units, you can only install them in position one of your disk unit enclosures. You can install three of these features (if you have three disk unit controllers) in the expansion unit, for example, in positions D31, D01, and D06.

Refer to the label on the inside of the front cover and install the disk units in this order:

__ 1. First fill all the disk unit positions that are controlled by the first high-speed disk unit controller.

    __ a. Fill the slot **1**'s: D31, D36, D46

    __ b. Fill the slot **2**'s D32, D37, D47

    __ c. Fill the slot **3**'s: D33, D38, D48

    __ d. Fill the slot **4**'s: D34, D39, D49

    __ e. Fill the slot **5**'s: D35, D40, D50

__ 2. Your expansion unit requires a second high speed disk unit controller before you can install disk units into the following positions. Contact IBM or an Authorized Dealer if your expansion unit does not have a second high speed disk unit controller (IOA Card 2).

Next fill the slots in (IOA Card 2) this sequence:

    __ a. Fill the slot **1**'s: D01, D11, D21

    __ b. Fill the slot **2**'s: D02, D12, D22

    __ c. Fill the slot **3**'s: D03, D13, D23

    __ d. Fill the slot **4**'s: D04, D14, D24

    __ e. Fill the slot **5**'s: D05, D15, D25

__ 3. Your expansion unit requires a third high speed disk unit controller before you can install disk units into the following positions. Contact IBM or an Authorized Dealer if your expansion unit does not have a third high speed disk unit controller (IOA Card 3).

Last fill the slots in (IOA Card 3) this sequence:

    __ a. Fill the slot **1**'s: D06, D16, D26

    __ b. Fill the slot **2**'s: D07, D17, D27

    __ c. Fill the slot **3**'s: D08, D18, D28

    __ d. Fill the slot **4**'s: D09, D19, D29

    __ e. Fill the slot **5**'s: D10, D20, D30

System unit control panel

Go to the front of your iSeries system unit. Open the control panel door.

Your control panel looks like either Figure 1 or Figure 2 on page 30. Refer to the control panel for your unit.

Figure 1. Control panel without Electronic Keystick

A	Power On Light
	• A blinking light indicates power to the unit.
	• A constant light indicates that the unit is up and working.
B	Power Push button
C	Processor Activity
D	System Attention
E	Function/Data Display
F	Increment/Decrement buttons
G	Enter Push button
.	
.	
.	
.	
.	
.	
.	
.	
.	
.	

If your control panel looks like this, before you can use [F] Increment/Decrement buttons and [G] Enter push button, you need to press [H] Mode Selects to select Manual mode [N] .
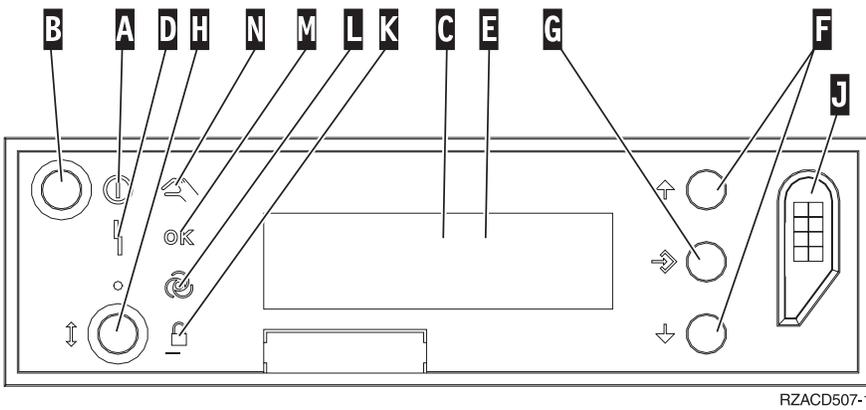
Figure 2. Control panel with Electronic Keystick

[A]	Power On Light
	• A blinking light indicates power to the unit.
	• A constant light indicates that the unit is up and working.
[B]	Power Push button
[C]	Processor Activity
[D]	System Attention
[E]	Function/Data Display
[F]	Increment/Decrement buttons
[G]	Enter Push button
[H]	Mode Selects
[J]	Electronic Keystick Slot
[K]	Secure
[L]	Auto
[M]	Normal
[N]	Manual

Adding the 7104 Expansion Unit to the 270 System Unit

__ 1. Ensure that all jobs are complete.

__ 2. When all jobs are complete, type **pwrdwnsys *immed** on an iSeries command line and press Enter.

__ 3. When the unit is completely powered down, power off all PCs and devices, such as printers and displays, that are connected to the system unit.

__ 4. Unplug any power cords, such as printers and displays, from electrical outlets.

__ 5. Unplug the system unit and expansion unit power cords from the electrical outlets.

__ 6. Remove the front cover Refer to "270, 820 and 5075 front cover" on page 17.

__ 7. Remove the back cover. Refer to "Removing the side and back cover" on page 51.

__ 8. Remove the right side cover (two thumbscrews).

__ 9. Remove the left side cover (two screws).

__ 10. Remove the top cover (two screws). Slide the top cover back and lift up.

__ 11. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** Attach the adhesive part of the foil to an unpainted surface on the frame of the unit.

   Notes:

   a. Follow the same precautions you would use without the wrist strap. The 2209 Disposable Wrist Strap is for static control. It will not increase nor decrease your risk of receiving electric shock when using or working on electrical equipment.

   b. Discard the wrist strap immediately and contact your dealer for a replacement, if the disposable wrist strap appears damaged or is cut off. Do not continue until a new wrist strap is available.

   c. Remove the liner from the copper foil at the end, when you unroll the strap.

   d. Attach the copper foil to an **exposed, unpainted** metal surface on the frame of the system unit (electrical ground).

__ 12. Did you receive a 2763 or 4748 IOA card?

   If **no**, go to step 23 on page 34.

   If **yes**, use the following table to determine where to install the IOA card.

Card Received	Current Position C01	Action Needed
2763	9767	Install 2763 in position C02
	2763	Install new 2763 in position C02
2748	9767	Remove 9767 and install 2748 in position C01
	2763	Remove 2762 and install 2748 in position C01

__ 13. Locate the adapter card positions inside your system unit.

__ 14. Does your unit have screws to secure the cards?

RV5B001-0
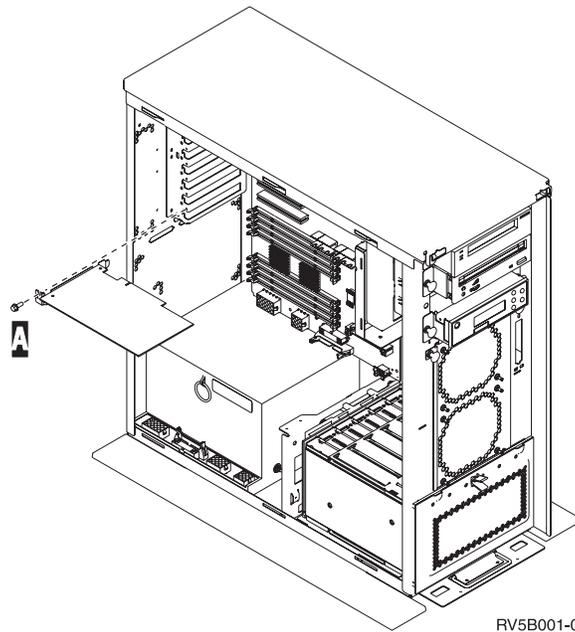
No   Yes

↓

        __ a. Remove the screw from the card position where you plan to remove or install the card.

        __ b. Go to step 16 on page 33.

__ 15. Open the latch at the card position where you plan to remove or install the card. Move the blue latch counter clockwise and then swing the black latch out.
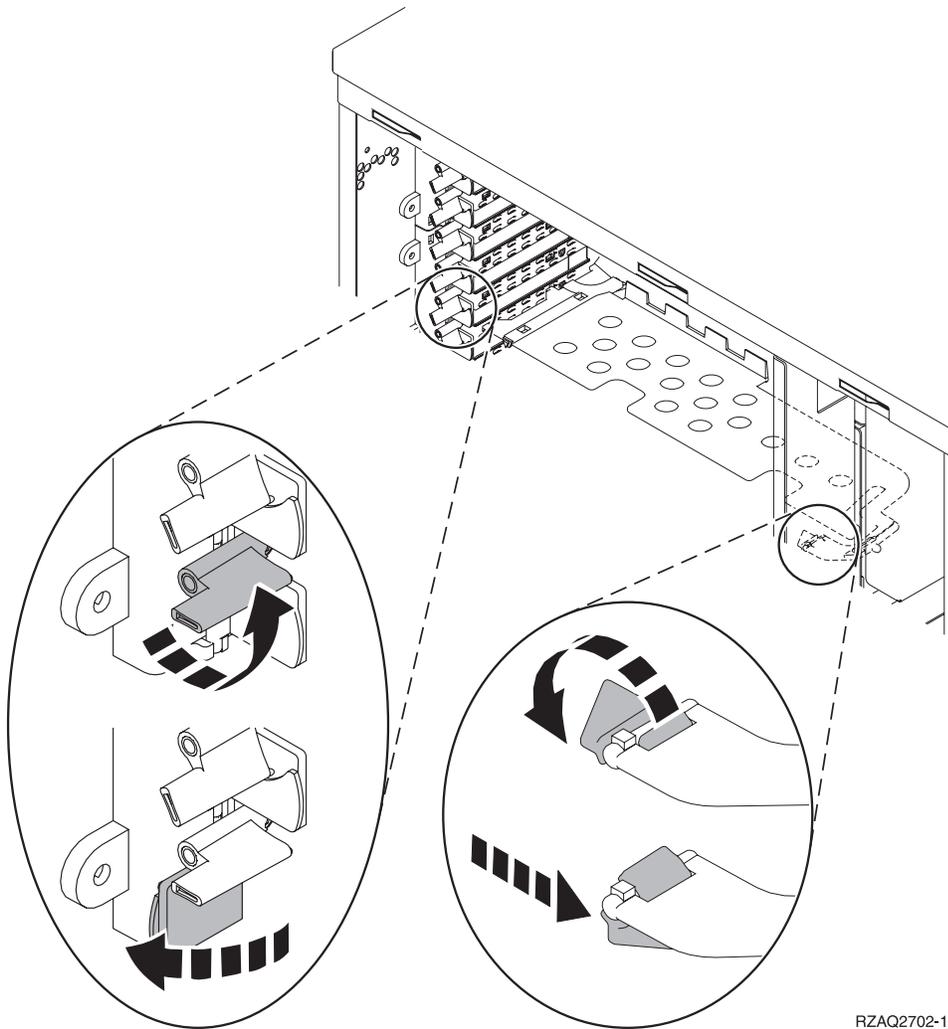
RZAQ2702-1

Figure 3. Example of 270 Card Latch

__ 16. If removing a card, place it in a protective package.

__ 17. **Attention:** Adapter cards are fragile:
- Handle only by the edges
- Keep fingers off printed circuit area
- Use static strap when handling
- Leave in protective packaging until ready to install

__ 18. Locate the adapter card you want to install in this position.

__ 19. Align the adapter card with the card holders inside the system unit and push until it is connected securely.

__ 20. Swing the black latch in and move the blue latch clockwise to secure the card.

__ 21. If you removed a card and need to determine the position to install it, go to the *PCI Card Installation Instructions* on the *iSeries 400 Installation and Service Library*, SK3T-4096-00 CD, that came with your system unit, or the following Internet location:

    http://publib.boulder.ibm.com/pubs/html/as400/v5r1/hwpdf/index.htm

__ 22. **DANGER**

> **To prevent a possible electrical shock from touching two surfaces with different electrical grounds, use one hand, when possible, to connect or disconnect signal cables. (RSFTD004)**

Connect any cables and label the cables with the card position.

__ 23. Place the expansion unit and system unit side-by-side.

__ 24. Position the left side of the system expansion unit slightly ahead of the right side of the system unit.
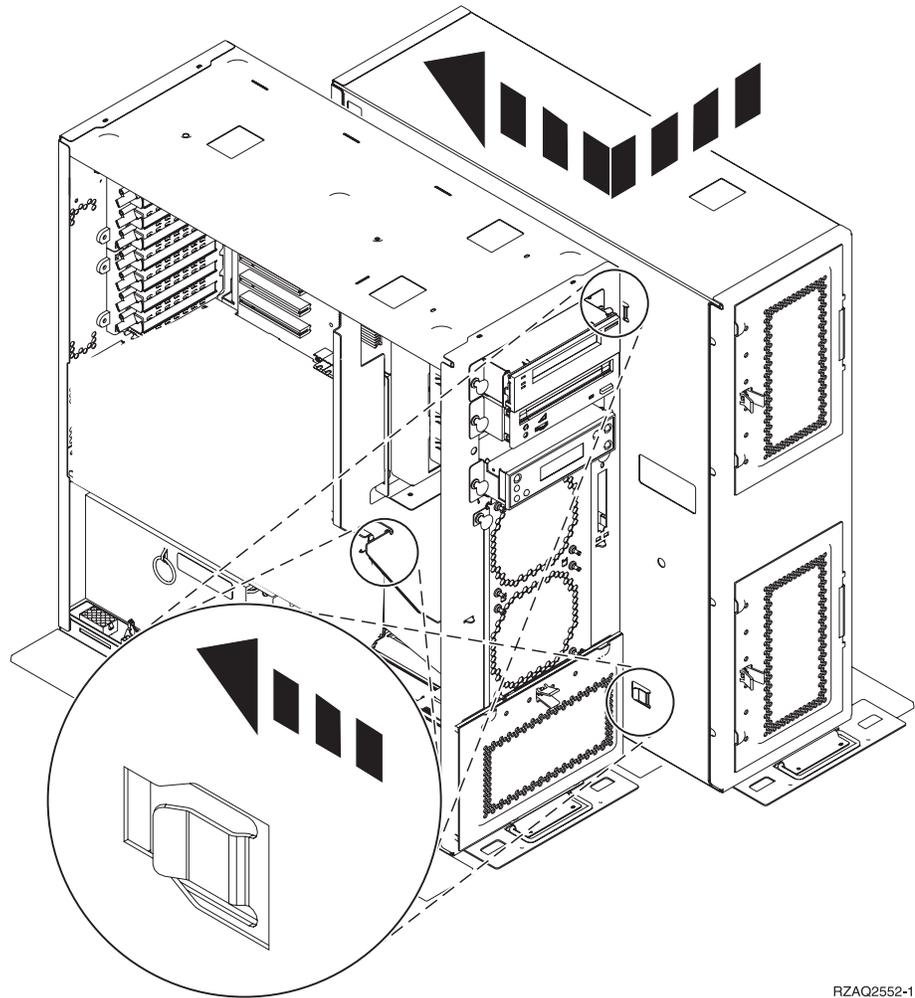
RZAQ2552-1

__ 25. The left side of the system expansion unit has connector hooks that must engage in the slots on the right side of the system unit frame.

__ 26. Slide the expansion unit back, engaging the connector hooks, until the units are aligned.

__ 27. Install the two thumbscrews **B** to secure the expansion unit to the system unit. Install the thumbscrews from the expansion unit side.

__ 28. Locate the data cable, part number 04N2273. Plug the end of the cable (opposite the white cable retainers) into the lower disk unit enclosure.

__ 29. Thread the cables, from the expansion unit, through the openings.

A   Disk unit data cable(s) (part number 04N2273)

C   Air moving device cable (part number 04N5720)

D   Power control cable (part number 04N5735)
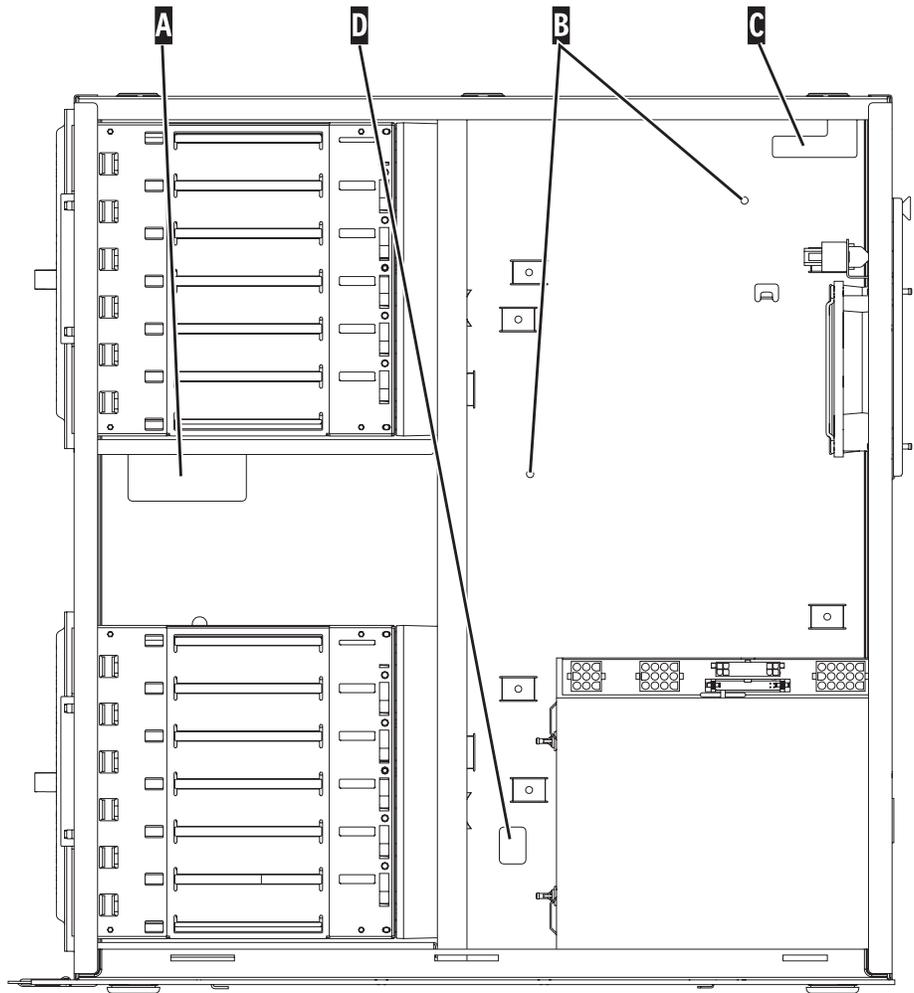
__ 30. Connect **A** disk unit data cables to the 2763, 2748 or 9767 card(s) in the system unit.

RZAQ2554-3
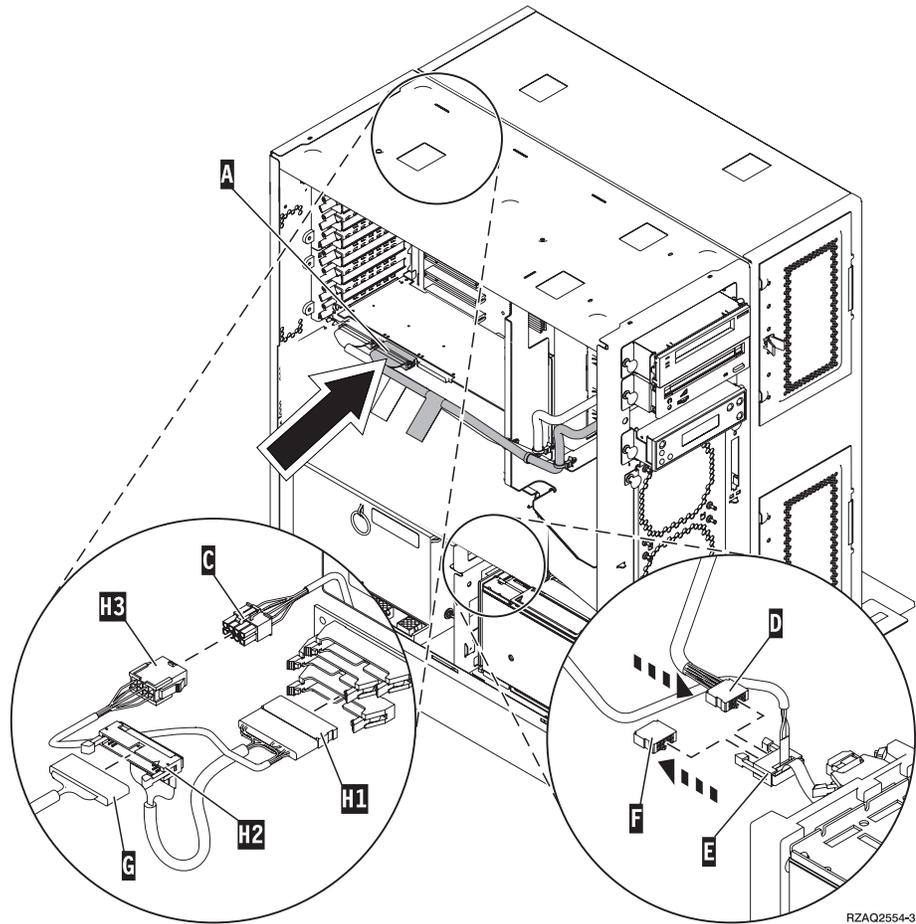
__ 31. Remove **G** DEBUG cable (part number P24L1883) from the system unit backplane.

__ 32. Plug in cable **H1** part number P04N5595, you received with the expansion unit, where you just removed the DEBUG cable from the backplane.

__ 33. Plug **G** into **H2** .

__ 34. Plug **C** (from expansion unit) into **H3** .

__ 35. Remove and discard the plug from **F** .

__ 36. Connect **D** (from expansion unit) and **E** .

__ 37. Is there a second disk unit enclosure installed in the upper position of the expansion unit?

No   Yes

↓

__ a. Connect the additional disk unit data cable to the back of the disk unit enclosure.

__ b. Route the disk unit data cable through the opening A
following the route of the existing data cable.
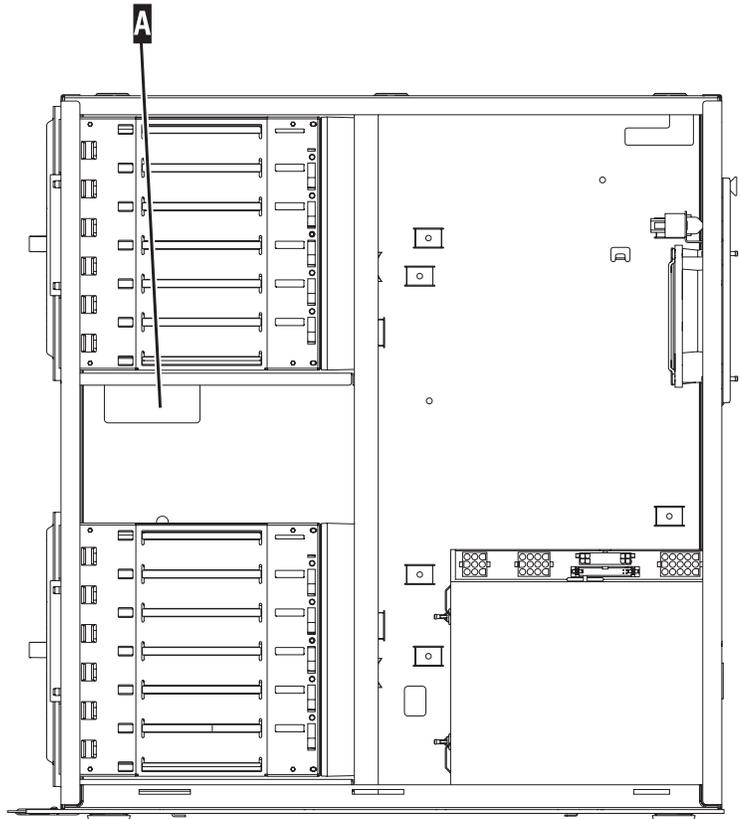
RZAQ2558-0

__ c. Connect the disk unit data cable to the next available port on the 2763, 2748 or 9767 cards.
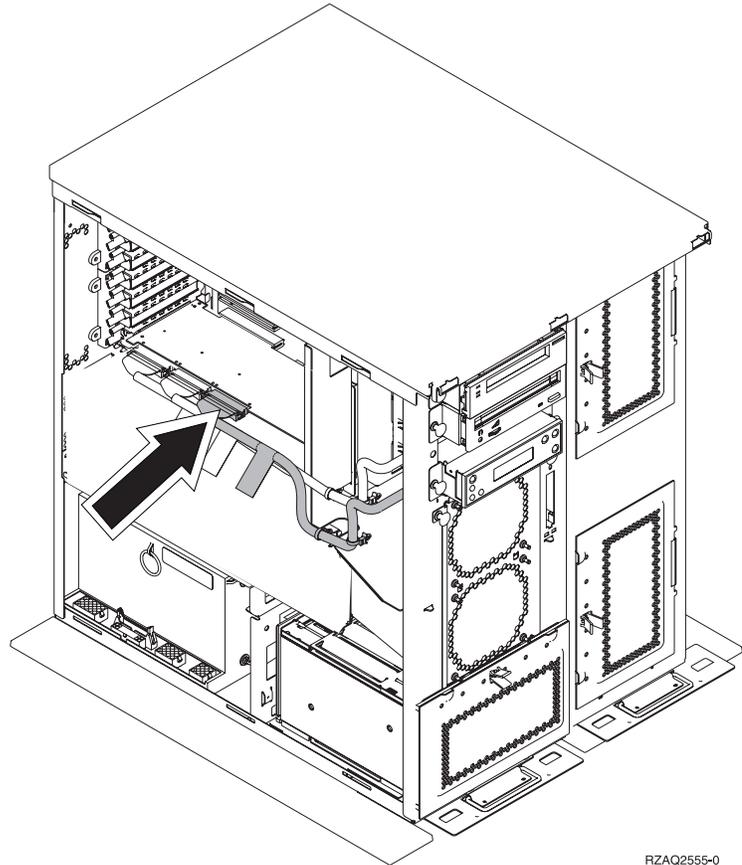
RZAQ2555-0

__ 38. Install the new top cover. Slide the cover from back to front (three screws on back).

__ 39. Install the right side cover (two thumbscrews).

__ 40. Install the left side cover that was on the system unit, on the left side of the expansion unit (two screws).

__ 41. Install the new front cover.

__ 42. Plug the power cord into the back of the 7104 expansion unit.

__ 43. Install the new back cover.

__ 44. Your may want to store the old covers from the 270 unit for possible use in the future or discard the old covers according to local regulations or recycle where facilities exist.

__ 45. Go to "Your system is powered off during installation" on page 8 to install disk units.

Installing the 7123 disk unit enclosure

The disk unit enclosure is installed on its side in the 270 system expansion unit as shown in the diagram in this instruction.

__ 1. Ensure that all jobs are complete.

__ 2. When all jobs are complete, type **pwrdwnsys *immed** on a command line and press Enter.

__ 3. When the unit is completely powered down, power off all PCs and devices, such as printers and displays, that are connected to the system unit.

__ 4. Unplug any power cords, such as printers and displays, from electrical outlets.

__ 5. Unplug the system unit and expansion unit power cords from the electrical outlets.

__ 6. Remove the front cover Refer to "270, 820 and 5075 front cover" on page 17.

__ 7. Remove the back cover. Refer to "Removing the side and back cover" on page 51.

__ 8. Remove the right side cover (two thumbscrews).

__ 9. Remove the left side cover (two screws).

__ 10. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** Attach the adhesive part of the foil to an unpainted surface on the frame of the unit.

   Notes:

   a. Follow the same precautions you would use without the wrist strap. The 2209 Disposable Wrist Strap is for static control. It will not increase nor decrease your risk of receiving electric shock when using or working on electrical equipment.

   b. Discard the wrist strap immediately and contact your dealer for a replacement, if the disposable wrist strap appears damaged or is cut off. Do not continue until a new wrist strap is available.

   c. Remove the liner from the copper foil at the end, when you unroll the strap.

   d. Attach the copper foil to an **exposed, unpainted** metal surface on the frame of the system unit (electrical ground).

__ 11. Remove the four screws securing the metal plate located above the existing disk unit enclosure. Keep the four screws. They will be used to secure the new disk unit enclosure.

__ 12. Find the package that contains the new disk unit enclosure and remove it from the static–protective package.

__ 13. Hold the disk unit enclosure so that disk unit position 6 is the top position.

__ 14. Slide the disk unit enclosure into the opening.

View **1**
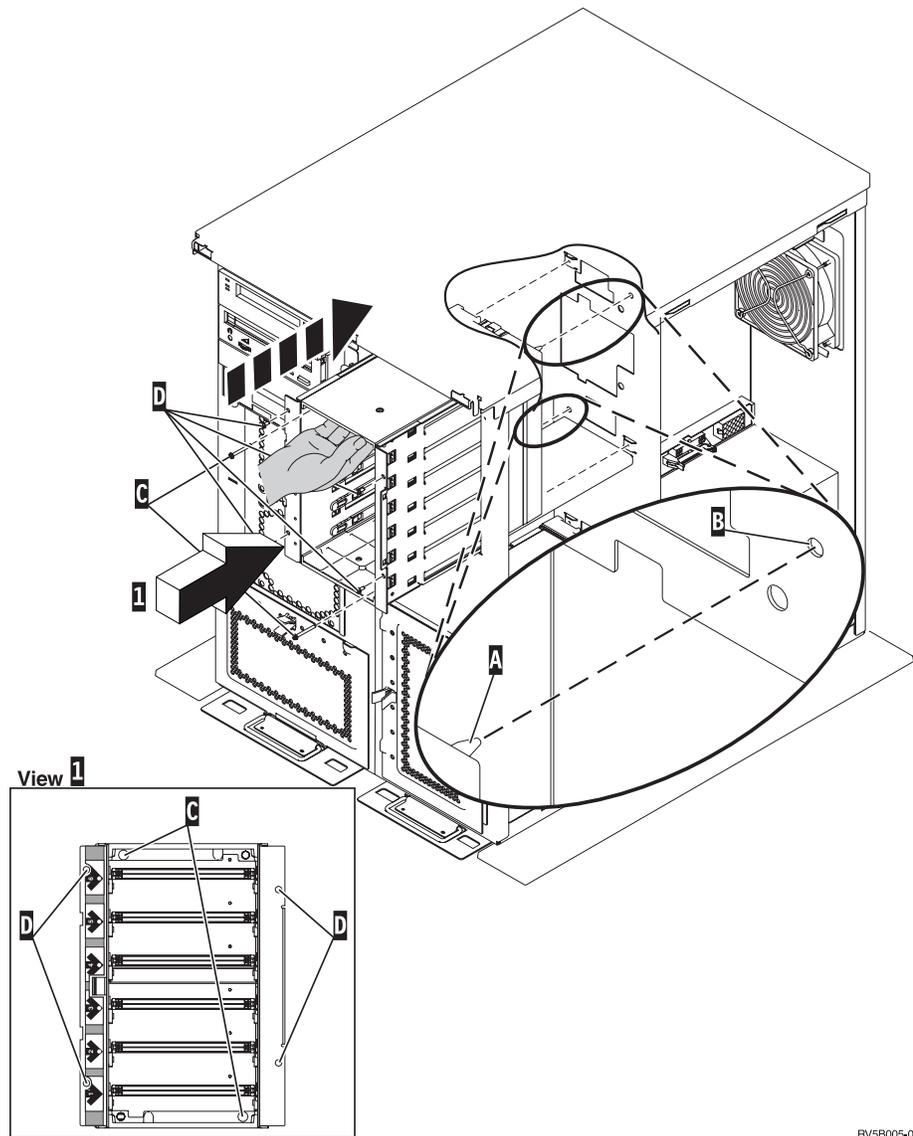
RV5B005-0

__ 15. Align the guide pin **A** on the disk unit enclosure with **B** in the expansion unit.

__ 16. Start installing, but do not tighten, the four screws **D** to secure the disk unit enclosure to the expansion unit.

__ 17. Install the two screws **C** inside the disk unit enclosure. Use the tool that was shipped with the disk unit enclosure to install these two screws shown in View **1**.

__ 18. Finish tightening the four screws **D**.

__ 19. Connect **A** power cables, **B** disk unit data cable (part number 04N2273) and **C** power control cable to the disk unit enclosure.
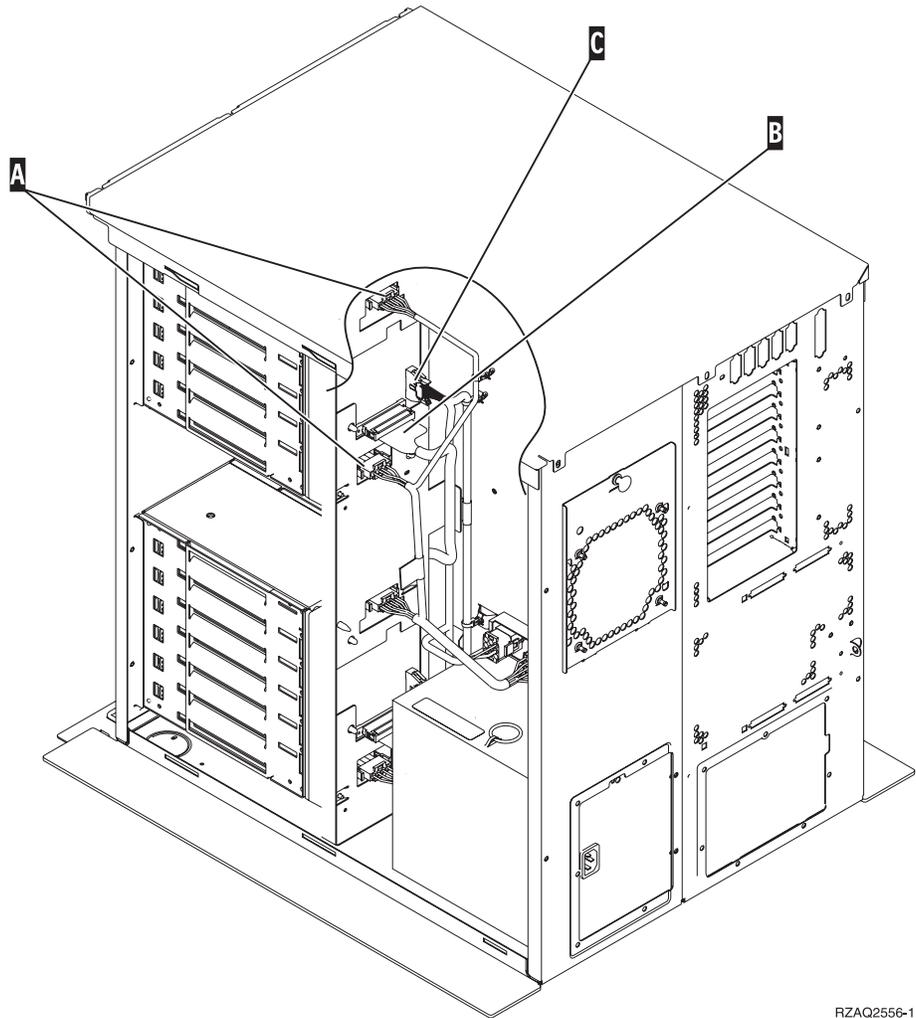
RZAQ2556-1

__ 20. Route the disk unit enclosure data cable through the opening **A** following the route of the existing data cable.
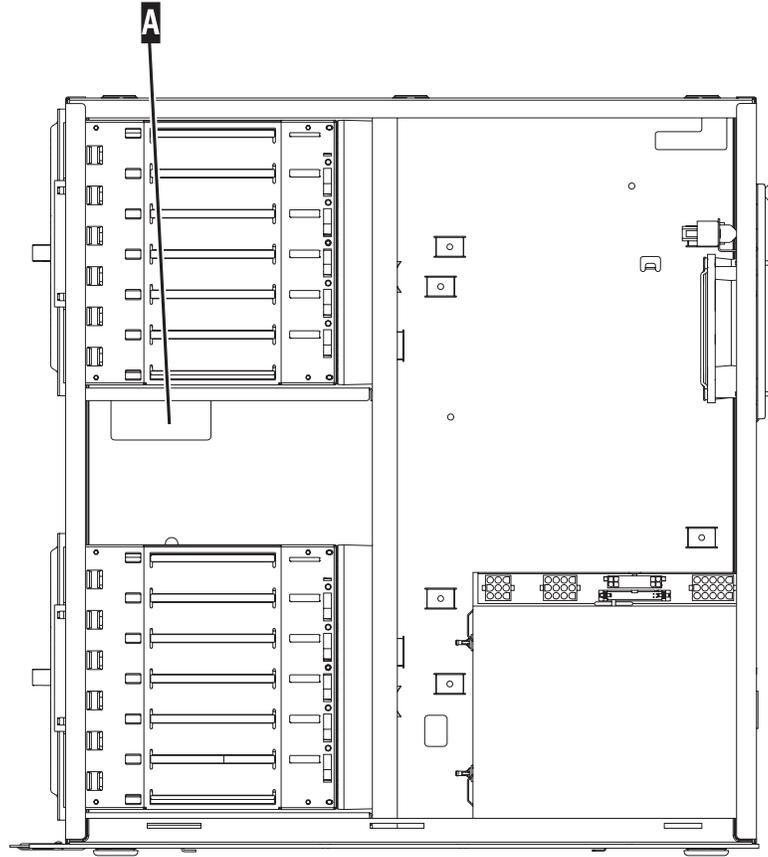
RZAQ2558-0

__ 21. Connect the disk unit data cable to the next available port on the 2763, 2748 or 9767 cards.
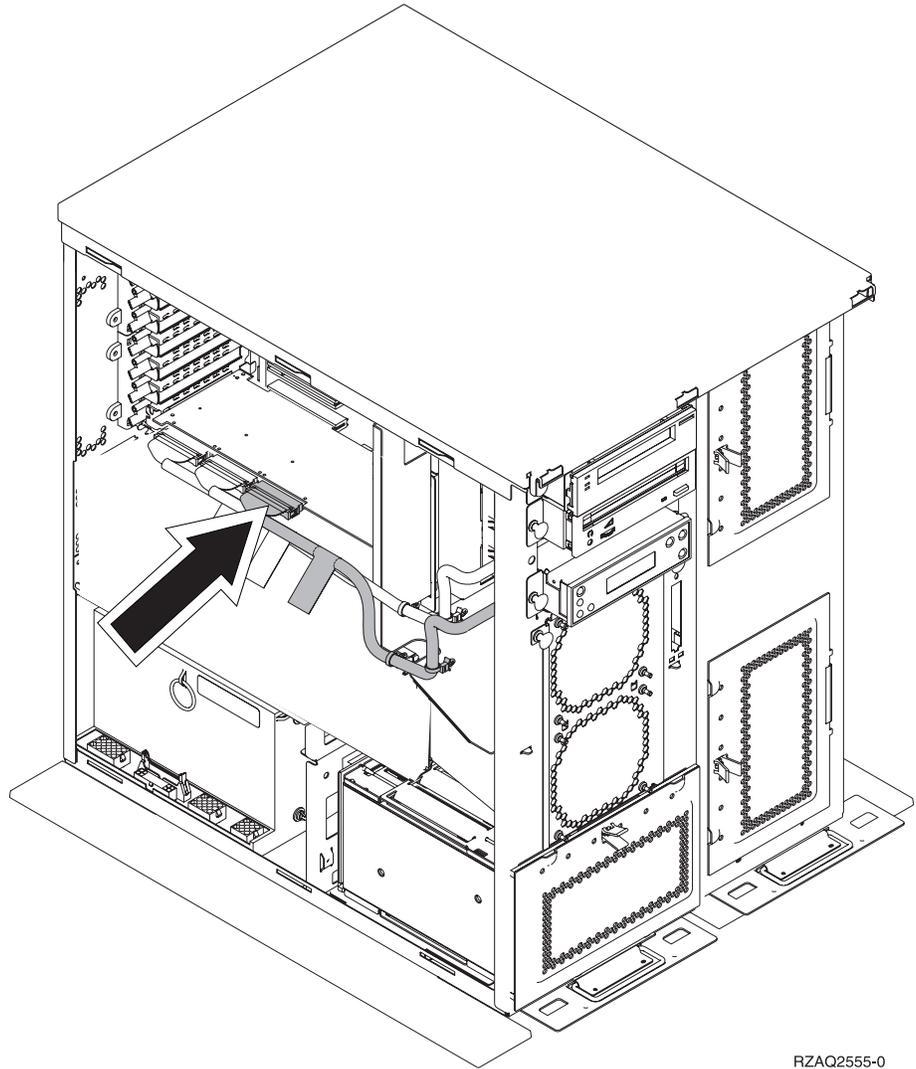
RZAQ2555-0

__ 22. Install the right side cover (two thumbscrews).

__ 23. Install the left side cover (two screws).

__ 24. Install the front cover.

__ 25. Install the back cover.

__ 26. Go to "Your system is powered off during installation" on page 8 to install disk units.

Installing the 7127 disk unit enclosure

The disk unit enclosure is installed in the upper position of the 820 system unit.

__ 1. Ensure that all jobs are complete.

__ 2. When all jobs are complete, type **pwrdwnsys *immed** on an iSeries command line and press Enter.

__ 3. When the iSeries is completely powered down, power off all PCs and devices, such as printers and displays, that are connected to the system unit.

__ 4. Unplug any power cords, such as printers and displays, from electrical outlets.

__ 5. Unplug the system unit and expansion unit power cords from the electrical outlets.

__ 6. Remove the front cover Refer to "270, 820 and 5075 front cover" on page 17.

__ 7. Remove the back cover. Refer to "Removing the side and back cover" on page 51.

__ 8. Remove the left side cover.

__ 9. Remove the right side cover.

__ 10. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** Attach the adhesive part of the foil to an unpainted surface on the frame of the unit.

   Notes:

   a. Follow the same precautions you would use without the wrist strap. The 2209 Disposable Wrist Strap is for static control. It will not increase nor decrease your risk of receiving electric shock when using or working on electrical equipment.

   b. Discard the wrist strap immediately and contact your dealer for a replacement, if the disposable wrist strap appears damaged or is cut off. Do not continue until a new wrist strap is available.

   c. Remove the liner from the copper foil at the end, when you unroll the strap.

   d. Attach the copper foil to an **exposed, unpainted** metal surface on the frame of the system unit (electrical ground).

__ 11. Remove the four screws securing the metal plate located above the existing disk unit enclosure. Keep the four screws. They will be used to secure the disk unit enclosure.

__ 12. Find the package that contains the new disk unit enclosure and remove it from the static–protective package.

__ 13.

RZAQ2712-1

Attach control cable (part number 24L1761) to location $\boxed{A}$, attach power cables (part number 04N2920) to locations $\boxed{B}$ and $\boxed{C}$, and data cable (part number 04N2273) to connector $\boxed{D}$ at the back of the disk unit enclosure.

__ 14. Slide the disk unit enclosure into the opening guiding the cables through the frame openings.
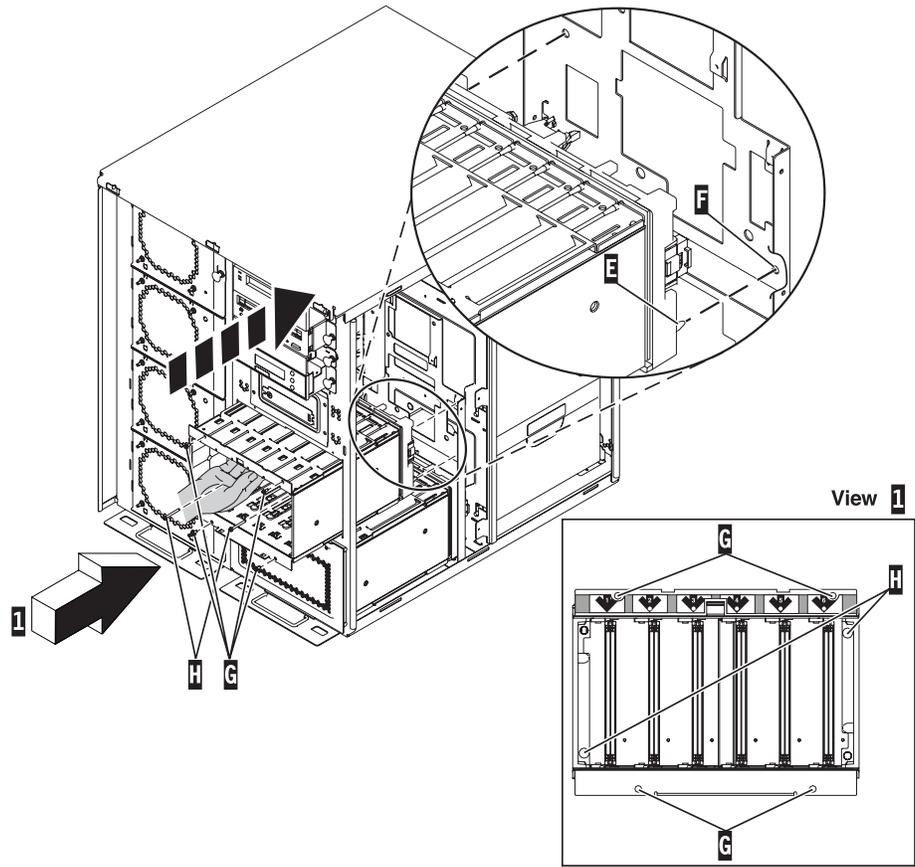
RZAQ2708-2

__ 15. Connect the cables to the system unit as show in Figure 4 on page 48. **A** to **A** , **B** to **B** , and **C** to **C** .
__ 16. Align the guide pin **E** on the disk unit enclosure with **F** in the system unit.
__ 17. Start installing but do not tighten the four screws **G** that secure the disk unit enclosure to the system unit.
__ 18. Install the two screws **H** . Use the tool that was shipped with the disk unit enclosure to install the two screws **H** shown in View **1** .
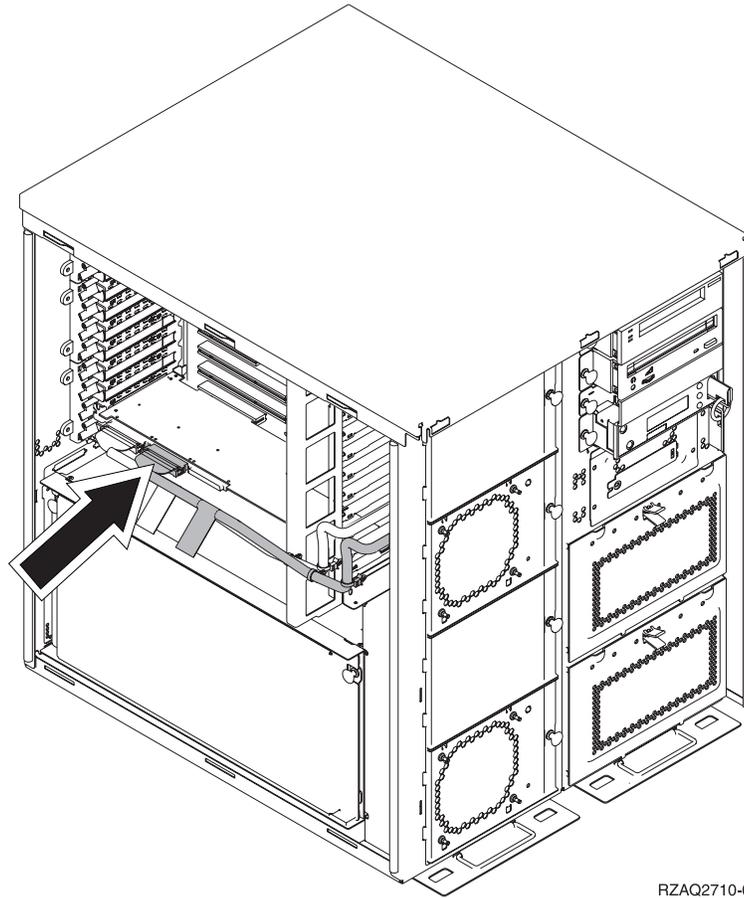__ 19. Finish tightening the four screws **G** .
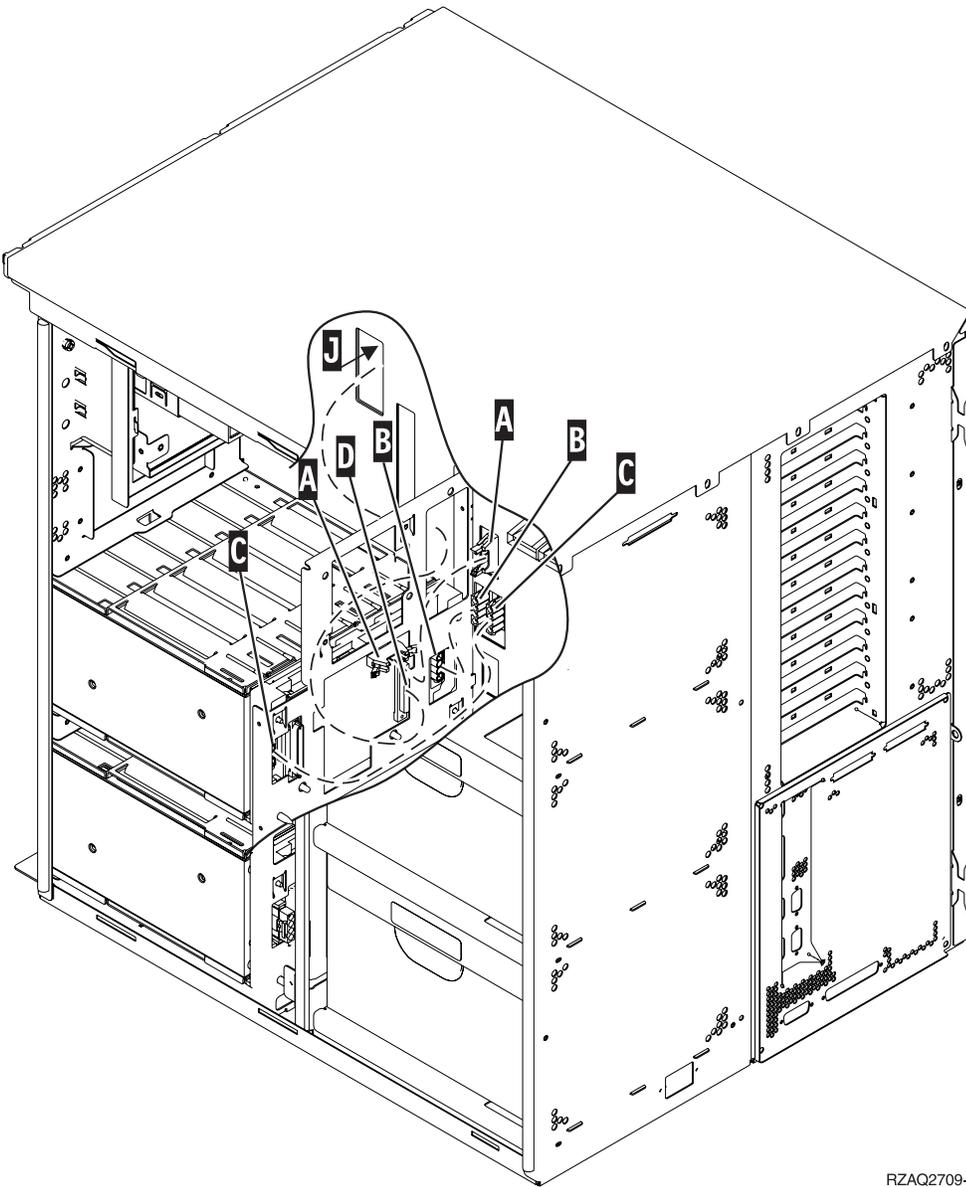
RZAQ2709-1

Figure 4. Connecting the cables to the system unit

__ 20. Route the disk unit data cable through the frame opening **J** following the
route of the existing disk unit data cable.

__ 21. Connect the disk unit controller cable to the next available port on the 2748 or 2763 card.

RZAQ2710-0

__ 22. Go to "Installing the power supply".

Installing the power supply

__ 1. You will install the power supply into the next available area. Refer to Figure 5 on page 50.

__ 2. Pull out on the blue button to remove the power supply filler plate.

__ 3. Pull the blue handle down on the power supply.
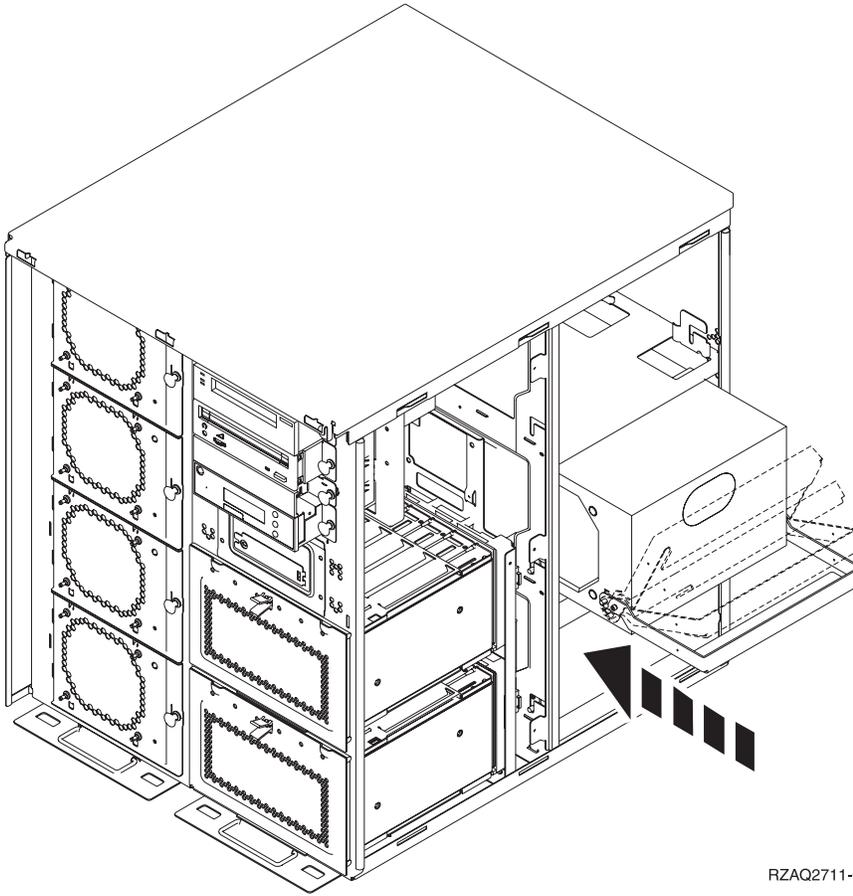
RZAQ2711-0

Figure 5. Installing the power supply

    __ 4. Slide the power supply into the system unit.

    __ 5. Move the blue handle up to lock in place.

    __ 6. Install the side covers.

    __ 7. Install the back cover.

    __ 8. To install disk units in your disk expansion unit go to "Your system is powered off during installation" on page 8.

Removing the side and back cover

__ 1. Place your hand near the bottom of the back cover and lift up and out.

__ 2. Remove the right side cover by removing the thumbscrews and sliding the cover from front to back until it stops.

__ 3. Remove the left side cover by removing the screws.

__ 4. Pull the cover out.
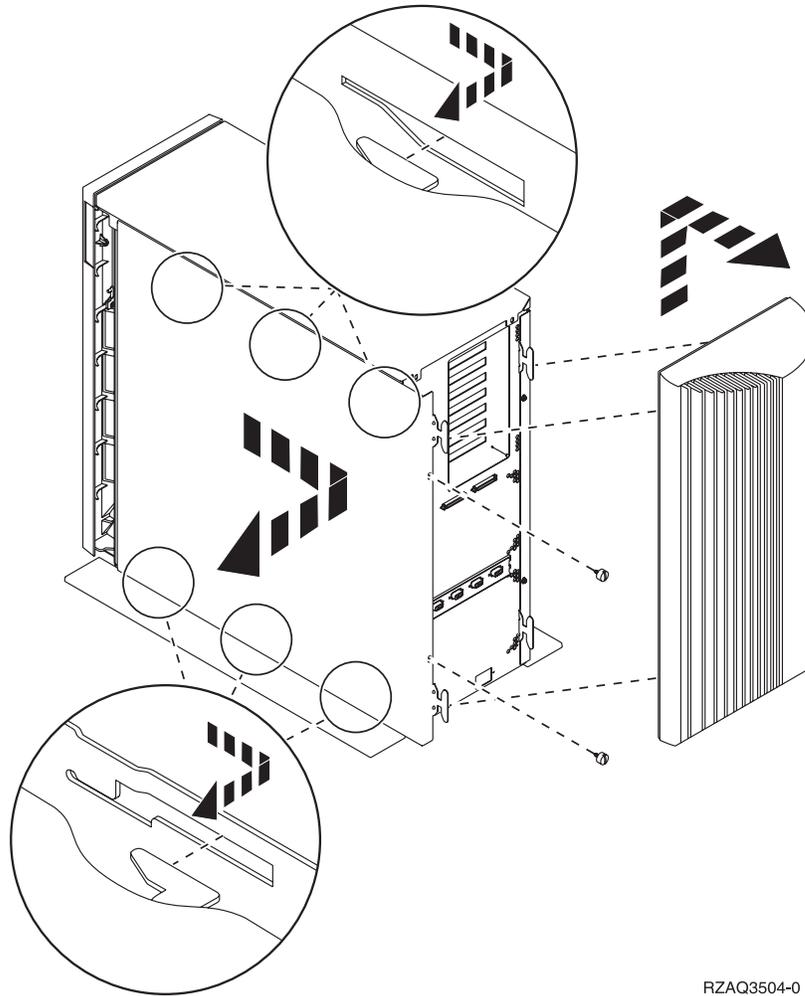
RZAQ3504-0

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Installation Instruction
Version 5

Publication No. SENG-4308-01

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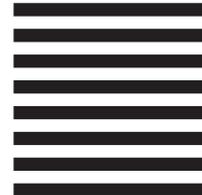
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