

AS/400e 270 or 820



Upgrading the System Unit from Twinaxial Console to Operations Console (Feature 5544)

Version 4

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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 15.

First Edition (July 2000)

This edition applies only to reduced instructions set computer (RISC) systems.

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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.

Upgrading Twinaxial Console to Operations Console

These instructions contain steps on how to **upgrade your Twinaxial Console to an Operations Console**.

If you are going to connect a remote control panel cable, ensure that you have the cable available before you begin this upgrade.

Install the Operations Console prerequisites on the personal computer (PC). See the *Operations Console Setup*, SC41-5508-01, book for prerequisites, located on the *Installation and Service Library CD*, SK3T-4028-02.

You are changing the console device, the AS/400 system value **QAUTOCFG** must be set to **ON**. Use the following to verify or set this system value on the AS/400:

- ___ 1. Enter **WRKSYSVAL QAUTOCFG** on an OS/400 command line and press Enter.
- ___ 2. Select **Change option** from the *Work with System Values* display and press Enter.
- ___ 3. Select **option 1=ON** from the *Change System Value* display and press Enter.
- ___ 4. The **Work with System Values** display appears. Press F3 once to return to the *AS/400 Main Menu*.

Before you begin

This feature is customer-installable. You can 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 some of the following:

- Remove the system unit covers.
- Install your new hardware.
- Install covers.
- IPL your operating system.
- Verify your new hardware configuration.

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.

- ___ 1. Ensure that you have a current backup of your system (including operating systems, licensed programs, and data).
- ___ 2. Ensure that you take a few minutes to become familiar with these instructions.
- ___ 3. If there are incorrect, missing 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)

- 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 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/slkbases.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**

Powering off the system unit

- ___ 1. Ensure that all jobs are complete.
- ___ 2. When all jobs are complete, type **pwrdownsys *immed** on an AS/400 command line and press Enter.
- ___ 3. Is your system unit an AS/400e 270 or 820?

270	820
↓	Go to step 6 on page 3.
- ___ 4. Look at the Function/Data display on the control panel. Refer to “System unit control panel” on page 9.
- ___ 5. Does **01 B N V=S** appear in the Function/Data display?

No	Yes
↓	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 5a through 5j.
 - ___ k. Go to step 8 on page 3.

Go to step 8.

- ___ 6. Look at the Function/Data display on the control panel.
- ___ 7. 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 7a through 7h.
- ___ 8. Press the Power push button that is located on the AS/400 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.

Selecting AS/400 Operations Console as the console device

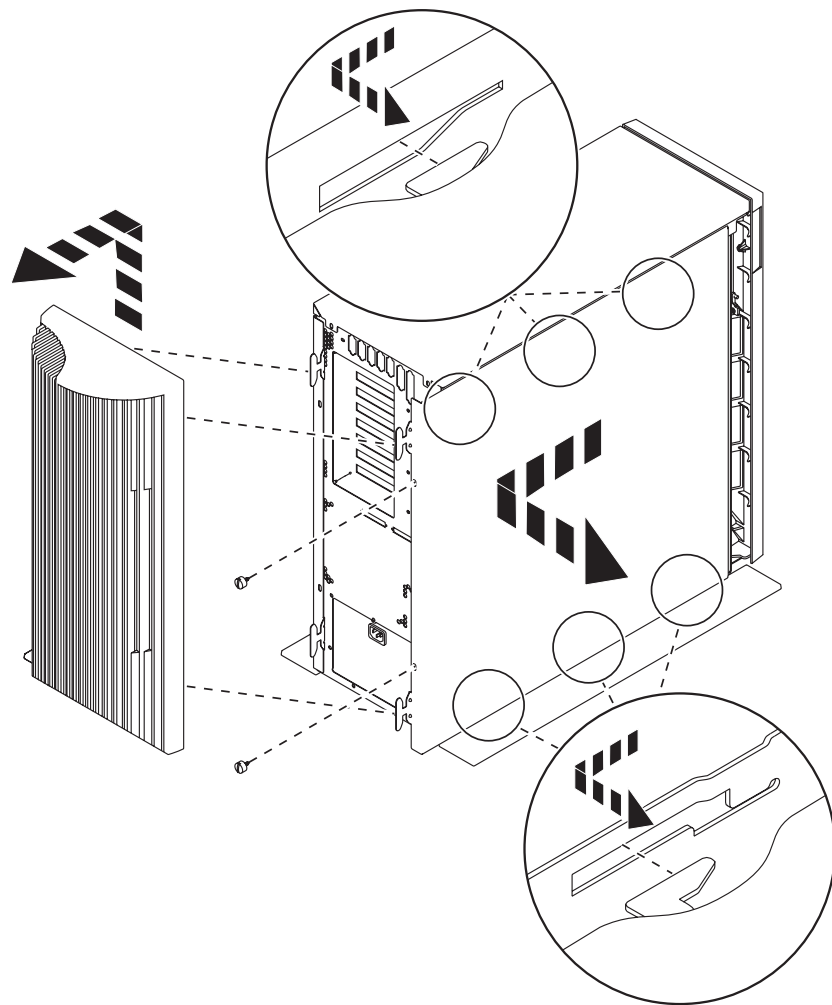
Use this section to select AS/400 Operations Console as the console device for your dial-up LCS. When the *IPL or Install the System* display appears:

- ___ 1. Select **Use Dedicated Service Tools (DST)** and press Enter.
- ___ 2. Type **QSECOFR** for the *DST user* and the *DST password* on the *Dedicated Service Tools (DST) Sign On* display and press Enter.
- ___ 3. Select **Work with DST environment** from the *Use Dedicated Service Tools (DST)* display and press Enter.
- ___ 4. Select **System devices** from the *Work with DST Environment* display and press Enter.
- ___ 5. Select **Console mode** from the *Work with System Devices* display and press Enter.
- ___ 6. Select **Operations Console** from the *Select Console Type* display and press Enter.
 - Important:** Make sure that you type 2 and press Enter even if 2 already exists. This forces a rewrite of the value.
- ___ 7. Press the F3 key until you return to the *Use Dedicated Service Tools (DST)* display.

- ___ 8. Select **Start a service tool** and press Enter.
- ___ 9. Select **Operator panel functions** and press Enter.
- ___ 10. Select the function key to power off the system (F10).
- ___ 11. Press Enter to confirm that you want to power down.
- ___ 12. Power off and unplug attached workstations and printers.

Connecting the Operations Console cable

- ___ 1. Remove the system unit back cover.
 - ___ a. Place your hand near the bottom of the back cover and lift up and out.
 - ___ b. **Attention:** If removing side cover while powered on, errors may occur due to electromagnetic interference.



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- ___ 2. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** Attach the adhesive part of the foil to an unpainted surface.
- ___ 3. If you have a **270 System Unit**, locate position C07. See “PCI card locations” on page 13 for more information.
- ___ 4. If you have a **820 System Unit**, locate position C06. See “PCI card locations” on page 13 for more information.

- ___ 5. Is there a card other than the 2745 card installed in C07 (270 System Unit) or C06 (820 System Unit)?

No Yes

↓

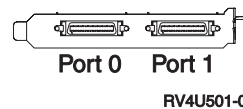
Before you remove the card from the system unit, you need to decide whether you can install the card in a different position. Go to the *PCI Card Installation Instructions*, on the *Installation and Service CD*, SK3T-4028, and then return here and continue.

Go to step 6.

- ___ 6. **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)

Port 0 is the left connector, and **port 1** is the right connector on the 2745 card.



Port 0 is required for Operations Console support. **Port 1** is required for electronic customer support, if you have it.

If you have a cable connected to **port 0 (left connector)**, disconnect the cable. If the cable is an electronic customer support cable, connect it to **port 1 (right connector)** on the same 2745 card.

Notes:

- a. You might have a communications cable already connected to **port 1 (right connector)**. Disconnect the communications cable, to make **port 1** available for the electronic customer support cable. Reconnect the communications cable to a port on a different 2745 card.
 - b. Label all cables with the correct card slot and port (for example, **C06/port 0**).
- ___ 7. Find the operations console cable, **part number 97H7557**, and label the cable, **C06/port 0** or **C07/port 0**.
- ___ 8. Connect the operations console cable to the left connector (port 0) on the 2745 card.
- ___ 9. Connect the other end of the cable to the first available serial port on your PC that will be used for Operations Console.
- ___ 10. Do you have a Remote Control Panel cable to connect?
- No Yes
- ↓ Connect the Remote Control Panel cable to the connector on the back of the system unit labeled **Debug**. Connect the other end of the Remote Control Panel cable to the parallel port on the back of the PC being used as the console. Continue with the next step.
- ___ 11. Install the system unit back cover.

__ 12. 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

Note: Do **not** power on your AS/400 system unit at this time.

- System unit console
- System expansion unit

__ 13. Power on the workstation or PC that is your console.

__ 14. Is your system unit an AS/400e 270 or 820?

270 820

↓ Go to step 17.

__ 15. Look at the Function/Data display on the control panel.

__ 16. Does **01 B N 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 **N** 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 N S** should appear in the Function/Data display. If it does not, repeat steps 16a through 16i.

Go to step 19 on page 7.

__ 17. Look at the Function/Data display on the control panel.

__ 18. Does **01 B V=S** appear in the Function/Data display with IPL mode Normal (OK) selected?

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 Mode Select button until the Normal indicator (**OK**) lights up.
 - ___ 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 S should appear in the Function/Display display. If it does appear, not repeat steps 18a on page 6 through 18i.
- ___ 19. Press the Power push button that is located on the AS/400 control panel. There is approximately a 10 second delay before the power-on light comes on, and data appears in the Function/Data display.

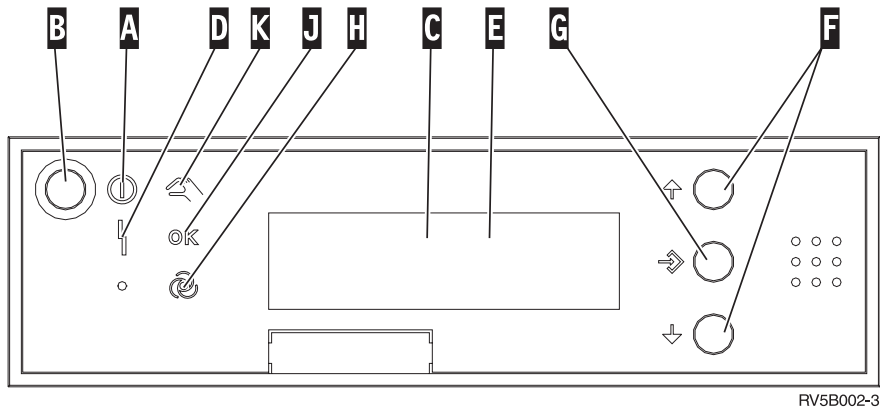
Note: The system takes approximately 5 to 20 minutes to power on and complete an IPL. When the IPL is complete, **01 B N S** appears in the Function/Data display.

- ___ 20. Place the EZ-Setup CD in your PC's CD-ROM drive and select EZ-Setup.
- ___ 21. Plug in and power on all attached devices, such as printers and displays when Operations Console is operating.

System unit control panel

Go to the front of your AS/400 system unit. Open the control panel door.

Your control panel looks like either Figure 1 or Figure 2 on page 10. Refer to the control panel for your unit.

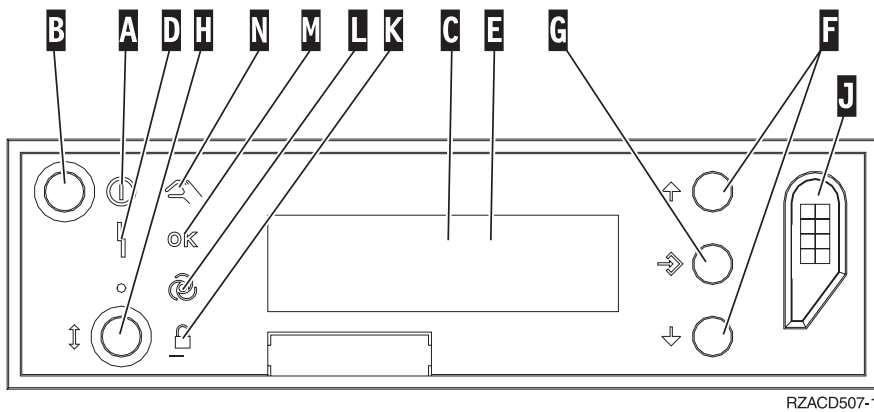


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Figure 1. Control panel without Electronic Keystick

- 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
- H** Auto
- J** Normal
- K** Manual
-
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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**.



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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

Removing the back and side cover

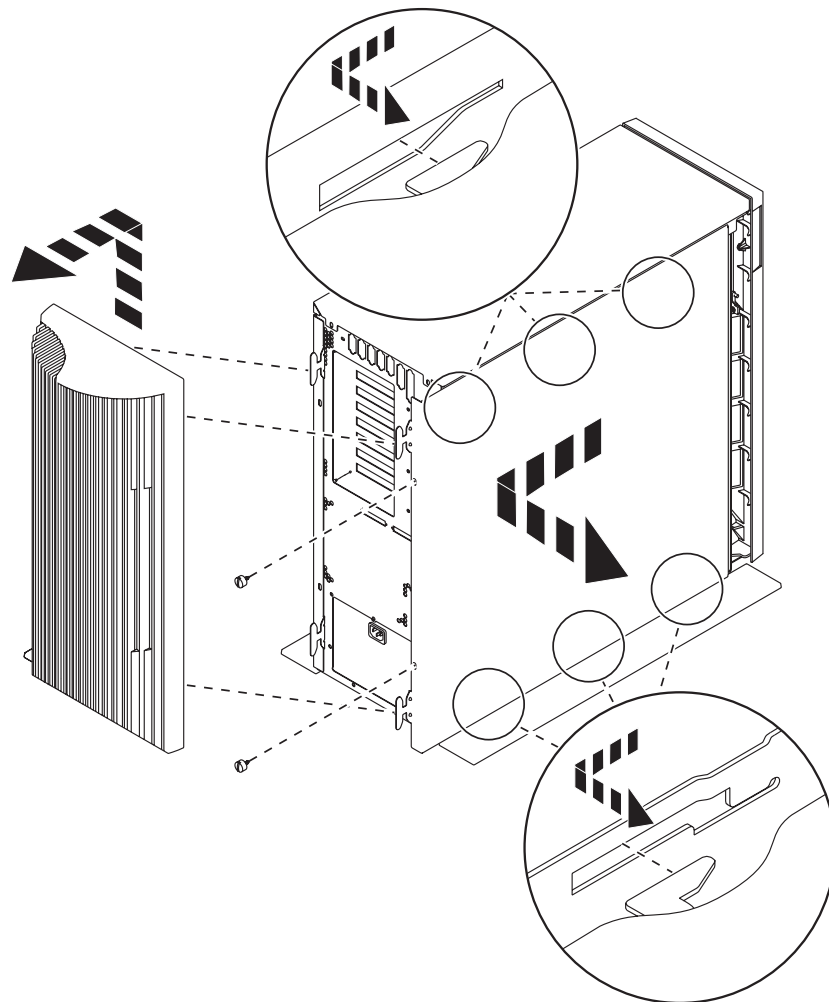
270 and 820 System Units

To access the PCI card location, you need to remove the back cover and the side cover:

- ___ 1. Place your hand near the bottom of the back cover and lift up and out.
- ___ 2. **Attention:** If removing side cover while powered on, errors may occur due to electromagnetic interference.

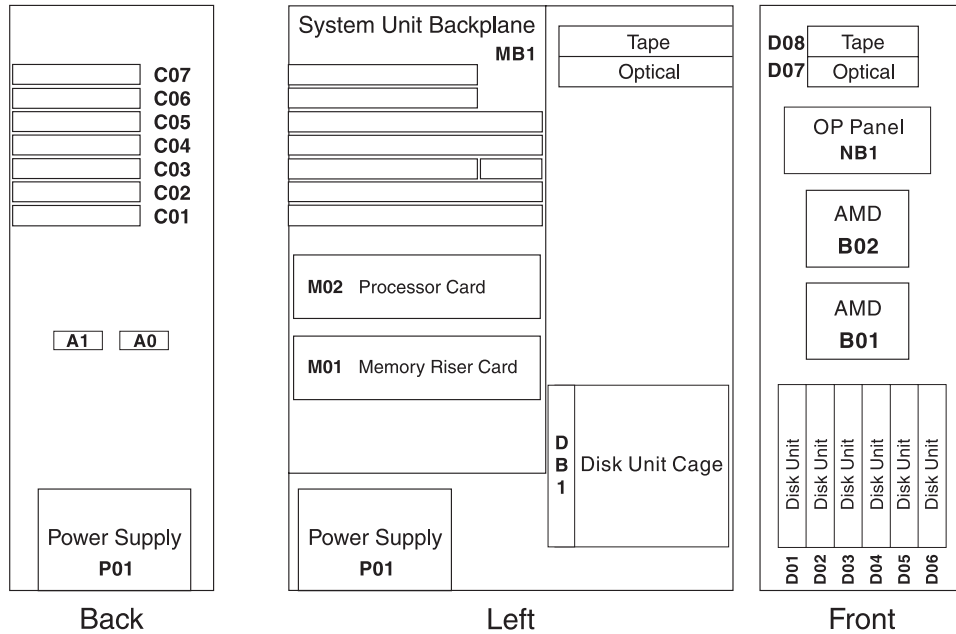
Remove the right side cover (view from back) by loosening the thumbscrews and sliding the cover from front to back until it stops.

- ___ 3. Pull the cover out.



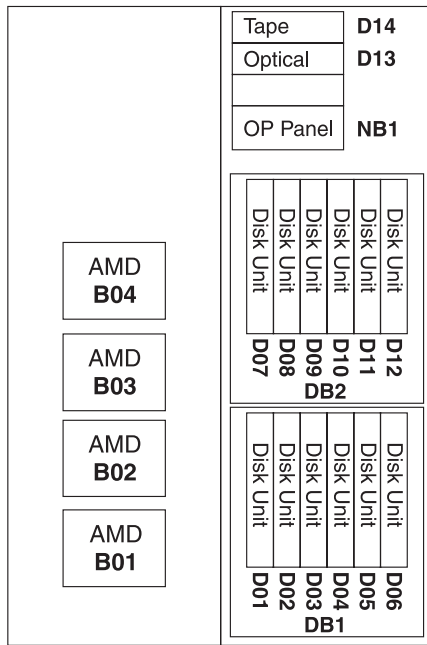
PCI card locations

270 System Unit

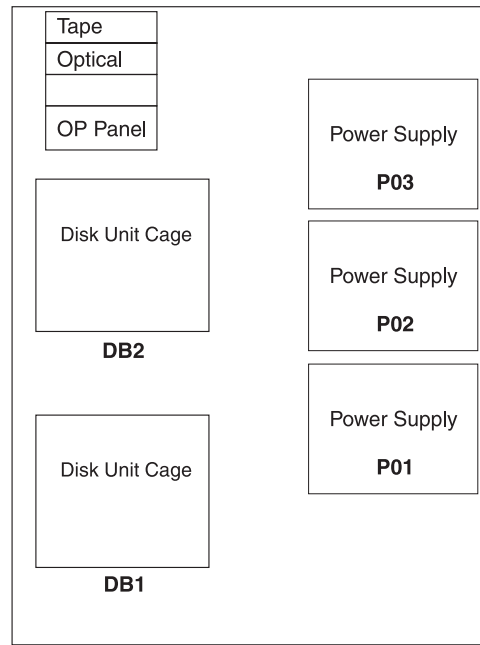


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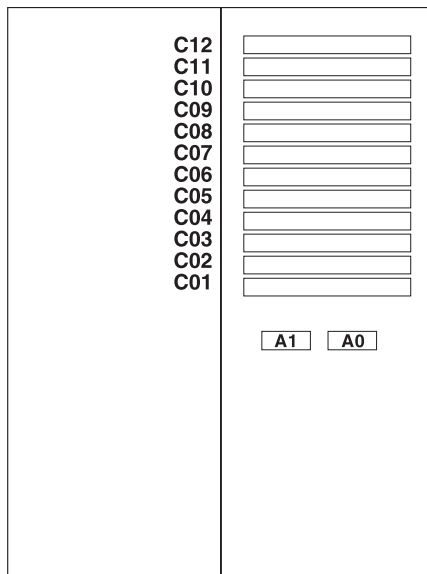
820 System Unit



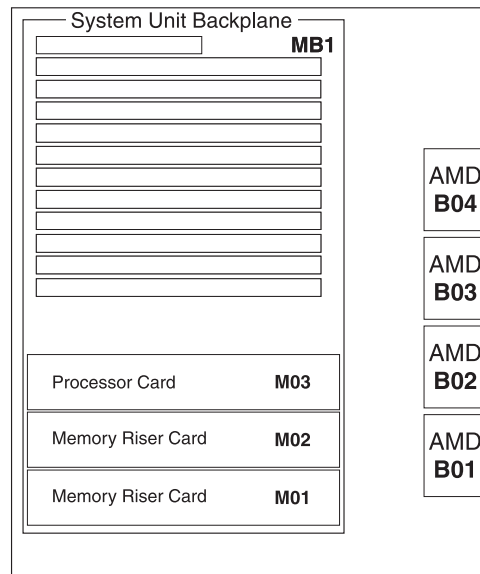
Front



Right



Back



Left

RZAQ2503-4

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Console (Feature 5544)

Publication No. SENG-5544-00

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Easy to find	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Well organized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applicable to your tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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