IBM

eserver

iSeries 270, 8xx

Upgrading the System Unit from Twinaxial Console to Operations Console (Features 5544, 5546, 5548)

Version 5

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Upgrade 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 topic in the *Information Center* for prerequisites.

If you are installing LAN connectivity, go to the Operations Console topic in the *Information Center*.

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

__ 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. Type **1 (ON)** from the *Change System Values* display and press Enter.
__ 4. The **Work with System Values** display appears. Press F3 once to return to the *Main Menu*.

Before you begin

This feature is customer installable. You can elect not to do this installation yourself. You may 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, perform an initial program load (IPL) of 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.
- Perfrom an IPL of your operating system.
- Verify your new hardware configuration.

Some of the figures 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:

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- 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 PTF prerequisites before you install your new feature. Go to the following Web site:

`http://www-912.ibm.com/supporthome.nsf/document/10000051`

a. Select **All Documents**.

b. Select **Collapse**.

c. Select **General Information**.

d. Select **Offerings**.

e. Select **Feature Prerequisites**.

f. Select **Customer Install Features Prerequisites**.

g. Locate your feature number and OS/400 release, and check the prerequisites.

Powering off the system unit

__ 1. Ensure that all jobs are complete.

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

__ 3. Is your system unit an iSeries 270/810 or 820 or 825?

__ **270 or 810**: Continue with the next step.

__ **820 or 825**: 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 7.

__ 5. Does **01 B M V=x** (**x** is either F or S) appear in the Function/Data display?

__ **Yes**: Go to step 8 on page 3.

__ **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 5a through 5j.

__ k. 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 is the Manual mode indicator (a small hand) illuminated?

__ **Yes**: Continue with the next step.

__ **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 and the manual mode indicator (a small hand) lights up. If it does not appear, repeat steps 7a through 7h.

__ 8. Press the Power push button that is located on the 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 Operations Console as the console device

If you plan to select Opertions Console (LAN), go to the Operations Console topic in the *Information Center*.

Use this section to select Operations Console (Direct) 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. Use your current dedicated service tools password.

__ 3. Type **your service tools user ID and service tools password** for the *DST user* and the *DST password* on the *Dedicated Service Tools (DST) Sign On* display and press Enter.

__ 4. Select **Work with DST environment** from the *Use Dedicated Service Tools (DST)* display and press Enter.

__ 5. Select **System devices** from the *Work with DST Environment* display and press Enter.

__ 6. Select **Console mode** from the *Work with System Devices* display and press Enter.

__ 7. Select **Operations console (Direct)** 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.

If you selected LAN, go to the Operations Console topic in the *Information Center*.

__ 8. Press the F3 key until you return to the *Use Dedicated Service Tools (DST)* display.

__ 9. Select **Start a service tool** and press Enter.

__ 10. Select **Operator panel functions** and press Enter.

__ 11. Select the function key to power off the system (F10).

__ 12. Press Enter to confirm that you want to power down.

__ 13. Power off and unplug attached workstations and printers.

Connecting the Operations Console cable

__ 1. Remove the covers. Refer to "Unit covers" on page 9.

__ 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 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 or decrease your risk of receiving electric shock when using or working on electrical equipment.

b. When you unroll the strap, remove the liner from the copper foil at the end.

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

__ 3. If you have a **270 System Unit**, locate position C07. See "PCI card locations" on page 15 for more information.

If you have a **820 System Unit**, locate position C06. See "PCI card locations" on page 15 for more information.

If you have a **830, 840, or 890 System Unit**, locate position C02. See "PCI card locations" on page 15 for more information.

__ 4. Connect the Operations Console cable **part number 97H7557** to the right connector on the 2771, 9771, 9793, 9799 card.

__ 5. Connect the other end of the cable to the first available serial port on your PC that will be used for Operations Console.

__ 6. Do you have a Remote Control Panel cable to connect?

__ **No**: Continue with the next step.

__ **Yes**: Connect the Remote Control Panel cable (the end with a missing pin) to the connector on the back of the system unit labeled **Debug**. Connect the other end of the Remote Control Panel cable (97H7591) to the parallel port on the back of the PC being used as the console. Continue with the next step.

__ 7. Install the system unit covers.

__ 8. **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 system unit at this time.
- System unit console
- System expansion unit

__ 9. Power on the workstation or PC that is your console.

__ 10. Is your system unit a 270/810 or 820/825?

__ **270 or 810**: Continue with the next step.

__ **820 or 825**: Go to step 13.

__ 11. Look at the Function/Data display on the control panel.

__ 12. Does **01 B N V=S** appear in the Function/Data display?

__ **Yes**: Go to step 15 on page 6.

__ **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 12a through 12i.

Go to step 15 on page 6.

__ 13. Look at the Function/Data display on the control panel.

__ 14. Does **01 B V=S** appear in the Function/Data display with IPL mode Normal (OK) selected?

- Yes: Continue with the next step.
- 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 and **OK** lights up. If it does not appear, repeat steps 14a on page 5 through 14i.

__ 15. Press the Power push button that is located on the 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.

__ 16. Place the *iSeries Setup and Operations CD-ROM*, SK3T-4098-01, in your PC's CD-ROM drive and select the EZ-Setup Wizard option to set up your iSeries. Follow the installation prompts until completed.

__ 17. 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 iSeries system unit. Open the control panel door.

Your control panel looks like either Figure 1 or Figure 2 on page 8. Refer to the control panel for your unit.

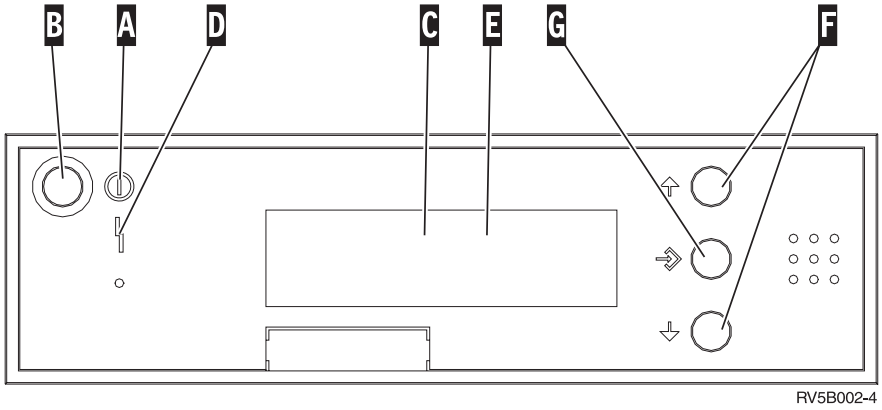

Figure 1. Control panel without Electronic Keystick

Following are the descriptions of the Figure 1 callouts:

A Power On Light
- A blinking light indicates power to the unit.
- A constant light indicates that the unit is on 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 Figure 2 on page 8, 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** . To use Mode Select, the keystick needs to be inserted.

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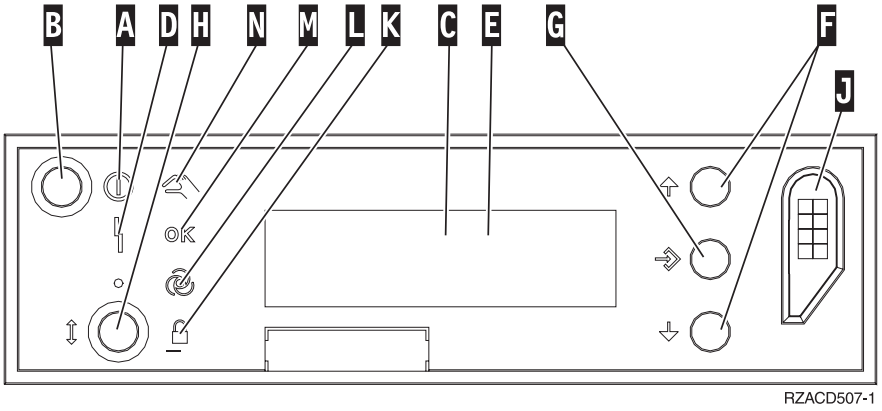


Figure 2. Control panel with Electronic Keystick

A Power On Light
- A blinking light indicates power to the unit.
- A constant light indicates that the unit is on 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

Unit covers

Select your unit:

__ "270, 810 or 820 system units"

__ "830, 840, 870, 890, SB2, SB3, 5074, 5079, and 5094 units" on page 10

__ "270 and 810 units in a rack" on page 12

270, 810 or 820 system units

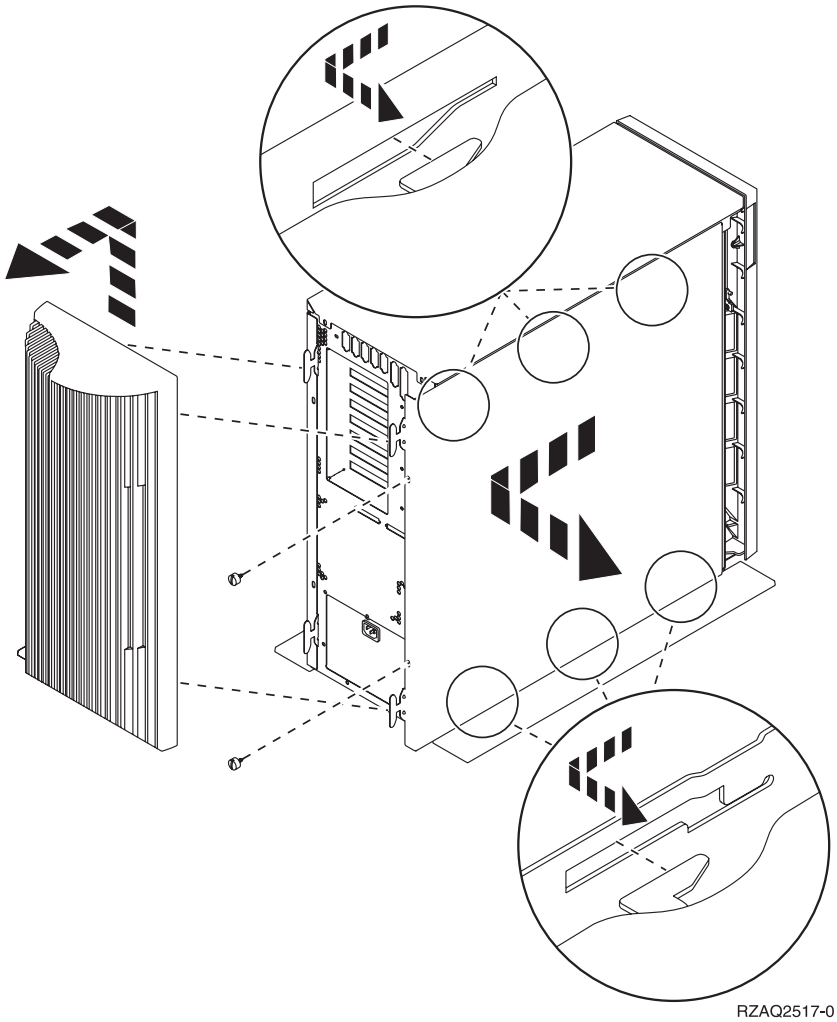
To access the PCI card location, you need to remove the back cover, if you have one, and the side cover:

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

__ 2. **Attention:** If you are removing the side cover while the server is 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.



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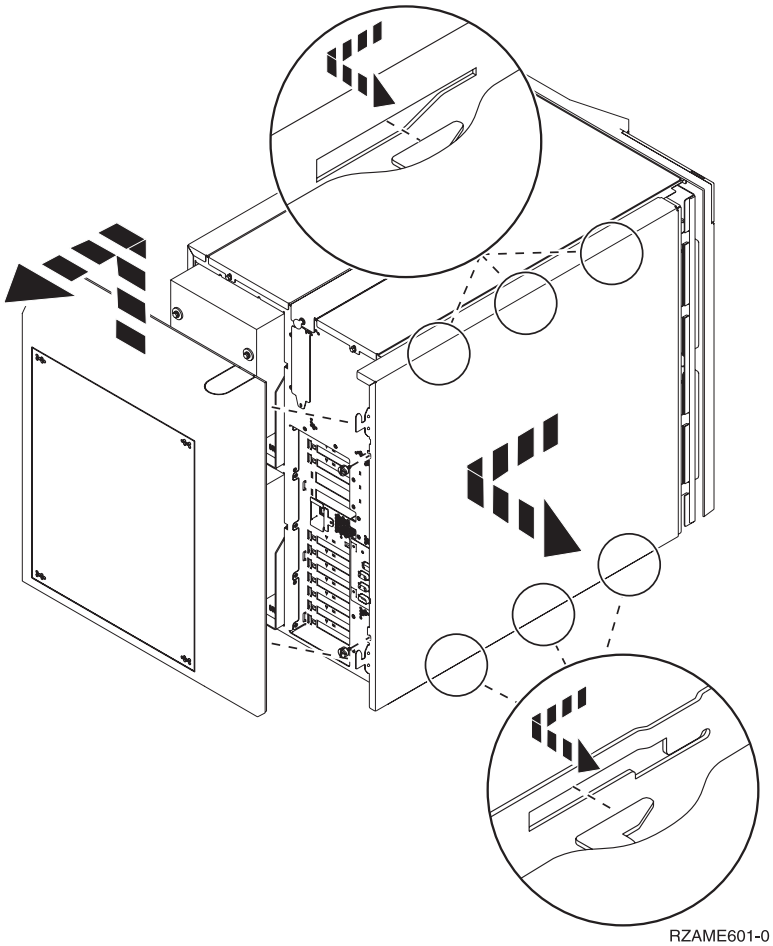
825 system unit

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

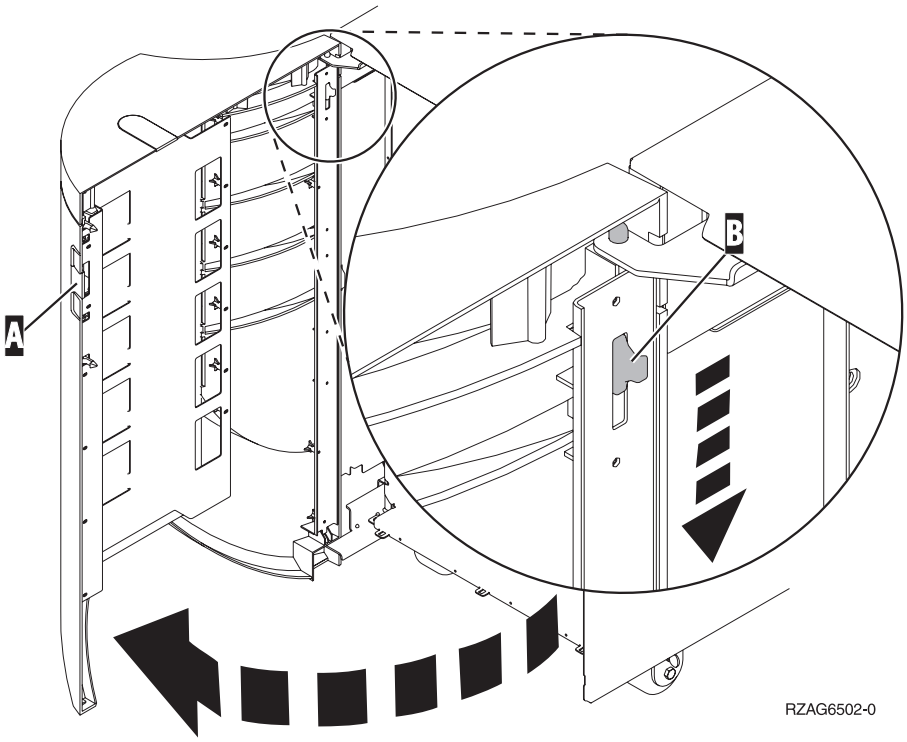
__ 3. Pull the cover out.



830, 840, 870, 890, SB2, SB3, 5074, 5079, and 5094 units

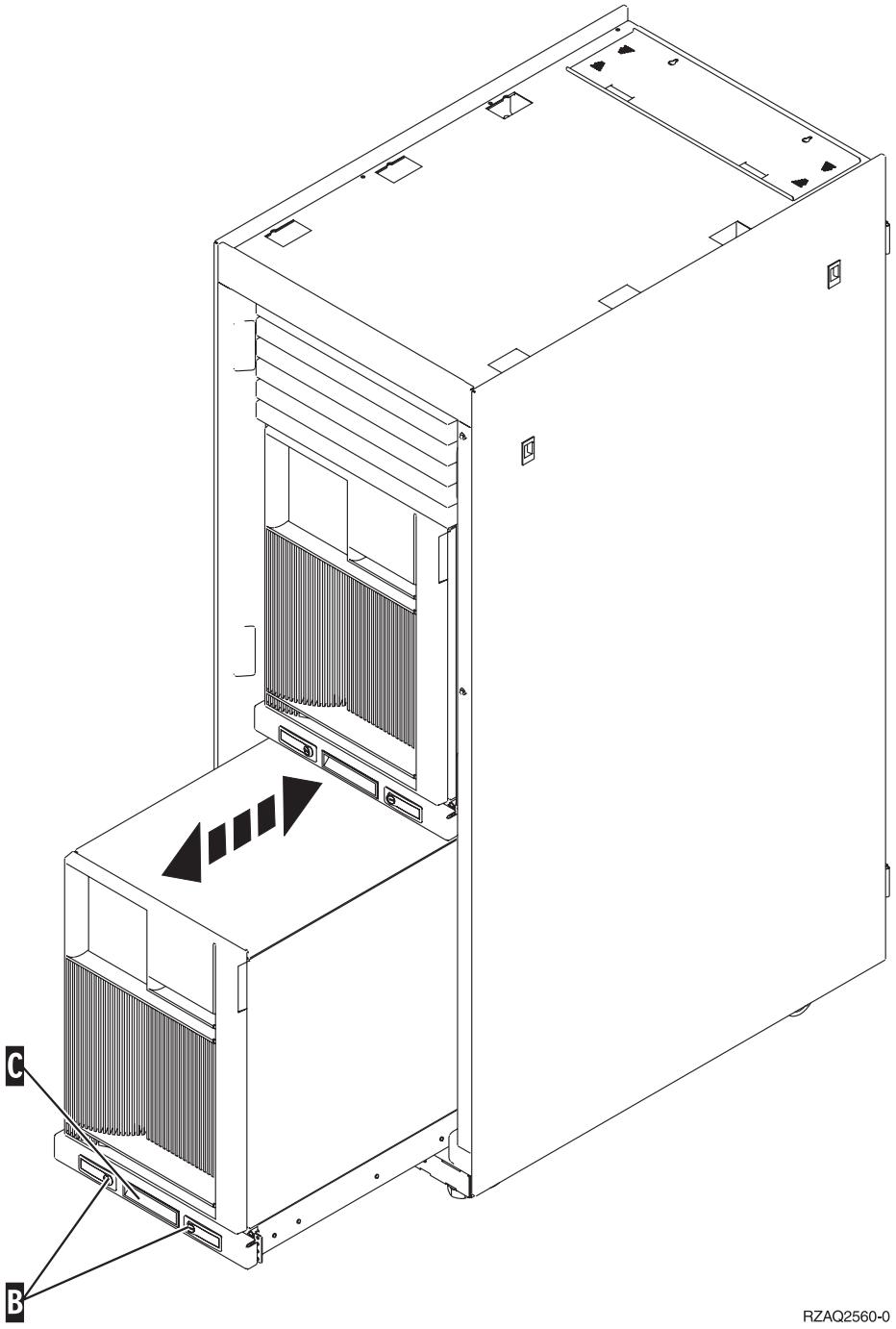
To access the PCI card location, you need to open the back cover:

- **A** Open the back cover.
- **B** Remove the back cover.
- Remove the PCI card access plate.


A
B
RZAG6502-0

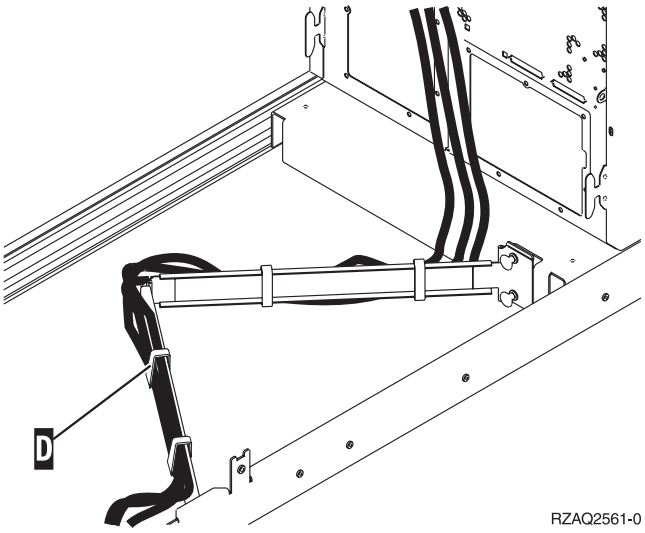
270 and 810 units in a rack

1. Press latches **B** and pull the server out using the handle **C**.



2. Refer to previous unit diagrams to remove the side cover.

3. If you are cabling the server, feed the excess cabling along the cable management arm **D** and secure the cables with the fasteners.

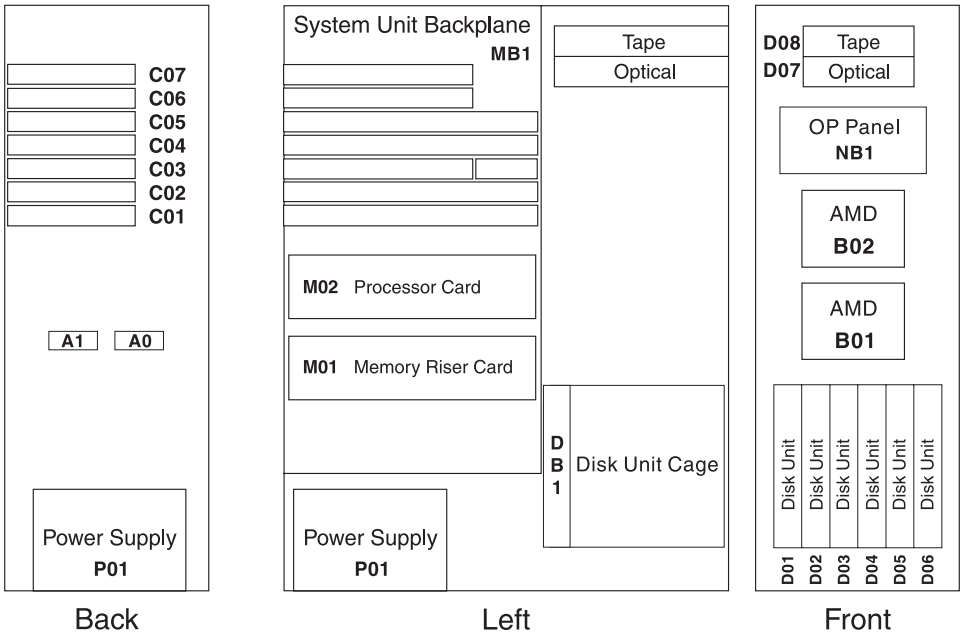


PCI card locations

Go to your system unit:

- "270 system unit"
- "820 system unit" on page 16
- "830, 840, 890 system unit" on page 17

270 system unit



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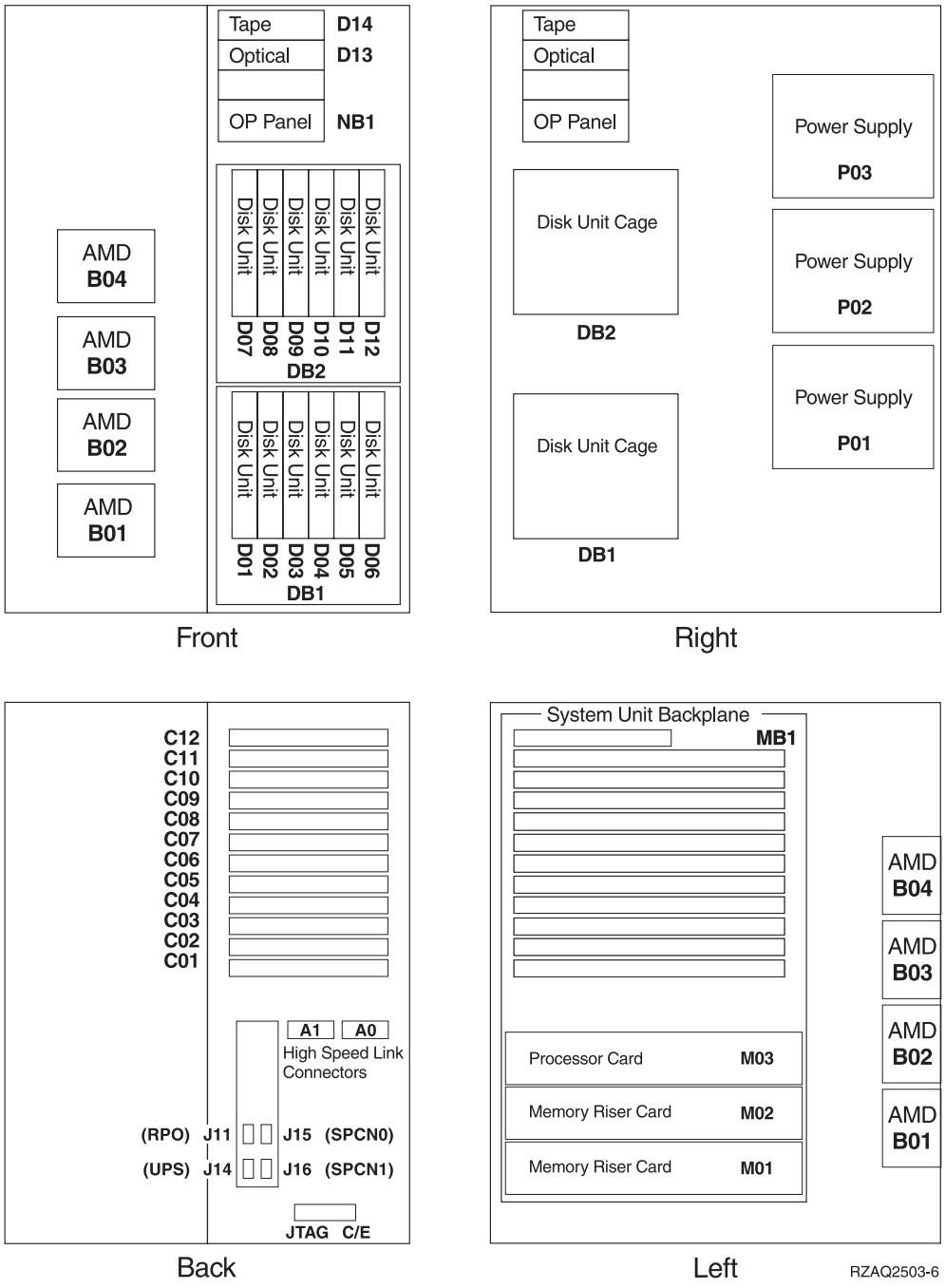
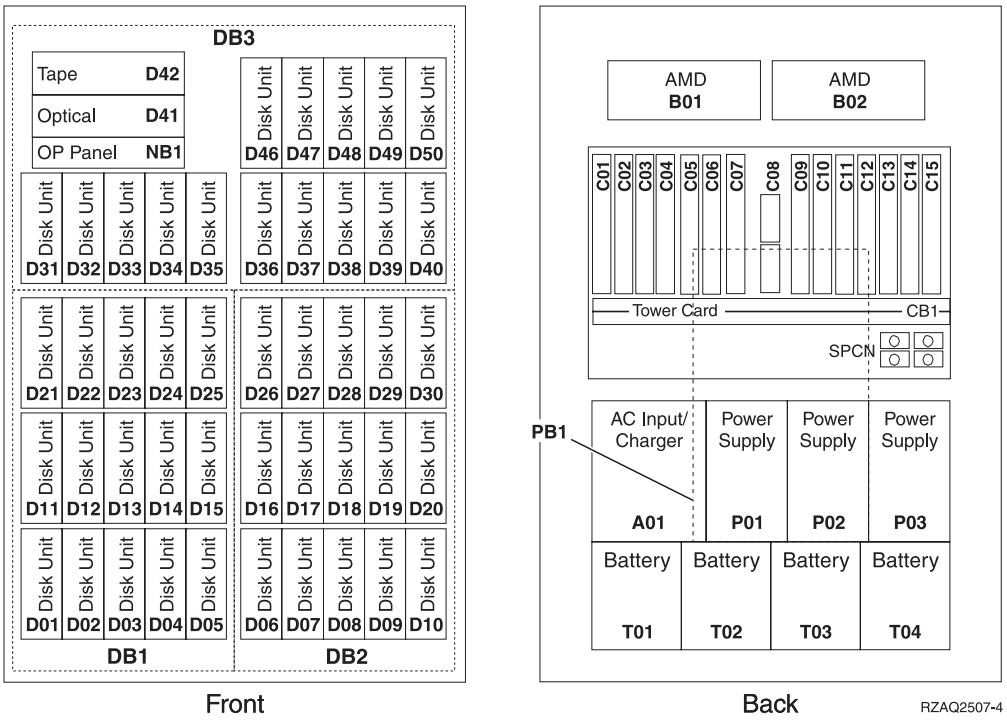
820 system unit



830, 840, 890 system unit



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