IBM

@server

iSeries 270, 810, 820 or 825

Removable Media
Instruction

Version 5

IBM

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Removable Media Instruction

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Chapter 1. Install removable media in iSeries 270, 810, or 820

You can elect to install removable media in your iSeries server. It will take approximately one hour to install the hardware. However, you may elect not to perform this feature installation. 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, IPL your system, and verify your hardware configuration.

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

Before you begin:

__ 1. Ensure that you have a current backup of your operating system and licensed programs. If you have backed up the operating system and licensed programs since the last time you applied PTFs, that backup is acceptable.

__ 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 are installing new hardware in logical partitions, you need to plan and understand the requirements to be successful. Go to Logical partitions in the *Information Center*. Then return to these instructions.

__ 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.

The figures in these instructions may not look exactly like the server that you have. However, the steps to perform the task are the same.

Getting ready

__ 1. Is your system unit an iSeries 825?

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

    __   **Yes**: Go to Chapter 2, "Install removable media in iSeries 825" on page 7.

__ 2. Ensure that all jobs are complete.

__ 3. When all jobs are complete, power down the system by typing `pwrdwnsys *immed` on a command line and press the Enter key.

    Note: Should you encounter difficulties during the installation, contact your authorized dealer or service provider.

__ 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 power cord from the electrical outlet.

__ 7. Remove the unit covers. Refer to "Unit Covers" on page 17.

__ 8. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** View video. 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 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).

Installing the removable media

__ 1. Are you replacing an existing removable media device?

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

    __   **No**: Go to step 6.

__ 2. Disconnect the signal (larger connector) and power (smaller connector) cables from the back of the device.

__ 3. Pull the two blue latches that secure the device to the system unit frame forward until they stop.

__ 4. Remove the device by sliding it forward and out of the system unit. You may need to remove the filler blank above the control panel.

__ 5. Go to step 7.

__ 6. Remove the blank from the system unit.

__ 7. Find the package that contains the new removable media and remove it from the package.

__ 8. Is the device you are installing an optical device?

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

    __   **No**: Go to step 10.

__ 9. Refer to the example below and set the optical device unit address jumpers by doing the following:

    __ a. Place a jumper around the first set of pins.

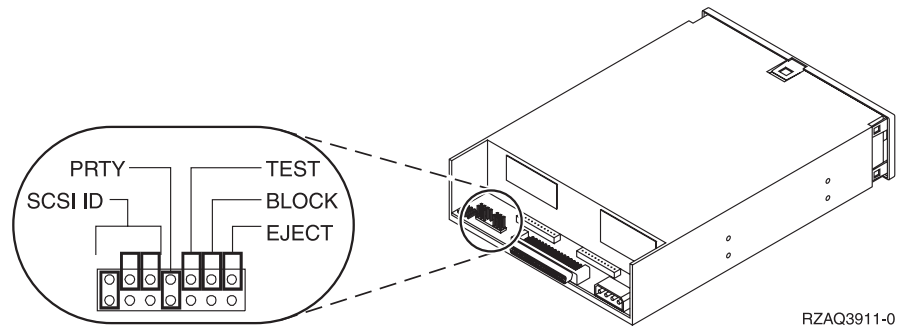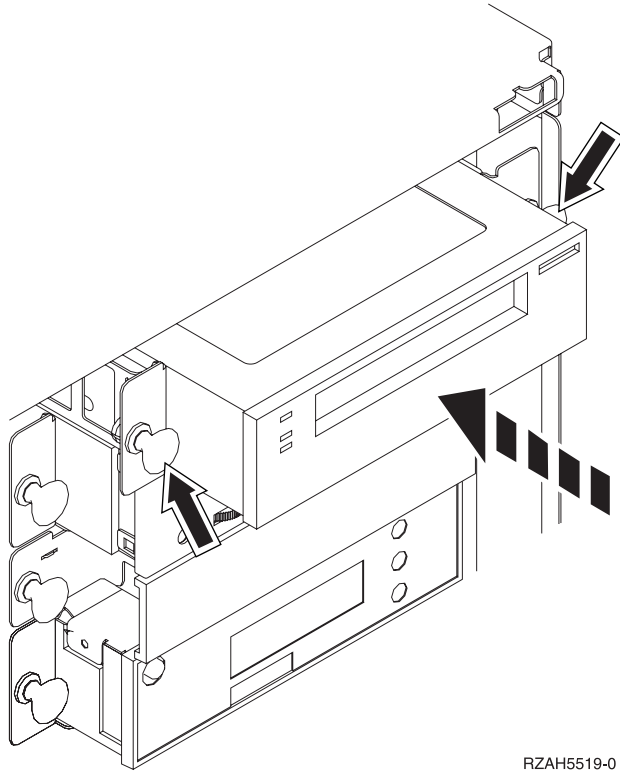   __ b. Place a jumper around the fourth set of pins.

Figure 1. Optical device jumper locations

__ 10. Align the device and slide it into the front of the system unit (Figure 2 on page 4) until the device is flush against the frame of your system unit.

__ 11. Push in the blue latches to secure the device to your system unit.

__ 12. Plug the power cable into the smaller connector on the back of the tape unit.

__ 13. If you are not replacing an existing removable media device, you need to remove the tape from the end of the cable.

__ 14. Plug the signal cable into the larger connector on the back of the tape unit.

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Figure 2. Installing the removable media

__ 15. Do you have another removable media device to install?

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

    __   **Yes**: Repeat steps 1 on page 2 through 14 on page 3.

__ 16. Do you have any other adapter cards or devices to install?

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

    __   **Yes**: If you have another device such as a disk unit, an adapter card, or a memory card to install, go to the instructions that came with that device.

__ 17. Go to "Completing the installation".

Completing the installation

__ 1. Install the system unit side cover by aligning the tabs on the top and bottom edge. Press forward and make sure that all tabs enter the slots. Slide the cover toward the front of the system unit until it stops and tighten the screws.

__ 2. Install the system unit covers.

__ 3. **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

__ 4. Plug in and power on all attached devices, such as printers and displays.

__ 5. Is your unit a 270 or 810 or 820?

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

    __ **820**: Go to step 8.

__ 6. Look at the Function/Data display on the control panel.

__ 7. Does **01 B N V=S** appear in the Function/Data display?

    __ **Yes**: Go to step 10 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 7a through 7i.

        __ k. Go to step 10 on page 6.

__ 8. Look at the Function/Data display on the control panel.

__ 9. Does **01 B V=S** with Normal indicator (**OK**) illuminated appear in the Function/Data display?

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

    __ **No**: Do the following:

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

        __ 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**) is illuminated.

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

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

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

        01 B S with Normal indicator (**OK**) illuminated appear in the Function/Data display. If it does not appear, repeat steps 9a on page 5 through 9j.

    __ l. Go to step 10.

__ 10. Power on the workstation or PC that is your console.

__ 11. Press the system-unit power-on button. The power-on light will appear.

    Note: There is an approximately 10-second delay before the power on. The system takes approximately 5 to 20 minutes to power on and complete an IPL.
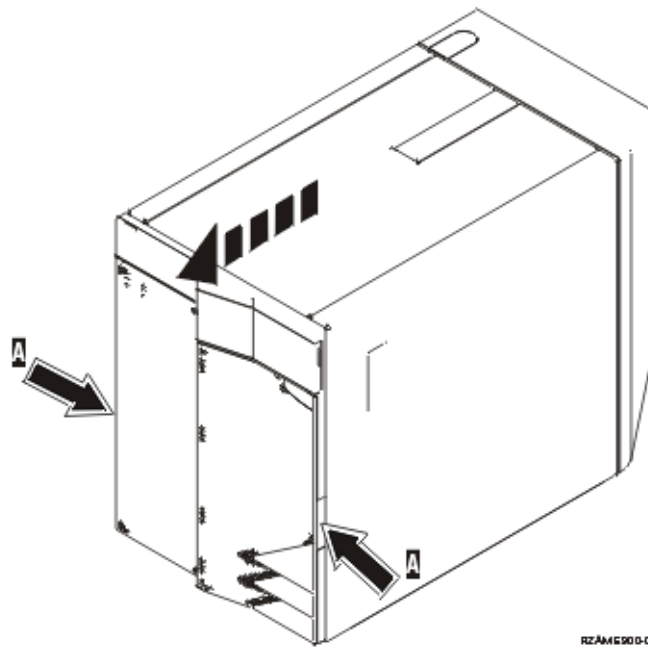
__ 12. Sign on the system unit. Ensure that you have service tools authority.

__ 13. Do the following to verify your removable media device you just installed:

    __ 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 user ID 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. **Select Packaging hardware resources (systems, frames, cards, ...)** from the *Hardware Service Manager* display.

        Press Enter.

    __ h. Type **9** (Hardware contained within package) in the *Op*t column next to the system unit on the *Packaging Hardware Resources* display.

        Press Enter.

    __ i. Scroll up or down until the removable media unit you installed is shown.

    __ j. To return to the *Main Menu*, press F3 (Exit) three times and then press Enter.

    __ k. Place the configuration list where you can refer to it in the future.

__ 14. For information on how to make your removable media operational, go to the Work with storage topic in the *Information Center*.

__ 15. Your feature installation is complete.

Chapter 2. Install removable media in iSeries 825

This procedure gives you the steps you need to install removable media devices in your 825 unit. It will help you to decide between a concurrent removable media device installation and a power down removable media device installation. During a concurrent installation, you do not power down your expansion unit.

If you encounter difficulties during the installation, contact your authorized dealer or service provider.

__ 1. Are you installing feature code 5306 (concurrent) Removable Media Backplane?

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

    __   **Yes**: Go to Chapter 3, "Install concurrent removable media backplane" on page 13.

__ 2. Is your system unit powered off?

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

    __   **Yes**: Go to step 4 on page 10.

__ 3. Remove the front cover.

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__ 4. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** View video. 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 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).

__ 5. Be sure you understand the steps in "Concurrent procedure (system unit powered on)" before you begin. If you do not feel comfortable using the concurrent procedure, go to "Nonconcurrent procedure (system unit powered off)" on page 10.

Concurrent procedure (system unit powered on)

Follow these steps to perform the concurrent install.

Attention: Failure to follow these instructions could result in damage to the removable media device or to the system unit and could result in loss of data.

__ 1. If you have not done so already, sign on with **service tools authority**.

__ 2. On an iSeries command line, type: `strsst`. Press Enter.

__ 3. Type **your service tools user ID and service tools password** on the *System Service Tools (SST) Sign On* display. Press Enter.

__ 4. When the *System Service Tools (SST)* display appears, select the **Start a service tool** option.

Press the Enter key.

__ 5. When the *Start a Service Tool* menu appears, select the **Hardware service manager** option.

Press the Enter key.

__ 6. At the *Hardware Service Manager* display, select the **Device Concurrent Maintenance** option.

Press the Enter key.

__ 7. At the *Specify either Physical Location or Resource Name* field, type:

> a. The number 1 for Frame ID.
>
> b. The physical location (D17 is the upper location and D18 is the lower location).

__ 8. Pull out the removable media filler bezel from the location in which you are installing the new device.

__ 9. **Attention:** Removable media devices are fragile. Handle with care. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** View video. Attach the adhesive part of the foil to an unpainted surface.
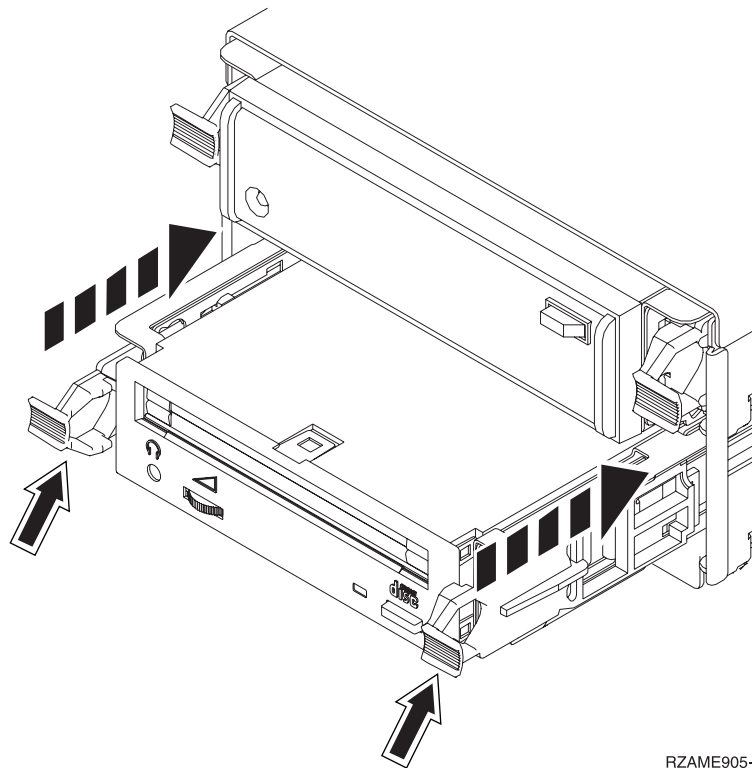
> **Notes:**
>
> a. Follow the same precautions you would use without the wrist strap. The 2209 Disposable Wrist Strap is for static control. It will not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
>
> b. When you unroll the strap, remove 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).

__ 10. Find the package that contains the new removable media assembly and remove it from the static-protective package.

__ 11. Pull the handles out toward you before you install the removable media device into the expansion unit.

__ 12. Hold the device with the button in the upper right for tape units or lower right for CD-ROMs.

__ 13. Refer to Figure 3 and support the bottom of the removable media device as you slide it half way into the selected position. Do not push it any further.

__ 14. At the *Specify action as* field, select option **Install device**.

__ 15. At the *Enter a time value between 00 and 19* field, type **01** for one minute.

__ 16. Press the Enter key.

> **Note:** Watch the light on the right side of the removable media devices. When the light comes on and begins to blink rapidly, you have nine seconds to slide the removable media device into place.

__ 17. When the light starts blinking, slide the removable media device in until it seats properly. Push both handles in at the same time to lock the removable media device into place.

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Figure 3. Installing removable media device

__ 18. The green light will stop blinking and remain on solid when you properly installed the removable media device.

__ 19. Return to the console and wait until the *Concurrent Maintenance Results* display appears.

Press the Enter key.

__ 20. When the *Hardware Service Manager* menu appears, select the **Packaging hardware resources (system, frames, cards...)** option.

Press the Enter key.

__ 21. On the *Packaging Hardware Resources* menu, enter a **9** in the *Opt* column next to the unit with the new removable media device.

Press the Enter key.

__ 22. The *Description* and *Device Type-Model* will be displayed along with the position where your new removable media was installed.

__ 23. Press **F3** once to return to the *Hardware Service Manager* display.

__ 24. At the *Hardware Service Manager* display, press **F6** to print the configuration list if you have a printer. You or a service representative may refer to the configuration list in the future.

__ 25. Install the front cover.

__ 26. Press **F12** twice and press the Enter key to return to the Main menu.

__ 27. Your feature installation is complete.

Nonconcurrent procedure (system unit powered off)

__ 1. If you have installed logical partitions on your system unit, refer to the *iSeries Information Center*. Go to Manage logical partitions in the *iSeries Information Center* to find instructions on powering down a system with logical partitions.

__ 2. Ensure that all jobs are complete.

__ 3. Type `pwrdwnsys *immed` when all jobs are complete. Press Enter.

__ 4. When the iSeries power down is complete, unplug any power cords, such as printers and displays, from electrical outlets.

__ 5. Unplug the system unit power cord from the electrical outlet.

__ 6. Unplug the power cord for the expansion unit from the electrical outlet.

__ 7. Remove the front cover.

__ 8. **Attention:** Removable media devices are fragile. Handle with care. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** View video. 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 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).

__ 9. Pull out the removable media filler bezel from the location in which you are installing the new device. View video.

__ 10. Find the package that contains the new device and remove it from the static-protective package.

__ 11. Hold the device upright and pull both handles on both sides of the device toward you.

__ 12. Hold the device with the button in the upper right for tape units or lower right for CD-ROMs. Do not hold the device by the handles. View video.

__ 13. Refer to Figure 4 and align the device with the position where you removed the filler bezel.

__ 14. Slide it into the unit until it stops.

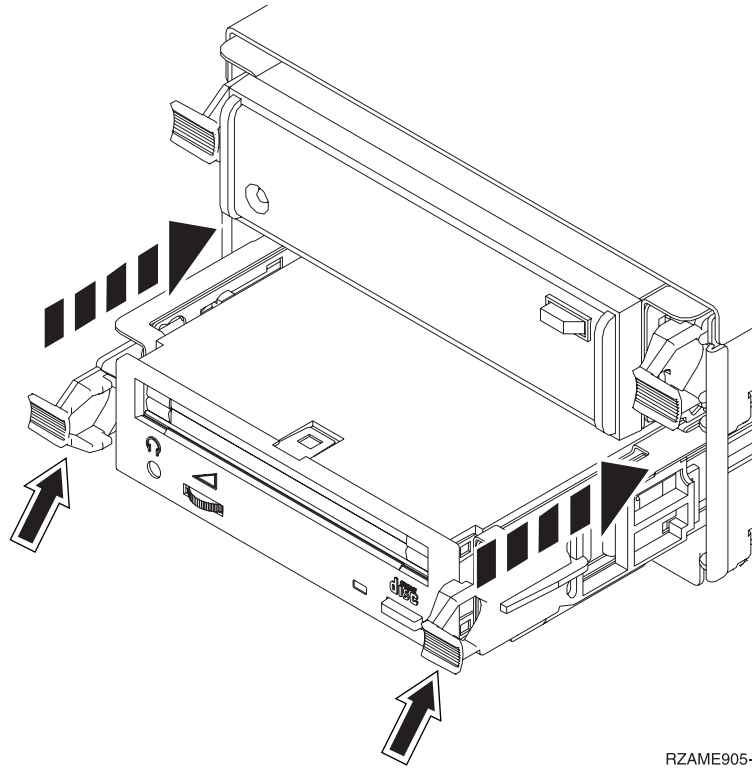__ 15. Push both handles in at the same time to lock the removable media device into place.

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Figure 4. Installing removable media device

__ 16. Install the front cover.

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)

__ 17. Plug in the system unit and system unit console. Plug in everything you previously unplugged such as printers and displays.

__ 18. Power on all attached devices, such as printers and displays.

__ 19. Look at the Function/Data display on the control panel.

__ 20. Does **01 B V=S** with Normal indicator (**OK**) illuminated appear in the Function/Data display?

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

    __   **No**: Do the following:

        __ a. Press the Mode Select button until the Manual indicator (a small hand) is illuminated.

        __ 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**) illuminated.

__ 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 with Normal indicator (**OK**) illuminated should appear in the Function/Data display. If it does not appear, repeat steps 20a on page 11 through 20j.

__ 21. Power on the workstation or PC that is the console for your system.

__ 22. Press the power button to power on your system unit.

__ 23. Sign on the system unit. Ensure that you have service tools authority.

__ 24. Do the following to verify your removable media device configuration:

__ a. On a command line, type: **strsst**. Press the Enter key.

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

__ c. When the *System Service Tools (SST)* display appears, select the **Start a service tool** option.

Press the Enter key.

__ d. When the *Start a Service Tool* display appears, select the **Hardware service manager** option.

Press the Enter key.

__ e. When the *Hardware Service Manager* display appears, select the **Packaging hardware resources (system, frames, cards...)** option.

Press the Enter key.

__ f. On the *Packaging Hardware Resources* display, enter a **9** in the *Opt* column next to the unit with the new removable media device.

__ g. The *Description* and *Device Type-Model* will be displayed along with the position where your new removable media was installed.

__ h. Press **F3** once to return to the *Hardware Service Manager* display.

__ i. At the *Hardware Service Manager* display, press **F6** to print the configuration list if you have a printer. You or a service representative may refer to the configuration list in the future.

__ j. Press **F12** twice and press the Enter key to return to the Main Menu.
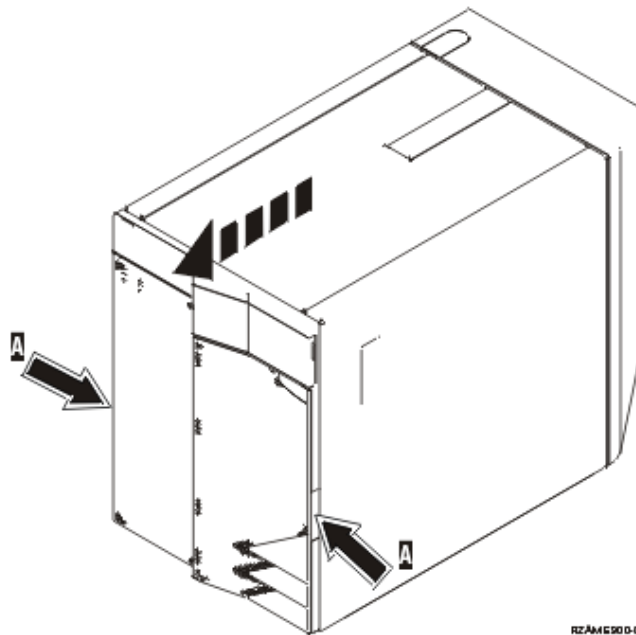
__ k. Your feature install is complete.

Chapter 3. Install concurrent removable media backplane

You are installing feature 5306 concurrent removable media backplane.

__ 1. Ensure that all jobs are complete.

__ 2. When all jobs are complete, power down the system by typing **pwrdwnsys *immed** on a command line and press the Enter key.

   Note: Should you encounter difficulties during the installation, contact your authorized dealer or service provider.

__ 3. 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.

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

__ 5. Unplug the system unit power cord from the electrical outlet.
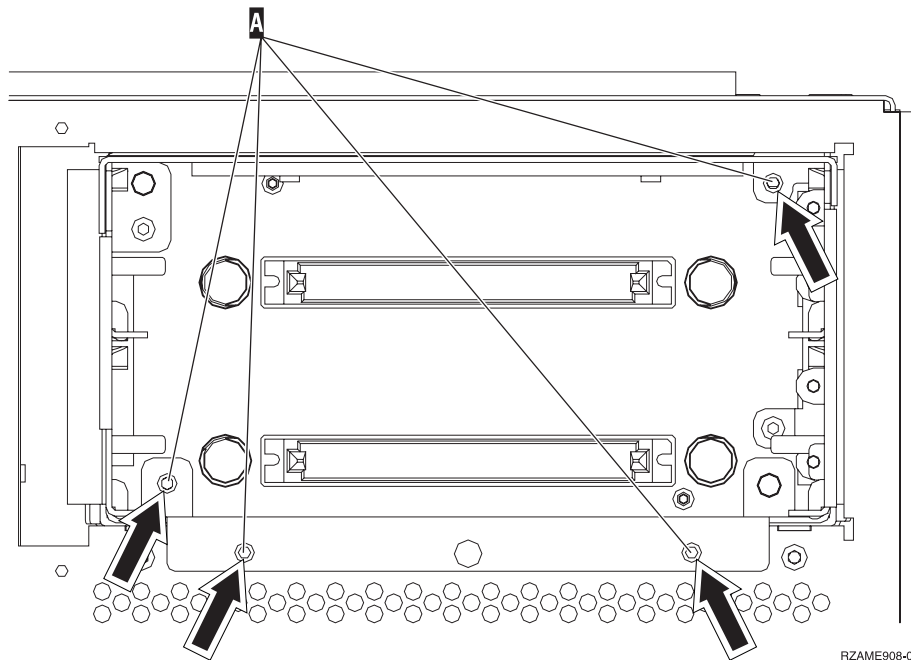
__ 6. Remove the front cover.

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__ 7. **Attach the disposable wrist strap to prevent electrostatic discharge from damaging a device.** ⬚ View video. 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 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.

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

__ 8. Remove the media devices from the unit.

__ 9. Remove the screws **A** .

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__ 10. Slowly slide the removable media enclosure from the system.

__ 11. Disconnect the signal and power cables from the back of the removable media enclosure.

__ 12. Find the package that contains the new removable media enclosure and remove it from the package.

__ 13. Plug in the cables removed in step 11 into the new removable media device.

__ 14. Align the enclosure and slide it into the front of the system unit.

__ 15. Reinstall the screws from step 9.

__ 16. Align and slide in the removable media devices. Push both handles in at the same time to lock the media device into place.

__ 17. Install the front cover.

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)**

__ 18. Plug in the system unit and system unit console. Plug in everything you previously unplugged such as printers and displays.

__ 19. Power on all attached devices, such as printers and displays.

__ 20. Look at the Function/Data display on the control panel.

__ 21. Does **01 B V=S** with Normal indicator (**OK**) illuminated appear in the Function/Data display?

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

No: Do the following:

    __ a. Press the Mode Select button until the Manual indicator (a small hand) is illuminated.

    __ 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**) illuminated.

    __ 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 with Normal indicator (**OK**) illuminated should appear in the Function/Data display. If it does not appear, repeat steps 21a through 21j.

__ 22. Power on the workstation or PC that is the console for your system.

__ 23. Press the power button to power on your system unit.

__ 24. Sign on the system unit. Ensure that you have service tools authority.

__ 25. Do the following to verify your removable media device configuration:

    __ a. On a command line, type: **strsst**. Press the Enter key.

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

    __ c. When the *System Service Tools (SST)* display appears, select the **Start a service tool** option.

        Press the Enter key.

    __ d. When the *Start a Service Tool* display appears, select the **Hardware service manager** option.

        Press the Enter key.

    __ e. When the *Hardware Service Manager* display appears, select the **Packaging hardware resources (system, frames, cards...)** option.

        Press the Enter key.

    __ f. On the *Packaging Hardware Resources* display, enter a **9** in the *Opt* column next to the unit with the new removable media device.

    __ g. The *Description* and *Device Type-Model* will be displayed along with the position where your new removable media was installed.

    __ h. Press **F3** once to return to the *Hardware Service Manager* display.

    __ i. At the *Hardware Service Manager* display, press **F6** to print the configuration list if you have a printer. You or a service representative may refer to the configuration list in the future.

    __ j. Press **F12** twice and press the Enter key to return to the Main Menu.
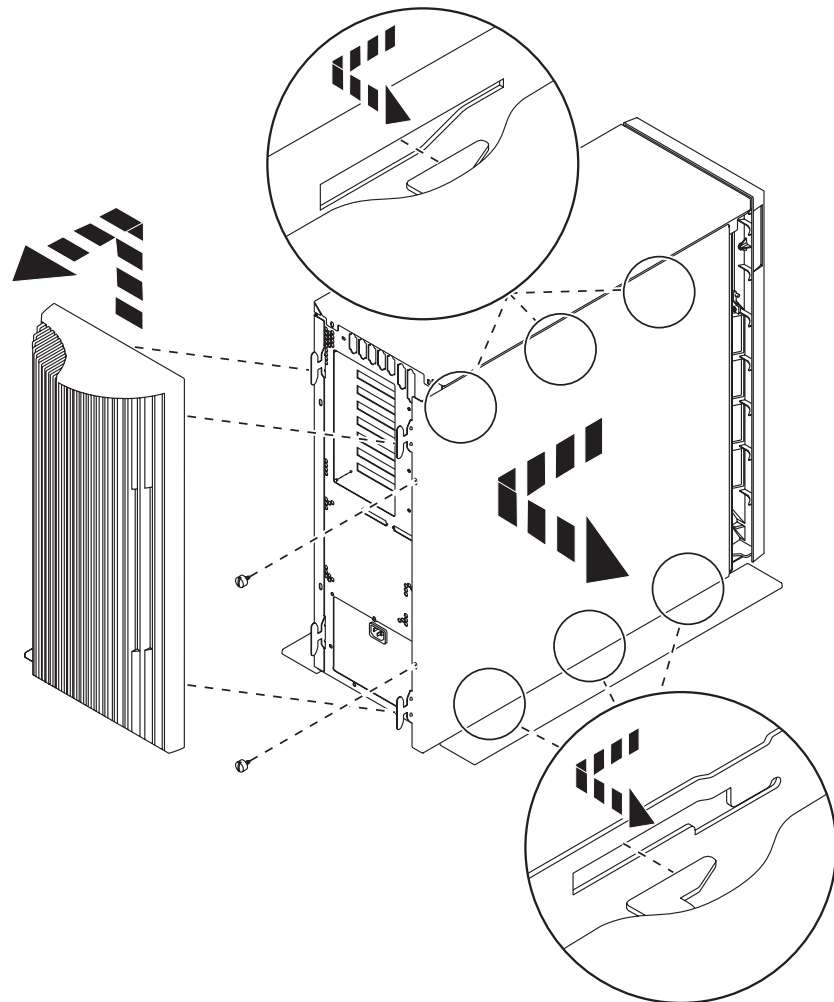
    __ k. Your feature install is complete.

Unit Covers

Locate the diagram of the unit you are working on:

- "270, 810 and 820 System Units"
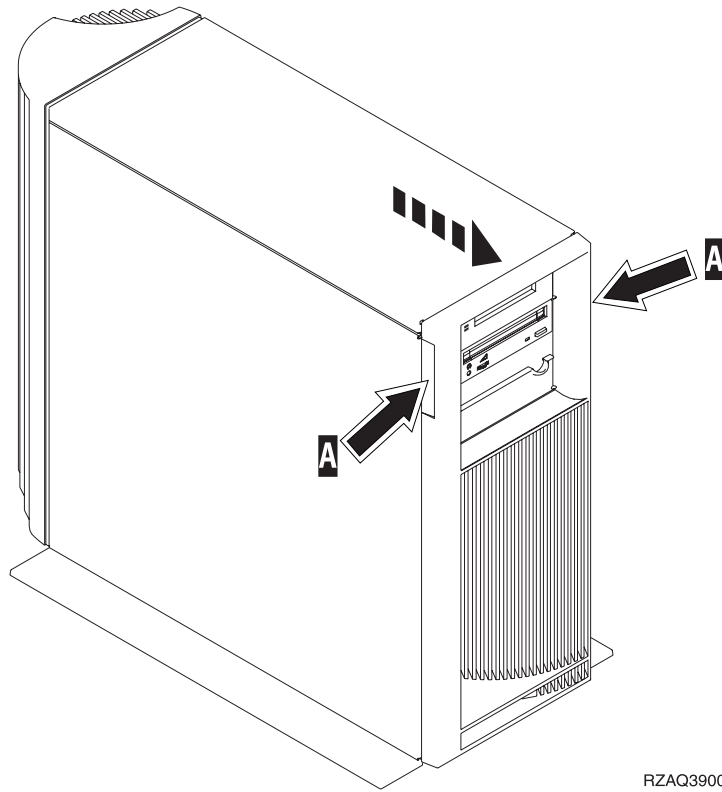- "270 or 810 unit in a rack" on page 19

270, 810 and 820 System Units

To allow access to the removable media location, you need to remove the covers.

__ 1. Place your hand near the bottom of the back cover, if you have one, and lift up and out.

__ 2. **270 and 810 units**—Remove the right side cover (view from back) by loosening the thumbscrews and sliding the cover from front to back until it stops.

   820 unit—Remove the left side cover (view from back) by loosening the thumbscrews and sliding the cover from front to back until it stops.
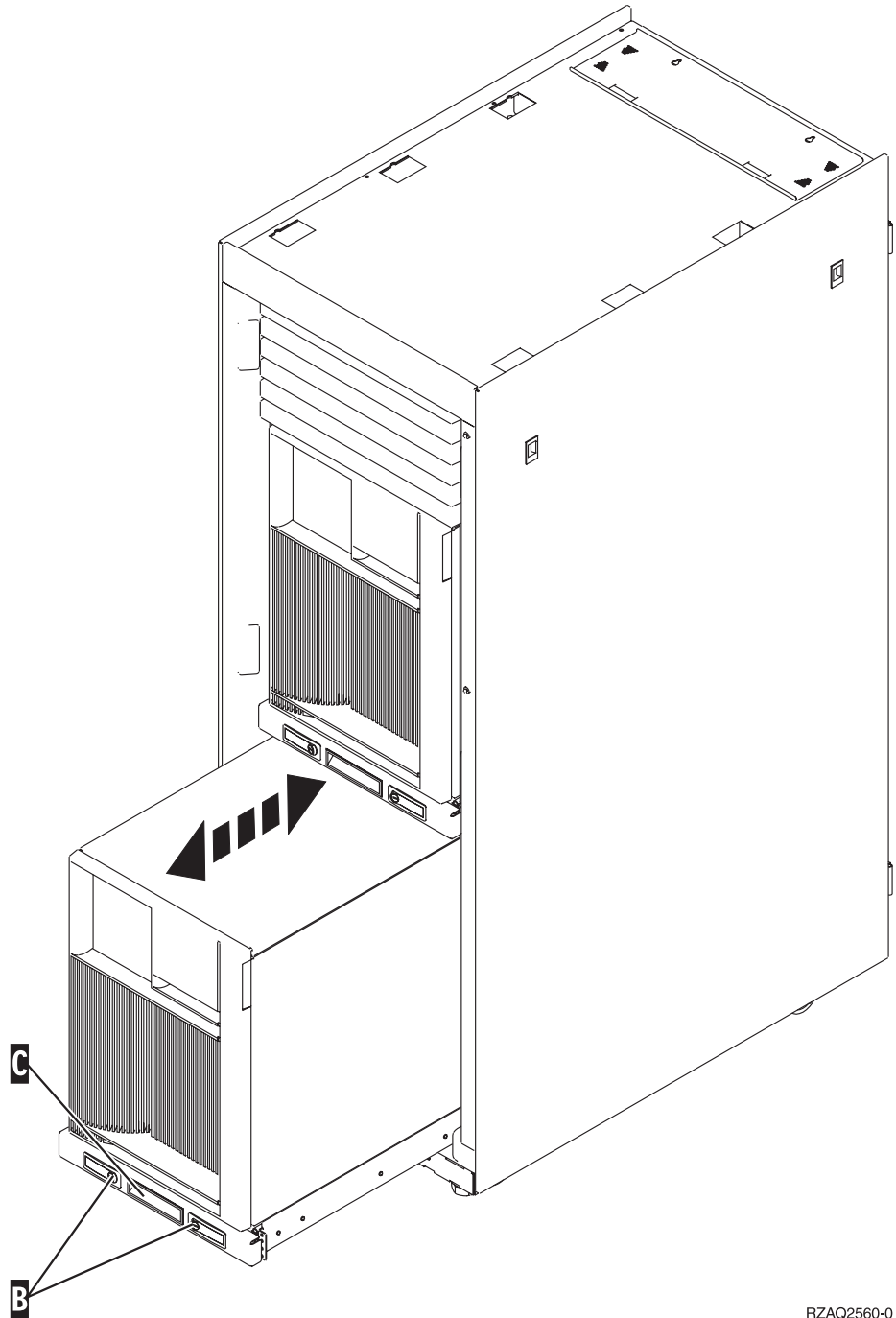
__ 3. Pull the cover out.

RZAQ2517-0

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__ 4. Remove the front cover.

RZAQ3900-0

270 or 810 unit in a rack

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

RZAQ2560-0

2. Remove the front cover. Refer to step 4 on page 18.
3. Remove the left side cover (view from front). Refer to step 3 on page 17.

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