

IBM

@server

iSeries 830, 840, 870 or 890
5074, 5079, 5094, 5095 or 8093

Removable Media Device

Version 5





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iSeries 830, 840, 870 or 890
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Removable Media Device

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Note

Before using this information and the product it supports, be sure to read the information in "Notices," on page 17.

Fourth Edition (August 2005)

This edition applies to version 5, release 3, modification 0 of IBM Operating System/400[®] (product number 5722-SS1) and to all subsequent releases and modifications until otherwise indicated in new editions. This version does not run on all reduced instruction set computer (RISC) models nor does it run on CISC models.

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Removable media device

Replacing and installing this feature are customer tasks. When you use these instructions, you will perform some or all of the following tasks:

- Perform prerequisite tasks.
- Power down the system unit.
- Remove the system unit or expansion unit covers.
- Remove hardware.
- Install new hardware.
- Install covers.
- IPL your operating system.
- Verify your new hardware configuration.

It takes approximately one hour to install the hardware. You may need to allow additional time to complete your jobs, to back up your system, IPL your system, and verify your hardware configuration.

You can choose to perform these tasks yourself or contact IBM(R) or an authorized service provider to make arrangements for them to perform the tasks for a fee. Should you encounter difficulties when performing a task, contact your authorized dealer or service provider.

Select the instructions for the task you want to perform:

- “Replace removable media devices” on page 2
- “Install removable media devices” on page 6

Before you begin

Before you begin a replacement or installation task, follow these steps:

- ___ 1. **For an installation and if possible, for a replacement, ensure that you have a current backup of your system (including operating system, licensed programs, and data).** 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. Ensure that you have access to a medium flat-bladed screwdriver.
- ___ 4. If there are incorrect, missing, or visibly damaged parts, contact one of the following:
 - Your authorized service provider
 - In the United States: IBM® Rochester Manufacturing Automated Information Line (R-MAIL) at 1-800-300-8751
 - In countries outside of the United States: Use the following Web site to locate your service and support numbers:
<http://www.ibm.com/planetwide>
- ___ 5. 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.

- ___ 6. If you encounter difficulties during the procedure, contact your authorized service provider or your authorized dealer.
- ___ 7. 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/s_dir/slkbase.NSF/slkbase
 - a. Select **All Documents**.
 - b. Select **General Information**.
 - c. Select **Offerings**.
 - d. Select **Feature Prerequisites**.
 - e. Select **Customer Installation Features Prerequisites**.
 - f. Locate your feature number and OS/400® release, and check the prerequisites.

Replace removable media devices

To replace a removable media device, perform these tasks:

- ___ 1. Perform prerequisite tasks as described in “Before you begin” on page 1.
- ___ 2. Open the front cover **A** (Figure 3 on page 7, 5074, 5094, 5095, 8093, 830, 840, 870, or 890; Figure 4 on page 8, 5079 or 5294).
- ___ 3. Use the latch that is shown **B** to remove the cover.

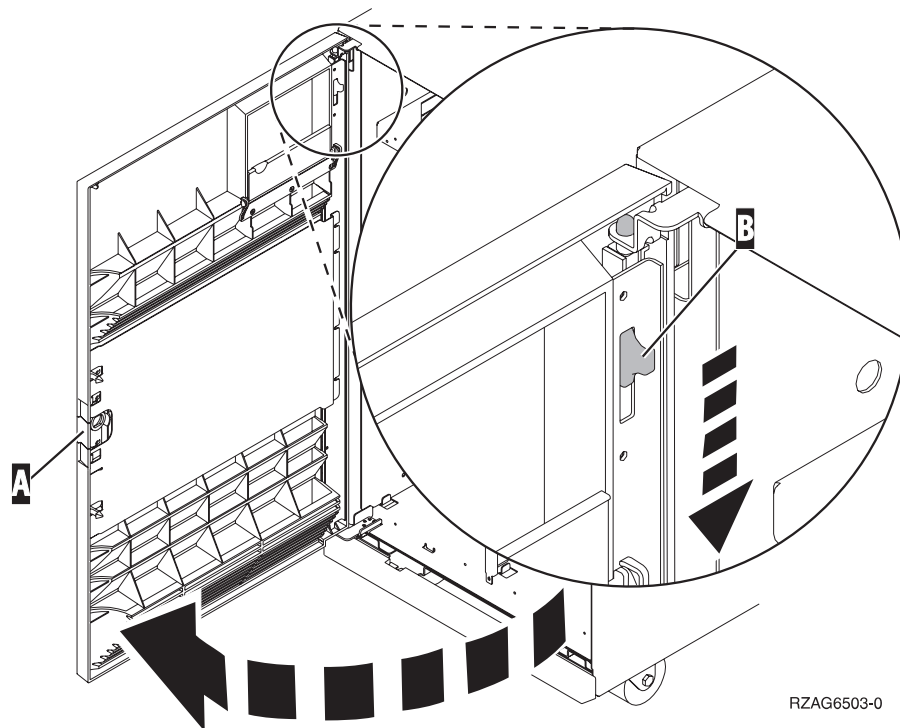
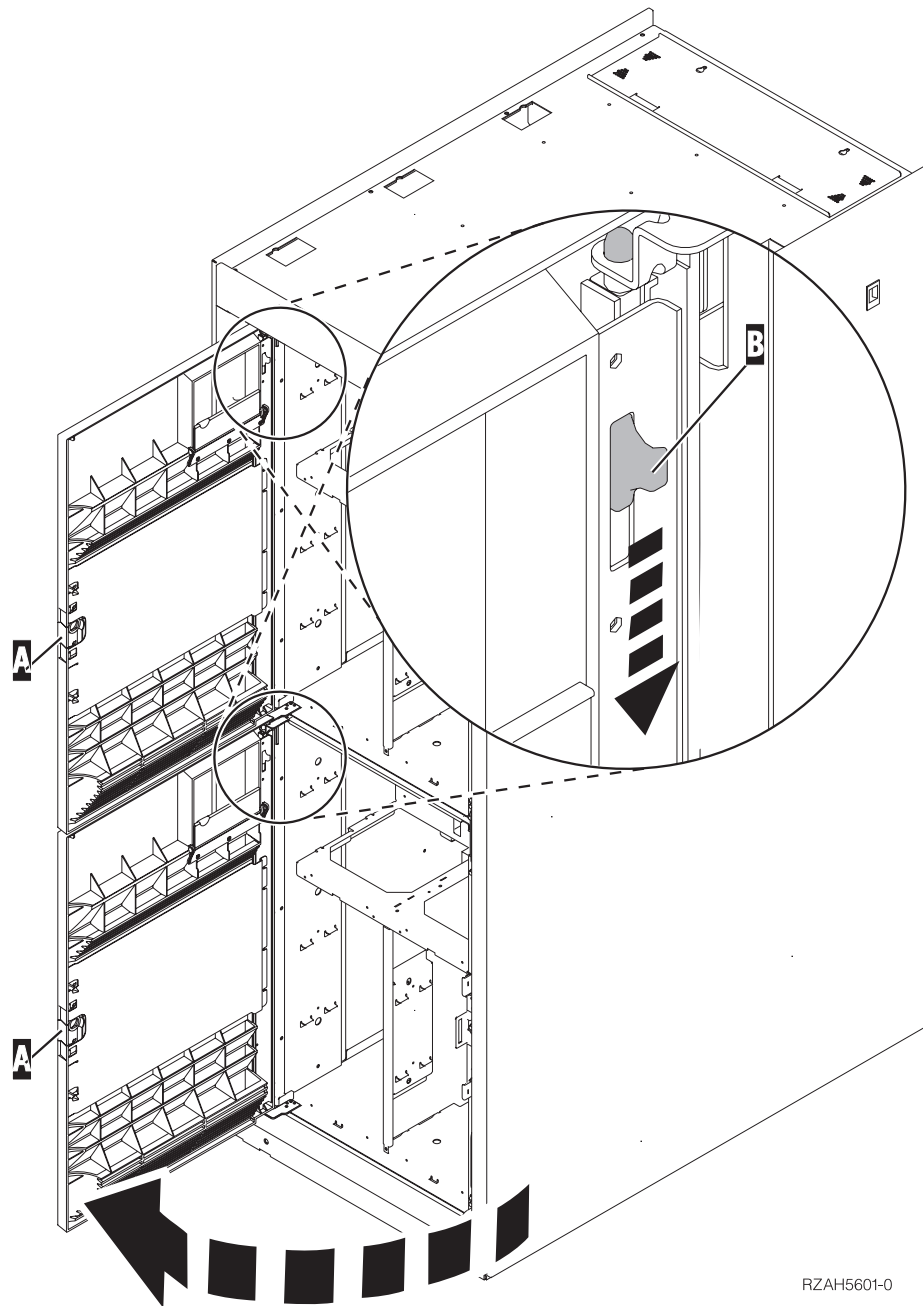


Figure 1. Opening the front cover door (5074, 5094, 5095, 8093, 830, 840, 870, 890)



RZAH5601-0

Figure 2. Opening the front cover door (5079)

Your system can either be powered off (nonconcurrent) or powered on (concurrent) when you replace the removable media device. Unless the system is already powered off, replacing the removable media with the system powered on is recommended. Select the preferred procedure from the following:

- “Replace removable media devices with system powered on”
- “Replace removable media devices with system powered off” on page 5

Replace removable media devices with system powered on


Be sure you understand the steps in this procedure before you begin. If you do not feel comfortable using the concurrent procedure, go to “Replace removable media devices with system powered off” on page 5.

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.

To perform the concurrent replacement procedure, follow these steps:

- ___ 1. **If possible, use a wrist strap to prevent electrostatic discharge from damaging your hardware.** If you do not have a wrist strap, touch a metal surface of the system or expansion unit before installing or replacing hardware.

If you received the 2209 Disposable Wrist Strap, follow these steps:

- ___ a. Attach the disposable wrist strap.  View video.
- ___ b. When you unroll the strap, remove the liner from the copper foil at the end.
- ___ c. Attach the adhesive part of the copper foil to an **exposed, unpainted** metal surface on the frame of the unit.

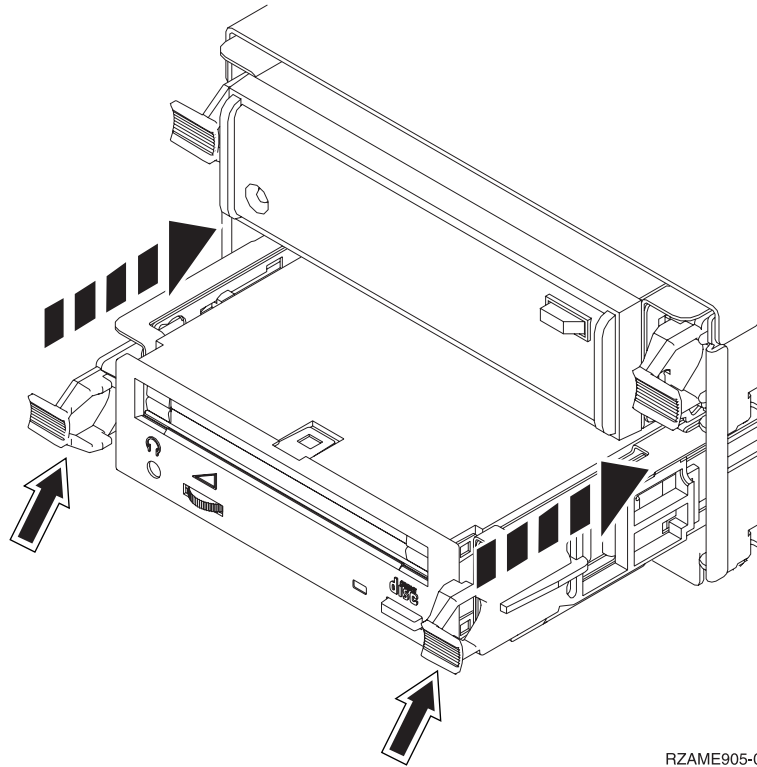
Note: Follow the same precautions you would use without the wrist strap. The 2209 Disposable Wrist Strap is for static control. It will not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.

- ___ 2. Locate the removable media device to be replaced.
 - ___ Record the Frame ID of the system unit or expansion unit here:_____ . (The Frame ID is displayed on the front of each system unit and expansion unit.)
 - ___ Record the number of the Device Position for the removable media device to be replaced here:_____ .
- ___ 3. If you have not done so already, sign on with **service tools authority**.
- ___ 4. On an iSeries command line, type: **strsst**. Press Enter.
- ___ 5. Type **your service tools user ID and service tools password** on the *System Service Tools (SST) Sign On* display. Press Enter.
- ___ 6. When the *System Service Tools (SST)* display appears, select the **Start a service tool** option.
Press the Enter key.
- ___ 7. When the *Start a Service Tool* menu appears, select the **Hardware service manager** option.
Press the Enter key.
- ___ 8. At the *Hardware Service Manager* display, select the **Device Concurrent Maintenance** option.
Press the Enter key.
- ___ 9. At the *Specify either Physical Location or Resource Name* field, type:
 - a. The number that you recorded for the Frame ID.
 - b. The number that you recorded for the physical location.
- ___ 10. Select option **1** (Remove device) for the action to be performed.
- ___ 11. Set the time delay for one minute—01. **Do not press Enter at this time.**

Note: Watch the light on the right side of the removable media devices. When you press Enter, after a one minute delay, this light comes on and begins to blink rapidly. You then have nine seconds to remove the device into place.

- ___ 12. Press Enter on the console.

- ___ 13. When the light starts blinking, pull both handles on both sides of the device toward you.



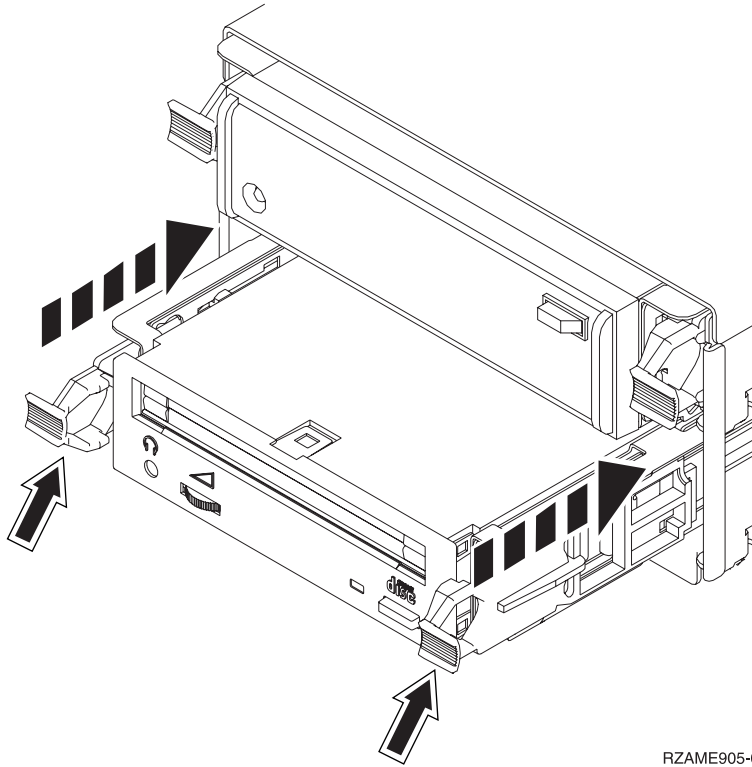
- ___ 14. Slide the device out.

Note: Do not hold the device by the handles.

- ___ 15. The light will stop blinking and remain off when the device is removed.
- ___ 16. Return to the console and wait until the *Concurrent Maintenance Results* display appears.
Press **F12**.
- ___ 17. Follow the steps in “Details: Install removable media devices with system powered on” on page 10 to install the new removable media device.

Replace removable media devices with system 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. Locate the device you want to replace.
- ___ 3. Pull both handles on both sides of the device toward you.



RZAME905-0

- ___ 4. Slide the device out.

Note: Do not hold the device by the handles.

- ___ 5. Follow the instructions in “Details: Install removable media devices with system powered off” on page 12 to install the new removable media device.

Install removable media devices

This procedure gives you the steps you need to install removable media devices in your expansion 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. Is your system unit powered off?
 - ___ **No:** Continue with the next step.
 - ___ **Yes:** Go to step 4 on page 15.
- ___ 2. Open the front cover **A** (Figure 3 on page 7, 5074, 5094, 5095, 8093, 830, 840, 870, or 890; Figure 4 on page 8, 5079 or 5294).
- ___ 3. Use the latch that is shown **B** to remove the cover.

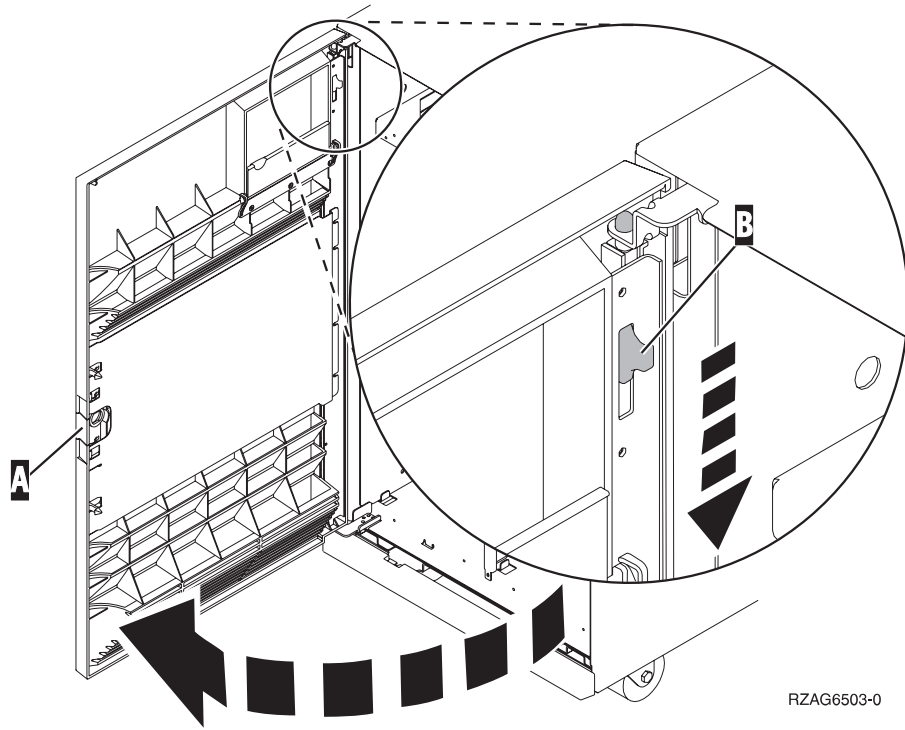
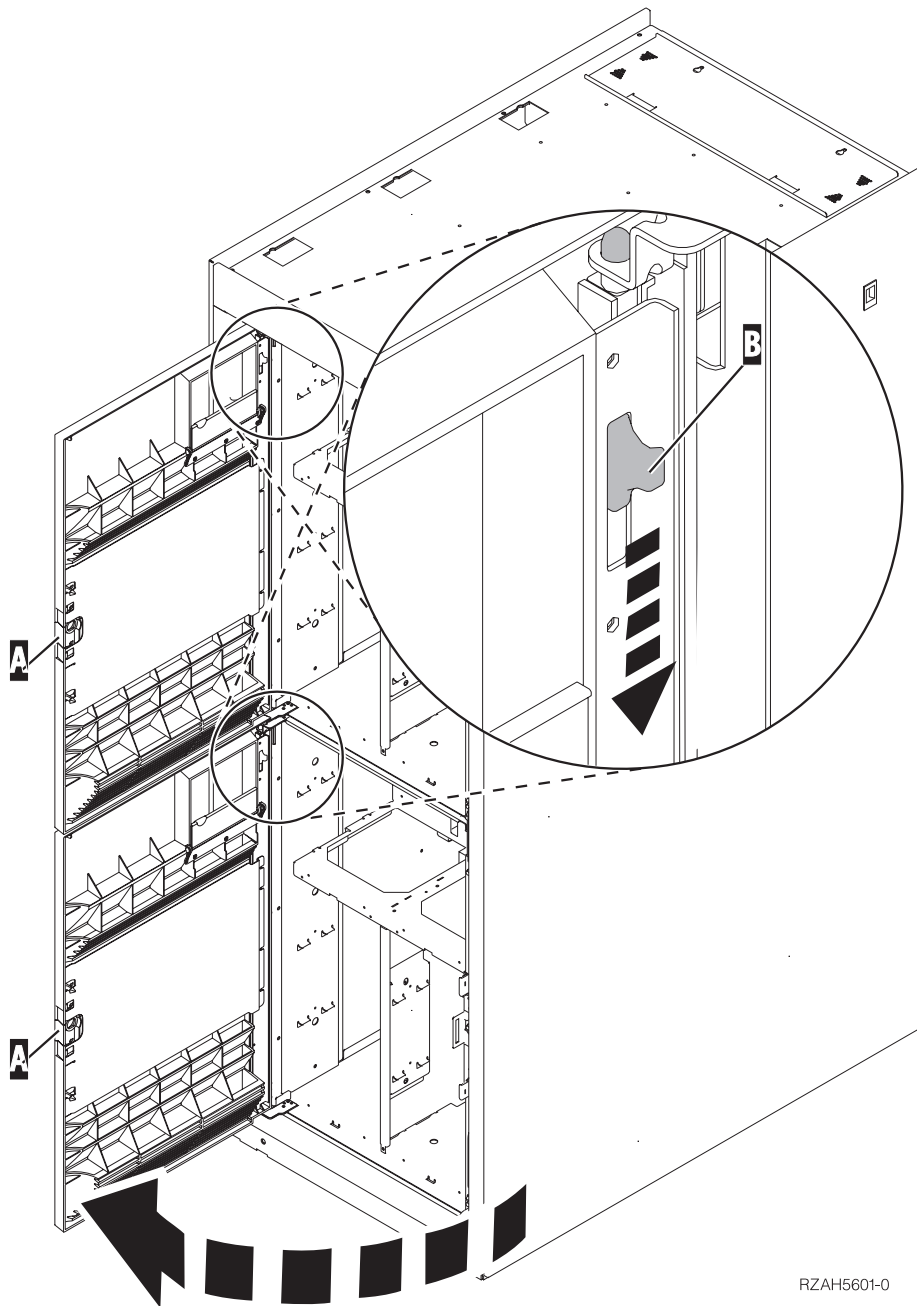


Figure 3. Opening the front cover door (5074, 5094, 5095, 8093, 830, 840, 870, 890)




RZAH5601-0

Figure 4. Opening the front cover door (5079)

- ___ 4. **If possible, use a wrist strap to prevent electrostatic discharge from damaging your hardware.** If you do not have a wrist strap, touch a metal surface of the system or expansion unit before installing or replacing hardware.

If you received the 2209 Disposable Wrist Strap, follow these steps:

- ___ a. Attach the disposable wrist strap.  [View video.](#)
- ___ b. When you unroll the strap, remove the liner from the copper foil at the end.
- ___ c. Attach the adhesive part of the copper foil to an **exposed, unpainted** metal surface on the frame of the unit.

Note: 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.

- ___ 5. Be sure you understand the steps in “Install removable media devices with system powered on” before you begin. If you do not feel comfortable using the concurrent procedure, go to “Install removable media devices with system powered off” on page 11.

Install removable media devices with system powered on

Be sure you understand the steps in this procedure before you begin. If you do not feel comfortable using the concurrent procedure, go to “Install removable media devices with system powered off” on page 11.


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.

To perform the concurrent installation, follow these steps:

- ___ 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. When the *Hardware Service Manager* menu appears, select the **Packaging hardware resources (system, frames, cards...)** option.
Press the Enter key.
- ___ 7. On the *Packaging Hardware Resources* menu, locate the expansion unit in which you are installing the removable media device.
- ___ 8. Once you locate your expansion unit, look at the *Frame ID* field. (The Frame ID is also displayed on the front of each expansion unit.)
- ___ 9. Write the number that appears in the *Frame ID* field here: _____ .
- ___ 10. Look at the label on the inside of the front cover of the expansion unit indicated in step 9. Find the position where you will be installing your removable media device.
- ___ 11. Write the number that appears in the *Phys* column for your device here: _____ . This number is the Device Position.
- ___ 12. Return to the *Hardware Service Manager* menu by pressing **F3** once.
- ___ 13. At the *Hardware Service Manager* display, select the **Device Concurrent Maintenance** option.
Press the Enter key.
- ___ 14. At the *Specify either Physical Location or Resource Name* field, type:
 - a. The number you determined in step 9 for Frame ID.
 - b. The physical location you determined in step 11 for Position.
- ___ 15. Pull out the removable media filler bezel from the location in which you are installing the new device.

- ___ 16. **If possible, use a wrist strap to prevent electrostatic discharge from damaging your hardware.** If you do not have a wrist strap, touch a metal surface of the system or expansion unit before installing or replacing hardware.

If you received the 2209 Disposable Wrist Strap, follow these steps:

- ___ a. Attach the disposable wrist strap.  View video.
- ___ b. When you unroll the strap, remove the liner from the copper foil at the end.
- ___ c. Attach the adhesive part of the copper foil to an **exposed, unpainted** metal surface on the frame of the unit.

Note: 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.

- ___ 17. Follow the steps in “Details: Install removable media devices with system powered on” to install the new removable media device.

Attention: Removable media devices are fragile. Handle with care.

Details: Install removable media devices with system powered on

To install the removable media device, follow these steps:

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

Attention: Removable media devices are fragile. Handle with care.

- ___ 2. Pull the handles out toward you before you install the removable media device into the system or expansion unit.
- ___ 3. Hold the device with the button in the upper right for tape units or lower right for CD-ROMs. Do not hold the removable media device by the handle.
- ___ 4. Refer to Figure 5 on page 11 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.
- ___ 5. At the *Specify action as* field, select option **Install device**.
- ___ 6. At the *Enter a time value between 00 and 19* field, type **01** for one minute. **Do not press Enter at this time.**

Note: Watch the light on the right side of the removable media devices. When you press Enter, after a one-minute delay, this light comes on and begins to blink rapidly. You then have nine seconds to slide the removable media device into place.

- ___ 7. Press the Enter key.
- ___ 8. 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.

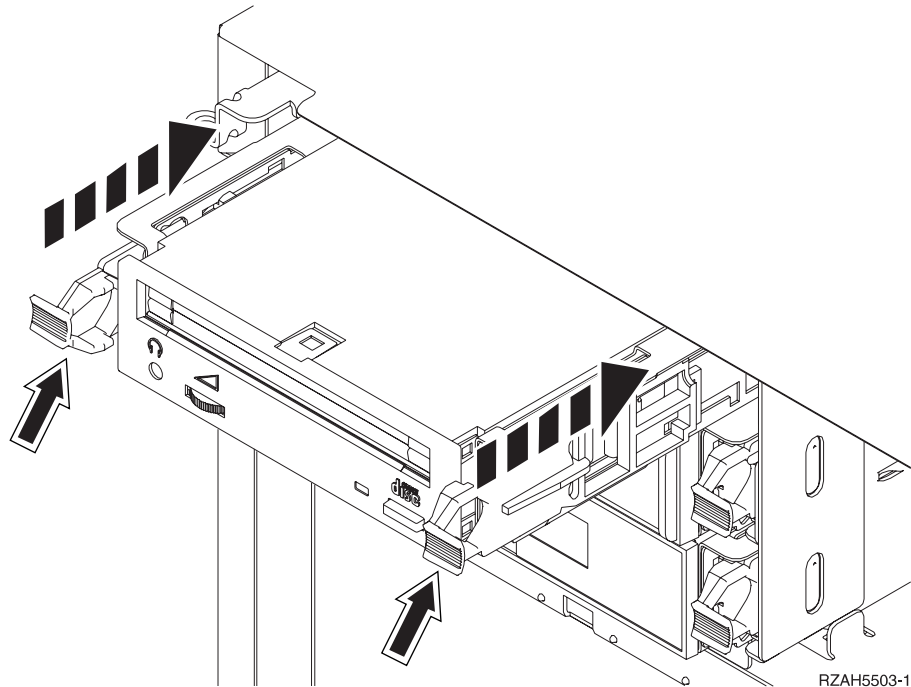


Figure 5. Installing removable media device

- ___ 9. The green light will stop blinking and remain on solid when you properly installed the removable media device.
- ___ 10. Return to the console and wait until the *Concurrent Maintenance Results* display appears.
Press the Enter key.
- ___ 11. When the *Hardware Service Manager* menu appears, select the **Packaging hardware resources (system, frames, cards...)** option.
Press the Enter key.
- ___ 12. On the *Packaging Hardware Resources* menu, enter a **9** in the *Opt* column next to the expansion unit with the new removable media device.
Press the Enter key.
- ___ 13. The *Description* and *Device Type-Model* will be displayed along with the position where your new removable media device was installed.
- ___ 14. Press **F3** once to return to the *Hardware Service Manager* display.
- ___ 15. 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.
- ___ 16. Install the front cover for the system or expansion unit.
- ___ 17. Press **F12** twice and press the Enter key to return to the Main menu.
- ___ 18. Your feature installation is complete.


Install removable media devices with system powered off

To install the removable media device, follow these steps:

- ___ 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. "Power down the system or expansion unit" on page 14.
- ___ 3. Open the front cover **A** (Figure 3 on page 7, 5074, 5094, 5095, 8093, 830, 840, 870, 890; Figure 4 on page 8, 5079 or 5294).
- ___ 4. If needed, use the latch that is shown at **B** to remove the front cover (Figure 3 on page 7, 5074, 5094, 5095, 8093, 830, 840, 870, 890; Figure 4 on page 8, 5079 or 5294).
- ___ 5. **If possible, use a wrist strap to prevent electrostatic discharge from damaging your hardware.** If you do not have a wrist strap, touch a metal surface of the system or expansion unit before installing or replacing hardware.

If you received the 2209 Disposable Wrist Strap, follow these steps:

- ___ a. Attach the disposable wrist strap.  View video.
- ___ b. When you unroll the strap, remove the liner from the copper foil at the end.
- ___ c. Attach the adhesive part of the copper foil to an **exposed, unpainted** metal surface on the frame of the unit.

Note: 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.

- ___ 6. Pull out the removable media filler bezel from the location in which you are installing the new device.
- ___ 7. Follow the steps in "Details: Install removable media devices with system powered off" to install the new removable media device.

Details: Install removable media devices with system powered off

To install the removable media device, follow these steps:

- ___ 1. Find the package that contains the new device and remove it from the static-protective package.
Attention: Removable media devices are fragile. Handle with care.
- ___ 2. Hold the device upright and pull both handles on both sides of the device toward you.
- ___ 3. 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.
- ___ 4. Refer to Figure 6 on page 13 and align the device with the position where you removed the filler bezel.
- ___ 5. Slide it into the unit until it **stops**.
- ___ 6. Push both handles in at the same time to lock the removable media device into place.

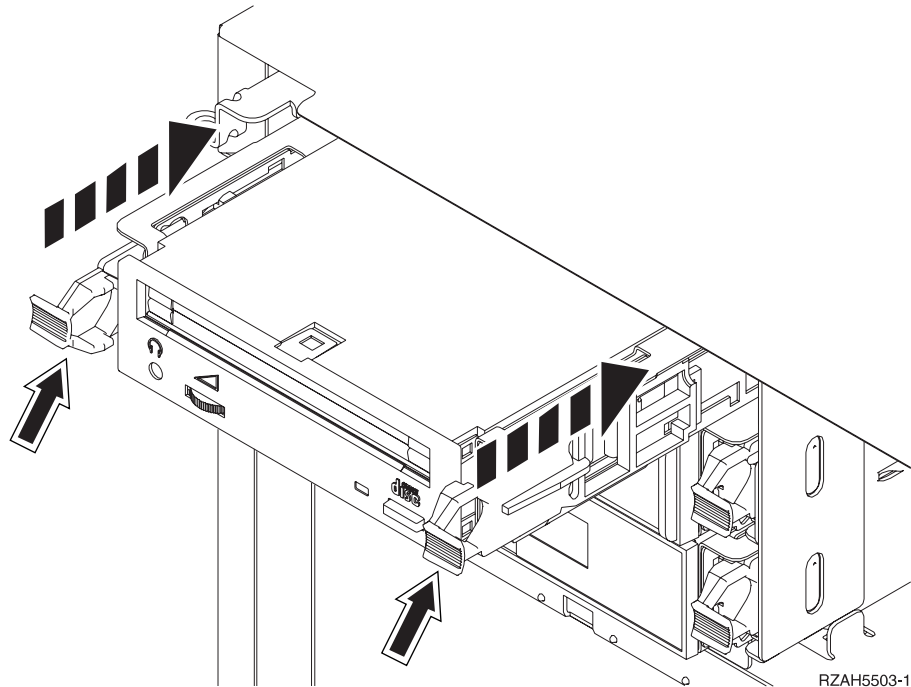


Figure 6. Installing removable media device

- ___ 7. Do you have any other devices to install?
 - ___ **No:** Continue with the next step.
 - ___ **Yes:** If you have another device such as a tape unit or a CD-ROM drive, refer to the instructions that came with that device.
- ___ 8. 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)

- ___ 9. Plug in the system unit and system unit console. Plug in everything you previously unplugged such as printers and displays.
- ___ 10. Power on all attached devices, such as printers and displays.
- ___ 11. Look at the Function/Data display on the control panel.
- ___ 12. 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 12a on page 13 through 12j.
- ___ 13. Power on the workstation or PC that is the console for your system.
- ___ 14. Press the power button to power on your system unit.
- ___ 15. Sign on the system unit. Ensure that you have service tools authority.
- ___ 16. 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 expansion unit with the new removable media device. Use the frame ID that is displayed on the front of your expansion unit.
 - ___ g. The *Description* and *Device Type-Model* will be displayed along with the position where your new removable media device 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.

Power down the system or expansion unit

To power down the system unit and any attached expansion units, follow these steps:

- ___ 1. If an Integrated xSeries Adapter (IXA) is present on the system, shut it down using OS/400 options.
- ___ 2. Ensure that all jobs are complete.
- ___ 3. Type **pwrdownsys *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 system or expansion unit from the electrical outlet.

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Electronic Emission Notices

Federal Communications Commission (FCC) statement

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

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

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

Responsible Party:

International Business Machines Corporation
New Orchard Road
Armonk, NY 10504

Telephone: 1-919-543-2193

Industry Canada Compliance Statement

This Class A digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

Australia and New Zealand Class A statement

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

VCCI Statement - Japan

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

The following is a summary of the VCCI Japanese statement in the box above.

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

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

Per GB 9254-1998, the user manual for a Class A product must carry the following warning message (English translation from the Chinese standard) about use in a residential environment in Chinese (*Simplified Chinese*):

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

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

Electromagnetic Interference (EMI) Statement - Taiwan

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

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

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

Radio Protection for Germany

Dieses Gerät ist berechtigt in Übereinstimmung mit Dem deutschen EMVG vom 9.Nov.92 das EG-Konformitätszeichen zu führen.

Der Aussteller der Konformitätserklärung ist die IBM Germany.

Dieses Gerät erfüllt die Bedingungen der EN 55022 Klasse A. Für diese von Geräten gilt folgende Bestimmung nach dem EMVG:

Geräte dürfen an Orten, für die sie nicht ausreichend entstört sind, nur mit besonderer Genehmigung des Bundesministers für Post und Telekommunikation oder des Bundesamtes für Post und Telekommunikation betrieben werden. Die Genehmigung wird erteilt, wenn keine elektromagnetischen Störungen zu erwarten sind.

(Auszug aus dem EMVG vom 9.Nov.92, Para.3, Abs.4)

Hinweis

Dieses Genehmigungsverfahren ist von der Deutschen Bundespost noch nicht veröffentlicht worden.

Electronic Emission Notices

The following Statement applies to this IBM product. The statement for other IBM products intended for use with this product will appear in their accompanying manuals.

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an IBM authorized dealer or service representative for help.

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

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

Responsible Party:

International Business Machines Corporation
New Orchard Road
Armonk, NY 10504

Telephone: 1-919-543-2193

Industry Canada Compliance Statement

This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Community Compliance Statement

This product is in conformity with the protection requirements of EC Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to CISPR 22 / European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

Properly shielded and grounded cables and connectors (IBM part number 75G5958 or its equivalent) must be used in order to reduce the potential for causing interference to radio and TV communications and to other electrical or electronic equipment. Such cables and connectors are available from IBM authorized dealers. IBM cannot accept responsibility for an interference caused by using other than

recommended cables and connectors.



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