ESCALA POWER5

Hardware Information

Power supply

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Hardware Information

Power supply

Hardware

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Table of Contents

Power supply

Learn how to remove, replace, and install power supplies.

Replacing this feature is a customer task. You can either perform this task yourself or contact a service provider to perform the task for you. You might be charged a fee by the service provider for this service.

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Parent topic: Power supply

Remove the model ESCALA PL 245T/R system unit power supply

Learn how to remove, replace, and install a power supply.

The following procedures describe the installation, removal, and replacement of the power supply in a model ESCALA PL 245T/R.

- **Remove the model ESCALA PL 245T/R power supply**
  Follow these steps to correctly remove a power supply.
- **Replace the model ESCALA PL 245T/R system unit power supply**
  Follow these steps to correctly replace a power supply with the system power off.

Parent topic: Power supply

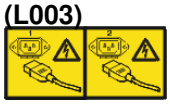
Remove the model ESCALA PL 245T/R power supply

Follow these steps to correctly remove a power supply.

To remove a power supply from a model ESCALA PL 245T/R, complete the following steps:

1. Perform the prerequisite tasks described in Before you begin.
2. If the system is running, Stop the system or logical partition.
3. Remove the side cover. Remove and replace model ESCALA PL 245T/R covers and doors.
4. Disconnect the power cable from the back of the power supply.

(L003)



or

5. Wait at least 10 seconds before performing the next step.

Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

6. Lift the disk drive cage by lifting up on the release tab and pulling the cage up until it locks into place as shown in the following figure.

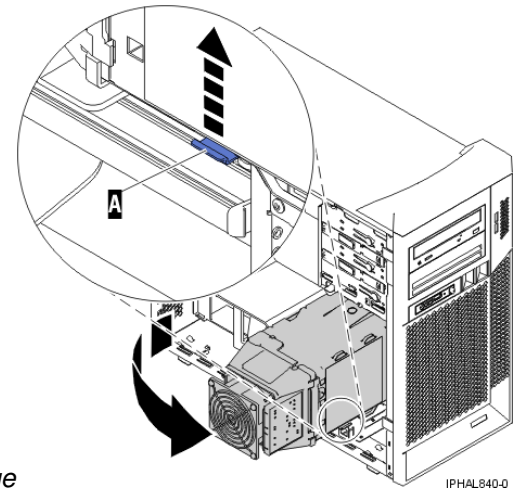


Figure 1. lifting the disk drive cage

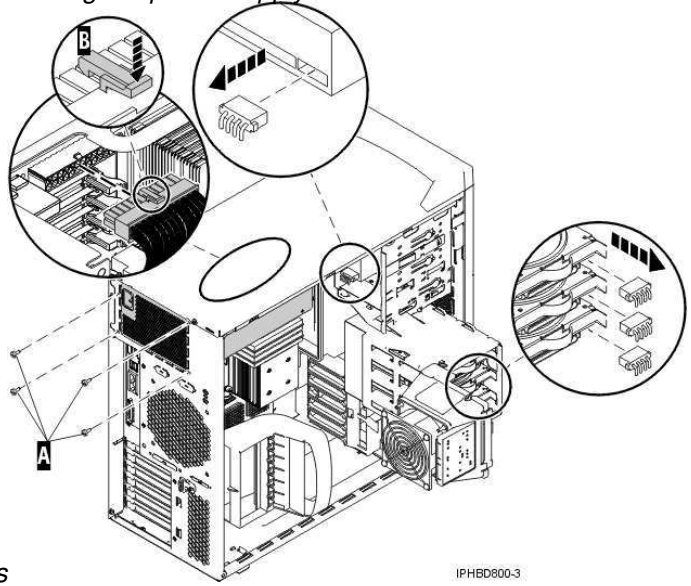
7. Open the air baffle door by lifting up on the tab in the center of the air baffle and pulling the door off of the air baffle.
8. Label and remove all power connectors from the system power supply.

Note: The release tab B on the main power connection to the system backplane is very close to the air baffle and might be difficult to reach. If you cannot reach the release tab with the baffle down, slightly lift the air baffle to press the release tab .

9. Remove the four thumbscrews A from the back of the system unit as shown in the following figure.

Note: The following figure shows the basic configuration. Take care to label all power cords and record their connection locations.

Figure 2. Removing the power supply



connections

10. Slide the power supply forward, releasing it from the bracket on the top of the system unit as shown in the following figure.

11. Remove the power supply from the system unit.

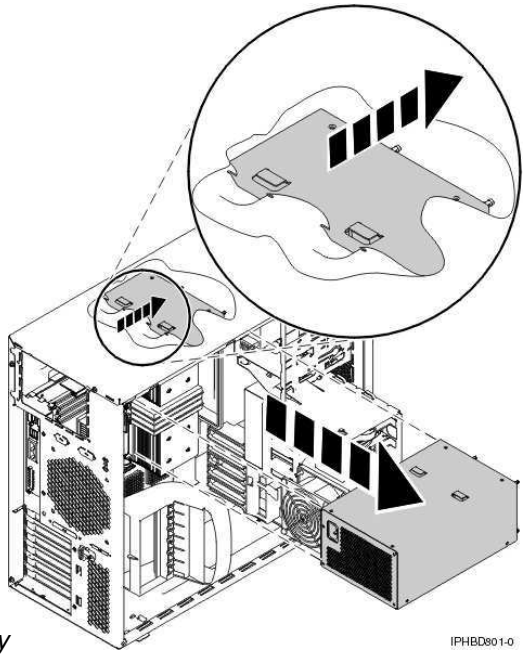


Figure 3. Detaching the power supply

To replace the power supply see, Replace the model ESCALA PL 245T/R system unit power supply

Parent topic: Remove the model ESCALA PL 245T/R system unit power supply

Stop the system or logical partition

Learn how to stop a system or logical partition.

Attention: Using either the power-on button on the control panel or entering commands at the Hardware Management Console (HMC) to stop the system can cause unpredictable results in the data files. Also, the next time you start the system, it might take longer if all applications are not ended before stopping the system.

To stop the system or logical partition, select the appropriate procedure:

- **Stop the system that is not managed by a Hardware Management Console**
- **Stop the system or logical partition using the Hardware Management Console**

Parent topic: Start or stop the system or logical partition

Related tasks

Start the system or logical partition

Stop the system that is not managed by a Hardware Management Console

The following procedure describes how to stop a system that is not managed by a Hardware Management Console (HMC).

Prepare to stop the system

Before you stop the system, do the following:

1. Ensure that all jobs are completed and end all applications.
2. Ensure that the operating system is stopped. Failure to do so can result in the loss of data.
3. Write down the information displayed on the control panel if you are stopping your system due to an error or to make a repair. For more information, see Collecting reference codes and system information.

Stop the system

To stop a system, follow these steps:

1. Log in to the system as a user with the authority to run the `shutdown` or `pwrdwnsys` (Power Down System) command.
2. At the command line, enter one of the following commands:
   - If your system is running AIX, type **`shutdown`**.
   - If your system is running Linux, type **`shutdown -h now`**.

   The command stops the operating system. The system power turns off, the power-on light begins to slowly blink, and the system goes into a standby state.
3. Set the power switches of any devices connected to the system to off.
4. Unplug any power cables that are attached to the unit from electrical outlets. Ensure that you unplug power cables from peripheral devices, such as printers and expansion units.

   Important: The system might be equipped with a second power supply. Before continuing with this procedure, ensure that all power sources to the system have been completely disconnected.

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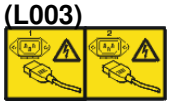


or

Parent topic: Stop the system or logical partition

Stop the system or logical partition using the Hardware Management Console

You can use the Hardware Management Console (HMC) user interface to stop the system or a logical partition. For instructions on stopping the system, see Powering off the managed system.

Parent topic: Stop the system or logical partition

Replace the model ESCALA PL 245T/R system unit power supply

Follow these steps to correctly replace a power supply with the system power off.

Note: Do not attach the power cord to the power supply until instructed to do so.

To replace a power supply in a model ESCALA PL 245T/R, complete the following steps:

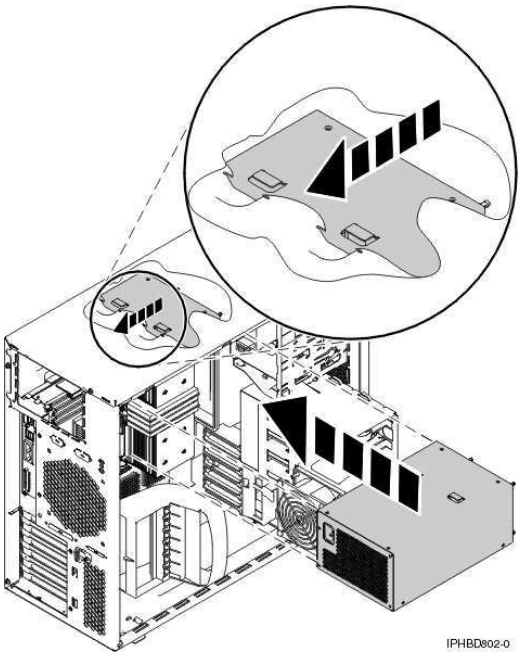
1. If you have not previously removed the power supply, do so now. See Remove the model ESCALA PL 245T/R power supply.

   Attention:

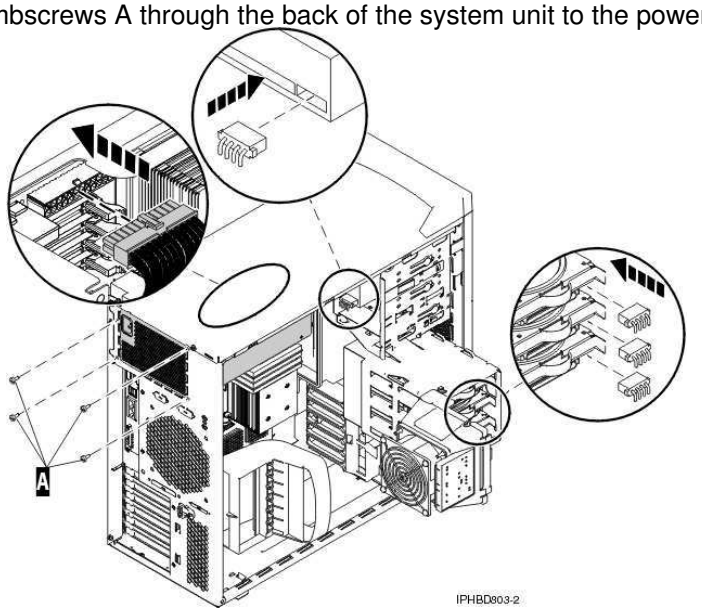
   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
   - If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

2. Perform the prerequisite tasks described in Before you begin.
3. Slide the power supply into the bracket on the top of the system unit as shown in the following figure.

   Figure 1. Attaching the power supply



4. Attach the four thumbscrews A through the back of the system unit to the power supply as shown in the following figure.



5. Attach the power connectors to the system in the locations you noted in the remove process.

   Note: The previous figure shows a basic configuration; your system might be different.

6. Push the disk drive cage slightly forward, press the release tab, and lower the cage into the system as shown in the following figure.

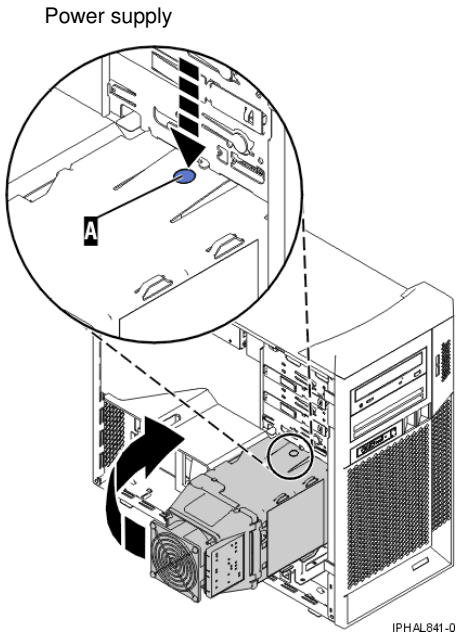


Figure 2. lowering the disk drive cage

7. Reconnect the power cable at the back of the power supply.
8. Replace the side cover. For instructions, see Remove and replace model ESCALA PL 245T/R covers and doors.
9. Reconnect the cables at the back of the system.
10. On a rack-mounted system unit, close the back rack door.
11. If the system was stopped, Start the system or logical partition.

Parent topic: Remove the model ESCALA PL 245T/R system unit power supply

Start the system or logical partition

Use these instructions to start a system or logical partition.

- **Start a system that is not managed by a Hardware Management Console**
- **Start the system or logical partition using the Hardware Management Console**

Parent topic: Start or stop the system or logical partition

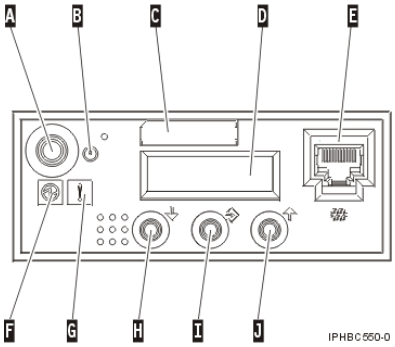
Related tasks

Stop the system or logical partition

Start a system that is not managed by a Hardware Management Console

To start a system that is not managed by a Hardware Management Console (HMC), follow these steps:

1. On a rack-mounted system unit, open the front rack door, if necessary. On a stand-alone system unit, open the front door.
2. Before you press the power button on the control panel, ensure that power is connected to the system unit as follows:
   - All system power cables are connected to a power source.
   - The power-on light F, as shown in the following figure, is slowly blinking.
   - The top of the display D, as shown in the following figure, contains `01 V=F`.



Tip: The system attention light G, as shown in the previous figure, does not appear on the control panel on the model ESCALA PL 850R/PL 1650R/R+.

3. Press the power button A, as shown in the following figure, on the control panel.

Note: On the 7/10 or model ESCALA PL 250R-L, the power button is on the operations panel.

4. Observe the following after pressing the power button:
   - The power-on light begins to blink visibly faster.
   - The system cooling fans are activated after approximately 30 seconds and begin to accelerate to operating speed.
   - Progress indicators, also referred to as checkpoints, appear on the control panel display while the system is being started. The power-on light on the control panel stops blinking and remains on, indicating that system power is on.

Tip: If pressing the power button does not start the system, use the following instructions to start the system using the Advanced System Management Interface (ASMI).

- Set up access to the ASMI. For instructions, see Accessing the ASMI.
- Start the system using the ASMI. For instructions, see Powering the system on and off.

Parent topic: Start the system or logical partition

Start the system or logical partition using the Hardware Management Console

After the required cables are installed and the power cables are connected to a power source, you can use the Hardware Management Console (HMC) user interface to start the system or logical partition.

For instructions on working with the HMC, see Managing the Hardware Management Console. For instructions on starting a logical partition, see Activating a partition profile. For instructions on starting the system, see Powering on the managed system.

Progress indicators, also referred to as checkpoints, appear on the control panel display while the system is being started. The power-on light on the control panel stops blinking and remains on, indicating that system power is on.

Parent topic: Start the system or logical partition

Model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply

Learn how to install, remove, and replace the power supply.

The following procedures describe the installation, removal, and replacement of the power supply in the server ESCALA PL 250R-VL or ESCALA PL 450R-XS. This server can have up to two power supplies.

- **Install or replace a model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply with the power on**
  Learn to install a second power supply, or replace one of two power supplies present in the system.
- **Remove and replace the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply with power off**
  View these instructions for installing a feature that requires removal of the power supplies, or replacing the primary or the only power supply present in the system.

Parent topic: Power supply

Related References

Power supply LEDs

Install or replace a model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply with the power on

Learn to install a second power supply, or replace one of two power supplies present in the system.

The following procedure describes how to install a power supply or replace a power supply when two power supplies are present in a model server. The system power can remain on under the following conditions:

- When installing a second power supply.
- When one of the two power supplies present in the system must be replaced.

To install a second power supply or to replace a failing power supply when two are present in the system, do the following procedure:

1. Perform the prerequisite tasks described in Before you begin.
2. On a rack-mounted system unit, open the back rack door.

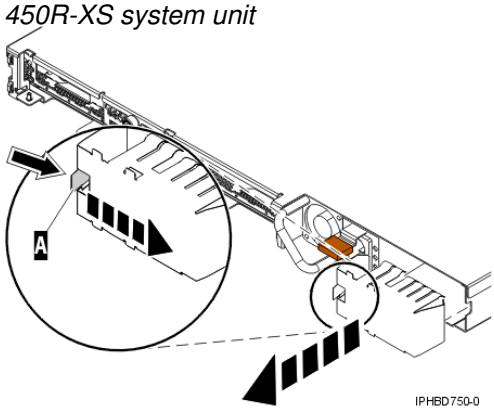
3. If a failing power supply is present, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
4. Disconnect the power cable from the failing power supply at the back of the system.

Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

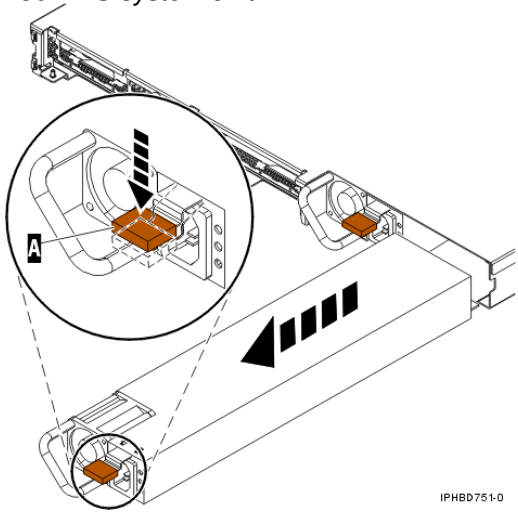
5. Ensure that the power supply bay is empty by doing one of the following steps:
   - Remove the power supply filler by pushing the tab A to the right and pulling the filler out of the system.

Figure 1. Remove a power supply filler from a model ESCALA PL 250R-VL or ESCALA PL 450R-XS system unit



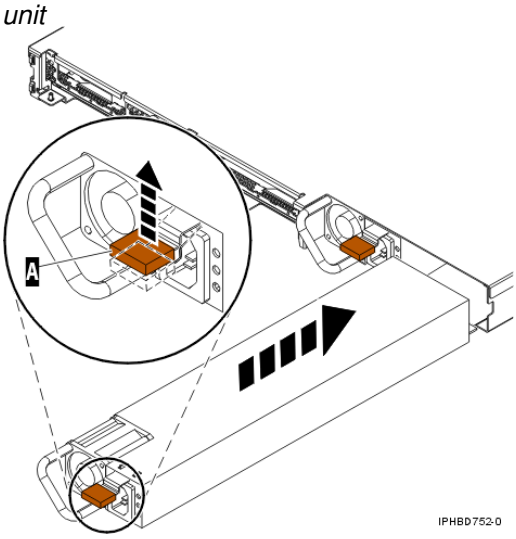
   - Remove a failing power supply by doing the following:
     a. Press the terra-cotta tab A while grasping the handle.
     b. After the power supply is released, use the handle to pull the power supply out.

Figure 2. Remove a power supply from a model ESCALA PL 250R-VL or ESCALA PL 450R-XS system unit



6. As shown in Figure 3, insert the new power supply into the power supply bay.

Figure 3. Install a power supply in a model ESCALA PL 250R-VL or ESCALA PL 450R-XS system unit



7. Slowly press the power supply into the system. The power supply tab A will snap into place, which indicates that the power supply is seated correctly and locked into position.
8. If you are installing a second power supply feature, plug the second power cable into the back of the new power supply. If you have just replaced a power supply, reconnect the power cable to the new power supply by routing it through the handle.
9. Connect the power source to the system.
10. Note the state of the light-emitting diodes (LEDs) on the power supply. For more information, read Power supply LEDs. If the LEDs indicate the power supply is operating normally, that is both of the green LEDs are on solid (not blinking), continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 7. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
11. If you are working on a rack-mounted system unit, ensure the system cables are routed correctly through the cable-management arm.
12. Reconnect the cables at the back of the system.
13. On a rack-mounted system unit, close the back rack door.

Parent topic: Model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply

Remove and replace the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply with power off

View these instructions for installing a feature that requires removal of the power supplies, or replacing the primary or the only power supply present in the system.

The following procedures describe the removal and replacement of the power supply in a model server while the power is off. This system can have up to two power supplies. A power supply is removed and replaced while the system power is off under the following conditions:

- The primary power supply has failed and a secondary power supply is not present in the system.
- The power supply must be removed from the system to repair another part of the system.

1. Remove the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply
   Learn how to remove a power supply with the system power off.
2. Replace the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply
   Learn how to replace a power supply with the system power off.

Parent topic: Model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply

Remove the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply

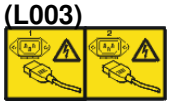
Learn how to remove a power supply with the system power off.

To remove a power supply from a model server while the system power is off, do the following procedure:

1. Perform the prerequisite tasks described in Before you begin.
2. If you are removing the power supply as part of another procedure, continue to the next step. If you are removing the power supply because it is not operational, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
3. If the system is running, Stop the system or logical partition.
4. On a rack-mounted system unit, open the back rack door.
5. Disconnect the power cable from the back of the power supply that you want to remove.

   Note: This system might be equipped with a second power supply. Before continuing with this procedure, ensure that all power sources to the system have been completely disconnected.

   (L003)

   or

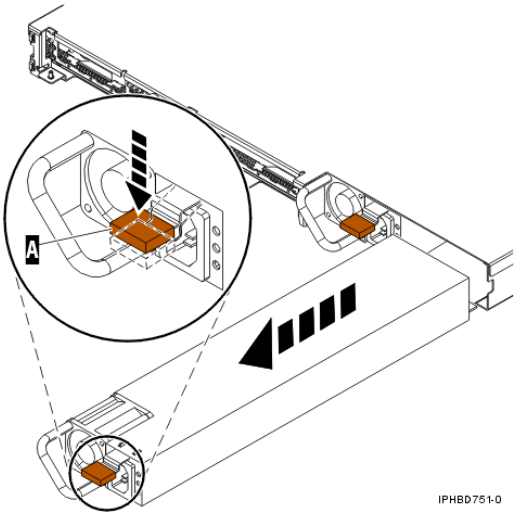
6. Wait at least 10 seconds before performing the next step.

   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
   - If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

7. As shown in Figure 1, depress the terra-cotta tab A while grasping the handle.

   Figure 1. Remove a power supply from a model ESCALA PL 250R-VL or ESCALA PL 450R-XS system unit



8. After the power supply is released, use the power supply handle to pull the power supply out of the system.

Parent topic: Remove and replace the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply with power off **Next topic:** Replace the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply

Replace the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply

Learn how to replace a power supply with the system power off.

Notes:

1. Do not connect the power cables to the power source until you are instructed to do so.
2. During normal operation, the secondary power-supply bay must have either a power supply or filler panel installed for proper cooling.

To replace a power supply in a model server, do the following procedure:

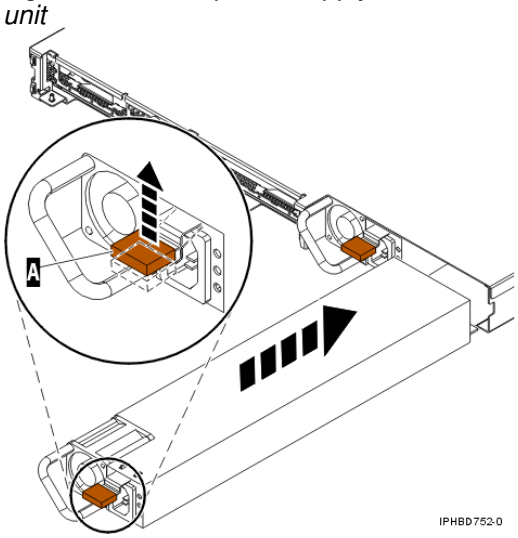
1. If you have not previously removed the power supply, do so now. For instructions, see Remove the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply.

   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
   - If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

2. As shown in Figure 1, grasp the power supply handle A and carefully insert the new power supply into the power supply bay.

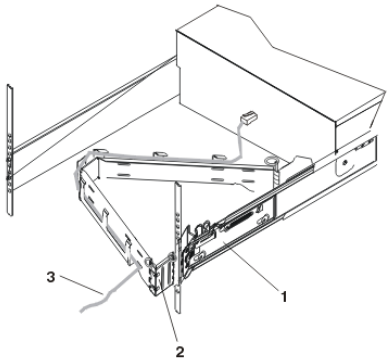
Figure 1. Install a power supply in a model ESCALA PL 250R-VL or ESCALA PL 450R-XS system unit



3. Slowly press the power supply into the system. The power supply tab will snap into place, which indicates that the power supply is seated correctly and locked into position.
4. Reconnect the power cable at the back of the power supply through the handle, if provided.
5. Note the state of the light-emitting diodes (LEDs) on the power supply. For information about the states of the power supply LEDs, read Power supply LEDs.

   If the LEDs indicate that the power supply is operating correctly, continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 2. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
6. If you are working on a rack-mounted system unit, ensure the system cables are routed correctly through the cable-management arm.

Figure 2. Cables routed through the cable-management arm



7. Reconnect the cables at the back of the system.
8. On a rack-mounted system unit, close the back rack door.
9. If the system was stopped, Start the system or logical partition.

Parent topic: Remove and replace the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply with power off **Previous topic:** Remove the model ESCALA PL 250R-VL or ESCALA PL 450R-XS power supply

Model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply

Learn how to remove, replace, and install a power supply.

The following procedures describe the installation, removal, and replacement of the power supply in a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ . The model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ server can have up to two power supplies.

- **Install or replace a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply with power on**
  Follow these instruction to install a second power supply, or replace one of two power supplies present in the system.
- **Remove and replace a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply with power off**
  These procedures describe how to install a feature that requires removal of the power supplies, or how to replace the primary or only power supply present in a system unit.

Parent topic: Power supply

Related References

Power supply LEDs

Install or replace a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply with power on

Follow these instruction to install a second power supply, or replace one of two power supplies present in the system.

This procedure is intended to be used for a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply. The system power can remain on under the following conditions:

- When installing a second power supply.
- When one of the two power supplies present in the system must be replaced.

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for installing a power supply. For instructions, see Install a feature using the Hardware Management Console.

To install a second power supply or to replace a failing power supply when two are present in the system, do the following procedure:

1. Perform the prerequisite tasks described in Before you begin.
2. On a rack-mounted system unit, open the back rack door.
3. If a failing power supply is present, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
4. Disconnect the power cable from the failing power supply at the back of the system.

Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.

- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

5. Place the rack-mounted system or expansion unit in the service position.
6. Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
7. Ensure that the power supply bay is empty by doing one of the following steps:
   a. Remove the power supply filler A by grasping the handle and pulling the filler inward in the direction of the arrows and then out of the system.

Figure 1. Remove a power supply filler from a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ rack-mounted system unit

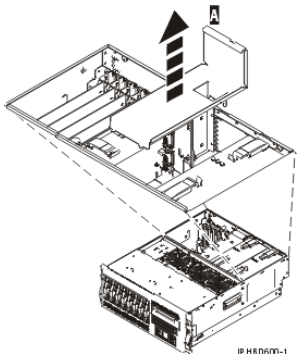
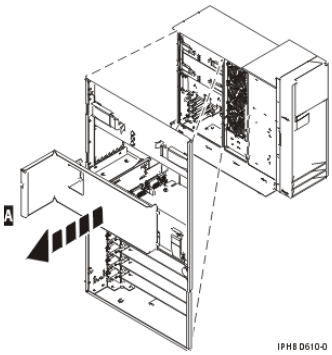


Figure 2. Remove a power supply filler from a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ stand-alone system unit



   b. Remove a failing power supply by doing the following:
      i. Squeeze the tabs on the power supply handles A as shown in Figure 3 or Figure 4, and then slowly rotate the handles B to the open position to release the power supply from the system.
      ii. After the power supply is released, use the power supply handles to pull the power supply C out of the system.

Figure 3. Remove a power supply from a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ rack-mounted system unit

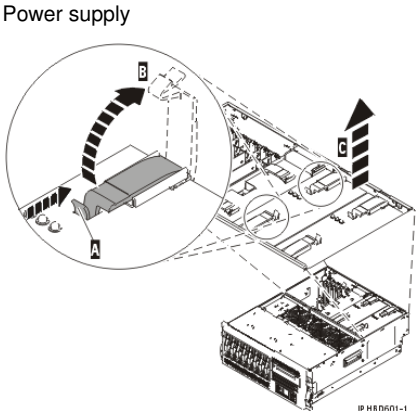
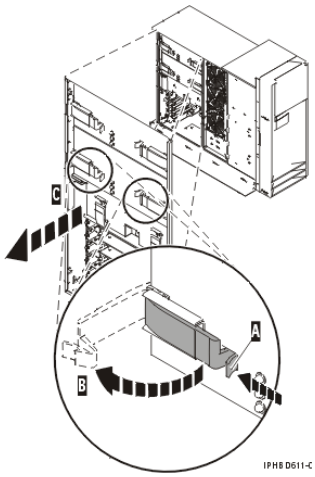


Figure 4. Remove a power supply from a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ stand-alone system unit



8. Open the power supply handles located on the top of the new power supply.
9. As shown in Figure 5 or Figure 6, grasp the power supply handles and carefully insert the new power supply A into the power supply bay.
10. Slowly press the power supply into the system. The power supply handle tabs will snap into place, which indicates that the power supply is seated correctly and locked into position B.

Figure 5. Install a power supply in a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ rack-mounted system unit

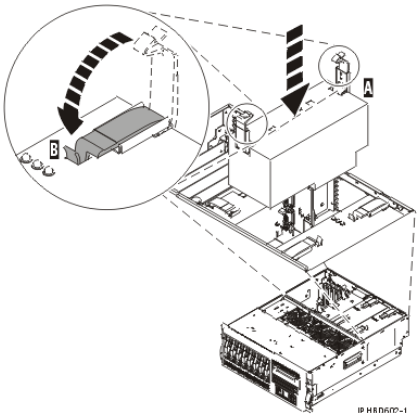
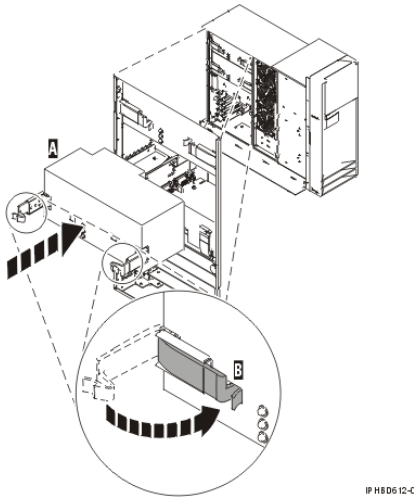


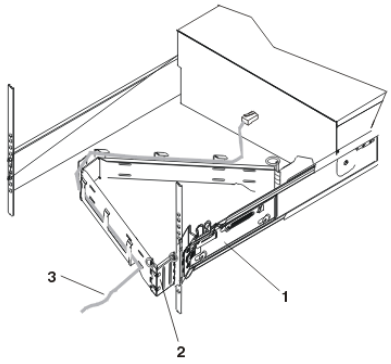
Figure 6. Install a power supply in a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ stand-alone system unit

Power supply



11. If you are installing a second power supply feature, plug the second power cable into the back of the new power supply. If you have just replaced a power supply, reconnect the power cable to the new power supply by routing it through the ring, if provided, before you plug it into the back of the server. For an example, see Figure 2 in Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on.
12. Connect the power source to the system.
13. Note the state of the light-emitting diodes (LEDs) on the power supply. For more information, read Power supply LEDs. If the LEDs indicate the power supply is operating normally, that is both of the green LEDs are on solid (not blinking), continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 9. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
14. Replace the service access cover. For instructions, see Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
15. If you are working on a rack-mounted system unit, ensure that the system cables are routed correctly through the cable-management arm.

Figure 7. Cables routed through the cable-management arm



16. If you have a rack-mounted system unit, Place the rack-mounted system or expansion unit in the operating position.
17. Reconnect the cables at the back of the system.
18. On a rack-mounted system unit, close the back rack door.

Parent topic: Model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply

Remove and replace a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply with power off

These procedures describe how to install a feature that requires removal of the power supplies, or how to replace the primary or only power supply present in a system unit.

A model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ can have up to two power supplies. A power supply is removed and replaced while the system power is off under the following conditions:

- The primary power supply has failed and a secondary power supply is not present in the system.
- The power supply must be removed from the system to repair another part of the system.

The 112/85 server has only one power supply that must be removed and replaced while the system power is off.

1. Remove the model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply
   Follow these steps to correctly remove a power supply with the system power off.
2. Replace the model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply
   Follow these steps to correctly replace a power supply with the system power off.

Parent topic: Model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply

Remove the model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply

Follow these steps to correctly remove a power supply with the system power off.

To remove a power supply from a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ while the system power is off, do the following procedure:

Attention: If you are removing a redundant power supply and are not going to replace that power supply you must insert a power supply filler for proper cooling. Failure to do so could cause the system to fail or damage the system components.

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for removing a power supply. For instructions, see Remove a part using the Hardware Management Console.

To remove a power supply while the system power is off, do the following procedure:

1. Perform the prerequisite tasks described in Before you begin.
2. If you are removing the power supply as part of another procedure, continue to the next step. If you are removing the power supply because it is not operational, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
3. If the system is running, Stop the system or logical partition.
4. On a rack-mounted system unit, open the back rack door.
5. Disconnect the power cable from the back of the power supply that you want to remove.

Note: This system is equipped with a second power supply. Before continuing with this procedure, ensure that all power sources to the system have been completely disconnected.

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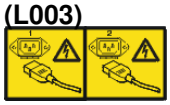


or

6. If you are servicing a rack-mounted system unit, Place the rack-mounted system or expansion unit in the service position.
7. Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
8. Wait at least 10 seconds before performing the next step.

Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

9. As shown in Figure 1 or Figure 2, squeeze the tabs on the power supply handles A and then slowly rotate the handles B to release the power supply or filler from the system. For a model 112/85, see Figure 3.
10. After the power supply is released, use the power supply handles to pull the power supply C out of the system.

Figure 1. Power supply removal from a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ rack-mounted system unit

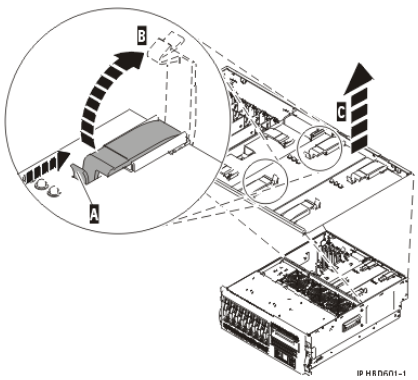


Figure 2. Power supply removal from a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ stand-alone system unit

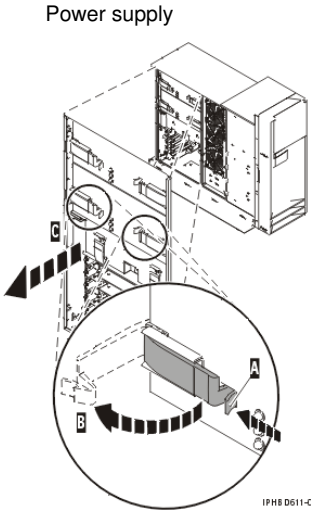
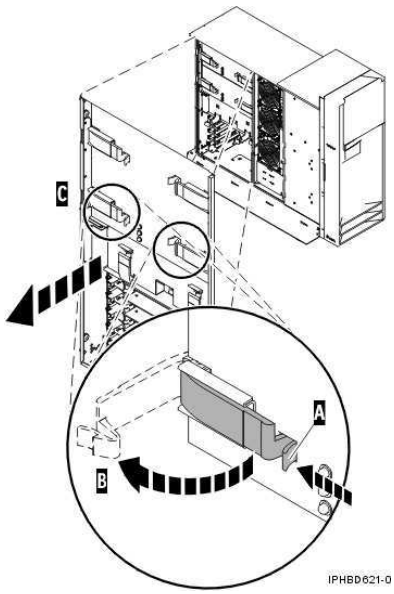


Figure 3. Power supply removal from a model 112/85 stand-alone system unit



Parent topic: Remove and replace a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply with power off **Next topic:** Replace the model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply

Replace the model 112/85 or ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply

Follow these steps to correctly replace a power supply with the system power off.

Notes:

1. Do not connect the power cables to the power source until you are instructed to do so.
2. During normal operation, the secondary power-supply bay must have either a power supply or filler panel installed for proper cooling.

To replace a power supply in a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ , do the following procedure:

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for replacing a power supply. For instructions, see Replace a part using the Hardware Management Console.

To replace a power supply, do the following procedure:

1. If you have not previously removed the power supply, do so now. See Remove the model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply.

   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
   - If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

2. Open the power supply handles A on the top of the new power supply as shown in Figure 1 or Figure 1. For a model 112/85, see Figure 3.
3. Grasp the power supply handles and carefully insert the new power supply A into the power supply bay. For a model 112/85, see Figure 3.
4. Slowly press the power supply into the system. The power supply handle tabs A will snap into place, which indicates that the power supply is seated correctly and locked into position B.

Figure 1. Replace a power supply in a model ESCALA PL 250T/R rack-mounted system unit

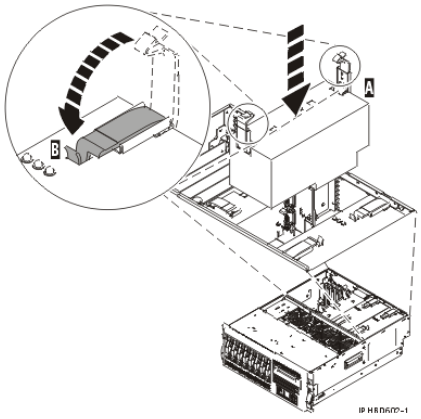


Figure 2. Replace a power supply in a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ stand-alone system unit

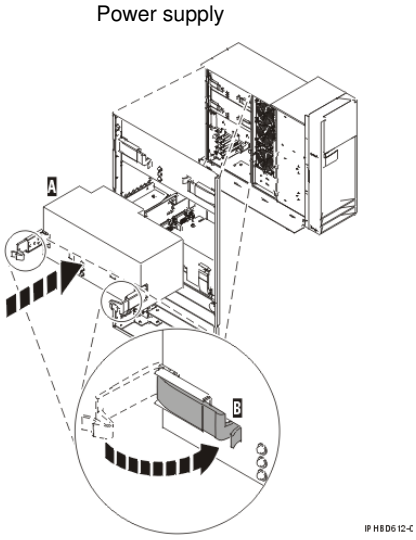


Figure 3. Replace a power supply in a model 112/85 stand-alone system unit

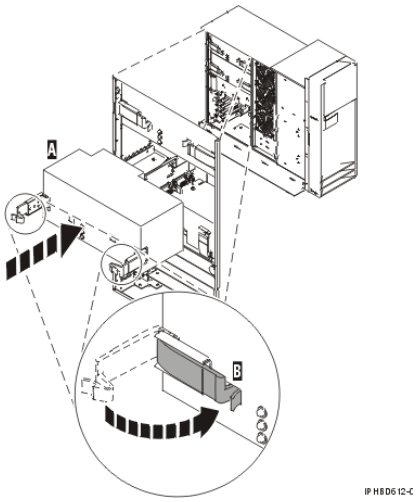
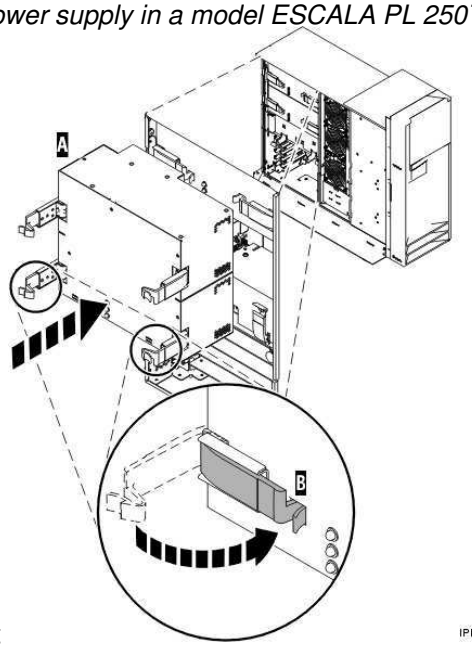


Figure 4. Replace a double wide power supply in a model ESCALA PL 250T/R, PL 250T/R+ or PL



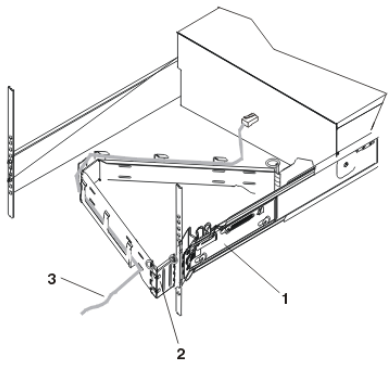
450T/R-L+ stand-alone system unit

5. Reconnect the power cable at the back of the power supply. If you have just replaced a power supply, reconnect the power cable to the new power supply by routing it through the ring, if provided, before you plug it into the back of the server. For an example, see Figure 2 in Replace the model ESCALA

PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on.

6. Note the state of the light-emitting diodes (LEDs) on the power supply. For information about the states of the power supply LEDs, read Power supply LEDs. If the LEDs indicate that the power supply is operating normally, continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 2. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
7. Replace the service access cover. For instructions, see Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
8. If you are working on a rack-mounted system unit, ensure that the system cables are routed correctly through the cable-management arm.

Figure 5. Cables routed through the cable-management arm



1 System rail
2 Cable management arm
3 Cable

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9. If you are servicing a rack-mounted model ESCALA PL 250T/R system unit, place the rack-mounted system or expansion unit in the operating position. For instructions, see Place the rack-mounted system or expansion unit in the operating position.
10. Reconnect the cables at the back of the system.
11. On a rack-mounted system unit, close the back rack door.
12. If the system was stopped, Start the system or logical partition.

Parent topic: Remove and replace a model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply with power off **Previous topic:** Remove the model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+ power supply

Model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply

Learn how to install, remove, and replace the power supply.

The following procedures describe the installation, removal, and replacement of the power supply in a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply. These servers can have up to two power supplies.

- **Install or replace a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply with power on**
  Follow these instructions to install a second power supply, or replace one of two power supplies present in the system.
- **Remove and replace the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply with power off**
  This procedure describes how to install a second power supply, or replace one of two power supplies present in the system.

Parent topic: Power supply

Related References

Power supply LEDs

Install or replace a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply with power on

Follow these instructions to install a second power supply, or replace one of two power supplies present in the system.

The following procedure describes how to install a power supply or replace a power supply when two power supplies are present in model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ system unit. The system power can remain on under either of the following conditions:

- You are installing a second power supply.
- One of the two power supplies present in the system must be replaced.

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for installing a power supply. For instructions, see Install a feature using the Hardware Management Console.

To install a second power supply or to replace a failing power supply when two are present in the system, do the following procedure:

1. Perform the prerequisite tasks described in Before you begin.
2. On a rack-mounted system unit, open the back rack door.
3. If a failing power supply is present, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
4. Disconnect the power cable from the failing power supply at the back of the system.

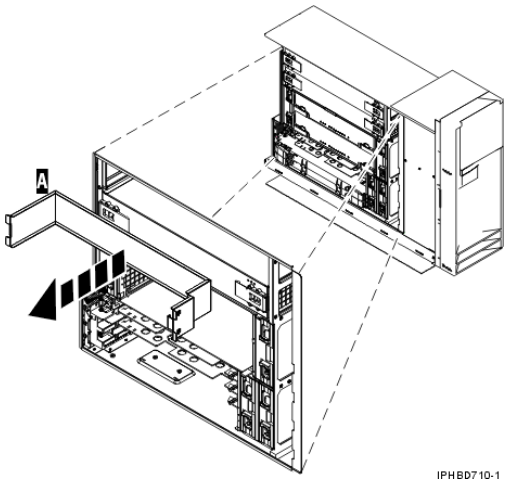
Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

5. Place the rack-mounted system or expansion unit in the service position.
6. Remove the service access cover. For instructions, see Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
7. Ensure that the power supply bay is empty by doing one of the following methods:
   a. Remove the power supply filler A by grasping the handle and pulling the filler inward in the direction of the arrows and then out of the system.

Figure 1. Remove a power supply filler from a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ rack-mounted system unit

Figure 2. Remove a power supply filler from a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ stand-alone system unit



b. Remove a failing power supply by doing the following steps:
    i. Squeeze the tabs on the power supply handles A as shown in Figure 3 or Figure 4 and then slowly rotate the handles B to the open position to release the power supply from the system.
    ii. After the power supply is released, use the power supply handles to pull the power supply C out of the system.

Figure 3. Remove a power supply from model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, server, rack-mounted system unit

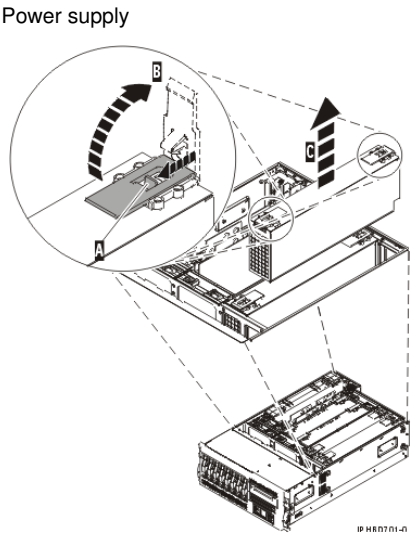
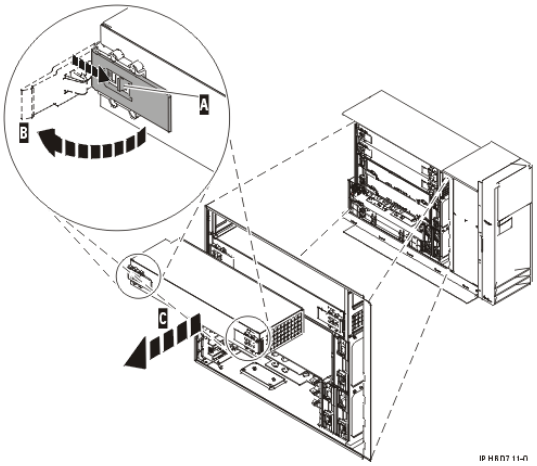


Figure 4. Remove a power supply from model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ stand-alone system unit



8. Open the power supply handles on top of the new power supply.
9. As shown in Figure 5 or Figure 6, grasp the power supply handles and carefully insert the new power supply A into the power supply bay.
10. Slowly press the power supply into the system. The power-supply-handle tabs will snap into place, which indicates that the power supply is seated correctly and locked into position B.

Figure 5. Install a power supply in model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ rack-mounted system unit

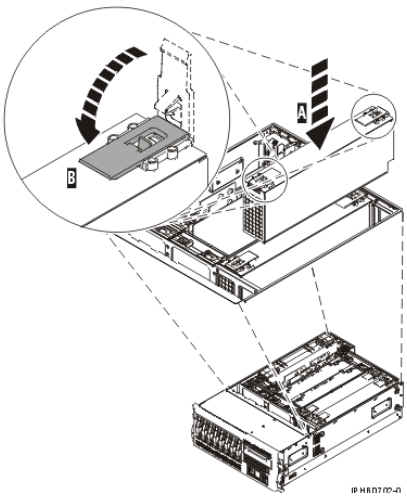
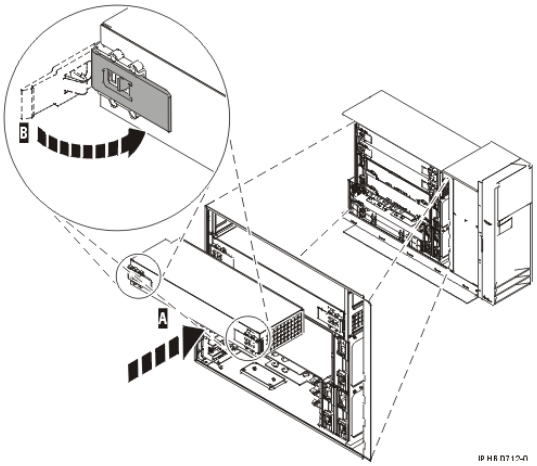
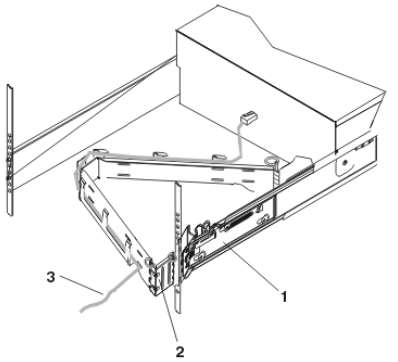


Figure 6. Install a power supply in model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ stand-alone system unit



11. If you are installing a second power supply feature, plug the second power cable into the back of the new power supply. If you have just replaced a power supply, reconnect the power cable to the new power supply by routing it through the ring, if provided, before you plug it into the back of the server. For an example, see Figure 2 in Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on.
12. Connect the power source to the system.
13. Note the state of the light-emitting diodes (LEDs) on the power supply. For more information, read Power supply LEDs. If the LEDs indicate that the power supply is operating normally, that is both of the green LEDs are on solid (not blinking), continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 9. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
14. Replace the service access cover. For instructions, see Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
15. If you are working on a rack-mounted system unit, ensure that the system cables are routed correctly through the cable-management arm.

Figure 7. Cables routed through the cable-management arm



1 System rail
2 Cable management arm
3 Cable

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16. If you have a rack-mounted system unit, place the rack-mounted system or expansion unit in the operating position. Refer to Place the rack-mounted system or expansion unit in the operating position.
17. Reconnect the cables at the back of the system.
18. On a rack-mounted system unit, close the back rack door.

Parent topic: Model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply

Remove and replace the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply with power off

This procedure describes how to install a second power supply, or replace one of two power supplies present in the system.

The following procedures describe the removal and replacement of a power supply in the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ while the system power is off. This system can have up to two power supplies. A power supply is removed and replaced with the system power off under the following conditions:

- The primary power supply has failed and a secondary power supply is not present in the system.
- The power supply must be removed from the system to repair another part of the system.

1. Remove the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply
   Follow these steps to correctly remove a power supply with the system power off.
2. Replace the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply
   Follow these steps to correctly replace a power supply with the system power off.

Parent topic: Model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply

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Remove the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply

Follow these steps to correctly remove a power supply with the system power off.

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for removing a power supply. For instructions, see Remove a part using the Hardware Management Console.

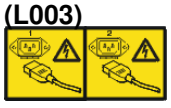
Note: If you are removing a redundant power supply, and are not going to replace that power supply, you will need to place a power supply filler into the empty bay for proper airflow and electromagnetic compatibility (EMC) shielding.

To remove a power supply from a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ while the system power is off, do the following steps:

1. Perform the prerequisite tasks described in Before you begin.
2. If you are removing the power supply as part of another procedure, continue to the next step. If you are removing the power supply because it is not operational, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
3. If the system is running, Stop the system or logical partition.
4. On a rack-mounted system unit, open the back rack door.
5. Disconnect the power cable from the back of the power supply that you want to remove.

   Note: This system might be equipped with a second power supply. Before continuing with this procedure, ensure that all power sources to the system have been completely disconnected.

(L003)



or

6. If you are servicing a rack-mounted system unit, place the rack-mounted system or expansion unit in the service position. For instructions, see Place the rack-mounted system or expansion unit in the service position.
7. Remove the service access cover, see Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
8. Wait at least 10 seconds before performing the next step.

Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

9. As shown in Figure 1 or Figure 2, squeeze the tabs on the power supply handles A and then slowly rotate the handles to release the power supply or filler from the system B.
10. After the power supply is released, use the power supply handles to pull the power supply out of the system C.

Figure 1. Remove a power supply from a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ rack-mounted system unit

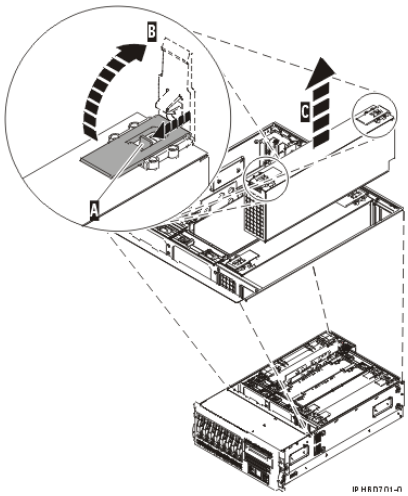
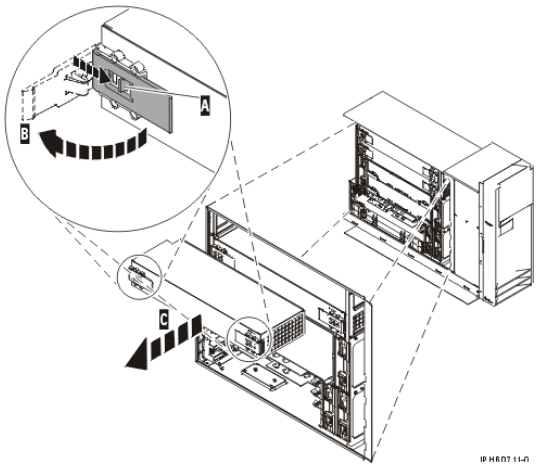


Figure 2. Remove a power supply from a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ stand-alone system unit

Power supply



Parent topic: Remove and replace the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply with power off **Next topic:** Replace the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply

Replace the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply

Follow these steps to correctly replace a power supply with the system power off.

Notes:

1. Do not connect the power cables to the power source until you are instructed to do so.
2. During normal operation, the secondary power-supply bay must have either a power supply or filler panel installed for proper cooling.

To replace a power supply in a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ , do the following procedure:

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for replacing a power supply. For instructions, see Replace a part using the Hardware Management Console.

To replace a power supply, do the following steps:

1. To remove the power supply, see Remove the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply.

   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
   - If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

2. Open the power supply handles on top of the new power supply, see Figure 1 or Figure 2.
3. As shown in Figure 1 or Figure 2, grasp the power supply handles and carefully insert the new power supply A into the power supply bay.
4. Slowly press the power supply into the system. The power supply handle tabs will snap into place, which indicates that the power supply is seated correctly and locked into position B.

Figure 1. Replace a power supply in a model ESCALA PL 450T/R rack-mounted system unit

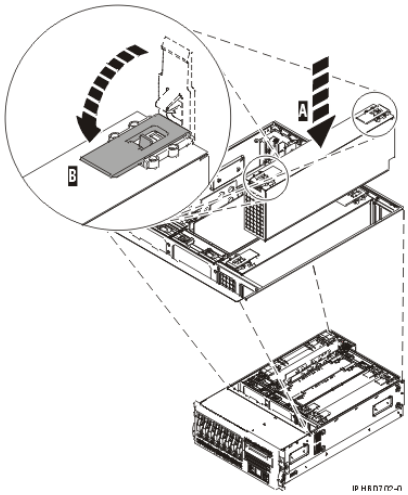
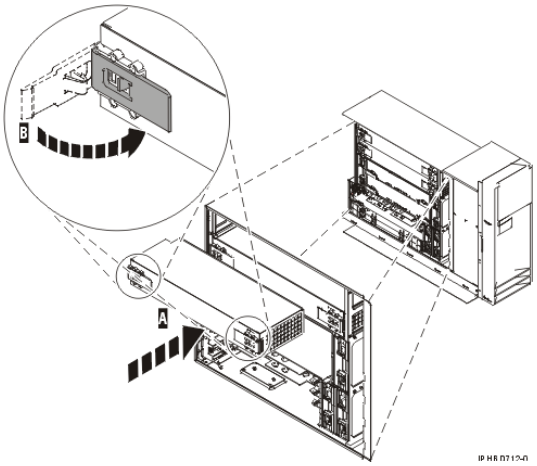


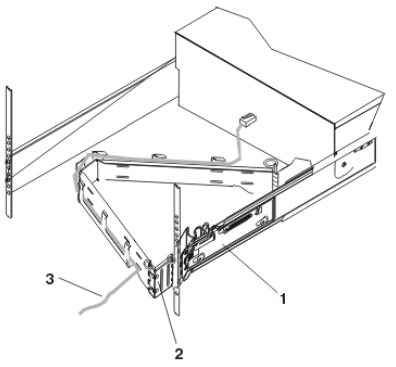
Figure 2. Replace a power supply in a model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ stand-alone system unit



5. Reconnect the power cable at the back of the power supply. If you have just replaced a power supply, reconnect the power cable to the new power supply by routing it through the ring, if provided, before you plug it into the back of the server. For an example, see Figure 2 in Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on.
6. Note the state of the light-emitting diodes (LEDs) on the power supply. For information about the states of the power supply LEDs, read Power supply LEDs.

   If the LEDs indicate that the power supply is operating normally, continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 2. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
7. Replace the service access cover. For instructions, see Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
8. If you are working on a rack-mounted system unit, ensure that the system cables are routed correctly through the cable-management arm.

Figure 3. Cables routed through the cable-management arm



1 System rail
2 Cable management arm
3 Cable

IPHAH615-0

9. If you are servicing a rack-mounted system unit, place the rack-mounted system or expansion unit in the service position, see Place the rack-mounted system or expansion unit in the operating position.
10. Reconnect the cables at the back of the system.
11. On a rack-mounted system unit, close the back rack door.
12. If the system was stopped, Start the system or logical partition.
13. If you replaced the power supply as part of another procedure, return to that procedure now.

Parent topic: Remove and replace the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply with power off **Previous topic:** Remove the model ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+ power supply

Model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply

Learn how to remove and replace the power supply.

The following procedures describe the removal and replacement of the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supplies.

- **Remove the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on**
  Learn how to remove the power supply with the system power on.
- **Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on**
  Learn how to replace the power supply with the system power on.
- **Remove the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power off**
  Learn how to remove the power supply with the system power off.
- **Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power off**
  Learn how to replace the power supply with the system power off.

Parent topic: Power supply

Related References

Power supply LEDs

Remove the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on

Learn how to remove the power supply with the system power on.

The following procedure describes the removal of the power supply from a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ while the system power is on.

Attention: Two power supplies must be present in the system to power on the system unit. If one power supply fails, or you have a system failure that does not stop the fans, the system will continue to operate. **You can remove and replace the power supply with the system power on if it is done in less than 5 minutes.** After 5 minutes, the system will power down to prevent the system from overheating. If the system power is off, go to Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power off.

If your system is managed by the Hardware Management Console (HMC), you can use the HMC to complete the steps for removing a power supply. For instructions, see Remove a part using the Hardware Management Console.

To remove the power supply from a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ while the system power is on, do the following steps:

1. Perform the prerequisite tasks described in Before you begin.
2. On a rack-mounted system unit, open the back rack door.
3. Identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
4. Disconnect the power cable from the back of the power supply that you want to remove.

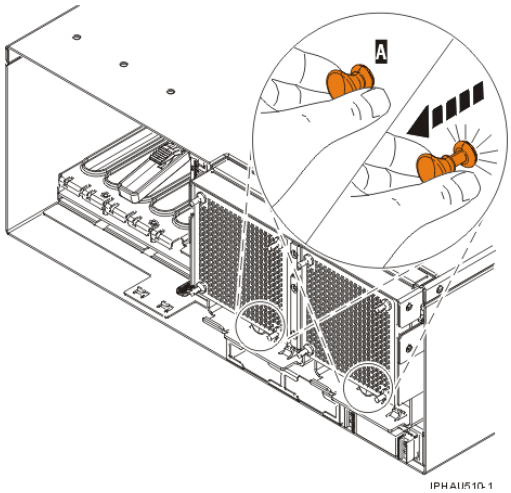
   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
   - If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

5. As shown in Figure 1, pull the terra-cotta locking knob A into the open position.

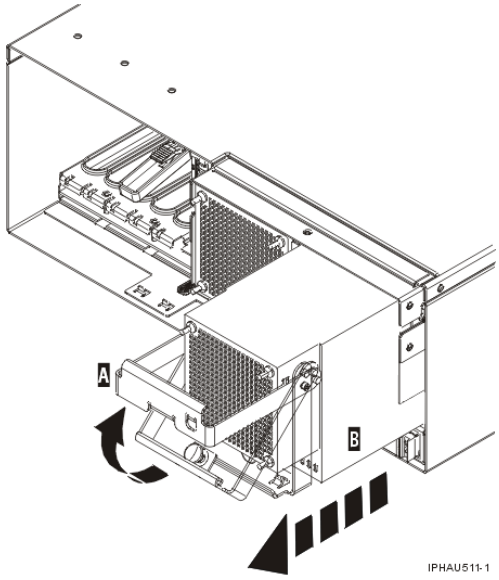
Figure 1. Model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply unlocked

Power supply



6. Lift the locking handle A (see Figure 2) into the open position, and then use the locking handle to pull the power supply out of the system B.

Figure 2. Remove the power supply from a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ system unit



Note: When you remove a power supply with the system power on, an error is logged. No action is required for this error.

Parent topic: Model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply

Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on

Learn how to replace the power supply with the system power on.

The following procedure describes the replacement of the power supply in a ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ while the system power is on.

Attention: Two power supplies must be present in the system to power on the system unit. If one power supply fails, or you have a system failure that does not stop the fans, the system will continue to operate. You can remove and replace the power supply with the system power on if it is done in less than 5 minutes. After 5 minutes, the system will power off to prevent the system from overheating. If the system power is off, go to Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power off.

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for replacing a power supply. For instructions, see Replace a part using the Hardware Management Console.

To replace the power supply in a model ESCALA PL 850R/PL 1650R/R+ or ESCALA PL 1650R-L+ while the system power is on, do the following steps:

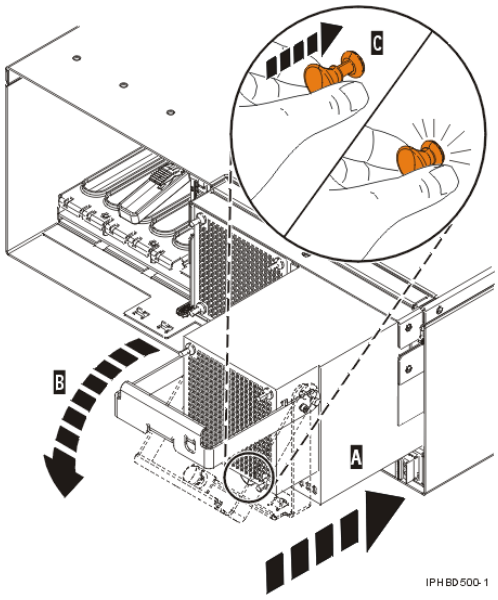
1. To remove the power supply, see Remove the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power on.
2. Perform the prerequisite tasks described in Before you begin.

Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

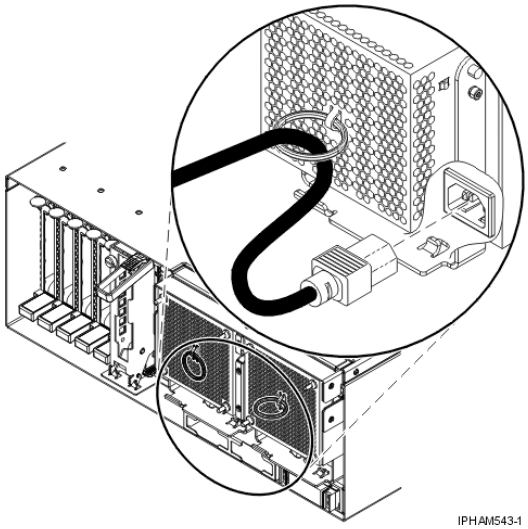
3. With the terra-cotta locking knob and the locking handle in the open position, place the new power supply in the power supply bay.
4. Push the power supply A into place.
5. Close the locking handle B, and then push the terra-cotta locking knob C into the closed position.

Figure 1. Replace the power supply in a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ system unit



6. Reconnect the power cable to the back of the power supply by routing it through the ring, if provided. If your server is equipped with a retention ring, route the power cord through the ring before you plug it into the back of the server.

Figure 2. Cable routed through power supply ring



7. Note the state of the light-emitting diodes (LEDs) on the power supply. For more information, read Power supply LEDs. If the LEDs indicate the power supply is operating normally, that is both of the green LEDs are on solid (not blinking), continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 3. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
8. Close the back rack door.

Parent topic: Model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply

Remove the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power off

Learn how to remove the power supply with the system power off.

The following procedure describes the removal of the power supply from a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ while the system power is off.

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for removing a power supply. For instructions, see Remove a part using the Hardware Management Console.

To remove the power supply from a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ while the system power is off, do the following steps:

1. Perform the prerequisite tasks described in Before you begin.
2. Identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
3. If the system is running, stop the system. For instructions, see Stop the system or logical partition.
4. Open the back rack door.
5. Disconnect the power cable from the back of the power supply that you want to remove.

Note: This system might be equipped with a second power supply. Before continuing with this procedure, ensure that all power sources to the system have been completely disconnected.

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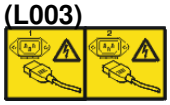
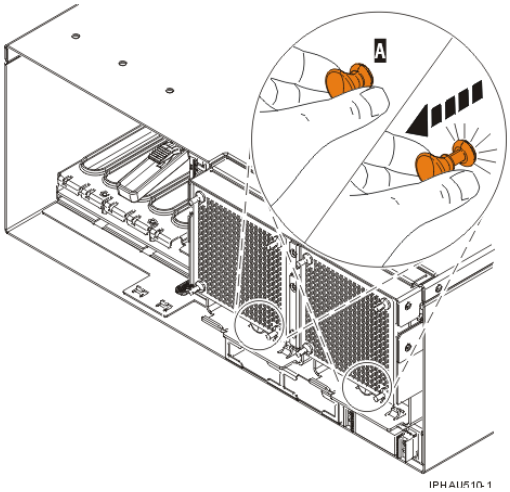


or

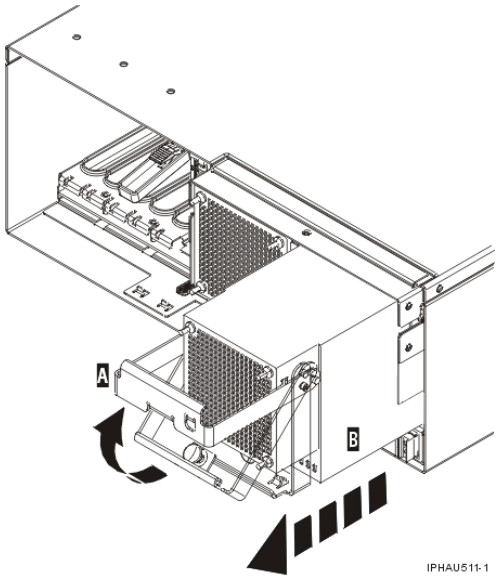
6. Pull the locking knobs A into the open position.

Figure 1. Model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply unlocked



7. Lift the locking handle A into the open position, and then use the locking handle to pull the power supply out of the system B.

Figure 2. Remove the power supply from a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ system unit



Parent topic: Model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply

Replace the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power off

Learn how to replace the power supply with the system power off.

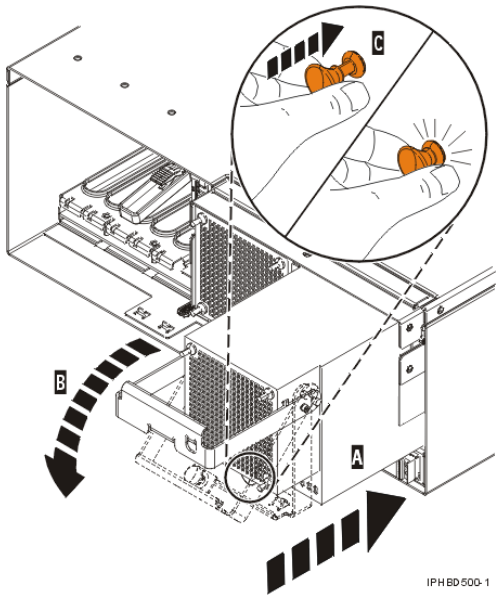
The following procedure describes the replacement of the power supply in a model ESCALA PL 850R/PL 1650R/R+ while the system power is off.

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for replacing a power supply. For instructions, see Replace a part using the Hardware Management Console.

To replace the power supply in a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ while the system power is off, do the following procedure:

1. To remove the power supply, see Remove the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply with power off.
2. With the terra-cotta locking knob and the locking handle in the open position, place the new power supply in the power supply bay.
3. Push the power supply A into place.
4. Close the locking handle B, and then push the locking knob C into the closed position.

Figure 1. Replace a power supply in a model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ system unit



5. Reconnect the power cable to the back of the power supply by routing it through the ring, if provided.
6. Start the system or logical partition.
7. Note the state of the light-emitting diodes (LEDs) on the power supply. For more information, read Power supply LEDs. If the LEDs indicate the power supply is operating normally, that is both of the green LEDs are on solid (not blinking), continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 2. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
8. Close the back rack door.

Parent topic: Model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+ power supply

Model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply

Learn how to install, remove, and replace the power supply.

The following procedures describe the installation, removal, and replacement of the power supply in the servers model ESCALA PL 250R-L . This server can have up to two power supplies.

- **Install or replace a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply with the power on**
  The following procedure describes how to install a second power supply, or replace one of two power supplies present in the system.
- **Remove and replace the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply with power off**
  These procedures describe how to install a feature that requires removal of the power supplies, or how to replace the primary or only power supply present in the system.

Parent topic: Power supply

Related References

Power supply LEDs

Install or replace a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply with the power on

The following procedure describes how to install a second power supply, or replace one of two power supplies present in the system.

The following procedure describes how to install a power supply or replace a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply when two power supplies are present in the system. The system power can remain on under the following conditions:

- You are installing a second power supply.
- One of the two power supplies present in the system must be replaced.

To install a second power supply or to replace a failing power supply when two are present in the system, do the following:

1. Perform the prerequisite tasks described in Before you begin.
2. On a rack-mounted system unit, open the back rack door.
3. If a failing power supply is present, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
4. Disconnect the power cable from the failing power supply at the back of the system.

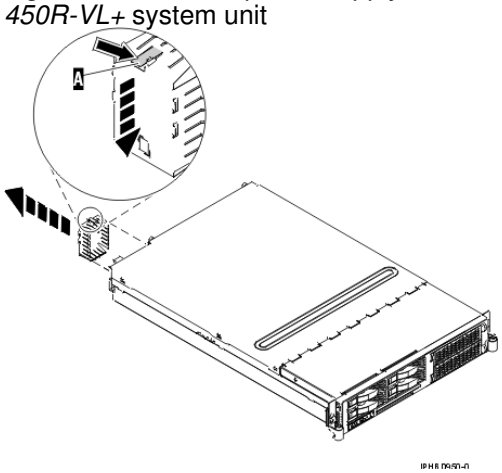
Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.

- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

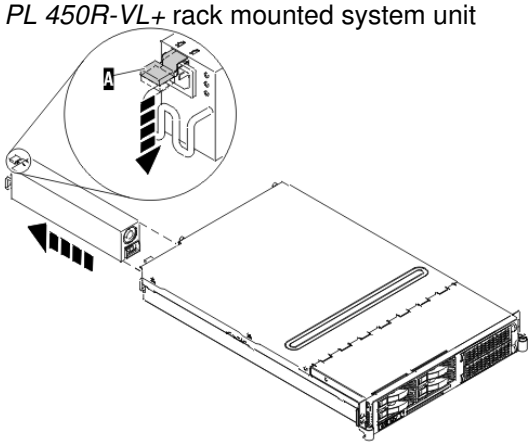
5. Ensure that the power supply bay is empty by doing the following:
   a. Remove the power supply filler by pushing the tab down A and pulling the filler out of the system.

Figure 1. Remove a power supply filler from a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ system unit



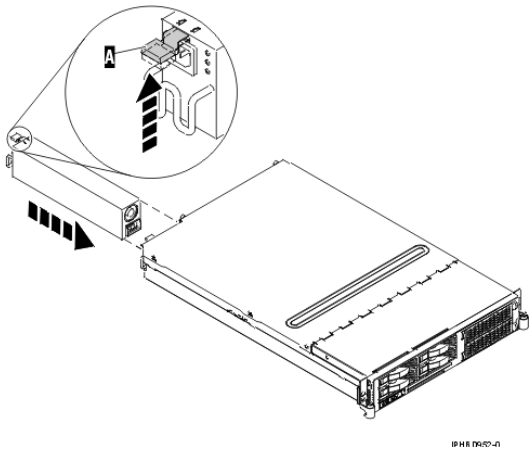
   b. Remove a failing power supply by doing the following steps:
      i. Press the terra-cotta tab A while grasping the handle.
      ii. After the power supply is released, use the handle to pull the power supply out.

Figure 2. Remove a power supply from a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ rack mounted system unit



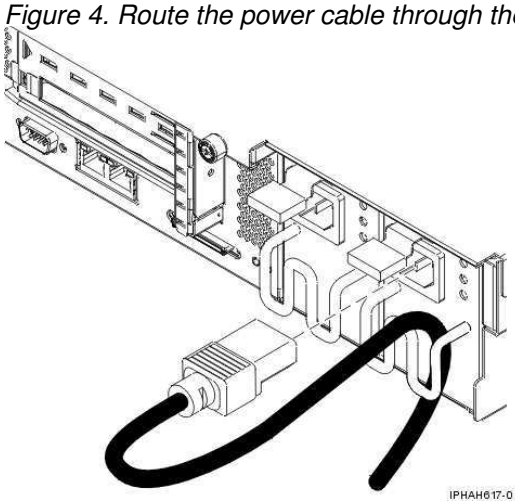
6. As shown in Figure 3 insert the new power supply into the power supply bay.

Figure 3. Install a power supply in a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+



7. Slowly press the power supply into the system. The power supply tab will snap into place, which indicates that the power supply is seated correctly and locked into position.
8. If you are installing a second power supply feature, plug the second power cable into the back of the new power supply.
9. Connect the power source to the system. If you have just replaced a power supply, reconnect the power cable to the new power supply by routing it through the ring or bar, if provided, before you plug it into the back of the server. For an example, see Figure 4.

Figure 4. Route the power cable through the bar



10. Note the state of the light-emitting diodes (LEDs) on the power supply. For more information, read Power supply LEDs. If the LEDs indicate the power supply is operating normally, that is both of the green LEDs are on solid (not blinking), continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 7. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
11. If you are working on a rack-mounted system unit, ensure the system cables are routed correctly through the cable-management arm.
12. Reconnect the cables at the back of the system.
13. On a rack-mounted system unit, close the back rack door.

Parent topic: Model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply

Remove and replace the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply with power off

These procedures describe how to install a feature that requires removal of the power supplies, or how to replace the primary or only power supply present in the system.

The following procedures describe the removal and replacement of the power supply in a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ while the power is off. This system can have up to two power supplies. A power supply is removed and replaced while the system power is off under the following conditions:

- The primary power supply has failed and a secondary power supply is not present in the system.
- The power supply must be removed from the system to repair another part of the system.

1. Remove the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply
   Learn how to remove a power supply with the system power off.
2. Replace the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply
   Learn how to replace a power supply with the system power off.

Parent topic: Model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply

Remove the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply

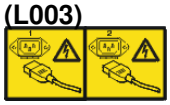
Learn how to remove a power supply with the system power off.

To remove a power supply from a ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ while the system power is off, do the following steps:

1. Perform the prerequisite tasks described in Before you begin.
2. If you are removing the power supply as part of another procedure, continue to the next step. If you are removing the power supply because it is not operational, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
3. If the system is running, Stop the system or logical partition.
4. On a rack-mounted system unit, open the back rack door.
5. Disconnect the power cable from the back of the power supply that you want to remove.

   Note: This system might be equipped with a second power supply. Before continuing with this procedure, ensure that all power sources to the system have been completely disconnected.

   (L003)

   or

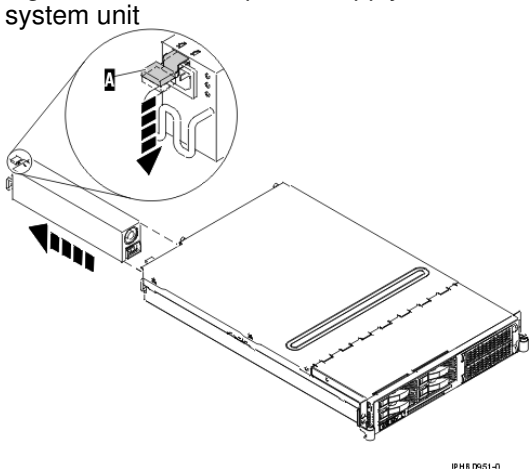
6. Wait at least 10 seconds before performing the next step.

   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
   - If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

7. As shown in Figure 1, press the terra-cotta tab A while grasping the handle.

Figure 1. Remove a power supply from a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ system unit



8. After the power supply is released, use the power supply handle to pull the power supply out of the system.

Parent topic: Remove and replace the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply with power off **Next topic:** Replace the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply

Replace the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply

Learn how to replace a power supply with the system power off.

Notes:

1. Do not connect the power cables to the power source until you are instructed to do so.
2. During normal operation, the secondary power-supply bay must have either a power supply or filler panel installed for proper cooling.

To replace a power supply in a ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ , do the following procedure:

1. If you have not previously removed the power supply, do so now. See Remove the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply.

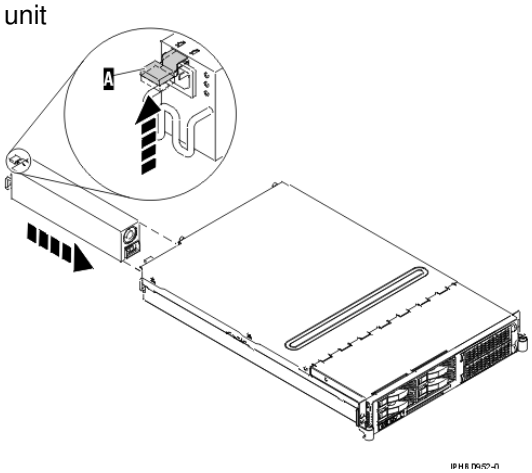
Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.

- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

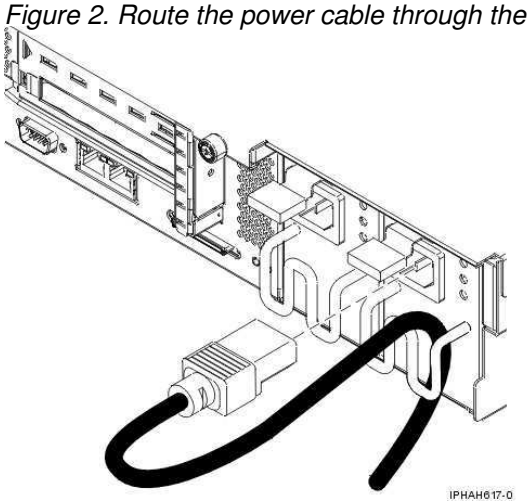
2. As shown in Figure 1, grasp the power supply handle A and carefully insert the new power supply into the power supply bay.

Figure 1. Install a power supply in a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ system unit



3. Slowly press the power supply into the system. The power supply tab will snap into place, which indicates that the power supply is seated correctly and locked into position.
4. Reconnect the power cable at the back of the power supply. If you have just replaced a power supply, reconnect the power cable to the new power supply by routing it through the cable bar, before you plug it into the back of the server. For an example, see Figure 2.

Figure 2. Route the power cable through the bar



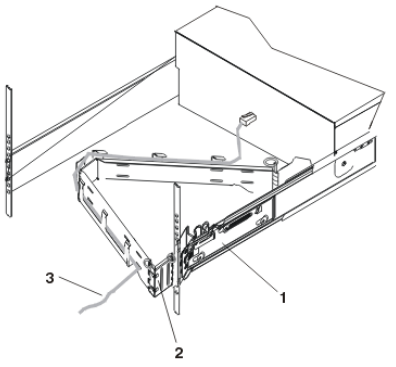
.

5. Note the state of the light-emitting diodes (LEDs) on the power supply. For information about the states of the power supply LEDs, read Power supply LEDs.

   If the LEDs indicate that the power supply is operating normally, continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 2. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.
6. If you are working on a rack-mounted system unit, ensure that the system cables are routed correctly through the cable-management arm.

Figure 3. Cables routed through the cable-management arm

Power supply



1 System rail
2 Cable management arm
3 Cable

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7. Reconnect the cables at the back of the system.
8. On a rack-mounted system unit, close the back rack door.
9. If the system was stopped, Start the system or logical partition.

Parent topic: Remove and replace the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply with power off **Previous topic:** Remove the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ power supply

Model 57/86, 57/87, D24, or T24 SCSI disk drive enclosure

Learn how to install, remove and replace the power supply.

The following procedures describe the installation, removal, and replacement of the power supply in the 57/86, 57/87, D24, or T24 SCSI disk drive enclosure. This unit can have up to two power supplies.

- **Install or replace a model 57/86, 57/87, D24, or T24 power supply with the power on**
  The following procedure describes how to install a second power supply, or replace one of two power supplies present in the system.
- **Remove and replace the model 57/86, 57/87, D24, or T24 SCSI disk drive enclosure power supply with power off**
  Learn how to install how to remove and replace the primary or only power supply present in the system.

Parent topic: Power supply

Install or replace a model 57/86, 57/87, D24, or T24 power supply with the power on

The following procedure describes how to install a second power supply, or replace one of two power supplies present in the system.

The following procedure describes how to install a power supply or replace a power supply when two power supplies are present in the system unit. The system unit power can remain on under the following conditions:

- You are installing a second power supply.
- One of the two power supplies present in the system must be replaced.

To install a second power supply or to replace a failing power supply when two are present in the system, do the following procedure:

1. Perform the prerequisite tasks described in Before you begin.

2. On a rack-mounted system unit, open the back rack door.

Attention:

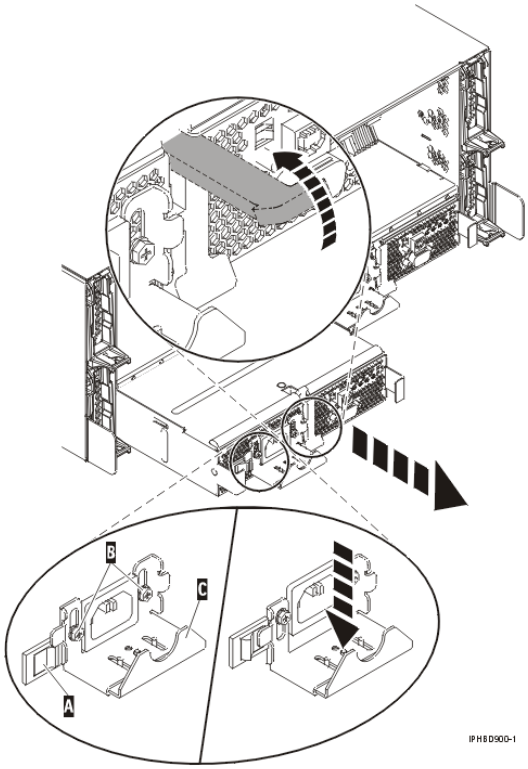
- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

3. If a failing power supply is present, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
4. Disconnect the power cable from the failing power supply at the back of the system by completing the following steps (see Figure 1):
    a. Press the switch A on the left side of the power cable.
    b. Release the power cable lock by pushing the bracket C down.

    Tip: You might have to slightly loosen the screws B with a Phillips screwdriver to lower the bracket.

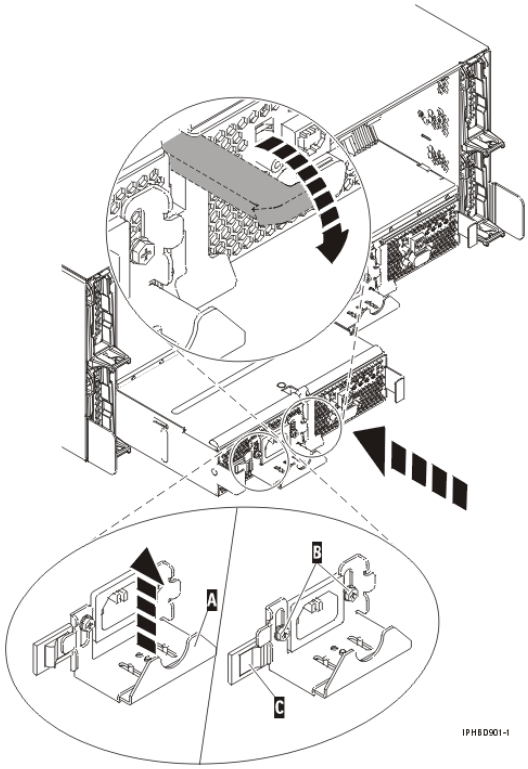
    c. Remove the power cable.
5. Ensure that the power supply bay is empty by completing the following steps:
    a. Remove the power supply filler by lifting the tab and pulling the filler out of the system.
    b. Remove a failing power supply by doing the following:
        i. Lift the white tab until the power supply is unseated.
        ii. Grasp the white tab on the power supply and gently pull the power supply out of the system.

Figure 1. Model 57/86, 57/87, D24, or T24 power supply removal



6. As shown in Figure 2, insert the new power supply into the empty power supply bay.

Figure 2. Model 57/86, 57/87, D24, or T24 power supply installation



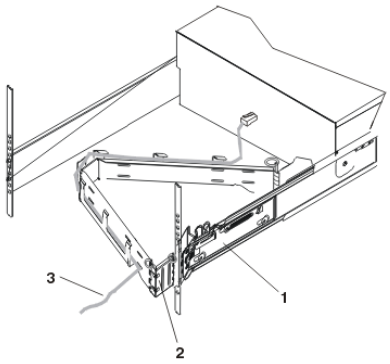
7. Slowly press the power supply into the system.
8. Press the white latch toward the power supply.
9. If you are installing a second power supply feature, plug the second power cable into the back of the new power supply.
10. Lift up the cable bracket A and press the power switch C to lock the cable bracket into place.
11. Connect the power source to the system. If you have just replaced a power supply, reconnect the power cable to the new power supply by routing it through the ring if provided.
12. Note the state of the light-emitting diodes (LEDs) on the power supply. If the LEDs indicate that the power supply is operating normally, that is, both of the green LEDs are on solid (not blinking), continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 6. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.

    Note: The power supply has four light-emitting diodes (LEDs): two green LEDs (ac power good and dc power good), and two amber LEDs (the far right LED indicates the power supply status). If both of the green LEDs are on solid (not blinking) and the right amber LED is off, the power supply is operating correctly. If the ac power good LED is on, the dc power good LED is blinking, and the far right amber LED is off, then the system is turned off, but the power supply is still connected to the power source. If the far right amber LED is blinking, the power supply is not operating correctly or the identify function has been selected.

13. If you are working on a rack-mounted system unit, ensure that the system cables are routed correctly through the cable-management arm.

Figure 3. Cables routed through the cable-management arm

Power supply



1 System rail
2 Cable management arm
3 Cable

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14. Reconnect the cables at the back of the system.
15. On a rack-mounted system unit, close the back rack door.

Parent topic: Model 57/86, 57/87, D24, or T24 SCSI disk drive enclosure

Remove and replace the model 57/86, 57/87, D24, or T24 SCSI disk drive enclosure power supply with power off

Learn how to install how to remove and replace the primary or only power supply present in the system.

The following procedures describe the removal and replacement of the power supply in a model 57/86, 57/87, D24, or T24 while the power is off. This system can have up to two power supplies. A power supply is removed and replaced while the system power is off under the following conditions:

- The primary power supply has failed and a secondary power supply is not present in the system.
- The power supply must be removed from the system to repair another part of the system.

1. Remove the model 57/86, 57/87, D24, or T24 power supply
   Follow these steps to correctly remove a power supply with the system power off.
2. Replace the model 57/86, 57/87, D24, or T24 power supply
   Follow these steps to correctly replace a power supply with the system power off.

Parent topic: Model 57/86, 57/87, D24, or T24 SCSI disk drive enclosure

Remove the model 57/86, 57/87, D24, or T24 power supply

Follow these steps to correctly remove a power supply with the system power off.

To remove a power supply while the system power is off, do the following procedure:

1. Perform the prerequisite tasks described in Before you begin.
2. If you are removing the power supply as part of another procedure, continue to the next step. If you are removing the power supply because it is not operational, identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
3. If the system is running, Stop the system or logical partition.
4. On a rack-mounted system unit, open the back rack door.

Attention:

- Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
- When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

5. Disconnect the power cable from the back of the power supply that you want to remove by doing the following steps (see Figure 1):
   a. Press the power switch C on the left side of the power cable.
   b. Release the power cable lock A by pushing it down.

      Tip: You might have to slightly loosen the retaining screws B with a Phillips screwdriver to lower the cable lock.

   c. Remove the power cable.

Note: This system is equipped with a second power supply. Before continuing with this procedure, ensure that all power sources to the system have been completely disconnected.

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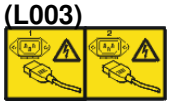
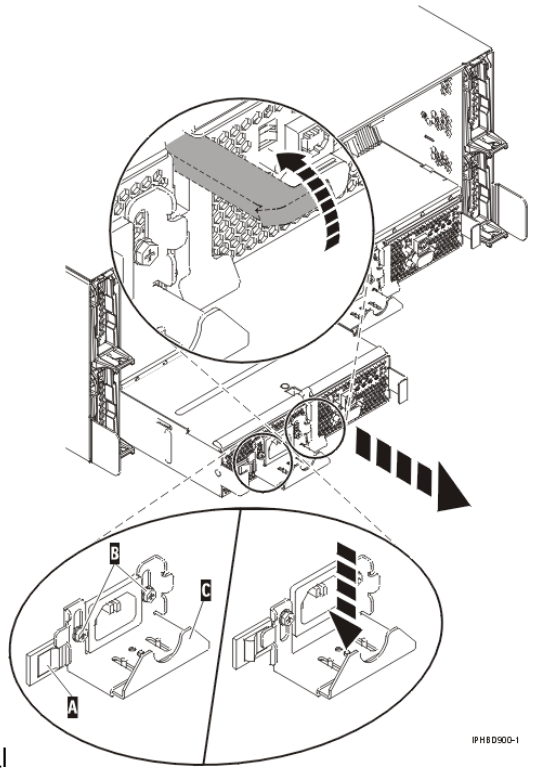


or

6. Wait at least 10 seconds before performing the next step.
7. As shown in Figure 1, lift the white tab until the power supply is unseated.

Figure 1. Model 57/86, 57/87, D24 , or T24 power supply

Power supply



removal

8. After the power supply is released, use the power supply handle to gently pull the power supply out of the system.

Parent topic: Remove and replace the model 57/86, 57/87, D24, or T24 SCSI disk drive enclosure power supply with power off **Next topic:** Replace the model 57/86, 57/87, D24, or T24 power supply

---

Replace the model 57/86, 57/87, D24, or T24 power supply

Follow these steps to correctly replace a power supply with the system power off.

Notes:

1. Do not connect the power cables to the power source until you are instructed to do so.
2. During normal operation, the secondary power-supply bay must have either a power supply or filler panel installed for proper cooling.

To replace a power supply, do the following procedure:

1. If you have not previously removed the power supply, do so now. For instructions, see Remove the model 57/86, 57/87, D24, or T24 power supply.

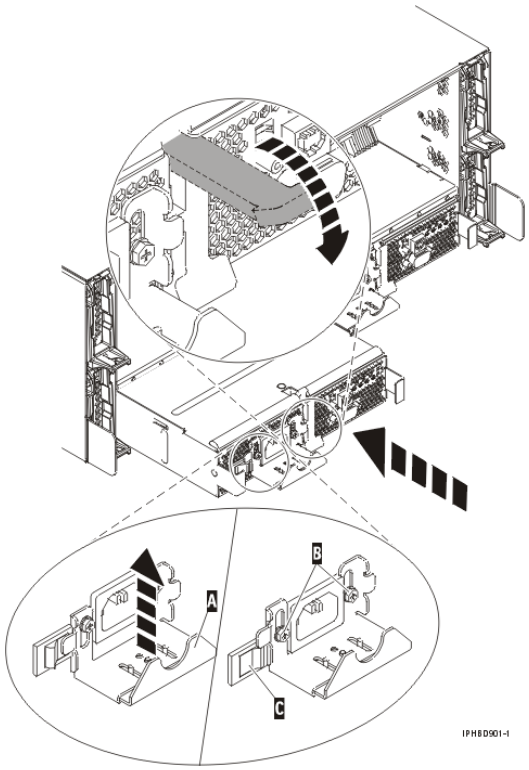
   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.

- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

2. As shown in Figure 1, insert the new power supply into the empty power supply bay.

Figure 1. Model 57/86, 57/87, D24 , or T24 power supply installation



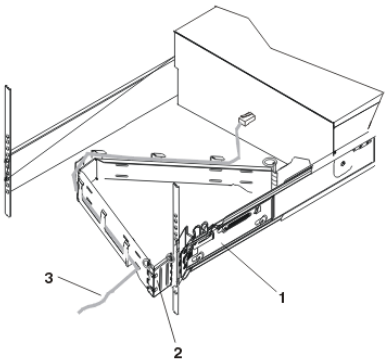
3. Slowly press the power supply into the system.
4. Press the white latch toward the power supply.
5. Reconnect the power cable at the back of the power supply through the ring, if provided.
6. Lift up the cable bracket A and press the power switch C to lock the cable bracket into place.
7. Note the state of the light-emitting diodes (LEDs) on the power supply. If the LEDs indicate that the power supply is operating normally, that is, both of the green LEDs are on solid (not blinking), continue to the next step. If not, remove the power supply from the system and repeat the procedure starting with step 2. If, after repeating the procedure, the power supply is not operating normally, contact your service provider.

   Note: The power supply has four light-emitting diodes (LEDs): two green LEDs (ac power good and dc power good), and two amber LEDs (the far right LED indicates the power supply status). If both of the green LEDs are on solid (not blinking) and the right amber LED is off, the power supply is operating correctly. If the ac power good LED is on, the dc power good LED is blinking, and the far right amber LED is off, then the system is turned off, but the power supply is still connected to the power source. If the far right amber LED is blinking, the power supply is not operating correctly or the identify function has been selected.

8. If you are working on a rack-mounted system unit, ensure that the system cables are routed correctly through the cable-management arm.

Figure 2. Cables routed through the cable-management arm

Power supply



1 System rail
2 Cable management arm
3 Cable

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9. Reconnect the cables at the back of the system.
10. On a rack-mounted system unit, close the back rack door.
11. If the system was stopped, start the system. For instructions, see Start the system or logical partition.

Parent topic: Remove and replace the model 57/86, 57/87, D24, or T24 SCSI disk drive enclosure power supply with power off **Previous topic:** Remove the model 57/86, 57/87, D24, or T24 power supply

Power supply LEDs

Learn about the states of the power supply LEDs.

The power supply has three light-emitting diodes (LEDs) which indicate the power supply status: two green LEDs (ac power good and dc power good), and one amber LED.

- If both of the green LEDs are on solid (not blinking) and the amber LED is off, the power supply is operating correctly.
- If the ac power good LED is on, the dc power good LED is blinking, and the amber LED is off, then the system is turned off, but the power supply is still connected to the power source.
- If the amber LED is blinking, the power supply is not operating correctly or the identify function has been selected.

Parent topic: Power supply

Power supply for the 05/95, 50/95, or 11D/20 expansion unit

The procedures for the removal and replacement of the power supply.

The following procedures describe the removal and replacement of the power supply in the 05/95, 50/95, or 11D/20 expansion unit.

1. Remove the power supply from the 05/95, 50/95, or 11D/20 expansion unit
   Learn how to remove a power supply.
2. Replace the power supply in the 05/95, 50/95, or 11D/20 expansion unit
   Learn how to replace a power supply in an expansion unit.

Parent topic: Power supply

Related References

Power supply LEDs

Remove the power supply from the 05/95, 50/95, or 11D/20 expansion unit

Learn how to remove a power supply.

To perform this procedure for the 05/95, 50/95, or 11D/20 expansion unit while the system power is on, you must have two power supplies and four working fans.

The figures in these instructions might not look exactly like the system unit that you have. However, the steps to perform this procedure are the same.

To remove the power supply, do the following procedure:

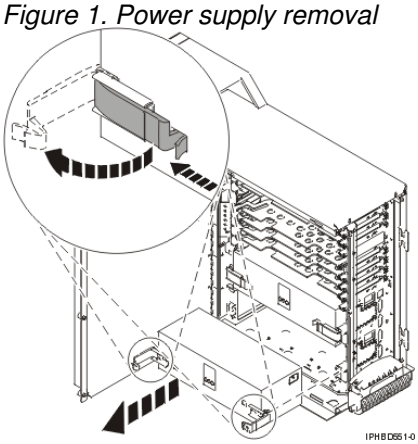
1. Perform the prerequisite tasks described in Before you begin.
2. Identify the power supply that needs to be replaced. For instructions, see Identify a failing part.
3. If you have two power supplies in the expansion unit, go to step 4. If you have one power supply in the expansion unit, go to Stop the system or logical partition.
4. Remove the back cover. For instructions, see Remove the back door and cover from the 50/95 expansion unit.

   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
   - If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

5. Remove the left-side cover (viewed from the back).
6. Pull the handle on the power supply that is to be replaced as shown in the following figure.

Figure 1. Power supply removal



7. Support the bottom of the power supply as you slide it out of the unit.

Parent topic: Power supply for the 05/95, 50/95, or 11D/20 expansion unit **Next topic:** Replace the power supply in the 05/95, 50/95, or 11D/20 expansion unit

Replace the power supply in the 05/95, 50/95, or 11D/20 expansion unit

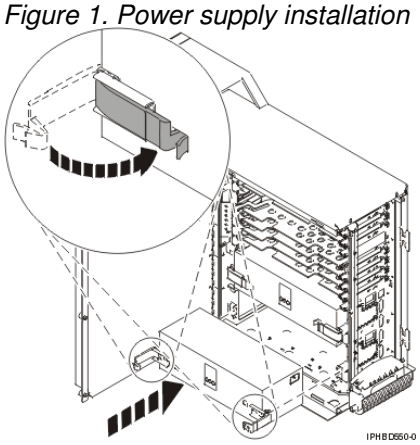
Learn how to replace a power supply in an expansion unit.

To replace the power supply in the 05/95, 50/95, or 11D/20 expansion unit, do the following steps:

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

1. To remove the power supply, see Remove the power supply from the 05/95, 50/95, or 11D/20 expansion unit.
2. Slide the power supply into the expansion unit as shown.

Figure 1. Power supply installation



3. Move the handles toward the power supply to lock it in place.
4. Look in the center of the power supply. A green light on the power supply indicates that the power is on and the installation is successful. If the green light is not on remove the power supply and repeat this procedure.
5. Install the side cover.
6. Plug the power cord into the power supply and into the outlet.
7. Install the back cover.
8. If the system was stopped, Start the system or logical partition.

Parent topic: Power supply for the 05/95, 50/95, or 11D/20 expansion unit **Previous topic:** Remove the power supply from the 05/95, 50/95, or 11D/20 expansion unit

Dual-line cord for the 50/94, 52/94, 8093-002, or 8094-002 expansion unit

View information for installing a dual-line cord.

This topic contains information on installing a dual-line cord in a 50/94, 52/94, 8093-002, or 8094-002 expansion unit.

The installation of these features are customer tasks. When you use these instructions, you will perform some or all of the following tasks:

- Power off the system unit.
- Open the back cover.

- Replace or install your new hardware.
- Perform an initial program load (IPL) of your operating system.
- Verify your new hardware configuration.

You might need to allow additional time to complete your jobs and back up your system.

You can choose to perform these tasks yourself or contact a service provider to make arrangements to perform the tasks for a fee. If you encounter difficulties when performing a task, contact your service provider.

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

- **Install a dual-line cord in a 50/94, 52/94, 8093-002, or 8094-002 expansion unit**
  Learn how to install a dual-line cord.

Parent topic: Power supply

Install a dual-line cord in a 50/94, 52/94, 8093-002, or 8094-002 expansion unit

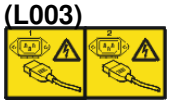
Learn how to install a dual-line cord.

To use the dual-line cord feature in a 50/94, 52/94, 8093-002, or 8094-002 expansion unit, you need to install a power supply and connect jumpers.

1. Perform prerequisite tasks as described in Before you begin.
2. Stop the system or logical partition.

   Note: This system might be equipped with a second power supply. Before continuing with this procedure, ensure that all power sources to the system have been completely disconnected.

   (L003)

   or

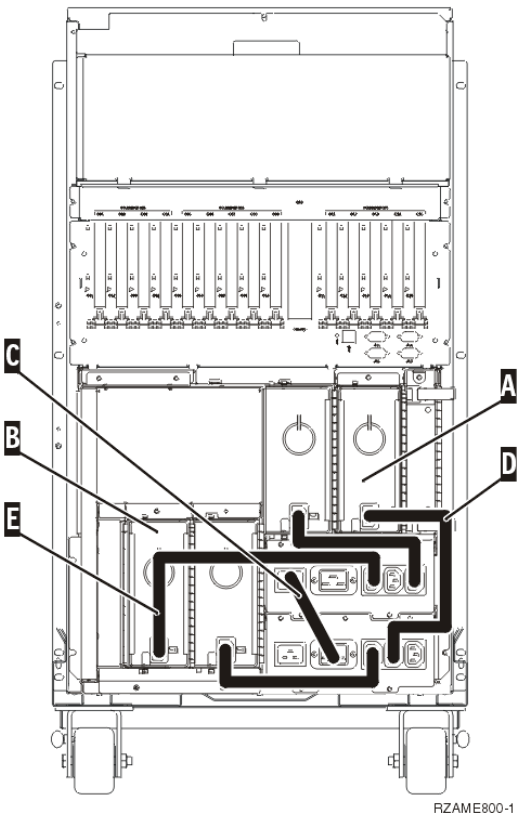
3. Remove the back cover. For instructions, see Remove the back door from the 50/74, 50/79, and 50/94 expansion unit.

   Attention:

   - Attach a wrist strap to an unpainted metal surface of your hardware to prevent electrostatic discharge from damaging your hardware.
   - When using a wrist strap, follow all electrical safety procedures. A wrist strap is for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.

- If you do not have a wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds.

4. Determine wether a power supply is already installed in location A as shown?



- If No: The new power supply will be installed in A. Continue with the next step.
- If Yes: The new power supply will be installed in B. Continue with the next step.

5. Remove the jumper C.
6. Remove the plate where you will install the power supply (A or B).
7. Slide the power supply into the system unit.
8. Move the handles toward the power supply to lock it in place.
9. If you installed the power supply in A, connect jumper D (part number 04N2181).
10. If you installed the power supply in B, connect jumper E (part number 04N2181).
11. Plug in the power cords.
12. Plug in the system unit and system unit console. Plug in all the components that you previously unplugged, such as printers and monitors.
13. Power on all attached devices, such as printers and displays.
14. Install the back cover.
15. Power on the workstation or PC that is the console for your system.
16. Start the system or logical partition.
17. Verify the new resource is functional. Refer to Verify the installed part.

Parent topic: Dual-line cord for the 50/94, 52/94, 8093-002, or 8094-002 expansion unit

Line cord maintenance

View these procedures when performing line cord maintenance.

These instructions will help meet requirements for line cord maintenance in 19-inch and 24-inch systems with redundant power supply configurations.

- **Line cord maintenance for 19-inch racks**
  View these procedures when performing line cord maintenance.
- **Line cord maintenance for 24-inch racks**
  View this procedure when performing line cord maintenance.

Parent topic: Power supply

Related References

Power supply LEDs

Line cord maintenance for 19-inch racks

View these procedures when performing line cord maintenance.

This procedure is intended for use with stand-alone or rack-mounted systems that have redundant power supply configurations.

Note: Single line cord systems are not covered in this procedure because they do no have redundant power and they require the system to be shut down to perform line cord maintenance.

Preparation:

During line cord maintenance, power-related error reference codes will be generated on one or more systems, depending on your location configuration. Coordinate this activity with the Support Center to prevent them from dispatching service and so they know when they should consider error conditions valid again. For the systems that are managed by the Hardware Management Console (HMC), disable call home before starting and re-enabled at the end of the procedure.

During this procedure, you will be told to clear or ignore errors associated with the procedure. You may choose to document the errors as they occur in the process rather than potentially clear the entire error log. This is a personal preference item and does not affect the intent of the test, as long as intentionally uncleared errors are tracked relative to new test errors or valid error messages that may need attention.

Note: Power, rack, or internal rack system line cord maintenance can be performed on one power circuit or line cord at a time without shutting the system down because redundant power supplies hot-pluggable. This is true providing the building to system line power source is not the same for both line cords for the rack or system line cord that maintenance is to be performed on.

Using the HMC Service Focal Point for managed systems or the operating system error logging for non-managed, non-HMC systems:

1. Ensure that there are no outstanding power (1100xxxx) error conditions on the system.
2. Make sure that any power-related problems that might be found have been serviced before attempting line cord maintenance.

- **19-inch line cord maintenance for stand-alone systems**
  Use this procedure to perform line cord maintenance for stand-alone systems.
- **19-inch line cord maintenance for rack-mounted systems**
  Use these procedures to perform line cord maintenance on a rack, system, or drawer in a rack.

Parent topic: Line cord maintenance

19-inch line cord maintenance for stand-alone systems

Use this procedure to perform line cord maintenance for stand-alone systems.

1. With the system powered on and running, after the error logs have been checked and any power-related problems resolved: Check to ensure the line cords are securely plugged into the system power supplies and wall receptacles.

   Note: For confirmation that the system is operating with redundant power, check the three power supply status LEDs on each power supply. For models ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ , the power supply LEDs can be viewed on the back of the system.

   For models ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/20, , the LEDs are located on the top of each power supply. To view these power supply LEDs, remove the top cover of the system to view LED status, see Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .

2. If both green power supply LEDs are solid (not blinking) and the amber LED is off, continue with this procedure. If not, have your system serviced before continuing with line cord maintenance.
3. Remove power from one of the power supplies by turning off the power source or by unplugging the line cord from the power supply.
4. Perform line cord maintenance on that line cord or the line connection.
5. When maintenance is complete, plug the line cord back into the power supply. Reconnect the line cord to the power source and, if turned off, reapply power to the system line cord that was just tested.

   After the power supply has had power reapplied to it, both green LEDs will return to solid and the amber LED will be off.
6. Using the operating system error logging for systems that are not managed by a Hardware Management Console systems:

   Note: Removing line voltage form the system power supply will cause the system to generate a 11001510 or 11001520 reference code, depending on which power supply you are working with.

   a. Clear or ignore the associated power error (11001510 or 11001520) caused by this procedure.
   b. Wait approximately 5 minutes and recheck the error log before continuing. If additional reference codes are displayed after the power supply 11001510 or 11001520 reference code was cleared or ignored, or if the power supply LEDs did not return to normal state in the previous step, have your system serviced before continuing.
7. Repeat steps 1 through 5 for the second power supply line cord or power source.
8. After completing line cord maintenance on the second line cord or power source, return the system to the normal operating state, see Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .
9. If you contacted the support contact at the beginning of this procedure, notify them that you system is back in production.

Parent topic: Line cord maintenance for 19-inch racks

19-inch line cord maintenance for rack-mounted systems

Use these procedures to perform line cord maintenance on a rack, system, or drawer in a rack.

Important: To perform line cord maintenance on a rack, system, or drawer within the rack, the rack must be externally cabled to power in a redundant power source configuration. Within the rack, all systems and drawers must be configured to support redundant power requirements with one side of the individual system or drawer cabled to the power distribution panel on one side of the rack, and the other side of the system or drawer cabled to the power distribution panel on the other side of the rack. Ensure that this is true before beginning your line cord maintenance. If this power cord separation is not present, then your rack, system, or drawer is not configured to be redundant.

1. 19-inch line cord maintenance for systems and drawers in a rack
   Use this procedure to perform the line cord maintenance for systems and drawers in a rack, including the ESCALA PL 850R/PL 1650R/R+ MLx system.
2. 19-inch line cord maintenance for the rack
   This procedure describes the process for line cord maintenance on a rack.

Parent topic: Line cord maintenance for 19-inch racks

19-inch line cord maintenance for systems and drawers in a rack

Use this procedure to perform the line cord maintenance for systems and drawers in a rack, including the ESCALA PL 850R/PL 1650R/R+ MLx system.

1. After the error logs have been checked, any power-related problems have been resolved, and with the system powered on and running: Make sure that the line cords are securely plugged into the system power supplies and rack power distribution panels, ensuring proper separation of line cords to power distribution panels.

   Note: For confirmation that the system is operating with redundant power, check the three power supply status LEDs on each power supply. For models ESCALA PL 850R/PL 1650R/R+, ESCALA PL 250R-L, 7/10, 11D/10, 11D/11, and 57/90 I/O drawers, the power supply LEDs can be viewed from the back of the system.

   For system models ESCALA PL 250T/R, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/20, or 11D/20 and 05/95 I/O drawers, the power supply LEDs are located on the top of each power supply. To view these power supply LEDs, remove the top cover of the system to view the LED status, see Place the rack-mounted system or expansion unit in the service position and Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, .

   Important: When placing a system or drawer in the service position, avoid accidentally unplugging cables from the system being worked with, as well as other systems or drawers in the rack.

2. If both green power supply LEDs are solid (not blinking) and the amber LED is off, continue with this procedure. If not, have your system serviced before continuing with line cord maintenance.
3. Remove power from one of the power supplies by unplugging the line cord from the power supply.
4. Perform the line cord maintenance on that line cord or line connection.

5. When maintenance is complete, plug the line cord back into the power supply, reinstall the line cord into the rack power distribution panel. After the power supply has had power reapplied to it, both green LEDs will return to solid (not blinking) and the amber LED is off.
6. Using the Hardware Management Console (HMC) Service Focal Point for managed systems, or the operating system error logging for non-managed, systems that are not managed by a HMC that may be in the same rack:

   Note: Removing line voltage from the system or drawer power supply will cause the system to generate a 11001510 or 11001520 reference code, depending on which power supply you were working with.

   a. Clear or ignore the associated power (11001510 or 11001520) error caused by this procedure.
   b. Wait approximately 5 minutes and recheck the error log before continuing. If additional reference codes are displayed after the power supply 11001510 or 11001520 reference code was cleared or ignored, or if the power supply LEDs did not return to normal state in the previous step, have your system serviced before continuing.
7. Repeat steps 1 through 5 for the second power supply or drawer line cord. For the model ESCALA PL 850R/PL 1650R/R+ MLx system, continue this process until all units have been tested.
8. If you need to perform the rack line cord maintenance procedure, continue to 19-inch line cord maintenance for the rack. Otherwise, return all systems and drawers to their normal operating condition, see Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, and Place the rack-mounted system or expansion unit in the operating position.
9. If you contacted the Support contact at the beginning of this procedure, notify them that you system is back in production.

Parent topic: 19-inch line cord maintenance for rack-mounted systems **Next topic:** 19-inch line cord maintenance for the rack

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19-inch line cord maintenance for the rack

This procedure describes the process for line cord maintenance on a rack.

If you have performed the line cord maintenance procedures for line cords inside the rack, continue with this procedure. If you have not, then you need to perform the internal line cord process on each system and drawer before continuing with this procedure, see 19-inch line cord maintenance for systems and drawers in a rack.

Note: The rack line cord maintenance step removes power from one side of all systems and drawers in a rack at the same time. One side of the rack can be powered off at a time. The same 11001510 or 11001520 reference codes will be generated for all systems and drawers in the rack and will need to be cleared or ignored after each side of the rack power is reapplied, as done in the rack internal cable step. For this reason, a very recent check of system power redundancy is important to ensure redundancy is in place when the rack power is disconnected.

If your rack is equipped with two switches, one for each power distribution panel inside the rack, then it is possible to turn off one switch and perform line cord maintenance for that rack power cable. If your rack is not configured to do so, then disconnecting the power cable at the back of one side of the rack or building receptacle is the alternate method.

1. Turn off one of your rack switches, or disconnect the rack line cord at the back of the rack.
2. Perform line cord maintenance on that external line cord or power source.
3. Reinstall the line cord and restore the power source. If your rack has an external switch that you turned off at the beginning of this procedure, turn the switch back on.
4. After approximately 10 minutes, check and clear or make note of each system's error log installed in the rack. If the rack is managed by a Hardware Management Console (HMC), non-system drawer errors will be displayed under Service Focal Point for the controlling system. If the rack, or part of the rack, is not managed by an HMC, then the drawer errors might be displayed in the controlling system error log.
5. Perform steps 1 through 4 for any additional rack power cables.
6. Inspect the rack and system power cables to ensure they are securely plugged.
7. Close or secure any covers, doors, or shields that were previously removed.
8. If you contacted the Support Contact at the beginning of this procedure, notify them that you system is back in production.

Parent topic: 19-inch line cord maintenance for rack-mounted systems **Previous topic:** 19-inch line cord maintenance for systems and drawers in a rack

Line cord maintenance for 24-inch racks

View this procedure when performing line cord maintenance.

This procedure is intended to be used for ac facility power maintenance on 24-inch systems whose bulk power assembly (BPA) has separately fed ac inputs. It is not for ac line cord replacement.

Important: If your system is a model 5/75 configured with a Bulk Power Jumper (BPJ), your system rack is not configured to be redundant. Do not attempt this procedure.

1. Select Service Applications on the Hardware Management Console (HMC) graphical user interface (GUI).
2. Select Service Focal Point > Exchange Parts.
3. Select System Unit Bulk Power Assembly for the machine of the bulk power controller (BPC) to have line cord maintenance.
4. From the Selected menu, click Replace FRU...
5. Select Bulk Power Controller (BPC). Click Next.
6. Select the BPC location code BPC-Aside (P1-C4). Click Add > Commit.

   Attention: Do not go through R&V screens past LED verification. Select No, one or more of the indicators are not on. Delay repair. Do not click Cancel. This will cause the BPA service lock to be set.

   One of two screens will appear.

   - The FRU can be exchanged redundantly when:

     A screen is displayed asking you to verify the BPC LEDs on the opposite side. If the LEDs are on as indicated, the FRU can be replaced redundantly. In either case, select No, one or more of the indicators are not on > Next. On the next screen, select Delay the repair > Next. Continue with step 7 and check the redundancy of the other side.
   - The FRU cannot be exchanged redundantly when:

     You are not asked to inspect the LEDs. You are only told that the redundant hardware is not available. You are sked to inspect the LEDs, but the visual inspection shows that redundant

hardware is not available. Select Delay repair > Next.

Remember: The ac facility maintenance should not be done until full redundancy is restored.

7. Repeat the redundancy check using steps 1 though 8 with BPC-Bside (Location code: P2-C4).
8. Perform ac facility maintenance on one side only. When BPC ac is reapplied, it will boot and go online.
9. Enter `Issysconn -r all`. Check service processors and BPCs (A & B side) until all show Connected.
10. Repeat the redundancy check on both sides using steps 1 - 9.
11. Perform ac facility maintenance on the other side.
12. Perform line cord checks again to confirm that there was no loss of redundancy introduced by the procedure (steps 1 - 8).
13. Clear any error codes that might have resulted from this procedure.

Parent topic: Line cord maintenance

Related procedures

View and print information related to power supplies.

- **Before you begin**
  Understand prerequisites for installing, removing, or replacing features and parts.
- **Start or stop the system or logical partition**
  Learn how to start or stop a system or logical partition.
- **Remove and replace model ESCALA PL 245T/R covers and doors**
  Learn how to remove and replace covers and doors.
- **Place the rack-mounted system or expansion unit in the service position or operating position**
- **Model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, service access cover**
  This topic describes how to remove and install the service access cover for the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, .
- **Expansion unit cover or door**
  Learn how to remove and install expansion unit covers and doors.
- **Place the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ __in the operating position**
  Learn how to place the unit into the operating position.
- **Install a feature using the Hardware Management Console**
- **Remove a part using the Hardware Management Console**
- **Replace a part using the Hardware Management Console**
- **Identify a failing part**
  The following procedures describe how to locate and identify a failing part on your system or expansion unit.
- **Verify the installed part**

Parent topic: Power supply

Start or stop the system or logical partition

Learn how to start or stop a system or logical partition.

- **Start the system or logical partition**
  Use these instructions to start a system or logical partition.
- **Stop the system or logical partition**
  Learn how to stop a system or logical partition.

Parent topic: Related procedures

Before you begin

Understand prerequisites for installing, removing, or replacing features and parts.

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.
  To Disconnect:
  1. Turn off everything (unless instructed otherwise).
  2. Remove the power cords from the outlets.
  3. Remove the signal cables from the connectors.
  4. Remove all cables from the devices

  To Connect:

  1. Turn off everything (unless instructed otherwise).
  2. Attach all cables to the devices.
  3. Attach the signal cables to the connectors.
  4. Attach the power cords to the outlets.
  5. Turn on the devices.

  (D005)

DANGERObserve the following precautions when working on or around your IT rack system:

- Heavy equipment personal injury or equipment damage might result if mishandled.
- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- To avoid hazardous conditions due to uneven mechanical loading, always install the heaviest devices in the bottom of the rack cabinet. Always install servers and optional devices starting from the bottom of the rack cabinet.
- Rack-mounted devices are not to be used as shelves or work spaces. Do not place objects on top of rack-mounted devices.
  
- Each rack cabinet might have more than one power cord. Be sure to disconnect all power cords in the rack cabinet when directed to disconnect power during servicing.

- Connect all devices installed in a rack cabinet to power devices installed in the same rack cabinet. Do not plug a power cord from a device installed in one rack cabinet into a power device installed in a different rack cabinet.
- An electrical outlet that is not correctly wired could place hazardous voltage on the metal parts of the system or the devices that attach to the system. It is the responsibility of the customer to ensure that the outlet is correctly wired and grounded to prevent an electrical shock.

CAUTION

- Do not install a unit in a rack where the internal rack ambient temperatures will exceed the manufacturer's recommended ambient temperature for all your rack-mounted devices.
- Do not install a unit in a rack where the air flow is compromised. Ensure that air flow is not blocked or reduced on any side, front, or back of a unit used for air flow through the unit.
- Consideration should be given to the connection of the equipment to the supply circuit so that overloading of the circuits does not compromise the supply wiring or overcurrent protection. To provide the correct power connection to a rack, refer to the rating labels located on the equipment in the rack to determine the total power requirement of the supply circuit.
- *(For sliding drawers.)* Do not pull out or install any drawer or feature if the rack stabilizer brackets are not attached to the rack. Do not pull out more than one drawer at a time. The rack might become unstable if you pull out more than one drawer at a time.
- *(For fixed drawers.)* This drawer is a fixed drawer and must not be moved for servicing unless specified by the manufacturer. Attempting to move the drawer partially or completely out of the rack might cause the rack to become unstable or cause the drawer to fall out of the rack.

(R001)

Before you begin a replacement or installation procedure, perform these tasks:

1. If you are installing a new feature, ensure that you have the software required to support the new feature and determine if there are any existing PTF prerequisites.
2. If you are performing an installation or replacement procedure that might put your data at risk, ensure, wherever possible, that you have a current backup of your system or logical partition (including operating systems, licensed programs, and data).

   For information on backing up your system or logical partition, select from the following:

   - AIX backup
   - Linux backup
3. Review the installation or replacement procedure for the feature or part.
4. Note the significance of color on your system.

   Blue or terra-cotta on a part of the hardware indicates a touch point where you can grip the hardware to remove it from or install it in the system, open or close a latch, and so on. Terra-cotta might also indicate that the part can be removed and replaced with the system or logical partition power on.
5. Ensure that you have access to a medium, flat-blade screwdriver.
6. If parts are incorrect, missing, or visibly damaged, do the following:
   - If you are replacing a part, contact your service provider or next level of support.
   - If you are installing a feature, contact one of the following:
     - Your service provider or next level of support.
7. If you encounter difficulties during the installation, contact your service provider, or your next level of support.
8. If you are installing new hardware in a logical partition, you need to understand and plan for the implications of partitioning your system. For information, see Partitioning the server, and then return to these instructions.

Parent topic: Related procedures

Remove and replace model ESCALA PL 245T/R covers and doors

Learn how to remove and replace covers and doors.

- **Remove and replace the model ESCALA PL 245T/R front cover**
- **Remove and replace the model ESCALA PL 245T/R acoustic-feature back cover**
  The model ESCALA PL 245T/R has a removable back cover only if you have ordered the acoustic covers feature.
- **Remove and replace the model ESCALA PL 245T/R side cover**

Parent topic: Related procedures

Remove and replace the model ESCALA PL 245T/R front cover

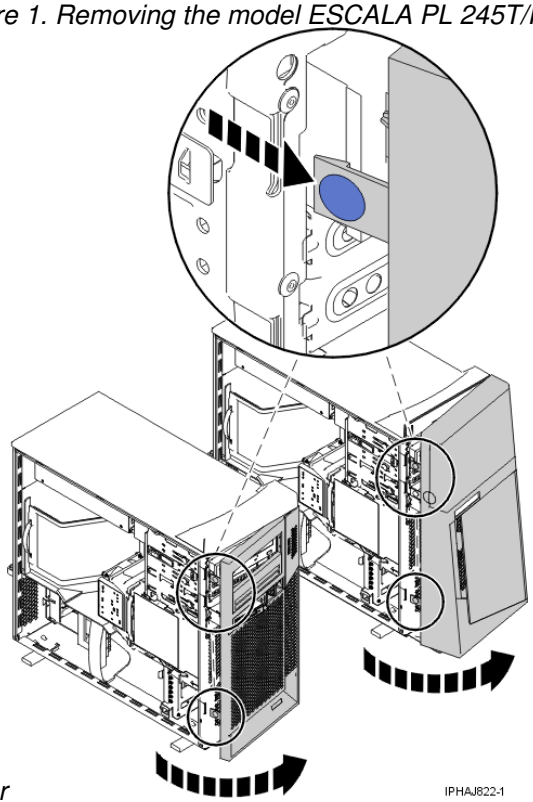
To remove the front cover from the model ESCALA PL 245T/R, follow these steps:

1. Remove the side cover. See, Remove and replace the model ESCALA PL 245T/R side cover
2. Lift each of the tabs on the front cover until it is released from the system unit, as shown in the following figure.

   Tip: On the open face cover there are two tabs to release. On the acoustic feature front cover there are three tabs to release.

3. Pull the cover open until it can be removed from the system unit.

Figure 1. Removing the model ESCALA PL 245T/R front cover



Parent topic: Remove and replace model ESCALA PL 245T/R covers and doors

Remove and replace the model ESCALA PL 245T/R acoustic-feature back cover

The model ESCALA PL 245T/R has a removable back cover only if you have ordered the acoustic covers feature.

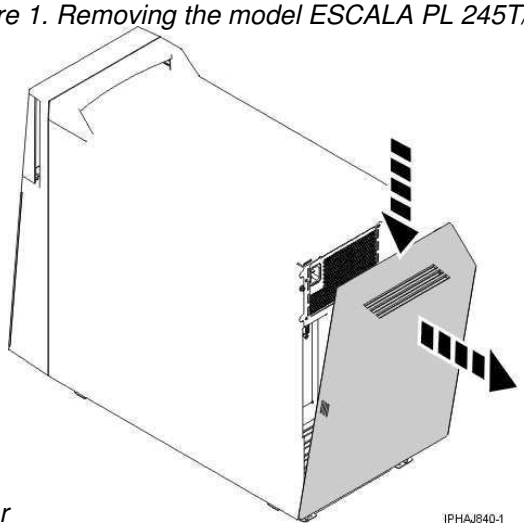
To remove the back cover from the model ESCALA PL 245T/R, follow these steps:

1. Press down on the center tab of the cover until you unseat it from the back of the system unit, as shown in the following figure.

   Remember: Use care not to dislodge any of the cables or cords attached to the system unit during this procedure.

2. Lift the top of the cover until the pins on the bottom clear the holes and the cover can be removed.

Figure 1. Removing the model ESCALA PL 245T/R back cover



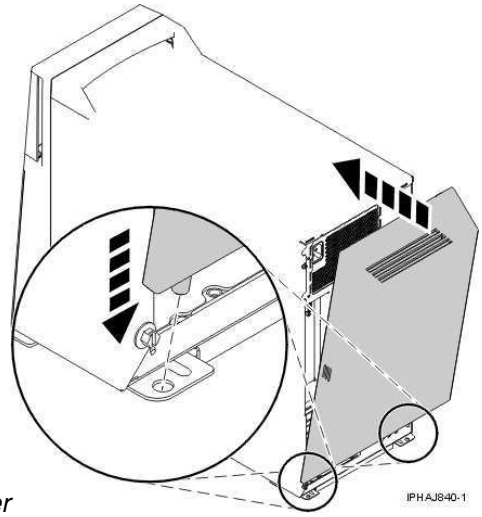
To replace the back cover from the model ESCALA PL 245T/R, follow these steps:

1. Attach all cables and cords.
2. Place the pins on the bottom of the cover into the slot at the bottom of the system unit, as shown in the following figure.
3. Rotate the cover until it snaps into place on the back of the system unit.

   Remember: Use care not to dislodge any of the cables or cords attached to the system unit during this procedure.

Figure 2. Replacing the model ESCALA PL 245T/R back

Power supply



cover

Parent topic: Remove and replace model ESCALA PL 245T/R covers and doors

Remove and replace the model ESCALA PL 245T/R side cover

To remove the side cover from the model ESCALA PL 245T/R, follow these steps:

1. Unlock the security lock A if it is locked, as shown in the following figure.
2. Press down on the latch B to open the cover and pull it away from the system unit.
3. Lift the panel out of the ledge on the bottom of the system unit.

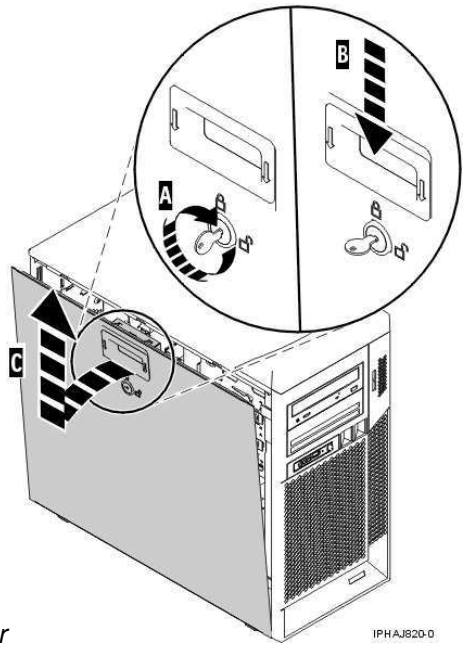


Figure 1. Removing the model ESCALA PL 245T/R side cover

Parent topic: Remove and replace model ESCALA PL 245T/R covers and doors

Replace the side cover in a model ESCALA PL 245T/R

To replace the side cover on the model ESCALA PL 245T/R, follow these steps:

1. Insert the bottom lip of the cover into the ledge on the bottom of the system unit.
2. Rotate the panel up A until the latch snaps into place B, as shown in the following figure.

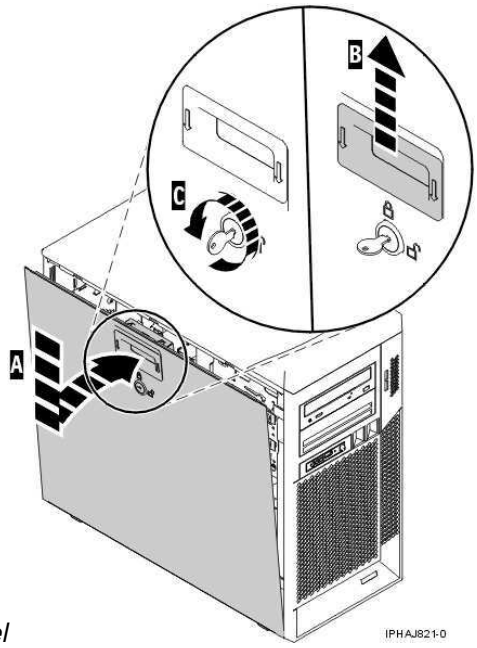


Figure 2. Replacing the service panel

3. Lock the security lock C if needed.

Place the rack-mounted system or expansion unit in the service position or operating position

The following procedures describe how to place a rack-mounted system or expansion unit into the service position or the operating position.

Select the appropriate instructions from this list:

- Place the rack-mounted system or expansion unit in the service position
- Place the rack-mounted system or expansion unit in the operating position

- **Place the rack-mounted system or expansion unit in the service position**
  By placing the rack-mounted system or expansion unit in the service position, you can access the inside of the unit.
- **Place the rack-mounted system or expansion unit in the operating position**
  By placing the rack-mounted system or expansion unit in the operating position, you make the unit available for use.

Parent topic: Related procedures

Place the rack-mounted system or expansion unit in the service position

By placing the rack-mounted system or expansion unit in the service position, you can access the inside of the unit.

Note: Some of the figures in these procedures might not look exactly like the system or expansion unit that you have. However, the steps to perform the task are the same.

DANGERWhen working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

  To Disconnect:

  1. Turn off everything (unless instructed otherwise).
  2. Remove the power cords from the outlets.
  3. Remove the signal cables from the connectors.
  4. Remove all cables from the devices

  To Connect:

  1. Turn off everything (unless instructed otherwise).
  2. Attach all cables to the devices.
  3. Attach the signal cables to the connectors.
  4. Attach the power cords to the outlets.
  5. Turn on the devices.

  (D005)

DANGERObserve the following precautions when working on or around your IT rack system:

- Heavy equipment personal injury or equipment damage might result if mishandled.
- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- To avoid hazardous conditions due to uneven mechanical loading, always install the heaviest devices in the bottom of the rack cabinet. Always install servers and optional devices starting from the bottom of the rack cabinet.

- Rack-mounted devices are not to be used as shelves or work spaces. Do not place objects on top of rack-mounted devices.

- Each rack cabinet might have more than one power cord. Be sure to disconnect all power cords in the rack cabinet when directed to disconnect power during servicing.
- Connect all devices installed in a rack cabinet to power devices installed in the same rack cabinet. Do not plug a power cord from a device installed in one rack cabinet into a power device installed in a different rack cabinet.
- An electrical outlet that is not correctly wired could place hazardous voltage on the metal parts of the system or the devices that attach to the system. It is the responsibility of the customer to ensure that the outlet is correctly wired and grounded to prevent an electrical shock.

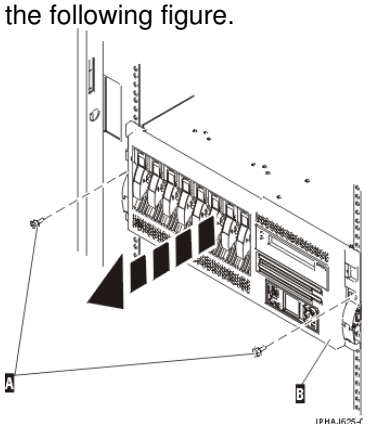
CAUTION

- Do not install a unit in a rack where the internal rack ambient temperatures will exceed the manufacturer's recommended ambient temperature for all your rack-mounted devices.
- Do not install a unit in a rack where the air flow is compromised. Ensure that air flow is not blocked or reduced on any side, front, or back of a unit used for air flow through the unit.
- Consideration should be given to the connection of the equipment to the supply circuit so that overloading of the circuits does not compromise the supply wiring or overcurrent protection. To provide the correct power connection to a rack, refer to the rating labels located on the equipment in the rack to determine the total power requirement of the supply circuit.
- *(For sliding drawers.)* Do not pull out or install any drawer or feature if the rack stabilizer brackets are not attached to the rack. Do not pull out more than one drawer at a time. The rack might become unstable if you pull out more than one drawer at a time.
- *(For fixed drawers.)* This drawer is a fixed drawer and must not be moved for servicing unless specified by the manufacturer. Attempting to move the drawer partially or completely out of the rack might cause the rack to become unstable or cause the drawer to fall out of the rack.

(R001)

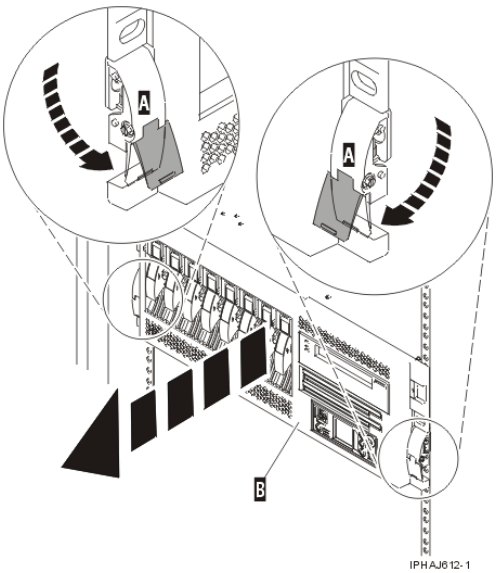
To place the rack-mounted system or expansion unit into the service position, follow these steps:

1. If necessary, open the front rack door.
2. Remove the two thumbscrews A that secure the system or expansion unit B to the rack as shown in the following figure.



3. Release the rack latches A on both the left and right sides as shown in the following figure.

Power supply



4. Review the following note, and then slowly pull the system or expansion unit out from the rack until the rails are fully extended and locked.

   Note:

   - If the procedure you are performing requires you to unplug cables from the back of the system or expansion unit, do so before you pull the unit out from the rack.
   - Ensure that the cables at the rear of the system or expansion unit do not catch or bind as you pull the unit out from the rack.
   - Ensure the rails are fully extended. When the rails are fully extended, the rail safety latches lock into place. This action prevents the system or expansion unit from being pulled out too far.

Parent topic: Place the rack-mounted system or expansion unit in the service position or operating position

Place the rack-mounted system or expansion unit in the operating position

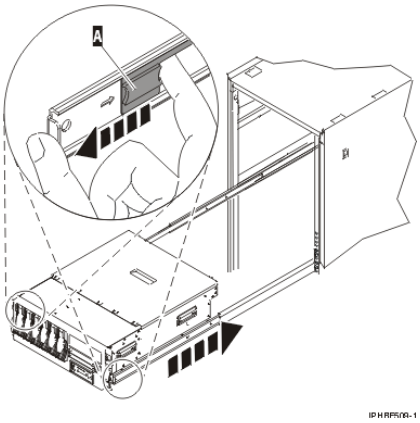
By placing the rack-mounted system or expansion unit in the operating position, you make the unit available for use.

Tip: Some of the figures in these procedures might not look exactly like the system or expansion unit that you have. However, the steps to perform the task are the same.

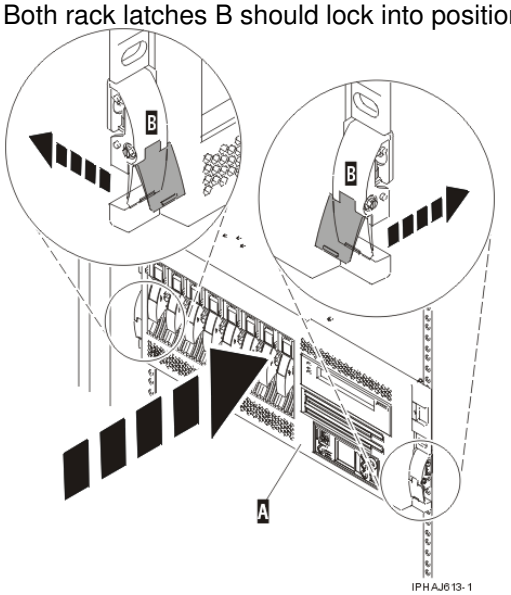
To place the rack-mounted system or expansion unit into the operating position, follow these steps:

1. Simultaneously release the blue rail safety latches A, located near the front of each rail, and push the system or expansion unit into the rack as shown in the following figure.

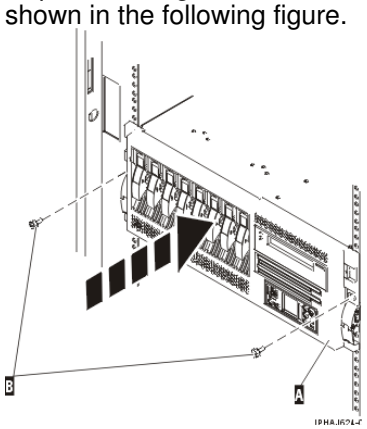
   Note: Ensure that the cables at the rear of the system or expansion unit do not catch or bind as you push the unit back into the rack.



a. Both rack latches B should lock into position as shown in the following figure.



2. Replace and tighten the two thumbscrews B that secure the system or expansion unit A to the rack as shown in the following figure.



3. Close the front rack door.

Parent topic: Place the rack-mounted system or expansion unit in the service position or operating position

Model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, service access cover

This topic describes how to remove and install the service access cover for the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, .

- **Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,**
  The following procedures describe how to remove the service access cover for the rack-mounted and stand-alone model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, .
- **Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,**
  The following procedures describe how to install the service access cover on the rack-mounted and stand-alone model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, .

Parent topic: Related procedures

Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10,

The following procedures describe how to remove the service access cover for the rack-mounted and stand-alone model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, .

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

- **Remove the service access cover from the rack-mounted model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,**
- **Remove the service access cover from the stand-alone model 112/85, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,**

Parent topic: Model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, service access cover

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Remove the service access cover from the rack-mounted model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10,

To remove the service access cover from a rack-mounted model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, , refer to Figure 1 and Figure 2 , and follow these steps:

1. Place the rack-mounted system or expansion unit in the service position.
2. Loosen the two thumbscrews located at the back of the cover.
3. Slide the cover toward the back of the system unit. When the front of the service access cover clears the upper frame ledge, lift the cover up and off the system unit.

Attention: For proper cooling and airflow, install the cover before starting the system. Operating the system without the cover for more than 30 minutes could damage the system components.

Figure 1. Remove the service access cover from the rack-mounted ESCALA PL 250T/R, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,

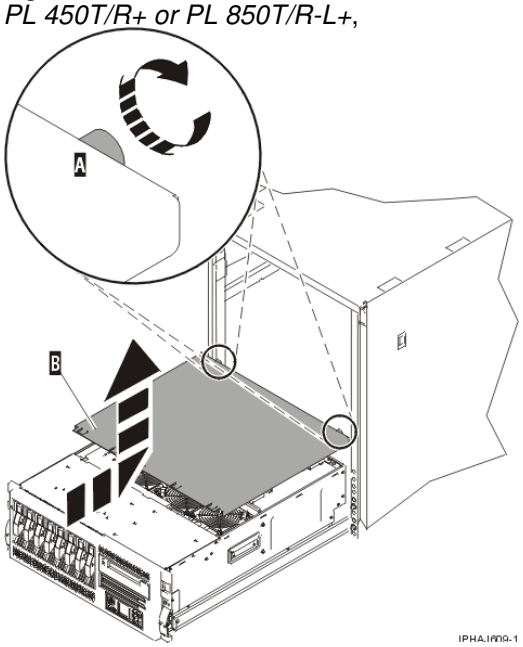
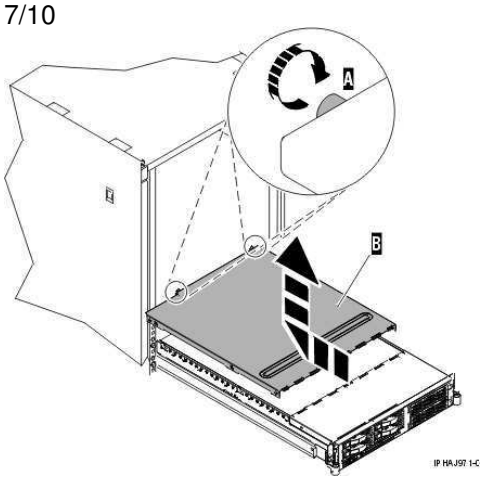


Figure 2. Remove the service access cover from the ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ or 7/10



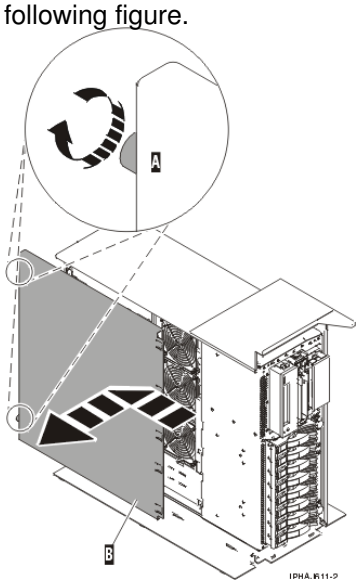
Parent topic: Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL

850T/R-L+,

Remove the service access cover from the stand-alone model 112/85, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,

To remove the service access cover from a stand-alone model 112/85, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, , do the following:

1. Loosen the two thumbscrews located at the back of the service access cover as shown in the following figure.



2. Slide the service access cover toward the back of the system unit. When the front of the cover clears the front frame ledge, lift the cover off the system unit.

Attention: For proper cooling and airflow, install the cover before starting the system. Operating the system without the cover for more than 30 minutes could damage the system components.

Parent topic: Remove the service access cover from the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,

Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10,

The following procedures describe how to install the service access cover on the rack-mounted and stand-alone model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, .

- **Install the service access cover on the rack-mounted model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL**

450T/R+ or PL 850T/R-L+,

- **Install the service access cover on the stand-alone model 112/85, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,**

Parent topic: Model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, service access cover

Install the service access cover on the rack-mounted model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10,

To install the service access cover on a rack-mounted model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, 7/10, , refer to Figure 1 and Figure 2, and follow these steps:

1. Place the service access cover A on the top of the system unit, approximately 25 mm (1 in.) from the front of the system unit.
2. Hold the service access cover against the system unit, and slide it toward the front of the system. Ensure that the fan LED cables do not get caught on the front edge of the service access cover as you move it forward. The tabs on the service access cover slide beneath the upper chassis ledge, and the two thumbscrews align with the screw holes at the back of the system unit.
3. Tighten the thumbscrews B located at the back of the cover.

Figure 1. Install the service access cover on the rack-mounted model ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,

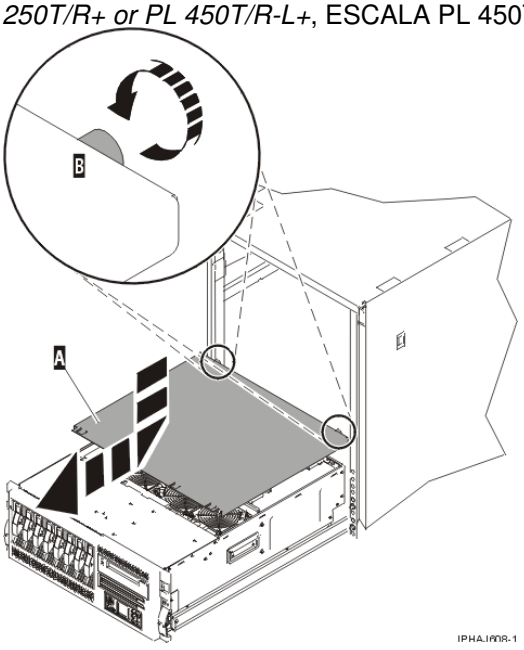
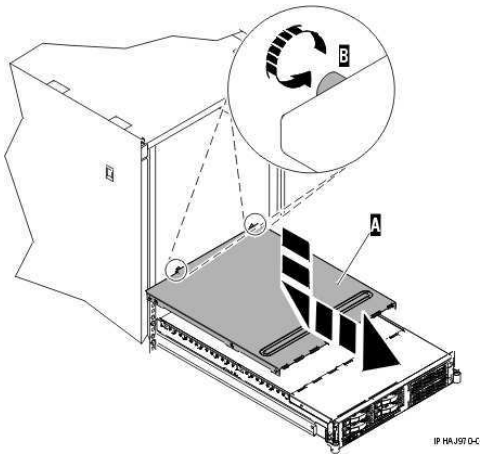


Figure 2. Install the service access cover on the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ or7/10



Parent topic: Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,

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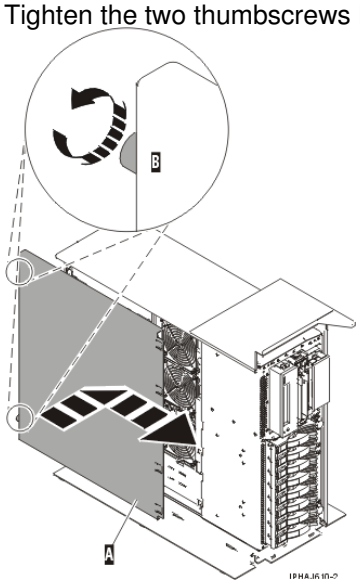
Install the service access cover on the stand-alone model 112/85, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,

To install the service access cover on a stand-alone model 112/85, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, , follow these steps:

1. Align the service access cover pins with the slots in the system. The flanges on the top and bottom of the cover wrap around the system frame, as shown in the following figure.
2. Hold the service access cover against the system unit A and slide it toward the front of the system.
3. Tighten the two thumbscrews B located at the back of the cover.



Parent topic: Install the service access cover on the model 112/85, ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,

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Expansion unit cover or door

Learn how to remove and install expansion unit covers and doors.

- **Remove the front door from the 50/74 or 50/94 expansion unit**
- **Remove the front door from the 50/79 or 52/94 expansion unit**
- **Remove the back door from the 50/74, 50/79, and 50/94 expansion unit**
- **Remove the front cover from the 50/95 expansion unit**
- **Remove the back door and cover from the 50/95 expansion unit**
- **Remove the back cover from the 05/88 expansion unit**
- **Remove and install the front cover on the 57/91 or 57/94 expansion unit**
  These procedures describe how to remove and install the cover of the 57/91 or 57/94 expansion unit.

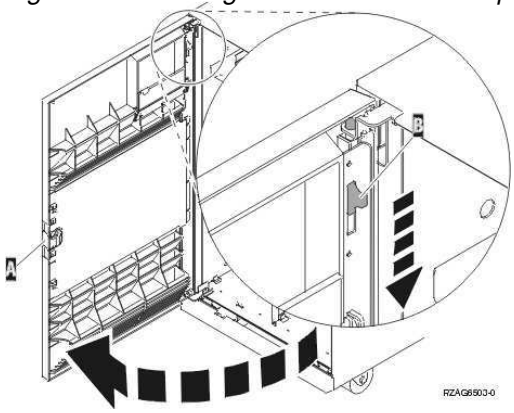
Parent topic: Related procedures

Remove the front door from the 50/74 or 50/94 expansion unit

To remove the front door from the expansion unit, follow these steps:

1. Open the front door A as shown in the following figure.
2. Press the latch B to remove the door.

Figure 1. Removing the 50/74 or 50/94 expansion unit front door



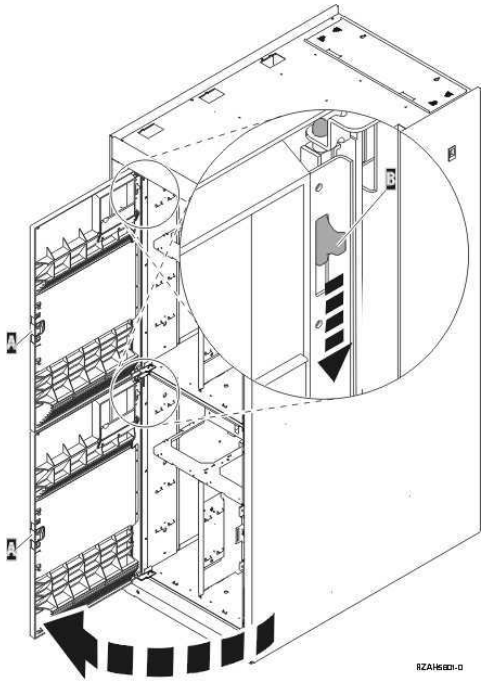
Parent topic: Expansion unit cover or door

Remove the front door from the 50/79 or 52/94 expansion unit

To remove the front door from the expansion unit, follow these steps:

1. Open the front door A as shown in the following figure.
2. Press the latch B to remove the door.

Figure 1. Removing the 50/79 or 52/94 expansion unit front door



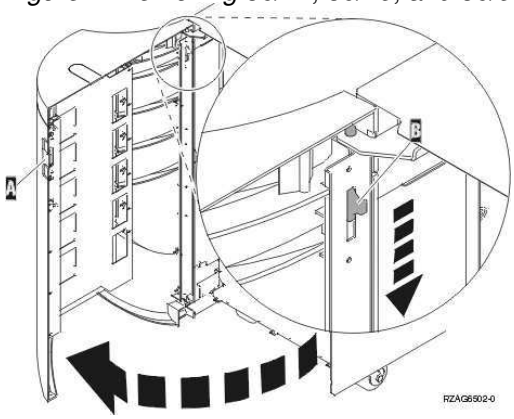
Parent topic: Expansion unit cover or door

Remove the back door from the 50/74, 50/79, and 50/94 expansion unit

To remove the back door from the expansion unit, follow these steps:

- Open the back door A as shown in the following figure.
- Press the latch B to remove the door.

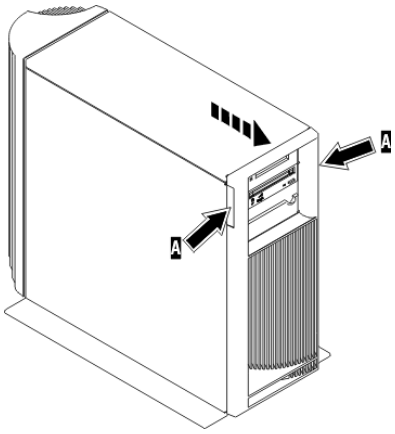
Figure 1. Removing 50/74, 50/79, and 50/94 expansion unit back door



Parent topic: Expansion unit cover or door

Remove the front cover from the 50/95 expansion unit

To remove the front cover from the expansion unit, grip the sides of the cover A and pull the cover toward you, as shown in the following figure.



Parent topic: Expansion unit cover or door

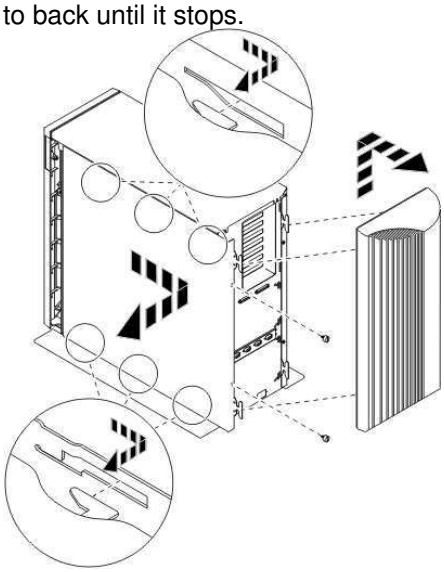
Remove the back door and cover from the 50/95 expansion unit

To remove the back door and cover from the expansion unit, follow these steps:

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

   Attention: If you remove the cover while the server is powered on, errors might occur due to electromagnetic interference.

2. Remove the left cover, view from back, by loosening the thumbscrews and sliding the cover from front to back until it stops.



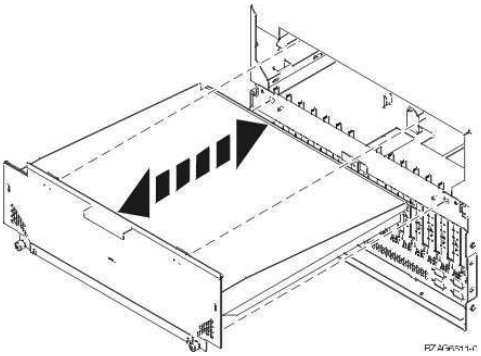
3. Pull the cover out.

Parent topic: Expansion unit cover or door

Power supply

Remove the back cover from the 05/88 expansion unit

Open the back cover and remove the air flow shield, as shown in the following figure.



Parent topic: Expansion unit cover or door

Remove and install the front cover on the 57/91 or 57/94 expansion unit

These procedures describe how to remove and install the cover of the 57/91 or 57/94 expansion unit.

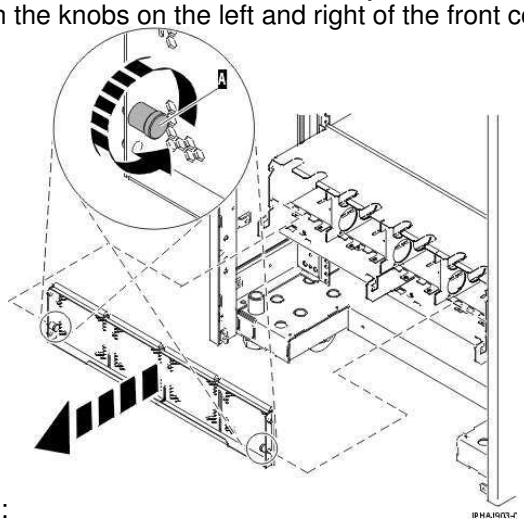
- **Remove the front cover from the 57/91 or 57/94 expansion unit**
- **Install the front cover on the 57/91 or 57/94 expansion unit**

Parent topic: Expansion unit cover or door

Remove the front cover from the 57/91 or 57/94 expansion unit

To remove the front cover, follow these steps:

1. Open the rack front door, if necessary.
2. Pull in the knobs on the left and right of the front cover as shown in the following figure:



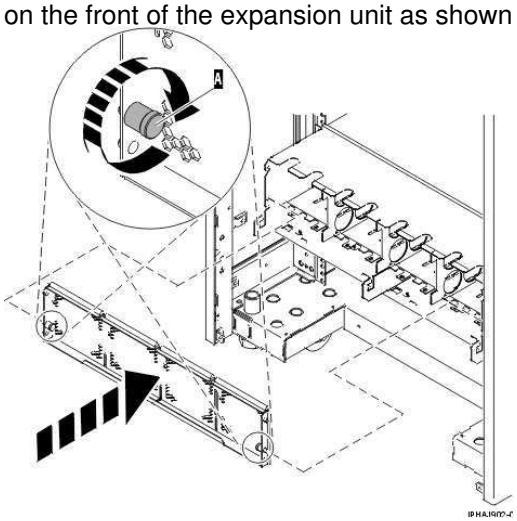
3. Pull the cover out and away from the expansion unit.

Parent topic: Remove and install the front cover on the 57/91 or 57/94 expansion unit

Install the front cover on the 57/91 or 57/94 expansion unit

To install the front cover, follow these steps:

1. Position the cover on the front of the expansion unit so that the pins on the cover line up with the slots on the front of the expansion unit as shown in the following figure:



2. Pull in the knobs on the left and right of the front cover.
3. Push the cover on to the front of the expansion unit.
4. Release the knobs on the left and right of the front cover.

Parent topic: Remove and install the front cover on the 57/91 or 57/94 expansion unit

Place the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ or 7/10 in the operating position

Learn how to place the unit into the operating position.

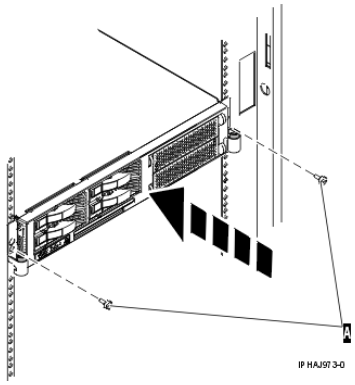
Tip: Some of the figures in these procedures might not look exactly like the system unit that you have. However, the steps to perform the task are the same.

To place the system unit into the operating position, follow these steps:

1. Simultaneously release the blue rail safety latches, located near the middle of each rail, and push the system unit into the rack. Both rack latches should lock into position.

Important: Ensure that the cables at the rear of the system unit do not catch or bind as you push the unit back into the rack.

2. Replace and tighten the two thumbscrews A that secure the system unit to the rack as shown in the following figure.



3. Close the front rack door.

Parent topic: Related procedures

Install a feature using the Hardware Management Console

To use the Hardware Management Console user interface to install a feature in a system or expansion unit that is managed by a Hardware Management Console (HMC), follow these steps:

1. In the navigation area, expand **Management Environment**.
2. Expand the managed system into which you are installing a feature.
3. Expand **Service Applications**.
4. Select **Service Focal Point**.
5. In the contents area, select **Install/Add/Remove Hardware**.
6. In the **Install/Add/Remove Hardware** window, highlight system or unit into which you are installing a feature.
7. Click **Selected**.
8. From the Selected menu, select **Add FRU**.
9. In the **Enclosure type** field, select the system or expansion unit into which you are installing a feature.
10. In the FRU types for selected enclosure, select the feature you are installing.
11. Click **Next.**
12. Follow the instructions to install the feature.

Note: The HMC might open the ESCALA Power5 Hardware Information instructions for installing the feature. If so, follow these instructions to install the feature.

Parent topic: Related procedures

Remove a part using the Hardware Management Console

To use the Hardware Management Console user interface to remove a part in a system or expansion unit that is managed by a Hardware Management Console (HMC), follow these steps:

1. In the navigation area, expand the **Management Environment.**
2. Expand the managed system in which you are replacing a part.
3. Expand **Service Applications.**
4. Select **Service Focal Point**.
5. In the contents area, select **Install/Add/Remove Hardware**.
6. In the **Install/Add/Remove Hardware** window, click System Processor.
7. From the Selected menu, select **Remove FRU**.
8. In the **Installed enclosure types** field, select the system or expansion unit from which you are removing a part.
9. In the Available FRU types for selected enclosure, select the part you are removing.
10. Click **Next.**
11. Follow the instructions to remove the part.

Note: The HMC might open the ESCALA Power5 Hardware Information instructions for removing the part. If so, follow these instructions to remove the part.

Parent topic: Related procedures

Replace a part using the Hardware Management Console

To use the Hardware Management Console user interface to replace a part in a system or expansion unit that is managed by a Hardware Management Console (HMC), follow these steps:

1. In the navigation area, expand the **Management Environment.**
2. Expand the managed system in which you are replacing a part.
3. Expand **Service Applications.**
4. Select **Service Focal Point**.
5. In the contents area, select **Repair Serviceable Event**.
6. Select the system and click **OK**.
7. In the window, click the problem number for the part you want to replace.
8. Follow the instructions to replace the part.

Note: The HMC might open the ESCALA Power5 Hardware Information instructions for replacing the part. If so, follow these instructions to replace the part.

Parent topic: Related procedures

Identify a failing part

The following procedures describe how to locate and identify a failing part on your system or expansion unit.

- **Identify a failing part on an AIX system or logical partition**
- **Identify a failing part on a Linux system or logical partition**
- **Identify a failing part using the Advanced System Management Interface**
  Use this task to identify a failing part if the Linux operating system is running on the system or logical partition.

Parent topic: Related procedures

Identify a failing part on an AIX system or logical partition

To identify a failing part on a system or logical partition running AIX, you must locate the failing part, and then activate the indicator light for that part.

- **Locate a failing part in an AIX system or logical partition**
- **Activate the indicator light for the failing part**

Parent topic: Identify a failing part

Locate a failing part in an AIX system or logical partition

To locate the failing part in a system or logical partition running AIX, follow these steps:

1. Log in as root user or `celogin-`.
2. At the command line, type `diag` and press Enter.
3. From the **Function Selection** menu, select Task Selection and press Enter.
4. Select Display Previous Diagnostic Results and press Enter.
5. From the **Display Previous Diagnostic Results** display, select Display Diagnostic Log Summary. A **Display Diagnostic Log** display appears. This display contains a chronological list of events.
6. Look in the T column for the most recent S entry. Select this row in the table and press Enter.
7. Choose Commit. The details of this log entry are shown.
8. Record the location information and the SRN value shown near the end of the entry.
9. Exit to the command line.

Use the location information for the failing part to activate the indicator light that identifies the failing part. For instructions, see Activate the indicator light for the failing part.

Parent topic: Identify a failing part on an AIX system or logical partition

Activate the indicator light for the failing part

The indicator light helps you locate which part to replace. To activate the indicator light, follow these steps:

1. Log in as root user.
2. At the command line, type `diag` and press Enter.
3. From the **Function Selection** menu, select Task Selection. Press Enter.
4. From the **Task Selection** menu, select Identify and Attention Indicators. Press Enter.
5. From the list of lights, select the location code for the failing part and press Enter.
6. Select Commit. This turns on the system attention and indicator light for the failing part.
7. Exit to the command line.

Parent topic: Identify a failing part on an AIX system or logical partition

Identify a failing part on a Linux system or logical partition

There are a number of methods to identify a failing part on a system or logical partition running Linux.

- **Locate a failing part and activate the indicator light**
  Use this task to locate a failing part if the service aids have been installed.
- **Activate the indicator light for the failing part**
  Use these instructions to activate the indicator light. The indicator light helps you locate which part to replace.
- **Deactivate the failing-part indicator light**
  After replacing a failing part, use this task to deactivate the failing-part indicator light.
- **Identify a failing part using stand-alone diagnostics**
  Use this task if the operating system is stopped or if you need to stop the system or logical partition to replace the failing part.

Parent topic: Identify a failing part

Locate a failing part and activate the indicator light

Use this task to locate a failing part if the service aids have been installed.

To identify a failing part on a system or logical partition running Linux, you must locate the failing part, and then activate the indicator light for that part.

- **Locate a failing part in a Linux system or logical partition**
  Use these instructions if you do not know the location code of the failing part. If you know the location code proceed to the next task to activate the indicator light.

Parent topic: Identify a failing part on a Linux system or logical partition

Locate a failing part in a Linux system or logical partition

Use these instructions if you do not know the location code of the failing part. If you know the location code proceed to the next task to activate the indicator light.

To locate the failing part in a system or logical partition running Linux, follow these steps:

1. Log in as root user.
2. At the command line, type `grep diagela /var/log/platform` and press Enter.
3. Look for the most recent entry that contains a system reference code (SRC).
4. Record the location information.

Parent topic: Locate a failing part and activate the indicator light

Activate the indicator light for the failing part

Use these instructions to activate the indicator light. The indicator light helps you locate which part to replace.

To activate the indicator light, follow these steps:

1. Log in as root user.
2. At the command line, type `/usr/sbin/usysident -s identify -l`*<location code>* and press Enter. Substituting the location code of the failing unit for *<location code>*.
3. Look for the system attention light to identify the enclosure that contains the failing part.

Parent topic: Identify a failing part on a Linux system or logical partition

Deactivate the failing-part indicator light

After replacing a failing part, use this task to deactivate the failing-part indicator light.

After replacing a failing part, follow these steps to deactivate the failing-part indicator light:

1. Log in as root user.
2. At the command line, type `/usr/sbin/usysident -s normal -l`*<location code>* and press Enter. Substitute the location code of the failing unit for ***<location code>***.
3. Look for the system attention light to identify the enclosure that contains the failing part.

Parent topic: Identify a failing part on a Linux system or logical partition

Identify a failing part using stand-alone diagnostics

Use this task if the operating system is stopped or if you need to stop the system or logical partition to replace the failing part.

You can use stand-alone diagnostics to identify a failing part in a Linux system, expansion unit, or logical partition. You access these diagnostics from a CD-ROM or from the Network Installation Management (NIM) server. This procedure describes how to use the diagnostics from a CD-ROM. For information on running

diagnostics from the Network Installation Management (NIM) Server, see Running the stand-alone diagnostics from a Network Installation Management server.

Prerequisites:

- If this server is directly attached to another server or attached to a network, be sure communications with the other servers are stopped.
- Ensure that no other activity is running on the logical partition. Stand-alone diagnostics require use of all of the logical partition resources. No other activity can be running on the logical partition.
- You must have access to the system console to use stand-alone diagnostics.

To use stand-alone diagnostics from a CD-ROM, follow these steps:

1. Stop all jobs and applications, and then stop the operating system on the system or logical partition.
2. Remove all tapes, diskettes, and CD-ROM.
3. Turn off the system unit power.

   Note: The next step starts the server or logical partition from the stand-alone diagnostic CD-ROM. If the CD-ROM or DVD-ROM drive is not available as the startup device on the server or logical partition on which you are working, follow these steps:

   a. Access the Advanced System Management Interface (ASMI). See Managing your server using the Advanced System Management Interface for information on using the ASMI.
   b. On the ASMI main menu, click **Power/Restart Control**.
   c. Click **Power On/Off System**.
   d. Select the **Service mode boot** from **default boot list** option in the AIX or Linux logical partition mode boot list.
   e. Click **Save settings** and power on the system. As soon as the optical drive has power, insert the AIX diagnostic diskette.
   f. Go to step 5.
4. Turn on the system unit power and insert the diagnostics CD-ROM into the CD-ROM drive.
5. After the keyboard POST indicator displays on the firmware console and before the last POST indicator (speaker) displays, press the 5 key on either the directly attached keyboard or the ASCII terminal. This indicates that a service mode boot should be initiated using the default service mode boot list.
6. Enter any requested password.
7. At the Diagnostic Operating Instructions display, press Enter.

   Tip: If the Diagnostic Operating Instructions display does not appear, contact your support center for assistance.

8. If the terminal type is requested, use the **Initialize Terminal** option on the **Function Selection** menu to initialize the operating system.

Parent topic: Identify a failing part on a Linux system or logical partition

Identify a failing part using the Advanced System Management Interface

Use this task to identify a failing part if the Linux operating system is running on the system or logical partition.

To activate the indicator light for a failing part, follow these steps:

1. If the unit ID does not match the label on the system or expansion unit, update the configuration information.
    - For information on setting up the ASMI refer to Accessing the Advanced System Management Interface.
    - For information on using the ASMI, refer to Managing your server using the Advanced System Management Interface
2. Turn on the failing part indicator light. For instructions, see Changing service indicators.

Parent topic: Identify a failing part

Verify the installed part

This topic describes how to verify a newly installed or replaced part on your system, logical partition, or expansion unit. Verify an installed feature or replaced part by selecting the appropriate procedure for the operating system or for the console as follows.

- **Verify an installed feature or replaced part on an AIX system or logical partition**
- **Verify the installed part on a Linux system or logical partition (run AIX diagnostics)**
- **Verify the presence of an installed part using Hardware Management Console (HMC)**
  Use these instructions to verify an installed part using the Hardware Management Console (HMC). If you have reference codes, symptoms, or location codes that you used during the service action, locate the records to use during this procedure.
- **Verify the presence of an installed part using the Advanced System Management Interface (ASMI)**
  Use these instructions to verify a newly installed part or replaced part using the Advanced System Management Interface (ASMI).

Parent topic: Related procedures

Verify an installed feature or replaced part on an AIX system or logical partition

To verify the operation of a newly installed feature or replacement part, select the appropriate procedure:

- Verify the installed feature using AIX
- Verifying the replaced part using AIX

Verify the installed feature using AIX:

1. Log in as root user.
2. At the command line, type `diag` and press Enter.
3. Select **Advanced Diagnostics Routines**. Press Enter.
4. From the **Diagnostic Mode Selection** menu, select **System Verification**. Press Enter.
5. When the **Advanced Diagnostic Selection** menu appears, do one of the following:
    - To test a single resource, select the resource that you just installed from the list of resources and press Enter.
    - To test all the resources available to the operating system, select **All Resources** and press Enter.
6. Select **Commit**, and wait until the diagnostic programs run to completion, responding to any prompts that appear.
7. Did the diagnostics run to completion and display the message `No trouble was found`?
    - **No:** If a service request number (SRN) or other reference code is displayed, suspect a loose adapter or cable connection. You can learn more about these codes in Reference codes.

Review the installation procedures to ensure that the new feature is installed correctly. If you cannot correct the problem, collect all SRNs or any other reference code information that you see. If the system is running in LPAR mode, note the logical partition in which you installed the feature. Contact your service provider for assistance.

- **Yes:** The new device is installed correctly. Exit the diagnostic programs and return the system to normal operations.

Verify the replacement part using AIX

To verify the operation of a newly installed feature or replacement part, follow these steps:

1. Did you replace the part using either AIX or the online diagnostics service aid's concurrent (hot-swap) service operation?
   - **No:** Go to step 2.
   - **Yes:** Go to step 5.
2. Is the system powered off?
   - **Yes:** If the system supports slow boot, set the system to perform a slow boot. For information, see Performing a slow boot.
   - **No:** Go to step 4.
3. Start the system and wait until the AIX operating system login prompt displays or until apparent system activity on the operator panel or display has stopped.
   Did the AIX login prompt display?
   - **Yes:** Go to step 4
   - **No:** If an SRN or other reference code is displayed, suspect a loose adapter or cable connection. You can learn more about these codes in the Reference codes. Review the procedures for the part that you replaced to ensure that the new part is installed correctly. If you cannot correct the problem, collect all SRNs or any other reference code information that you see. If the system does not start or you have no login prompt, see: Problems with loading and starting the operating system.

     If the system is partitioned, note the logical partition in which you replaced the part. Contact your service provider for assistance.
4. At the command prompt, type `diag a` and press Enter to check for missing resources. If you see a command prompt, go to step 5.

   If the **Diagnostic selection** menu is shown with **M** appearing next to any resource, follow these steps:

   a. Select the resource and press Enter.
   b. Select **Commit**.
   c. Follow any instructions that are shown.
   d. If a *Do you want to review the previously displayed error?* message is shown, select **Yes** and press Enter.
   e. If an SRN is shown, suspect a loose card or connection. If no obvious problem is shown, record the SRN .
   f. If no SRN is shown, go to 5.
5. Test the part by doing the following:
   a. At the command line, type `diag` and press Enter.
   b. From the **Function Selection** menu, select **Advanced Diagnostics Routines**. Press Enter.
   c. From the **Diagnostic Mode Selection** menu, select **System Verification**. Press Enter.
   d. Select **All Resources**, or select the diagnostics for the individual part to test only the part you replaced, and any devices that are attached to the part you replaced. Press Enter.

   Did the **Resource Repair Action** menu appear?
   - **No:** Go to step 6.
   - **Yes:** Go to step 7.
6. Did the *Testing Complete, No trouble was found* message appear?
   - **No:** There is still a problem. Contact your service provider. **This ends the procedure.**
   - **Yes:** Select **Log Repair Action**, if not previously logged, from the **Task Selection** menu to update the AIX error log. If the repair action was reseating a cable or adapter, select the resource associated with that repair action. If the resource associated with your action is not displayed on the Resource List, select **sysplanar0**. Press Enter.

     Tip: This action changes the indicator light for the part from the fault state to the normal state.

Go to step 9

7. When a test is run on a resource in system verification mode, and that resource has an entry in the AIX error log, if the test on the resource was successful, the *Resource Repair Action* menu appears. After replacing a part, you must select the resource for that part from the *Resource Repair Action* menu. This updates the AIX error log to indicate that a system-detectable part has been replaced.

   Note: On systems with a indicator light for the failing part, this changes the indicator light to the normal state.

   Follow these steps:

   a. Select the resource that has been replaced from the *Resource Repair Action* menu. If the repair action was reseating a cable or adapter, select the resource associated with that repair action. If the resource associated with your action does not appear on the Resource List, select **sysplanar0**. Press Enter.
   b. Select **Commit** after you make your selections. Did another *Resource Repair Action* display appear?
   - **No:** If the *No Trouble Found* display appears, go to step 9
   - **Yes:** Go to step 8.

8. The parent or child of the resource you just replaced may also require that you run the Resource Repair Action option on it. When a test is run on a resource in system verification mode, and that resource has an entry in the AIX error log, if the test on the resource was successful, the *Resource Repair Action* menu appears. After replacing that part, you must select the resource for that part from the *Resource Repair Action* menu. This updates the AIX error log to indicate that a system-detectable part has been replaced.

   Note: This changes the indicator light for the part from the fault state to the normal state.

   Follow these steps:

   a. From the *Resource Repair Action* menu, select the parent or child of the resource that has been replaced. If the repair action was to reseat a cable or adapter, select the resource associated with that repair action. If the resource associated with your action does not appear on the Resource List, select **sysplanar0**. Press Enter.
   b. Select **Commit** after you make your selections.
   c. If the *No Trouble Found* display appears, go to step 9.

9. If you changed the service processor or network settings, as instructed in previous procedures, restore the settings to the value they had prior to servicing the system.
10. Did you do any hot-plug procedures before doing this procedure?
    - **No:** Go to step 11.
    - **Yes:** Go to step 12.
11. Start the operating system, with the system or logical partition in normal mode. Were you able to start the operating system?
    - **No:** Contact your service provider. **This ends the procedure.**
    - **Yes:** Go to step 12.
12. Are the indicator lights still on?
    - **No. This ends the procedure.**
    - **Yes.** Turn off the lights. See one of the following for instructions:
      - Identify a failing part using stand-alone diagnostics
      - Running the stand-alone diagnostics from a Network Installation Management server
      - Changing service indicators with the ASMI menus

Parent topic: Verify the installed part

Verify the installed part on a Linux system or logical partition (run AIX diagnostics)

To verify the newly installed or replaced part, choose one of the following:

- Verify the presence of an installed part using the Advanced System Management Interface (ASMI)

- **Verify an installed part using the stand-alone diagnostics**
  Use these instructions to verify an installed part in a Linux system, expansion unit, or logical partition.

Parent topic: Verify the installed part

Verify an installed part using the stand-alone diagnostics

Use these instructions to verify an installed part in a Linux system, expansion unit, or logical partition.

You can use stand-alone diagnostics to verify an installed part in a Linux system, expansion unit, or logical partition. You access these diagnostics from a CD-ROM or from the Network Installation Management (NIM) server. This procedure describes how to use the diagnostics from a CD-ROM. For information on running diagnostics from the Network Installation Management (NIM) server, see Running the stand-alone diagnostics from a Network Installation Management server.

Prerequisites

- If this server is directly attached to another server or attached to a network, be sure communication with the other servers is stopped.
- stand-alone diagnostics require use of all of the logical partition resources. No other activity can be running on the logical partition.
- stand-alone diagnostics require access to the system console.

To use stand-alone diagnostics, follow these steps:

1. Stop all jobs and applications and then stop the operating system on the system or logical partition.
2. Remove all tapes, diskettes, and CD-ROM.
3. Turn off the system unit power. The next step boots the server or logical partition from the stand-alone diagnostics CD-ROM. If the optical drive is not available as the boot device on the server or logical partition on which you are working, follow these steps:
   a. Access the ASMI. See Managing your server using the Advanced System Management Interface for information on using the ASMI.
   b. On the ASMI main menu, click on **Power/Restart Control**.
   c. Click on Power On/Off System.
   d. Select the **Service mode boot from default boot list** option in the AIX/Linux logical partition mode boot drop-down menu.
   e. Click on **Save settings and power on**. As soon as the optical drive has power, insert the standalone diagnostic CD-ROM.
   f. Go to step 5.
4. Turn on the system unit power and immediately insert the diagnostics CD-ROM into the optical drive.
5. After the **keyboard** POST indicator displays on the system console and before the last POST indicator (**speaker**) displays, press the numeric 5 key on the system console to indicate that a service mode boot should be initiated using the default service mode boot list.
6. Enter any requested password.
7. At the *Diagnostic Operating Instructions* display, press Enter.

Note: If an SRN or other reference code is displayed, suspect a loose adapter or cable connection. Review the procedures for the part that you replaced to ensure that the new part is installed correctly. If you cannot correct the problem, collect all SRNs or any other reference code information that you see. If the system will not boot or you have no login prompt go to Problems with loading and starting the operating system.

Note: If you received an SRN or any other reference code when you attempted to start the system, you can learn more about these codes in Reference codes.

8. If the terminal type is requested, you must use the **Initialize Terminal** option on the *Function Selection* menu to initialize the operating system before you can continue.
9. From the Function Selection menu, select **Advanced Diagnostics Routines**. Press Enter.
10. From the Diagnostic Mode Selection menu, select **System Verification**. Press Enter.
11. When the Advanced Diagnostic Selection menu appears, select **All Resources**, or test only the part you replaced, and any devices that are attached to the part you replaced, by selecting the diagnostics for the individual part. Press Enter.
12. Did the *Testing Complete, No trouble was found* message appear?
    - **No:** There is still a problem. Contact your service provider.
    - **Yes:** Go to step 13.
13. If you changed the service processor or network settings, as instructed in previous procedures, restore the settings to the value they had prior to servicing the system.
14. If the indicator lights are still on, follow these steps:
    a. Select **Identify and Attention Indicators** from the *Task Selection* menu to turn off the system attention and indicator lights. Press Enter.
    b. Select **Set System Attention Indicator to NORMAL** and press Enter.
    c. Select **Set All Identify Indicators to NORMAL** and press Enter.
    d. Choose **Commit**.

    Note: This changes the system attention and identify indicators from the *Fault* state to the *Normal* state.

    e. Exit to the command line.

Parent topic: Verify the installed part on a Linux system or logical partition (run AIX diagnostics)

Verify the presence of an installed part using Hardware Management Console (HMC)

Use these instructions to verify an installed part using the Hardware Management Console (HMC). If you have reference codes, symptoms, or location codes that you used during the service action, locate the records to use during this procedure.

Use this procedure to update your HMC records after you have completed a service action on your server. If you have reference codes, symptoms, or location codes that you used during the service action, locate the records to use during this procedure.

1. At the HMC, examine the service action event log for any open service action events. See Viewing serviceable events for details.
2. Are there any service action events that are open?
   - **No**: If the system attention LED is still on, use the HMC to turn off the LED. See Activating and Deactivating LEDs. **This ends the procedure.**
   - **Yes**: Continue with the next step.

3. Record the list of open service action events.
4. Examine the details of the open service action event. Is the error code associated with this service action event the same as you gathered earlier.
    - **Yes**: Continue with the next step.
    - **No**: Choose from the following options:
        - Review the other serviceable events and find one that does match and continue with the next step.
        - If the log does not match what you had gathered earlier, contact your service provider.
5. Select and highlight the service action event from the Error Associated With This Serviceable Event window.
6. Click **Close Event**.
7. Add comments for the serviceable event. Include any unique additional information. Click **OK**.
8. Did you replace, add, or modify a FRU of the open service action event?
    - **No**: Select the **No FRU Replaced for this Serviceable Event** option and click **OK** to close the service action event.
    - **Yes**: Perform the following steps:
        a. From the FRU list, select a FRU that you need to update.
        b. Double-click the FRU and update the FRU information.
        c. Click **OK** to close the service action event.
9. If you continue to have problems, contact your service provider.

Parent topic: Verify the installed part

Verify the presence of an installed part using the Advanced System Management Interface (ASMI)

Use these instructions to verify a newly installed part or replaced part using the Advanced System Management Interface (ASMI).

To verify the newly installed or replaced part, follow these steps:

1. If the unit ID does not match the label on the system or expansion unit, update the configuration information.
    - For information on accessing up the ASMI, refer to Accessing the Advanced System Management Interface
    - For information on using the ASMI Managing your server using the Advanced System Management Interface.
2. Turn off the failing part indicator light. For instructions, see Changing service indicators.

Parent topic: Verify the installed part

Technical publication remarks form

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