

Hardware Information

Control panel

ESCALA POWER5



REFERENCE
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ESCALA POWER5

Hardware Information

Control panel

Hardware

July 2006

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Control panel

The following procedures describe the removal and replacement of the control panel (also known as the operator panel) for the models listed below. Also listed below are procedures to remove and replace the control-panel signal cable and control panel fillers, if applicable.

- [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#)
 - [Model ESCALA PL 250R-VL or ESCALA PL 450R-XS control panel](#)
 - [Model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ control panels](#)
 - [Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel](#)
 - [Model ESCALA PL 245T/R control panel](#)
-

Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels

These procedures describe the removal and replacement of the control panel in the following servers:

- 112/85
- ESCALA PL 250T/R
- ESCALA PL 450T/R
- 7/20

Replacing this feature is a customer task. You can 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.

Select the appropriate instructions from this list:

- [Remove the control panel with power on](#)
- [Replace the control panel with power on](#)
- [Remove the control panel with power off](#)
- [Replace the control panel with power off](#)
- [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panel fillers](#)
- [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control-panel signal cables](#)

Parent topic: [Control panel](#)

Remove the control panel with power on

These procedures describe the removal of the control panel with power on for the server models listed in [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#).

Be sure you read these instructions carefully and understand the complexity of the power on procedure before you begin. If you do not feel comfortable using this procedure, go to [Remove the control panel with power off](#).

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

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

Prerequisites

To remove a control panel with the system power on, you must first complete the following items:

Control panel

- Gain access to the Advanced System Management Interface (ASMI). See [Managing the Advanced System Management Interface \(ASMI\)](#) for instructions.

Remove the control panel

To remove the control panel with the system or logical partition powered on, follow these steps from the system or logical partition that controls the media device:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Remove the front cover from your system. Refer to [Remove the front cover from the 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+, or the 05/95 expansion unit](#).
3. Access the Advanced System Management Interface (ASMI). See [Managing the Advanced System Management Interface \(ASMI\)](#) for instructions.
4. In the navigation area of the ASMI, select Using concurrent maintenance utilities and then Control panel.
5. At the control panel window, select Remove and click Continue.
6. Choose the control panel's location and click Save Settings.
7. If the operation was successful, the window will display: `Operation completed successfully`.
8. Remove the control panel by pressing the locking tabs A located on either side of the panel, grasping the edges of the panel, and pulling it out of its bay.

Attention: Disconnect the control-panel signal cable B from the back of the control panel C.

Figure 1. Control panel removal from a rack-mounted system unit

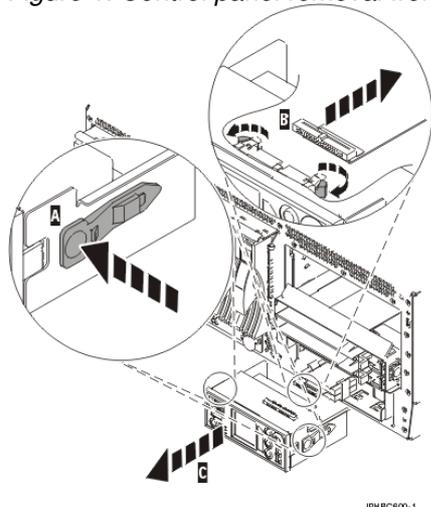
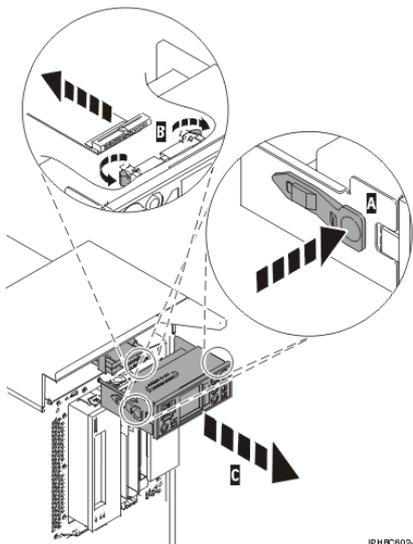


Figure 2. Control panel removal from a stand-alone system unit



9. Replace the control panel with power on (see [Replace the control panel with power on](#)).

Attention: A control panel or control panel filler must be in place when the system power is on for proper air flow and cooling. See [Model ESCALA PL 250T/R, ESCALA PL 450T/R, ESCALA PL 850R/PL 1650R/R+, and 7/20 control panel fillers](#) for instructions on installing a control panel filler.

Parent topic: [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#)

Replace the control panel with power on

These procedures describe the replacement of the control panel with power on for the server models listed in [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#).

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

Prerequisites

To replace a control panel with the system power on, you must first complete the following items:

- Gain access to the Advanced System Management Interface (ASMI). See [Managing the Advanced System Management Interface \(ASMI\)](#) for instructions.

Replace the control panel

To replace the control panels with the power on, do the following procedure:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. If you have not already done so, remove the control panel with power on. See [Remove the control panel with power on](#).

Attention: A control panel or control panel filler must be in place when the system power is on for proper air flow and cooling. See [Model ESCALA PL 250T/R, ESCALA PL 450T/R, ESCALA PL 850R/PL 1650R/R+, and 7/20 control panel fillers](#) for instructions on removing a control panel filler.

Control panel

3. If necessary, remove the new control panel from its packaging. If there are control-panel overlays included with the new control panel, install the appropriate overlay on the control panel.

Note: Remove the machine type label, with the serial number, from the front of the existing control panel and place the label on the new control panel.

4. Connect the control-panel signal cable B to the back of the control panel C.
5. Carefully slide the control panel into the control panel bay until you feel the locking tabs A lock in place.

Figure 1. Control panel replacement in a rack-mounted system unit

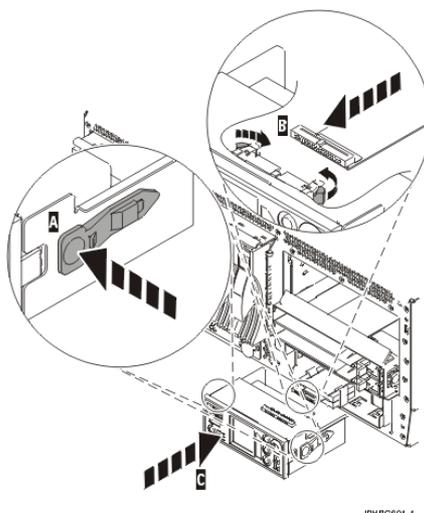
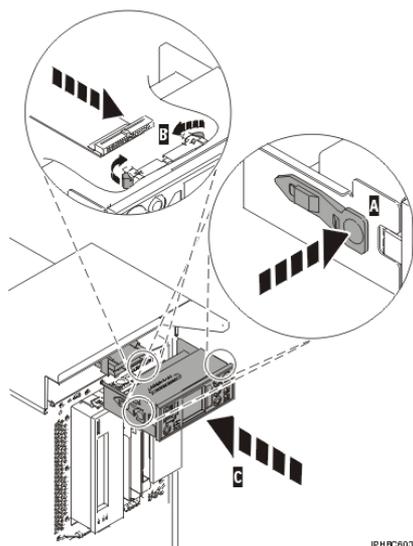


Figure 2. Control panel replacement in a stand-alone system unit



6. Install the front cover onto your system. Refer to [Install the front cover on the 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+, or the 05/95 expansion unit.](#)
7. Access the Advanced System Management Interface (ASMI). See [Managing the Advanced System Management Interface \(ASMI\)](#) for instructions.
8. In the navigation area of the ASMI, select Using concurrent maintenance utilities and then Control panel.
9. At the Preparing the control panel window, select Install and click Continue.

10. Choose the control panel's location and click Save Settings.
11. If the operation was successful, the window will display: `Operation completed successfully.`

Note: If there is a frozen bouncing ball (dot) that appears in the middle of the control panel, toggle between function 02 and function 01 until the ball disappears.

12. If you replaced the control panel as part of another procedure, return to that procedure now. If you replaced it because it was not operational, verify that the new resource is functional. See [Verify the installed part](#).

Parent topic: [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#)

Remove the control panel with power off

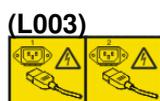
These procedures describe the removal of the control panel with power off for the server models listed in [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#).

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

To remove the control panel with the power off, do the following procedure:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Stop the system (see [Stop the system or logical partition](#)).
3. Disconnect the power source from the system by unplugging the system.

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



or



4. Remove the front cover from your system. Refer to [Remove the front cover from the rack-mounted 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+, and the 05/95 expansion unit](#).
5. Remove the control panel by pressing the locking tabs A located on either side of the panel, grasping the edges of the panel, and pulling it out of its bay.

Attention: Disconnect the control-panel signal cable B from the back of the control panel C.

Figure 1. Control panel removal from a rack-mounted system unit

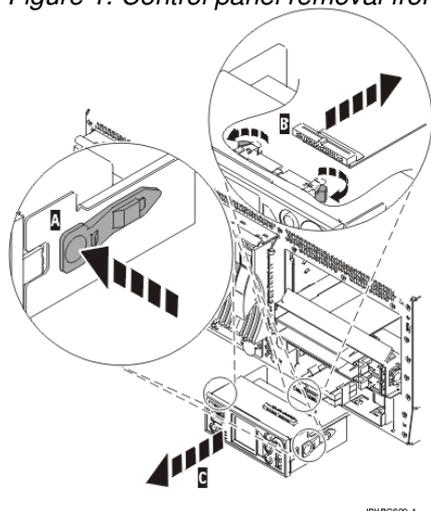
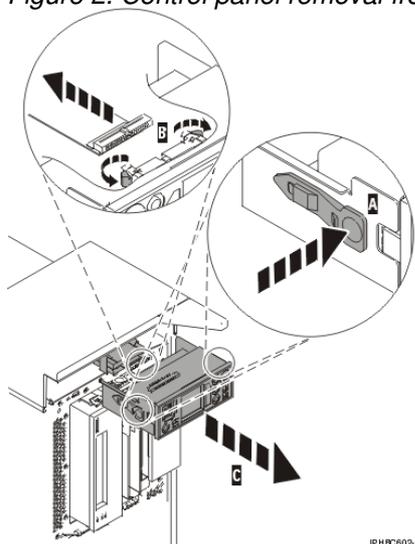


Figure 2. Control panel removal from a stand-alone system unit



6. If you are removing the control panel as part of another procedure, return to that procedure now.

Attention: If you are not immediately replacing the control panel, a control panel filler must be in place when the system power is on for proper air flow and cooling. See [Model ESCALA PL 250T/R, ESCALA PL 450T/R, ESCALA PL 850R/PL 1650R/R+, and 7/20 control panel fillers](#) for instructions on installing a control panel filler.

7. Replace the control panel with power off. (See [Replace the control panel with power off.](#))

Parent topic: [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#)

Replace the control panel with power off

These procedures describe the replacement of the control panel with the power off for the server models listed in [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#).

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

To replace the control panel with the power off, do the following:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Remove the control panel with power off (see [Remove the control panel with power off](#)).

Attention: A control panel or control panel filler must be in place when the system power is on for proper air flow and cooling. See [Model ESCALA PL 250T/R, ESCALA PL 450T/R, ESCALA PL 850R/PL 1650R/R+, and 7/20 control panel fillers](#) for instructions on removing a control panel filler.

3. If necessary, remove the new control panel from its packaging. If there are control-panel overlays included with the new control panel, install the appropriate overlay on the control panel.

Note: Remove the machine type label, with the serial number, from the front of the existing control panel and place the label on the new control panel.

4. Connect the control-panel signal cable B to the back of the control panel C.
5. Carefully slide the control panel into the control panel bay until you feel the locking tabs A lock in place.

Figure 1. Control panel replacement in a rack-mounted system unit

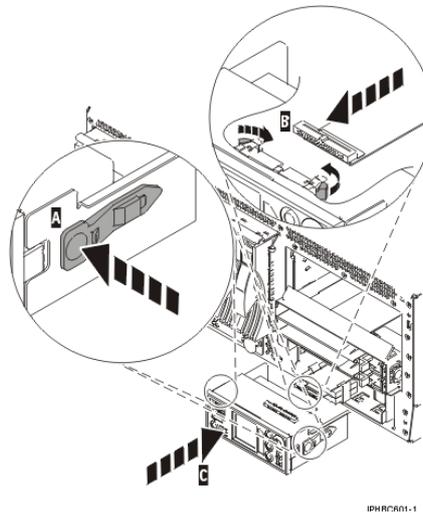
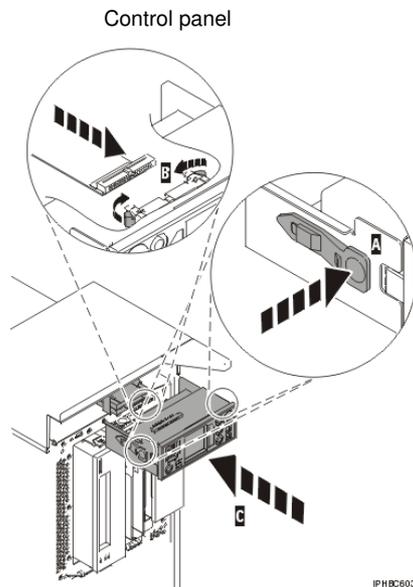


Figure 2. Control panel replacement in a stand-alone system unit



6. Install the front cover onto your system. Refer to [Install the front cover on the 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+, or the 05/95 expansion unit](#).
7. If you replaced the control panel as part of another procedure, return to that procedure now. If you replaced it because it was not operational, verify that the new resource is functional. See [Verify the installed part](#).
8. Start the system (see [Start the system or logical partition](#)).

Note: If there is a frozen bouncing ball (dot) that appears in the middle of the control panel, toggle between function 02 and function 01 until the ball disappears.

Parent topic: [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#)

Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panel fillers

These procedures describe the removal and replacement of the control-panel filler in the following servers:

- 112/85
- ESCALA PL 250T/R
- ESCALA PL 450T/R
- 7/20

If you do not replace the control panel immediately after removing it while power is on, a control panel filler must be in place for proper air flow and cooling.

Remove the control panel filler

1. Remove the front cover from your system. Refer to [Remove the front cover from the 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+, or the 05/95 expansion unit](#).
2. Locate the control panel filler.
3. Remove the control panel filler by pressing the locking tabs located on either side of the filler, grasping the edges of the panel, and pulling it out of its bay.

Replace the control panel filler

1. Carefully slide the control panel filler into the control panel bay until you feel the locking tabs lock in place.
2. Install the front cover onto your system. Refer to [Install the front cover on the 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+, or the](#)

[05/95 expansion unit.](#)

Parent topic: [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#)

Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control-panel signal cables

These procedures describe the removal and replacement of the control-panel signal cable in the following servers:

- 112/85
- ESCALA PL 250T/R
- ESCALA PL 450T/R
- 7/20

If your system is managed by the Hardware Management Console (HMC), use the HMC to complete the steps for replacing a control-panel signal cable. For instructions, see [Replace a part using the Hardware Management Console](#).

To complete these procedures, you will need to read and print the following instructions:

- [Media device](#)
- [Media-device enclosure](#)

If you are planning to use this information in printed form, be sure to print all of the information you need. You can find all of the information, in both HTML or PDF format, in the [Installing features](#) topic. Go to the listed procedures, print them, and then return here.

To replace the control-panel signal cable, do the following:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Remove the control panel with power off (see [Remove the control panel with power off](#)).
3. Remove the media-device enclosure. For instructions, see [Remove the media-device enclosure from models ESCALA PL 250T/R, ESCALA PL 450T/R, and 7/20](#).
4. Disconnect the control-panel signal cable from the media-device enclosure. If you are servicing a stand-alone system unit, note how the control-panel signal cable is routed through the system chassis.
5. Pull the control-panel signal cable out of the system.
6. Place the replacement control-panel signal cable into the system. If you are servicing a stand-alone system unit, note how the control-panel signal cable is routed through the system chassis.
7. Connect the control-panel signal cable to the media-device enclosure.
8. Replace the media-device enclosure. For instructions, see [Replace the media-device enclosure in models ESCALA PL 250T/R, ESCALA PL 450T/R, and 7/20](#).
9. Replace the control panel with power off (see [Replace the control panel with power off](#)).

Parent topic: [Model 112/85, ESCALA PL 250T/R, ESCALA PL 450T/R control panels](#)

Model ESCALA PL 250R-VL or ESCALA PL 450R-XS control panel

The following procedures describe the control panel in a server.

Note: To gain access to all of the control panel's features, including the display, refer to [Gain access to the model ESCALA PL 250R-VL or ESCALA PL 450R-XS control panels](#).

Replacing this feature is a customer task. You can 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.

- [Remove the control panel from a model ESCALA PL 250R-VL or ESCALA PL 450R-XS](#)
- [Replace the control panel in a model ESCALA PL 250R-VL or ESCALA PL 450R-XS](#)

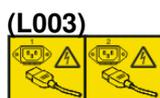
Parent topic: [Control panel](#)

Remove the control panel from a model ESCALA PL 250R-VL or ESCALA PL 450R-XS

To remove the control panel, do the following procedure:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Stop the system. Refer to [Stop the system or logical partition](#).
3. Disconnect the power source from the system by unplugging the system.

Note: This system may be equipped with a second power supply. Before continuing with this procedure, ensure that the power source to the system is completely disconnected.



or



4. Place the server in the service position. Refer to [Place the model ESCALA PL 250R-VL or ESCALA PL 450R-XS in the service position](#).
5. Open the service access cover. Refer to [Remove the service access cover from the rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS](#).
6. Disconnect the control panel cable A from the system backplane.
7. Press the release button B on the front of the control panel.
8. Pull the control panel away from the system until it stops.
9. Press the tabs C on both sides of the control panel to release the control panel from the chassis.
10. Pull the control panel out from the system while guiding the connector cable D out.

Figure 1. Control panel removal

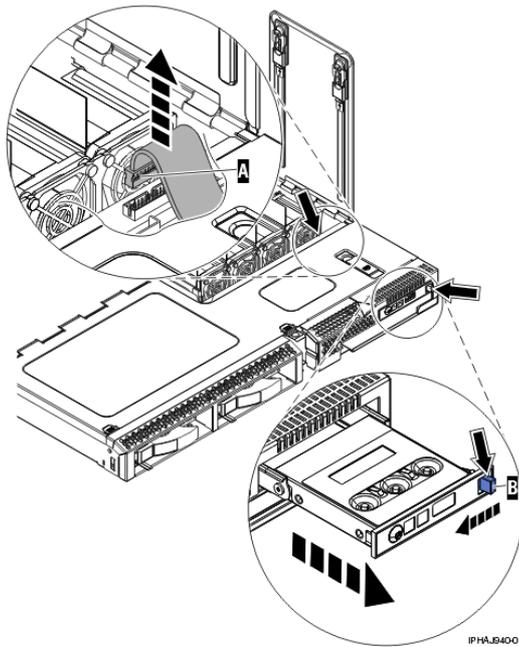
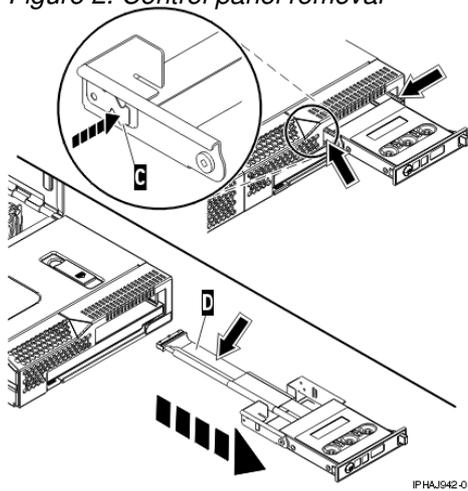


Figure 2. Control panel removal



Parent topic: [Model ESCALA PL 250R-VL or ESCALA PL 450R-XS control panel](#)

Replace the control panel in a model ESCALA PL 250R-VL or ESCALA PL 450R-XS

To replace the control panel, do the following procedure:

1. Align the control panel with the chassis opening.
2. Guide the control panel cable A through the chassis opening towards the cable connector B on the system backplane.
3. Connect the cable B.
4. Push the control panel C in until it latches into place.

Figure 1. Control panel replacement

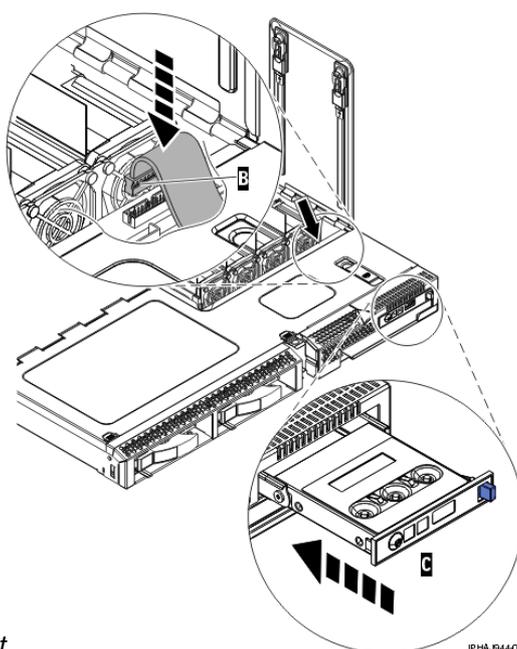
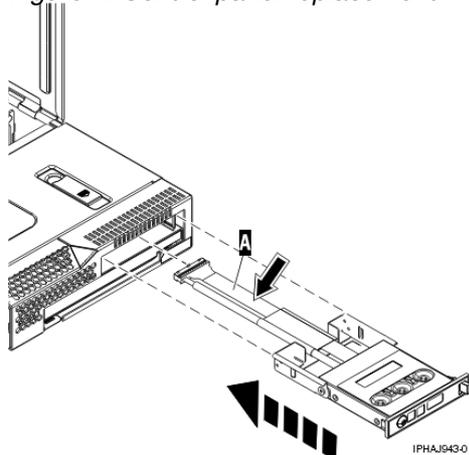


Figure 2. Control panel replacement

5. Install the service access cover. Install the service access cover on the rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS.
6. Place the server in the operating position. Refer to [Place the model ESCALA PL 250R-VL or ESCALA PL 450R-XS in the operating position](#).
7. Reconnect all system cables.
8. Start the system. Refer to [Start the system or logical partition](#).
9. Verify the installed part. Refer to [Verify the installed part](#).

Parent topic: [Model ESCALA PL 250R-VL or ESCALA PL 450R-XS control panel](#)

Model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, 7/10, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ control panels

These procedures describe the removal and replacement of the control panel in the and model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, 7/10, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+.

Attention: In the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, 7/10, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ servers, the control panel is part of a device enclosure that also houses the media device. You should never attempt to remove the control panel itself from the system chassis. The control panel must be removed as part of the device enclosure.

Note: To gain access to all of the control panel's features, including the display, refer to [Gain access to the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ control panels](#).

The following procedures describe the removal and replacement of the device enclosure in a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, 7/10, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ for the rack-mounted unit.

Replacing this feature is a customer task. You can 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.

- [Remove the device enclosure from a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+](#)
- [Replace the device enclosure in a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+](#)

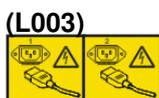
Parent topic: [Control panel](#)

Remove the device enclosure from a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, 7/10, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+

To remove the device enclosure, do the following:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Stop the system (see [Stop the system or logical partition](#)).
3. Disconnect the power source from the system by unplugging the system.

Note: This system may be equipped with a second power supply. Before continuing with this procedure, ensure that the power source to the system is completely disconnected.

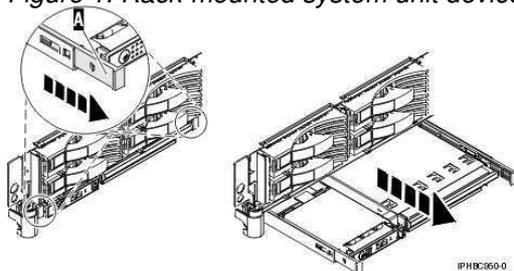


or



4. Remove the front cover (see [Remove the front cover from the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+](#)).
5. Remove the [media device](#).
6. Locate the blue, plastic, slide tabs A on both sides of the device enclosure.
7. Pull the tabs A out from the system. This releases the device enclosure.
8. Pull the device enclosure out of the system.

Figure 1. Rack-mounted system unit device enclosure removal



9. If you are removing the device enclosure as part of another procedure, return to that procedure now.
10. Replace the device enclosure, see [Replace the device enclosure in a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+](#).

Parent topic: [Model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ control panels](#)

Replace the device enclosure in a model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, 7/10, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+

To replace the device enclosure, do the following:

1. Pull the blue-plastic slide tabs on the new device enclosure out as far as they will go.
2. Align the device enclosure with the chassis opening.
3. Carefully push the new device enclosure into the system unit while ensuring that the slide tabs remain pulled out.

Note: Do not push the device enclosure in by its slide tabs.

Note: Ensure that the plastic cover on the control panel connector does not get caught on the bottom of the drive enclosure located above the control panel.

4. Once the device enclosure is all the way into the system, press the slide tabs inward toward each other while at the same time pushing them toward the system. This action locks the enclosure into place.
5. Replace the [media device](#).
6. Replace the front cover (see [Install the front cover on the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+](#)).
7. Reconnect all system power cables.
8. Place the system in the operating position (see [Place the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ in the operating position](#)).
9. If you replaced the device enclosure as part of another procedure, return to that procedure now. If you replaced it because it was not operational, verify that the new resource is functional. See [Verify the installed part](#).
10. Start the system (see [Start the system or logical partition](#)).

Parent topic: [Model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+, and ESCALA PL 250R-L+ or ESCALA PL 450R-VL+ control panels](#)

Control panel

Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel

These procedures describe the removal and replacement of the control panel in the ESCALA PL 850R/PL 1650R/R+, 9406-570 and ESCALA PL 850R/PL 1650R/R+ or ESCALA PL 1650R-L+ servers.

Important: There are two versions of the control panel cable for these models. Ensure that you replace the cable with the identical cable that was removed from the system.

Replacing this feature is a customer task. You can 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.

Select the appropriate instructions from this list:

- [Remove the control panel with power on](#)
- [Replace the control panel with power on](#)
- [Remove the control panel with power off](#)
- [Replace the control panel with power off](#)
- [Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel filler](#)

Parent topic: [Control panel](#)

Remove the control panel with power on

These procedures describe how to remove the control panel with power on, in the model ESCALA PL 850R/PL 1650R/R+ or ESCALA PL 1650R-L+.

Be sure you read these instructions carefully and understand the complexity of the power on procedure before you begin. If you do not feel comfortable using this procedure, go to [Remove the control panel with power off](#).

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

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

Prerequisites

To remove a control panel with the system power on, you must first complete the following items:

- Gain access to the Advanced System Management Interface (ASMI). See [Managing the Advanced System Management Interface \(ASMI\)](#) for instructions.

Remove the control panel

To remove the control panel with the system or logical partition powered on, follow these steps from the system or logical partition that controls the media device:

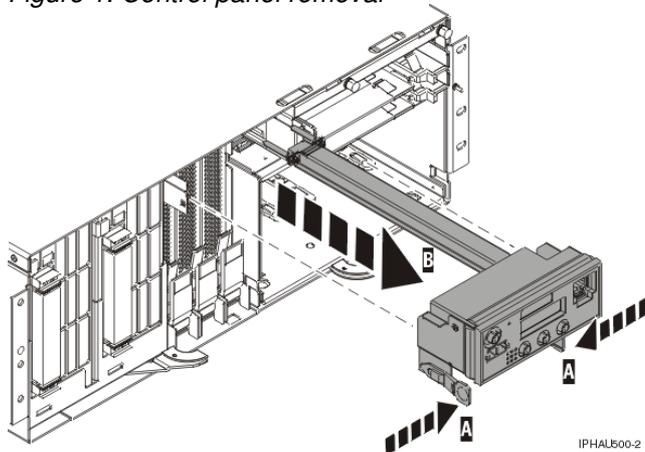
1. Perform the prerequisite tasks described in [Before you begin](#).

2. Access the Advanced System Management Interface (ASMI). See [Managing the Advanced System Management Interface \(ASMI\)](#) for instructions.

Attention: Do not reset the service processor, or remove and then reapply power to the system during this procedure.

3. In the navigation area of the ASMI, select Concurrent maintenance and then Control panel.
4. At the Preparing the control panel window, select Remove and click Continue.
5. Choose the control panel's location and click Save Settings.
6. If the operation was successful, the window will display *Operation completed successfully*.
7. Remove the front cover from your system. Refer to [Remove the front cover from the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+](#).
8. Remove the control panel by pressing the locking tabs A located on either side of the panel, grasping the edges of the panel, and pulling it out of its bay.

Figure 1. Control panel removal



9. Replace the control panel with power on, see [Replace the control panel with power on](#).

Attention: A control panel or control panel filler must be in place when the system power is on for proper air flow and cooling. See [Model ESCALA PL 250T/R, ESCALA PL 450T/R, ESCALA PL 850R/PL 1650R/R+, and 7/20 control panel fillers](#) for instructions on installing a control panel filler.

Parent topic: [Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel](#)

Replace the control panel with power on

These procedures describe the replacement of the control panel with power on, in the model ESCALA PL 850R/PL 1650R/R+ or ESCALA PL 1650R-L+.

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

Prerequisites

To replace a control panel with the system power on, you must first complete the following items:

- Gain access to the Advanced System Management Interface (ASMI). See [Managing the Advanced System Management Interface \(ASMI\)](#) for instructions.

Replace the control panel

To replace the control panels with the power on, complete the following steps:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. If you have not already done so, remove the control panel with power on. See [Remove the control panel with power on](#).

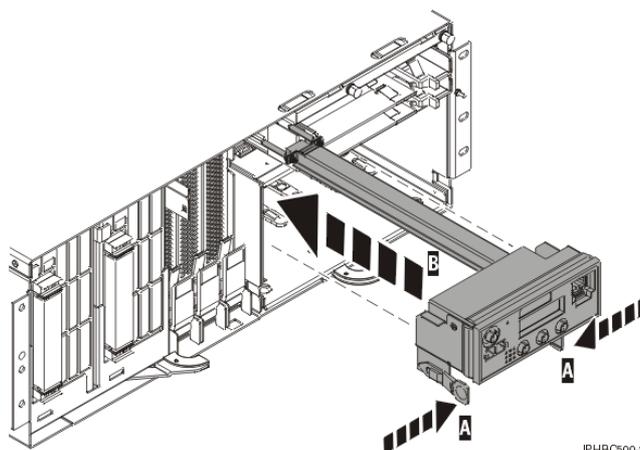
Attention: A control panel or control panel filler must be in place when the system power is on for proper air flow and cooling. See [Model ESCALA PL 250T/R, ESCALA PL 450T/R, ESCALA PL 850R/PL 1650R/R+, and 7/20 control panel fillers](#) for instructions on removing a control panel filler.

3. If necessary, remove the new control panel from its packaging. If there are control-panel overlays included with the new control panel, install the appropriate overlay on the control panel.

Note: Remove the machine type label, with the serial number, from the front of the existing control panel and place the label on the new control panel.

4. Carefully slide the control panel into the control panel bay until you feel the locking tabs A lock in place.

Figure 1. Control panel replacement



5. Access the Advanced System Management Interface (ASMI). See [Managing the Advanced System Management Interface \(ASMI\)](#) for instructions.
6. In the navigation area of the ASMI, select Concurrent maintenance and then Control panel.
7. At the control panel window, select Install and click Continue.
8. Choose the control panel's location and click Save Settings.
9. If the operation was successful, the window will display `Operation completed successfully`.

Note: If there is a frozen bouncing ball (dot) that appears in the middle of the control panel, toggle between function 02 and function 01 until the ball disappears.

10. Install the front cover onto your system. Refer to [Install the front cover on the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+](#).

- If you replaced the control panel as part of another procedure, return to that procedure now. If you replaced it because it was not operational, verify that the new resource is functional. See [Verify the installed part](#).

Parent topic: [Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel](#)

Remove the control panel with power off

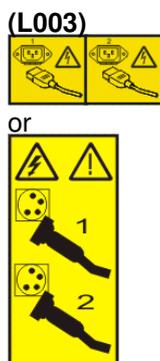
These procedures describe the removal of the control panel with power off in the model ESCALA PL 850R/PL 1650R/R+ or ESCALA PL 1650R-L+.

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

To remove the control panel with the power off, do the following:

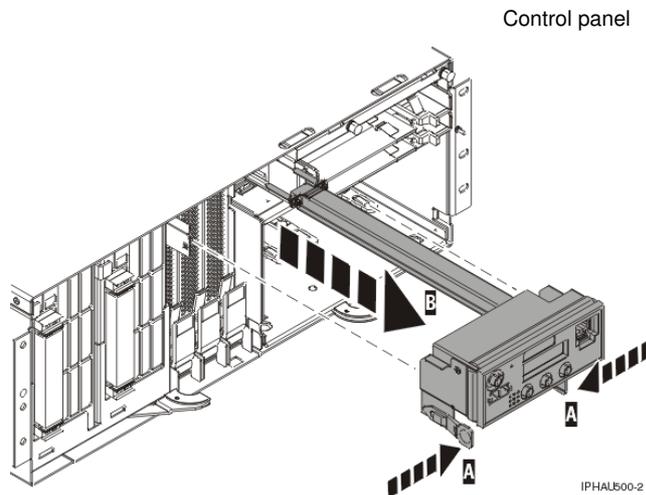
- Perform the prerequisite tasks described in [Before you begin](#).
- Stop the system (see [Stop the system or logical partition](#)).
- Disconnect the power source from the system by unplugging the system.

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



- Remove the front cover from your system. Refer to [Remove the front cover from the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+](#).
- Remove the control panel by pressing the locking tabs A located on either side of the panel, grasping the edges of the panel, and pulling it out of its bay.

Figure 1. Control panel removal



6. If you are removing the control panel as part of another procedure, return to that procedure now.

Attention: If you are not immediately replacing the control panel, a control panel filler must be in place when the system power is on for proper air flow and cooling. See [Model ESCALA PL 250T/R, ESCALA PL 450T/R, ESCALA PL 850R/PL 1650R/R+, or 7/20 control panel fillers](#) for instructions on installing a control panel filler.

7. Replace the control panel with power off. See [Replace the control panel with power off](#).

Parent topic: [Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel](#)

Replace the control panel with power off

These procedures describe the replacement of the control panel with the power off in the model ESCALA PL 850R/PL 1650R/R+ or ESCALA PL 1650R-L+.

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

To replace the control panel with the power off, do the following:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Remove the control panel with power off (see [Remove the control panel with power off](#)).

Attention: A control panel or control panel filler must be in place when the system power is on for proper air flow and cooling. See [Model ESCALA PL 250T/R, ESCALA PL 450T/R, ESCALA PL 850R/PL 1650R/R+, and 7/20 control panel fillers](#) for instructions on removing a control panel filler.

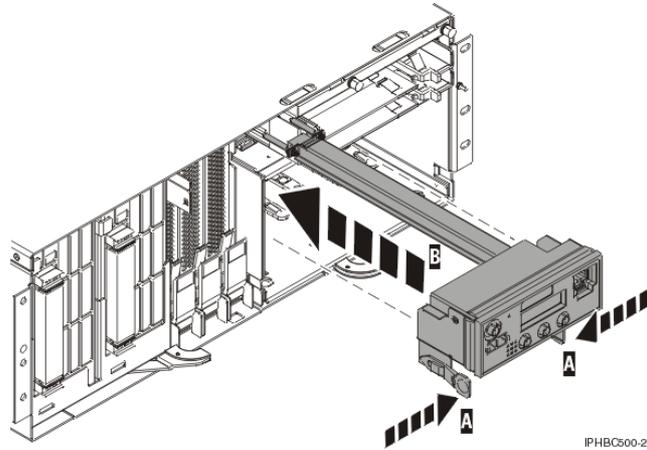
3. If necessary, remove the new control panel from its packaging. If there are control-panel overlays included with the new control panel, install the appropriate overlay on the control panel.

Note: Remove the machine type label, with the serial number, from the front of the existing control panel and place the label on the new control panel for future reference.

Control panel

4. Carefully slide the control panel into the control panel bay until you feel the locking tabs A lock in place.

Figure 1. Control panel replacement



5. Install the front cover onto your system. Refer to [Install the front cover on the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+](#).
6. If you replaced the control panel as part of another procedure, return to that procedure now. If you replaced it because it was not operational, verify that the new resource is functional. See [Verify the installed part](#).
7. Start the system. See [Start the system or logical partition](#).

Note: If there is a frozen bouncing ball (dot) that appears in the middle of the control panel, toggle between function 02 and function 01 until the ball disappears.

Parent topic: [Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel](#)

Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel filler

The following procedure describes the removal and replacement of control panel filler in the model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+.

If you do not replace the control panel immediately after removing it while power is on, a control panel filler must be in place for proper air flow and cooling.

Remove the control panel filler

1. Remove the front cover from your system. Refer to [Remove the front cover from the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+](#)
2. Locate the control panel filler.
3. Remove the control panel filler by pressing the locking tabs located on either side of the filler, grasping the edges of the panel, and pulling it out of its bay.

Replace the control panel filler

1. Carefully slide the control panel filler into the control panel bay until you feel the locking tabs lock in place.
2. Install the front cover onto your system. Refer to [Install the front cover on the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+](#).

Parent topic: [Model ESCALA PL 850R/PL 1650R/R+ and ESCALA PL 1650R-L+ control panel](#)

Model ESCALA PL 245T/R control panel

The following procedures describe the process for removing and replacing the control panel and signal cable in a model ESCALA PL 245T/R .

Note: To gain access to all of the control panel's features, including the display, refer to [Accessing the control panel](#).

Replacing this part is a customer task. You can 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.

- [Remove the control panel](#)
- [Replace the control panel](#)
- [Remove the control panel signal cable](#)
- [Replace the control panel signal cable](#)

Parent topic: [Control panel](#)

Remove the control panel

To remove the control panel from the model ESCALA PL 245T/R , complete the following procedure:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Stop the system. Refer to [Stop the system or logical partition](#).
3. Disconnect the power source from the system by unplugging the system.

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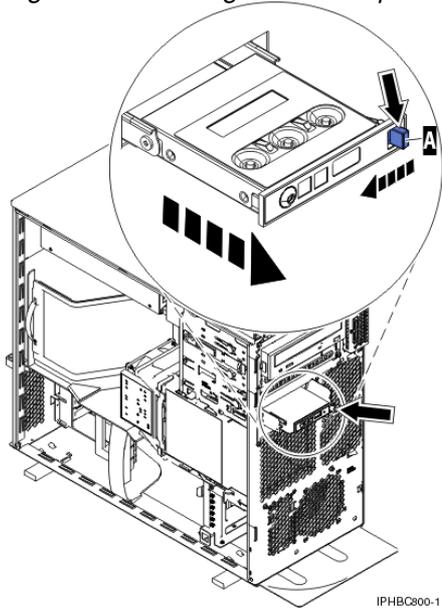
or



4. Place the ESCALA PL 245T/R in the service position or ensure that you can access cover for the 471/85. Refer to [Place the system in the service or operating position](#).
5. Open the service access cover. Refer to [Remove the covers](#) and choose from the configuration type that matches your system.
6. Remove the front bezel. Refer to [Remove the bezel](#).
7. Press the release button A on the front of the control panel.

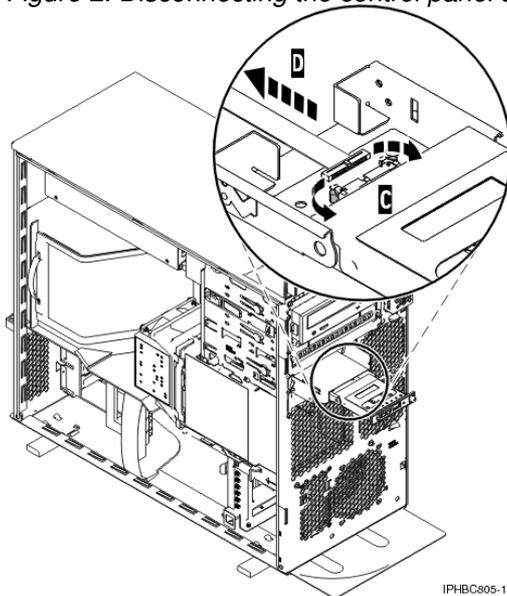
Note: The model ESCALA PL 245T/R control panel is mounted vertically, but the procedures for removing and replacing the control panel are identical.

Figure 1. Releasing the control panel from the chassis (471/85 pictured).



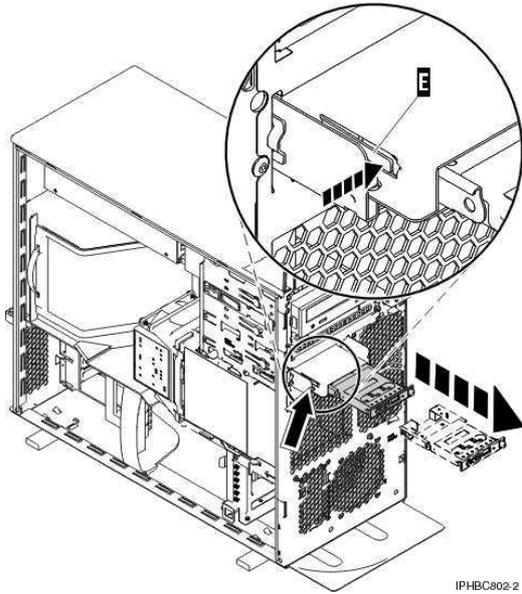
8. Pull the control panel away from the system until it stops.
9. Disconnect the control panel signal cable D from the back of the control panel C.

Figure 2. Disconnecting the control panel signal cable.



10. Press the tabs E on both sides of the control panel to release the control panel from the chassis.

Figure 3. Removing the control panel.



11. Pull the control panel out from the system.

Next topic: [Replace the control panel.](#)

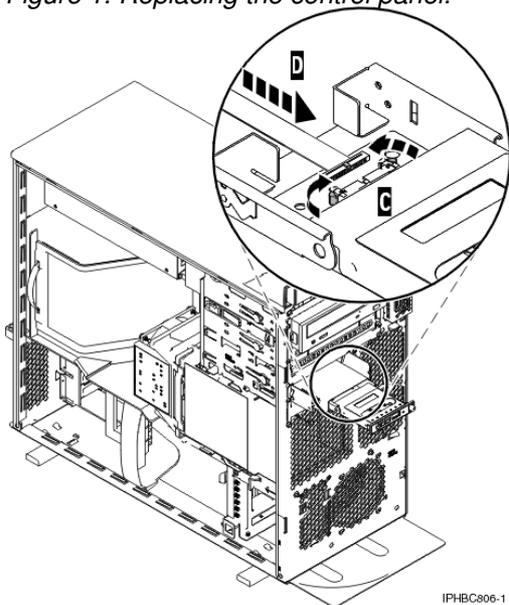
Parent topic: [Model ESCALA PL 245T/R control panel](#)

Replace the control panel

To replace the control panel from the model ESCALA PL 245T/R , complete the following procedure:

1. Align the control panel C with its opening on the chassis.

Figure 1. Replacing the control panel.



2. Attach the control panel signal cable D to the back of the control panel C.
3. Push the control panel C in until it latches into place in the chassis.
4. Install the service access cover. [Accessing the service access cover.](#)
5. Install the front bezel.

6. Place the system in the operating position. Refer to [Placing the system in the service or operating position](#).
7. Reconnect all system cables.
8. Start the system. Refer to [Start the system or logical partition](#).
9. Verify the installed part. Refer to [Verify the installed part](#).

Parent topic: [Model ESCALA PL 245T/R control panel](#)

Remove the control panel signal cable

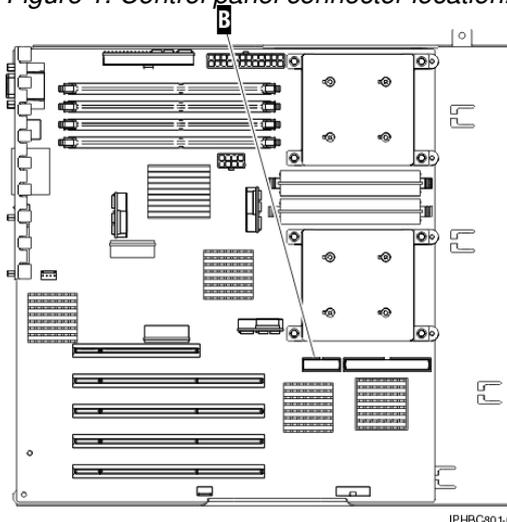
To remove the control panel signal cable from the model ESCALA PL 245T/R , complete the following procedure:

1. Perform the prerequisite tasks described in [Before you begin](#).
2. Stop the system. Refer to [Stop the system or logical partition](#).
3. Disconnect the power source from the system by unplugging the system.



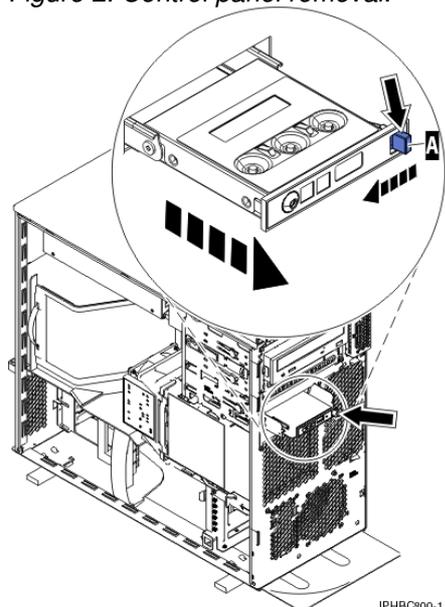
4. Place the ESCALA PL 245T/R in the service position or ensure that you can access cover for the 471/85. Refer to [Place the system in the service or operating position](#).
5. Open the service access cover. Refer to [Remove the covers](#) and choose from the configuration type that matches your system.
6. Disconnect the control panel cable from the system backplane connector B.

Figure 1. Control panel connector location.



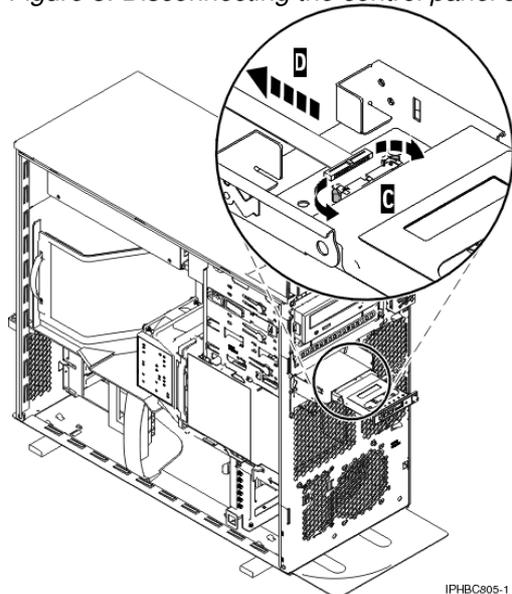
7. Press the release button A on the front of the control panel.

Figure 2. Control panel removal.



8. Pull the control panel away from the system until it stops.
9. Disconnect the signal cable D from the back of the control panel C and remove the cable from the system.

Figure 3. Disconnecting the control panel signal cable



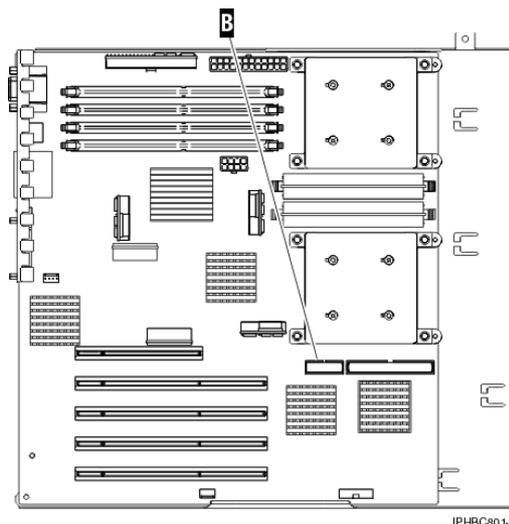
Parent topic: [Model ESCALA PL 245T/R control panel](#)

Replace the control panel signal cable

To replace the control panel signal cable in the model ESCALA PL 245T/R , complete the following procedure:

1. Thread the control panel signal cable through the opening in the chassis, but do not connect the cable to the control panel at this time.
2. Guide the cable through the chassis opening towards the cable connector B on the system board.

Control panel

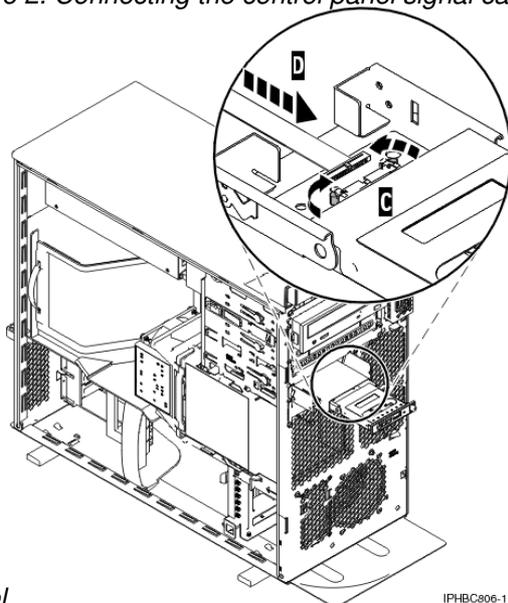


IPHBC801-0

Figure 1. Control panel connector.

3. Connect the control panel signal cable to the system board connector B.
4. Route the control panel cable through the chassis.
5. Connect the other end of the control panel signal cable D to the back of the control panel C.

Figure 2. Connecting the control panel signal cable to the control



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panel

6. Push the control panel C in until it latches into place in the chassis.
7. Install the front bezel.
8. Install the service access cover. [Accessing the service access cover.](#)
9. Place the system in the operating position. Refer to [Placing the system in the service or operating position.](#)
10. Reconnect all system cables.
11. Start the system. Refer to [Start the system or logical partition.](#)
12. Verify the installed part. Refer to [Verify the installed part.](#)

Parent topic: [Model ESCALA PL 245T/R control panel](#)

Control panel

Related procedures

The following procedures are referenced in the [Control panel](#) procedures.

- **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.
 - **Identify a failing part**
The following procedures describe how to locate and identify a failing part on your system or expansion unit.
 - **Install a feature using the Hardware Management Console**
 - **Remove and replace model ESCALA PL 245T/R covers and doors**
Learn how to remove and replace covers and doors.
 - **Gain access to the model ESCALA PL 245T/R control panel**
 - **Place the rack-mounted model ESCALA PL 245T/R in the service position or operating position**
 - **Gain access to the model ESCALA PL 250R-VL or ESCALA PL 450R-XS control panels**
 - **Open the model ESCALA PL 250R-VL or ESCALA PL 450R-XS service access panel**
 - **Place the model ESCALA PL 250R-VL or ESCALA PL 450R-XS in the service position**
 - **Place the model ESCALA PL 250R-VL or ESCALA PL 450R-XS in the operating position**
Learn how to place the unit into the operating position.
 - **Remove the front cover from the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+**
 - **Remove the front cover from the rack-mounted 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+, and the 05/95 expansion unit**
 - **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.
 - **Remove the front 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+,**
 - **Install the front cover on the rack-mounted 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+, , or the 05/95 expansion unit**
 - **Remove the door from the 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+,**
 - **Remove the front cover from the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+**
 - **Remove the front cover from the 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+, or the 05/95 expansion unit**
The following procedures describe how to remove the front cover of the 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+, or the 05/95 expansion unit.
 - **Verify the installed part**
-

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)

DANGER Observe 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](#)

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](#)

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](#)

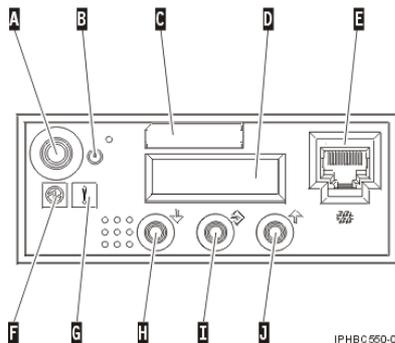
Related tasks

[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](#)

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](#)

[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 `pwrdownsys` (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.

(L003)



or



Parent topic: [Stop the system or logical partition](#)

Control panel

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](#)

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](#)

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.

- [Remove a part using the Hardware Management Console](#)
- [Replace a part using the Hardware Management Console](#)

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: [Install a feature using the Hardware Management Console](#)

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: [Install a feature using the Hardware Management Console](#)

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

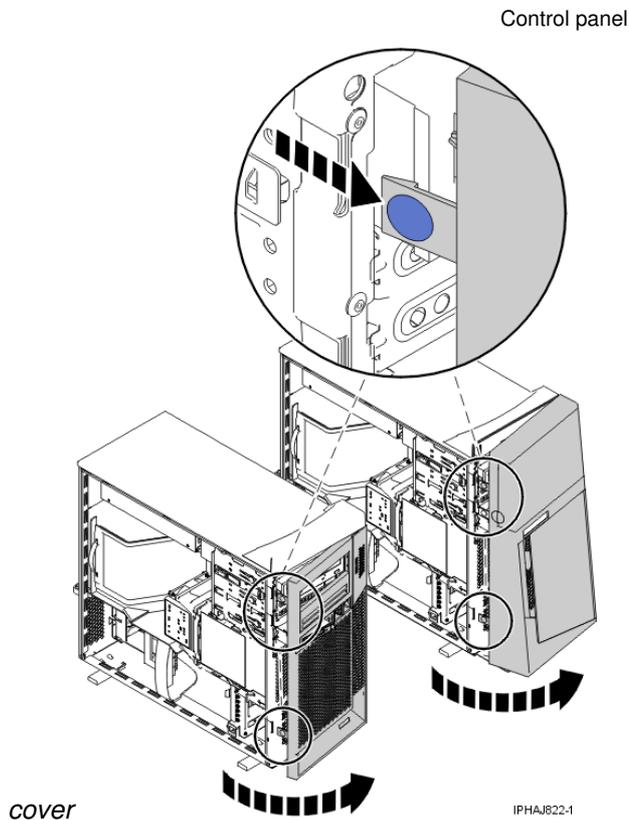
To remove the front cover from the model ESCALA PL 245T/R, follow these steps:

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



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:

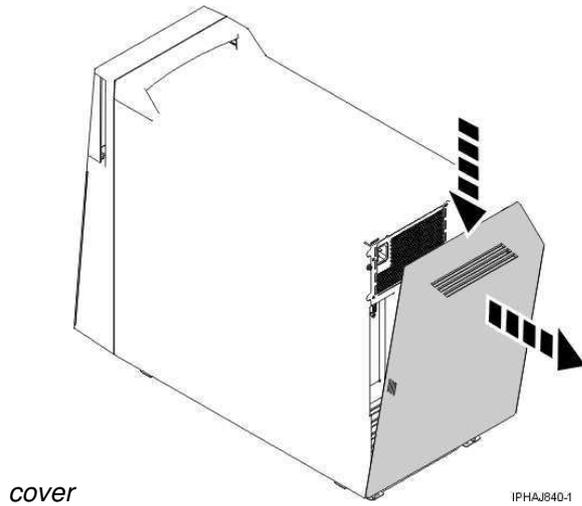
1. Press down on the center tab of the cover until you unseat it from the back of the system unit, as shown in the following figure.

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

Control panel

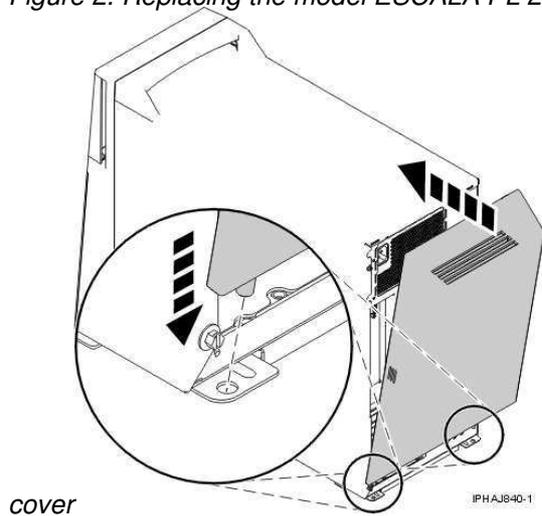


To replace the back cover from the model ESCALA PL 245T/R, follow these steps:

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



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.

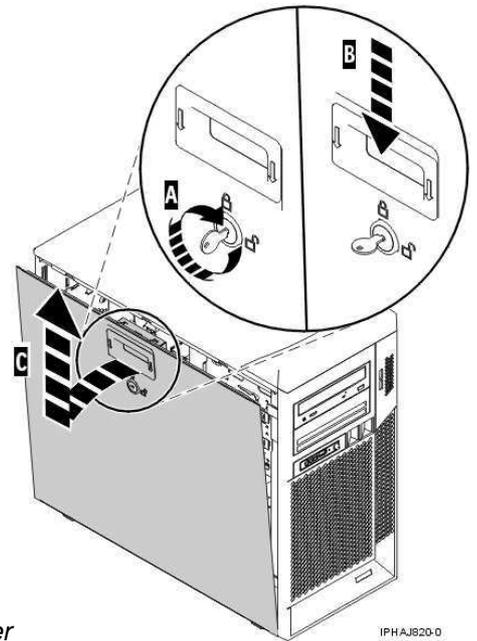


Figure 1. Removing the model ESCALA PL 245T/R side cover

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.

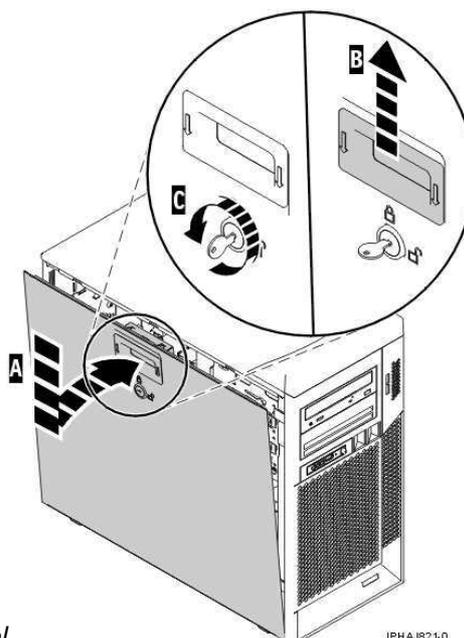


Figure 2. Replacing the service panel
3. Lock the security lock C if needed.

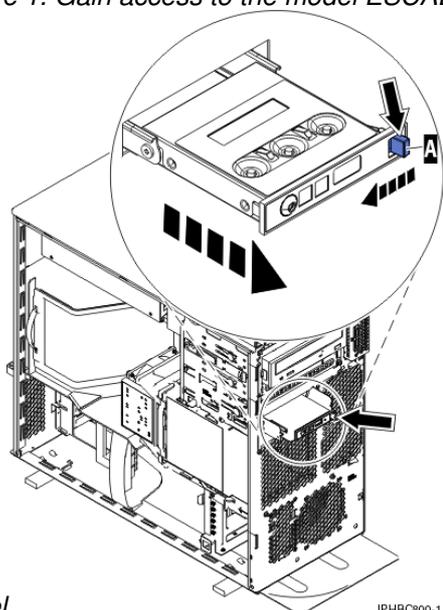
Gain access to the model ESCALA PL 245T/R control panel

Since only part of the model ESCALA PL 245T/R control panel is visible from the front of the server, the following procedure describes how to gain access to all of the control panel's features, including the display.

To access all of the control panel's features, complete the following steps:

1. Press inward on the spring-loaded tab A located on the right side of the control panel so that it pops out slightly, as shown in the following figure.

Figure 1. Gain access to the model ESCALA PL 245T/R control



2. Pull the control panel out, toward the front of the system, until it can be pivoted downward on its hinge.
3. To move the control panel back into the device enclosure, lift the control panel up to align it with the opening and push it into place until you feel the tab lock.

Parent topic: [Related procedures](#)

Place the rack-mounted model ESCALA PL 245T/R in the service position or operating position

Learn how to place a rack-mounted model ESCALA PL 245T/R into the service position or the operating position.

- **Place the rack-mounted model ESCALA PL 245T/R in the operating position**
By placing the rack-mounted system unit in the operating position, you make the unit available for use.

- **Place the rack-mounted model ESCALA PL 245T/R in the service position**

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

Parent topic: [Related procedures](#)

Place the rack-mounted model ESCALA PL 245T/R in the operating position

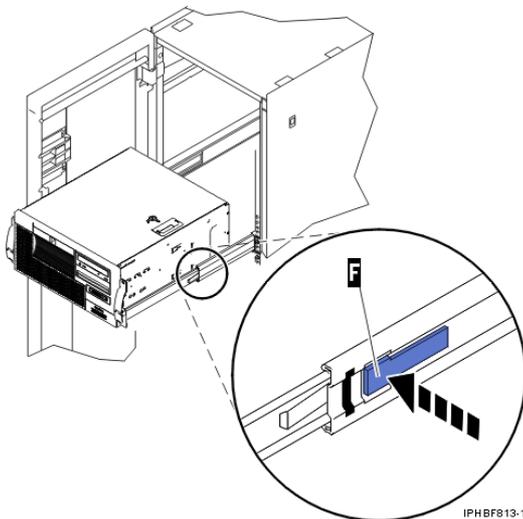
By placing the rack-mounted system unit in the operating position, you make the unit available for use.

Note: 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 rack-mounted system unit into the operating position, follow these steps:

1. Simultaneously release the blue rail safety latches F 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 unit do not catch or bind as you push the unit back into the rack.



- a. Both rack latches should lock into position.
2. Replace and tighten the two thumbscrews that secure the system unit to the rack.
 3. Close the front rack door.

Parent topic: [Place the rack-mounted model ESCALA PL 245T/R in the service position or operating position](#)

Place the rack-mounted model ESCALA PL 245T/R in the service position

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

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 rack-mounted system unit into the service position, follow these steps.

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)

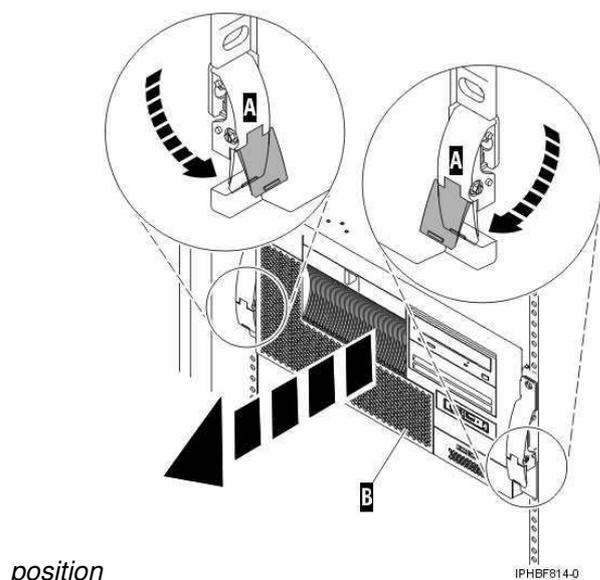
1. If necessary, open the front rack door.
2. Release the rack latches A on both the left and right sides as shown in the following figure.
3. Review the following note, and then slowly pull the system unit B out from the rack until the rails are fully extended and locked.

Note:

- ◆ If the procedure you are performing requires you to unplug cables from the back of the system unit, do so before you pull the unit out from the rack.
- ◆ Ensure that the cables at the rear of the system 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 unit from being pulled out too far.

Figure 1. Placing the model ESCALA PL 245T/R in the service

Control panel



Parent topic: [Place the rack-mounted model ESCALA PL 245T/R in the service position or operating position](#)

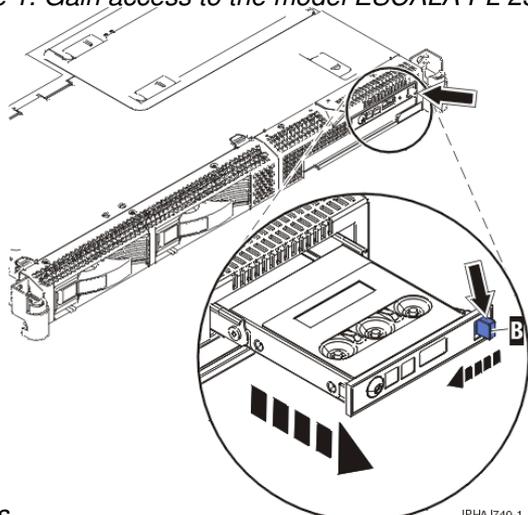
Gain access to the model ESCALA PL 250R-VL or ESCALA PL 450R-XS control panels

Since only part of the model ESCALA PL 250R-VL or ESCALA PL 450R-XS control panel is visible from the front of the server, the following procedure describes how to gain access to all of the control panel's features, including the display.

To access the control panel features, complete the following steps:

1. Press inward on the spring-loaded tab B located on the right side of the control panel so that it pops out slightly, as shown in the following figure.

Figure 1. Gain access to the model ESCALA PL 250R-VL or ESCALA PL 450R-XS control



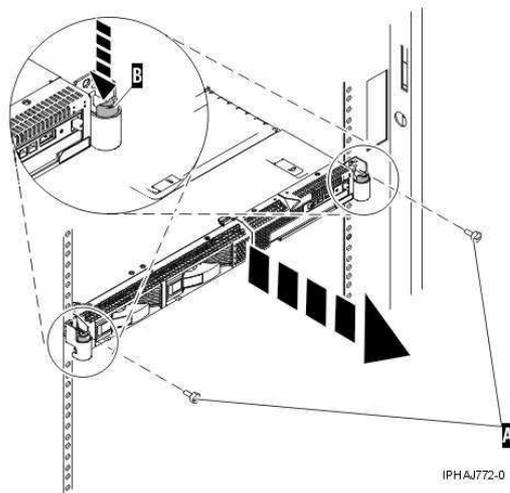
2. Pull the control panel out, toward the front of the system, until it can be pivoted downward on its hinge.
3. To move the control panel back into the device enclosure, lift the control panel up to align it with the opening and push it into place until you feel the tab lock.

Open the model ESCALA PL 250R-VL or ESCALA PL 450R-XS service access panel

To open the service access panel on a rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS follow these steps:

1. If necessary, open the front rack door.
2. If they are present, remove the two thumbscrews A that secure the system unit to the rack as shown in the following figure.

Figure 1. Remove thumbscrews from model ESCALA PL 250R-VL or ESCALA PL

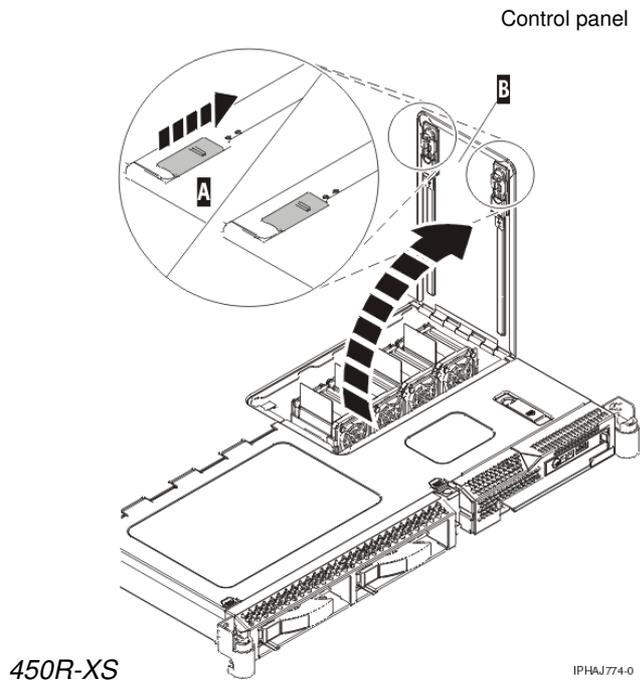


3. Release the rack latches B on both the left and right sides as shown in the previous figure.

Note:

- ◆ Ensure that the cables at the rear of the system unit do not catch or bind as you pull the unit out from the rack.
 - ◆ When the rails are fully extended, the rail safety latches lock into place. This action prevents the system unit from being pulled out too far.
4. Slowly pull the system unit out from the rack until the service access panel is completely exposed.
 5. Push the panel release tabs A until you can open the panel lid, as shown in the following figure.
 6. Lift the panel lid B to its fully opened position.

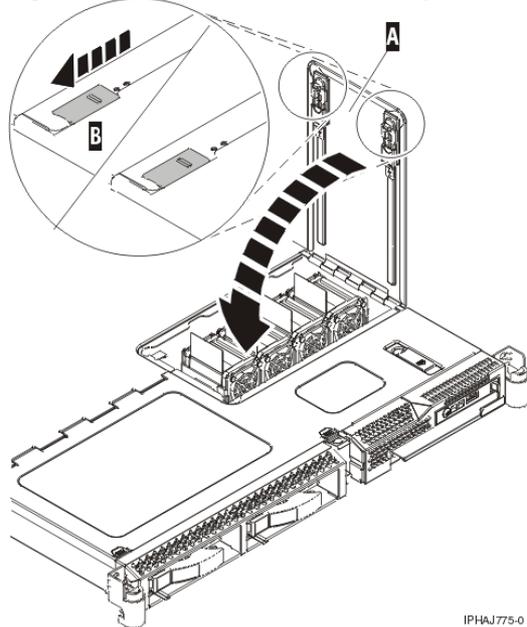
Figure 2. Open the service access panel on model ESCALA PL 250R-VL or ESCALA PL



Complete the following steps to close the service access panel:

1. Close the panel lid A, as shown in the following figure.

Figure 3. Close the service access panel on model ESCALA PL 250R-VL or ESCALA PL 450R-XS.



2. Push the panel release tabs B back into the locked position.
3. Gently push the server back into the rack until the rack latches lock into place.
4. Replace the thumbscrews if necessary.

- **Remove the service access cover from the rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS**
- **Install the service access cover on the rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS**

Parent topic: [Related procedures](#)

Control panel

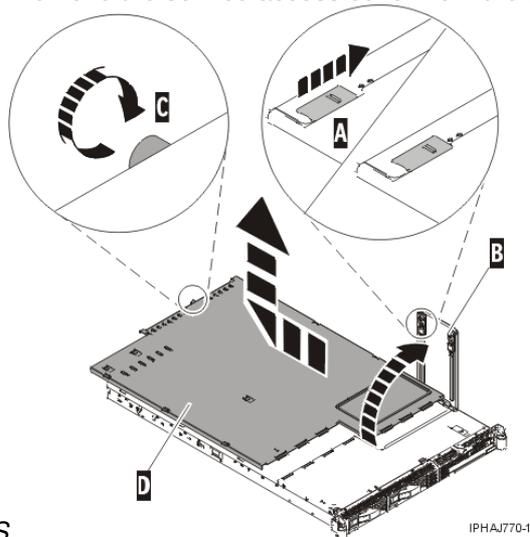
Remove the service access cover from the rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS

To remove the service access cover from a rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS and follow these steps:

1. Place the model ESCALA PL 250R-VL or ESCALA PL 450R-XS in the service position.
2. Push the release tab A to open the service access panel B, as shown in the following figure.
3. Loosen the thumbscrew located at the back of the cover C.
4. Slide the cover D 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 model ESCALA PL 250R-VL or ESCALA PL



450R-XS

IPHAJ770-1

Parent topic: [Open the model ESCALA PL 250R-VL or ESCALA PL 450R-XS service access panel](#)

Install the service access cover on the rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS

To install the service access cover on a rack-mounted model ESCALA PL 250R-VL or ESCALA PL 450R-XS and follow these steps:

1. Ensure that the service access panel C is open while installing the service access cover.

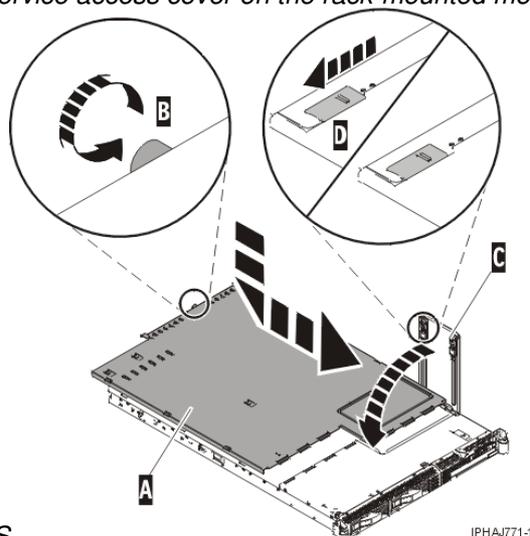
Control panel

2. 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, as shown in the following figure.
3. 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 thumbscrew aligns with the screw hole at the back of the system unit.

4. Tighten the thumbscrew B located at the back of the cover.

Figure 1. Install the service access cover on the rack-mounted model ESCALA PL 250R-VL or



ESCALA PL 450R-XS

5. Close the service access panel C and ensure the tabs D lock into place.

Parent topic: [Open the model ESCALA PL 250R-VL or ESCALA PL 450R-XS service access panel](#)

Place the model ESCALA PL 250R-VL or ESCALA PL 450R-XS in the service position

If you are servicing the fans or control panel see: [Open the model ESCALA PL 250R-VL or ESCALA PL 450R-XS service access panel](#).

Important: To place the model ESCALA PL 250R-VL or ESCALA PL 450R-XS in the service position you will need to remove the system unit from the rack.

Note: 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.

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)

DANGER Observe 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

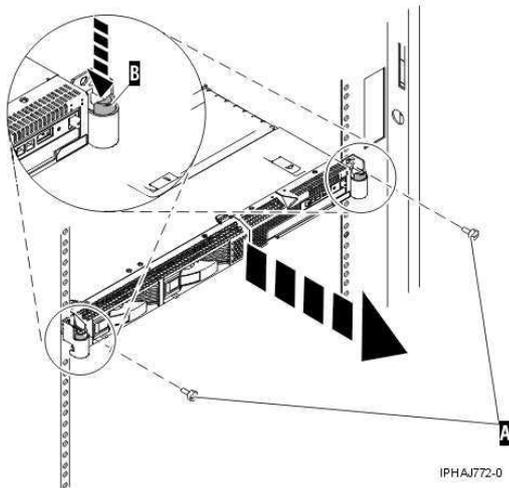
- Do not install a unit in a rack where the internal rack ambient temperatures will exceed the manufacturer's recommended ambient temperature for all your rack-mounted devices.
- Do not install a unit in a rack where the air flow is compromised. Ensure that air flow is not blocked or reduced on any side, 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 unit into the service position, follow these steps:

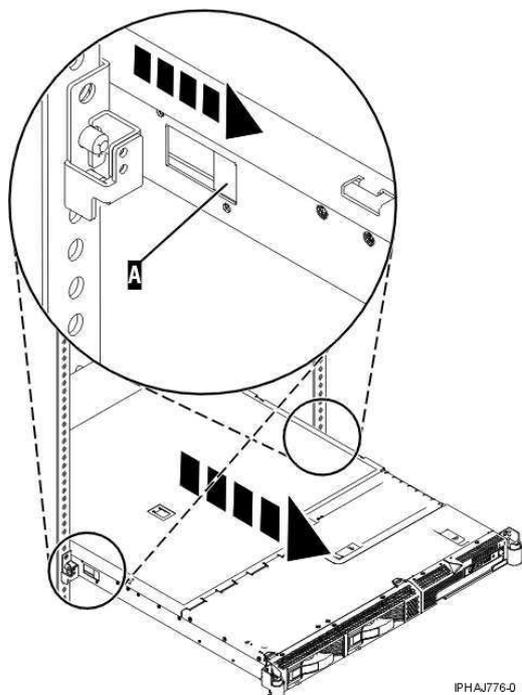
1. Record any error or log messages before you stop the system.
2. Stop the system. For instructions see, [Stop the system or logical partition](#).
3. If necessary, open the front rack door.
4. Carefully label and remove all cables and cords from the unit.
5. Remove the cable management arm from the system by doing the following:
 - a. Pull the release latch in the lower-left corner into the unlocked position.
 - b. Slide the cable management arm to the right detaching it from the system unit.
6. Remove the two screws A that secure the system unit to the rack as shown in the following figure.



7. Release the rack latches B on both the left and right sides as shown in the previous figure.
8. Review the following notes, and then slowly pull the system unit out from the rack until the system unit is fully extended and locked.

Note:

- ◆ Ensure that the cables at the rear of the system 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 unit from being pulled out too far.
9. Press the rail safety latches A to release the system from the rack, as shown in the following figure.



10. Grasp each side of the system unit and pull the system unit out of the rack.

CAUTION:This unit weighs approximately 17 kg (37 pounds). Be sure you can safely support this weight when removing the system unit from the rack.

11. Place the system unit on a sturdy flat surface capable of safely supporting the system unit while you are servicing it.

Parent topic: [Related procedures](#)

Place the model ESCALA PL 250R-VL or ESCALA PL 450R-XS 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. Lift the system unit, and position over the rails.

CAUTION:This unit weighs approximately 17 kg (37 pounds). Be sure you can safely support this weight when placing the system unit from the rack.

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

Note: 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.

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

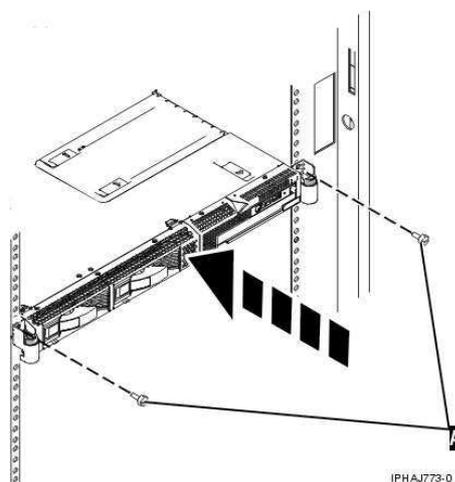


Figure 1. Replace the thumbscrews

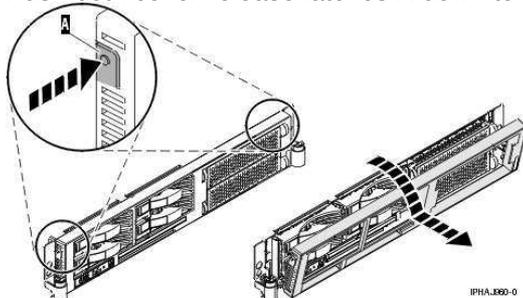
4. Connect the cables and cords.
5. Replace the cable management arm.
6. Close the front rack door.

Parent topic: [Related procedures](#)

Remove the front cover from the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ or 7/10

To remove the front cover, follow these steps:

1. If necessary, open the front rack door.
2. Push both cover-release latches A down to release the cover as shown in the following figure.



3. Pivot the cover from the bottom and swing the top of the cover out.
4. Pull the bottom of the cover up and then away from the system unit. This releases the two tabs located on the bottom of the cover.
5. Put the cover in a safe place.

- **Install the front cover on the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+**

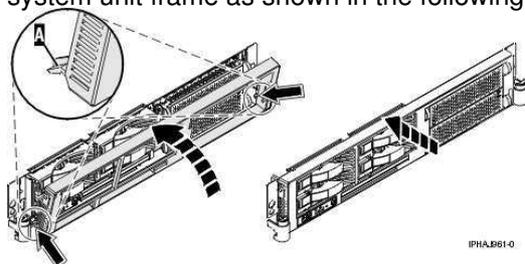
- **Place the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ __ in the service position**
Learn how to place the unit into the service position.
- **Place the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ __ in the operating position**
Learn how to place the unit into the operating position.
- **Gain access to the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ control panels**

Parent topic: [Related procedures](#)

Install the front cover on the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ or 7/10

To install the front cover, follow these steps:

1. If necessary, open the front rack door.
2. Insert the two tabs A located on the bottom edge of the cover into their locking slots, located on the system unit frame as shown in the following figure.



3. Pivot the front cover up toward the top of the system unit frame.
4. Align the tabs to the matching slots located on the front of the system unit frame.
5. Gently push the tabs into the slots until the cover seats against the front of the system unit.
6. Close the front rack door.

Parent topic: [Remove the front cover from the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+](#)

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

Learn how to place the unit into the service position.

Note: 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.

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.
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- 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)

DANGER Observe 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.
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CAUTION

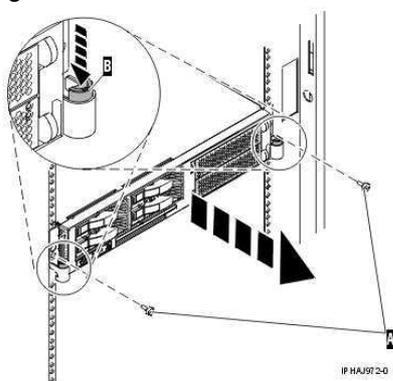
- Do not install a unit in a rack where the internal rack ambient temperatures will exceed the manufacturer's recommended ambient temperature for all your rack-mounted devices.
- Do not install a unit in a rack where the air flow is compromised. Ensure that air flow is not blocked or reduced on any side, 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 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 unit to the rack as shown in the following figure.



3. Release the rack latches B on both the left and right sides as shown in the previous figure.
4. Review the following note, and then slowly pull the system 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 unit, do so before you pull the unit out from the rack.
- ◆ Ensure that the cables at the rear of the system 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 unit from being pulled out too far.

Parent topic: [Remove the front cover from the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+](#)

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.

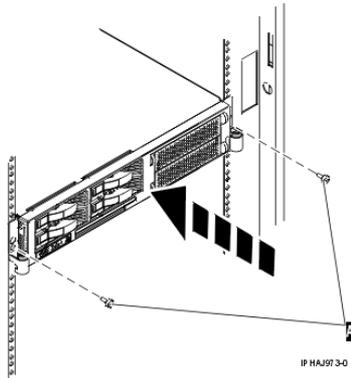
Tip: Some of the figures in these procedures might not look exactly like the system unit that you have. However, the steps to perform the task are the same.

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: [Remove the front cover from the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+](#)

Gain access to the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ control panels

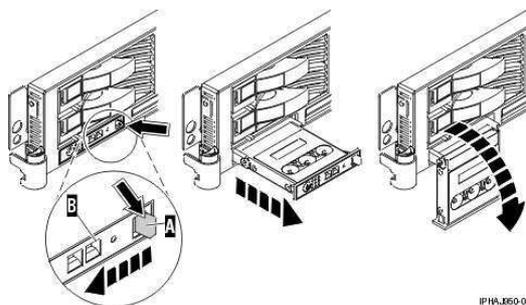
Because only part of the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ control panels control panel is visible from the front of the server, the following procedure describes how to gain access to all of the control panel's features, including the display.

To access all of the control panel's features, complete the following steps:

1. Press inward on the spring-loaded tab A located on the right side of the control panel B so that it pops out slightly, as shown in the following figure.

Figure 1. Gain access to the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ control panels

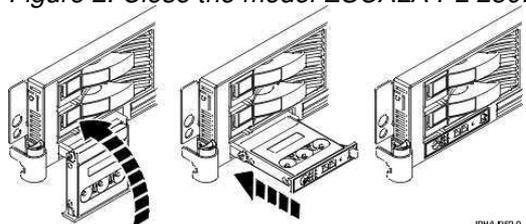
Control panel



IPH4L850-0

2. Pull the control panel out, toward the front of the system, until it can be pivoted downward on its hinge.
3. To move the control panel back into the device enclosure, lift the control panel up to align it with the opening and push it into place until you feel the tab lock, as shown in the following figure.

Figure 2. Close the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+ control panels



IPH4L850-0

Parent topic: [Remove the front cover from the model ESCALA PL 250R-L, PL 250R-L+ or PL 450R-VL+](#)

Remove the front cover from the rack-mounted 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+, and the 05/95 expansion unit

To remove the rack-mounted system or expansion unit front cover, follow these steps:

1. 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. Push both cover-release latches C in the direction of the arrows to release the cover from the system or expansion unit.
4. Pull the cover out and away from the system or expansion unit.

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.

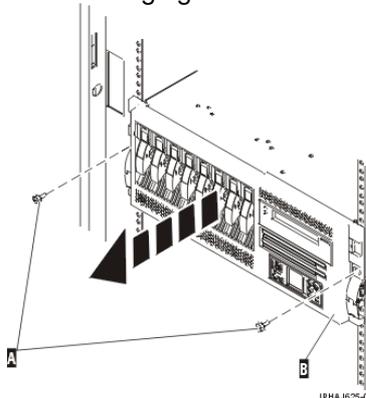
CAUTION

- 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.

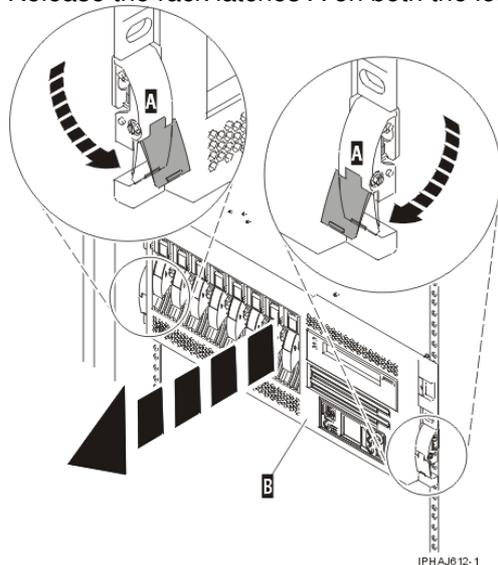
(R001)

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.



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:

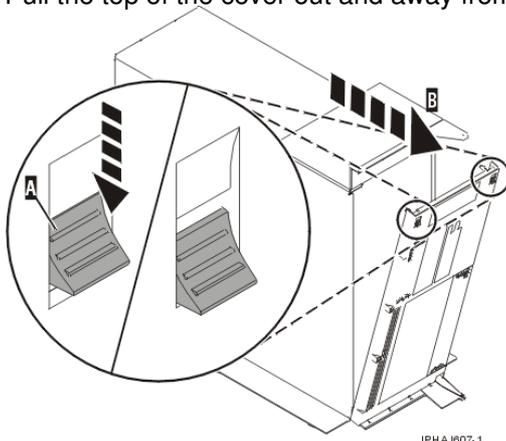
- ◆ If the procedure you are performing requires you to unplug cables from the back of the system or expansion unit, do so before you pull the unit out from the rack.
- ◆ Ensure that the cables at the rear of the system or expansion unit do not catch or bind as you pull the unit out from the rack.
- ◆ 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: [Related procedures](#)

Remove the front 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 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+, front cover, follow these steps:

1. [Remove the door from the 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+, .](#)
2. Press down on the two cover-release levers.
3. Pull the top of the cover out and away from the system as shown in the following figure.



4. Gently pull the cover up and off the base, releasing the lower cover-locking tabs.

- [Install the front 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+,](#)

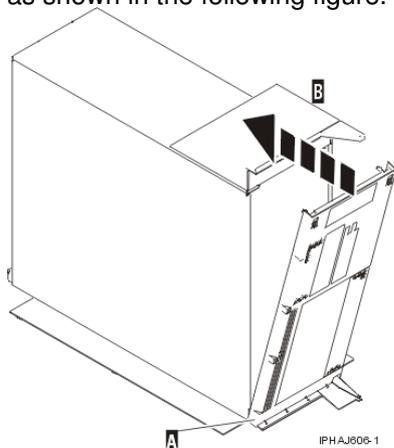
Parent topic: [Related procedures](#)

Install the front 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+,

Control panel

To install 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+, front cover, follow these steps:

1. Place the two lower cover-locking tabs into the retaining slots located on the base of the system unit as shown in the following figure.



2. Rotate the cover up toward the top of the system, ensuring that the aligning pins are aligned with their matching slots located on the system.
3. Gently push the cover in until the two cover-release levers are seated in their respective slots.
4. [Install or replace the door on the 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+, .](#)

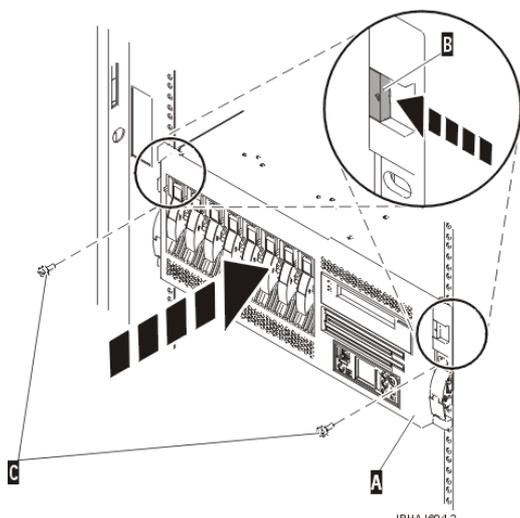
Parent topic: [Remove the front cover from the stand-alone model 112/85, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,](#)

Install the front cover on the rack-mounted 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+, , or the 05/95 expansion unit

To install the front cover on a rack-mounted 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+, or the 05/95, follow these steps:

1. Position the cover on the front of the system or expansion unit so that the two thumbscrews C align with the screw holes on the front of the system or expansion unit A, as shown in the following figure.
2. Push the cover-release latches B in the direction of the arrows to attach the cover to the front of the system or expansion unit. The latches will hold the cover in place.

Control panel



3. Tighten the thumbscrews.
4. Close the front rack door.

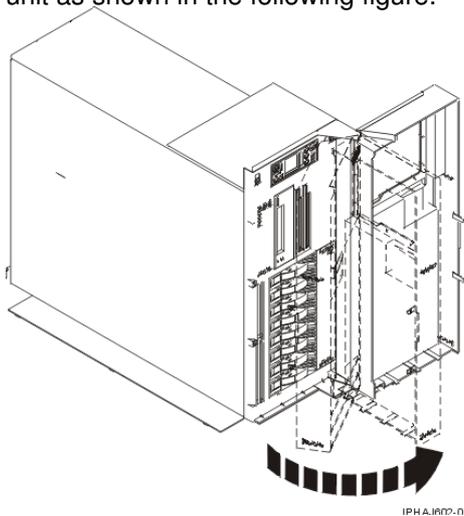
Parent topic: [Related procedures](#)

Remove the door from the 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+,

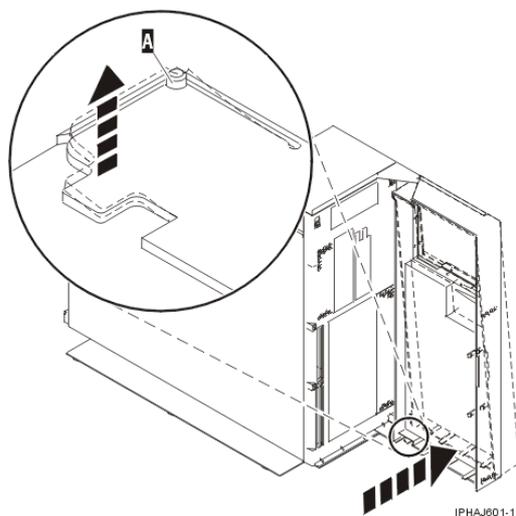
To remove the door from the model 112/85 or ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ see, [Remove the door from the model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+](#).

To remove the ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+, door, do the following:

1. Open the front door by grasping the door handle and pulling the door out and away from the system unit as shown in the following figure.



2. To remove the door, press down on the top back edge of the door.
3. Gently swivel the top back edge of the door forward and out past the top of the system unit.
4. Lift the door up to release it from the lower retaining post.



- **Install or replace the door on the 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+,**

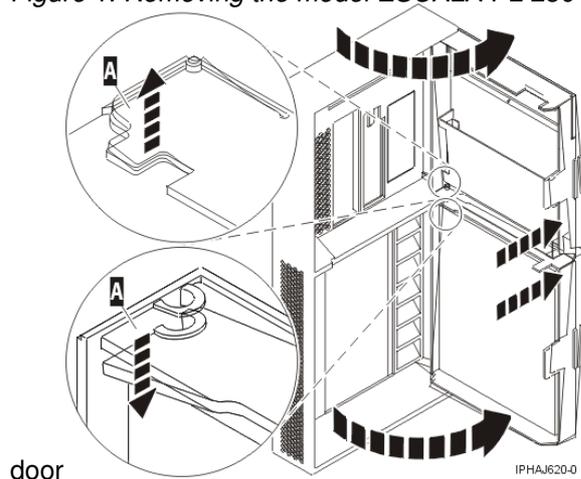
Parent topic: [Related procedures](#)

Remove the door from the model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+

The model 112/85 or ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ has two doors. The top door allows access to the media and the bottom allows access to the DASD. Use the following procedure for removing both doors.

1. Open the door that you want to remove and release the tab at the center hinge point as shown in the following figure.
 - a. Lift up the bottom tab at hinge A to release the top door.
 - b. Press down on the top tab at the hinge A to release the bottom door
2. Gently swivel the top back edge of the door forward until it releases from the system unit.

Figure 1. Removing the model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+

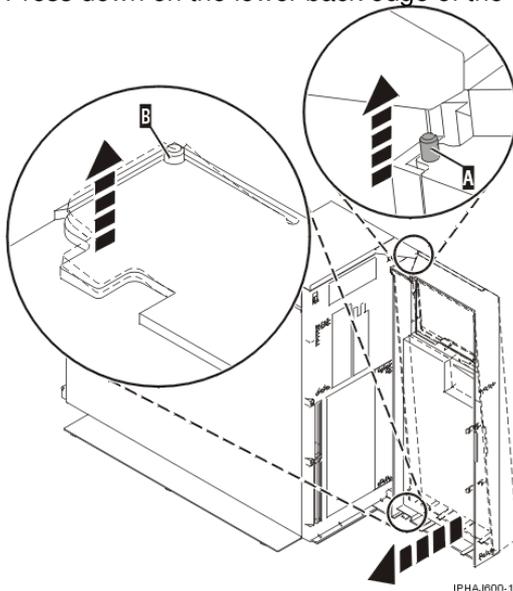


Install or replace the door on the model 112/85, ESCALA PL 250T/R, PL 250T/R+ or PL 450T/R-L+, ESCALA PL 450T/R, PL 450T/R+ or PL 850T/R-L+,

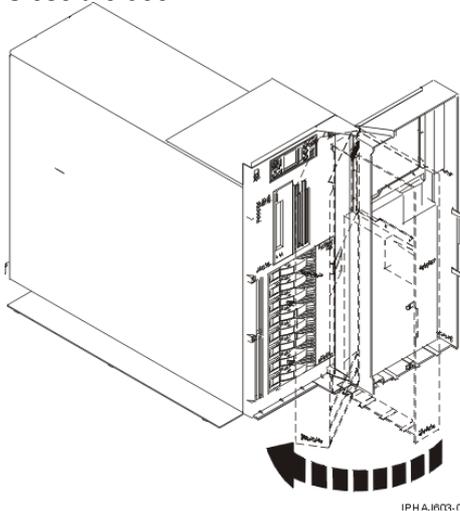
To install the model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ with acoustic feature front door see, [Install the door on the model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+](#)

To install the 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+, front door, do the following:

1. Set the door on the lower retaining post B, as shown in the following figure.
2. Rotate the door toward the top of the system unit.
3. Press down on the lower back edge of the door, and seat the top post A into its matching slot.



4. Close the door.



Parent topic: [Remove the door from the 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+,](#)

Install the door on the model ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+

The model 112/85 or ESCALA PL 250T/R+ or ESCALA PL 450T/R-L+ has two doors. The top door covers the media bays, and the bottom door covers the DASD bays.

1. Set the door into the retaining post A.

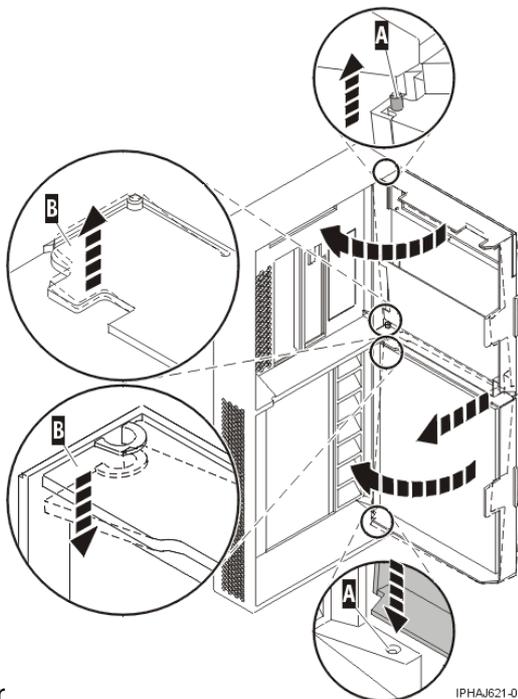


Figure 1. Installing the model 112/85 door

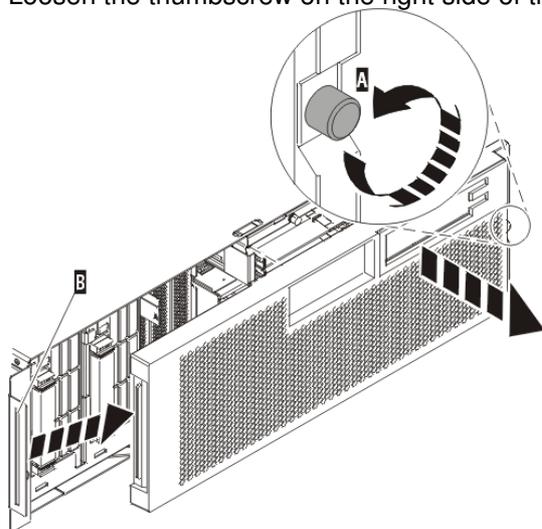
2. Rotate the door toward the system unit.
3. Press down on the back edge of the door, and seat the post B into its matching slot.
4. Close the door.

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Remove the front cover from the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+

To remove the front cover from the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+, follow these steps:

1. If necessary, open the front rack door.
2. Loosen the thumbscrew on the right side of the cover as shown in the following figure.



IPHA1/01.1

3. Slide the cover to the right and remove it from the system unit.

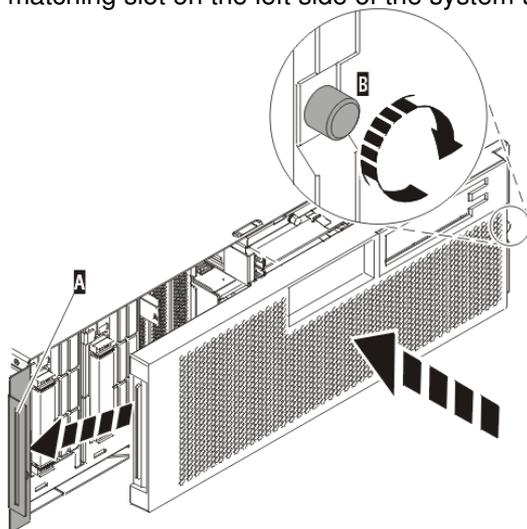
- [Install the front cover on the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+](#)

Parent topic: [Related procedures](#)

Install the front cover on the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+

To install the front cover on the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+, follow these steps:

1. Position the cover on the front of the system unit so that the tab on the left side of the cover is in the matching slot on the left side of the system unit as shown in the following figure.



IPHA.1500-1

2. Tighten the thumbscrew on the right side of the cover.
3. Close the front rack door.

Parent topic: [Remove the front cover from the model ESCALA PL 1650R-L+ or ESCALA PL 850R/PL 1650R/R+](#)

Remove the front cover from the 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+, or the 05/95 expansion unit

The following procedures describe how to remove the front cover of the 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+, or the 05/95 expansion unit.

- [Install the front cover on the 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+, or the 05/95 expansion unit](#)

The following procedures describe how to install the front cover for the rack-mounted and 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+, or the 05/95 expansion unit.

Parent topic: [Related procedures](#)

Install the front cover on the 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+, or the 05/95 expansion unit

The following procedures describe how to install the front cover for the rack-mounted and 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+, or the 05/95 expansion unit.

Parent topic: [Remove the front cover from the 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+, or the 05/95 expansion unit](#)

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](#)

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