

# Installation Guide

## 61D I/O Drawer

## 61R Second I/O Rack

**First Edition (July 2002)**

Before using this information and the product it supports, read the information in "Notices" on page 9 and product warranties included with your system.

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# Contents

<b>About This Book</b>	v
ISO 9000	v
Related Publications	v
Trademarks	v
 <b>Chapter 1. Installing the 61D I/O Drawer</b>	 1
Drawer Installation Procedure	1
Step 1: Take Inventory.	1
Step 2: Power off the System and Remove Power	2
Step 3: Set Up the Racks.	2
Step 3: Install the Rails and Nut Clips	2
Step 4: Install the Drawer(s)	4
Step 5: Attach the RIO and Power Cables	4
Step 5: Attach the Devices	5
Step 7: Verify the Hardware Operation	5
 <b>Chapter 2. Second Rack Installation Procedures</b>	 7
Inventory / Preparation	7
Installing the 61R Rack to an Existing Rack.	7
 <b>Notices</b>	 9



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## About This Book

This book provides information to service representatives about how to install the 61D I/O drawer and 61F Second I/O rack.

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### ISO 9000

ISO 9000 registered quality systems were used in the development and manufacturing of this product.

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### Related Publications

The following publications contain related information:

- The documentation shipped with your system contains detailed planning, installation, and option information.
- The *Site and Hardware Planning Information*, order number SA38-0508, contains information to help you plan the installation of your machine.

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## Chapter 1. Installing the 61D I/O Drawer

This chapter discusses how to install the 61D I/O drawer.

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### Drawer Installation Procedure

#### Step 1: Take Inventory

Before you begin the installation, check your inventory.

**Attention:** This process requires the use of a lift tool (part number 09P2481) and lift plate assembly tool (part number 11P4369). These must be obtained through the parts system.

\_\_\_ 1. The list of parts that are shipped with the system is as follows:

- Nut clip (ten each)
- Screws (fourteen each)
- Left rail (one each)
- Right rail (one each)
- Cable management bracket (one each)

Depending on your configuration, your shipment might also include an additional I/O rack. For information about installing a second rack, see Chapter 2, “Second Rack Installation Procedures” on page 7. The list of parts that are shipped with the additional rack are as follows:

- Standoff (four each)
- Secondary rack
- EMC bottom trim
- Vertical trim foam
- Top vertical foam
- Top EMC trim
- Vertical EMC trim panel (two each)
- Rack bolt (four each)
- Rack washers (four each)

\_\_\_ 2. Support Information and Warranty

Verify with the customer that the following items are available. You will need them to complete this installation.

- The system to which you are adding the I/O drawer is installed and operational.
- Because the system will be powered off for this procedure, the customer has scheduled a time when you can perform the drawer installation.

## **Step 2. Power off the System and Remove Power**

Refer to the documentation for your system for powering the system on or off, and shut down the system at this time. To completely remove power from the system, turn off the UEPO switch, turn off the circuit breakers on all optional power subsystems (if provided), then disconnect both power cords from the customer's receptacle.

## **Step 3: Set Up the Racks**

You must prepare the rack before installing the I/O Drawer. If the existing rack does not have room for an additional I/O drawer, you must install a second rack. For information about installing a second rack, see Chapter 2, "Second Rack Installation Procedures" on page 7. For more information about setting up the primary rack for your system, refer to your system's service documentation.

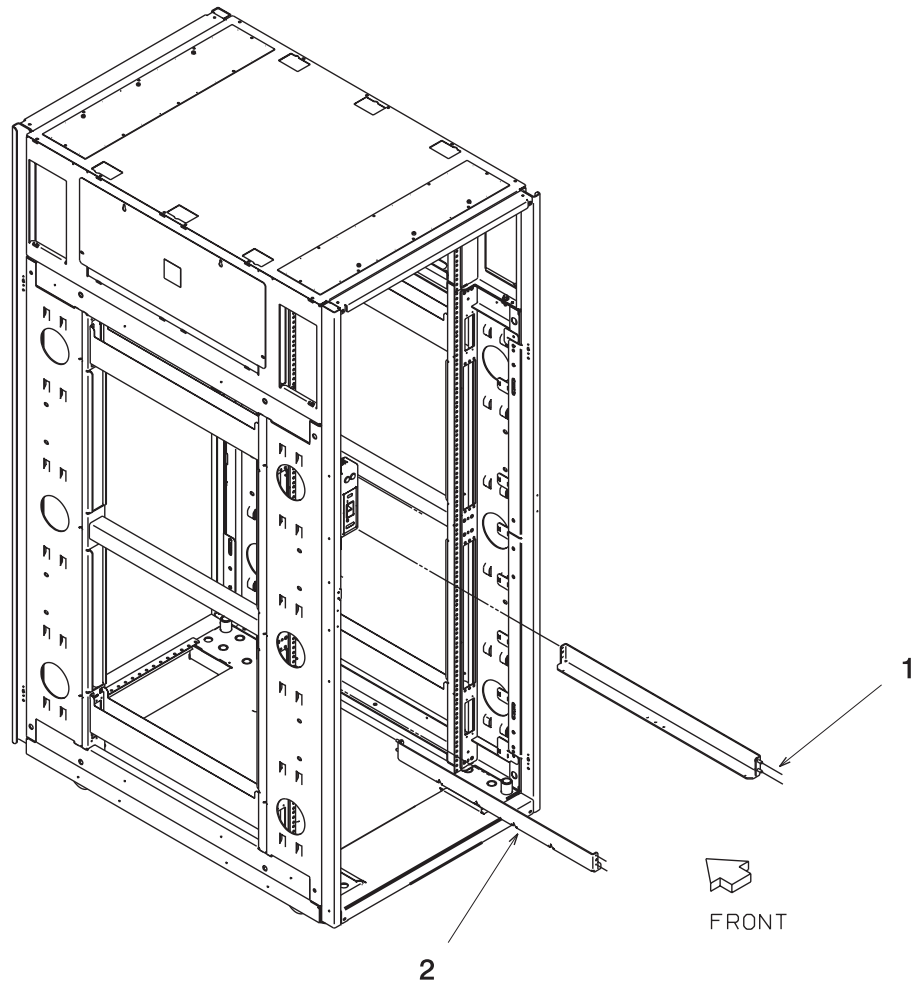
## **Step 3: Install the Rails and Nut Clips**

Install the nut clips and rails into your system rack if they are not already installed. To install the nut clips and rails in the rack, do the following:

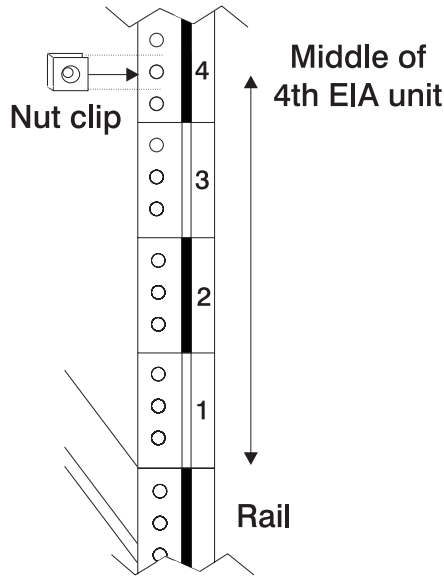
1. Determine the EIA locations for the drawer rails. To determine the correct EIA location for the drawer you are installing, refer to the subsystem positioning and cabling section of your system's installation or service guide.



2. Install the rails (1 and 2) in the rack unit as shown in the following figure.



3. Install the nut clip in the middle of the fourth EIA unit above where you installed the drawer rails, as shown in the following figure:



#### Step 4: Install the Drawer(s)

To install the drawer, do the following:

1. Position the lift tool so that the new I/O subsystem chassis can be moved onto the lift plate.
2. Install the wheel chocks and engage the brake.
3. Move the new I/O drawer onto the tool with its rear (PCI adapter end) flush with the lift plate.
4. Position the lift tool as close as possible to the front of the rack. Install the wheel chocks on lift tool casters. Engage the lift tool brake.
5. Raise the plate to a height so that the lift plate is just above the appropriate I/O drawer rails. Release the pins on the extender arms and position them on both the left and right sides. The arms must fit around the frame extenders and lock in place (do not adjust the lift tool once these arms are locked in place).
6. One person should gently push the I/O drawer toward the frame from the front of the system. Adjust the height of the lift plate as needed. After the I/O drawer is installed in the frame, retract the extender arms.
7. Lower the lift plate and remove it from the lift tool, and then repackage the lift tool.
8. Reinstall all the components you removed for this procedure. For more information about installing your system's components, refer to the documentation shipped with your system.

#### Step 5: Attach the RIO and Power Cables

For information about attaching the cables to your system, refer to the documentation shipped with your system.

## Step 5: Attach the Devices

For information about attaching devices to your system, refer to the documentation shipped with your system and its devices.

## Step 7: Verify the Hardware Operation

Use the system verification procedure discussed in your system's installation guide to check the system for correct hardware operation.

If you are installing a 7th or 8th I/O drawer, you must first have the correct system firmware level. Before installing the seventh or eighth I/O drawer, perform the following procedure:

1. Check the current firmware level on the managed server.
  - If the system is booted into AIX, issue the following command: **lscfg -vp | grep -p Platform**  
The line that begins with ROM level (alterable)... displays the currently installed firmware level.
  - If the system is powered down, look at the top line of the service processor main menu.
2. If the firmware level is earlier than **RH020413**, you must update the firmware before installing the I/O drawers. To do this, download the firmware update images and instructions from CORE.

**Note:** The firmware level is in the format **RHyymmdd**, where

**yy**=the year

**mm**=the month

**dd**=the day of the firmware release.

3. After the managed server reboots, wait 30 minutes with the managed system sitting at the AIX prompt for the automated power code download to complete. The power code download must be completed for the additional drawer(s) to be recognized.
4. After 30 minutes, power down the managed server. Remove power from the system by switching the UEPO switch in the OFF position.

You can now proceed with the following steps to install the seventh and eighth I/O drawer.



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## Chapter 2. Second Rack Installation Procedures

This chapter discusses how to install a second rack to your existing system.

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### Inventory / Preparation

Use the packing lists for each ship group to verify that you have all the items shipped with your upgrade.

Other tools that might be needed for installation, but not shipped with the system, include:

- Lift Tool
- Service Vacuum
- Service Ladder
- Stepladder

Verify with the customer that the following items are available. You will need them to complete this installation.

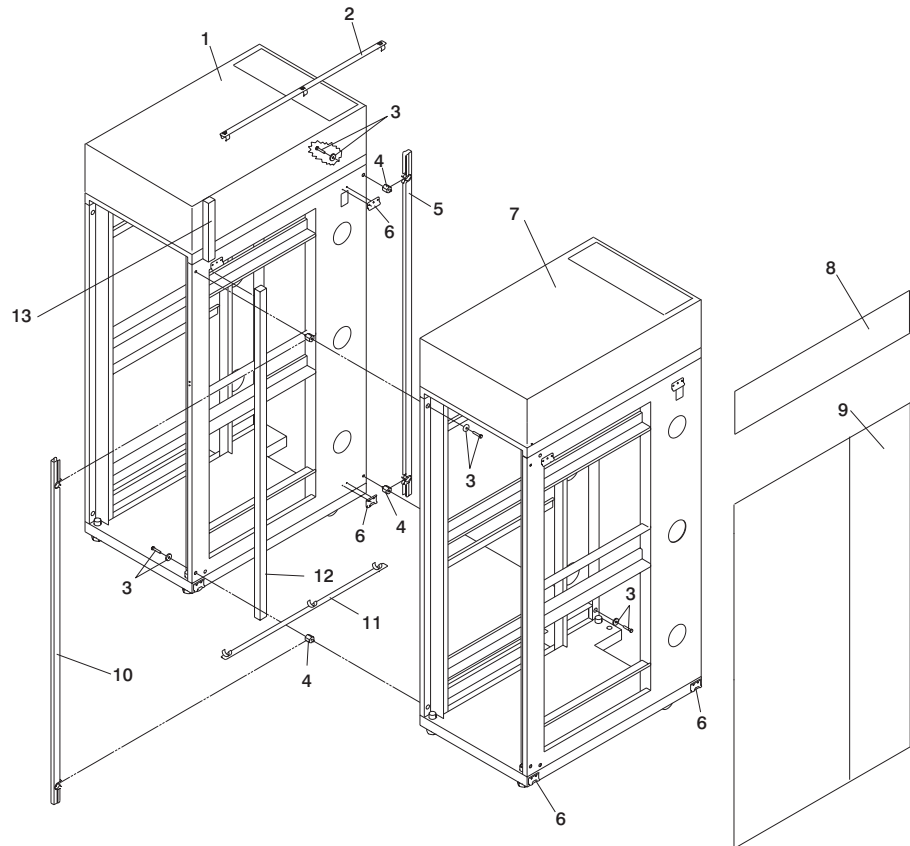
- Front and rear door for the secondary rack
- Rack bolt-together kit hardware

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### Installing the 61R Rack to an Existing Rack

1. Screw two standoffs (4 in the following diagram) to the primary rack (7) and the other two to the secondary rack (1).
2. Attach the EMC bottom trim (11) to the secondary rack, using the four included screws.
3. Place the lower vertical trim foam (12) on the secondary rack, starting at the EMC bottom trim (11).
4. Place the top vertical foam (13) on top of the bottom foam.
5. Place the top EMC trim (2) on top of the secondary rack, using the middle two screws. Do not tighten the screws yet.
6. Place the two vertical EMC trim panels (5 and 10) into position. The trim panels are located so that the flanges point into the frame and fit on the tabs of the bottom and top EMC trim.
7. Screw down the top EMC trim to lock in the vertical trim.
8. Roll the two frames together, being careful not to damage the EMC trim with the standoffs (4).

9. Use the bolts and washers (3) to bolt the frames together. For more information, refer to the following diagram:



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