D10 I/O Drawer Installation Guide

SA23-1295-00

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Before using this information and the product it supports, read the information in “Notices” on page 13 and product warranties included with your system.

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About This Book

This book provides information to service representatives about how to install the D10 I/O drawer.

ISO 9000

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

Related Publications

The following publications contain related information:

- The documentation shipped with your system contains detailed planning, installation, and option information.
- The documentation shipped with your rack contains rack installation 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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Installing the D10 I/O Drawer

The following information discusses how to install the D10 I/O drawer.

Drawer Installation Procedure

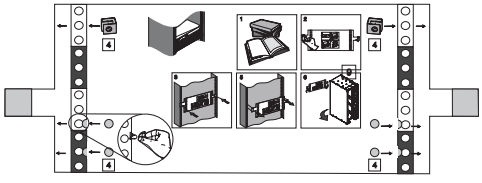
If you are installing a drawer into an existing shell, skip to “Step 3. Power off the System and Remove Power” on page 2. To install the drawer in a new shell, use the following steps:

Step 1: Take Inventory

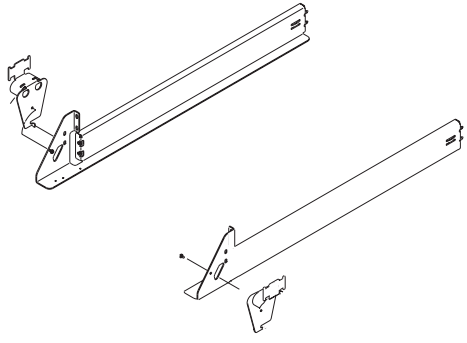
Before you begin the installation, check your inventory.

1. The parts that are shipped with the system are as follows:

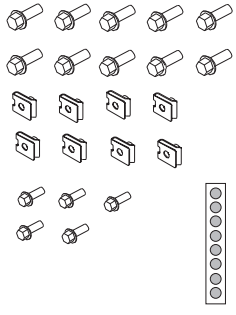
☐ Rack-Mounting Template



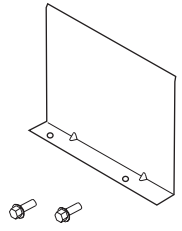
☐ 2 Rail with Cable Management Arms



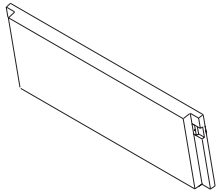
☐ Rack-Mounting Kit contains:
8 rail to rack screws,
4 shell to rail screws,
8 nut clips,
1 shell to rail screw
2 drawer to shell screws,
2 cable management screws,
1 strip of self adhesive placement dots



☐Filler Plate and screws



☐ Front Bezel



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

- Ensure that there is an empty slot in an existing shell or that there is enough room to install a new shell.
- Because the system that you are attaching to will be powered off for this procedure, make sure that the customer has scheduled a time when you can perform the drawer installation.

Step 2: Set Up the Racks

Before installing the I/O drawer, you must prepare the rack .

1. If the existing rack already has the shell installed, skip to “Step 9: Install the Drawer” on page 10.
2. If the existing rack has room for the 4 EIA shell , continue with “Step 5: Install the Nut Clips and Self-Adhesive Dots Using the Rack-Mounting Template” on page 3.
3. 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 the documentation that shipped with your rack.

Step 3. Power off the System and Remove Power

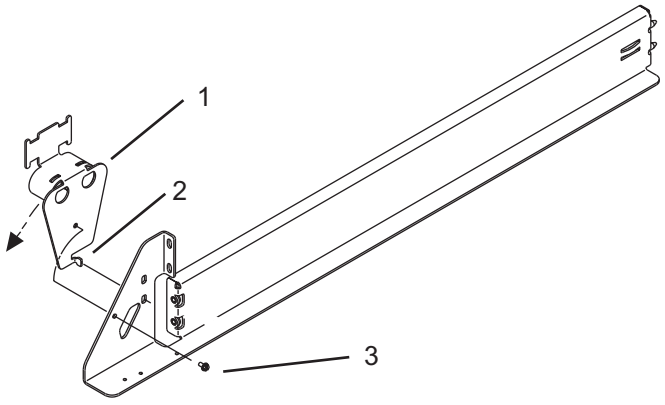
1. Ensure that the system you are attaching to is running the latest level of firmware. For information on checking or upgrading the firmware level or your system, refer to the firmware updates section of your system’s installation guide.
2. After ensuring that your firmware is at the latest level, shut down and power off the system that you are attaching to. For information about shutting down and powering off the system, see the documentation provided with your system.
3. If you are installing a drawer into an existing shell, continue with “Step 9: Install the Drawer” on page 10.

Step 4: Attach the Cable Management Arm to the Rails

If the cable management arm is not attached to the rails, do the following. Otherwise, go to “Step 5: Install the Nut Clips and Self-Adhesive Dots Using the Rack-Mounting Template” on page 3, or “Step 6: Install the Nut Clips and Self-Adhesive Dots without Using the Rack-Mounting Template” on page 5.

1. Insert the cable management arm rail tab into the rail.

2. Rotate the cable management arm as shown in the following illustration.



1 Cable Management Arm

2 Cable Management Arm Rail Tab

3 Retaining Screw

3. Secure the cable management arm with the retaining screw.
4. Repeat substeps 1 through 3 for the other rail.

Step 5: Install the Nut Clips and Self-Adhesive Dots Using the Rack-Mounting Template

If you do not have a rack-mounting template, go to “Step 6: Install the Nut Clips and Self-Adhesive Dots without Using the Rack-Mounting Template” on page 5.

Notes:

1. The rack-mounting template has printed illustrations located on the front and rear of the template. Each illustration is designed to aid you in identifying the EIA (Electronics Industries Association) location holes used when planning to populate your rack. *Do not* use the rack-mounting template without reading and understanding the following steps.
2. Each step must be completed in its entirety. Skipping steps or not following steps in sequence may cause rail failure, resulting in system-drawer damage or bodily injury.
3. Use the front side of the rack-mounting template when installing the hardware on the front of the rack, and the back side of the rack mounting template when installing the hardware on the back of the rack. You can distinguish the front of the template from the rear by the step numbers. The steps on the front of the rack-mounting template begin with the number 1.

To install the nut clips and rails in the rack, using the rack-mounting template, do the following:

1. Locate the rack-mounting template, nut clips, self adhesive dots, and rails.

2. Using the rack-mounting template: Each black or white unit on the template is equal to 1 EIA unit. Each EIA unit consists of 3 holes. The EIA units illustrated on the template must be aligned with an EIA unit located on the rack. It is not necessary to align like-colored EIA units. For example, a black EIA unit illustrated on the rack-mounting template does not have to be aligned with a black EIA unit located on the rack. A black EIA unit on the rack-mounting template can be aligned with a white EIA unit located on the rack.

   To use the rack-mounting template, do the following:

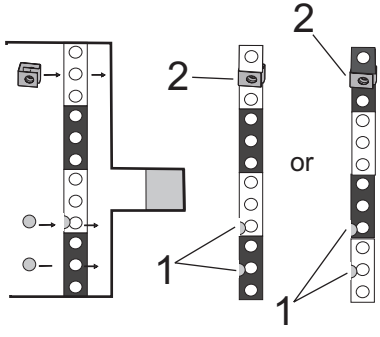
   a. Determine where in the rack to place the drawer. Make note of the EIA location number. Align the black and white strip located on each side of the rack-mounting template with an EIA location on each side of the rack.

   b. Remove the protective coating from each adhesive strip located on the back tabs of the rack-mounting template. Lightly press the template into position onto the rack. Ensure that the rack-mounting template is level.

      Note: Make note of the rack EIA location where you mounted the template. You will use the same EIA locations on the rear of the rack.

   c. Note the four dots printed on the front side of the template. Attach a self-adhesive dot directly across from the template's printed dots onto the rack's EIA strip. These dots determine the placement of the rail-alignment pins.

      Note: When attaching the self-adhesive dots, fold the dots around the EIA rail as shown on the template and in the following illustration.



1 Folded Self-Adhesive dot
2 Nut Clip

   d. Attach the nut clips directly across from the template's printed nut clips onto the rack's EIA strip.

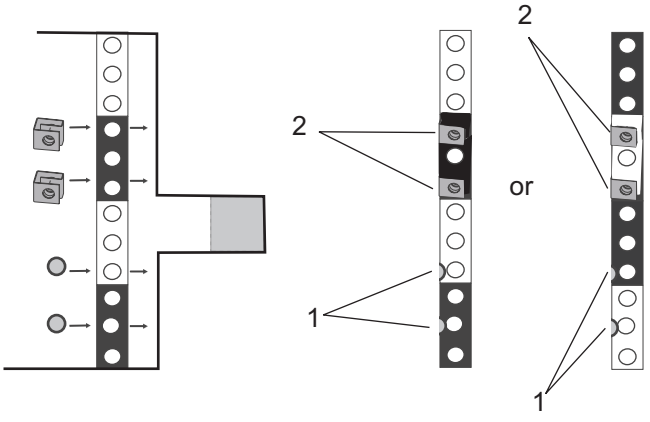
   e. Remove the rack-mounting template from the front of the rack.

      You should now have placed four self-adhesive dots and two nut clips on the front of your rack.

   f. Go to the rear of the rack.

g. Facing the rear of the rack, remove the protective coating from each adhesive strip, and attach the backside of the rack-mounting template to the back of the rack. Place the template on the corresponding EIA locations that were noted from the front of the rack.

Note: The steps on the rear of the rack-mounting template begin with number 7.



1 Folded Self-Adhesive dot
2 Nut Clip

h. Note the four dots printed on the backside of the template. Attach a self-adhesive dot directly across from the template's printed dots onto the rack's EIA strip.

Note: These dots are where the rail retaining screws are attached.

i. Attach the nut clips directly across from the templates printed nut clips onto the rack's EIA strip.

Step 6: Install the Nut Clips and Self-Adhesive Dots without Using the Rack-Mounting Template

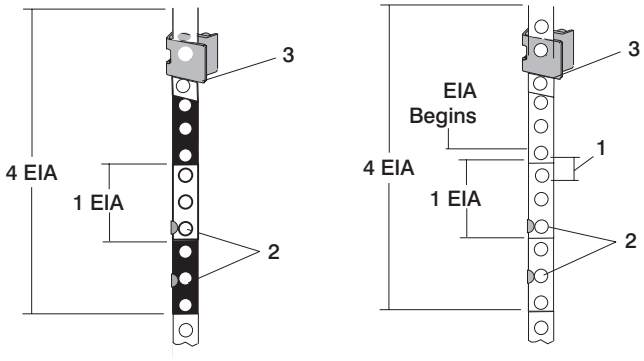
To install the nut clips and rails in the rack, without using the rack-mounting template, do the following:

1. This I/O drawer requires a space of four EIA units. Determine where in the rack to place the drawer, and make note of the EIA location number.

   Note: An EIA section on the rack consists of a grouping of three holes.

   The following illustration shows a 1-EIA unit and a 4-EIA unit. Depending on the rack manufacturer, the EIA units may be separated either by color or by a line. The holes along the EIA strip are not evenly spaced. If your rack has no color or line separation between EIAs, assume that each EIA section begins where the hole

spacing is closest together.



1 EIA Hole Spacing
2 Self-adhesive Dot Placement
3 Nut clip

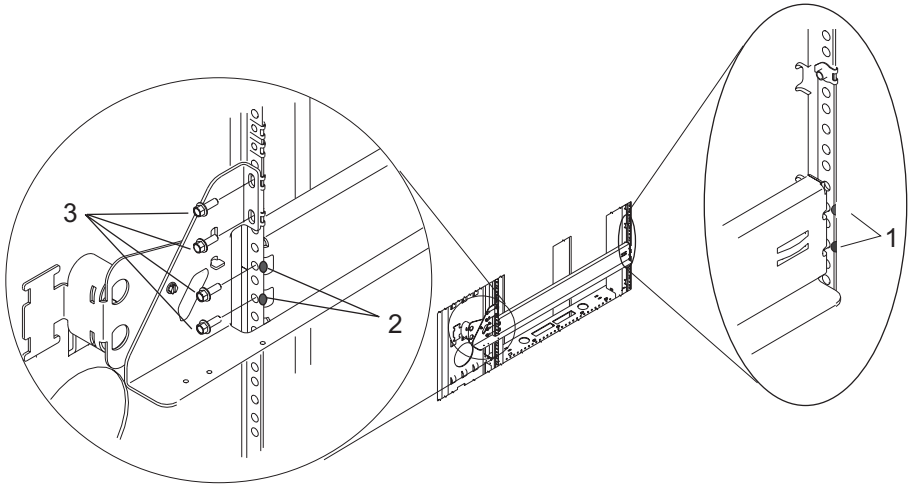
2. Facing the front of the rack and working from the right side, locate the bottom EIA unit that your drawer will be using and make a note of the EIA location. Place a self-adhesive dot next to the middle hole of this EIA unit and wrap the dot around the rail, or mark the rack where it can be seen from the rear of the rack.

   Note: The self-adhesive dots are used to identify the EIA unit holes located on the rack. Alignment pins located on the rail alignment brackets are placed through the identified holes when mounting the rails. If you no longer have any of the dots, use some other form of marking tool to aid you in identifying the hole locations. (for example, marker or pencil).
3. Begin with the hole identified by the dot, or mark, placed in substep 2; count up two holes and place the second dot, or mark the rack where it can be seen from the rear, next to the hole.
4. Begin with the hole identified in substep 3, count up 7 holes and place a nut clip. The nut clip aids in securing your drawer to the rack.
5. Repeat substeps 2 through 4 on the left side of the rack.
6. Facing the rear of the rack and working from the right side, locate the bottom EIA unit that your drawer will be using. Place a supplied self-adhesive dot, or make a mark, next to the middle hole of this EIA unit.
7. Begin with the hole identified by the dot, or mark, placed in substep 6, count up two holes and place the second dot, or mark, next to the hole.
8. Begin with the top dot, count up three holes and place a nut clip.
9. Count up two more holes and place a second nut clip.

Step 7: Install the Rails

To install the rails, do the following:

1. From the rear of the rack, note the position of the two placement dots, or marks, previously installed on the front EIA strips. Install the rack-alignment pins for the left rail into the corresponding EIA holes located in the left front EIA strip.
2. From the rear of the rack, align the rails with the two placement dots or marks, previously installed on the rear EIA strips. Loosely thread two retaining screws into each rail, at the corresponding EIA strip holes.



1 2 - Front placement dots
2 2 - Rear placement dots
3 4 - Retaining screws

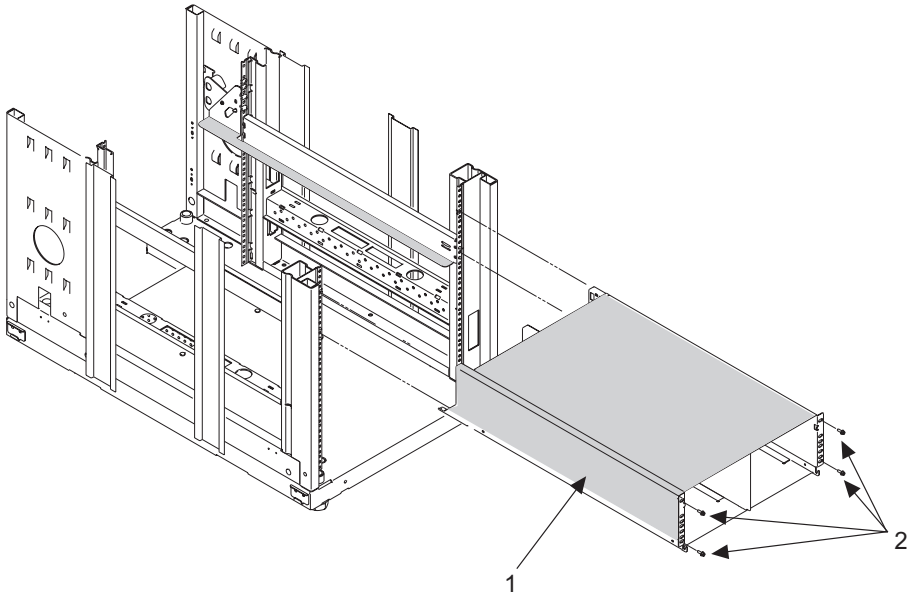
3. Loosely thread two retaining screws into the rear EIA strips where the nut clips were previously installed.
4. Repeat steps 1 through 3 for the right rail.
5. Tighten all screws.

Step 8: Install the Shell

Note: Before installing the shell, ensure that the rails are level side to side and front to rear.

To install the shell, do the following:

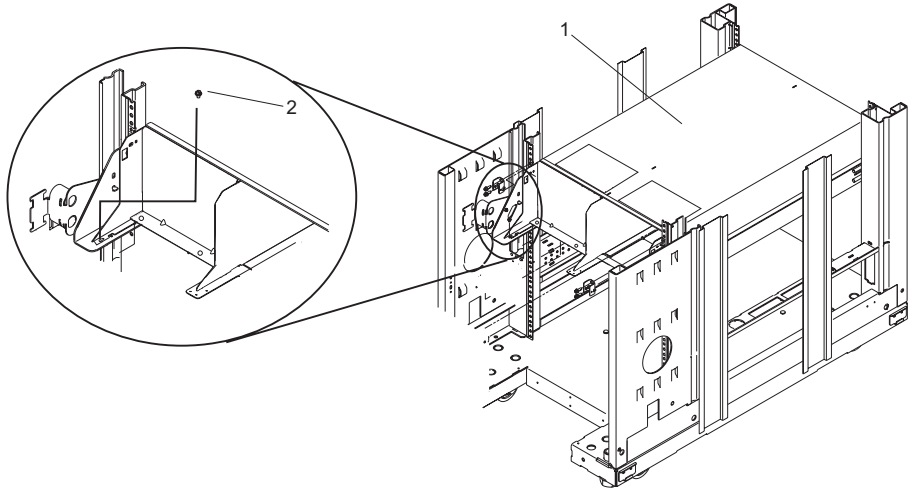
1. From the front of the rack, place the shell on the rails and slide it into the rack.



1 Shell
2 4 - Retaining screws

2. Install and tighten the four retaining screws into the front of the shell securing the shell to the EIA strips.

3. If you are only installing one drawer, install and tighten the retaining screw into the rear of the shell securing the shell to the rails.

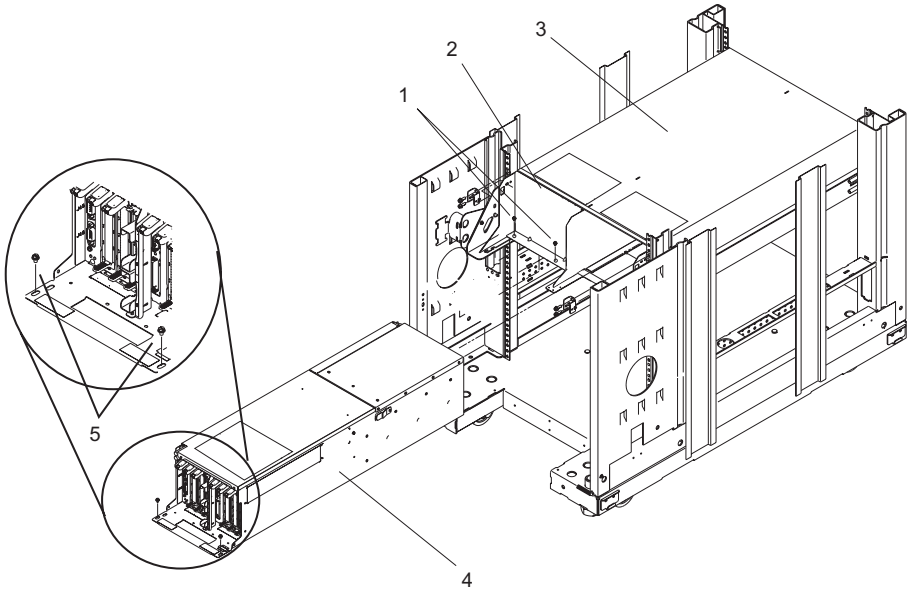


1 Shell
2 Retaining screw

Step 9: Install the Drawer

To install the drawer, from the rear of the rack, do the following:

1. If you are installing a drawer in an existing shell, remove the filler plate screws and remove the filler plate.



1 Filler Plate Screws
2 Filler Plate
3 Shell
4 Drawer
5 Drawer Screws

2. Carefully move any existing cables that are blocking the drawer location.
3. Carefully slide the drawer into the shell.
4. Install and tighten the two drawer screws, securing the drawer to the shell.
5. If you are installing two drawers, repeat substeps 1 through 4.

Note: If there is only one drawer installed in the shell, ensure that the filler plate is installed in the blank slot.

Step 10: Attach the RIO, Power Controller (SPCN) and Power Cables

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

Route the cables over the cable management bracket and secure them with the hook-and-loop fastener.

Step 11: Install Adapters

To install any uninstalled adapters, refer to the documentation provided with your system.

Step 12: Attach the Devices

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

Step 13: Power On the System

For information on powering on the system, refer to system's installation guide.

Step 14: Verify the Hardware Operation

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

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