
What to Do

You need the following items to install the 5.25-inch device option in a BA346-K series desktside expansion pedestal:

- A compatible 5.25-inch storage device
- The installation kit
- Electrostatic discharge (ESD) protection (either an ESD mat or an ESD wrist strap). Familiarize yourself with using an ESD strap as described in "Using an ESD Strap," (page 10).
- Common hand tools
- *StorageWorks Solutions BA346-K Series Desktside Expansion Pedestal Users Guide*

Complete the installation procedures in the following order:

1. Review this installation guide to become familiar with the installation procedures and the kit components.
2. Read the storage device publications so that you are familiar with device and its components. Pay particular attention to:
 - Procedures for disabling the internal SCSI bus termination.
 - Procedures for setting the internal SCSI bus address.
3. Complete the procedures described "Planning the Installation," see page 2.
4. Complete the procedures described in "Inventorying the Installation Kit," see page 2.
5. Complete the procedures in "Preparing for the Installation," see page 3.
6. Complete the procedures described in "Installing the Option," see page 4, and:
 - "Mounting the Device," see page 5
 - "Installing the Modular Carrier," see page 6
 - "Setting the Configuration Address," see page 8

CAUTION

The only valid SCSI device addresses for the 5.25-inch devices are 0 through 6.

- "Completing the Installation," see page 10

CAUTION

Electrostatic discharge (ESD) can damage storage devices. To prevent this you must take one of the following precautions:

- Place an ESD mat on the work surface before starting the procedures. Place the components on the mat while assembling the SBB.
- Wear an ESD wrist strap whenever you handle any of the electronic components (see "Using an ESD Strap," see page 10).
- Do not touch the device connectors.

Note

These installation procedures are only valid for storage devices that comply with the appropriate product safety requirements of UL1950, CSA950, or EN60 950.

Planning the Installation

Planning the installation involves completing the following actions

- Selecting the storage devices to include form-factor (half-height, full-height)
- Determining half-height storage device location in the modular carrier (upper, lower), mounting hardware, and mounting hole locations.
- Determining the pedestal configuration address (see “Setting the Configuration Address,” see page 8)
- Determining the device addresses

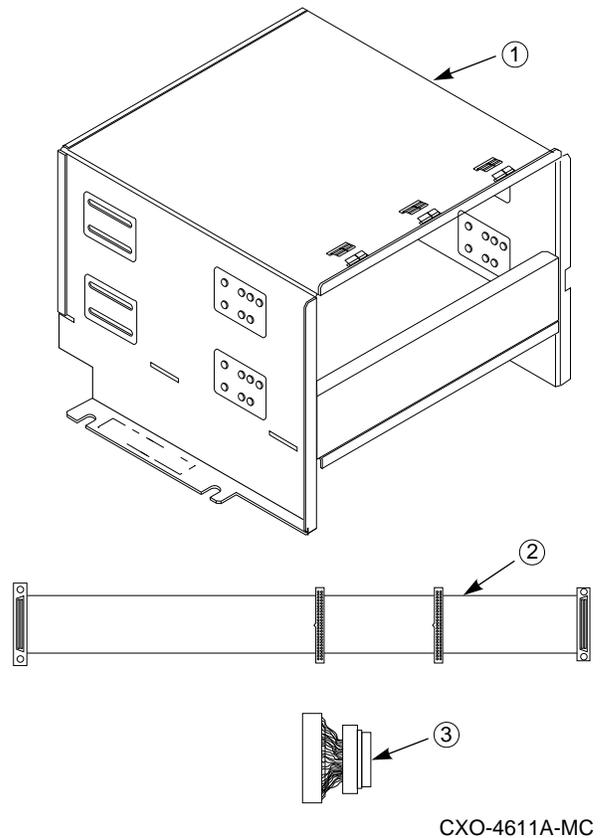
Inventorying the Kit

Refer to Figure 1 and inventory the contents of the installation kit per Table 1.

Table 1 Installation Kit Contents

	Part	Qty
①	Modular carrier with filler panel	1
②	Input cable, 5.25-inch device	1
③	Adapter cable, 68-pin female to 50-pin female	2
	Screw, flat head, 6–32 x 0.250 in*	8
	Screw, flat head, M3 x 5 mm	8

Figure 1 Installation Kit Components



* The drawing shows the relative, *not the actual*, screw size.

Preparing for the Installation

Complete the following procedure to prepare the pedestal for installing the option:

1. Turn off the power to both the controller and the pedestal.
2. Disconnect the ac power cord.
3. Disconnect the external SCSI bus cables.
4. Remove the front door by lifting it up and off the hinge pins.
5. Refer to Figure 2 and remove the left-side cover screw.
6. Grasp the side cover rear hand hold (Figure 3) and pull the cover to the rear and remove.
7. Note the configuration address (jumpers W1-W3, J18).
8. Disconnect the I/O cable from J10 on the backplane.
9. Remove the screws connecting the I/O cable to the rear panel and remove the cable. Save the screws for installing the 5.25-inch device I/O cable.

Figure 2 Removing the Side Cover

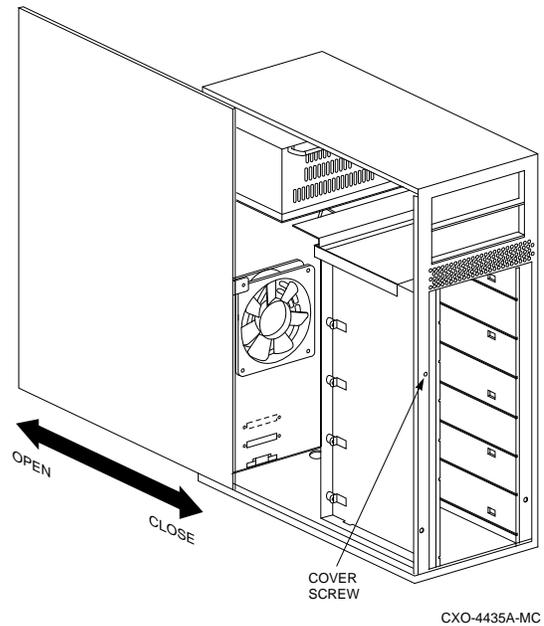
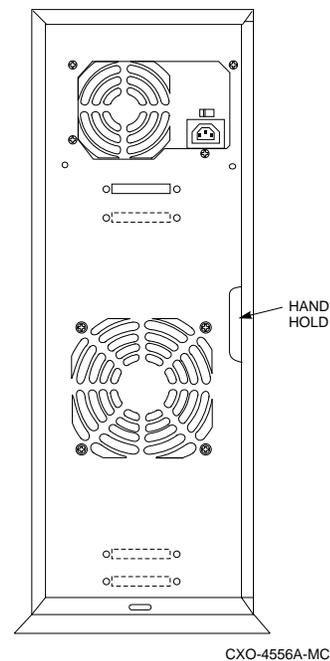


Figure 3 Side Cover Hand Hold



Installing the Option

Installing the 5.25-inch device option in the pedestal involves the following actions:

- Removing the pedestal filler panel.
- Installing the device in the modular carrier.
- Mounting the modular carrier in the pedestal.
- Setting the configuration address.
- Installing the side cover, connecting the cables, and checking the pedestal for proper operation.

Setting the Device SCSI Address

See “Setting the Configuration Address” and select the device address for each 5.25-inch device. *All devices on a single SCSI bus must have a unique address.* Set the device address per the device manufacturer’s instructions.

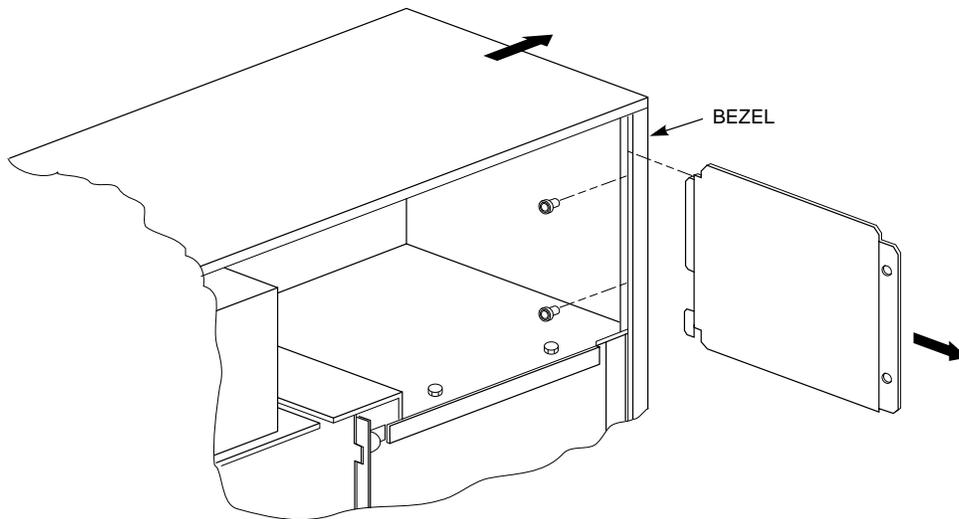
Removing the Pedestal Filler Panel

Refer to Figure 4 and remove the pedestal filler panel

Note

There are two 5.25-inch device filler panels; one in the pedestal and one in the modular carrier. The pedestal panel is always removed.

Figure 4 To Remove the Pedestal Filler Panel



- ① REMOVE SCREWS
- ② GENTLY PUSH BEZEL FORWARD
- ③ PULL OUT FILLER PANEL
- ④ REPLACE SCREWS

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Mounting the Device

As described in the following sections mounting the 5.25-inch device involves removing the modular carrier device filler panel and then installing the device in the modular carrier.

Removing the Device Filler Panel

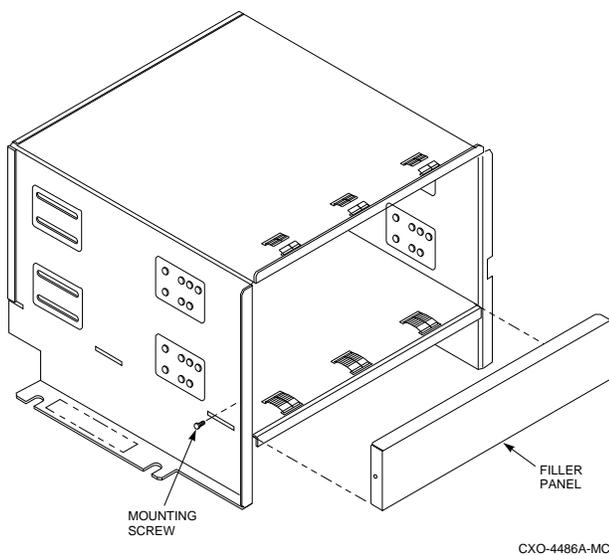
The device filler panel is factory installed. No action is required when installing the first half-height device. When you are installing either a full-height, or two half-height devices you must remove this panel by completing the following procedure:

CAUTION

When there is a single half-height device installed the device filler panel maintains air flow through the device and the power supply. Remove this panel only when installing two half-height devices or a full-height device.

1. Refer to Figure 5 and remove the filler panel mounting screw from the left side of the modular carrier.
2. Pull the left side of the filler panel to the front.
3. Disengage the filler panel tabs from the slots on the right side of the modular carrier and remove the panel.

Figure 5 Device Filler Panel Location



Installing the Device

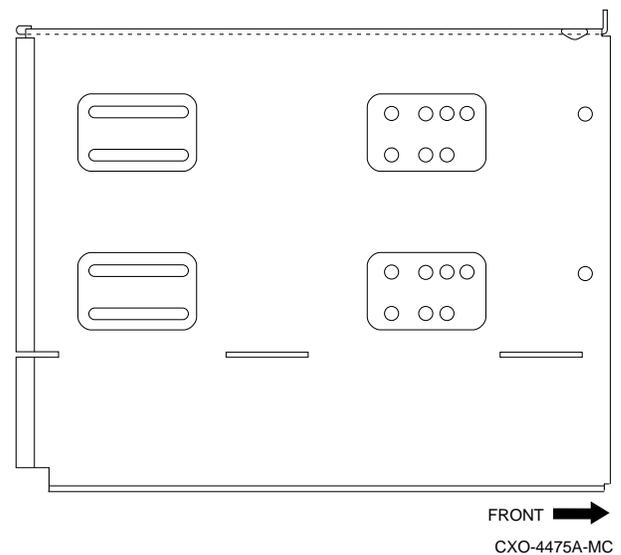
As shown in Figure 6, the modular carrier has multiple mounting holes and two mounting slots. The device form factor (half-height or full height) as well as the specific device determines the mounting holes used. The general configuration rules are:

- A single half-height device is mounted in the top slot
- A full height device is mounted in the bottom slot

See Figure 6 and complete the following procedure to mount the device in the modular carrier:

1. Determine the mounting holes to be used by inserting the device into the carrier and moving it so that the slots in the rear and the mounting holes in the front align with the mounting holes in the device.

Figure 6 Device Mounting Holes



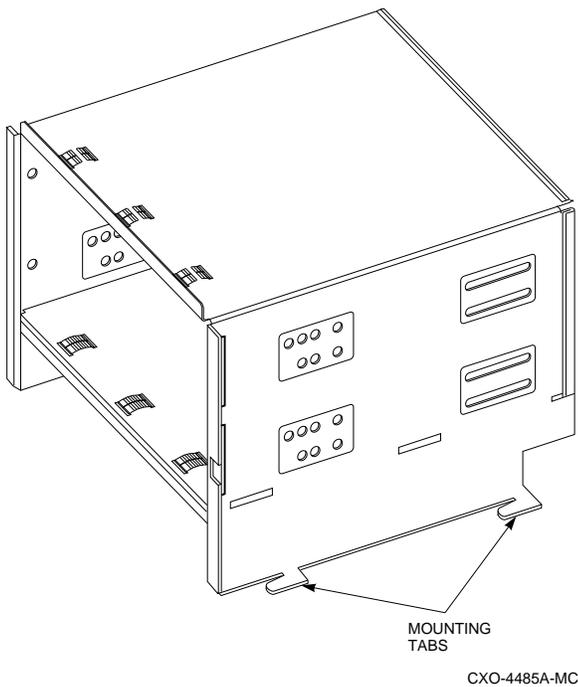
3. Insert the device mounting screws and tighten them.
4. When the device has a 50-pin input connector, connect a 68-pin to 50-pin adapter cable to the each device.
5. Connect the 5.25-inch device cable to the device or the adapter cable.

Installing the Modular Carrier

Complete the following procedure to install the modular carrier in the pedestal:

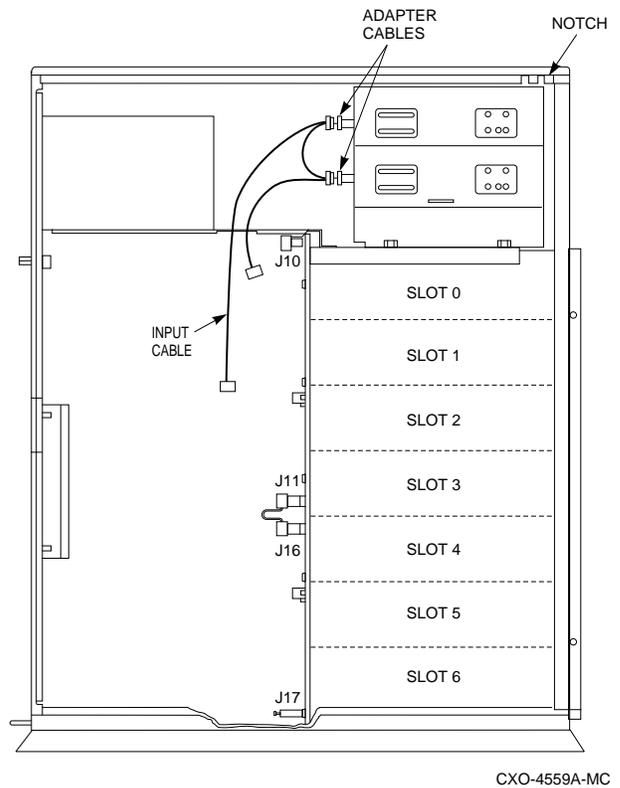
1. Remove the two mounting screws from the pedestal.
2. Disconnect the input cable from backplane connector J10. Remove the input cable connector from the pedestal rear panel.
3. For devices with a 50-pin SCSI connector install the 68-pin to 50-pin adapter cables.
4. Connect the 5.25-inch I/O cable to the devices.
5. As shown in Figure 7 there are two hooks on the right side of the modular carrier. These hooks fit into slots on the right side of the pedestal.

Figure 7 Modular Carrier Hooks



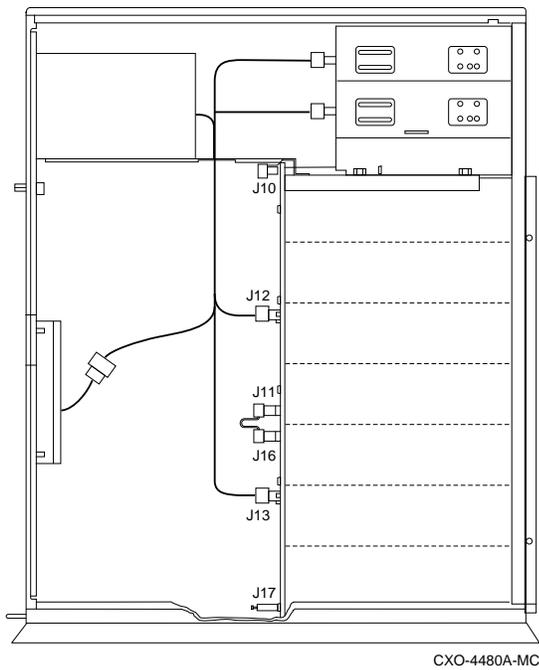
5. Align the top front of the modular carrier with the notch in the top edge of the pedestal (see Figure 8). Slide the carrier into the pedestal and push it against the right side.
6. Guide the 5.25-inch device I/O cable through the cable slot by the power supply. Connect the cable to backplane connector J10.

Figure 8 Modular Carrier Installation



7. Connect the dc power connectors to the devices (see Figure 9).

Figure 9 DC Power Connections



8. Slide the carrier forward so that the hooks engage the slots in the pedestal. The modular carrier mounting holes must align with the pedestal mounting holes.
9. Install the carrier mounting screws removed in Step 1.
10. Mount the 5.25-inch device I/O cable connector in the top position on the rear panel.

Setting the Configuration Address

There are both configuration addresses and device addresses. Jumpers W1-W3 determine the eight configuration addresses that can be used for both 8-bit (addresses 0-6) and 16-bit (addresses 0-6 and 8-14) devices.

Note

SCSI device address 7 is the SCSI controller address.

Use jumpers W1-W3 to set the address configurations. Figure 10 shows the location of connector J18 and the jumpers. Table 2 lists the slot addresses assigned for each of the eight address configurations. Figure 11 shows the basic 5.25-inch device configuration cabling.

CAUTION

All devices on a *single* SCSI bus must have different device address. Duplicate addresses will cause the SCSI bus to malfunction. Refer to “Setting the Device SCSI Address.”

Figure 10 Address Configuration Jumpers

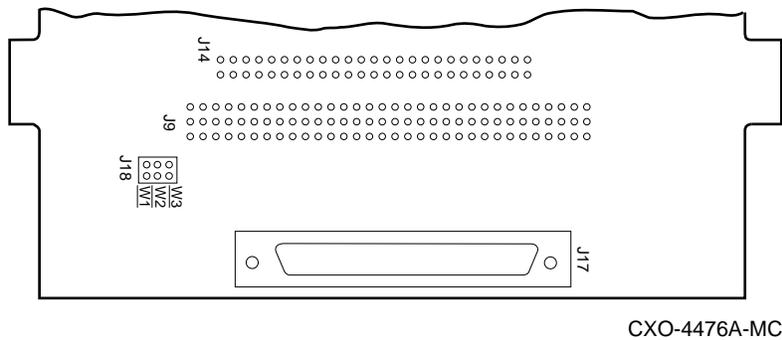
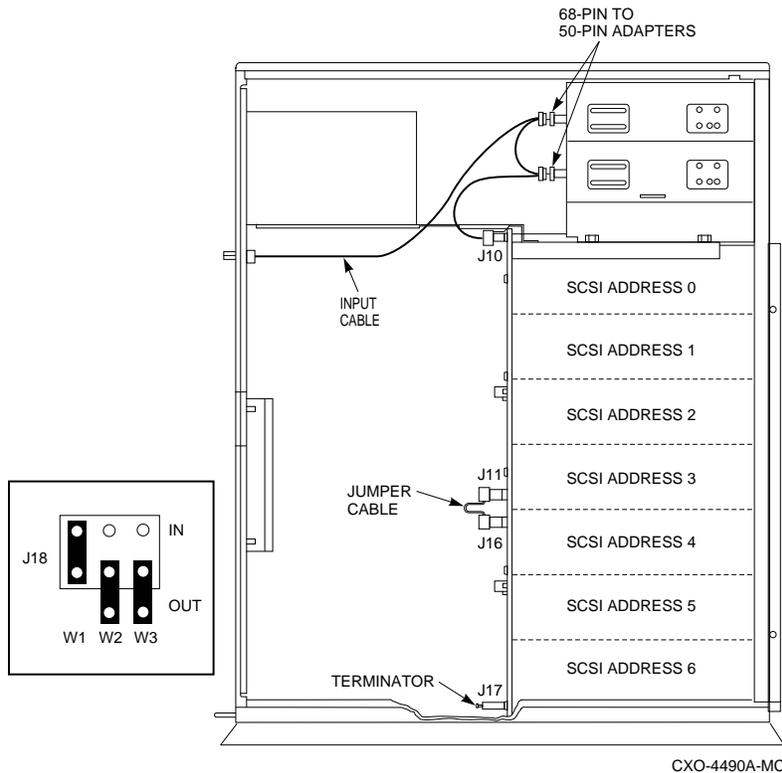
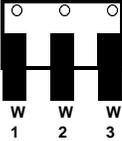
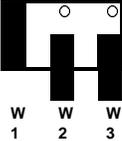
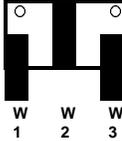
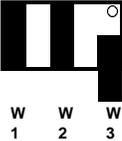
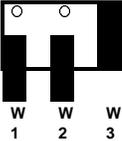
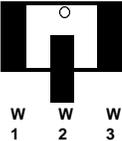
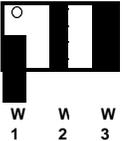
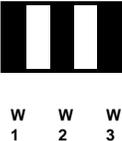


Figure 11 Basic 5.25-Inch Device Configuration



Standard Configuration Addresses and Slot Addresses

Table 2 Standard Configuration Addresses and Slot Addresses

Configuration 1 (Dual Bus only)		SCSI Addresses	Slot	0	1	2	3	4	5	6
			Address	0	1	2	3	0	1	2
Configuration 2 Standard Configuration		SCSI Addresses	Slot	0	1	2	3	4	5	6
			Address	0	1	2	3	4	5	6
Configuration 3		SCSI Addresses	Slot	0	1	2	3	4	5	6
			Address	8	9	10	11	0	1	2
Configuration 4		SCSI Addresses	Slot	0	1	2	3	4	5	6
			Address	8	9	10	11	4	5	6
Configuration 5		SCSI Addresses	Slot	0	1	2	3	4	5	6
			Address	0	1	2	3	8	9	10
Configuration 6		SCSI Addresses	Slot	0	1	2	3	4	5	6
			Address	0	1	2	3	12	13	14
Configuration 7		SCSI Addresses	Slot	0	1	2	3	4	5	6
			Address	8	9	10	11	8	9	10
Configuration 8		SCSI Addresses	Slot	0	1	2	3	4	5	6
			Address	8	9	10	11	12	13	14

LEGEND:
 16-bit devices only

Completing the Installation

Complete the following procedure to complete the installation:

1. Check that the bus configuration, to include configuration address is correct.
2. Replace the side cover.

CAUTION

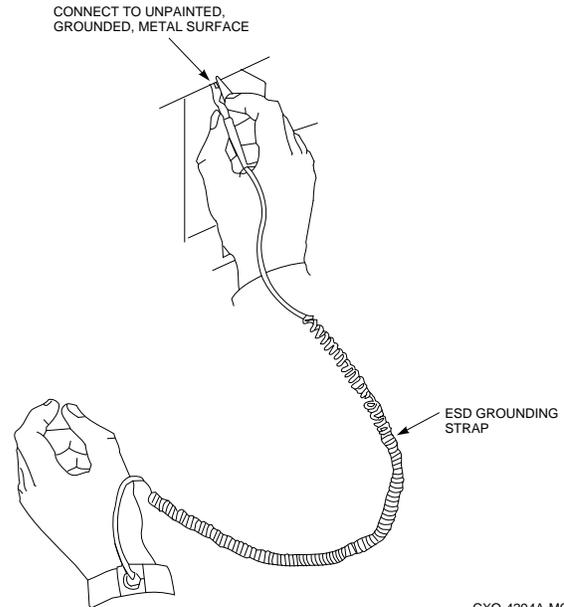
Install the side cover before turning the power on.

3. Connect the external SCSI cable and the ac power cord.
4. Turn on the pedestal and check that the pedestal is operating properly and that the devices respond when the SCSI bus is active.

Using an ESD Strap

When you do not have an ESD mat or other ESD protection, you must use an ESD wrist strap as shown in Figure 12 when mounting the storage device in the modular carrier.

Figure 12 Grounding the ESD Strap



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