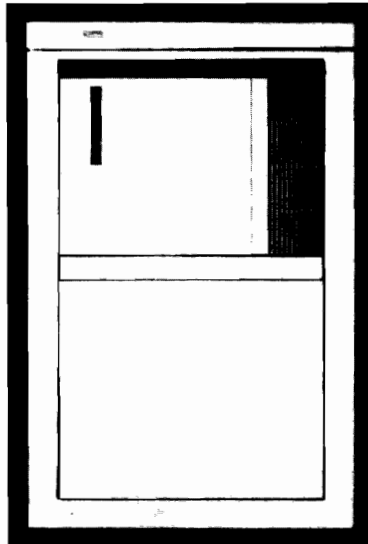


Optical Disk Library Systems Models 10 and 20

Setup Guide for Rackmount Version in a 1-meter Cabinet



**HEWLETT
PACKARD**

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Introduction

About This Guide

Caution



This Optical Disk Library System should be installed by qualified service personnel only. Contact your service representative to arrange for installation.

This setup guide is for Models 10 and 20 in a standard EIA 1-meter cabinet. If you have a deskside cabinet, use the *Deskside Setup Guide* included in the accessories kit.

This guide contains installation instructions for several options. After reading this chapter, use the table below to locate the instructions for your particular Library System option.

Option	Description	Start Installation at ...
Option 1AB or 100	Deskside Option Autochanger	Not located in this booklet; use <i>Deskside Setup Guide</i>
Option 1AC or 104	Rackmount Option Autochanger—with 1-meter cabinet	Chapter 2
Option 133 or 101	Rackmount Option Autochanger—without cabinet (usually installed as a second unit, with a slide kit)	Chapter 5

Before You Begin

Complete the *Unpacking Instructions* located in a plastic envelope attached to the outside of the shipping carton.

Caution



Save the following items for future use:

- This hardware installation guide
- The unpacking instructions (found on the outside of the box)
- The shipping bracket (removed in this procedure)

Moving the Optical Disk Library System when it is improperly packaged can damage the unit. If the Optical Disk Library System is moved, the above items are needed for repackaging the unit. (Refer to “Moving the Optical Disk Library System” in Chapter 5 of the *Optical Disk Library System User’s Guide for Models 10 and 20*.)

Site Preparation/Requirements

Before setting up the Optical Disk Library System, you should complete a site analysis and preparation. The following paragraphs discuss the requirements for proper operation of the Optical Disk Library System.

Environmental Requirements

The Optical Disk Library System is designed to operate with an ambient air temperature range of 10° to 40°C (50° to 104°F) with a rate of temperature change not to exceed 10°C (50°F) per hour. See the “Cooling Requirements” section in this chapter for the recommended operating range.

Primary Power/External Ground

The female power outlet to be used to supply AC power to the Optical Disk Library System must be checked to ensure that the proper voltage is available. Permitted voltage range(s), depending on configuration and assuming 48- 66Hz, are 90 to 125 V (120 V nominal) and 198 to 250 V (240 V nominal). Also, check the earth (safety) ground in the power outlet (uses NEMA IG 15-R).

Be aware that the Optical Disk Library System can draw as much as 25 amperes at poweron and the electrical load imposed by the Optical Disk Library System may reduce the available voltage below the non-load value. If the line voltage is not within the correct range, resolve the power problem.

Cooling Requirements

A minimum of 2-3 inches should be maintained behind the Optical Disk Library System to allow air circulation.

The area does not have to be air-conditioned but maintaining an operating room temperature between 18°C to 24°C (65°F to 75°F) is recommended.

Location Requirements

Position the drive away from sources of particulate contamination such as frequently-used doors and walkways, stacks of supplies that collect dust, and smoke-filled rooms.





Unpalleting the Cabinet

This chapter gives instructions for removing the cabinet from the pallet and installing the anti-tip rails.

Tools Required

- A 3/8-inch wrench
- A 1/2-inch open-end wrench
- A 5/16-inch wrench
- A 9/16-inch wrench
- A 5 mm Allen wrench
- A flat-head screwdriver
- A 1/8-inch wrench
- A T-15 Torx®
- A T-25 Torx®

Installing the Ramp and Removing the Unit from the Pallet

1. Using a 9/16-inch wrench, remove the eight hold-down bolts that clamp the leveler feet to the pallet.
2. Installing the Ramp onto the Pallet.
 - a. From the line of three bolts you will find on one end of the pallet, remove the outside bolts.
 - b. Place the ramp with the two-by-two wood pieces facing up, onto the pallet with the holes on the end of the ramp aligning with the holes just created by removing the two bolts.
 - c. Locate two bolts with washers in a plastic bag stapled to the top of the pallet, or use the two bolts you removed in Step a.
 - d. Insert the bolts through these holes. (It is not necessary to tighten these bolts.)

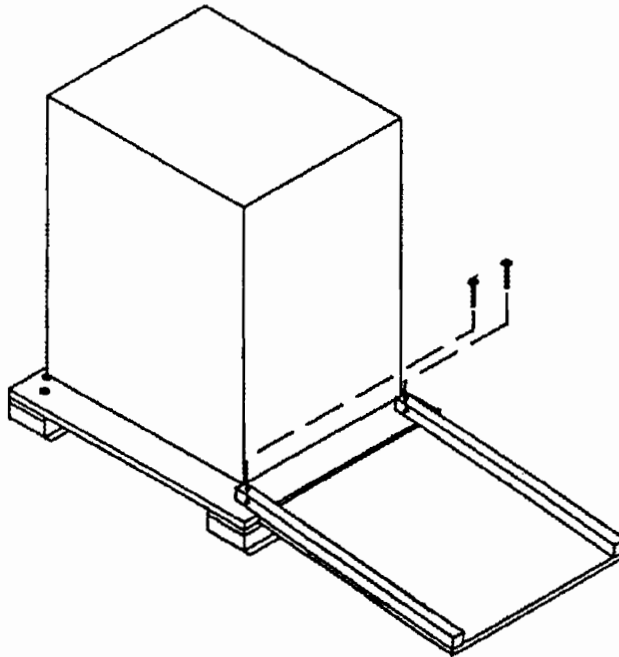


Figure 2-1. Installing the Ramp onto the Pallet

3. Raise the four leveler feet on the cabinet to their highest position using a 1/2-inch open-end wrench.

Caution

The cabinet could tip over if the leveler feet catch on the ramp. To prevent this, make sure the leveler feet are raised to their highest level.

4. Carefully roll the cabinet down the ramp.

Unlocking and Removing the Rear Door

1. Locate the keys to the rear door. They are in a small plastic bag taped to a cross-bar just inside the front of the cabinet. There is also a bolt, two washers, and a nut in the bag. Save them for later installation into the X-brace.
2. Unlock the rear door using one of the keys.
3. While holding the door securely in one hand, pull down on the hinge pin located near the inside top corner of the door, opposite the side where the lock is located. When the pin is released, lift up slightly on the door and remove it.

Removing the Top Cover

1. Remove the two 5/16-inch bolts from the rear of the top cover. Save these bolts to replace the cover after completing the setup.
2. Lift the rear of the cover approximately 2 inches.
3. While holding the cover up, push forward on the top to release it and then remove it.

Removing the Front Cabinet Panel

1. Remove the two 3/8-inch nuts from the inside top front of the cabinet panel.
2. Save the nuts for replacing the panel after completing the setup.
3. Lift up and then out to remove the cabinet panel.

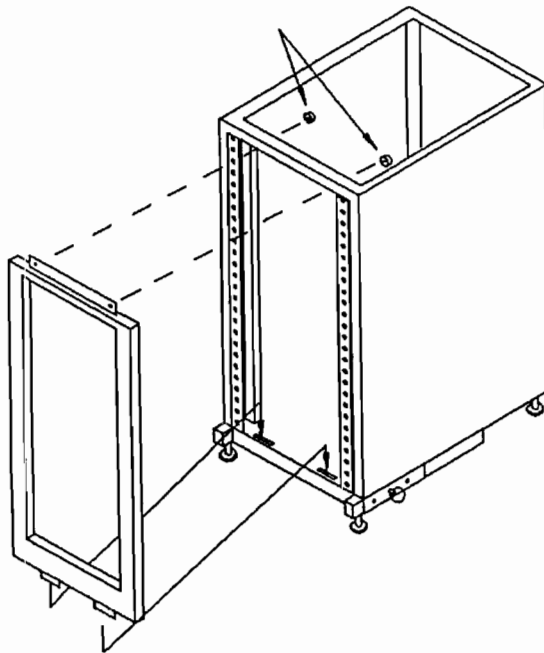


Figure 2-2. Front Cabinet Panel Removal

Installing the Anti-tip Rails and Feet

Caution



The cabinet will tip over during installation of the Autochanger if the anti-tip rails are not installed.

Follow these steps to install the anti-tip rails:

1. Locate the anti-tip rails and feet. They are in a cardboard box in the bottom of the cabinet.
2. You should find these parts in the box:
 - a. Two extension rails connected to two receiving rails by two locking pins
 - b. Four bolts
 - c. Two feet
3. Remove the receiving rails from the extension rails by removing the locking pins.
4. (See the photo on the opposite page for proper placement.) Attach one receiving rail to each side front of the cabinet, lining up the two outer holes in the receiving rails with the holes in the cabinet. Insert the bolts and tighten them with a 5 mm Allen wrench. The channel on the receiving rail should face down. See photo on opposite page for proper placement.
5. Insert one foot into each extension rail. Notice that the feet can be inserted in either side of the rail. When properly installed, the holes drilled in the sides of the extension rails will be closer to the floor than the ceiling. If the legs are not installed correctly, the holes in the extension rails and the holes in the receiving rails will not line up and the locking pin cannot be inserted.
6. Insert extension rails into receiving rails and push in fully. Lock in place by lining up the center holes and inserting the locking pins.

When you extend the anti-tip rails, extend them fully, lock in place with the locking pins, and extend the feet.

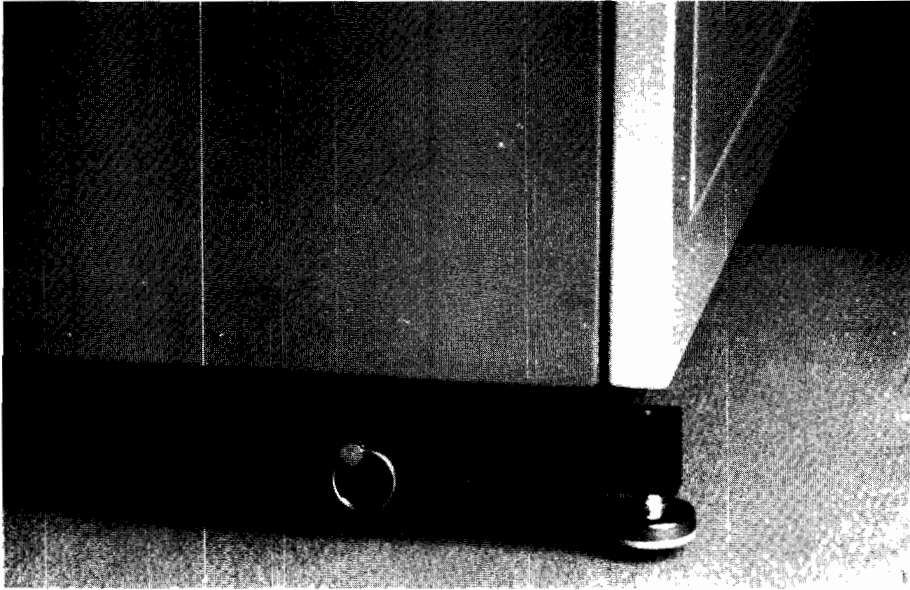


Figure 2-3. Anti-tip Rail in the Stowed Position

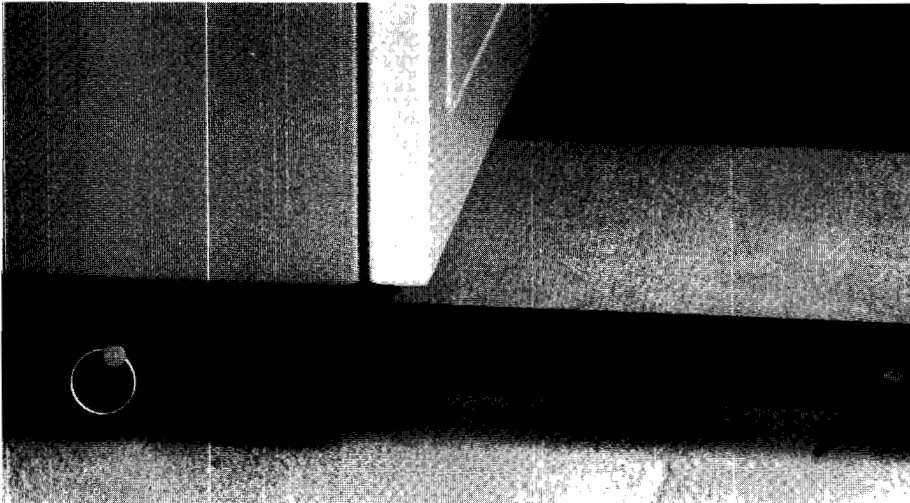


Figure 2-4. Anti-tip Rail in the Extended Position

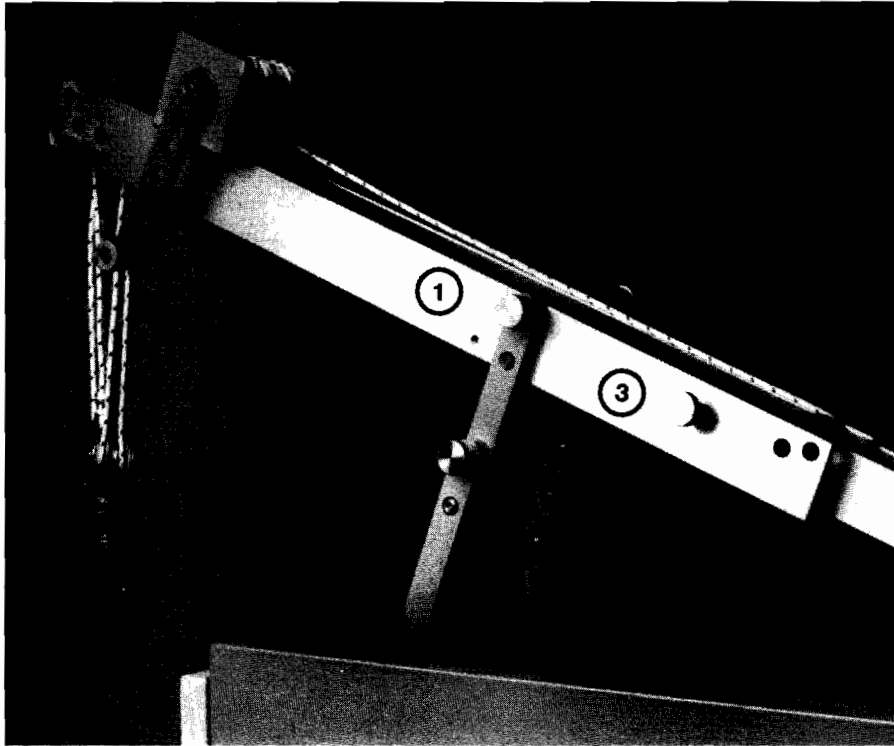


Figure 2-5. Front of Hoist Properly Installed on Cabinet

Installing the Hoist

Caution



The Autochanger weighs over 175 pounds. Therefore, a hoist is highly recommended for installing the Autochanger into the Optical Disk Library System cabinet. HP service representatives can borrow a hoist from the HP Service Office.

If you do not have access to a hoist, locate a co-worker to help you lift the Autochanger into the cabinet.

The photo on the opposite page shows the hoist properly installed on top of the front of the cabinet. Knobs "1" and "2" are used to extend the front legs. Knob "3" is used to release the extension lock so the hoist can be extended to fit on top of the cabinet.

Follow these instructions for installing the hoist:

1. Be sure you have removed the top cover of the cabinet as instructed on page 2-4.
2. Remove the hoist from the bag and set it on top of the cabinet, with the pulley extending over the front of the cabinet.
3. The photo on the opposite page shows how the front legs look when fully extended. Loosen knob "1" to rotate the top part of the leg 45 degrees to its new position. Loosen knob "2" to rotate the bottom part of the leg 90 degrees to its new position. These are captive screws, so loosen them as much as possible and rotate the legs so they will extend.
4. Loosen knob #3 to extend the crane's length so it will fit on top of the cabinet.

5. See the photo on the next page. Notice the position of the back plate and how the back of the hoist rests inside the back of the cabinet. Attach the back of the hoist (the end opposite the end with the pulley) to the back of the cabinet by attaching the bar and tightening the large screw with the knob.
6. Extend the hoist forward so the front legs rest against the front of the cabinet. Tighten the extension lock knob.
7. Attach the hoist strap assembly if it is not already attached to the end of the pulley. It is a square metal plate with four straps attached to it. It must be attached right side up.

Note

When properly installed, the captive screw **knobs** will be hanging on the outside of the straps. (If you install it wrong side up, the **screws** will be hanging on the outside of the straps.)

Remove the screw and the four washers at the bottom of the pulley. Align the hole in the strap plate with the hole in the bottom of the pulley and replace the washers and screw. Finger tighten securely.

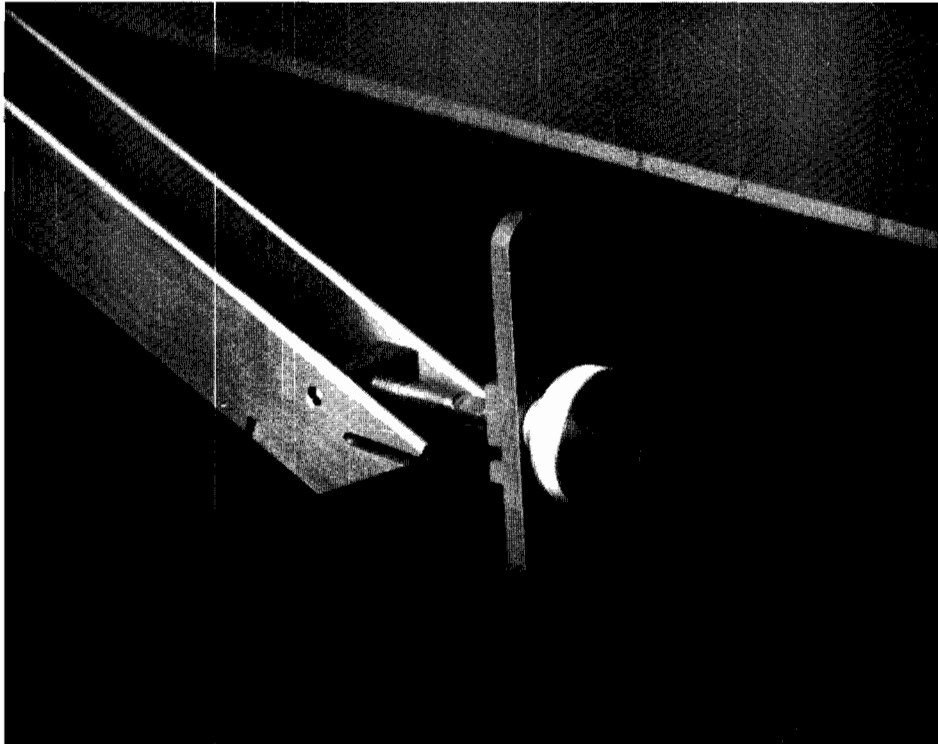


Figure 3-1. Rear of Hoist Properly Installed on Cabinet

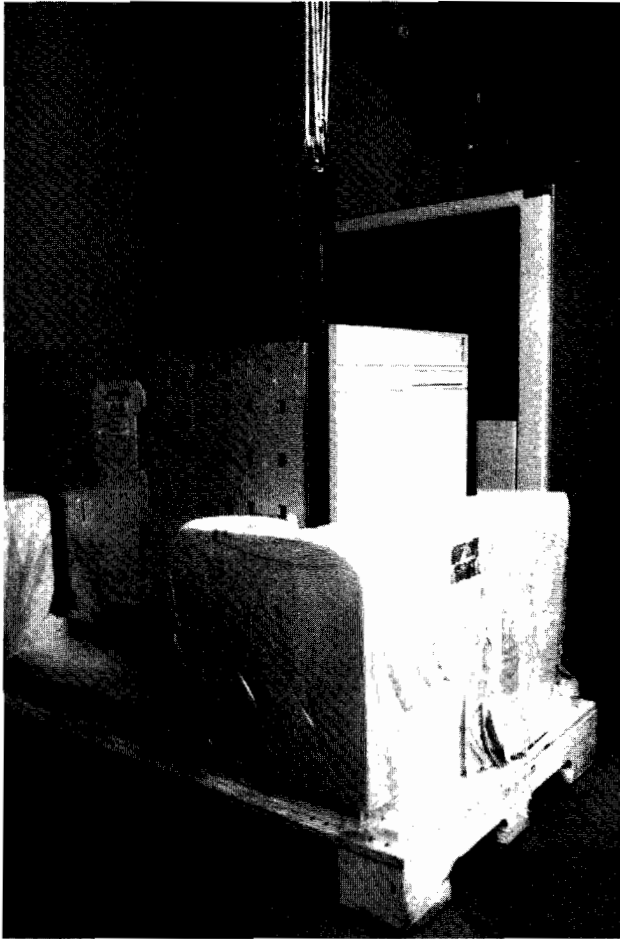


Figure 3-2. Autochanger Properly Positioned in Front of Cabinet

Installing the Autochanger into the Cabinet

Preparing the Cabinet for Insertion of the Autochanger

1. If you are installing a second Autochanger into an existing Optical Disk Library System, pull the cabinet out from the wall and allow ample room for this setup.
2. Lower the rear leveler feet under the cabinet to a stable position.
3. Extend the cabinet's anti-tip rails by pulling the locking pins out of each rail. Extend the rails fully.
4. Replace the anti-tip rail locking pins.
5. Reach beneath the extended rails and lower the anti-tip feet to the floor.

Warning



The Disk Library System is heavy. Take all precautions to keep the cabinet from tipping over. Be sure to extend the anti-tip rails and lower the leveler feet as instructed. Do not retract the anti-tip rails until after the unit has been locked into the cabinet.

Positioning the Autochanger

Using a pallet jack, move the Autochanger to the front of the Disk Library System cabinet with the orange shipping bracket facing away from the cabinet. See the photo on the opposite page for proper placement of the Autochanger in front of the cabinet. (In the photo, the shipping bracket and the plastic protective sheet have already been removed.)

Removing the Shipping Bracket

1. Remove the shipping bracket (the orange angle bracket on the left side of the unit).
2. Remove the bracket screw using a #T-15 Torx.
3. Using one hand at each end of the bracket, pull the bracket straight out (see the photo below).

Caution



Keep the the shipping bracket and the screw . You will need to replace the shipping bracket if the unit is moved a long distance or if it needs to be shipped. Moving the Autochanger without replacing the shipping bracket can damage the unit.

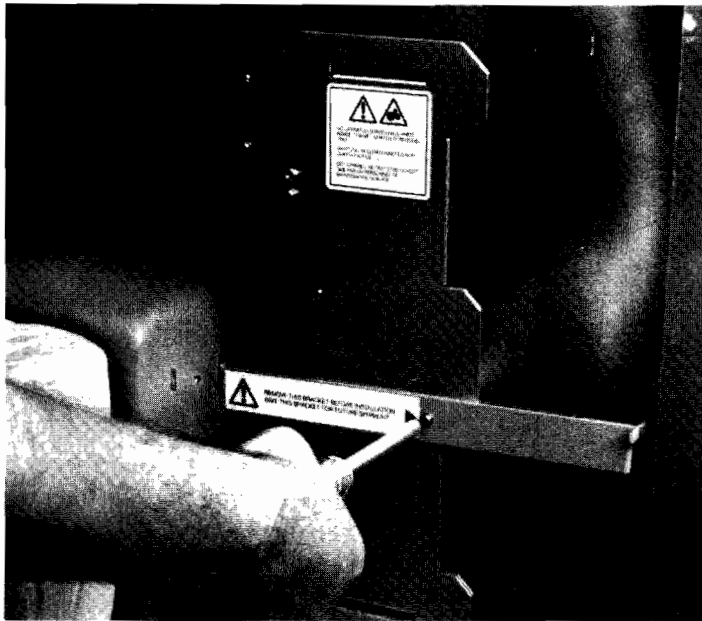


Figure 4-1. Removing the Shipping Bracket

Attaching the Hoist to the Autochanger

1. There are four straps on the hoist. All are slightly different lengths. Identify the shortest blue strap and attach it to Point A near the control panel (see photo below). Using your fingers, screw the captive bolt securely into the hole near the corner of the Autochanger.
2. Identify the red strap. Attach this strap to point B near the rear of the unit (see photo below). Using your fingers, screw the captive bolt securely into the hole near the corner of the Autochanger. Do not attach the other two straps yet.

Caution



The Autochanger will bang into the cabinet and cause damage if you do not steady the Autochanger while you are lifting it.

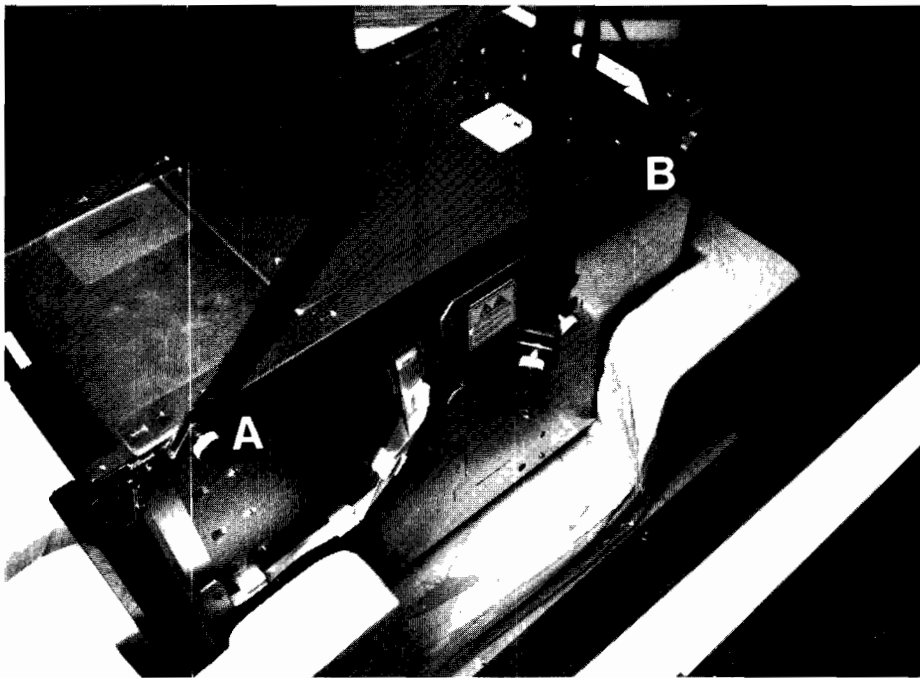


Figure 4-2. Autochanger with Two Straps Attached

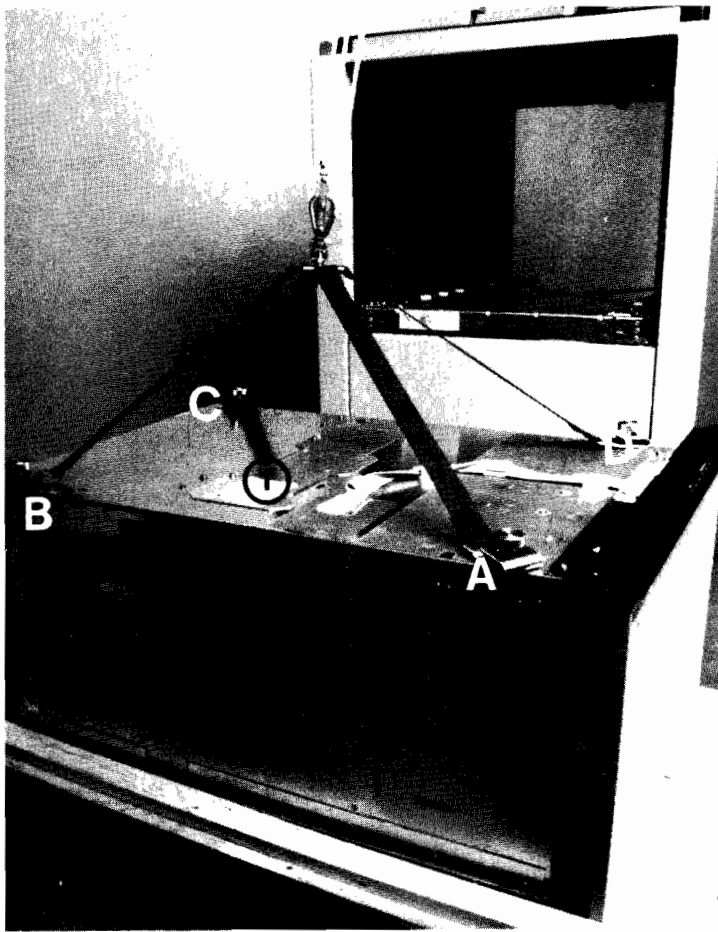


Figure 4-3. Autochanger Resting on Pallet with all Four Straps Attached

4-4 Installing the Autochanger into the Cabinet

3. Lift the Autochanger off the pallet by cranking the crane until the bottom edge of the unit is approximately eight inches off the pallet. Carefully remove the bottom packing cushions and plastic, while steadying the Autochanger.
4. Leave the pallet in place, but move it 8 inches from the front of the cabinet.
5. Look at the photo on the opposite page. Notice the final orientation of the Autochanger on the pallet. The side on which you attached the first two straps will now be on top.
6. Lower the Autochanger onto the pallet, helping to tip the Autochanger away from the cabinet and continue lowering the Autochanger until it rests on the pallet as shown in the photo on the opposite page.
7. Lower the pulley until the two remaining blue straps from the hoist can be attached to Points C and D. (see the photo for these locations). Screw on the captive bolts securely.

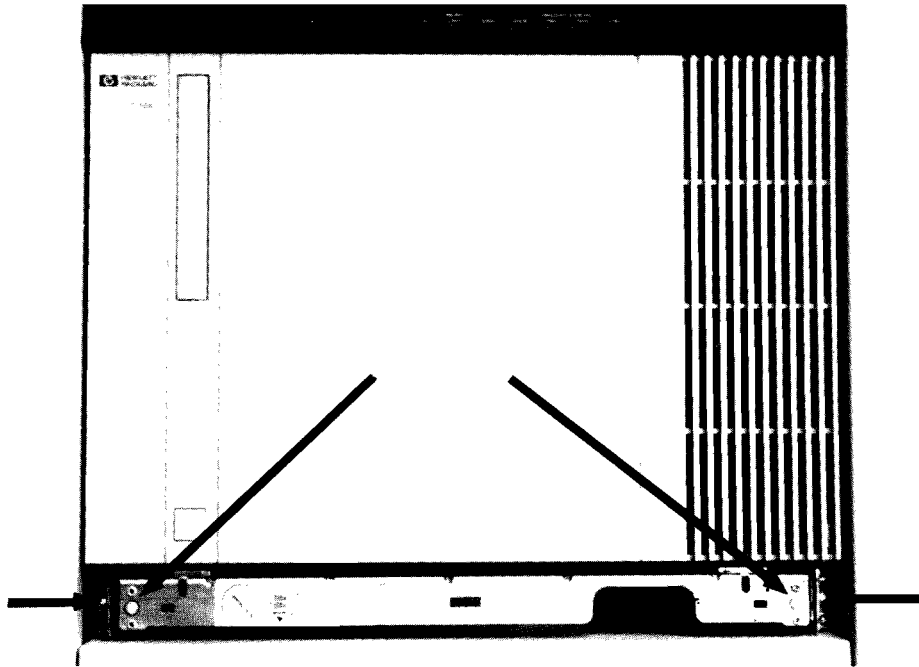


Figure 4-4. Location of Screws (longer arrows) and Latch Plates (shorter arrows)

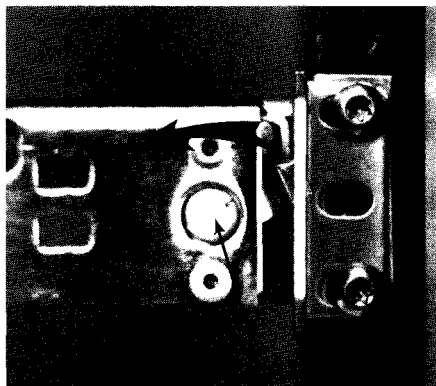


Figure 4-5. Close-up of Latch Plate Screw

4-6 Installing the Autochanger into the Cabinet

Installing the Autochanger onto the Rack

1. Locate the two screws that are on each side of the front of the rack slides (see the photo on the opposite page). In this photo, the Autochanger has already been installed on the rack slides.
2. Using a flat-head screwdriver, turn each screw one-quarter turn, unlocking the slide. Test to make sure it is unlocked and the rack slide can be pulled out of the cabinet.

Caution



The Autochanger will bang into your cabinet and cause damage if you do not steady the Autochanger while you are lifting it.

Caution



Make sure the anti-tip rails are fully extended and locked into position, and that you have lowered the anti-tip feet to the floor.

-
3. Hoist the Autochanger so that it is positioned 2 to 3 inches above the slides.
 4. Remove the pallet.
 5. Pull the slides out from underneath the Autochanger.
 6. Carefully lower the Autochanger onto the rack slides. The Autochanger can be set on the rack slides either perpendicular or horizontal to the slides. After the installation of the swivel screw, the Autochanger can be swiveled to slide into the cabinet.

Installing the Swivel Screw

1. Locate the small plastic bag that contains the swivel screw, a white plastic washer, a metal washer, and a captive nut. (These items are packaged in the accessories kit.)
2. Locate the Autochanger access plate. Refer to Circle #1 in Figure 4-3. It is the metal plate in the center of the top of the Autochanger.
3. Remove the Autochanger access plate using a T-15 to remove the two screws. Save the plate and the screws.
4. Look into the Autochanger and line up the hole you see in the bottom of the Autochanger with the center hole on the X-brace underneath the Autochanger. There are two holes in the X-brace. You must use the **center** hole.
5. Insert the swivel screw through the hole by reaching into the Autochanger.
6. Place the white plastic washer, the metal washer, and the nut on the bottom of the swivel screw by reaching underneath the Autochanger.
7. Holding the screw with a 1/8-inch Allen wrench, tighten the nut with a 3/8-inch wrench until approximately 1/8-inch of the screw sticks through the nut.
8. Replace the Autochanger access plate.
9. Remove the hoist straps.
10. Remove the hoist from the top of the cabinet.
11. Swivel the Autochanger, if necessary, to line up on the rack slides.
12. Press in both green locking buttons located in the channels of the slide rails and push the unit all the way into the cabinet.

Adjusting the Trim Panel

The trim panel must be adjusted and then removed again to adjust the latch plates. Follow these steps to adjust the trim panel:

1. Pull the Autochanger out of the cabinet about 12 inches.
2. Snap the trim panel onto the handle assembly.
3. Line up the trim panel with the front face of the Autochanger by adjusting the position of the handle assembly. Use a 3/8-inch wrench to tighten the four nuts holding the handle assembly.
4. Remove the trim panel from the handle by inserting a flat-blade screwdriver into the gap between the unit's front panel and the trim panel (near the center of the unit), and prying gently upwards.

Adjusting the Latch Plates

The latch plates must be adjusted so that the Autochanger can be locked into the cabinet. There is a latch plate adjacent to each end of the handle on the front of the rack slide bracket. See the photo on Page 4-6 for location of the latch plates.

Follow these instructions to adjust the latch plates.

1. Slide the library system into the cabinet as far as it will go.
2. Loosen the two T-25 screws holding the latch plates and front slide brackets to the cabinet.
3. Turn the latch in the handle assembly into the slot of the latch plate using a flat-blade screwdriver.

Note



The right latch turns clockwise to tighten and the left latch turns counterclockwise to tighten. Reverse the direction for both to loosen adjustment. Tighten only until snug.

4. Adjust the latch plate (from left to right or right to left) to fully capture the latch.
5. Retighten the Torx screws in the latch plate.
6. Replace the trim panel by snapping it onto the handle assembly.

Reassembling the Cabinet

- Replace the front cabinet panel, securing it with the two 3/8-inch nuts.
- Replace the cabinet top, securing it with the two 5/16-inch screws.
- Replace the rear door.
- Raise the leveler feet on the cabinet to their highest position.
- Raise the anti-tip feet and push the anti-tip rails back under the cabinet.
- Go to Chapter 6, “Checking System Hardware Configuration.”

Installing a Second Autochanger in the Cabinet

This chapter gives instructions for installing a second Autochanger in a 1-meter cabinet. It assumes you already have an Optical Disk Library System with one Autochanger installed in the top position. Follow these instructions for installing a second Autochanger in the lower part of the cabinet.

Before you Begin

1. Tools required

- 5/16-inch wrench
- 3/8-inch open wrench
- T-15 Torx
- T-25 Torx
- 1/8-inch Allen wrench
- Flat-head screwdriver



2. Make sure you have moved the Optical Disk Library System away from the wall and that you have ample work room for this installation process.
3. Locate the box of rack slides and the box of accessories packaged with the Autochanger. Identify the parts in the rack slide kit by comparing them to the photo on the next page.

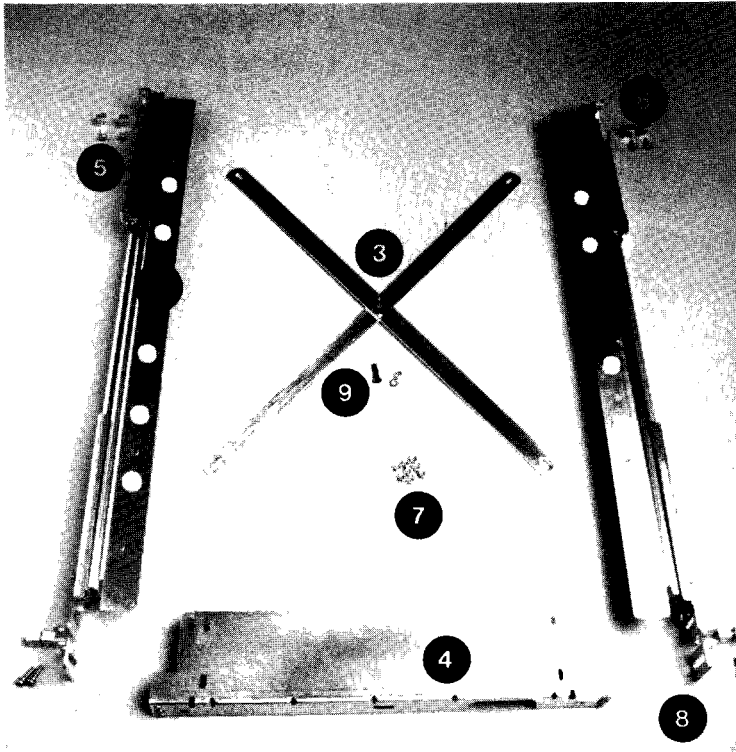


Figure 5-1. Contents of Rack Slide Kit

- 1- Left slide rail
- 2- Right slide rail
- 3- X-brace
- 4- Handle
- 5- Screws (8)
- 6- Metal clip nuts (8)
- 7- Nuts (8)
- 8- Latch plates (2)
- 9- Swivel screw, washers (2) & nut

5-2 Installing a Second Autochanger in the Cabinet

4. There is also a front trim panel included, wrapped in a protective cover.

Caution

Do not press the Disk Library System's operation switch (located on the front panel) or the power switch (located on the rear panel) until you are sure that the SCSI bus is inactive. Pressing either button when the bus is active can cause data loss and/or indeterminate bus states. Check the host system reference manuals for information on checking the status of the SCSI bus.

5. Remove the SCSI cable.
6. Make sure all power to the Optical Disk Library System has been disconnected.

Caution

Extend the anti-tip rails as far as they will go and lower the anti-tip feet to the floor.

7. Remove the rear door by pulling down on the hinge pin which is located near the top inside corner of the door, opposite the side where the lock is located.
8. Remove the top cover by removing the two 5/16-inch nuts from the back of the cabinet. Lift up on the rear of the cover and push it forward to remove it.
9. Remove the front cabinet panel by first removing two 3/8-inch nuts in the top front. Remove panel by lifting up slightly and pulling out to release bottom bracket. See Figure 2-2 on page 2-5.
10. Remove the trim panel in the center of the front of the cabinet by gently prying it loose with a flat-head screwdriver.

11. Using a flat-head screwdriver, unlock the rack slide by turning the screws located on either side of the front of the rack slide one-quarter turn. See the photo below for location of these two screws.

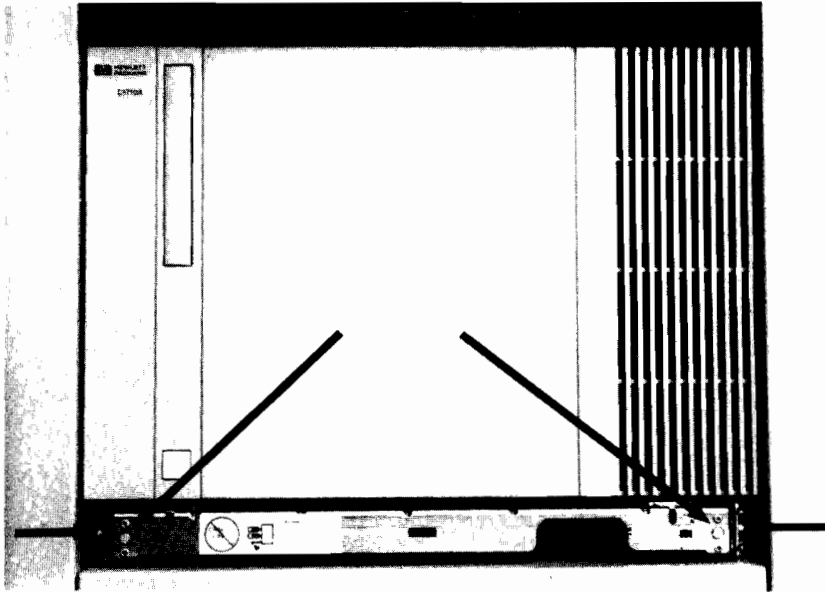


Figure 5-2. Location of Locking Screws on Front of Rack Slides

Caution



Do not crawl inside the cabinet during the installation process unless the top Autochanger is fully extended, the anti-tip rails are extended and locked, and the feet are extended to the floor.

Removing the Lower Front Filler Panel

1. Pull the Autochanger all the way out until it locks in place.

Caution



The panel that you are about to remove is very heavy. When you remove the final nut, the panel may fall forward, out of the cabinet. Try to steady it as you remove the final nut.

2. Remove the four 3/8-inch nuts that hold the lower front filler panel in place. The nuts are located in the four corners of the panel, on the inside of the cabinet.
3. Hold the panel and gently lower it to the floor.

Installing the Rack Slides

TIP



The lower rack slides are installed just like the upper ones. If you are in doubt of proper installation, look at the upper assembly.

The rack slides can be adjusted to fit an HP cabinet or any standard cabinet with a depth of 27 to 29.5 inches. The following instructions describe installation of rack slides into an HP cabinet. Any differences when installing these rack slides into a non-HP cabinet are noted on the last page of this chapter.

Follow these instructions for installing the rack slides:

1. Make sure the anti-tip rails are fully extended and the feet are on the floor.
2. Make sure the Autochanger is fully extended.
3. Unpack the slides. The slides are adjusted to fit Non-HP cabinets when they are shipped.

Adjusting the Slides for an HP-installation

Shorten the slides to fit an HP 1-meter cabinet by following these steps:

1. Remove the two 3/8-inch nuts and washers from the screws from the front bracket of each slide.
2. Move the brackets from the original position to the rear position.
3. Replace the nuts and washers. Tighten with a 3/8-inch wrench.
4. See the photo below for the proper alignment. The slide labeled "1" is adjusted for HP cabinets. The slide labeled "2" is adjusted for installation in non-HP cabinets.

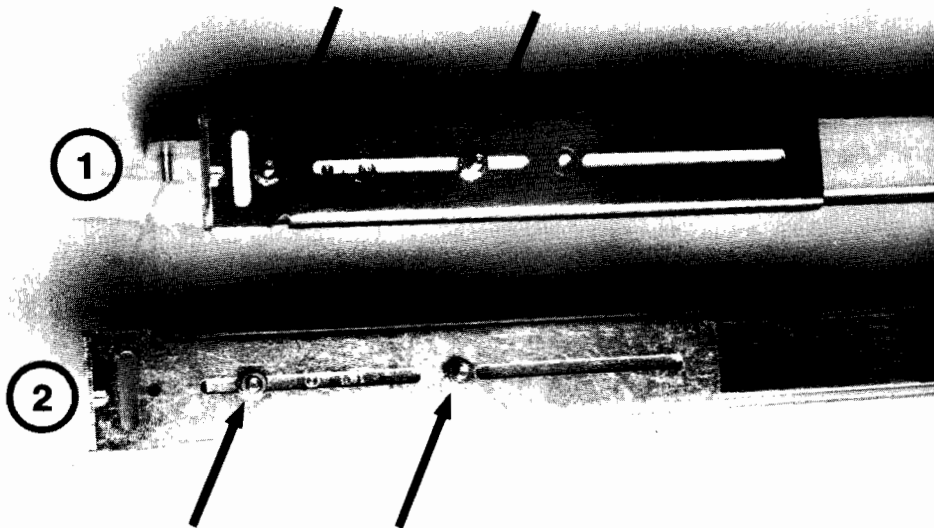


Figure 5-3. Fronts of Rack Slides

Adjusting the Rear of the Slides

Locate the two 3/8-inch nuts that are on the guides at the rear of the rack slides. See the photo below. Circle "1" shows the rear guide. Circle "2" shows the two nuts that need to be loosened. Loosen these two nuts on each guide. This permits you to further adjust the length of the slides when installing them in the cabinet.

Installing the Sheet Metal Clip Nuts

1. Locate the eight sheetmetal clip nuts. Insert them in the cabinet at the third and fifth holes up from the bottom on each of the two front and two rear rails. The nut should be on the backside of each rail.
2. Attach the front of a rack slide bracket to the front clip nuts. Locate a latch plate and attach it to the front of the slide bracket using two T-25 screws. The latch plate attaches to the outside of the slide bracket, with the widest part facing to the outside of the rack. Look at the upper slide bracket to see how the latch plate is properly attached. Tighten the screws securely.

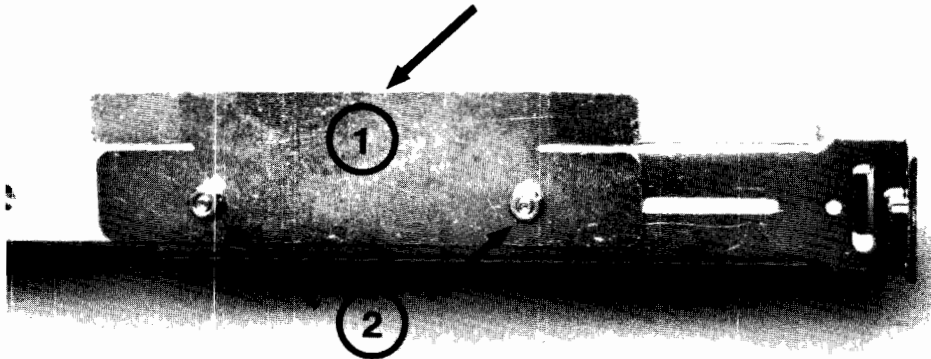


Figure 5-4. Rear of Rack Slide

Attaching the Rear of the Rack Slides

1. Attach the rear of the rack slides to the rack rear mounting rails with the two T-25 screws. Tighten securely. (Be sure to push the slides up against the mounting rails to get the slide as snug as possible.
2. Tighten the adjustment nuts on the rear guides with a 3/8-inch open wrench.
3. Push in the top autochanger by pushing in on the green buttons (located in the channels of the slide rails) while pushing the Autochanger into the cabinet.



Figure 5-5. X-Brace Installed in Rack Slide

Installing the X-Brace

Refer to the photo on the opposite page which shows the X-brace properly installed.

Follow these steps to install the X-brace:

1. Fully extend the lower slides until they lock in place.
2. Locate the X-brace. Hold the brace in one hand, with the rivet head closest to your hand. Rotate the top of the brace clockwise until the center holes line up. (This is where the swivel screw will be mounted after the Autochanger is installed.)
3. The X-brace should be positioned so that the rivet head is closest to the front of the cabinet, with the two holes closest to the rear of the cabinet.
4. Install the X-brace under the rack slides, on the screw studs that are located in the four corners of the rack slide assembly.
5. Attach the X-brace with the 3/8-inch nuts provided. Finger tighten.

Note



Notice the position of the center hole in the X-brace. The Autochanger swivel screw will be inserted through this center hole after the Autochanger has been lifted onto the rack slides.

6. Attach the handle under the front of the rack slides, on the screw studs, using four 3/8-inch nuts. Finger tighten only.
7. Slide the entire assembly into the rack, first pushing in on the green release buttons located on the channels of the slide rails.
8. With a 3/8-inch wrench, tighten the four nuts connecting the X-brace to the rack slides. (The handle nuts will be tightened later.)

Installing the Autochanger

Follow the instructions in Chapters 3 and 4 to install the Autochanger into the cabinet. Then go to Chapter 6.

Installation Instructions for Non-HP Cabinets

Follow the instructions in this chapter, with the following exceptions:

- Do not attempt to shorten the slides. They are shipped adjusted to the proper length.
- In Step 6 on page 5-7 omit the reference to latch plates.
- Install the slides so that there is a 24.3-inch clearance from the top of the cabinet (or from the bottom of the unit above) to the top mounting bracket hole.
- On some non-HP cabinets, the rear mounting rails may interfere with the guides provided at the rear of the slides. If this is the case, remove the guides and the flat washers from each slide and re-install the T-25 bracket screws.

Connecting the Optical Disk Library System

This chapter gives instructions for the following:

- Recording product information
- Changing the disk drives' addresses
- Connecting SCSI cables
- Connecting power
- Setting the Autochanger controller address

Recording Product Information

Prior to connecting the Disk Library System to the host computer, follow these steps:

1. Open the back door of the cabinet.
2. Locate the product information located on the Disk Library System's rear panel.
3. Record this information by checking the appropriate boxes on the table in Appendix F of the *Optical Disk Library System User's Guide for Models 10 and 20*.

Rear Panel Connections

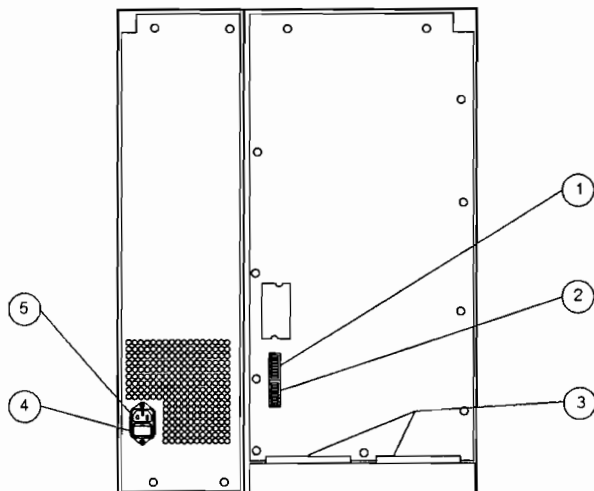


Figure 6-1. Optical Disk Library Rear Panel

1. Drive 1 Address Select Switch Used to set the SCSI ID for Disk Drive 1. Default address is 4.
2. Drive 2 Address Select Switch Used to set the SCSI ID for Disk Drive 2. Default address is 5.
3. SCSI Connectors Two SCSI bus connectors that allow SCSI devices to be daisy-chained. If the Disk Library System is the last device on the bus, a terminator must be connected to the unused connector.
4. Power Switch Energizes the primary circuits of the power supply.
5. Power Connector Connection for the power cord.

Changing the Disk Drives' Addresses

Each Disk Library System uses either 2 or 3 SCSI addresses—one for each optical drive and one for the Autochanger controller. The addresses for the optical drives are set using the switches on the Disk Library System rear panel. The Autochanger controller address is set using the control panel. This section gives instructions for setting the optical drive addresses. For instructions for setting the autochanger controller address, refer to “Setting the Autochanger Controller Address” in this chapter.

Note



If you are configuring more than one Disk Library System to the same host, you must change the SCSI addresses on one of the Disk Library Systems to avoid an address conflict.

The default address settings are:

Model 20

Optical Disk Drive #1 Address 4
Optical Disk Drive #2 Address 5

Model 10

Optical Disk Drive #1 Address 4

Caution



Do not press the Disk Library System's operation switch (located on the front panel) or the power switch (located on the rear panel) until you are sure that the SCSI bus is inactive. Pressing either button when the bus is active can cause data loss and/or indeterminate bus states.

Check the host system reference manuals for information on determining the status of the SCSI bus.

Caution

Make sure the Disk Library System is switched off and the power cord is unplugged before changing the disk drive addresses.

To change the Optical Drive addresses, follow these steps.

1. Locate the address switches on the rear panel of the Disk Library System.
2. Verify that switches 2, 4, and 5 are in the “OFF” position and switch 3 is in the “ON” position.

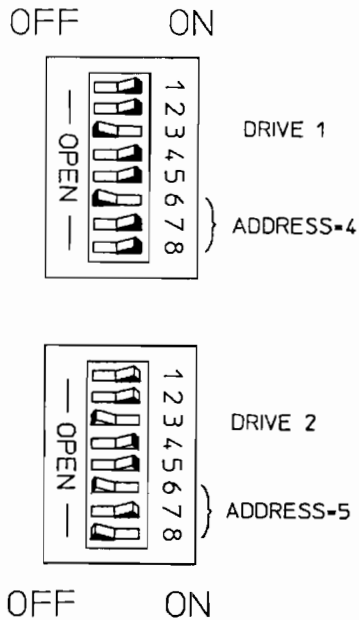


Figure 6-2. Default Switch Settings

Table 6-1. Switch Explanations

Switch	Selection	Description
1 - Write-with-Verify	On	When enabled, each time you write to an optical disk, the data that was just written is verified on the next disk rotation. (See the note that follows this table.)
	Off	(Default) Write-with-Verify is disabled.
2 - Eject Mode	On	Eject only by the controller.
	Off	(Default) Eject Button enabled. Must be off.
3 - Disable Eject Through SCSI Command	On	(Default) When SCSI Eject Command is received, the drive spins down but the disk is not ejected. Must be on.
	Off	When SCSI Eject Command is received, the drive spins down and the disk is ejected.
4 - Diagnostic Switch	On	For use by factory personnel only. Must be off.
	Off	(Default) No diagnostics - normal operating mode. Must be off.
5 - SCSI Parity Check Mode Selection	On	Parity Check disable.
	Off	(Default) Parity Check enable.
6, 7, and 8 - SCSI Address		These switches combine to set the SCSI address. Refer to Table 6-2 on the next page.

Note

It is highly recommended that your library system operate with verify after write to assure data integrity. If your host system does not initiate a write-with-verify, you may wish to initiate the function using switch 1. Because of the verification process, you can expect to see a 0-40% overall system performance degradation, depending on the host system and the application.

3. Set the appropriate address switches on both disk drives.

Switches 6 through 8 are used to set the address. The address can be set from 0 to 7. However, you should **avoid address 7** as it is used by the host HP-UX system or other hosts for the SCSI controller address.

Table 6-2. SCSI Address Settings

SCSI ID	SWITCH 6	SWITCH 7	SWITCH 8
0	OFF	OFF	OFF
1	OFF	OFF	ON
2	OFF	ON	OFF
3	OFF	ON	ON
4 (default)	ON	OFF	OFF
5 (default)	ON	OFF	ON
6	ON	ON	OFF
7	ON	ON	ON

4. Record the address settings you chose for future reference.

The SCSI Interface

Caution



The problem described below is unique to HP 9000 Series 300 computers. If you are connecting the Disk Library System to any other host computer, this notice is not applicable.

Combining a SCSI interface or a high-speed disk interface with an HP 98625A high-speed interface can result in data loss or data corruption to an HP 9000 Series 300 system disk.

To make this combination work, replace the HP 98625A interface card with an HP 98625B interface card.

The following interfaces are high-speed disk interfaces:

- HP 98625A Interface Card
- HP 98625B Interface Card
- HP 98626A Daughterboard for Models 330, 350, 360, and 370
- High Speed Disk Interface bundled with the Model 345 or Model 375

The following interfaces are SCSI interfaces:

- HP 98658A Interface Card
 - HP 98265A Daughterboard for Models 330, 350, 360, and 370
 - Built-in interface for Models 345 and 375
-

Connecting the SCSI Cables

1. Make sure your computer and Disk Library System are switched off.
2. Locate a SCSI cable.

The allowable external SCSI cable length differs as follows:

- Single-Ended SCSI Interface—Up to 4.9 meters total cable length is allowed (includes 1.1 meter internal cable length).
 - Differential SCSI Interface—Up to 23.9 meters total cable length is allowed (includes 1.1 meter internal cable length).
3. Locate an appropriate SCSI terminator—differential or single-ended.
 4. Do you have another SCSI device connected to your host computer?

NO

- a. Connect the SCSI cable to a SCSI socket on the rear of the Disk Library System. Press in fully. (See Figure 3-1)
- b. Plug the terminator into the other SCSI socket.
- c. Connect the other end of the SCSI cable to the SCSI interface on the computer. Press in fully.
- d. Go to the next step “Connecting the Power Cord.”



You can position the Disk Library System anywhere along the SCSI bus. The last device on the bus needs to be terminated properly and the total SCSI cable length limitations must not be exceeded.

YES

- a. Determine which SCSI device is last on the chain of SCSI connections.
- b. Remove the terminator from the SCSI socket on the last device and connect the Disk Library System SCSI cable to that socket. Press in fully.
- c. Connect the other end of the SCSI cable to one of the SCSI sockets on the back of the Disk Library System. Press in fully.
- d. Plug the terminator into the other SCSI socket on the back of the Disk Library System.

Connecting the Power Cord

1. Check to make sure the power switch is off.
2. Locate the power cord.
3. Plug the power cord into the AC line connector located on the rear panel.
(See Figure 6-1)
4. Plug the power cord into the power outlet.
5. Switch the power switch on.

Reassembling the Cabinet

1. Replace the front panel and the two nuts that secure it.
2. Replace the rear door.
3. Replace the cabinet top and the two screws that secure it.
4. Position the power cord and the SCSI cable below the rear door.
5. Close the rear door.

Switching on the Disk Library System

1. Locate the operation switch on the front panel.
2. Switch on the unit. Initially, the control panel displays **TESTING**. Once the power on test completes, the control panel displays **READY**.

Note



A sequence of tests run when the Disk Library System is first switched on. The **READY** status on the control panel indicates that the unit is in sound condition. If a **TEST FAIL** status appears on the control panel display, consult your *Optical Disk Library System Service Manual*, part number C1700-90080, for troubleshooting information.

Setting the Autochanger Controller Address

The Autochanger controller default SCSI address is 3. If you want to change the address to something else, follow these steps.

1. Switch on the Optical Disk Library System.
2. With READY displayed, press **OPTION**. TEST * displays.
3. Press **NEXT**. CONF * displays.
4. Press **NEXT**. INFO * displays.
5. Press **NEXT**. SCSI ID displays.
6. Press **ENTER**. SCSI ID 3 displays.
7. Press **NEXT** or **PREV** until the address you want displays.
8. Press **ENTER**. The address you chose is now set.

Note



If you changed the controller address, power cycle the Optical Disk Library System so the new address setting(s) will be recognized by the host system.

Positioning the Unit

- If everything appears to be working correctly, position the Optical Disk Library System in its permanent location and lower the leveler feet using a 1/2-inch wrench.
- In the accessories box, locate the appropriate Hewlett-Packard host configuration instructions to continue with the installation. If you are connecting to a non-HP host, consult the host system manual for peripheral installation instructions.