

# StorageWorks by Compaq

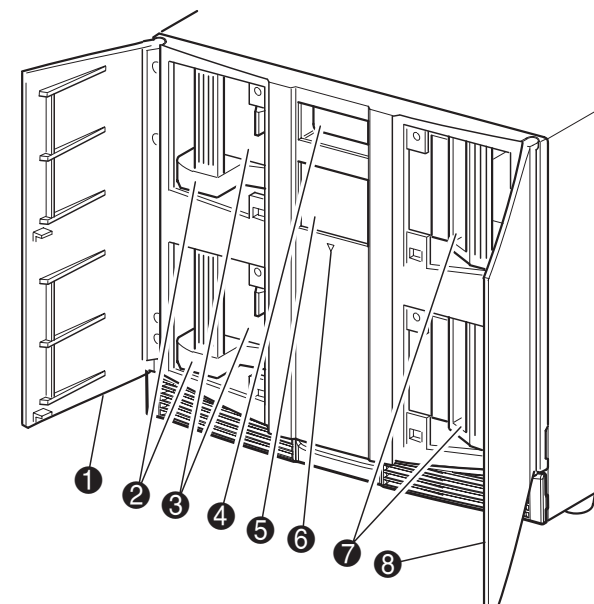
## MSL5052 Library

### Overview & Installation

#### Product Documentation

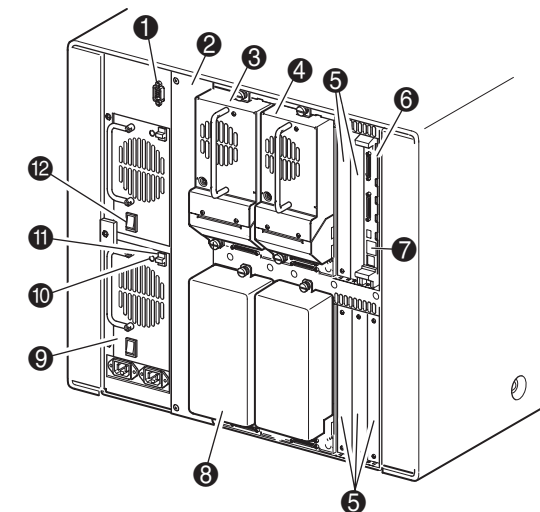
<i>Compaq StorageWorks™ MSL5000 Series Library User Guide</i>	This document provides information about the MSL5000 Series Libraries, including system installation and configuration, operation, maintenance and troubleshooting instructions, and specifications.
<i>Compaq StorageWorks MSL5000 Series Library Rack Mount Template</i>	This template serves as a tool to quickly measure and mark a rack for proper installation of a MSL5000 Series Library.
<i>Compaq StorageWorks MSL 5000 Series Documentation CD</i>	CD containing electronic versions of all MSL5000 Series Library product documentation in English, French, Italian, German, Spanish, Danish, and Japanese.
<i>Compaq StorageWorks MSL5026 and MSL5052 Overview and Installation Instructions.</i>	These documents contain product overview information and quick installation instructions for experienced installers.
<i>Compaq World Wide Warranty Statement</i>	This document contains information about the warranty for your library.
<i>Compaq World Wide Telephone Booklet</i>	This document contains contact information for Compaq resources the world over.
<i>Important Safety Information Booklet</i>	This document contains information about common sense precautions necessary when working with equipment powered at wall receptacle service levels.

#### Front View



- 1 Left Magazine Door
- 2 Left Magazines
- 3 Mail Slots
- 4 Viewing Window
- 5 GUI Touch Screen
- 6 Library Status LED
- 7 Right Magazines
- 8 Right Magazine Door

#### Rear View

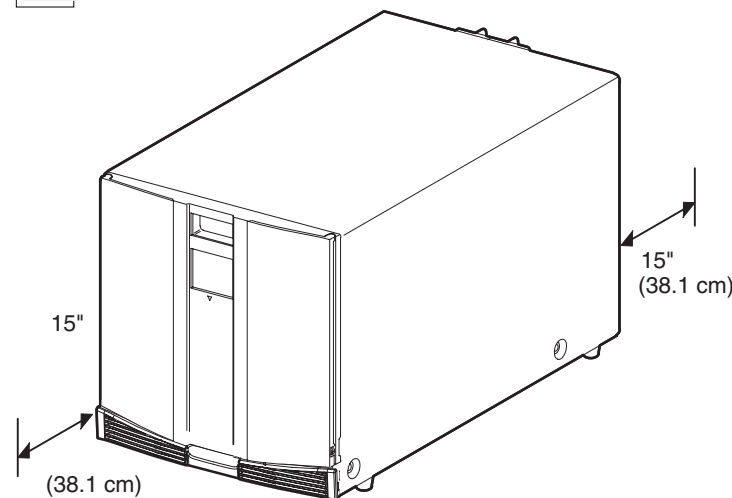


- 1 PTM Motor Cable Connector
- 2 PTM Cover Plate
- 3 Tape Drive 1
- 4 Tape Drive 0
- 5 Accessory PCI Slots (5)
- 6 Library Controller Board
- 7 PTM/LAN Connection
- 8 Blank Drive Cover (2)
- 9 Power Supply (2)
- 10 Power On LED (2)
- 11 Power Supply Release (2)
- 12 Power Switch (2)

**WARNING:** To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into NIC receptacles.

### Open Card Completely Before Beginning Installation Procedures

#### 1 Setting Up the Tabletop Model



The table top model requires no mechanical assembly for mounting. Place the library on a desk, table, or other stable, horizontal surface. Make sure the cooling grills at the front and fans at the rear of the library are not obstructed. Allow 15 inches (38.1 cm) of clearance at the front and 15 inches (38.1 cm) at the rear for magazine and hot-plug tape drive access.

#### 2 Cabling the Library

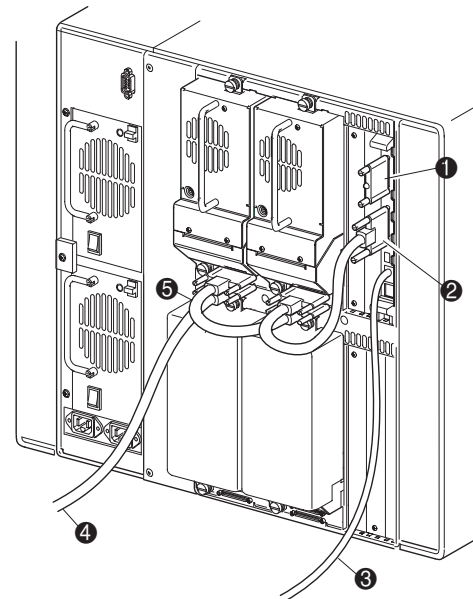
Use the following guidelines when configuring your SCSI cables:

- Use the highest quality SCSI cables. Bus errors caused by excessive length or poor quality cables can significantly degrade performance and reliability.
- Each tape drive in the library (and the library controller) are a separate SCSI target. When any two or more devices are connected to the same SCSI bus, each separate SCSI device must be assigned a unique SCSI ID.
- SCSI IDs are set at the factory. Use the GUI touch screen to change any of the factory defaults.
- To connect a library to a host, the host must have at least one Wide LVD/SE controller and the appropriate driver software.
- For best performance, do not attach more than two drives per SCSI bus.
- Compaq recommends that the robot and corresponding drives on the same bus are attached to host bus 0.

##### Two Drives, Single Host

- 1 SCSI Terminator
- 2 .5 m Jumper Cable
- 3 To PTM / LAN
- 4 To Host
- 5 .25 m Jumper Cable

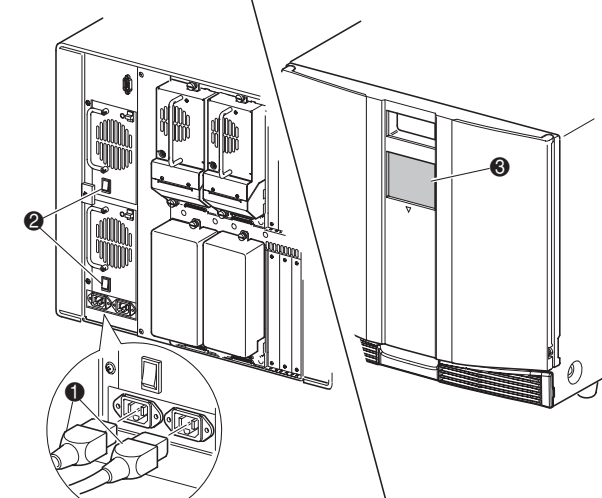
**NOTE:** Host cable 4 is not supplied. Refer to the *Compaq StorageWorks MSL5000 Series Library User Guide* for complete configuration and operation information.



**IMPORTANT:** The short jumper cable 5 is designed specifically for this use only. Stretching one to reach the library controller board can damage the cable. Use the long jumper cable 2 to connect the tape drive and library controller board.

**NOTE:** MSL5052 Libraries support up to four tape drives. Refer to Appendix E of the *Compaq StorageWorks MSL5000 Series Library User Guide* for a complete list of supported cable configurations.

#### 3 Powering the Library



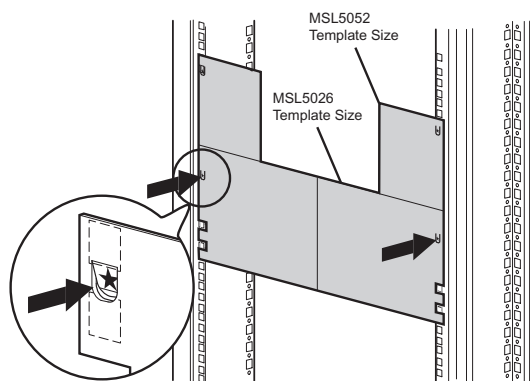
- a. Connect the supplied power cords 1 to the power supply as shown. Left is bottom PS, right is top PS.
- b. Toggle the power switch 2 on.
- c. Press anywhere on the GUI touch screen 5 to activate the display and power on the library.

**IMPORTANT:** The magazine doors have both an electrical release (via the GUI touch screen) and a manual release. It is recommended that the doors are always opened using the GUI touch screen. In an emergency, the doors can be manually opened by inserting a paper clip into each mechanical release. See "Opening the Doors" on the front of this document for release locations.



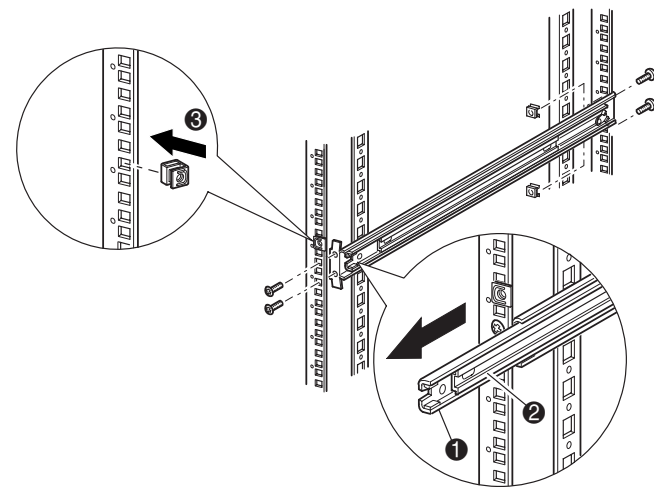
# 1 Installing Rails for the Rackmount Model

**IMPORTANT:** When installing the MSL5000 Series Library into an Compaq H9A rack an H9A Rack Rail Adapter Kit part number 254795-001 is required.



Use the template shipped with the library to mark the location of the mounting hardware on the mounting rails of the storage cabinet.

- Push back the tabs in the top of the template and place them in the holes of the mounting rails. Match up the hole pattern printed on the sides of the template with the hole pattern in the mounting rails.
- Make sure to begin measuring in the correct place. If a component is already installed immediately below the planned position of the new component, place the template against the front mounting rails and rest it on top of the previously installed component.
- Use the front of the template to mark the attachment points for mounting brackets, rails, components, or clip nuts on the front of the storage cabinet.
- Use the back of the template to mark the attachment points for mounting brackets, rails, components, or cage nuts on the back of the storage cabinet.

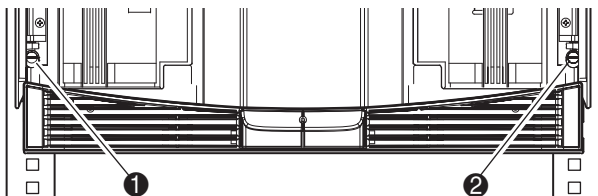


- Remove the template, then attach the rails using the supplied fasteners. Rail front brackets are threaded to directly accept screws. Rear brackets are not threaded and require installation of cage nuts in the storage cabinet's rear vertical rails. Refer to the *Compaq Rack Products Reference Guide* for detailed cage nut installation instructions.

**IMPORTANT:** Fully tighten the front rail screws. Leave the rear rail screws "finger tight" to prevent binding when mounting the library.

- Fully extend the slide rails 1 on both sides of the storage cabinet until they lock.
- Slide the inner bearing race 2 as far as possible to the front of the rail assembly.
- Install the two slide-on clip nuts in positions marked in step 3.

# 4 Securing the Library



With the doors open, secure the front panel to the storage cabinet using the two retaining screws. Close the doors before proceeding to Step 5.

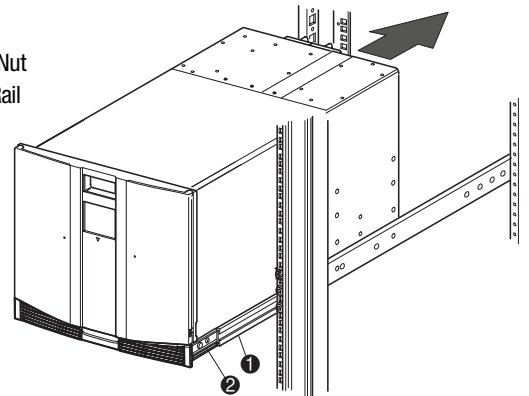
# 5 Cabling the Library

Use the following guidelines when configuring your SCSI cables:

- Use the highest quality SCSI cables. Bus errors caused by excessive length or poor quality cables can significantly degrade performance and reliability.
- Each tape drive in the library (and the library controller) are a separate SCSI target. When any two or more devices are connected to the same SCSI bus, each separate SCSI device must be assigned a unique SCSI ID.
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- For best performance, do not attach more than two drives per SCSI bus.
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# 2 Installing the Library

- Slide-On Clip Nut
- Intermediate Rail
- Inner Rail

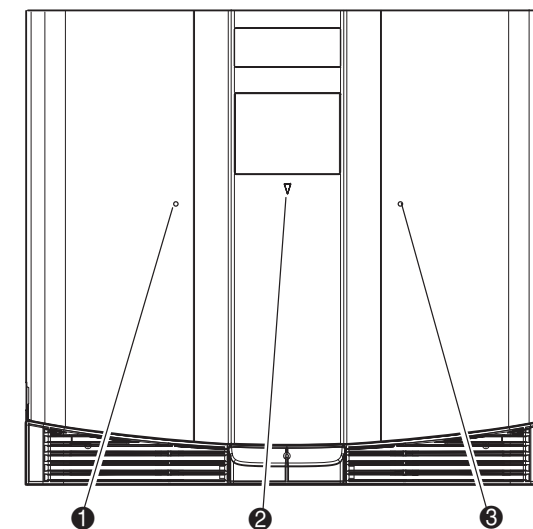


**WARNING:** Two people are required to perform the next step. Make certain, When the library is fully extended, that a force of 20% of the storage cabinet's weight, but not more than 57 lb (26 Kg), applied in any direction other than upwards, does not cause the storage cabinet to overbalance.

- Using two people, raise the library and visually align the inner and intermediate slide rails.
- Carefully insert the library's inner slide rails into the extended intermediate slide rails.
- Slide the library completely into the storage cabinet until the front panel touches it.
- Level the rear of the library and then fully tighten the rear rail screws.

**WARNING:** A storage cabinet might become unstable if more than one component is extended for any reason. Extend only one component at a time.

# 3 Opening the Doors

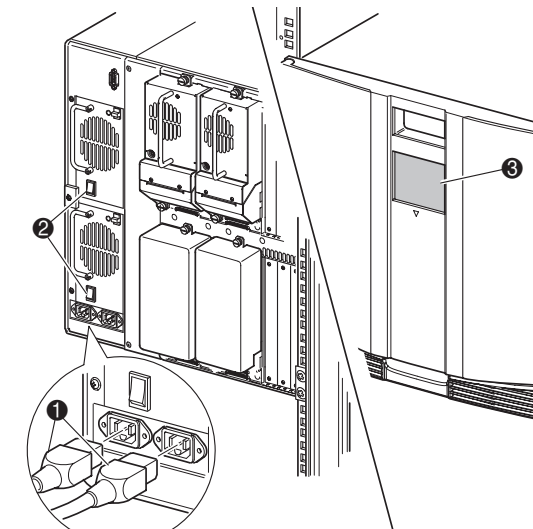


- Left Emergency Door Release
- Library Status LED
- Right Emergency Door Release

Remove the tape to open the doors for installation. Remove and discard the pull-tabs used to block the latch mechanism before closing the doors. Leave the doors open and proceed to Step 4, "Securing the Library".

**IMPORTANT:** The magazine doors have both an electrical release (via the GUI touch screen) and a manual release. It is recommended that the doors are always opened using the GUI touch screen. In an emergency, the doors can be manually opened by inserting a paper clip into the mechanical releases as shown.

# 6 Powering the Library

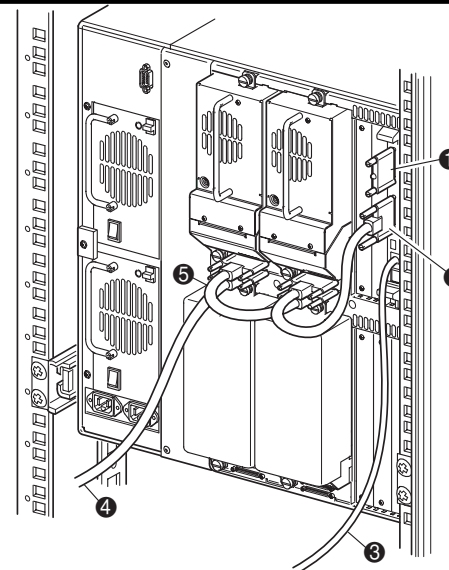


- Connect the supplied power cords 1 to the power supply's receptacles. Left is bottom PS, right is top PS.
- Toggle the power switch 2 on.
- Press anywhere on the GUI touch screen 3 to activate the display and power on the library.

## Two Drives, Single Host

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