

Packing the IBM Universal Tape Library for shipment

The IBM® Universal Tape Library is an automated tape storage and retrieval device for System x™ servers. This document describes the preparation of the tape library for return shipment to IBM. Follow these guidelines carefully to prevent damage during shipment. See the *Safety Information Book* on the IBM *Documentation CD* that was included with the product before you complete the packing procedure. All other IBM Universal Tape Library documentation is also on the IBM *Documentation CD*.

Attention: You must use original IBM packing materials to pack the tape library properly. Use the packing materials from the replacement library to pack the library that you want to return.

To pack the library for shipment, complete the following procedures:

1. "Removing the library from the rack"
2. "Installing the internal shipping restraints" on page 5
3. "Packing the library for shipment" on page 10

Removing the library from the rack

Attention: At least two people are required to move the library chassis.

To remove the library from the rack, complete the following steps:

1. Use the operator control panel (OCP) interface to open the front doors, and remove both tape cartridge magazines. Remove any tape cartridges from the fixed bins or FlexLink openings (see the *IBM Universal Tape Library User's Guide* for information about OCP operation and bin locations).

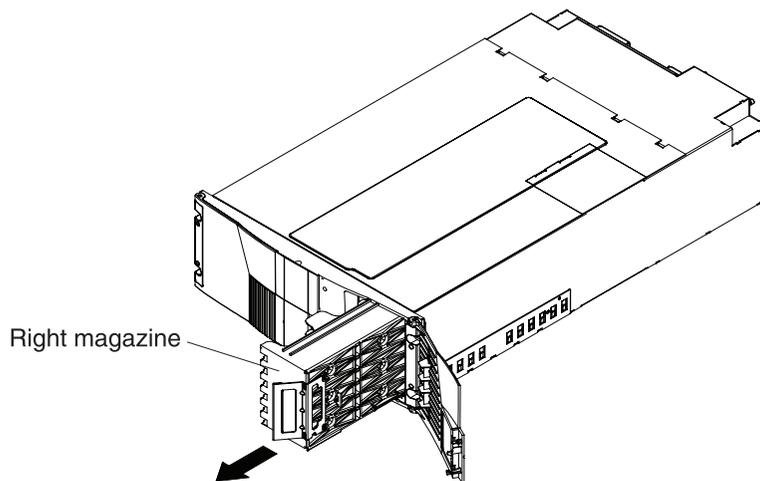


Figure 1. Removing the tape cartridge magazines

After you remove the tape cartridge magazines and close the doors, the library takes inventory of all possible tape cartridge locations (magazines, fixed slots, FlexLink openings, and tape drives). This process takes several minutes.

Note: You must remove all tape cartridges from the tape library before you park the library for shipment. If there are tape cartridges in the library, the system will not park the library robotics.

2. From the Library Operations screen on the OCP, select **Park for Shipping**. The library shuts down.

Attention: This unit has more than one power supply cord. Disconnect all power supply cords before removing the library.

3. From the back of the library, disconnect all power, Ethernet, and SCSI cables from the library.

Statement 4



Use safe practices when lifting.



≥18 kg (39.7 lb)



≥32 kg (70.5 lb)



≥55 kg (121.2 lb)

4. Remove the library chassis from the rack.
 - a. Loosen the captive screws that secure the tape drives to the chassis and remove the tape drives from the back of the library.

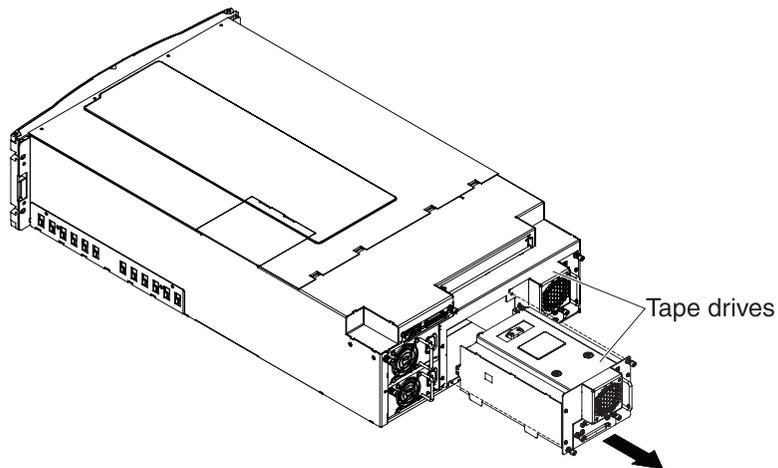


Figure 2. Removing the tape drives

- b. Loosen the captive screw that secures the power supplies to the chassis and remove the power supplies from the back of the library.

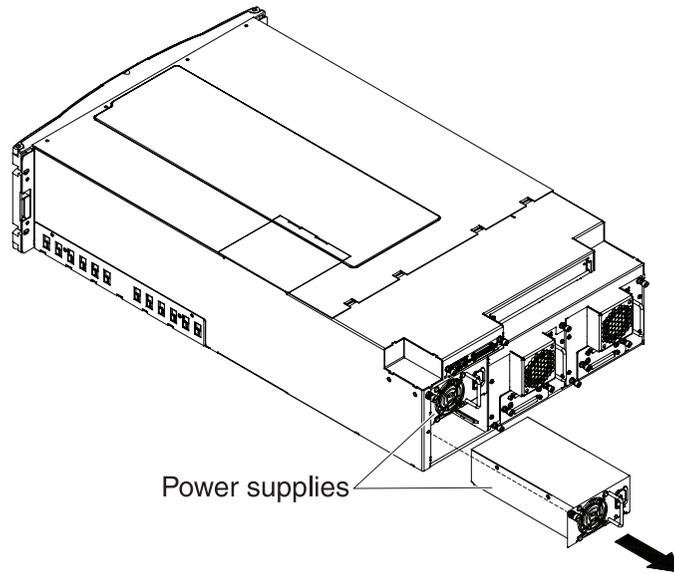


Figure 3. Removing the power supplies

- c. Remove the Phillips screws that secure each side of the chassis to the rack-mounting rails.
- d. Remove the two hex screws that secure the clamps on the back of the library.

Note: See the *IBM Universal Tape Library User's Guide* for additional rack-mounting information.

- e. **Attention:** At least two people are required to lift the library chassis.
Remove the library from the rack.

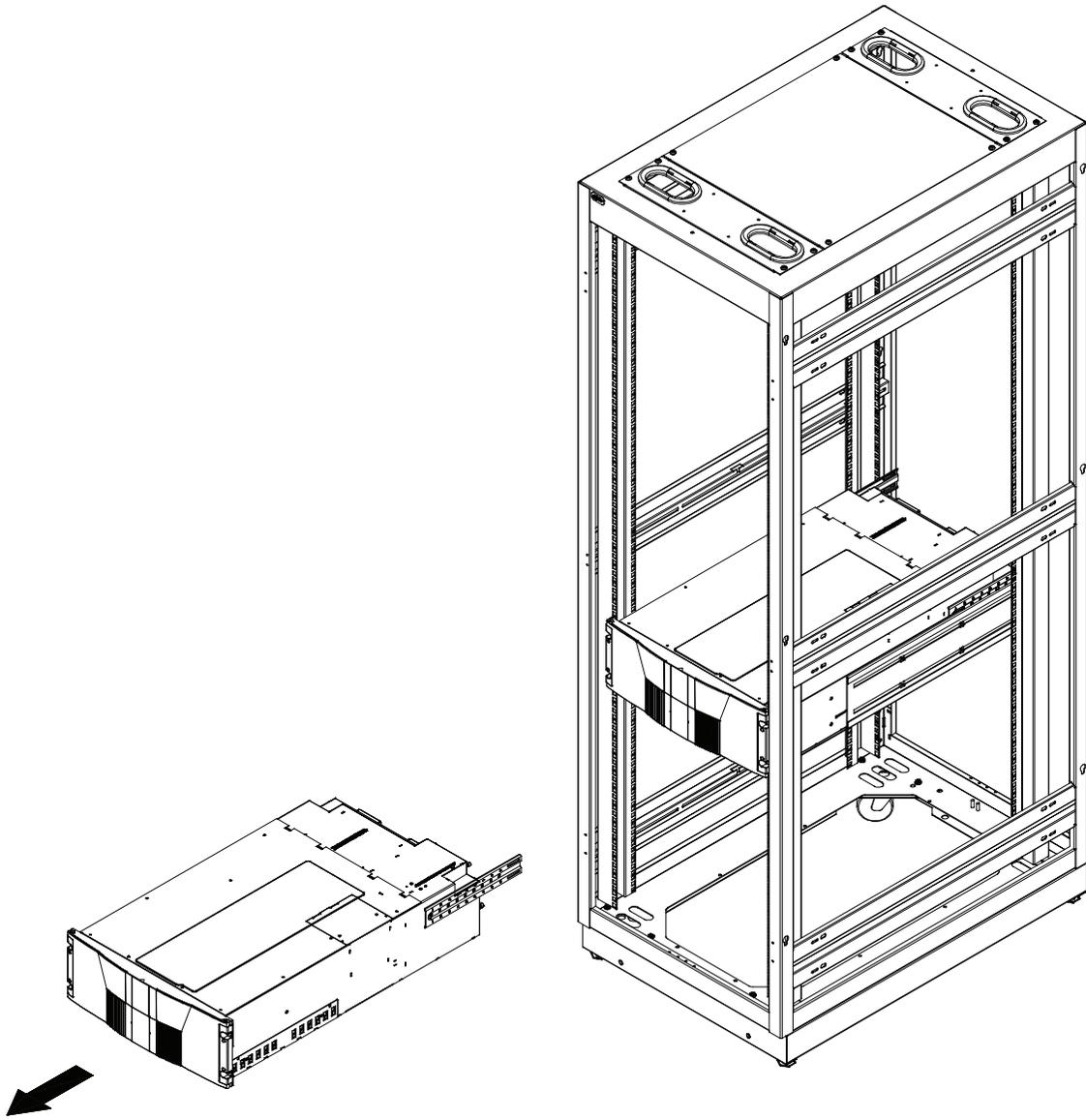


Figure 4. Removing the library

Installing the internal shipping restraints

You must install the shipping restraints on the internal robotics of the library to prevent damage during shipment.

Attention: Failure to install the shipping restraints on the robotics might void your warranty.

To install the shipping restraints, complete the following steps:

1. Place the library on a flat surface and remove the 12 Phillips screws that secure the FlexLink cover and top cover to the library chassis, as shown in Figure 5.

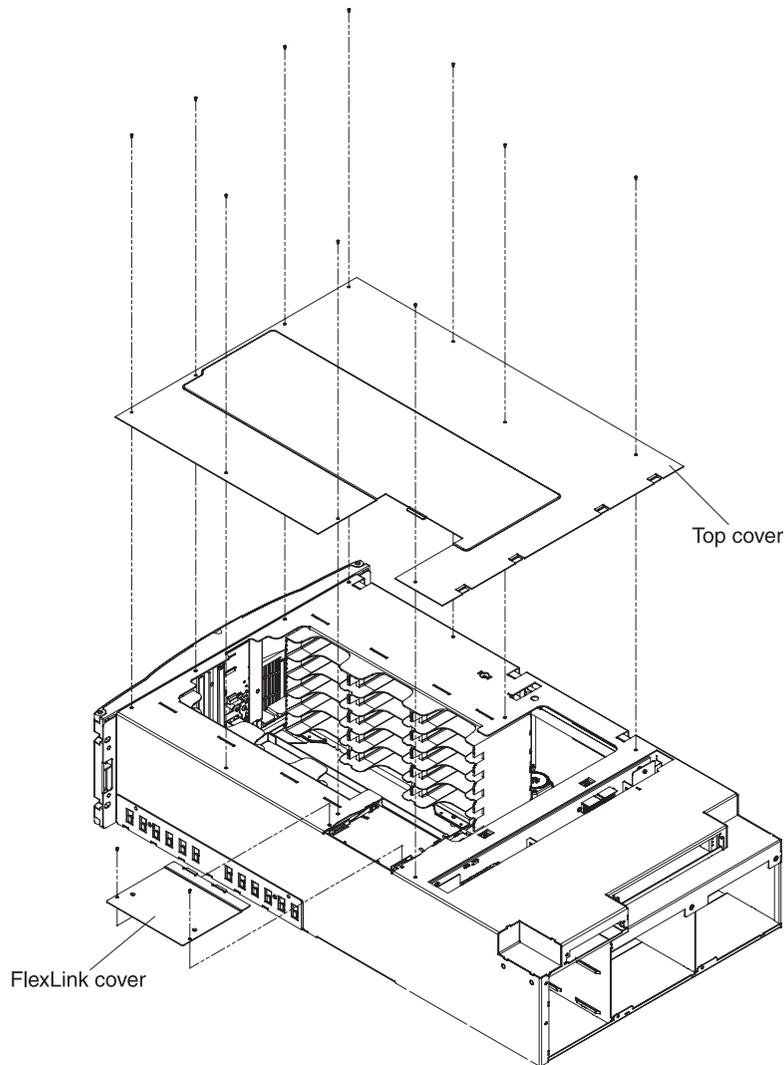


Figure 5. Removing the FlexLink cover and top cover plate

Attention: Take standard electrostatic discharge precautions when you work inside the library chassis.

2. If the library is not operational and you have not run the **Park for Shipping** command, grasp the robotics and gently move it to the front of the library, as shown in Figure 6.

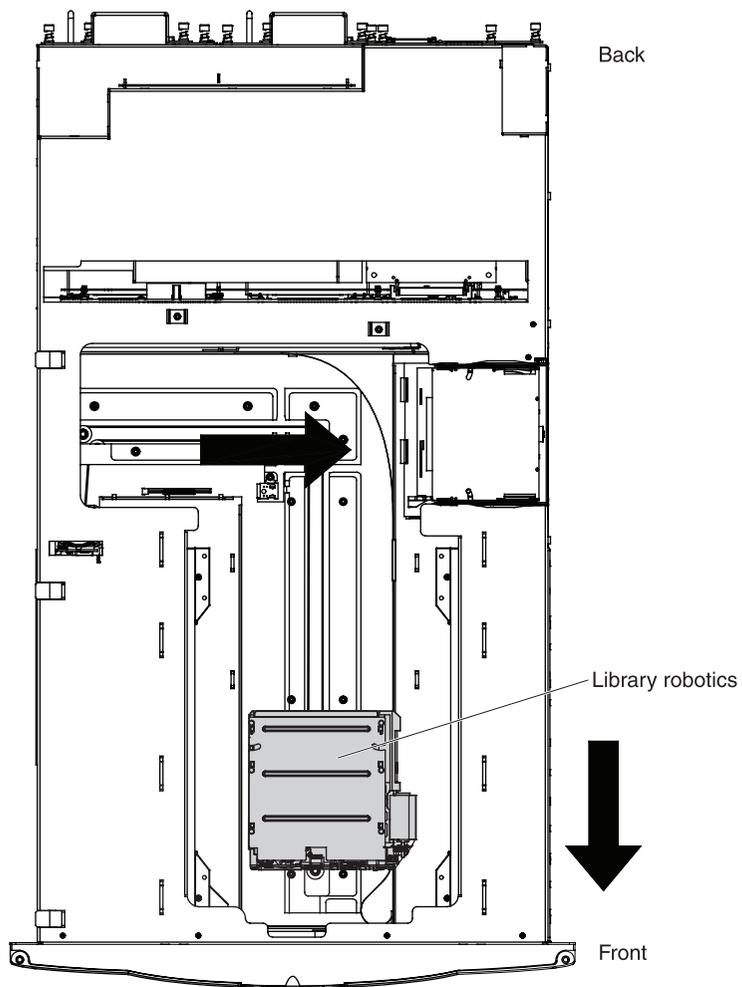


Figure 6. Moving the robotics

3. Install the metal restraints through the chassis eyelets, as shown in Figure 7.

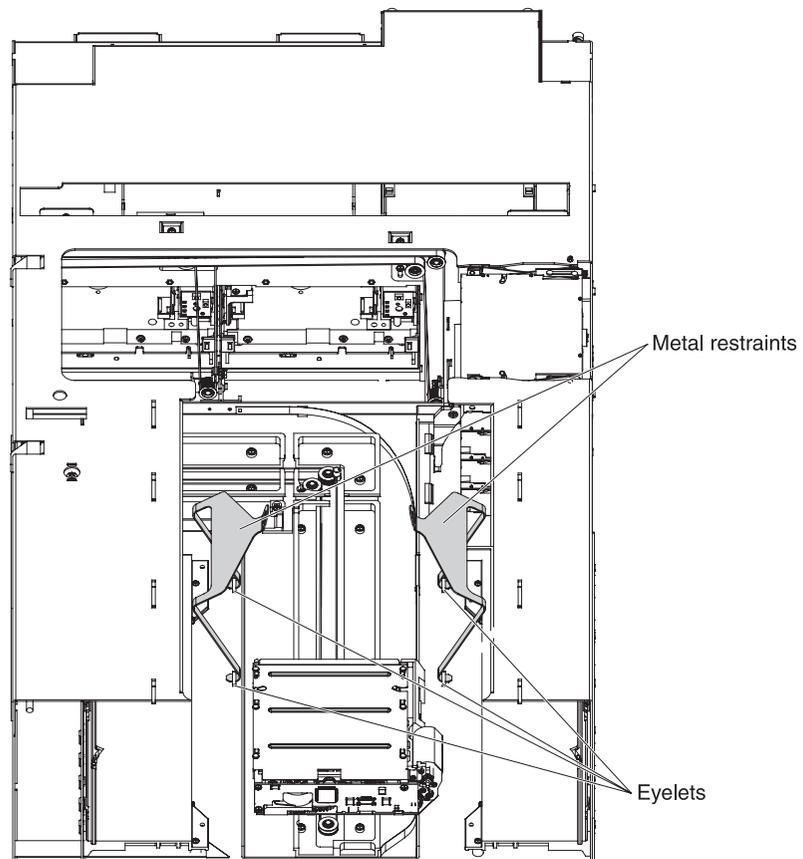


Figure 7. Installing the metal restraints

4. Install the two halves of the foam robotics packing material as shown in Figure 8:
 - a. Install the left foam packing material first so that it fits onto the robotics platform, and then push the foam piece toward the back of the unit until it stops.
 - b. Install the right foam material on the library robotics so that the motor fits into the foam opening, and then push the foam piece toward the front of the library until it stops.

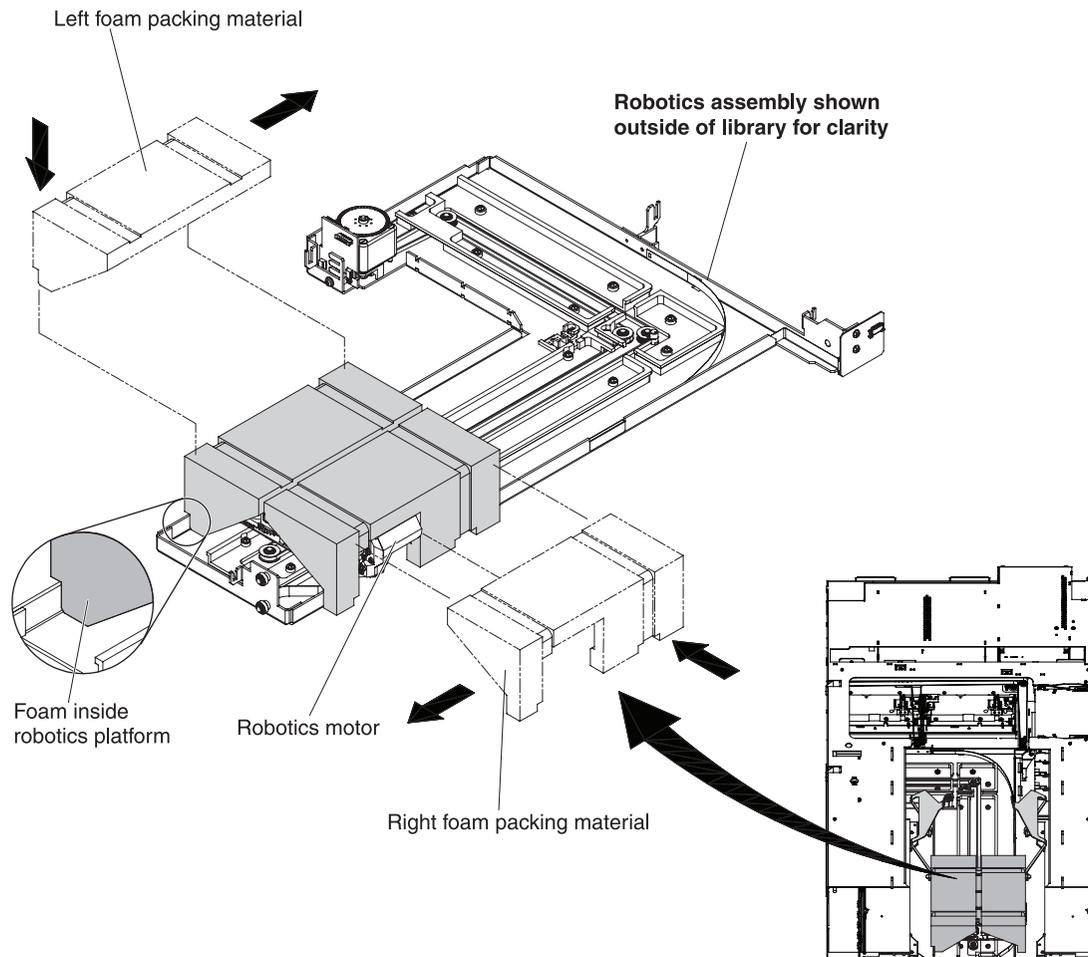


Figure 8. Installing the foam robotics packing material

- Slide the robotics with the foam packing material under the metal restraints so that the metal bands fall into the restraint cutouts. Clamp the two halves of the metal restraints together and use a plastic tie band to secure the robotics to the library chassis as shown in Figure 9.

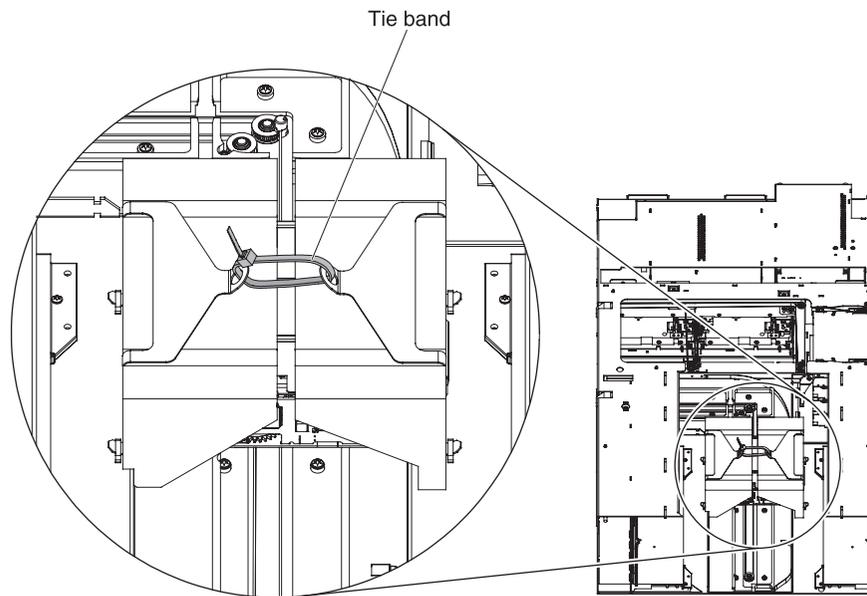


Figure 9. Securing the robotics

- Install the FlexLink cover and top cover that you removed in step 1 on page 5.
- Install the tape drives and power supplies that you removed during the procedure in "Removing the library from the rack" on page 1.
- Open the magazine access doors by inserting the metal pick, which is included with the library accessory kit, into the release holes as shown in Figure 10 and trip the magazine door release for both the right and left magazine doors. The magazine access doors open.

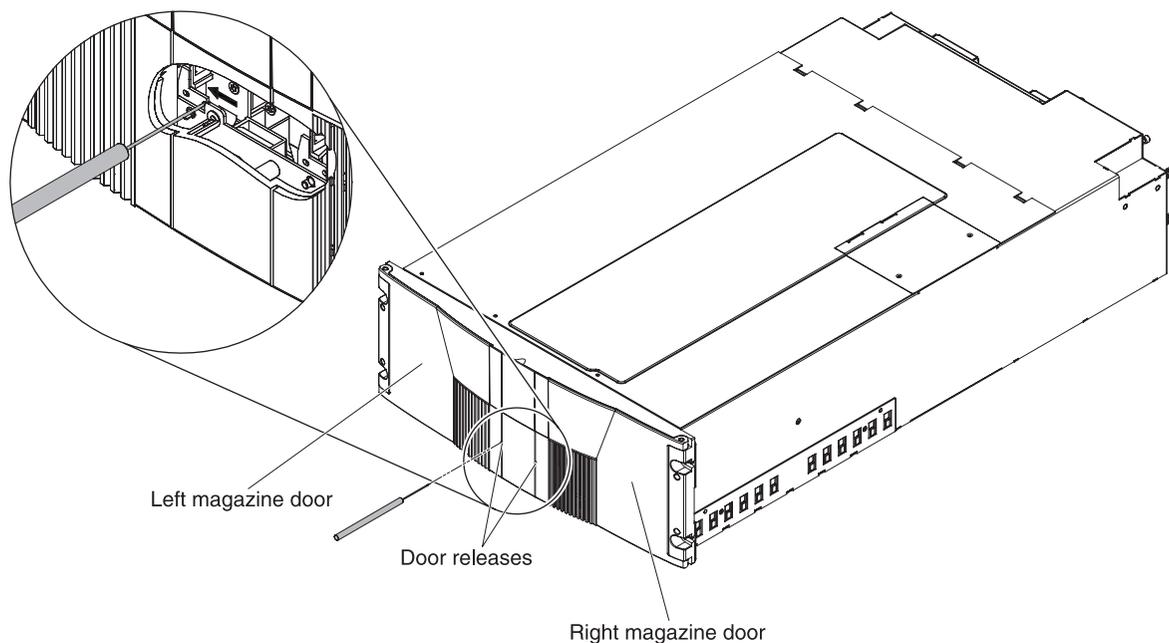


Figure 10. Opening the left and right magazine access doors

9. Install the tape cartridge magazines.

Packing the library for shipment

Statement 4



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Attention: To prevent damage to the library, do not put the weight of the library chassis on the front bezel. Lift the library chassis at the sides.

Package the library in the shipping carton as shown in Figure 11. Place the library chassis in an antistatic bag before you place the library in the shipping carton.

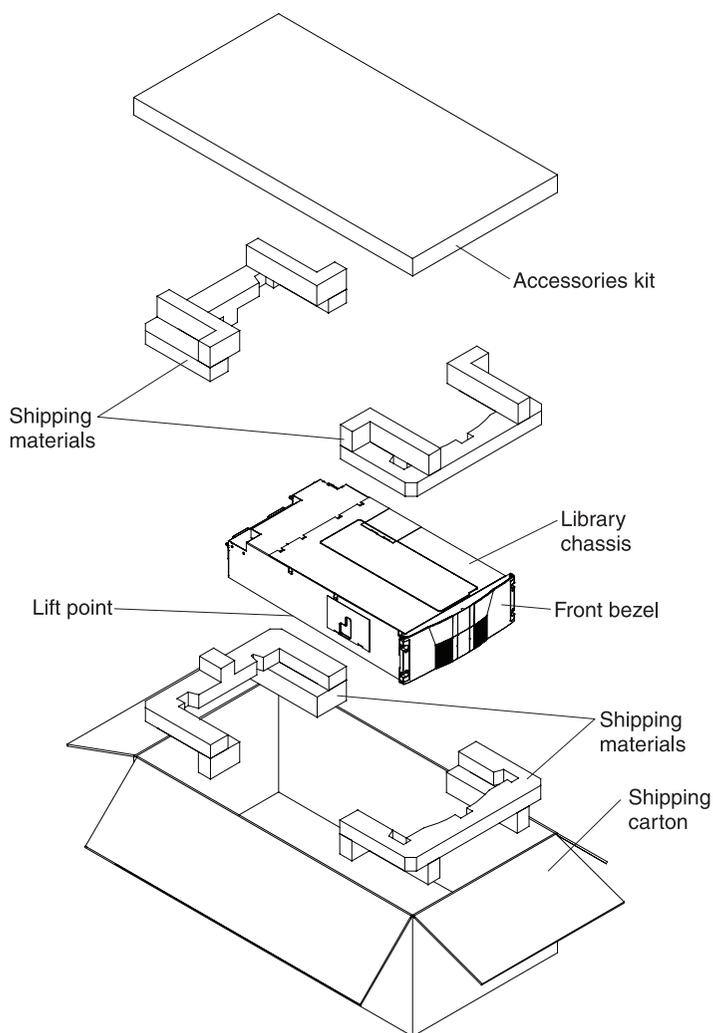


Figure 11. Packing the library for shipment

First Edition (July 2008)

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(1P) P/N: 44R5295

