Removing a Data Cartridge from a Non-Functional EXB-8200, EXB-8200SX, EXB-8500, or EXB-8500c

The following information describes how to remove a data cartridge and tape that is loaded in the tape path of a nonfunctioning EXB-8200, EXB-8200SX, EXB-8500, or EXB-8500c tape drive. Use this procedure only as a last option when it is necessary to preserve the data on the tape.

CAUTION
Exabyte does not assume responsibility for any damage to the tape drive, the data cartridge, or the tape or for the loss of any data resulting from this procedure. Any damage to the tape drive caused by this procedure will be repaired as a nonwarranty repair and may void the existing warranty for the tape drive.

Before starting the procedure...

1. Power the tape drive off and back on again to attempt to clear a possible hang condition. This may cause the tape to be unloaded from the tape path.

2. If the green LED is lit, indicating Ready status, press the unload button or try to unload the cartridge from the software. If the data cartridge does not unload or the green LED is off, continue with these instructions.

Required tools

- #1 flat-blade screwdriver
- #0 Phillips screwdriver
- Torque limiting screwdriver, 3.4 to 5.0 inch-pounds (3.9 to 5.8 kg-cm)
- T-10 TORX bit
- T-8 TORX bit
- Adhesive tape
- Small nonconductive tool, such as a molded potentiometer adjustment tool

Step 1 Disconnect the tape drive and remove it from its enclosure

WARNING!
Before beginning this procedure, turn off the system in which your tape drive is installed and disconnect the power cord.

Following all procedures appropriate to the system in which the tape drive is installed, disconnect the tape drive from the power supply and the SCSI bus, and remove the tape drive from its enclosure. You may need to consult your computer owner's manual and one of the following documents for information about how the tape drive has been installed:

- *EXB-8200 and EXB-8200SX Installation and Operation* (306544) or
  Quick Installation: EXB-8200 and EXB-8200SX

- *EXB-8500 and EXB-8500c Installation and Operation* (306216) or
  Quick Installation: EXB-8500 and EXB-8500c

To order manuals, contact Exabyte.

Step 2 Remove the tape drive's top cover

1. Using a T-8 TORX bit, remove the two screws at the top of the tape drive near the edges.

2. Using a T-10 TORX bit, remove the remaining three screws (one in the middle of the top cover and two on the sides at the back of the tape drive).

3. Gently lift the cover at the rear of the tape drive and slide the cover toward the rear to disengage the tabs on the front of the cover. Remove the cover.
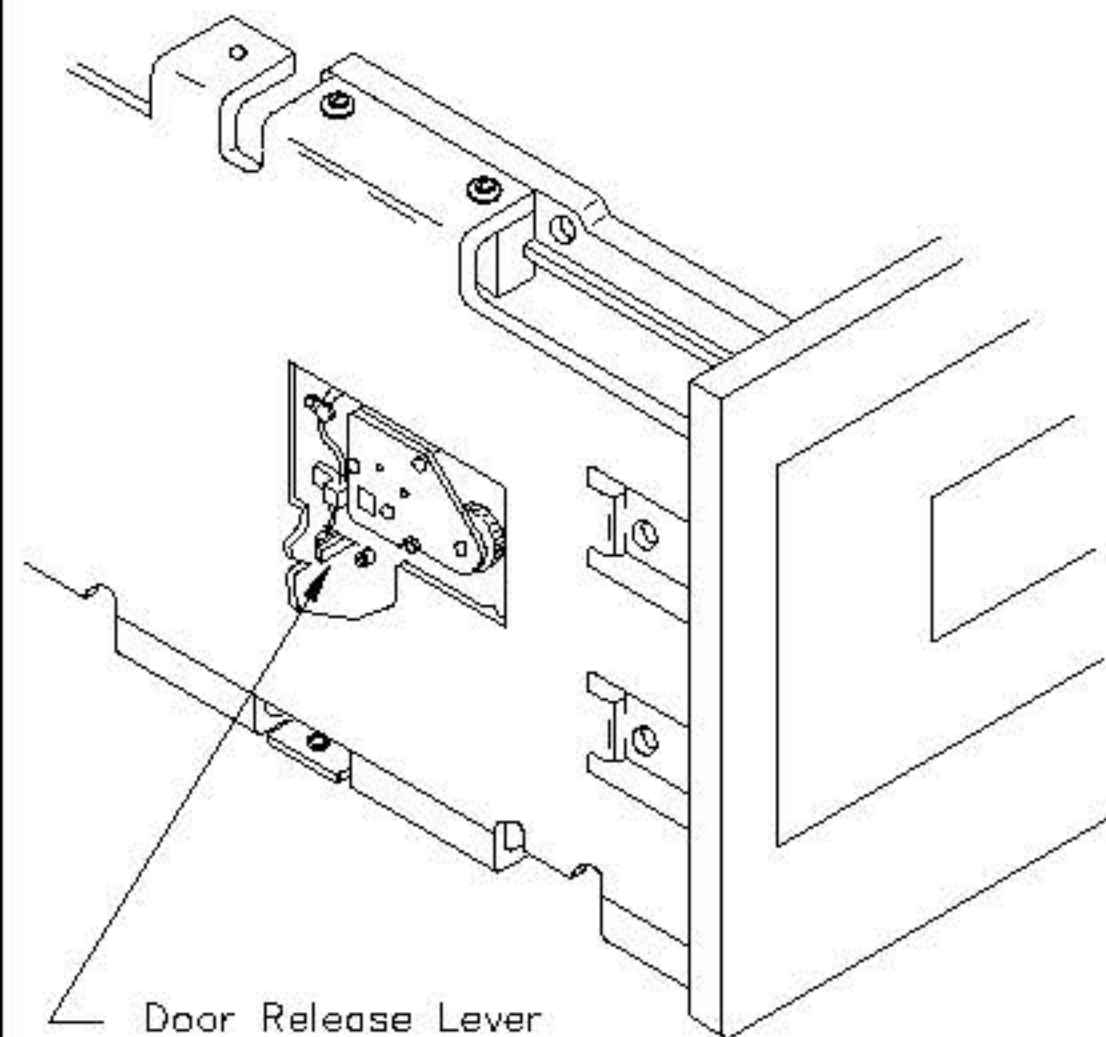
Step 3 Visually inspect the tape path

Check to see if the tape has been unloaded from the tape path.

- **If the tape has not been unloaded**, skip the rest of this step and continue with Step 4.

- **If the tape has been unloaded**, open the tape drive's door by using a small nonconductive tool, such as a potentiometer adjustment tool, to move the door release lever toward the front of the tape drive (see the following figure). Remove the data cartridge, and skip to Step 13.
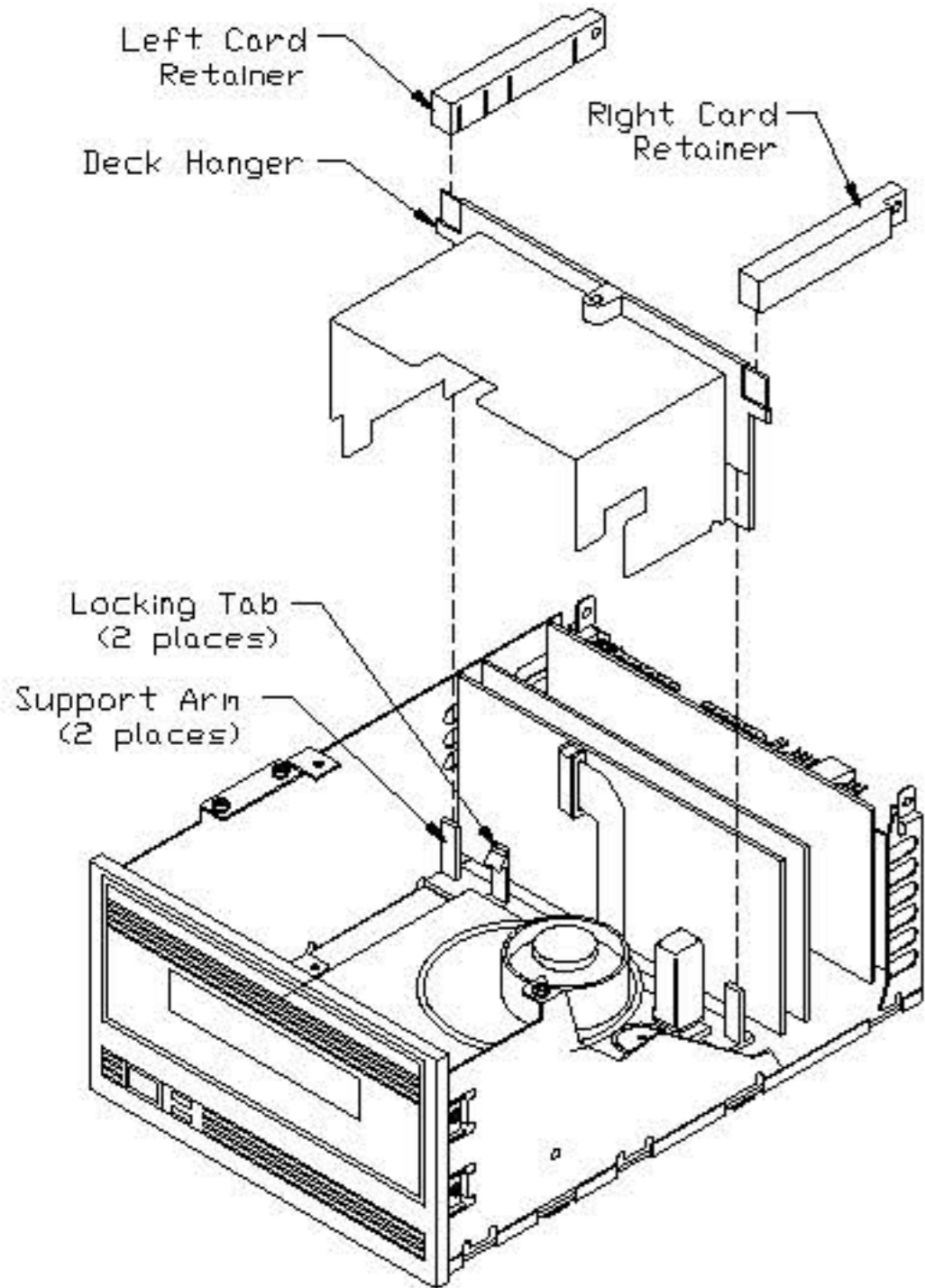
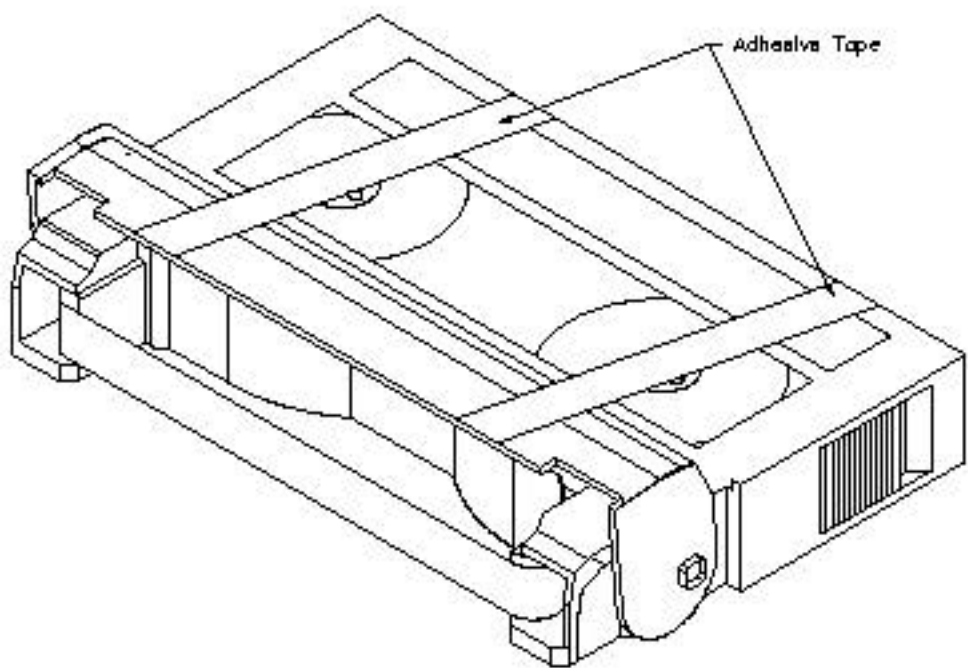| CAUTION |
|---|
| The amount of force required to activate the lever is slight. The lever should move no more than 1/8 inch (3 mm). |

Door Release Lever

Step 4 Remove the deck hanger (EXB-8500 and EXB-8500c only)

1. Gently remove the card retainers, shown in the following figure, by lifting them straight up.

2. Locate the locking tabs that hold the deck hanger in place. From the back of the deck hanger, use a #1 flat-blade screwdriver to press one of the tabs toward the rear of the tape drive while pulling up on the same end of the deck hanger. Hold that end of the deck hanger up until you release the other tab. Then, remove the deck hanger.
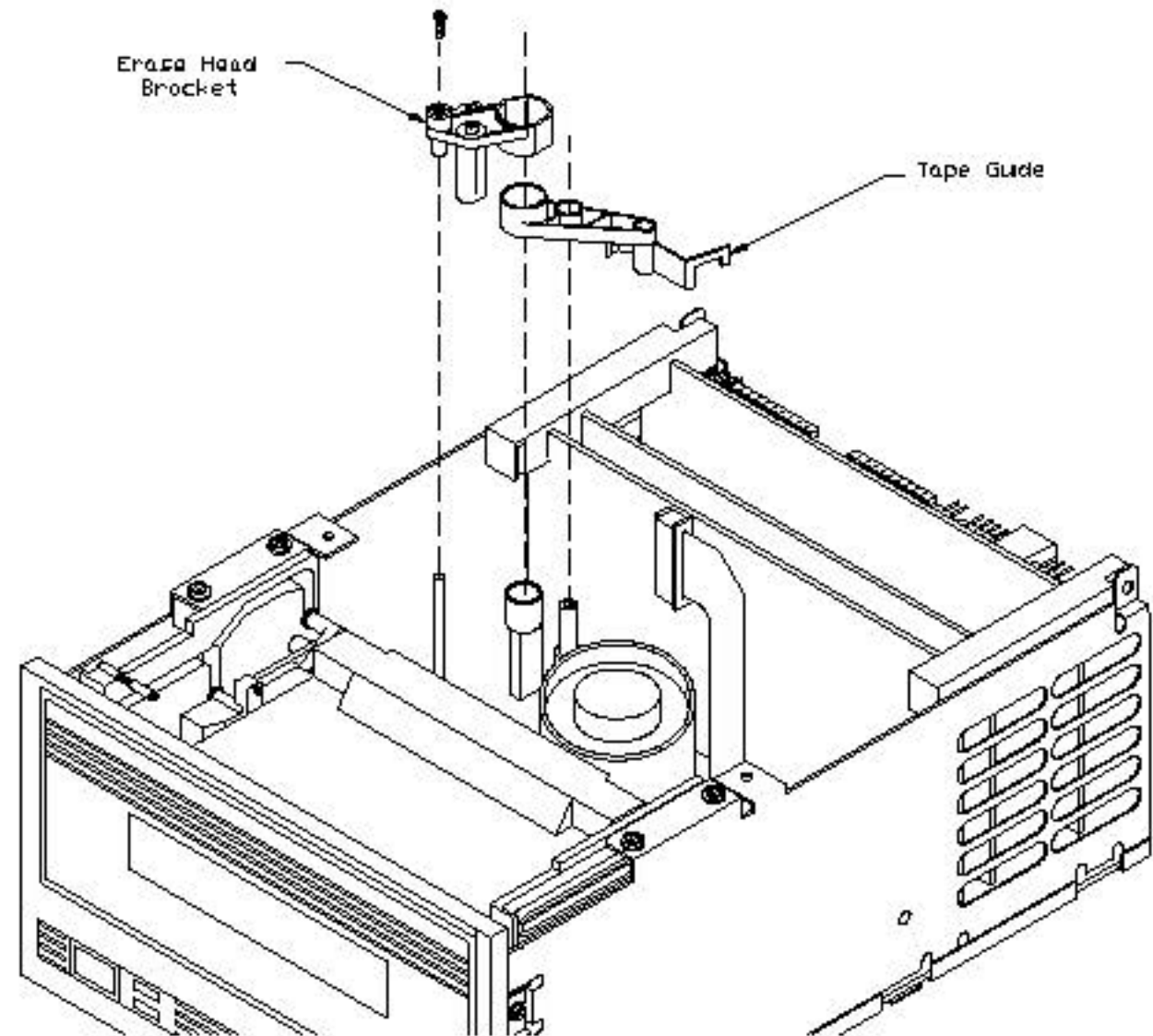
Step 5 Prepare the data cartridge

1. Obtain two pieces of adhesive tape, each approximately 2 inches (5 cm) long.

2. Position the two pieces of tape so that they hold open the data cartridge door, as shown in the following figure.

Adhesive Tape

Step 6 Remove the erase head bracket and tape guide

1. Locate the erase head bracket and tape guide (see the following figure).

2. Use a #0 Phillips screwdriver to remove the small screw that holds the erase head bracket in place.

3. Lift the erase head bracket straight off its post. You do not need to remove the connector and wires. Position the erase head bracket so that it is away from the tape path.

4. Gently lift the tape guide straight up so that it is removed from all three of its posts at the same time. Set the tape guide aside.
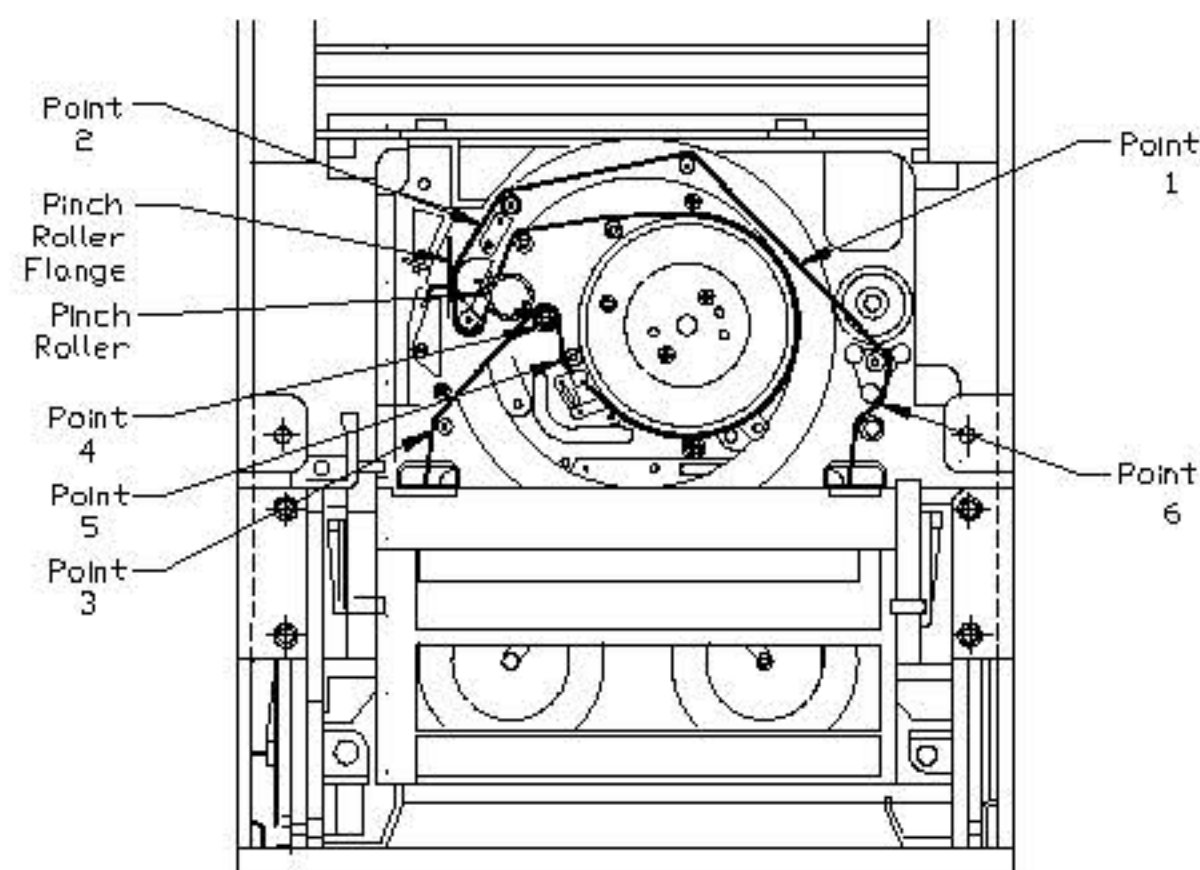
Step 7 Remove the tape from the tape path

CAUTION

Exabyte considers the following procedure to have a high potential for damage to the tape and the heads on the tape drive. **Use extreme caution when attempting to remove the tape using this procedure.**

When removing the tape from the guide posts and rollers, use a nonconductive tool, such as a molded potentiometer adjustment tool. Avoid touching the side of the tape where data is recorded. The side of the tape that comes in direct contact with the head assembly is the side where data is recorded. The data side of the tape is duller in color than the back of the tape.

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1. Using the nonconductive tool, loosen the tape at point 1, shown in the following figure, by positioning the tool between the tape and the rotating head and moving the tool toward the rear of the tape drive.

2. Using your finger, move the pinch roller flange toward the left and hold it in this position.

CAUTION

Do not release the pinch roller until the tape is completely removed from around the pinch roller and capstan. If the pinch roller is released before the tape is clear of these components, the tape will be damaged.

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3. Insert the nonconductive tool in the tape loop at point 2 and gently lift the tape up from around the pinch roller and capstan.

4. After the tape is completely clear of the pinch roller and the capstan, release the pinch roller flange.

5. Remove the tape from around the guide posts and rollers at points 3 and 4. Be sure to place the tool inside the tape loop to avoid touching the tape recording surface or the head assembly.

6. Position the tool between points 4 and 5 inside the tape loop. Point 5 is an "L" shaped black plastic part that prevents the tape from riding up over the rotating drum. Gently move the tape up so that it passes between the "L" and the edge of the head assembly.

7. Lift the tape from around the guide posts and roller at point 6. Be sure to place the tool inside the tape loop.

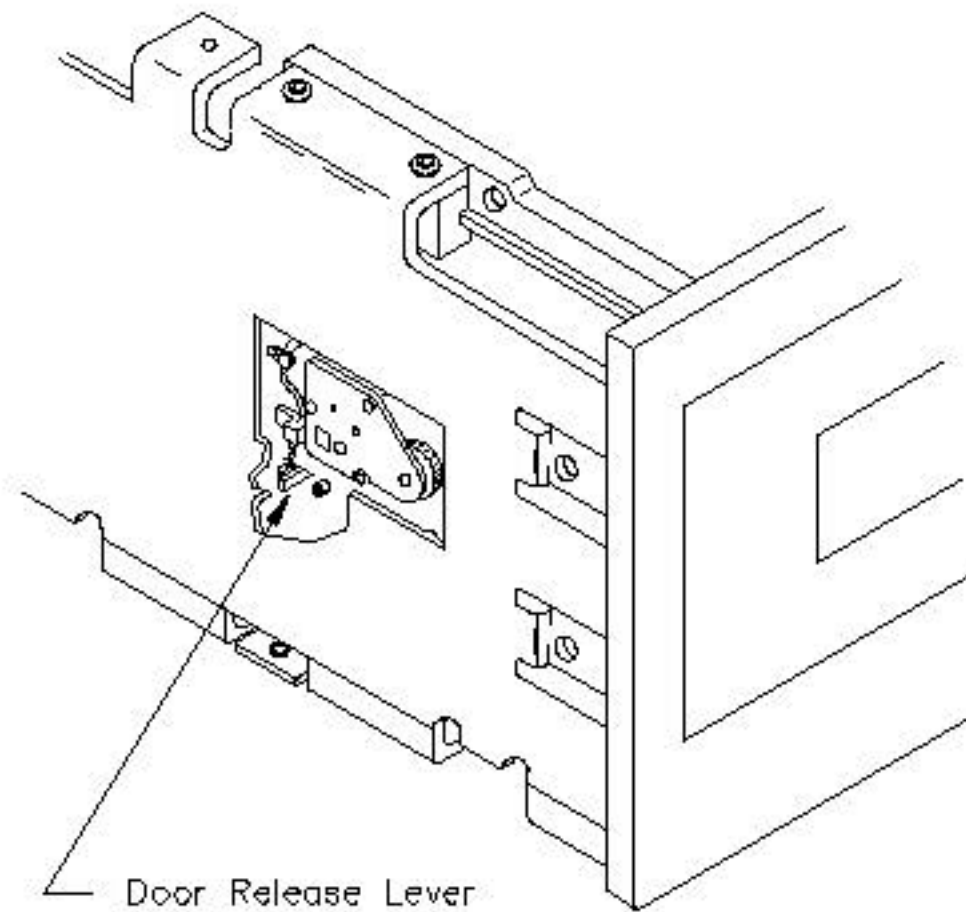## Step 8 Remove the door and faceplate

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CAUTION

When opening the door, hold the door so that it opens slowly. This will prevent the data cartridge from moving suddenly and damaging the tape.
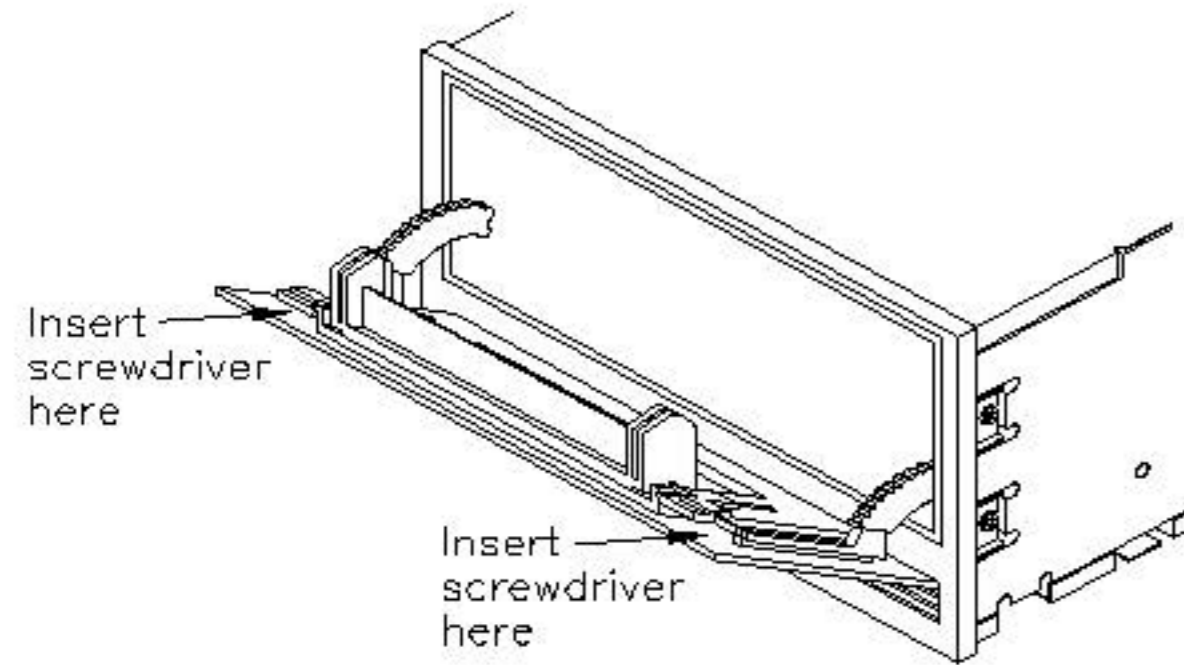
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1. Open the door by using a small nonconductive tool, such as a potentiometer adjustment tool, to move the door release lever toward the front of the tape drive (see the following figure).

CAUTION

The amount of force required to activate the lever is slight. The lever should move no more than 1/8 inch (3 mm).

Door Release Lever

2. Using a flat-blade screwdriver, separate the door from the door retainer at the two locking tabs near the top edge of the door (see the following figure).

3. Separate the two components so that the bottom locking tabs are also released. Remove both parts.

4. Use a T-8 TORX bit to loosen (but not remove) the four faceplate mounting screws located at the sides of the faceplate.

5. Slide the faceplate away from the main housing. You may need to close the door frame partially so that you can remove the faceplate. Leave the door frame open to allow access to the data cartridge.

Step 9 Wind the loose tape and remove the cartridge

1. Position the tape drive so that it is resting on the left side of the main housing with the door facing to your left.

2. Insert a #1 flat-blade screwdriver between the bottom edge of the door and the front of the tape drive. Insert the blade into the hub of the takeup reel (the top hub with the tape drive in the current position).

3. Slowly turn the screwdriver counterclockwise to wind loose tape into the cartridge.

CAUTION
Make sure that all of the tape is wound into the cartridge so that the tape will not be damaged by the cartridge door. Do not damage the tape by overwinding it.

4. Remove the adhesive tape that is holding open the door of the data cartridge.

5. Carefully close the data cartridge's door, checking to ensure that the door does not contact the exposed tape. Then, remove the data cartridge.

Step 10 Replace the tape guide and erase head bracket

1. Replace the tape guide on its three posts.

2. Replace the erase head bracket, attaching it with the screw that you removed earlier.
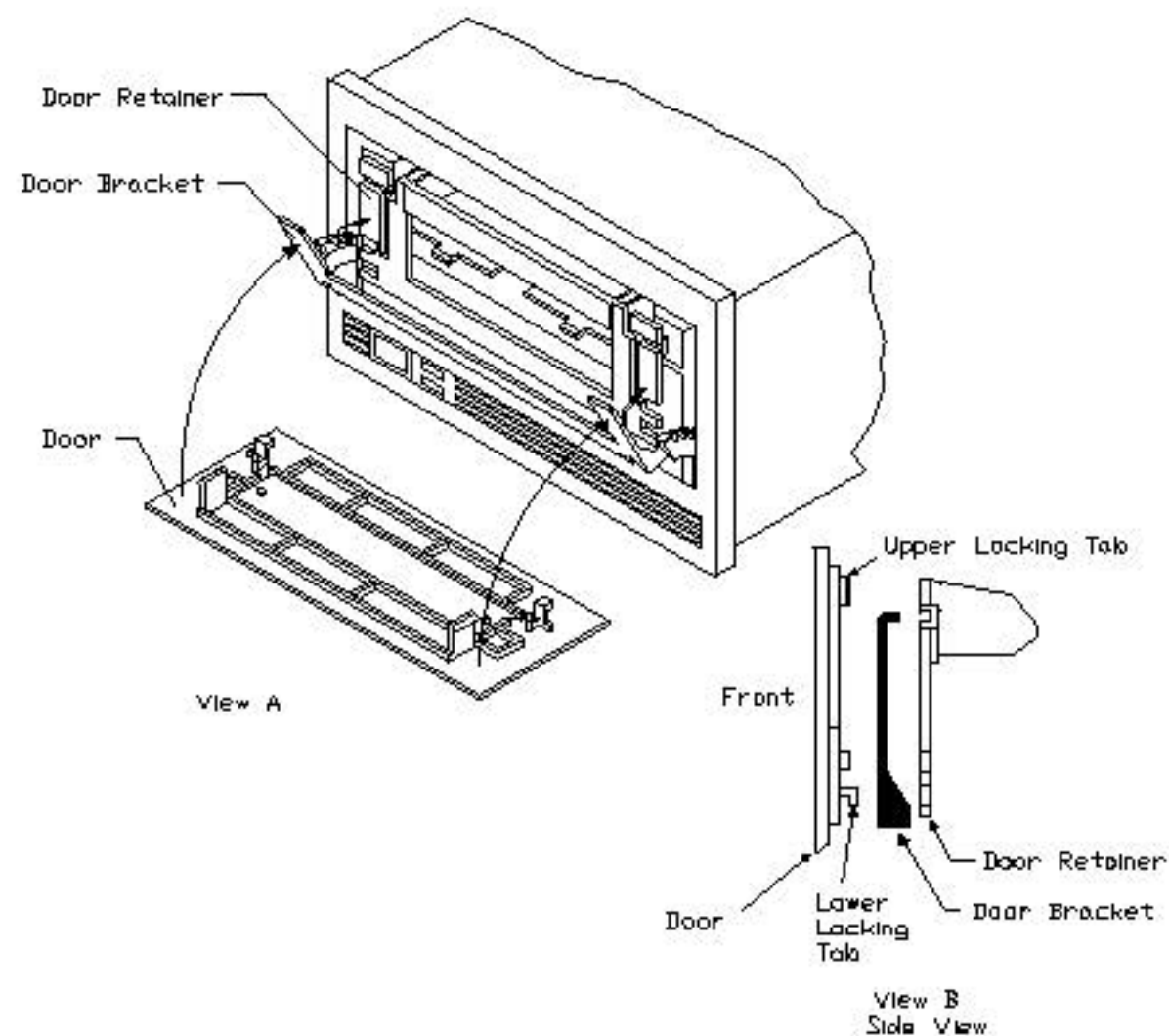
Step 11 Replace the faceplate and door

1. With the door bracket closed, slide the faceplate over the door frame and position the faceplate so that the mounting tabs are under the mounting screws.

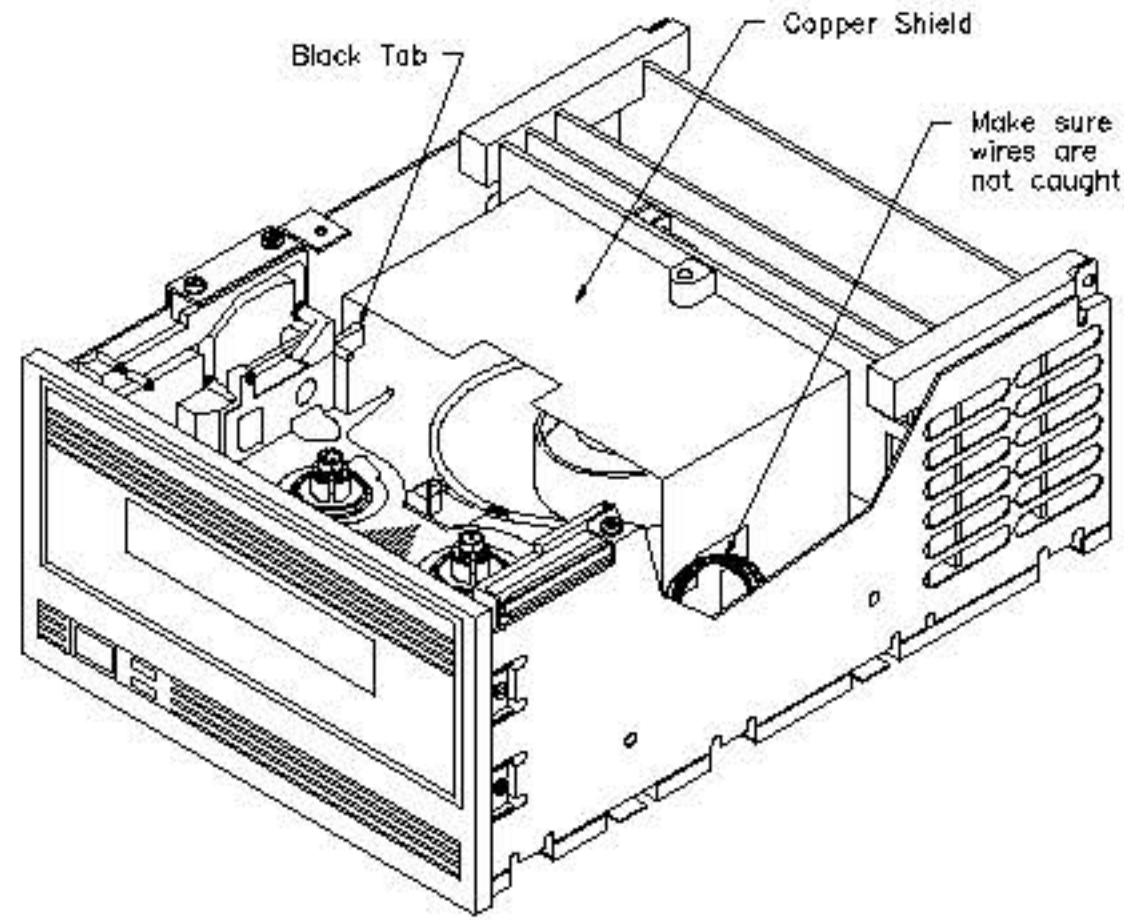2. Tighten the mounting screws.

> **CAUTION**
>
> Do not overtighten the mounting screws. Overtightening the mounting screws can damage the faceplate mounting tabs or strip the screw holes in the main housing.

3. Open the door bracket. Position the door on the door bracket so that the bottom locking tabs on the door are in the notches on the bottom of the door bracket (see the following figure).

4. Holding the door in place, position the door retainer so that the lower notches on the bottom of the door retainer are aligned with the locking tabs on the bottom of the door.

5. Squeeze the bottom of the door and door retainer together so that the locking tabs snap into the bottom notches.

6. Squeeze the top of the door and door retainer together to engage the top locking tabs.

Step 12 Replace the deck hanger (EXB-8500 and EXB-8500c only)

1. From the front of the tape drive, position the copper shield so that the left side of it is to the left of the black tab shown in the following figure. Make sure that the right side of the copper shield does not interfere with the tape path or wires.

2. Line up the plastic portion of the deck hanger between the locking tabs behind it and the support arms in front of it. Slide the deck hanger down between the locking tabs and support arms until it snaps into place.

3. Replace the right and left card retainers as follows:

   ○ Position the retainer so that the screw hole in the retainer lines up with the hole in the tab at the rear of the tape drive. Each card should fit in one slot. The deck hanger fits in the slot closest to the front of the tape drive.

   ○ After the card retainers are in place, press downward on both retainers simultaneously to make sure that all the cards are properly seated.

Step 13 Replace the top cover

1. Position the cover with the flat tabs toward the front of the tape drive and the two downward bent tabs toward the rear.

2. Holding the rear of the cover up slightly, slide the cover toward the front of the tape drive to insert the flat tabs into the corresponding slots on the faceplate.

3. Position the rear of the cover so that the bent tabs line up with the screw holes in the card retainers.

4. Replace the screws in the bent tabs and in the top of the cover above the deck hanger.

5. Replace the screws in the top of the cover at the sides of the tape drive.

Step 14 Reinstall the tape drive

If you are reinstalling the tape drive into a computer drive bay and need instructions, refer to one of the following documents:

- *EXB-8200 and EXB-8200SX Installation and Operation* (306544) or
  Quick Installation: EXB-8200 and EXB-8200SX

- *EXB-8500 and EXB-8500c Installation and Operation* (306216) or
  Quick Installation: EXB-8500 and EXB-8500c

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