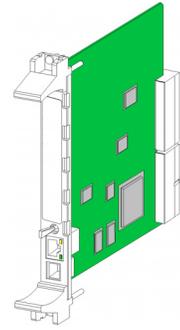


# Spare Library Controller Card

## Remove & Replace Instructions



### Overview & Notes

This document describes how to remove and replace the Library Controller card in a NEO 2000e or 4000e library. It is also used for legacy NEO libraries that have been upgraded to an E-Series.

*NOTE: A discharge of static electricity can damage micro-circuitry. To help prevent Electrostatic Discharge (ESD), observe standard ESD precautions.*

**WARNING:** To reduce the risk of electric shock or damage to equipment, always remove any power cords while working with the unit.

**AVERTISSEMENT:** Pour réduire le risque de choc électrique ou endommagement de l'équipement, retirez toujours les cordons électriques en travaillant avec l'appareil.

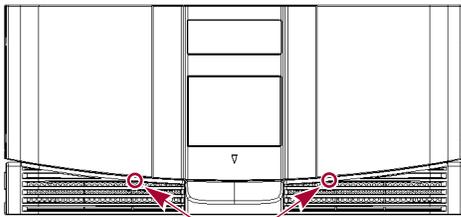
#### Unpacking the Spare

Carefully unpack and verify that you have all the parts:

- Library Controller card
- Five (5) M4x6mm hexhead screws
- Sixteen (16) M3x6mm flathead Phillips screws

You will also need a 2.5mm (or 3/32 inch) hex driver and a slip-joint pliers.

### Preparing the Library



Manual Release Locations

**IMPORTANT:** If the library is non-operational, the doors can be manually opened by pushing a stiff wire against the releases behind the front panel.

1. If the **library** is operational:
  - a. Exit the **application software** and, if necessary, stop the software services.
  - b. Using the GUI (or the application software), remove any **cartridges** from the drives to prevent damage.
  - c. Use the GUI to remove **all** the magazines.
2. Make note of the library's **IP Address**. It will be used to reconfigure the library after replacing the card.
3. Using the Web Management Interface, download the **Binary file** from the History tab. This can be used as a reference to reconfigure the library with unique configurations.
4. **Power off** the library:
  - a. At the **GUI**, press **Power > OK** (at Confirm).
  - b. Turn the **power supply** switch to OFF (O).
  - c. Remove the **power cord**.

### Replacing the 2000e Card

#### Remove Library from Rack

1. Remove all **external cables**.  
For SCSI drives, leave the terminators attached.
2. If XpressChannel is installed, release it by loosening the **two captive screws** on the back side and, for a Master unit, unplugging the **DB-15 cable**.
3. To reduce weight, we recommend removing the **drive assemblies**:
  - a. Loosen the captive **thumbscrews** at the top and bottom of the drive assembly.
  - b. Fully supporting the assembly, pull the handle to remove the **drive assembly**.
  - c. Place each drive assembly on an **ESD surface** on its side as not to bend the tabs.

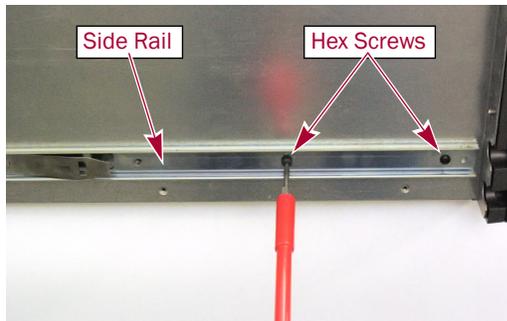
**WARNING:** It is recommended that a mechanical lifter (or at least two people) be used during rack installation or removal to prevent injury.

**AVERTISSEMENT:** Pour éviter toute blessure il est recommandé qu'un monte-charge (ou deux personnes au moins) soit utilisé lors de l'installation ou de l'enlèvement du support.

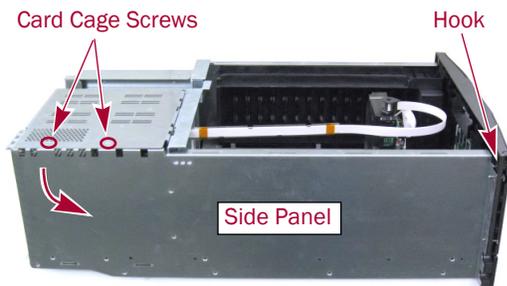
4. Using a mechanical lifter (or two people), remove the **unit** from the rack and place on a secure ESD surface.

### Remove the Old Card

1. Remove **front top cover**:
  - a. Open the front doors and remove and retain the **two screws** securing the front top cover.
  - b. Remove the **cover**, and set aside.
2. Remove and discard the five hexhead screws holding the **inner side rail** on left side. Set the rail aside.

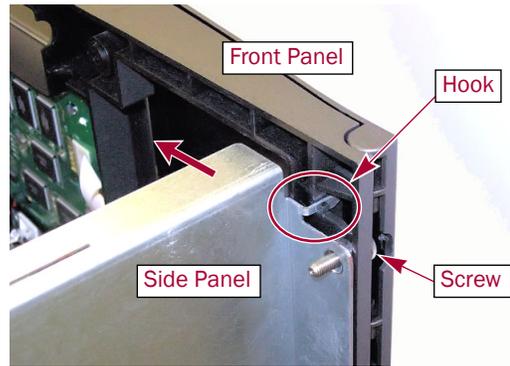


3. Remove the **side panel**:

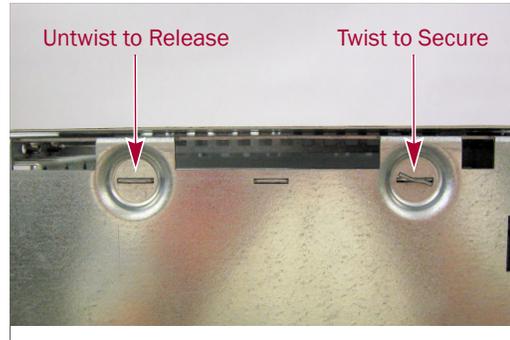


- a. Remove and discard the **14 screws** on the side.
- b. Remove and discard the **two screws** on the **card cage top left edge** holding side panel.
- c. Carefully swing out and lift the **rear** of the side panel and lift the side panel **front hook** off front panel.

You may have to work with retaining screws to extract the side panel.



4. Using a slip-joint pliers, untwist the **three metal tabs** on the card cage side.



5. Carefully swing front edge of **card cage side plate** out and work the rear edge off the toggle switch on the card. Set the plate aside.



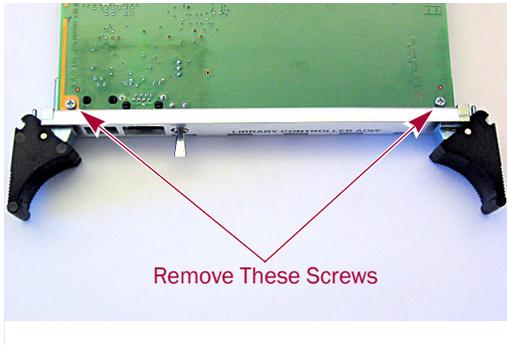
6. Remove the old **controller card**.

### Prepare the New Card

The replacement Library Controller card is used in different libraries and comes with a quick-release plate on the rear connectors. This plate is unnecessary with the NEO 2000e and must be removed:

1. Remove the **new card** and place it on an ESD surface.

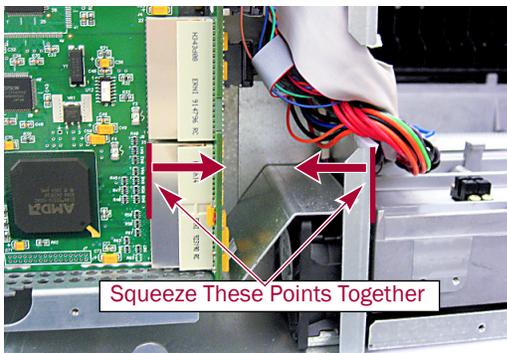
2. Locate the **quick-release plate screws** on the back side of the card.



3. Remove and retain the **two screws**, and slide the quick-release plate off the **new card**.
4. Using the retained screws, attach the **quick-release plate** to the **old card**.
5. Package the **old card** in the ESD bag for return.

### Install the New Card

1. Carefully insert the **new controller card** observing ESD procedures. Ensure the plastic sleeve around the toggle switch stays on.



2. Slide the rear of **card cage side plate** over the toggle switch and insert it onto the three side tabs.
3. Gently twist the **tab edges** to secure the plate.
4. Reinstall the **side panel**:
  - a. With the rear angled out slightly from the library, fasten the **front hook** onto the front panel.
  - b. Swing the **rear** toward the unit until all the tabs are aligned with their respective holes.
  - c. Using **two** new M3x6mm screws, secure the **card cage top edge** to the side panel.
  - d. Using **14** new M3x6mm screws, secure the **side panel** to the library.
5. Using **five** new M4x6mm hexhead screws, reattach the **inner side rail**.
6. Replace the **front top cover**:
  - a. Slide the **cover tabs** into their slots and gently set the front top cover into place.
  - b. Insert the **two retained screws** and tighten them.

### Reinstall the Library

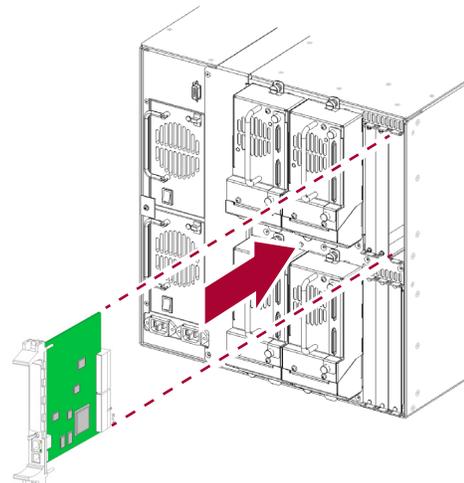
1. Using a mechanical lifter (or two people), reinstall the **library** into the rack.
  2. If removed, reinstall each of the **drive assemblies**:
    - a. While fully supporting the **assembly**, line it up with the open bay and slowly push it into the bay until it seats firmly against the backplane.
    - b. Tighten the two captive **thumbscrews**.
  3. Reconnect all **external cables**.
  4. For SCSI systems, verify the **terminators** are still attached to the drive housings.
  5. If used, reconnect the **XpressChannel** and, for a Master unit, plug in the **DB-15 cable**.
  6. Manually open the doors and reinstall the **magazines**.
- Continue with "Complete the Installation" on page 4.

## Replacing the NEO 4000e Card

**CAUTION:** The Library Controller card only functions in the right-most slot of the Primary card cage.

1. Using a Phillips screwdriver, loosen the **retaining screws** at the top and bottom of the card.
2. Push the **top ejector handle up** and the **bottom ejector handle down** to release the card.
3. Slide the **card** out of the bay.
4. Carefully insert the **new card** into the right-most slot and slide the card into the bay.  
Resistance will be felt when the card begins to mate with the library backplane.
5. Using the card handles, apply just enough force to **seat the card snugly** into the library backplane.
6. Tighten the hold-down **screws** on the card.

Continue with "Complete the Installation" on page 4.



# Replacing the Legacy NEO Library Card

## Replace the Card

Legacy NEO 2000 or NEO 4000 libraries that have been upgraded to E-Series level also use this Controller card.

Follow the same procedure for “Replacing the NEO 4000e Card” on page 3 to replace the card in either library.

## Copy E-Series Key Code

Once the new card is installed, it needs to have the upgrade key entered to activate it. Look inside the left door and copy the **key code** off the E-Series Upgrade sticker. It is needed during the configuration steps.

## Complete the Installation

### Power On the Library

1. Plug in the **power cord**.
2. Turn the power supply **switch** to ON (I).
3. Press the **GUI touchscreen** to power on the module.

### Configure the Library

*NOTE: For more details about these steps, refer to the NEO 2000e/4000e User Guide.*

1. Depending on the type of library module, do one of the following:
  - For a **Master/Standalone** module, at the GUI, press **Menu > Network** to set the IP address of the library noted earlier to allow access to the Web Management Interface.  
If not available, to obtain the static IP address used, contact your network administrator.
  - For a **Slave** module, use the GUI to change it to Slave mode, and reboot.
2. For a legacy NEO library, at the GUI, enter the full 32 digit E-Series Upgrade key through **Menu > Library > Feature Keys**. Hyphens and spaces are ignored.

*NOTE: A Master or Standalone module can also be configured through WebTLC (Setup > Feature Key).*

Wait for the reboot to complete before continuing.

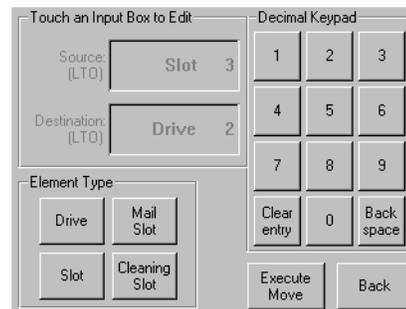
3. Using the default **Administrator password** (“2”), log on to Web Management Interface and reconfigure the library and network.

If necessary, re-enter any **feature key** codes.

### Learn Tape Drive Positions

To prevent the backup software from timing out, it is necessary to have the library learn the bays where all the tape drives are located.

1. At the front panel, press **Move Media**.
2. Move a **tape** to a drive:
  - a. Select a tape in a slot as the **Source**.
  - b. Select a tape drive as the **Destination**.
  - c. Press **Execute Move**.

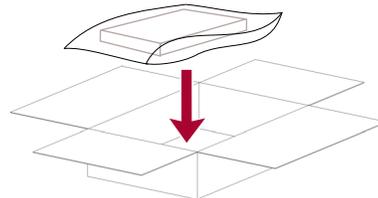


3. Reverse the process to **move the tape** back to its slot.
4. Repeat **Steps 2–3** for the **remaining drives**.

You are now ready to put the library back online and enable the backup software to access it.

### Return Old Part

1. Place the **old part** in the anti-static bag and put it in the replacement part's box.



2. Use an RMA to return the part to **Overland Storage**.

For return shipping details and RMA number, go to: <http://docs.overlandstorage.com/return-instructions>

### Additional Help

You can get additional technical support on the Internet at <http://support.overlandstorage.com>, or call 1-877-654-3429 (toll-free U.S. & Canada), +44 (0) 118-9898050 (Europe), or +1 (858) 571-5555 Option 5 (International).