

Replacement Chassis Instructions

This document describes how to remove and replace a chassis in a NEO S-Series library from Overland Storage.

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

WARNUNG: Um das Risiko eines elektrischen Schlags oder Schäden am Gerät zu vermeiden, ziehen Sie stets den Netzstecker, bevor Sie an der Einheit arbeiten.

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

CAUTION: While working with the unit, observe standard Electrostatic Discharge (ESD) precautions to prevent damage to micro-circuitry or static-sensitive devices.



Prepare the Unit

CAUTION: In the NEOs library, do not replace both the library controller and the chassis at the same time as the serial numbers for both cannot be updated when both are replaced simultaneously. If you receive a new library controller and chassis for the same unit, first install the new library controller in the old chassis as directed in the Spare Library Controller Replacement Instructions, then follow these instructions to replace the chassis.

The following items are included in the new chassis and should not be removed from the old chassis:

- Center bezel with OCP
- Magazine access doors
- Robotic assembly
- Spooling mechanism



Unlock the Magazine

Unlock the magazine using the OCP or RMI. If these methods fail, or if a magazine needs to be removed when the power to the device is off, you can release the magazine manually. Only one magazine or mailslot can be open at a time.

NOTE: As a best practice, perform this procedure while applications are idle. While the magazine is extended, the library robotic assembly cannot move media.

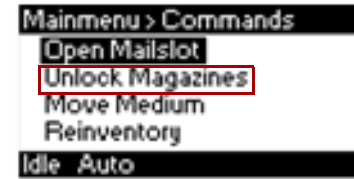
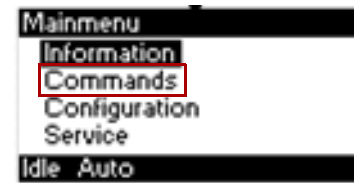
1. Open the **magazine access door**.
2. Log in as an administrator in **OCP** or **RMI**.
3. Unlock the magazine.
 - In OCP, from the **Main menu** screen, select **Commands** > **Unlock Magazines**.
 - In RMI, select **Operations** > **Magazines**, then select the magazine to replace from the drop-down menu.

A message box indicates when the magazine has been unlocked.

NOTE: If not removed, the magazine and the mailslot will reload after 30 seconds.

4. If this procedure is complete, go to [Remove Cartridges](#).
If this procedure did not unlock the magazine, go to [Remove the Magazine Manually](#).

OCP



RMI



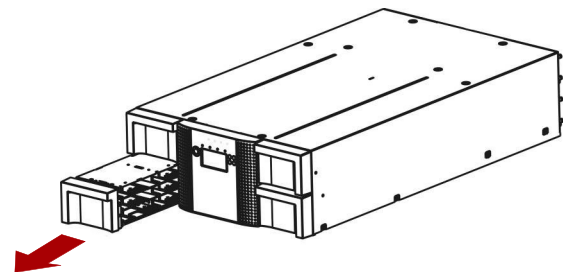
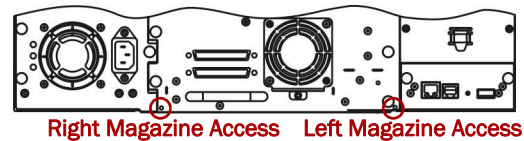
Remove the Magazine Manually

NOTE: This procedure requires two people.

1. Press the **power button** on the front bezel to power down the library.
2. Push a **small metal pin** or a **straightened paper clip** into the magazine access hole.

NOTE: For the 4U, all magazines on one side are released and should be removed at the same time.

3. While one person holds the **pin** or **paper clip** in the hole, the second person gently pulls the **magazine** out of the unit.

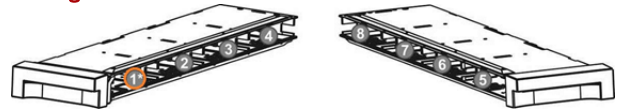


Remove Cartridges

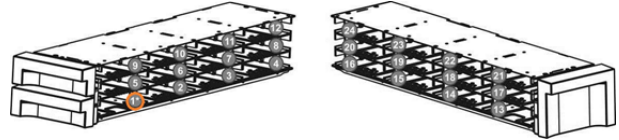
IMPORTANT: Overland recommends that you remove the cartridges to reduce the unit's weight prior to removal.

1. Slowly **pull the magazine** free of the latch.
2. Remove cartridges from the magazine. Note which bay each cartridge was removed from.
3. Repeat [Steps 1–2](#) for any other magazine.

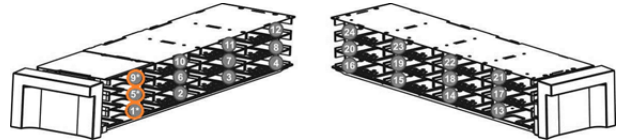
1U Magazine



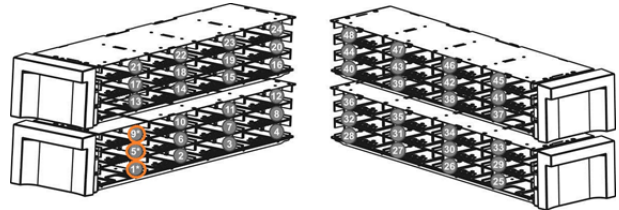
2U Magazine with Single Mail Slot



2U Magazine with Triple Mail Slot



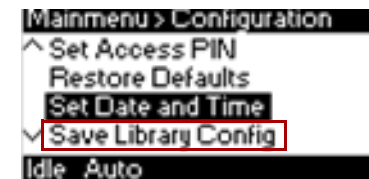
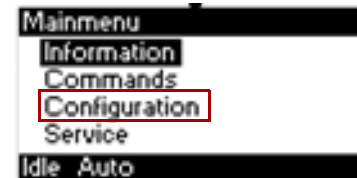
4U Magazine



Save the Configuration

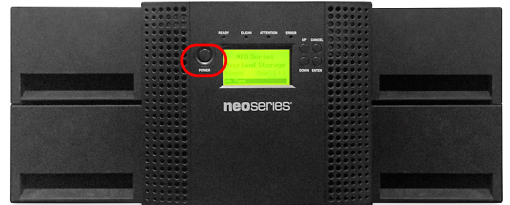
1. To save the configuration file to a USB device, insert a **USB flash drive** into one of the USB ports on the base module.
2. Navigate to the Save Configuration screen.
 - From OCP: **Configuration > Save / Restore Library Config > Save to/Restore from USB**
 - From RMI: **Configuration > Restore Defaults > Save / Restore Config to file**
3. Select the **destination** location for the download:
 - **OCP:** Downloads the configuration file to the USB flash drive inserted into the USB port.
 - **RMI:** Downloads the configuration file to the browser or system running the RMI.
4. Click **Save**.

OCP



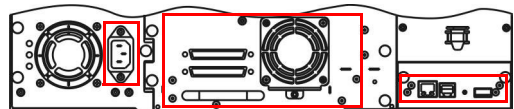
Power Off the Old Unit

1. Verify that all host processes are **idle**.
2. Verify that any assemblies are in the **parked** position.
3. Power off the library from the front panel by depressing the **power button** and holding it for 3 seconds.



Disconnect Cables

1. From the module containing the failed controller, unplug the **AC power cables**.
2. Remove the **expansion interconnect cables** that connect to other modules, if present.
3. If present, remove the **Ethernet cables** and the **USB device**.

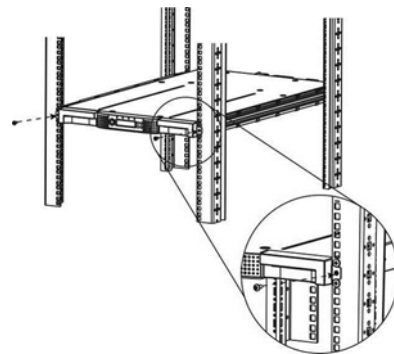


Remove Unit from Rack

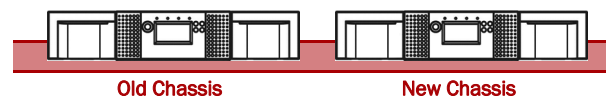
WARNING: It is recommended that a mechanical lifter (or at least two people) be used during rack installation or removal to prevent injury.

WARNUNG: Um Verletzungen zu vermeiden, empfehlen wir zur Rack-Installation oder -Deinstallation die Nutzung einer mechanischen Hebehilfe (oder mindestens zwei Personen).

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



1. Release the **screws** on the library flanges that secure the library to the rack.
2. With a lifter positioned in front of the library, release the rail locks and slide the **library** out onto the lifter.
3. Place on an **ESD-safe** surface side-by-side with the new chassis.

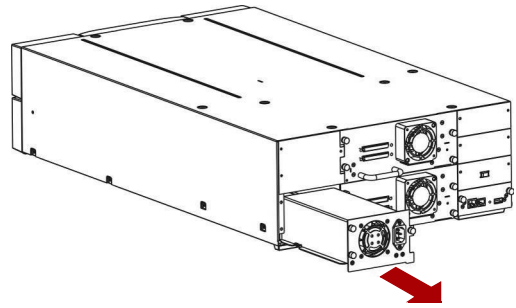


Remove Components from the Old Chassis

Remove the Power Supply

NOTE: If you are installing a new power supply, proceed to *Remove the Power Supply Cover Plate*.

1. Finger-loosen the **three blue captive thumbscrews** on the power supply.
2. Using the thumbscrews, slowly pull the **power supply** approximately 4 inches (10 cm) out of the library.
3. While using one hand to support the bottom of the power supply, use the other hand to completely **remove the power supply** from the module.
4. Set the **power supply** aside for installation in the new chassis.

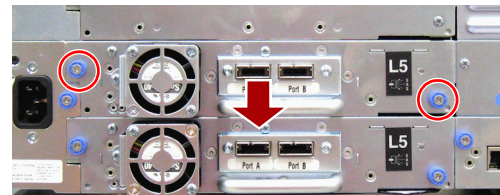


Remove the Tape Drive

1. Loosen the blue captive **thumbscrews** on the tape drive.
2. While supporting the bottom of the drive, **remove the drive** from the library by pulling straight back using the tape drive handle.

CAUTION: Support the bottom of the tape drive when removing it to avoid damaging any of the internal connections.

3. Set the **tape drive** aside for installation in the new chassis.



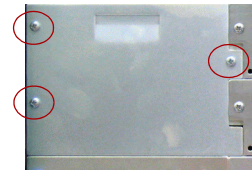
Install Components in the New Chassis

Remove the Power Supply Cover Plate

If a redundant power supply was installed in the old chassis, then the cover plate must be removed from the new chassis before installing the new power supply.

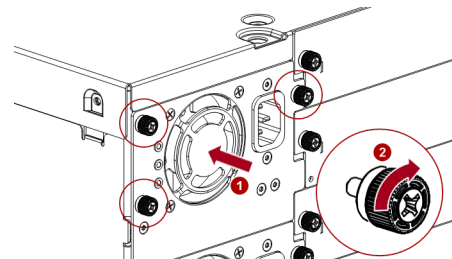
If no redundant power supplies were installed, proceed to *Install the Power Supply*.

1. Using a Phillips screwdriver, **remove** the three screws securing the **power supply cover plate**.
2. Set the **cover plate** on a secure surface.



Install the Power Supply

1. Position the **new power supply** onto the alignment rails in the new chassis.
2. Slide the **power supply** into the library until it is flush with the back panel of the library.
3. Finger-tighten the **blue captive thumbscrews** to secure the power supply to the library.
4. Repeat [Steps 1–3](#) for any other power supply.



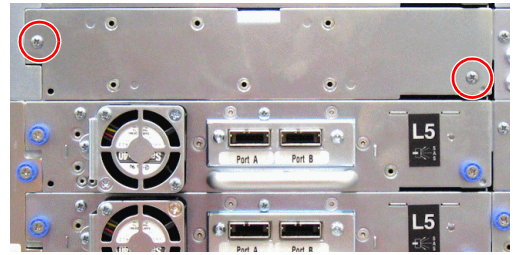
Remove the Drive Bay Cover

If the old chassis contained extra tape drives, remove the drive bay covers in the new chassis before proceeding.

If no additional tape drives were installed in the old chassis, proceed to Install the Tape Drive.

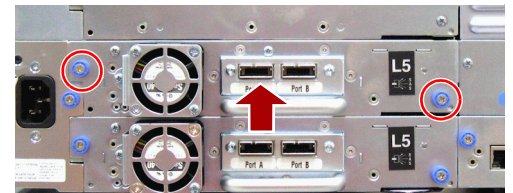
1. Identify the **location** for the tape drive in the new chassis.
 - If this is the first tape drive, install it in the **bottom drive bay**.
 - Otherwise, install the new drive in the **next higher drive location**.
2. Using a Phillips screwdriver, remove the half-height drive **bay cover**.

Continue with Install the Tape Drive.



Install the Tape Drive

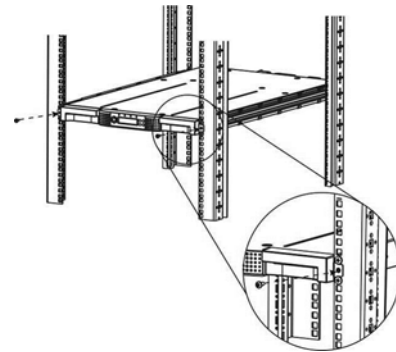
1. While supporting the drive assembly, slowly insert and align the **tape drive** into the drive bay in the new chassis. The tape drive should be flush with the back panel of the device.
2. Finger-tighten the captive **thumbscrews** until the tape drive is secure.
3. Repeat steps [Steps 1–2](#) for any other tape drives.



Reassemble the Unit

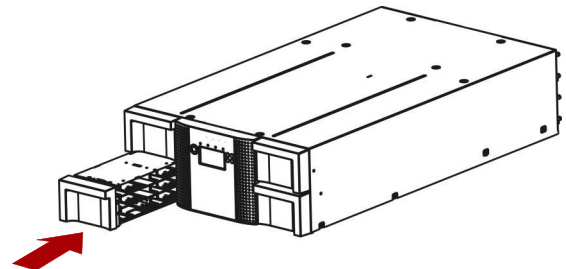
Reinstall Unit in Rack

1. Slide out the **middle** slide rails on both sides.
2. Using the mechanical lifter, position the **server** in front of the rack.
3. Insert the server **inner rails** into the middle rails and slide the server into the rack.
4. Secure the server to the rack with the **captive screws** on the bottom of the server flanges.
5. After the appliance is secured in the rack, verify all **drives** are secure in their bays and have not become unseated.



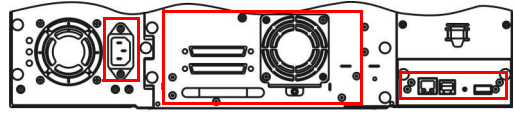
Reload and Reinstall the Magazines

1. Position the **magazine rails** onto the **alignment rails**.
2. Load the **tape cartridges** into the new magazine in the same location they were in previously.
3. Push the **magazine handle** slowly until the magazine release latch snaps into place. The magazine locks into place after it is correctly installed.



Reconnect Cables

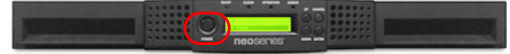
1. **Reconnect** all the **cables** to the same ports they were removed from the unit.
2. Reattach the **power cords**.



Power On the Library

Press the **power button** on the base module for one to two seconds.

The **green LED** is shown as the library completes its Power-on Self-test (POST).



Verify/Update the Library Firmware

Verify the Library Firmware

1. Confirm that the **library** recognizes the **new controller** by selecting **Status > Library Status**.

Check the event log to make sure any library controller events have cleared.



IMPORTANT: If you are asked whether or not to retain the serial number, always select **Yes**.

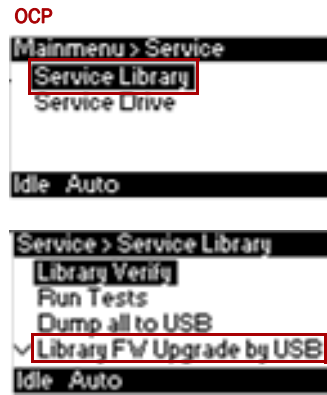
2. Use the RMI or OCP to verify that the library controller has the current **firmware**.
 - If the firmware is current, proceed to Return Old Parts to Overland.
 - If the firmware needs to be updated, proceed to Update the System Firmware.

OCP

```
Startup
Firmware Rev: 0.60
Drives:      2
Magazines:   2
Mailslot:
Busy Rand
```

Update the System Firmware

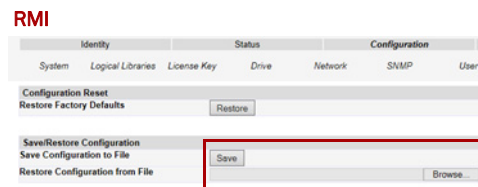
1. Download the latest firmware from:
ftp://ftp.overlandstorage.com/Firmware/Neo_Series/Neo-XL/
2. Load the firmware file on a **USB stick**.
3. Attach the **USB stick** to the port on the back panel.
4. Use the OCP or RMI to upload the firmware upgrade.
 - From OCP, select **Main Menu > Service > Service Library > FW Upgrade by USB**.
 - From RMI, select **Service > Firmware > Upgrade Library Firmware > Upgrade**.
5. Click **Browse** to select the firmware file.
6. Click **Upload**.
7. Once the update is complete, **verify** the firmware version.



Restore the Configuration File

To complete installation of the new library controller, restore the library configuration file:

1. Select **Configuration > System > Save/Restore Configuration**.
2. Select **Restore Configuration File**.
3. **Browse** and select the configuration file.
4. Click **Upload File & Restore**.

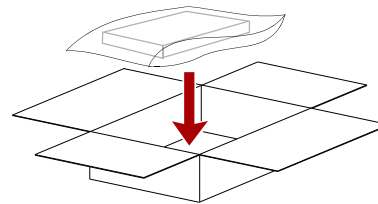


IMPORTANT: If your backup software licensing configuration requires 12 slots, select **Configuration > System > Active Slots**, choose a value of **12**, and click **Apply**.



Return Old Parts to Overland

1. Place the **old chassis** in the packing materials and put in the replacement part's box.
2. Use the existing **packing material** to secure it in the box.
3. Use an RMA to return the chassis to **Overland Storage**.
For return shipping details and RMA number, go to:
<http://docs.overlandstorage.com/return-instructions>.



<http://support.overlandstorage.com>

You can get additional technical support on the Internet at the **Overland Storage Support web page**, or by contacting Overland Storage using the information found on the **Contact Us** page on our web site.