

Spare Chassis Replacement Instructions

This document describes how to remove and replace a chassis in a NEO XL-Series library or expansion module 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 NEOxl 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
- Magazine banks (including mailslot)
- Robotic assembly
- Spooling mechanism



Remove Cartridges

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

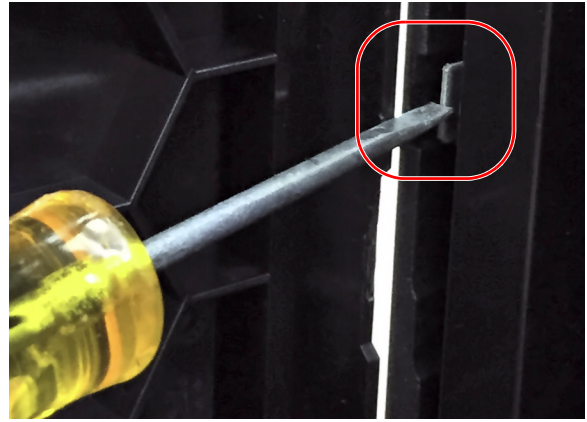
1. Open the left door.
2. Insert a small flat head screwdriver or Torx driver into the **left magazine release hole** and gently push the tab in.

CAUTION: Do not exert force once you encounter resistance. Doing so can damage the device.

3. Slowly **pull the magazine** free of the latch.
4. Remove cartridges from the magazine. Note which bay each cartridge was removed from.

Left Magazine

1	11	21	31
2	12	22	32
3	13	23	33
4	14	24	34
5	15	25	35
6	16	26	36
7	17	27	37
8	18	28	38
9	19	29	39
10	20	30	40



Right Magazine

41	51	61	71
42	52	62	72
43	53	63	73
44	54	64	74
45	55	65	75
46	56	66	76
47	57	67	77
48	58	68	78
49	59	69	79
50	60	70	80

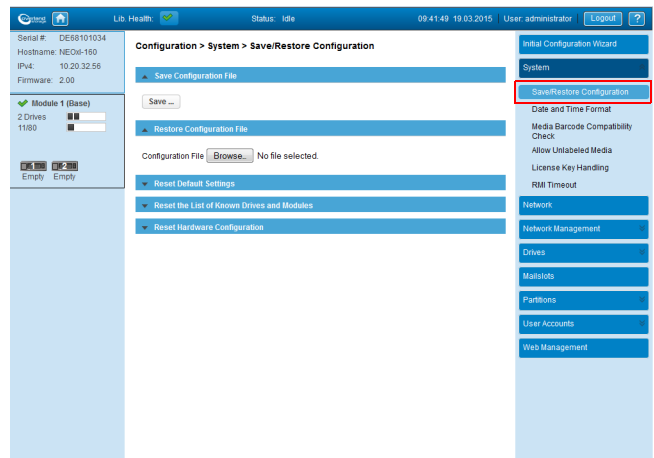
5. Open the right door. If the right magazine is present, repeat **Steps 2–4** for the right magazine.

NOTE: Depending on the model, the optional right magazine may have 20 or 40 cartridges and may or may not have Mail Slots configured. The example provided shows all 80 slots with no mail slots configured.

Save the Configuration

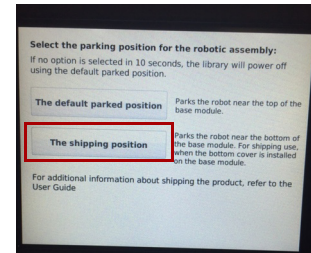
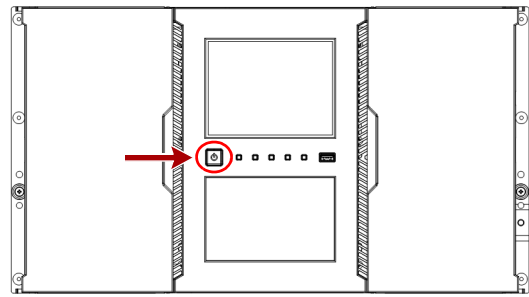
This process is only needed for the NEOxl library. If you are replacing an expansion unit chassis, skip to [Power Off the Old Unit](#).

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



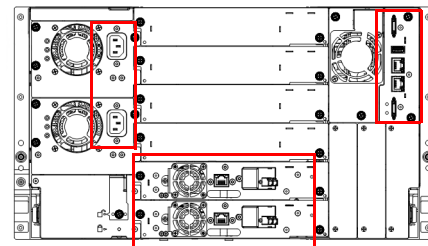
Power Off the Old Unit

1. Power off the library from the front panel by depressing the **power button** and holding it for 3 seconds.
During the shutdown, you will be given a choice of selecting the default parked position or the shipping position.
2. Select the **Shipping Position**.
If the library does not perform a soft shutdown, depress and hold the power button for 10 seconds.
3. Verify that all host processes are **idle**.



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**.

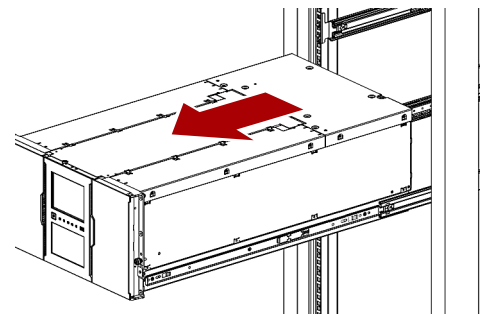


Remove Unit from Rack

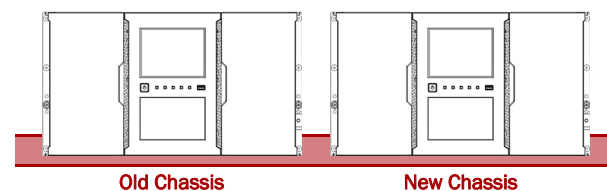
WARNING: It is recommended that a mechanical lifter (or at least two people) be used during rack installation or removal to prevent injury.

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 recommandé qu'un monte-charge (ou deux personnes au moins) soit utilisé lors de l'installation ou de l'enlèvement du support.



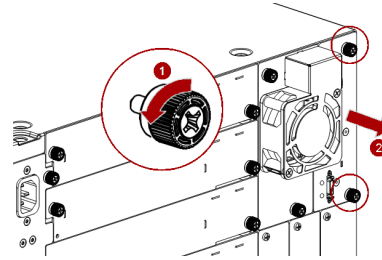
1. Release the **captive screws** on the bottom of the library flanges that secure the library to the rack.
2. With a lifter positioned in front of the library, release the rail locks and slide the **library** out onto the lifter.
3. Place on an **ESD-safe** surface side-by-side with the new chassis.



Remove Components from the Old Chassis

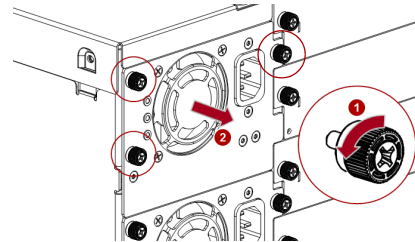
Remove the Library Controller

1. On the old chassis, loosen the **two blue captive thumbscrews** on the controller.
2. Using the thumbscrews, slowly remove the **controller** from the library.



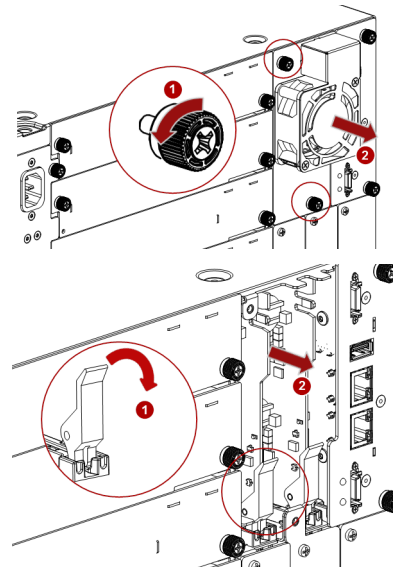
Remove the Power Supply from the Old Chassis

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 supporting the bottom of the power supply with one hand, use the other hand to completely **remove the power supply** from the module and set it aside.
4. Repeat [Steps 1–3](#) to remove any other **power supply**.



Remove the Chassis Fan Assembly and Drive Power Boards

1. Loosen the **two blue captive thumbscrews** on the chassis fan assembly.
2. Using the thumbscrews, slowly **remove the chassis fan assembly** from the library. Set the **fan assembly** aside.
3. Slowly slide any **drive power boards** out of the library and set them aside on an ESD-secure surface.



Remove the Tape Drive

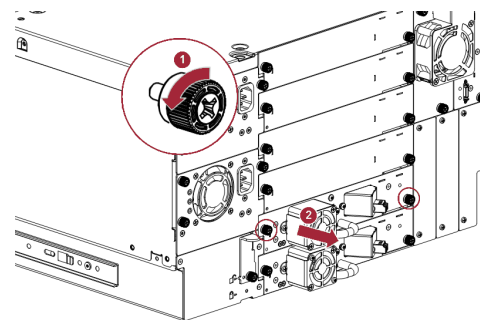
1. Loosen the blue captive **thumbscrews** on the tape drive.
2. While supporting the bottom of the drive, **remove the drive** from the library by pulling straight back using the tape drive handle.



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

Set the **tape drive** aside.

3. Repeat [Steps 1–2](#) for any other **tape drives**.

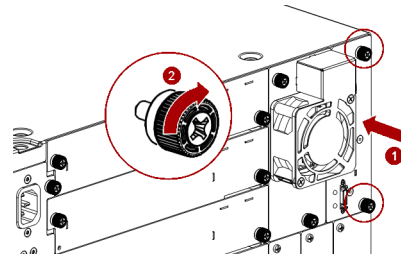


Install Components in New Chassis

Install the Library Controller

NOTE: To replace a

1. Position the controller on the **alignment rails** in the **new chassis**.
2. Slide the **controller** slowly into the library until it is flush with the back panel of the library.
3. **Finger-tighten** the blue captive thumbscrews to secure it to the library.

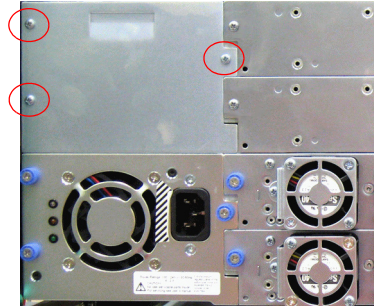


Remove the Power Supply Cover Plate

If you need to install two power supplies in the new chassis, you will need to remove the second bay cover plate.

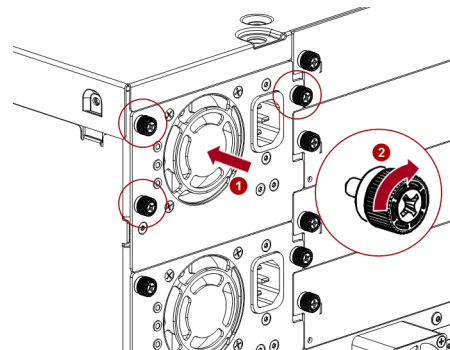
If no cover plates are present in the new chassis, proceed to [Install the Power Supply](#).

1. In the new chassis, 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

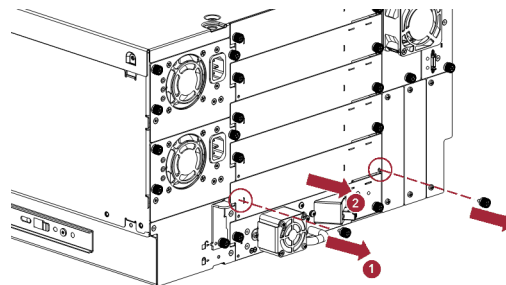
1. In the new chassis, position the **power supply** onto the alignment rails.
2. Slide the **power supply** into the library until it is flush with the back panel of the library.
3. Finger-tighten the **blue captive thumbscrews** to secure the power supply to the library.
4. To install a redundant **power supply**, repeat [Steps 1–3](#).



Remove the Tape Drive Bay Cover

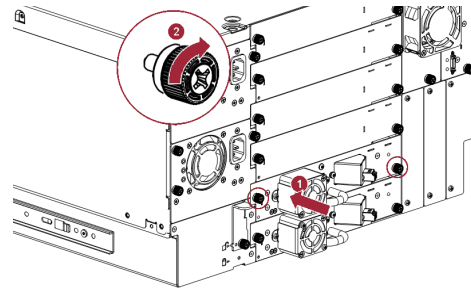
If no drive bay cover plates are present on the bays being used, proceed to [Install the Tape Drive](#).

1. Identify the **location** for the tape drive.
Install all the tape drives in the same locations as in the old chassis.
2. Using a Phillips screwdriver, **remove** the half-height drive **bay cover**.
3. To create access for additional **tape drives**, repeat [Steps 1–2](#).



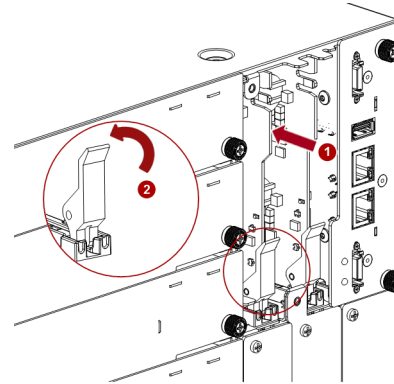
Install the Tape Drive

1. While supporting the drive assembly, slowly insert and align the **tape drive** into the same drive bay location it used in the old 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. To install additional **tape drives**, repeat [Steps 1–2](#).



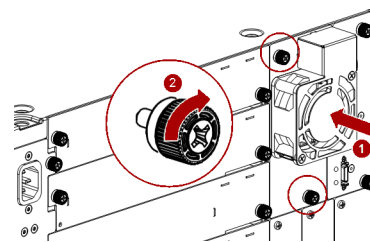
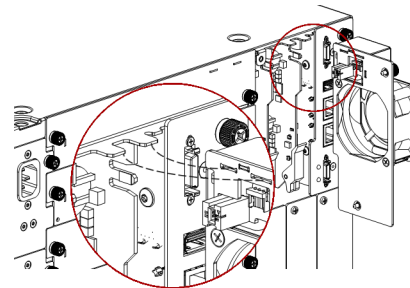
Install the Drive Power Board

1. If used, position the **drive power board** onto the alignment rails of the new chassis.
2. Slide the **drive power board** into the library until seated firmly.
3. Push the **latch** up until it snaps into place.
When the drive power board is installed correctly, the latch will not be loose.
4. Repeat [Steps 1–3](#) to install any other drive power boards.



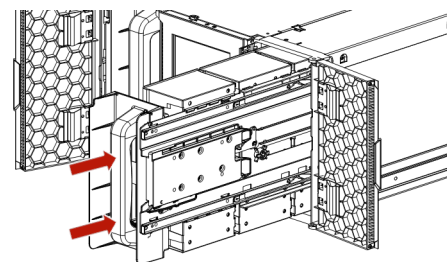
Install the Fan Assembly

1. Align the **tabs** on the new library with the **slots** at the top of the chassis fan assembly.
2. Push in the **fan assembly** until it is flush with the back panel of the library.
3. Finger-tighten the **blue captive thumbscrews** to secure the assembly to the library.



Install the Magazine

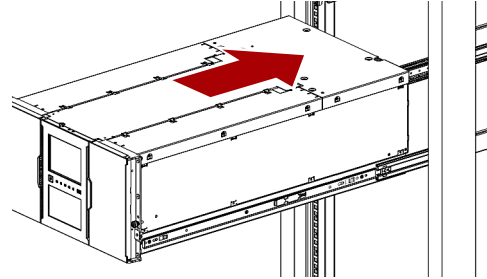
1. Pull the **magazine** back out until fully extended.
2. Load the **tape cartridges** into the new magazine in the same location they were in previously.
3. Push the **magazine handle** slowly until the magazine release latch snaps into place. The magazine locks into place after it is correctly installed.



Install Unit in Rack

Reinstall Unit in Rack

1. Slide out the **middle** slide rails on both sides.
2. Using the mechanical lifter, position the **library** in front of the rack.
3. Insert the library **inner rails** into the middle rails and slide the library into the rack.
4. Secure the library to the rack with the **captive screws** on the bottom of the library flanges.



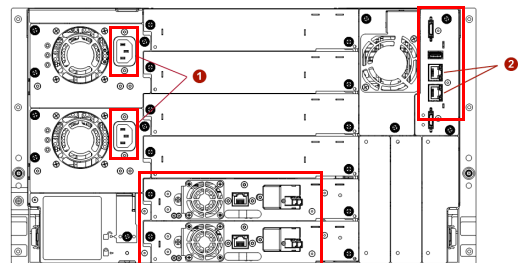
Reinstall Cartridges

1. Pull the **magazine** back out until fully extended.
2. Load the **tape cartridges** into the new magazine in the same location they were in previously.
Refer to the number on the assembly.
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 and Power On

1. Attach the **power cords** to the new library (1).
2. Attach the Ethernet cables and USB cables (2).
3. Connect the **tape drive connections**.
If you are installing an **SAS fanout cable**:
 - a. Attach one **mini-SAS connector** into the connector on the tape drive.
 - b. Use the **other ends** to connect tape drives, or coil and secure them to the rack to minimize stress on the connectors.



Tape Drive Connections

If you are installing an **FC cable**:

- a. Connect the **FC cable connector** to the connector on the tape drive.
- b. If you installed a new tape drive, configure the **FC interface**.

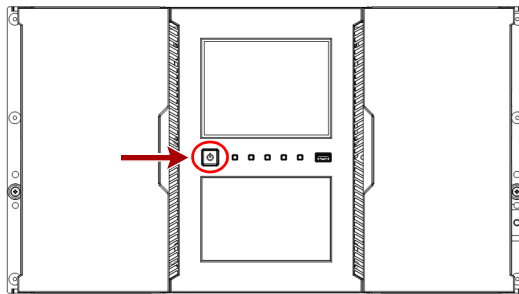
Power Cycle the Unit

CAUTION: In an NEOxl library, when all other components have been moved, the library must be turned on and off before replacing the library controller. Replacing the library controller before power cycling the library will lead to library operation failure.

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).

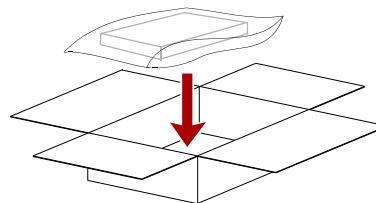
NOTE: To install a new library controller, once the library has completed POST, refer to the Spare Library Controller Instructions.



Return Old Parts to Overland

1. Place the **old part** in the anti-static bag and put it 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 part 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.