

Spare Robotic Assembly Instructions

This document describes how to remove and replace a robotic assembly in a NEO XL-series 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.

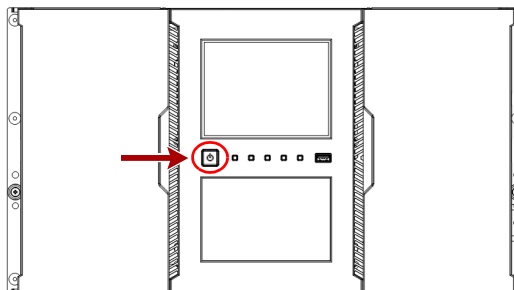
CAUTION: While working with the unit, observe standard Electrostatic Discharge (ESD) precautions to prevent damage to micro-circuitry or static-sensitive devices.



Prepare the Unit

Power Off the Library

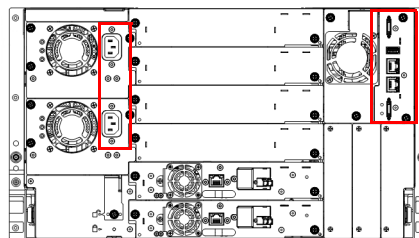
1. Verify that the **robotic assembly** is in its parked position.
2. Verify that all host processes are **idle**.
3. Power off the library from the front panel by depressing the **power button** and holding it for 3 seconds.
If the library does not perform a soft shutdown, depress and hold the power button for 10 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**.

NOTE: An expansion module does not have Ethernet or USB ports.



Remove Cartridges

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

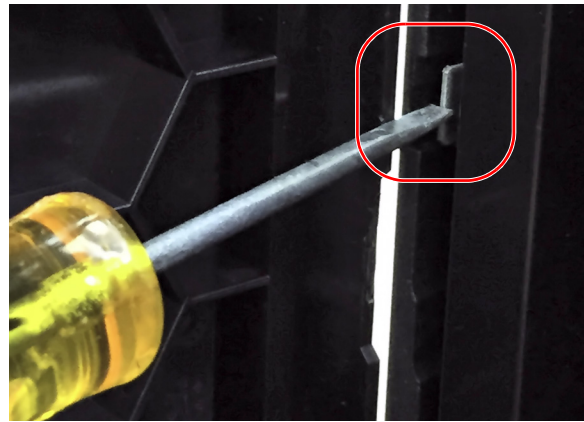
1. Open the left door.
2. Insert a small flat head screwdriver or Torx driver into the **left magazine release hole** and gently push the tab in.

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 bays with no mail slots configured.

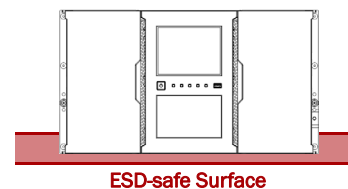
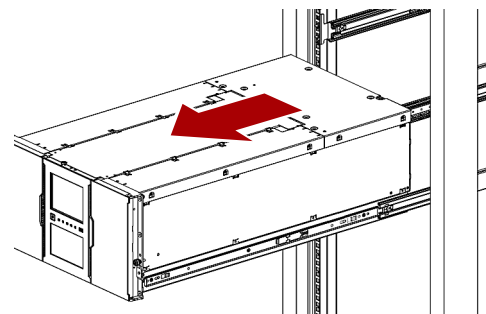
Remove Unit from Rack

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.

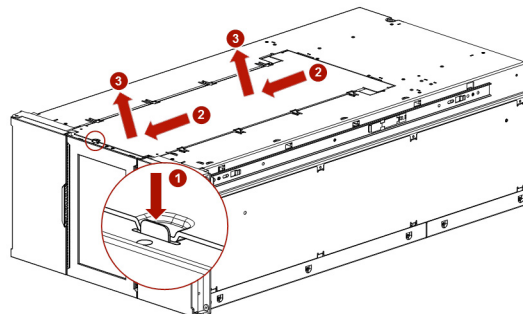
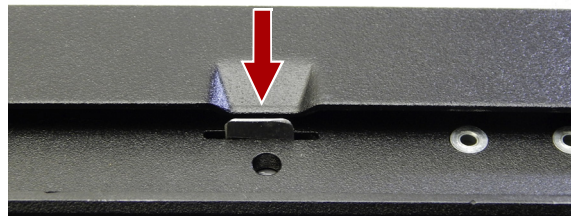
1. Release the **front captive screws** on the bottom of the library flanges that secure the library to the rack.
2. With a lifter positioned in front of the library, release the rail locks and slide the **chassis** out onto the lifter.
3. Place on an **ESD-safe** surface.



Install/Replace Robotic Assembly

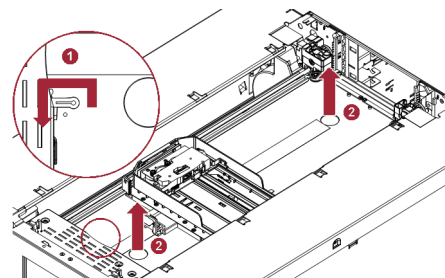
Remove the Cover

1. Push a small flat head or Torx screwdriver into the hole to retract the spring lock.
2. Slide the cover towards the front of the unit. The cover should pop free.
3. Remove the cover from the module.



Remove the Robotic Assembly and Spooling Mechanism from the Library Module

1. If needed, slide the **cartridge carrier** to the middle to access the robot locking lever.
2. Unlock the robot by moving the **blue lever** to the left, then toward the front of the unit, then to the right, as shown on the label.
3. Place your fingers into the **large holes** on the robotic assembly and pull up slowly.



NOTE: The robotic assembly will offer resistance. Lift the robotic assembly no faster than 12 mm (0.5 inch) per second.

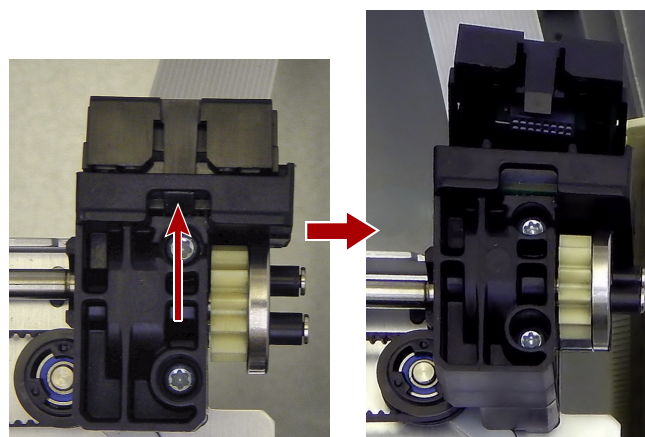
4. Lift the **robotic assembly** gently from the module and place it on top of the module on the right side (opposite the spooling mechanism).

NOTE: Take care not to damage the spooling cable.

5. Use a small flathead screwdriver to press and push the **small latch on top of the robotic assembly** to unlock the spooling cable.
6. Lift the **spooling cable** from the robotic assembly and place it in its cradle at the top of the spooling mechanism.
7. Set aside the **old robotic assembly** for return to Overland.



IMPORTANT: If there is a tape cartridge still in the cartridge carrier, remove the cartridge by lifting it straight up; you may need to move the cartridge slightly from side to side.



Install the New Robotic Assembly

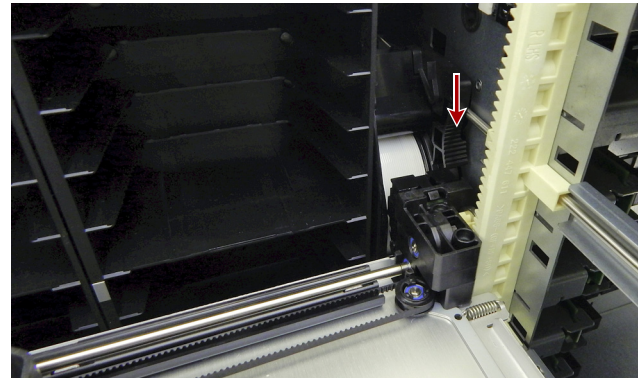
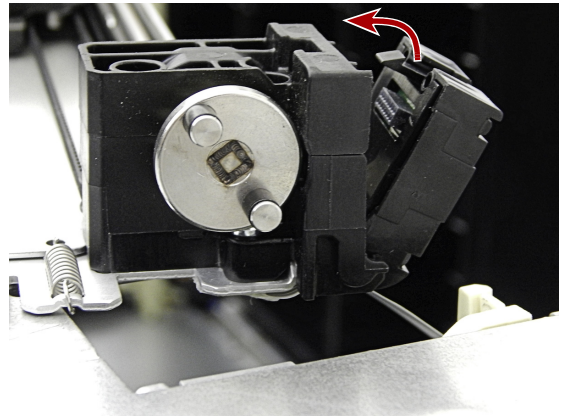
1. Verify that the new robotic assembly is **unlocked**.
If the robot is locked, unlock it.
Standing at the front of the module, move the blue lever to the left, then toward the front, then to the right, as shown on the label.
2. Reconnect the **spooling cable** to the robotic assembly.
 - a. Remove the end of the **spooling cable** that connects to the robotic assembly from its cradle.
 - b. Place the **spooling cable** into the groove at its base and rotate until it latches into place.
3. Align the gears of the **robotic assembly** with the grooves in the inside corners of the module.
4. Push the **robotic assembly** down slowly until the assembly begins to lower on its own.



CAUTION: Lower the robotic assembly no faster than 12 mm (0.5 inch) per second. If you push too hard or too quickly, damage to the robotic assembly and the module may occur.

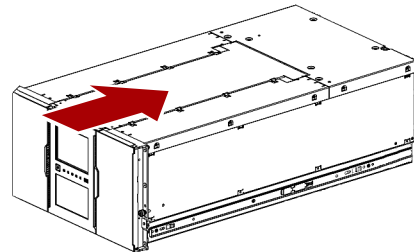
NOTE: The robotic assembly should drop smoothly when applying gentle force. If it does not, check the alignment of the gears.

5. Lock the **robot**.
Move the blue lever to the left, then toward the rear of the unit, then to the right.



Reinstall Library Top Cover

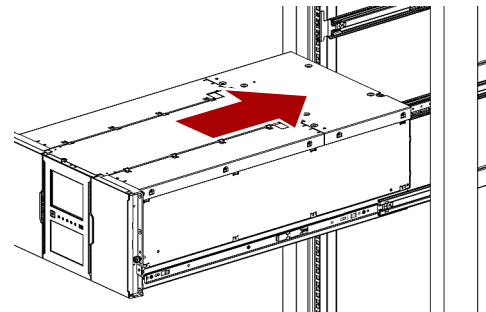
1. Push the left magazine back into the module until it locks into place.
2. Replace the top cover on the base module.
Align all tabs on the cover with the slots on the module, gently push it down, and then slide the cover toward the back of the module until the spring lock engages.



Reassemble the Unit

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 rack rails and slide the library into the rack.
4. Secure the library to the rack with the **front captive screws** on the bottom of the library flanges.



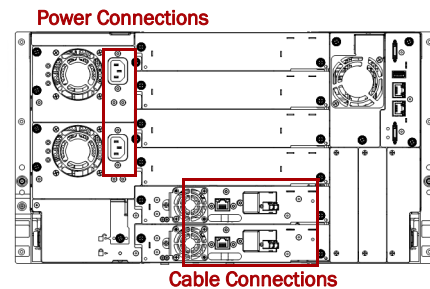
Reinstall Cartridges

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. **Reconnect** all the **cables** to the same ports they were removed from the unit.
2. Reattach the **power cords**.
3. Power the **library** back on.



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>.

