Spare Mezzanine RAID Card Instructions

This document describes how to remove and replace a mezzanine RAID controller card in a NEO 80 or 160 Agility appliance from Overland Storage.

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

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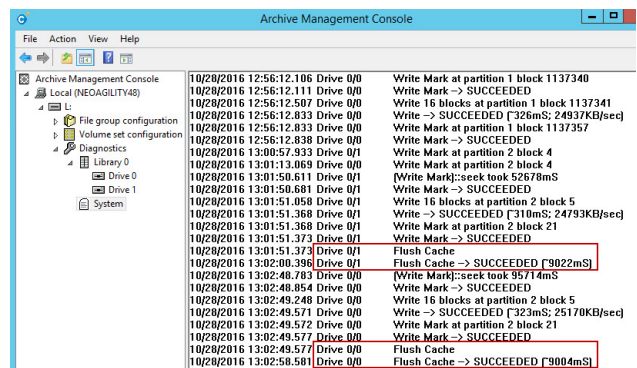
⚠️ **CAUTION:** While working with the appliance, observe standard Electrostatic Discharge (ESD) precautions to prevent damage to micro-circuitry or static-sensitive devices.

Prepare the Appliance

Power Appliance Off

⚠️ **CAUTION:** To prevent data corruption and loss, verify that all processes are inactive and idle before shutting down the NEO Agility appliance.

1. Using either console or remote desktop, log into the appliance as an **administrator**.
2. Verify that all host processes are **idle**.
3. From the **Agility Management Console**, verify that all queued tape write operations have completed.

   Review the last entries in the **Diagnostics > System** log for the Flush Cache > SUCCEEDED events for all tape drives.
4. Right-click the Windows logo in the lower-left corner and select **Shutdown or sign out > Shutdown**.
5. When all the LEDs are off, disconnect the **power cords** from their sockets.
6. Disconnect the remaining **cables** from the unit, noting their locations.

Power Sockets   Cable Ports

Remove the Bezel

1. If needed, use the **supplied key** to unlock the bezel.
2. Press in the **latch** on the right to release the bezel.
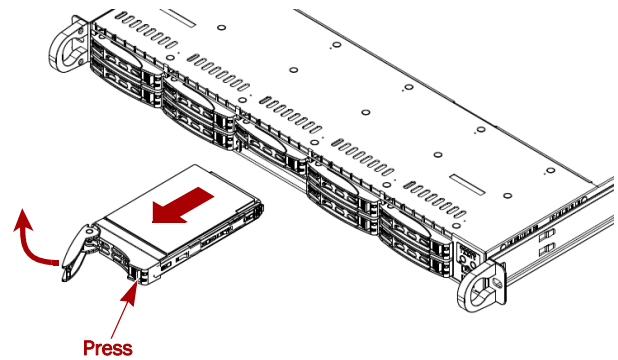3. Carefully swing the **bezel** out, remove it from the appliance, and set it aside.

Remove the Drives

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

NOTE: *Do not remove the disk drives from their carriers. Doing so voids the drive warranty.*

Remove **all** the drive and blank carriers noting from which bay they were removed:

1. Press the **button** on the right side of the carrier to release the built-in handle.
2. Using the **handle**, pull the carrier out.
3. **Number the carrier** and set it on a secure surface.
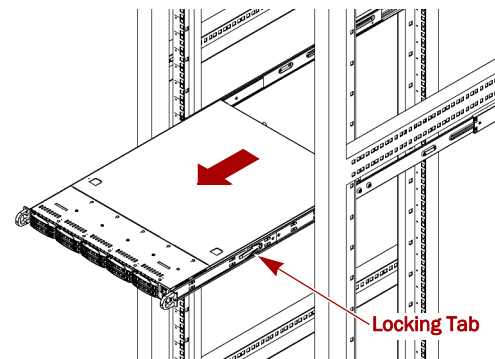4. Repeat Steps 1–3 for **all** the remaining drive carriers.

Press

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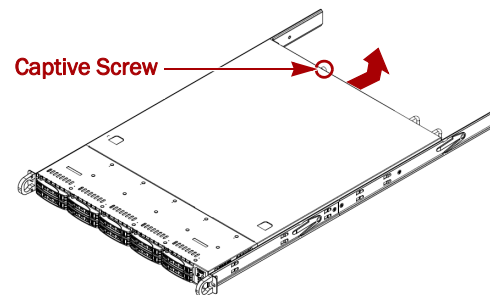
AVERTISSEMENT: Pour éviter toute blessure il est recommande qu'un monte-charge (ou deux personnes au moins) soit utilisé lors de l'installation ou de l'enlèvement du support.

1. Remove and retain the **two screws** on the front flanges that secure the appliance to the rack.
2. With a lifter positioned in front of the appliance, fully extend the rails to slide the **chassis** out onto the lifter.
3. Depress the **rail locking tabs** on each side to release the appliance and place it onto the lifter.
4. Place the chassis on a **secure surface**.

Locking Tab

Remove Top Panel

1. With the appliance on a secure surface, release the captive screw at the rear of the top panel.
2. Slide the **top panel** toward the rear and lift it off.
   Only about **one-half inch** (1.25cm) movement is required.
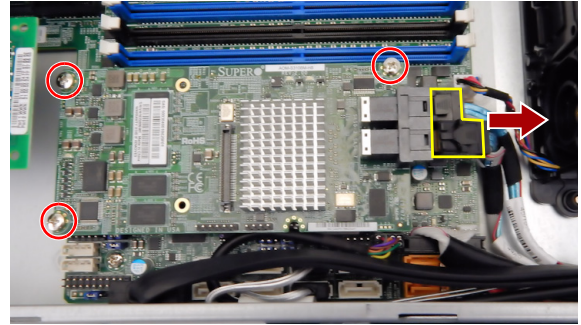3. Repeat Steps 1–2 for the **new chassis**.

Captive Screw

Install/Replace Mezzanine Card

Remove Existing Mezzanine Card

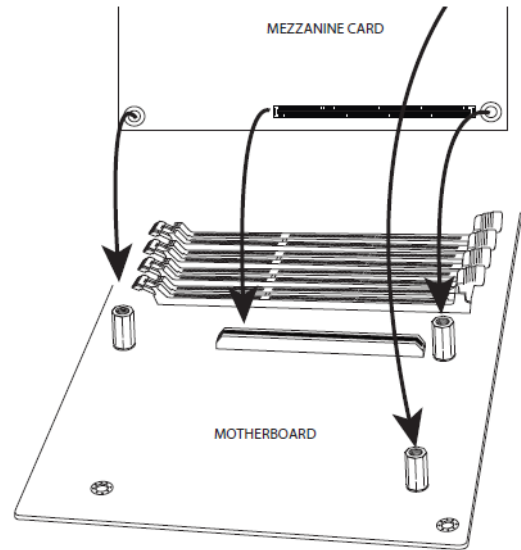Note both the **orientation** and **location** of card in chassis.

1. Loosen the **latches** securing the two tie-wrapped cables to the mezzanine card.

   NOTE: *Do not cut the cable tie-wraps during this procedure.*

2. Disconnect the **two cables** from the mezzanine card.

3. Use a Phillips screwdriver to remove and retain the **three screws** securing the mezzanine card to the chassis.

4. With both hands, lift the **card** up by its corners to unseat it from the chassis, setting it aside for return to Overland.
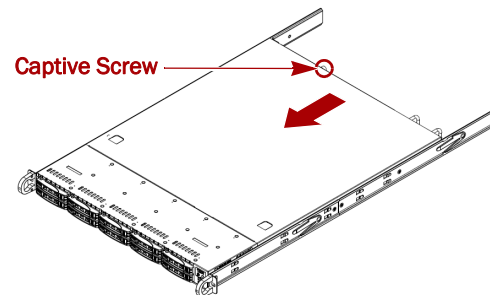
Install New Mezzanine Card

1. With both hands, carefully seat the **new card** in the slot.

2. Using a Phillips screwdriver, attach the mezzanine card to the chassis with the **three retained screws**.

3. Connect the previously removed **two cables** in the same order as before to the new mezzanine card.

Complete the Replacement

Reinstall Top Panel

1. Align the top panel over the appliance with no more than **one-half inch** (1.25cm) extending out over the rear and gently press it down onto the appliance.

2. Slide the panel **forward** into position.

3. Tighten the **captive screw** at the rear of the panel to ensure it is securely seated.
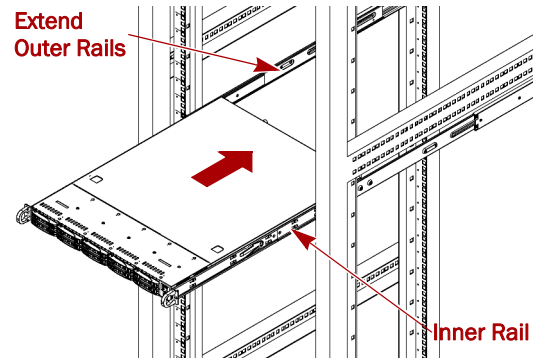
Reinstall Appliance in Rack

1. Fully extend the **outer rails** from the rack to the front.

2. Using the mechanical lifter, position the **appliance** in front of the rack, aligning the **inner rails** with the rack **outer rails**.

3. Slide the chassis into the rail racks, keeping the pressure even on both sides, until the **locking tabs** click into place.

   NOTE: You may need to depress the locking tabs when reinstalling the appliance to ensure they are securely seated.
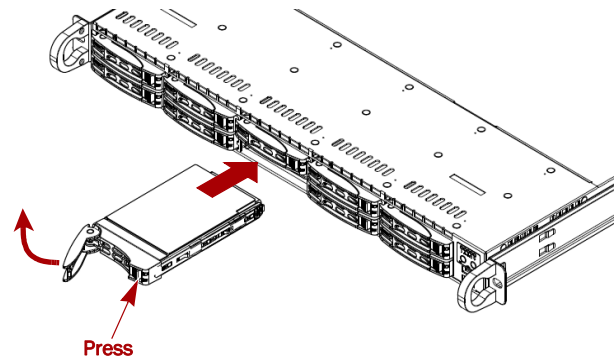
4. Reinstall the retained **two screws** in the front appliance flanges to secure the appliance to the rack.
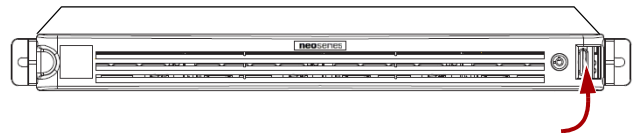
Reinstall Drives

1. Position a **drive assembly** in front of its empty **bay**.

   They MUST be returned to the bay they were removed from. Refer to the number on the assembly.

2. Slide the **assembly** in until it stops.

3. Press the **handle** in until the latch **clicks**, securing it.

4. Repeat Steps 1–3 for **all** remaining drive carriers.

   IMPORTANT: To maintain proper airflow and cooling, a drive assembly or a blank carrier must be installed in *every* bay. No empty bays are allowed.

Attach the Bezel

1. Holding the bezel level horizontally and at a 45º angle to the front, insert the **left bezel tabs** into the left flanges.

2. Pressing in the release latch on the right, swing the **bezel** into place on the right, and let go the latch to secure it.

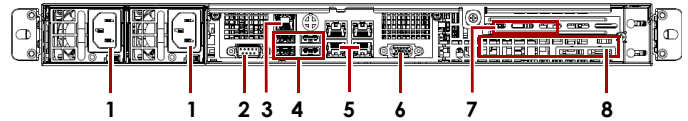3. If needed, **lock** the bezel using the supplied key.

Reconnect Cables and Power On

1. Reconnect **fibre channel (FC) or SAS cables** from the FC/SAS ports on the NEO library tape drives to the NEO Agility appliance.

   NOTE: For FC environments, the interconnect may be from an FC switch.

2. Reconnect the **network cables** to the Ethernet ports.

3. If required for **console connection**, reattach a video monitor cable to the VGA port and keyboard/mouse cable to a USB port.

4. If needed, use the **IPMI port** for hardware monitoring.

5. Reattach both **power cords** to the AC power sockets on the appliance.

6. Plug the **power cords** into a UPS appliance or a properly grounded AC power source.

7. Press the **power switch** to power the appliance back ON.

1 - AC Power
2 - VGA Port
3 - IPMI Port
4 - USB 3.0 Ports (4)
5 - 1GbE Port (2)
6 - Serial Port
7 - FC (80/160 only) or SAS Ports (2)
8 - Optional card

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.