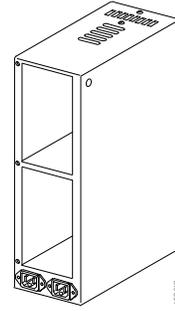


# Spare Power Supply Receiver

## Remove & Replace Instructions



### Overview & Notes

**IMPORTANT:** Overland Storage requires that all NEO Series parts be removed and replaced by an Overland Storage authorized service provider. Improper installation may result in damage which voids existing warranties.

This document describes how to remove and replace the Power Supply Receiver of a NEO 4000E library from Overland Storage.

**WARNING:** The GUI touch screen does not completely shut off NEO SERIES system power. To reduce the risk of electric shock or damage, unplug both power cords.

**CAUTION:** To prevent damage, do not leave a power supply receiver bay empty during operation of the unit.

#### Unpacking the Spare

Carefully unpack and verify that you have all the parts:

- NEO 4000E power supply receiver
- Five M3x6mm flathead screws
- Six M4x8mm flathead screws
- One 6/32x3/8 panhead Phillips screw
- Five 6/32x1/4 flathead screws
- These instructions

**NOTE:** Except for the DB-15 jack screws, discard all the old screws and use the new screws provided.

#### Electrostatic Discharge Information

A discharge of static electricity can damage micro-circuitry or static-sensitive devices. To help prevent Electrostatic Discharge (ESD), observe standard ESD precautions.

### Prepare the Library

1. If the library is **operational**:
  - a. Using the GUI or the application software, remove any **cartridges** from the drives to prevent damage.
  - b. Exit the **application software** and, if necessary, stop the software services.
  - c. Use the GUI to remove **all** the magazines.

**IMPORTANT:** If the library is non-operational, the doors can be manually opened by pushing a stiff wire through the front panel release holes (Figure 1).

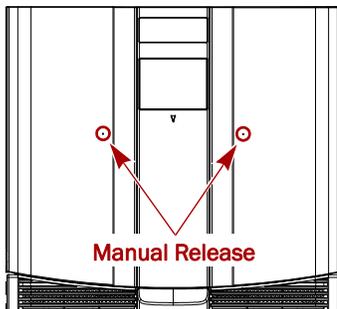


Figure 1. Manual Door Release Locations

2. **Shut down** the library as follows:
  - a. If necessary, use the **GUI** to power down the library.
  - b. Turn the **power supply** switches to OFF (O).
  - c. Remove the **power cords**.
  - d. Remove all **data cables**.
  - e. Also, to reduce weight, we recommend removing the **drive assemblies**.
3. If XpressChannel is installed, release it by loosening the **four captive screws** on the back side and unplugging the **DB-15 plug**.

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

4. Using a mechanical lifter (or two people), remove the **unit** from the rack and place on a secure ESD surface.
5. Remove the two key top **covers**:
  - a. Remove the **two screws** securing the **primary cover** and set the cover aside.
  - b. Remove the **four screws** securing the **power supply cover** and set the cover aside.

6. If necessary, remove the XpressChannel **cover plate** (Figure 2):
  - a. Remove drives **#2 and #4** to access the cover inner mounting screws.
  - b. Remove the **two screws** located inside drive bays #2 and #4.
  - c. Remove the **screw** on the top.
  - d. Remove the **two screws** outside next the power supplies securing the cover.
  - e. Set the XpressChannel **cover** aside.
7. Remove the **power supplies**:
  - a. Remove the **mounting screw** securing the power supply locking bracket.
  - b. Pushing down on the latches, use the handles to pull the **power supplies** out of the receiver.

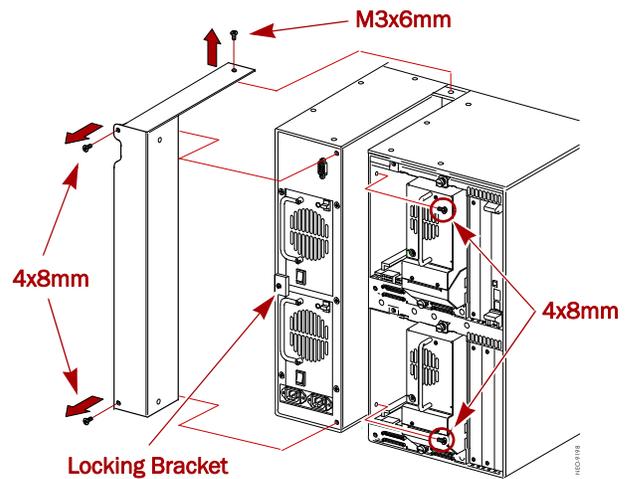


Figure 2. Removing the XpressChannel Cover

## Remove the Old Receiver

1. Working through the opening behind the right magazine tracks, remove the two 22-pin main power **harness connectors**:
  - a. Press the **release** on the left side of the **left connector** and pull firmly.
  - b. Repeat **Step a** for the **right connector**.
2. Remove all four of the 4-pin drive **power connectors** located above and to the right of the 22-pin sockets.
3. Remove and retain the two **jack screws** that secure the DB-15 connector (located above the power supplies).
4. Move the DB-15 **cable** up and toward the chassis center so as not to interfere with receiver removal.
5. Outside the back of the library, remove the **five mounting screws** while supporting the receiver.
6. Carefully remove the **receiver** through the opening in the top of the library (Figure 3).  
You may have to tip it toward the rear to release the power sockets at the bottom.

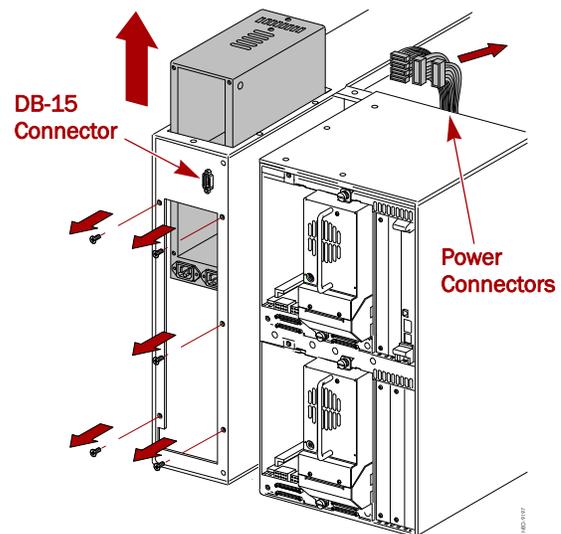


Figure 3. Removing the Old Receiver

## Install the New Receiver

1. Install the new **Power Supply Receiver**:
  - a. Insert it into the opening at the top of the library.
  - b. From the rear, supporting the receiver, secure it with **five new 6/32x1/4 flathead screws**.
2. Connect the **receiver wiring** inside (Figure 4):
  - a. Push the **lower drive bay main power** harness plug into the **right 22-pin connector** until it latches.
  - b. Insert the two **lower drive bay drive power** plugs in the **lower** two 4-pin connectors.
  - c. Push the **upper drive bay main power** harness plug into the **left 22-pin connector** until it latches.
  - d. Insert the two **upper drive bay drive power** plugs in the **next** two 4-pin connectors.

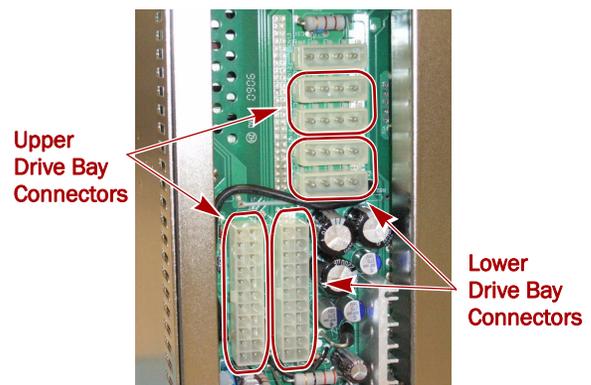


Figure 4. Receiver Rear Connectors

3. Reposition the **DB-15 connector** to its chassis hole and secure it with the two retained **jack screws**.
4. Verify all the **wiring** is correct:
  - a. Visually check that none of the wiring is **looped or sticking out** into the path taken by the shuttle.
  - b. Check that the **ferrite boxes** on the wiring harnesses are pushed as close as possible to plugs connected to the receiver.



**CAUTION:** Care must be taken to ensure that the wiring is not positioned so that it comes into contact with the shuttle during normal operation.

---

5. If removed, reinstall the **XpressChannel cover**:
  - a. Position the **XpressChannel cover** over the opening.
  - b. Install a **new M3x6mm** flathead screw in the top.
  - c. Install **two new M4x8mm** flathead screws inside drive bays #2 and #4.
  - d. Install **two new M4x8mm** flathead screws outside next the power supplies, securing the cover.
  - e. Carefully reinsert the **#2 and #4 drive assemblies**.

6. Reinstall the **top covers**:
  - a. Using **four new M3x6mm** screws, reinstall the power supply receiver **cover**.
  - b. Using **two new M4x8mm** screws, reinstall the front chassis **cover**.
7. Reinstall the **power supplies**:
  - a. Carefully insert each power supply and push it firmly against the rear backplane until it seats.
  - b. Using the new **6/32x3/8 mounting screw**, reinstall the locking bracket to secure power supplies.
8. Reinstall the library in the **rack**:
  - a. Using a mechanical lifter (or two people), carefully slide the unit in the **same rack position**.
  - b. If removed, reinstall the **drive assemblies**.
  - c. If used, reconnect the **XpressChannel**.
  - d. Reconnect the **data cables**.
  - e. Reconnect the **power cords**.
  - f. Toggle the power supply **switches** to ON.
  - g. Press anywhere on the **GUI touchscreen** power on the module.
9. Using the replacement part box, return the **old part** to Overland Storage.

#### 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).