

# **XO 4/ XO FLEX**

## **INS, Replacement of lifting motor / backrest motor**

YB-045  
Version 1.00

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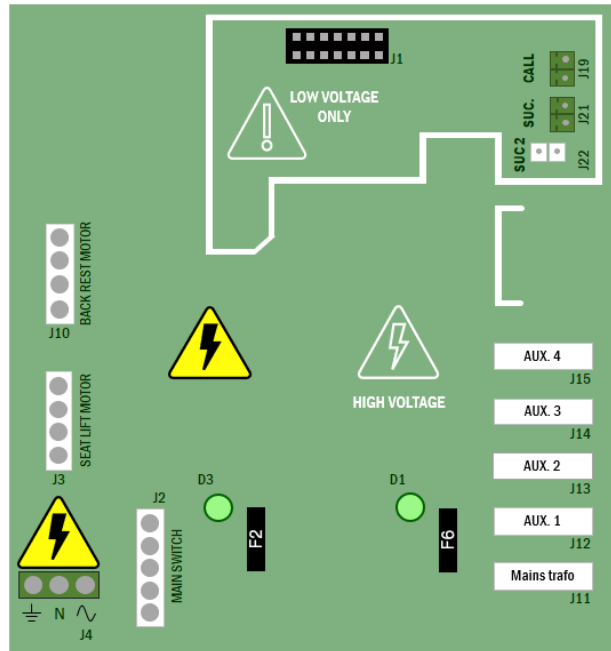
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# MOTOR POWER AND SIGNAL CABLE CONNECTIONS

Motor power source location on “Mains PCB”

Connector **J10 “Back rest Motor”**  
Backrest motor power supply.

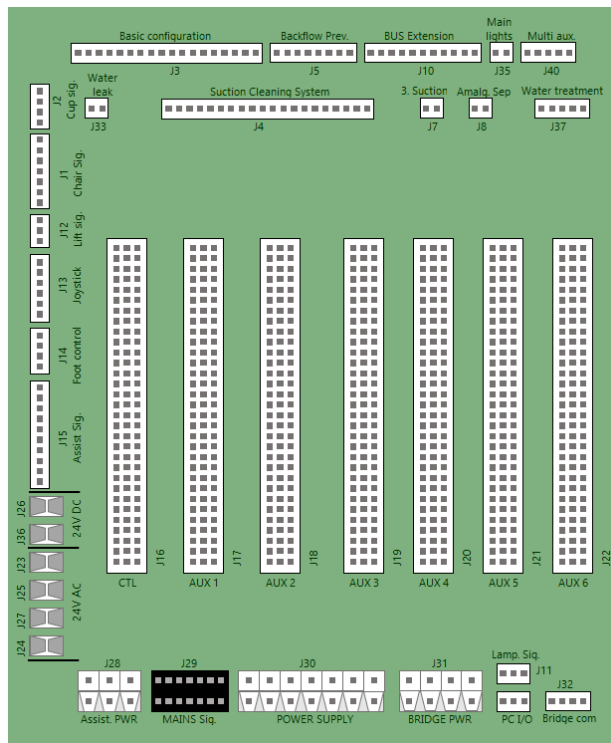
Connector **J3 “Seat lift Motor”**.  
Seat motor power supply.



Motor signal connection on “Backplane”.

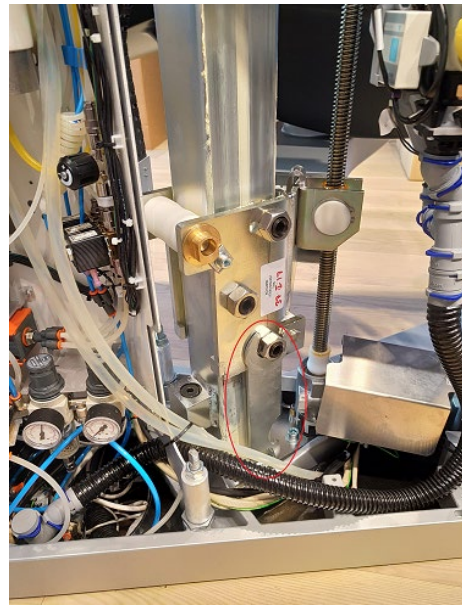
Connector **J1 “Chair Sig”**  
Signal for lowering or raising the backrest.

Connector **J12 “Lift Sig”**  
Signal for lowering or raising the seat.

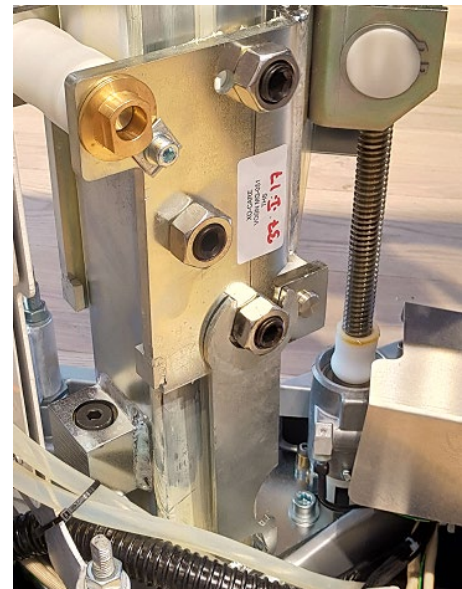


## REPLACEMENT OF LIFTING MOTOR

- Remove the service panels on both sides
- Place the XO wrench on the base of the unit in a way to support the chair carriage guide when lowering the seat. Make sure that the carriage guide rest properly on the wrench before removing the motor (see red circle on picture).
- Remove the patient chair.

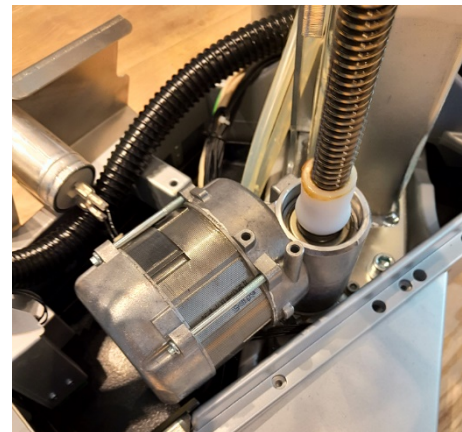


Detailed picture



Remove the Motor Protection Cover to gain access to the 3 screws securing the motor to the base.

**Caution:** the capacitor is fixed to the protective plate. Disconnect it.





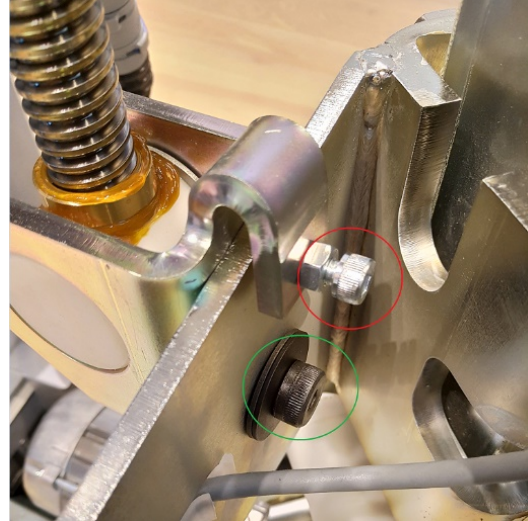
**WARNING: IN ORDER TO AVOID ANY RISK OF ELECTRIC SHOCK, DISCONNECT ALL THE POWER SOURCE BEFORE SERVICING THE UNIT.**

Disconnect the power and signal cables from the motor on the “**Mains PCB**”

- the 230V power supply on jumper **J3 “Seat lift Motor”**
- Signal cable **J12 “Lift Sig”**

Remove the screw.

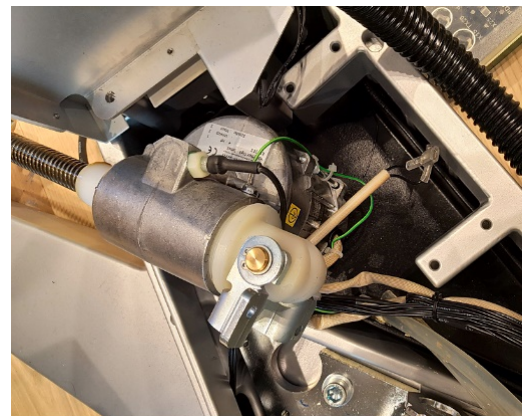
1<sup>st</sup> from the rotation screw support guide  
(red circle) Used Allen key 4  
and the fixing screw  
(green circle) Allen key 5



Remove the motor retaining screw located  
at the base of the chair.  
On both sides of the motor.



Once the screws are released, lift and  
replace the motor.



After replacing the motor, reconnect the following.

- the capacitor.
- the 230V power supply connector on jumper **J3 “Seat lift Motor”**
- the signal cable on **J12 “Lift Sig”**

**Important:** Add Darina R2 grease to the spindle (delivered in a small plastic bag)!

## REPLACEMENT OF BACKREST MOTOR

Before replacing the motor, make sure that the unit is switched off.

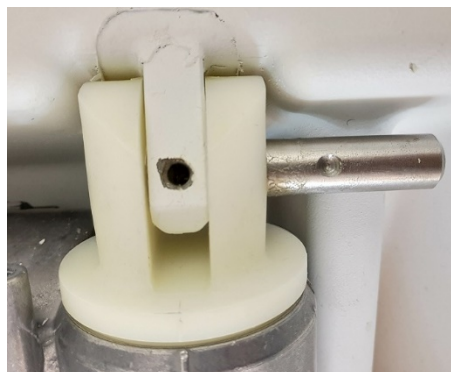
Disconnect the following cables

- Of the capacitor
- Of the 230V Power supply
- Of the signal cable **J104 “Backrest Signal”**.

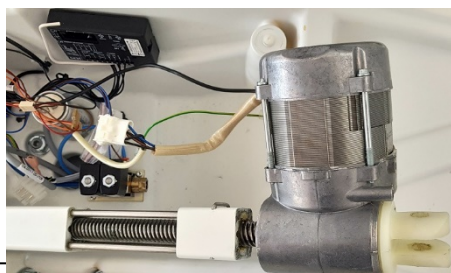
To release the motor, loosen the locking screw with an Allen key 2.5 to release the motor holding rod.



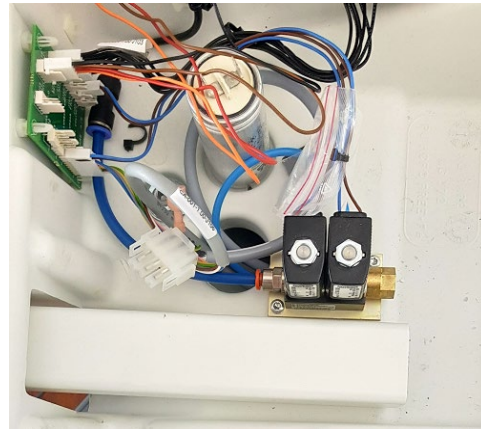
Remove the pin.  
Do not use a hammer to avoid damaging the motor mount



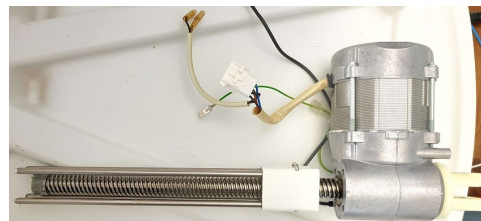
Lift the motor to release it while supporting the backrest. Pull it off the push pull.



Ensure not to put pressure on the push pull when resting on the base while fixing the new motor.  
Caution: Always support the backrest when sliding the 4 guiding rods in the push pull.



Place the new motor.  
Replace the retaining rod properly.  
Once the rod is properly inserted with the safety hole centered, tighten the locking screw.



**Important:** Add Darina R2 grease to the spindle (delivered in a small plastic bag)!

After replacing the motor:

Reconnect the following cables in the patient chair:

- the capacitor
- the 230V power supply connector
- the signal cable on the jumper **J104 "Backrest Signal"**.

Reconnect the cables on the **"Mains PCB"**

- Connector **J1 "Chair Sig"**
- Connector **J10 "Backrest Motor"** (Backrest power connector).

It is mandatory to synchronize the chair. See the procedure down below



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## **CHAIR SYNCHRONISATION:**

It is mandatory to synchronize the chair.

- After replacing the AN-368 PCB situated in XO4 & XO FLEX bridge.
- After replacing the lithium battery.
- After a firmware update.

### **TO SYNCHRONISE THE CHAIR, PROCEED AS FOLLOW:**

- 1 Power the unit on and wait until it is ready. Continue with step 2 or see alternative procedure.
- 2 Press C (configuration switch) twice. Display shows "**LIGHT**"
- 3 Press foot control joystick **west** (left). Display shows "**UNIT**"
- 4 Press foot control joystick **south** (against yourself). Display shows "**CHAIR**"
- 5 Press foot control joystick **east** (right). Display shows "**RINSE=0**"
- 6 Press foot control joystick **south**. Display shows "**SYNC**"
- 7 Press foot control joystick **east**. Display shows "**NO**"
- 8 Press foot control pedal **south**. Display shows "**YES**"
- 9 Press foot control joystick **west**. Display shows "**SYNC**" and the chair moves.
- 10 Press the configuration switch. Display shows same info as in 1, and calibration has ended when the chair stops.

**NB: This description can ONLY be performed on Units running firmware version 1.51 or above.**

### **ALTERNATIVE PROCEDURE:**

- Same as above,
- But after step 1 move the chair (even slightly)
- Execute step 2 quickly after.
- Display shows "**SYNC**". Continue from step 7.