# XO® 4
## Retrofitting MX2 Brushless micromotor

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**Complete kit, XO-032:**

HT-256 MX2 Micromotor
AO-137 Power driver PCB
AO-134 DMX PCB (motor control)
AN-013 Suspension arm, XO4
AO-446 Suspension tubing, MX2
AO-327 Valve module
CA-073 Cable, Power supply to MX2
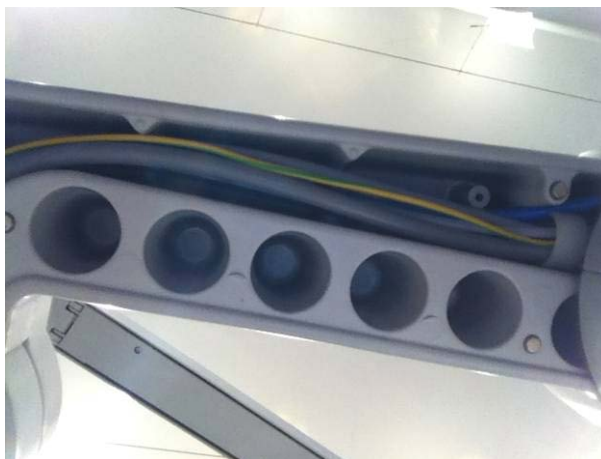AO-136 Power supply, MX/MX2

**WARNING:**
When making changes and handling electronics
in the instrument bridge – always use ESD
antistatic wristband (UC-600).



Open the instrument bridge and remove the
Powerdriver PCB if not type AD-624/AO-137.

Mount the cable CA-073 in the arm by removing the covers on the underside of the bridge arm.



Place the cable together with the other cables in the bridge arm, starting from the unit stand.



Draw the cable together with the other cables in the bridge arm.
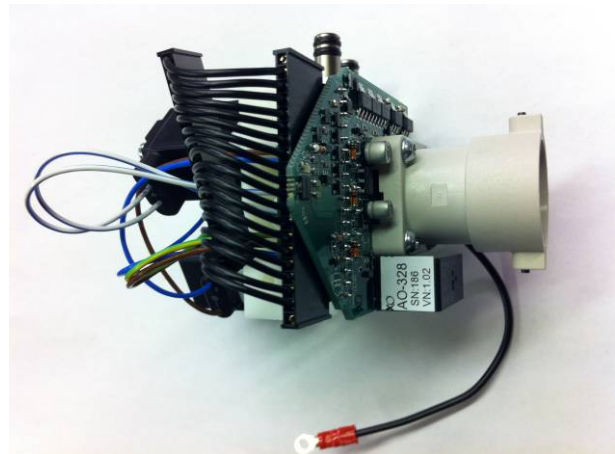
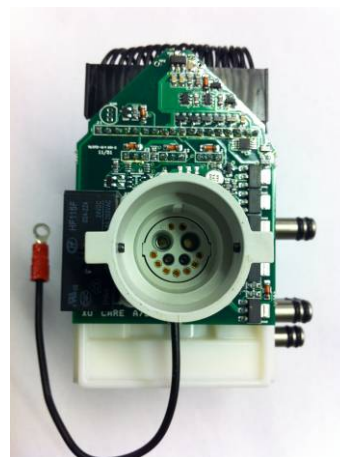Draw the cable together with the other cables in the bridge arm.

Mount the MX2 valve module in the bridge at the preferred instrument position.
In cases where the MX2 motor shall replace an existing MC3 motor or turbine, it's only necessary to replace the suspension PCB (AO-328).
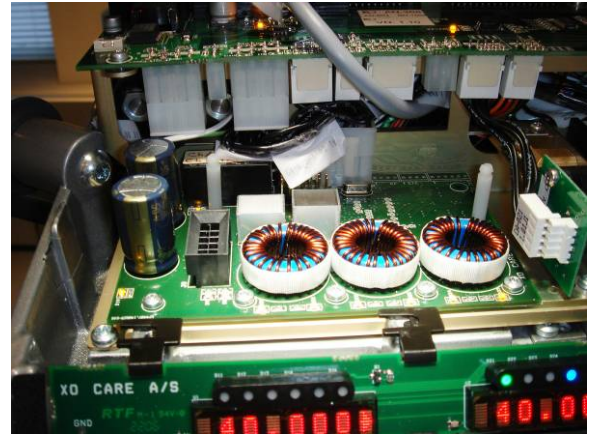
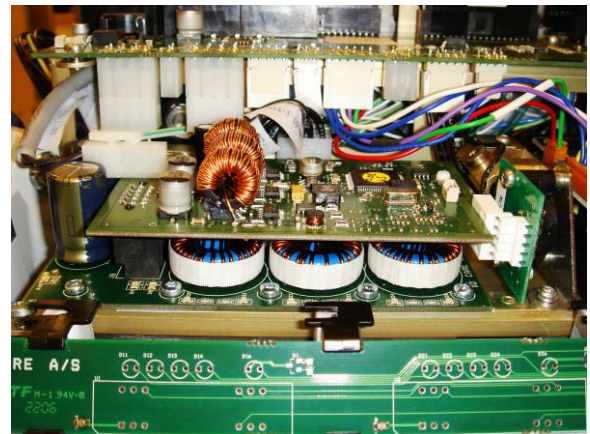**Note:** The GND wire shall be connected to chassis.

Suspension PCB (AD-656/AO-328).

If necessary mount the new Power driver PCB and remember to connect the cables on the PCB before mounting the 5 screws that holds the PCB.



Mount the DMX PCB, AO-134 on top of the power driver (MX2 motor control).



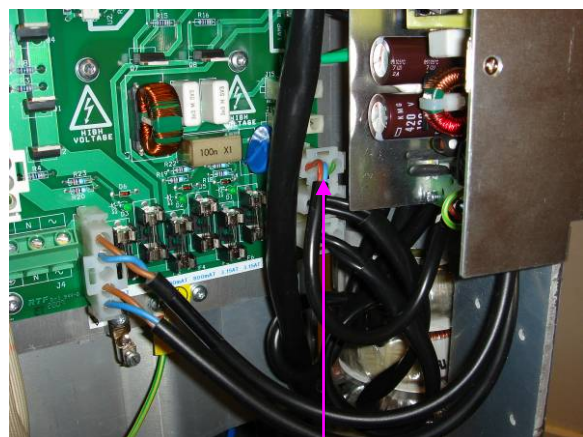Connect the power cable CA-073 marked DMX to the DMX controller PCB.

Mount the special MX2 micromotor power supply (AO-136) inside the unit stand as shown, with the enclosed screws.

Connect cable CA-073 marked "DMX Power" to the MX power supply.

Connect the 230VAC power plug to an unused AUX plug on Mains PCB. (J11, J12, J13 or J14)

J11, J12, J13, J14

Update the unit firmware to latest version.
Available from XO website: www.xo-care.com

This is very important, in order to have the MX2 micromotor running.

Please do the following after Firmware is updated:

1. Connect the MX2 Micromotor suspension tubing at the correct position
2. Choose Technician menu – and set the position (SUSPx) to MOTOR.
3. Continue in Technician menu – and find the menu SPCBx, where x is the MX2 Micromotor position.
4. Choose the relevant Suspension PCB type = AD-654 for MX Motor.
5. Exit from Technician menu by pressing "C"- button once.

MX2 Micromotor should now be ready for test run.
**Note:**
The cooling air shall be adjusted just as the MC3 motor = 10l/min.
**Note:**
The ball-bearings are lubricated for life.
MX2 is sterilisable and yet maintenance-free.
Please refer to BienAir Userguide.