

Key Points for Installation: 4 - After Assembly

Following the previous issue, this issue focuses on points you should pay attention to after assembly.

Double-check the Working Range

As instructed in the previous issue, it is a proactive measure for avoiding trouble if you check the coarse manipulator (motorized and manual) since these are used around the center of the working range.

Fine manipulators (hydraulic types) are also recommended for use in the middle of the working range (around 5 on the scale).

If you have anything that conflicts in the working range, please confirm a safe range before you operate the manipulator.

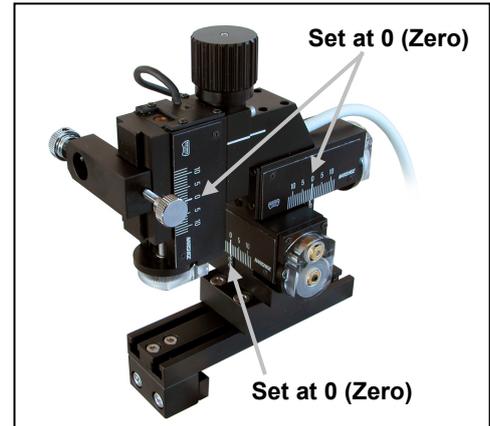
◆◆Key Points for Motorized Types◆◆

《Common Problems》

Motorized types (such as MM-89) can be held back at the end of the working range by factors such as dust, deteriorated lubricant or limited working range of mechanism. When this happens, the manipulator requires repair.

《To Avoid the Problem...》

It is recommended that the motorized manipulator be used around the center of the working range, referring to the scale of the drive unit.



◆◆Key Points for Manual Types◆◆

《Common problems》

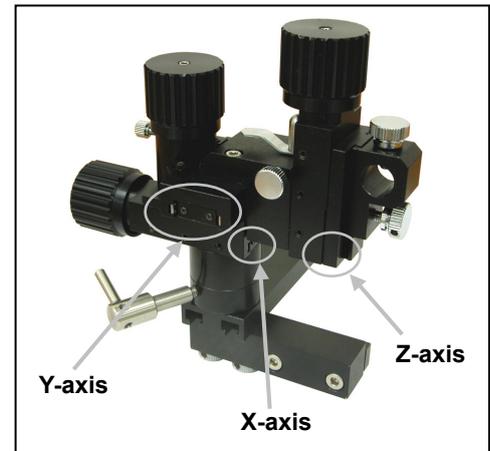
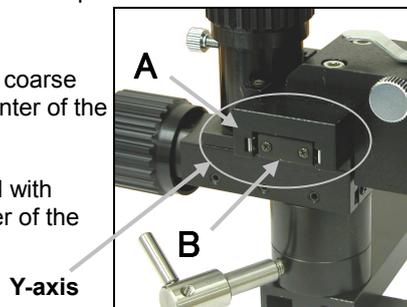
When manual types (such as MMN-1 and MN-4) are driven to the maximum, the impact loosens tension of the knob. When this happens, you can feel the knob tension is light.

If you continue to use the manipulator with this condition, it will result in the knob having play. If this happens in Z-axis, it will result in the driver unit descending. The manipulator may need repair to correct the situation.

《To Avoid the Problem...》

It is recommended that the manual coarse manipulator be used around the center of the working range.

When the outer slider (A) is aligned with the inner slider (B), this is the center of the working range.



The ideal setting for all axes of a coarse or fine manipulator are set at the center of the working range, while a pipette tip positions at the center of the optical axis of the microscope.

You adjust position of the coarse manipulator and mounting adaptor to allow the pipette in the center of the optical axis while you keep the coarse and fine manipulators at the center of their working range.

Hydraulic tubes and electric cables

Micromanipulators are adjusted carefully. When hydraulic tubing or an electric cable is stretched taut, movement is affected. If this happens, you must find a better position to release the manipulator from tension. Particularly, tension can cause drift occurrence in electrophysiology. You are encouraged to install manipulators without straining them.

If you have any questions or need further information, please contact us.