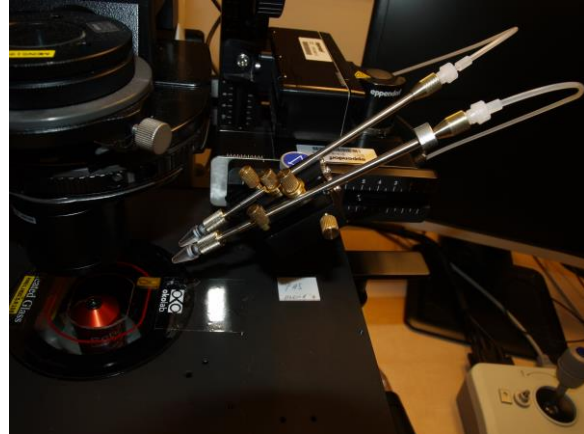


# TwinHolder for micromanipulators 4r and 4m – Instalation and User Manual

Revision: 12-2015

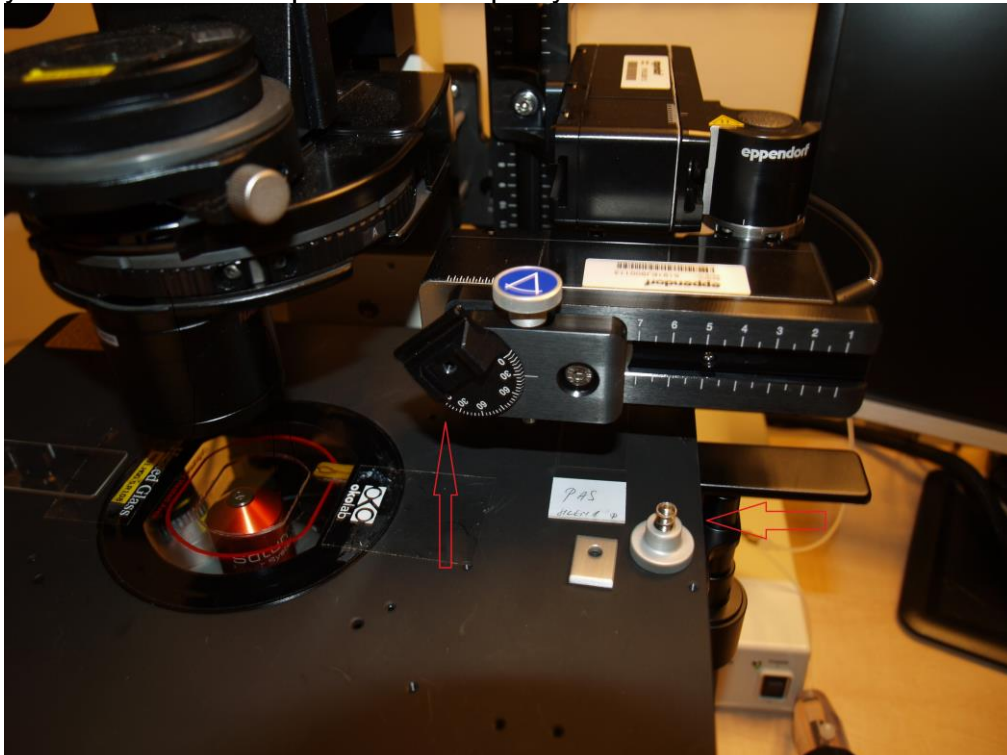
This accessory is manufactured to enable mounting of 2 capillary holders on the micromanipulator. It enables adjusting the position of the back capillary holder in up and down direction and the front capillary holder in left and right direction. Additionally the front capillary holder can be moved forth and back so that the distances of the capillaries are also well matched. This TwinHolder does not enable lifting of one or the other capillary holder.



## Installation:

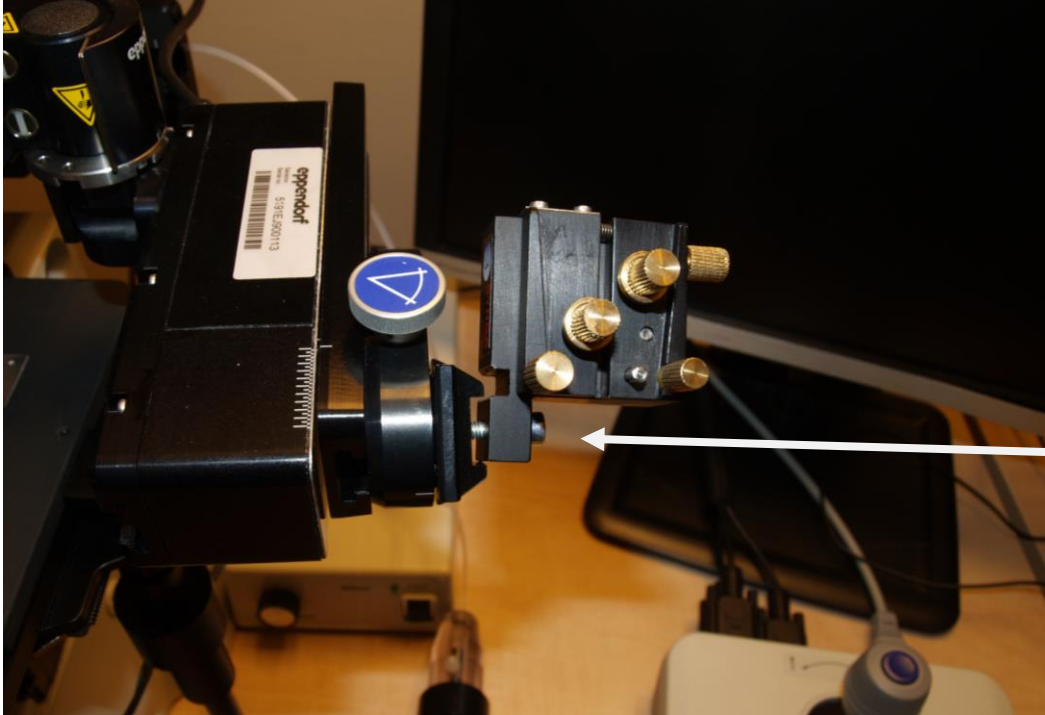
### Step 1:

Unscrew the blue wheel and metal part which in normal case holds the 1 capillary holder. See picture. Save the blue wheel, spring and metal part for future use when you will want to setup back to 1 capillary holder use.



**Step 2:**

Attach the TwinHolder into the slot on the angle adjusting part of the micromanipulator. Use the supplied screw to fix attach as shown in the 2 pictures here:

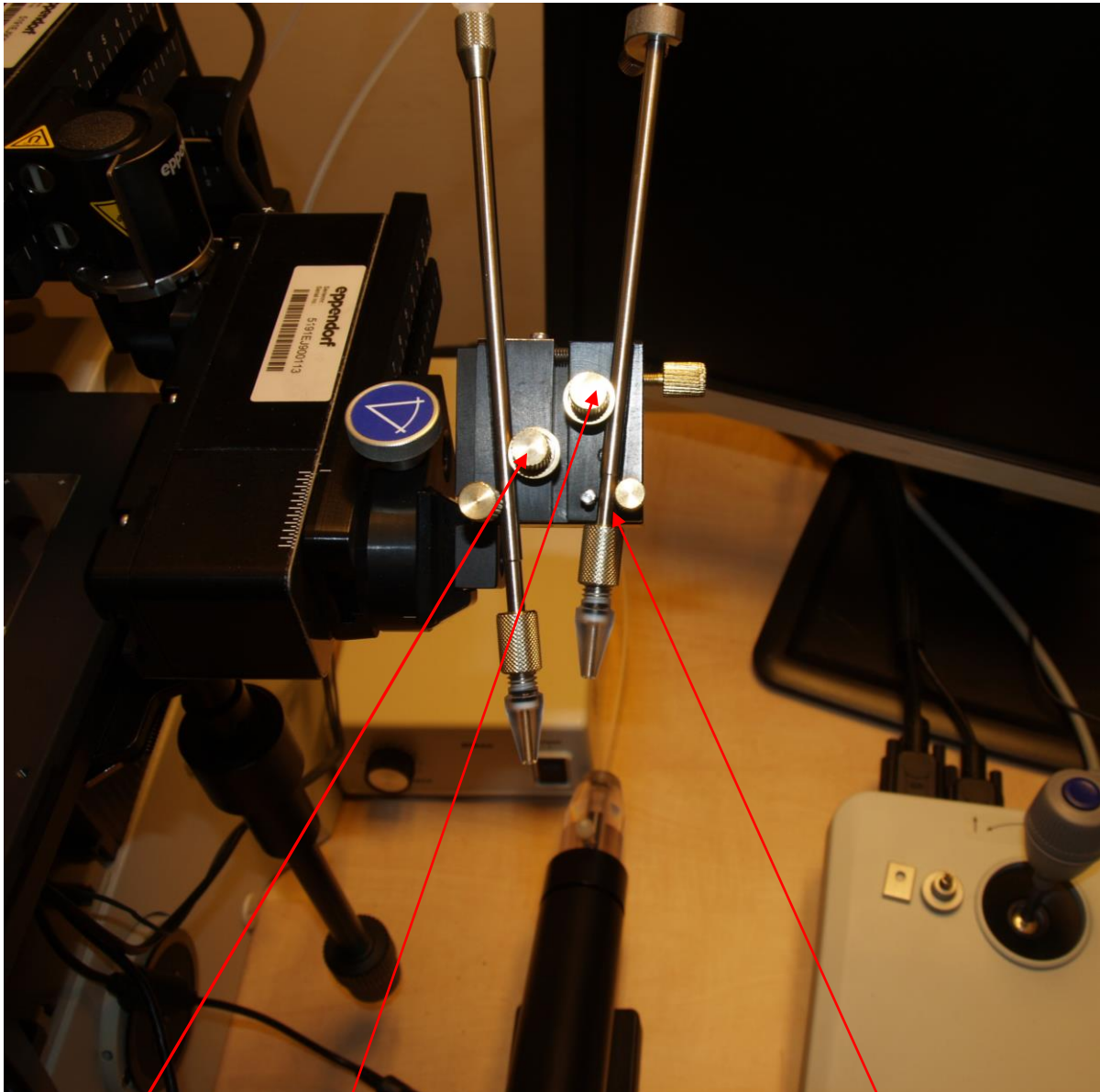


Make tight using a hex screw driver



**Step 3:**

Attach the capillary holders. The back one should go easy by screwing up the holding screw (3). The front one will not be possible to insert due to the forth and back adjusting wheel. First unscrew the holding screw (4). Now you have to insert it in the narrow front part (5) of the capillary holder and then push forward.



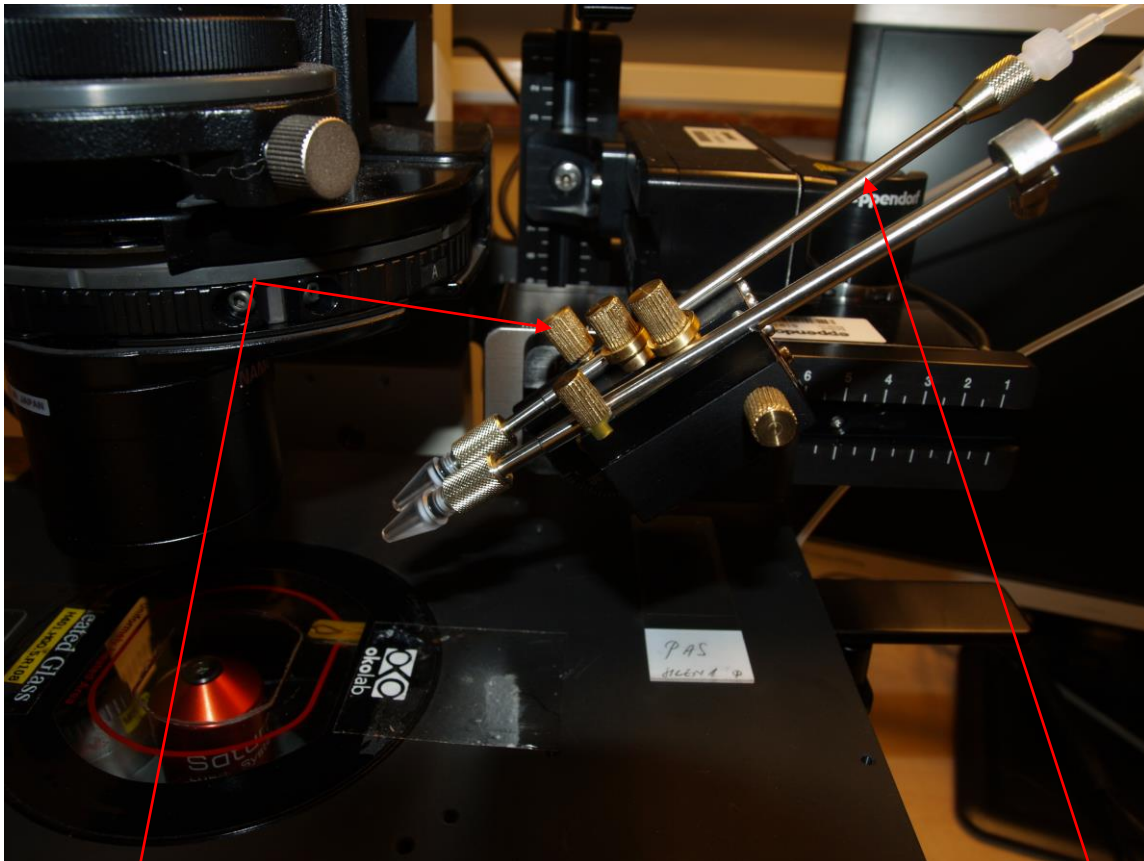
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## Adjusting the positions of the capillaries:

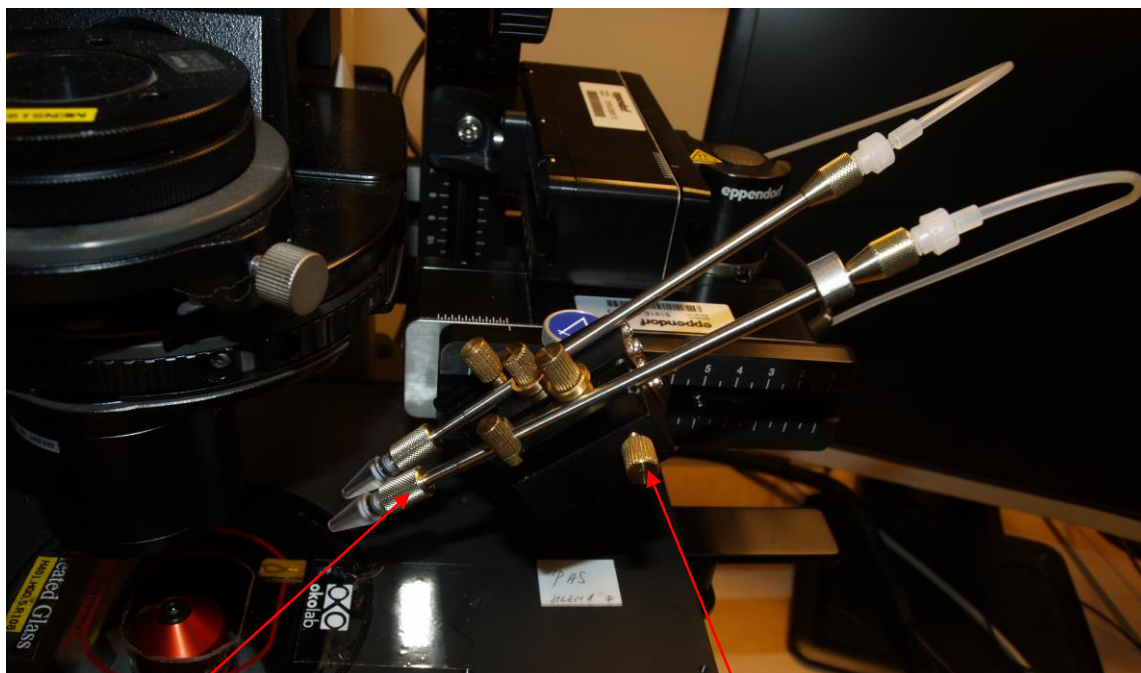
Adjust the up and down position of the back capillary (6) in line with the height of the front capillary. Use the high screw (7) for this.



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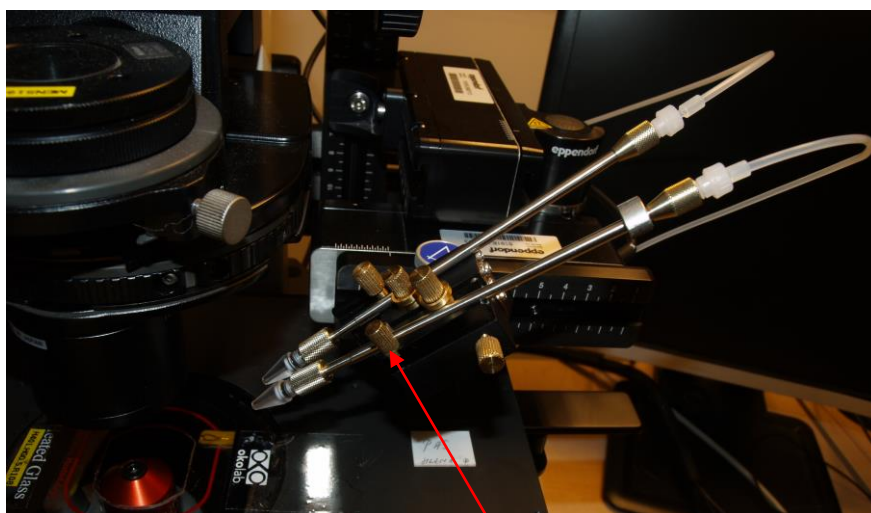
Similarly adjust the left right orientation of the front capillary (8) according to the position of the back capillary. For this use the left right positioning screw (9).



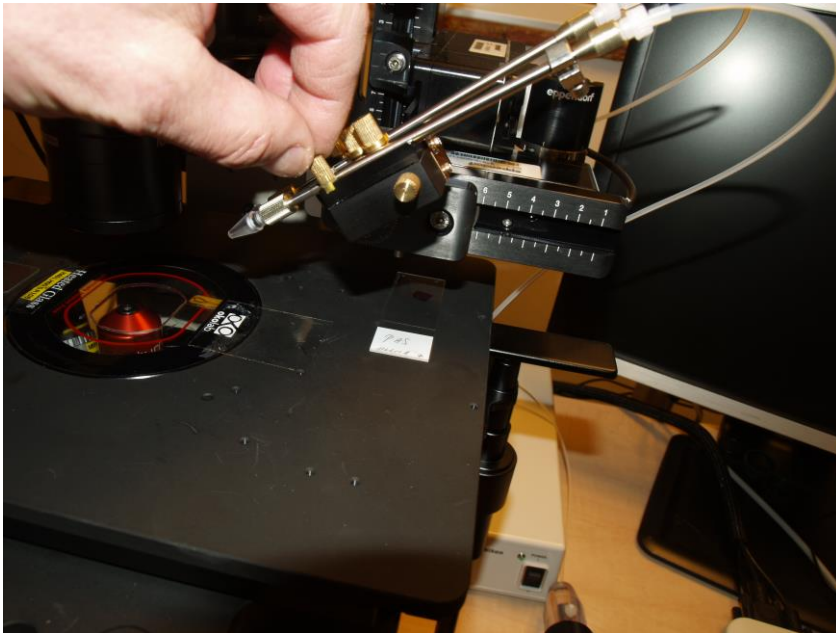
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Finally you can adjust the forth and back position of the front capillary holder (8) with the forward adjustment wheel (10).



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## Information, suggestions and comments

To share comments or suggestions regarding the Synga system, please send them (including identification and lot numbers of the applicable product) to Synga, s.r.o.:

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