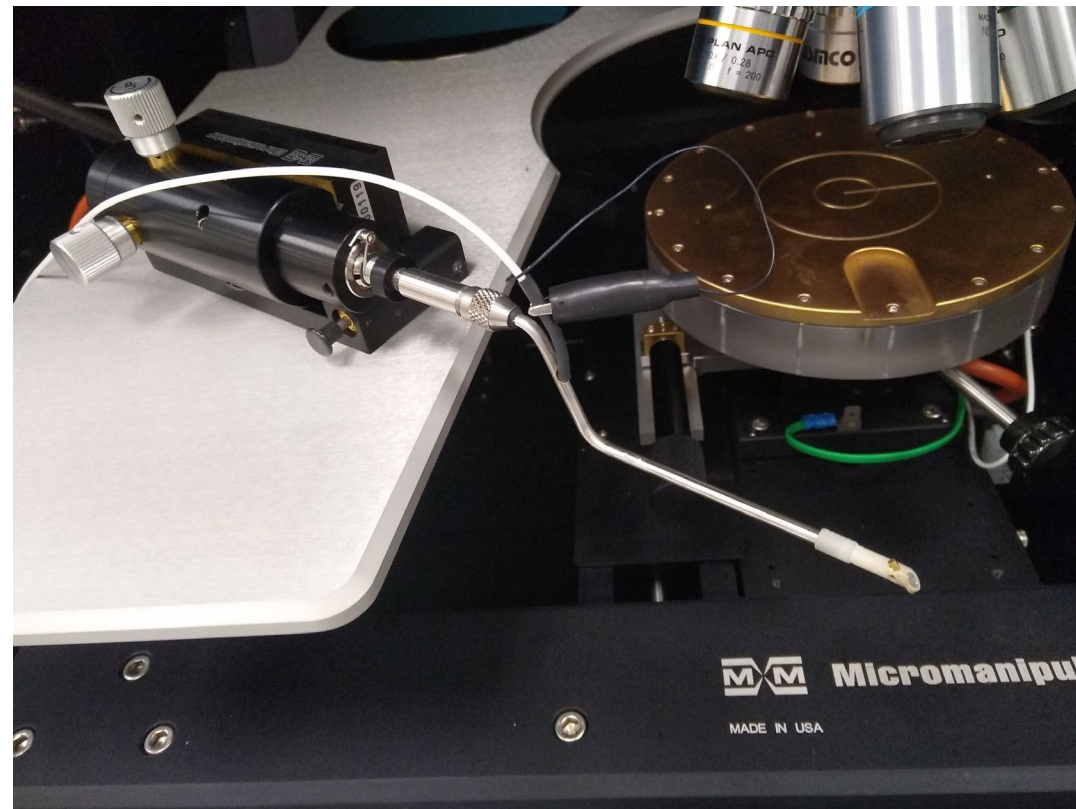


Micromanipulator Probe Needle Replacement

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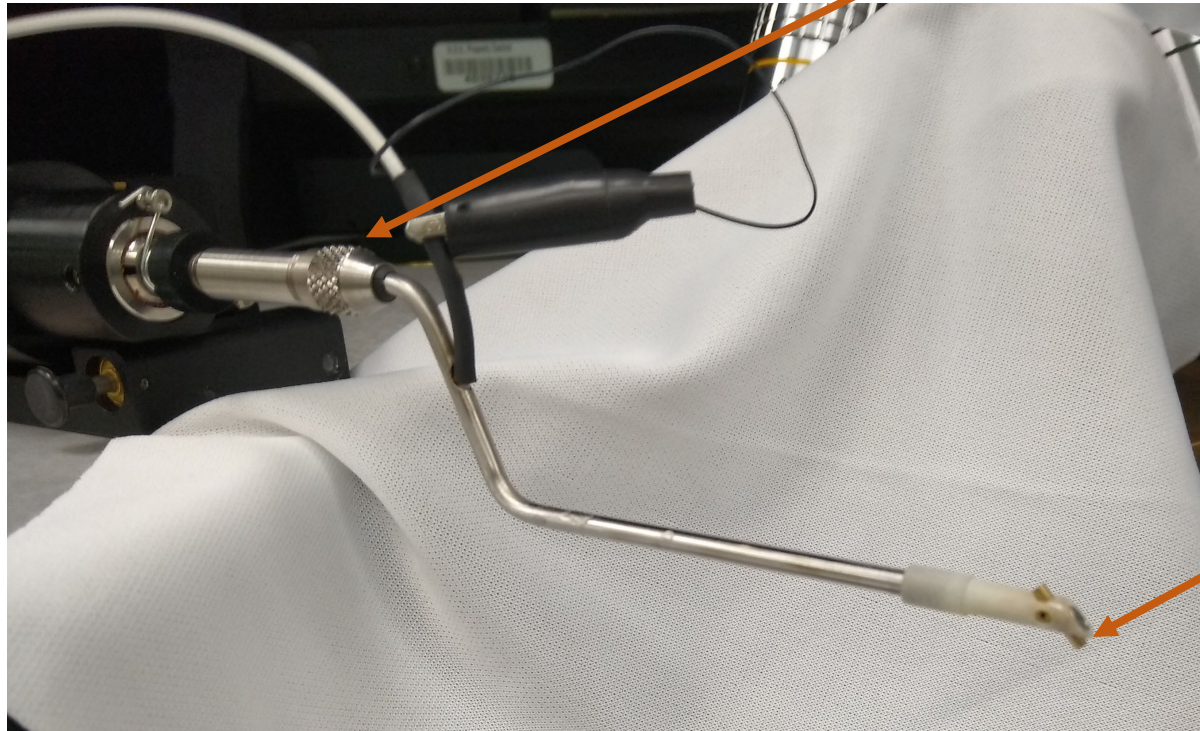


Background

- When you arrive at the Micromanipulator the probes may have no needles
- The previous user may have removed the needles
- Some users have specialized needles
 - Users are allowed to supply their own needles
- Users may purchase needles for their exclusive use from AEP Core
 - These are listed as a consumable in ILab
- If there are no needles in the probes when you arrive, you can attach them yourself...

Probe Without Needle

Attaching nut. You can loosen this to remove probe or to allow rotating the probe about this connection point.



Socket for probe needle.

Probe needles



- If you are not using your own probe needles you should find some User Needles which are kept at the probe station.

Probe Head Closeup

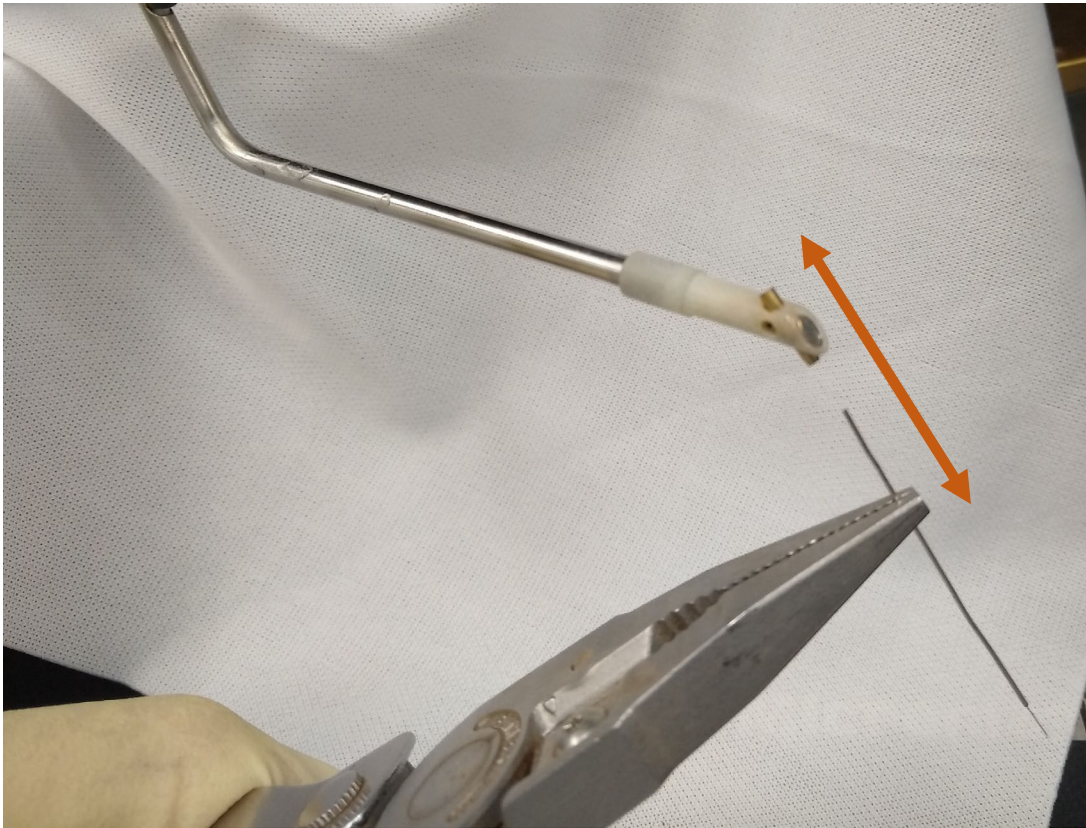


The probe needle goes into this socket. It is a friction fit – simply push in / pull out.

Typical Probe Needle



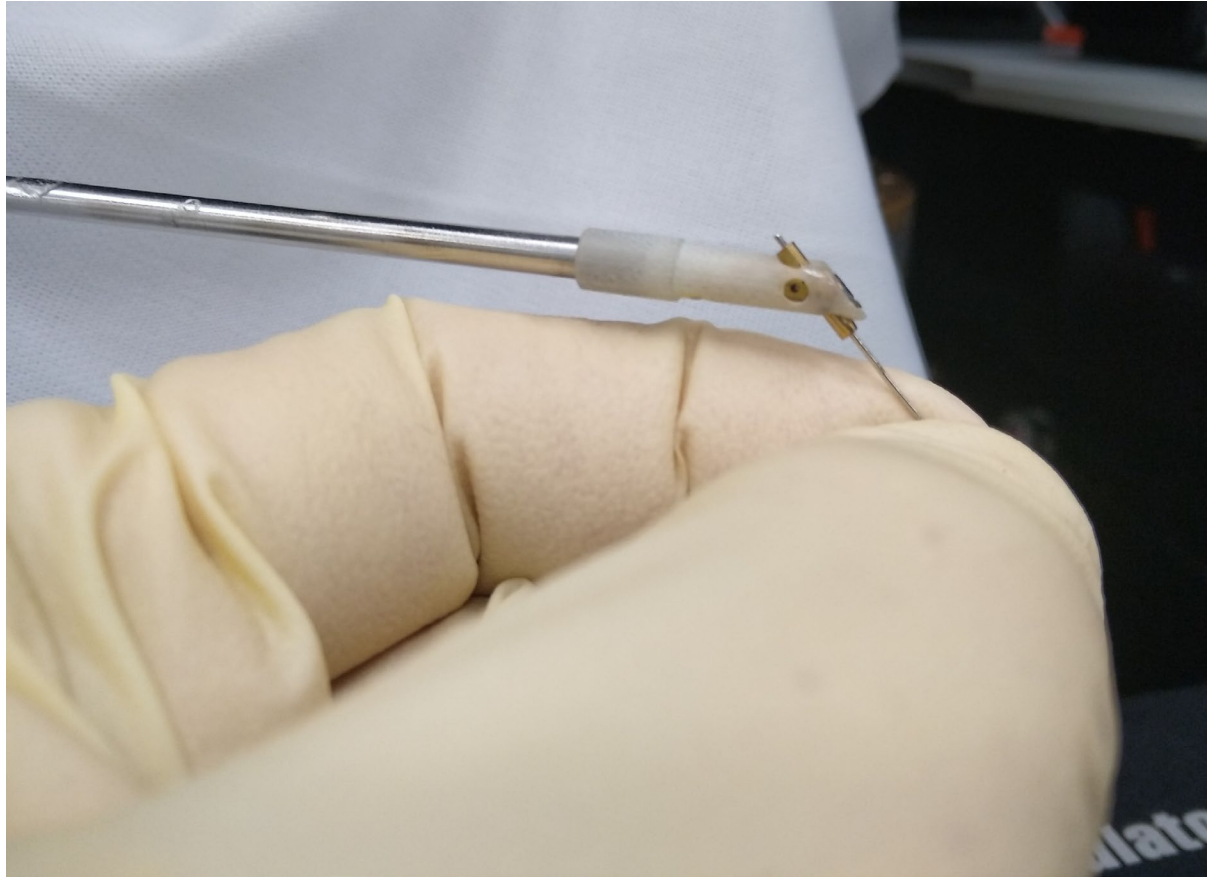
Probe Needle Insertion: I



You can use a needle-nose plier or tweezers to insert / remove the probe needle from the socket on the end of the probe. The probe is held in place by friction. Be sure to align the probe with the socket and it should insert with minimal force.

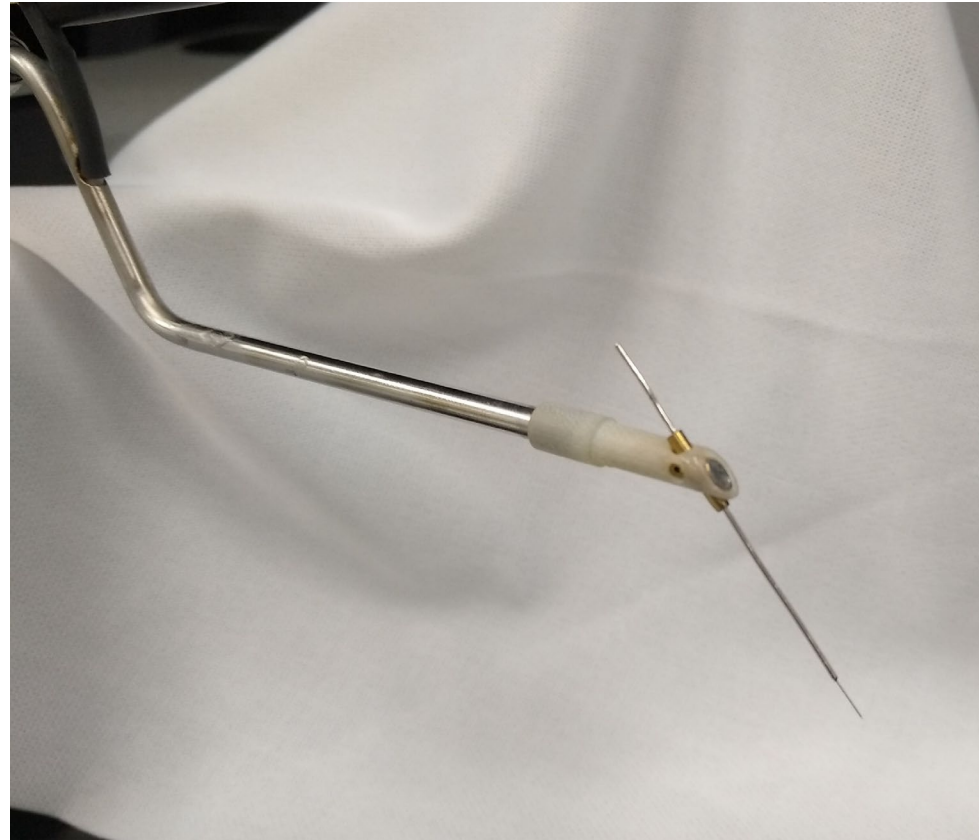
You can adjust the needle in / out to help get the length that best fits your sample contacting situation.

Probe Needle Insertion: II

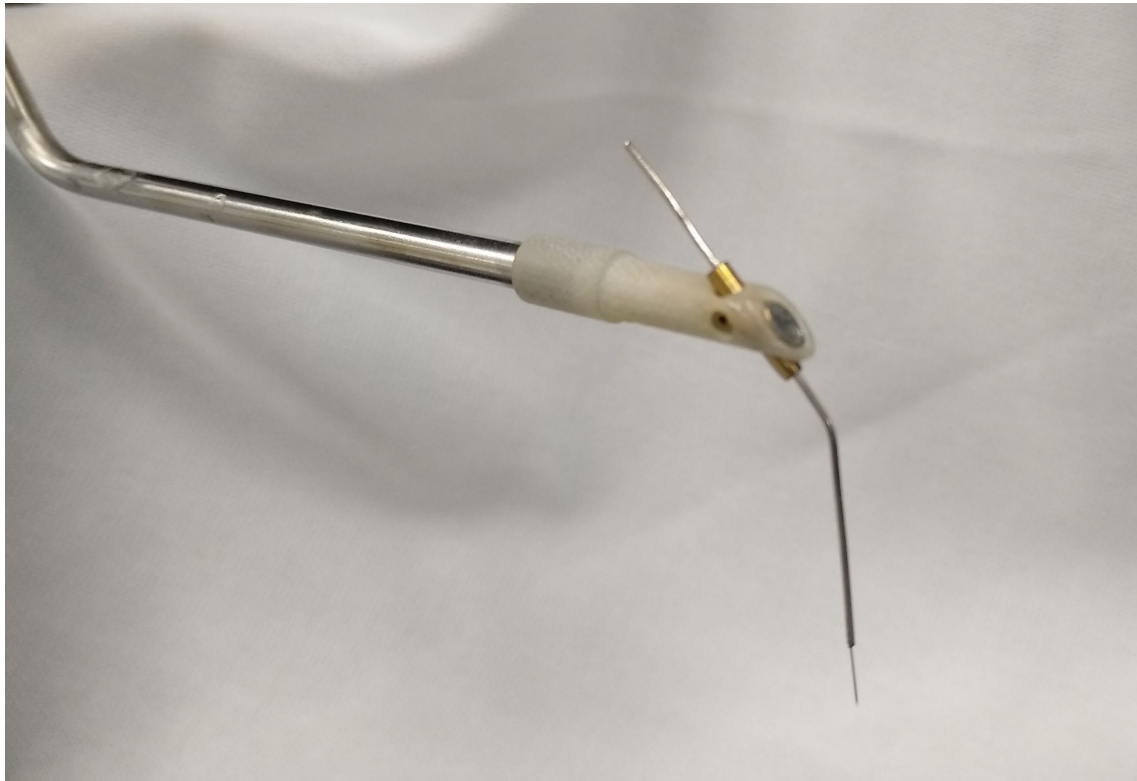


You can insert the needle by hand but you must handle it carefully to avoid a self-inflicted injury.

Needle in place & ready to go!



Needle Adjustment



In addition to adjusting the needle in / out, you can bend the needle as shown if you need better access to your device contacts. This may occur if you are trying to fit multiple contact needles onto a small area of your sample.

If you do not need to bend the needles, we ask that you keep them straight. This will help maximize their lifetime.

Of course, if you are using your own personal supply of needles, you may do anything to them that you wish!

Needle Removal

- The needles simply slide out in the same manner as they were inserted.
- If you are making use of the “User Needles” you do not need to remove them from the probes when finished.
- If you are using your personal supply, please remove them and take them with you so they do not become confused with the “User Needles”
- Contact Ed or Jovan if there are any questions!