

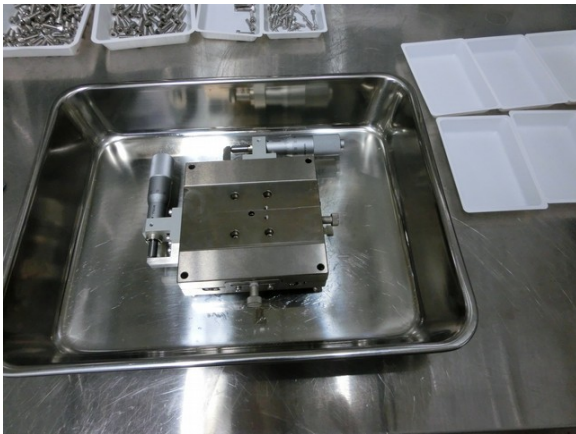
# Degreasing XY-Translator Stages for UHV Usage

(Simon Zeidler)

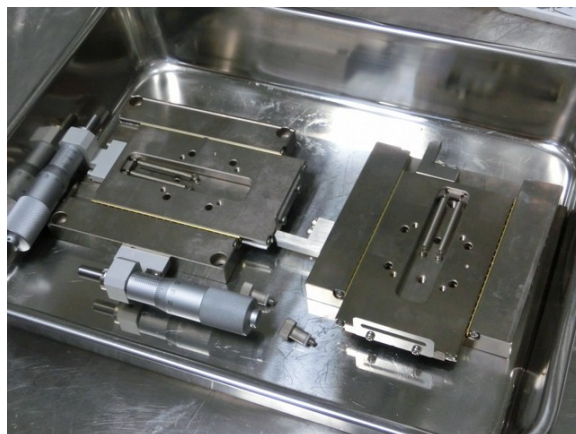
This manual is basically an addition to the assembly manuals of the WAB and the NAB!

## 1. Disassembly

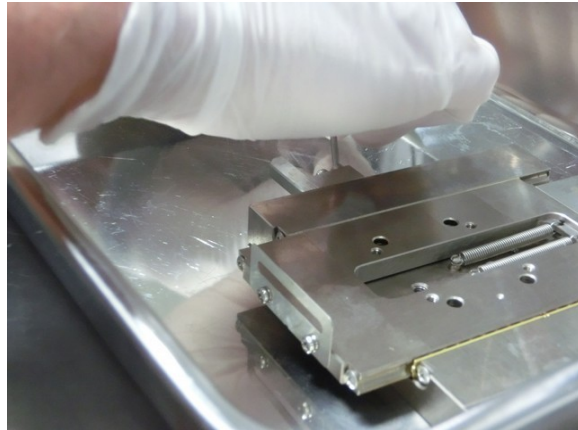
- First, unmount both horizontal translators from each other by removing the 4 central screws on the backside of the stage



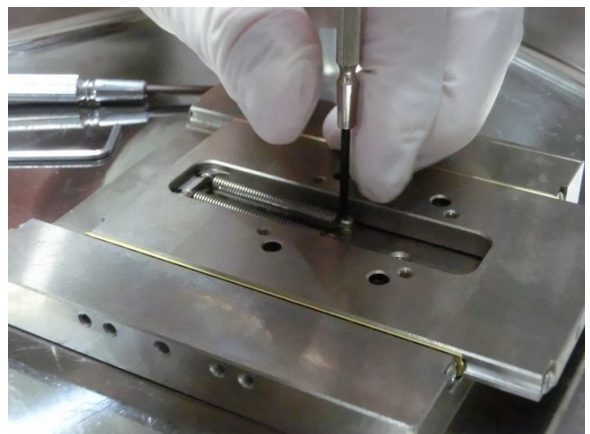
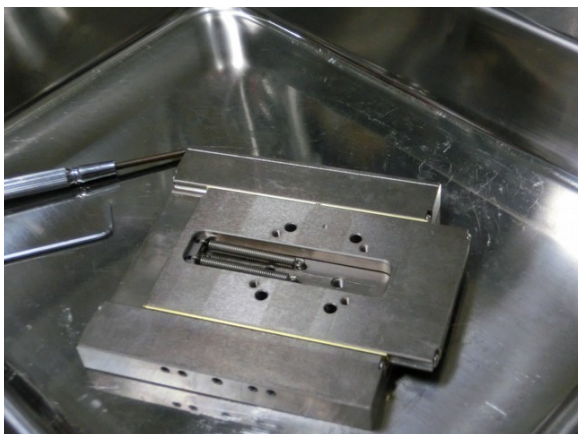
- Remove the stopper screws and disengage the upper from the bottom part of the stage



- Take the upper part of the stage and remove the micrometer-screw-stoppers assembly

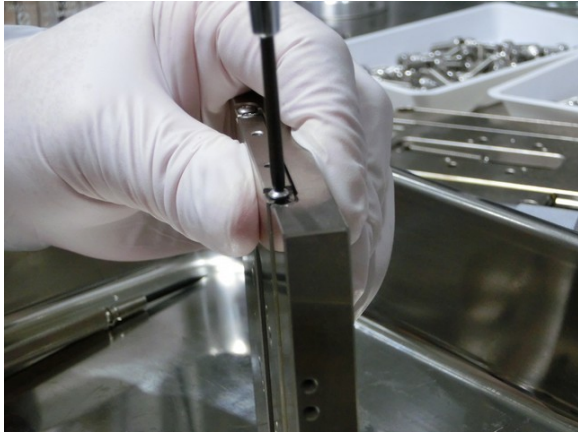


- Remove the slider-stopper shield and the two springs

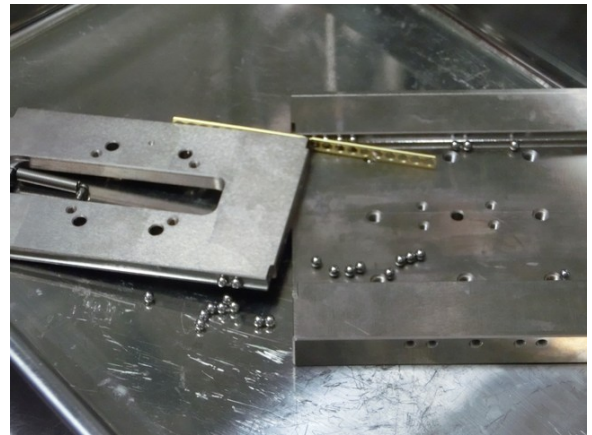
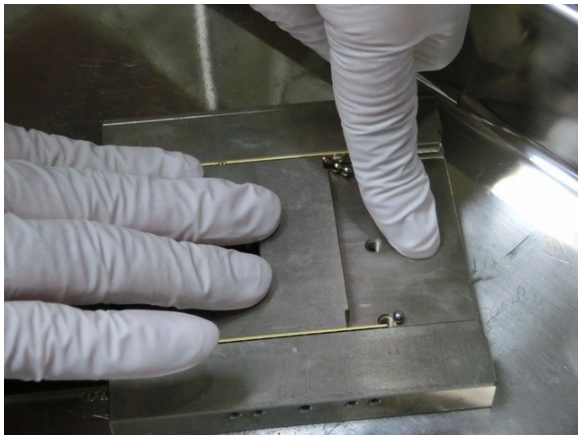




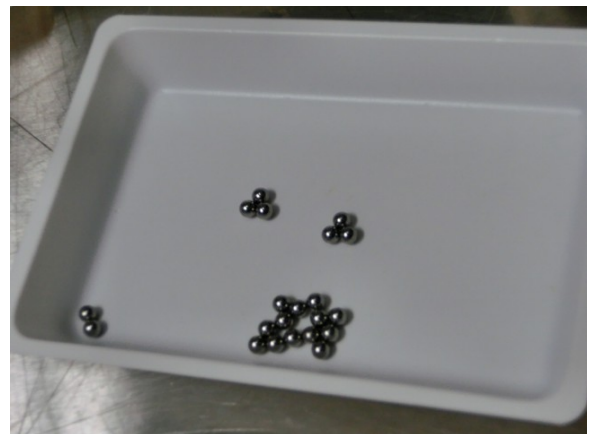
- Unscrew the slider-rail from the top-plate (it is screwed on both sides)



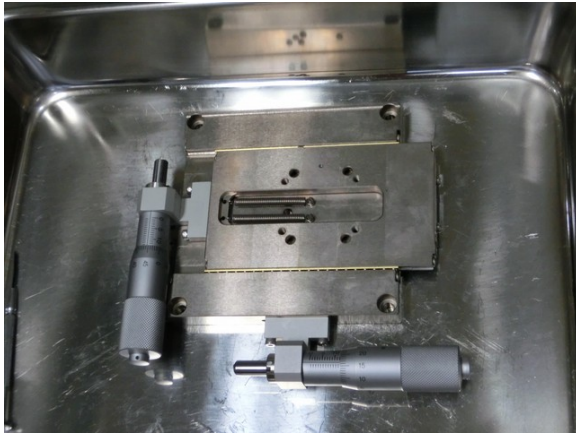
- Remove the slider-rail carefully until all the metal balls are released from the bearing



- Store all parts carefully (especially the balls: keep them separated by their side on the bearing; don't forget to count them as to keep track)



- Now take the bottom part of the stage and remove the micrometer-screws from their mount  
→ one needs to undo the clamping first which is a tricky part. A small screw-driver and a hammer may be used to do the job!



- Once this is done, repeat all the steps which were done for the upper part
- At last, disassemble the micrometer-screw  
→ for disassembling the screw from its handle, one needs to remove the fixing-screw on top of the handle. After slightly loosened, it needs a small push-back to be removed completely. Again, a careful hit with a hammer can do the job







## 2. Cleaning

- Before starting to wash the parts, roughly clean the slider-rails and the micrometer-screws with a tissue to remove the biggest deposits of grease



- Put the parts into trays or cups made of metal or glass. Separate the balls from each bearing from all the other parts  
→ depending on the size of the ultra-sonic cleaner, the sizes of the trays and cups should be considered



- Fill in the trays/cups acetone until all of the parts are well below the acetone's surface  
→ however, it may be that some bigger parts are sticking out of the acetone. In that cases, after cleaning, turn these parts upside down and repeat the cleaning
- Cover the container with the parts by using Aluminum foil as to prevent water splashes coming into the acetone
- Insert the container into the ultra-sonic cleaner and start the cleaning process (~ 30 minutes)

**3. Re-assembly**