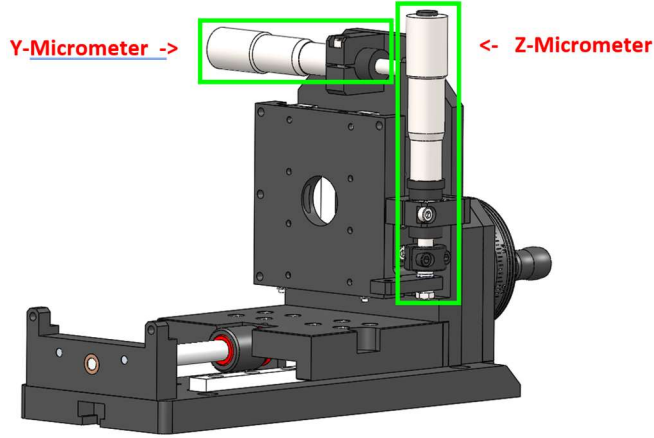


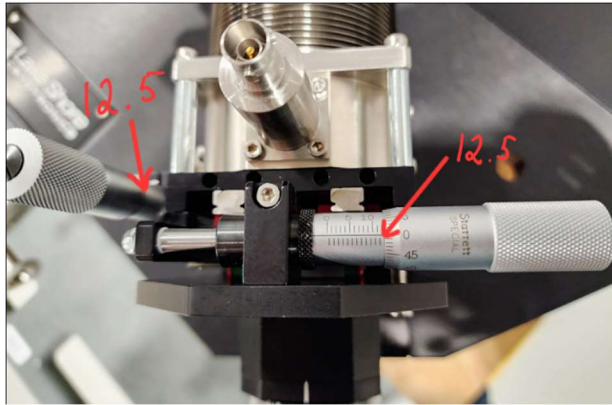
Servicing Probe Station Y and Z Micrometers

1. Please read the entire document carefully before you attempt any mechanical work. If you have any questions, please do not hesitate to contact our service department for assistance.

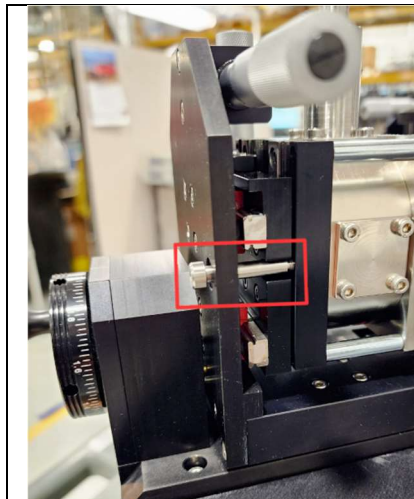
Reference: Micrometer definition:



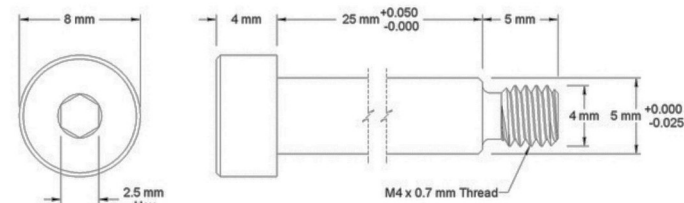
2. Set both Y and Z micrometers to 12.5



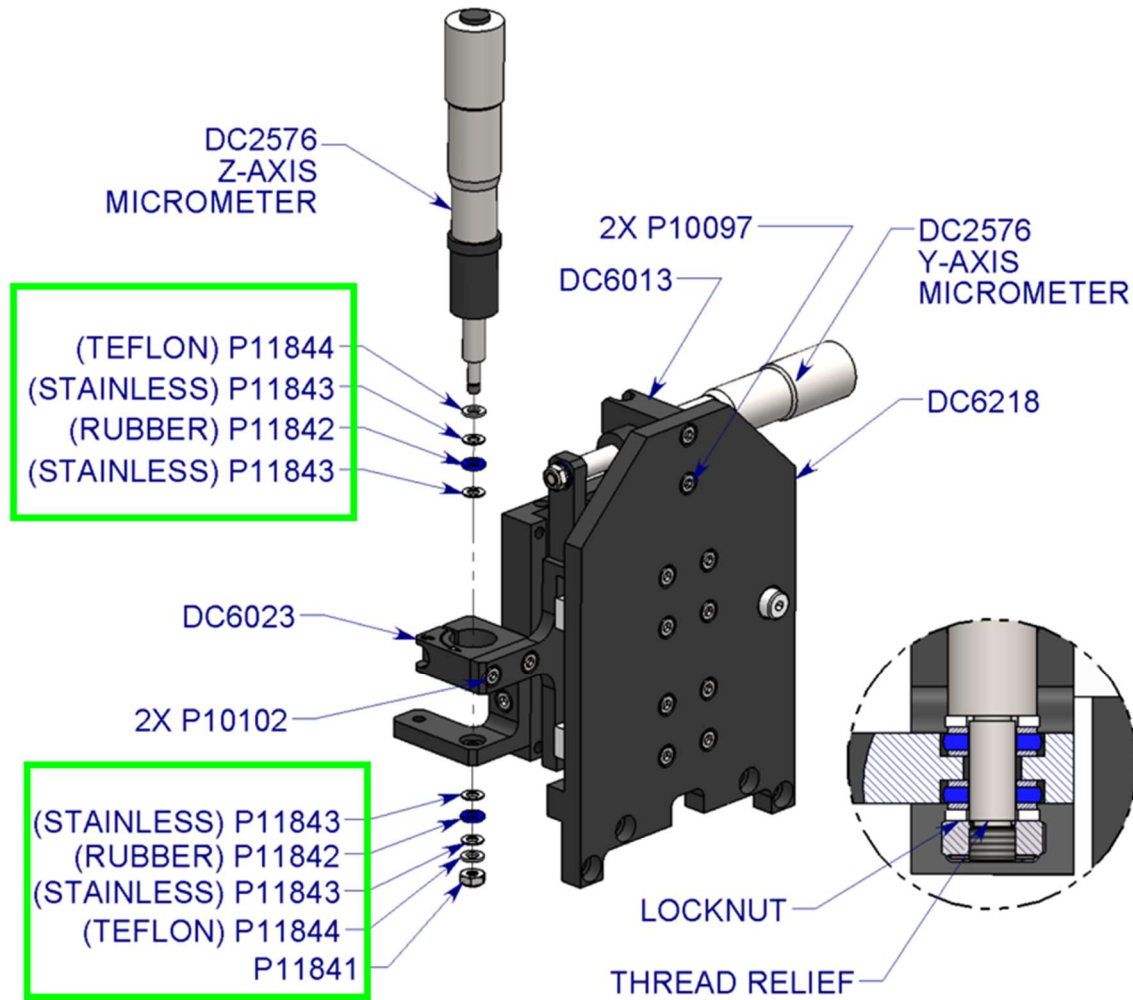
3. Install the locking guide pin, which is boxed in red in the diagram below. You may need to fine-tune both micrometers to ensure that the locking pin is inserted correctly.



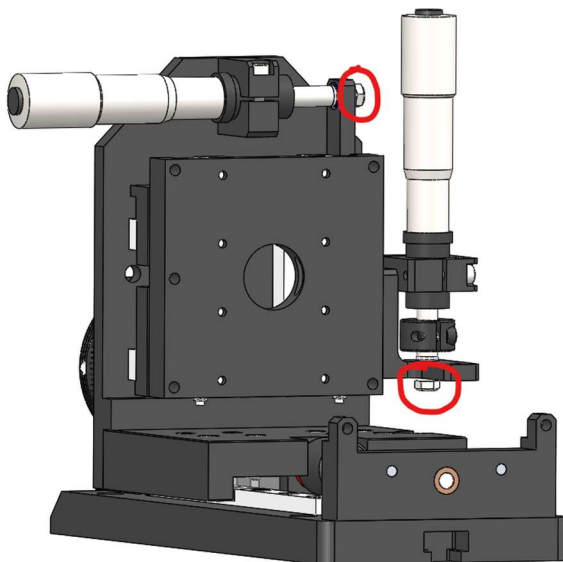
In case you do not have the proper locking pin, you may use any available 5 mm diameter shaft, even if it doesn't have a threaded tip.



4. **Reference:** Micrometer installation details. Note that the **highlighted parts** and their installation is identical/repeated for the Y-MICROMETER (*but omitted on the drawing to lessen clutter*).

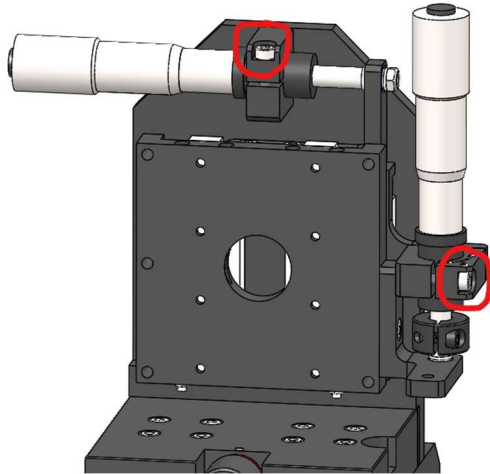


5. **Note:** Exercise caution during this step, as there is a high potential for **losing small parts**. Depending on which micrometer you are servicing, remove its associated nut (circled in red in the diagram). Be careful not to lose the small washers, even if you plan to replace them.



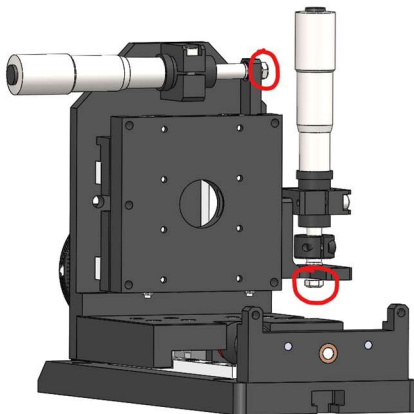
6. **Note 1:** Exercise caution during this step, as there is a high potential for **losing small parts**.
Note 2: Be aware that the screws inside the micrometer mounting block can be very tight. Before attempting to loosen them, ensure that your tool is not worn out from use and fits snugly into the head of the screw all the way. If the screw becomes stripped, you may need a special tool to remove it.

Loosen (but do not remove) the screw on the associated mounting block (**circled in red**) of the micrometer you are servicing. Once the screw is loose, you can pull out the micrometer. Take care not to lose the small washers, even if you plan to replace them.

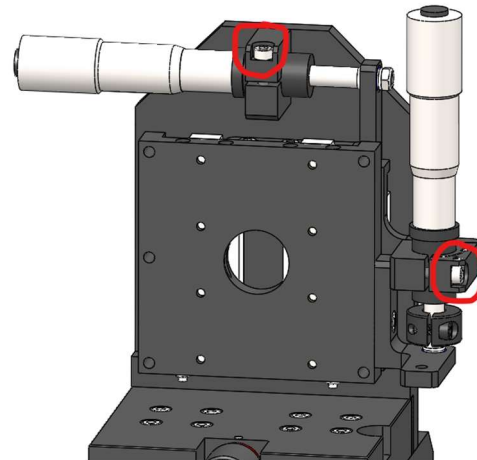


7. Re-install the serviced or new micrometer according to the drawing in Step #4 above and make sure to install the washers in the correct order.

a. After installing the micrometer, tighten the micrometer nut until there is no more slack or play, but do not over-tighten beyond this point. If the micrometer is overtightened, you may find it difficult or impossible to turn. In such cases, loosen the micrometer nut to the appropriate level.



b. To secure the serviced micrometer in place, tighten the micrometer mounting block screw until it is fixed firmly in place. You should not be able to move or twist the micrometer within this block once it is secured.



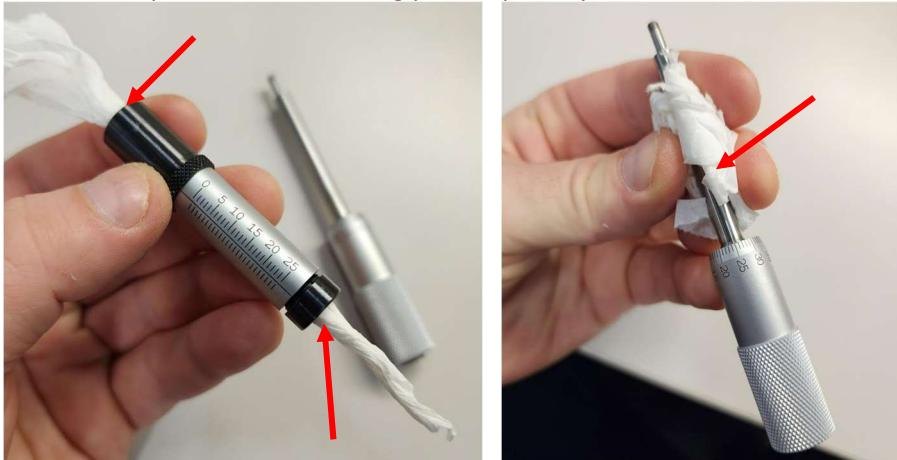
Cleaning and Servicing Micrometers

Micrometers can become increasingly difficult to turn with prolonged use, and their longevity depends on factors such as humidity, temperature, and environment. When they become too difficult or even impossible to operate, they either require replacement or cleaning and re-lubrication, if there is no mechanical defect.

1. To clean the interior of a micrometer, you can easily separate the micrometer into two parts by unscrewing it.



2. Clean both parts of the micrometer using a lab wipe and isopropyl alcohol. Wipe down the micrometer shaft and the internal portion of the mating part, especially at both inside ends of the ferrule part.



3. Apply a **thin** layer of your preferred general-purpose synthetic lubricant to both ends of the ferrule and apply a thin layer of the same lubricant to the shaft. Reassemble the micrometer by screwing it back together and check for smooth operation throughout the micrometer's range. If your micrometer still feels difficult to turn or has sections that feel hard to move, you may need to replace it.

