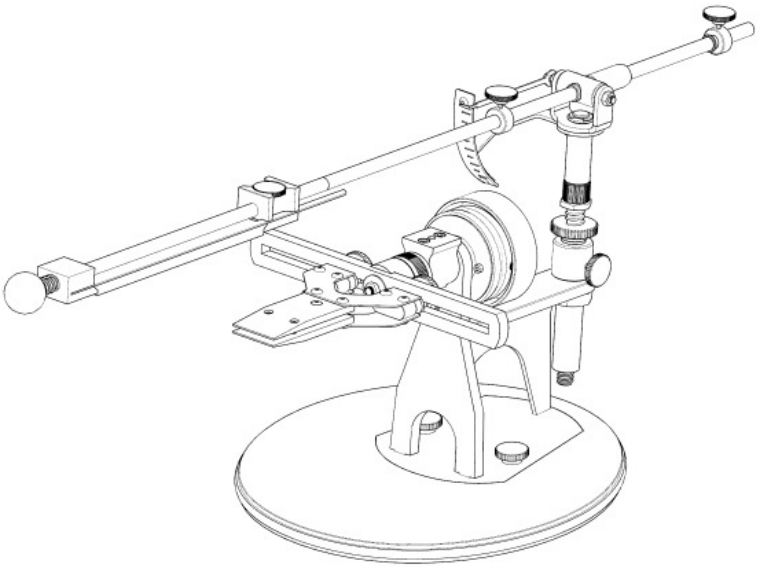
TSPROF

KNIFE SHARPENER®

made in Russia

TSPROF K-02
Knife Sharpener



ENGLISH

USER'S MANUAL

Table of Contents

Safety guide

WARNING

- Before using, read this user's manual to ensure correct usage through understanding. After reading, store it in a safe place for future reference. Incorrect handling of this product could possibly result in personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in this sharpening system manual.

- Sharpening greatly increases the risk of injury from contact with a blade, even a slight touch of the sharpened blade can lead to a severe cut.

- During the sharpening, beware of contact with a blade. Bear in mind that translational movements are made towards a sharp blade.

- Before starting the sharpening process, be sure to install the bar stoppers.

- When installing, adjusting and during the sharpening work, protect your hands from cuts on the sharp edges of a knife.

- After finishing work with the sharpening system, remove the knife from the clamp (or together with the clamping jaws) and put it into the sheath, or otherwise isolate the blade to avoid cuts.

- During the sharpening work, beware of accidental triggering of the rotary gear, for example, when the fixation effort is exceeded.

- When using a G-clamp to secure the body of the sharpening system to a table or workbench, make sure that the G-clamp is well tightened and the body is securely fixed to the work surface.

- When using the stand, hold the sharpener at a distance from the edge of the working surface. The fall of heavy metal construction even from a small height can lead to injuries.

- Do not leave an open, not covered blade in the access zone of children and animals.

Maintenance tips

- Moving the abrasive holder bar during the process of sharpening should be smooth and even, without any jerky motions and too much of a hand force applied.
- When the sharpening is finished, remove the holder bar, abrasive and a knife. Clean the sharpening system with a dry napkin.

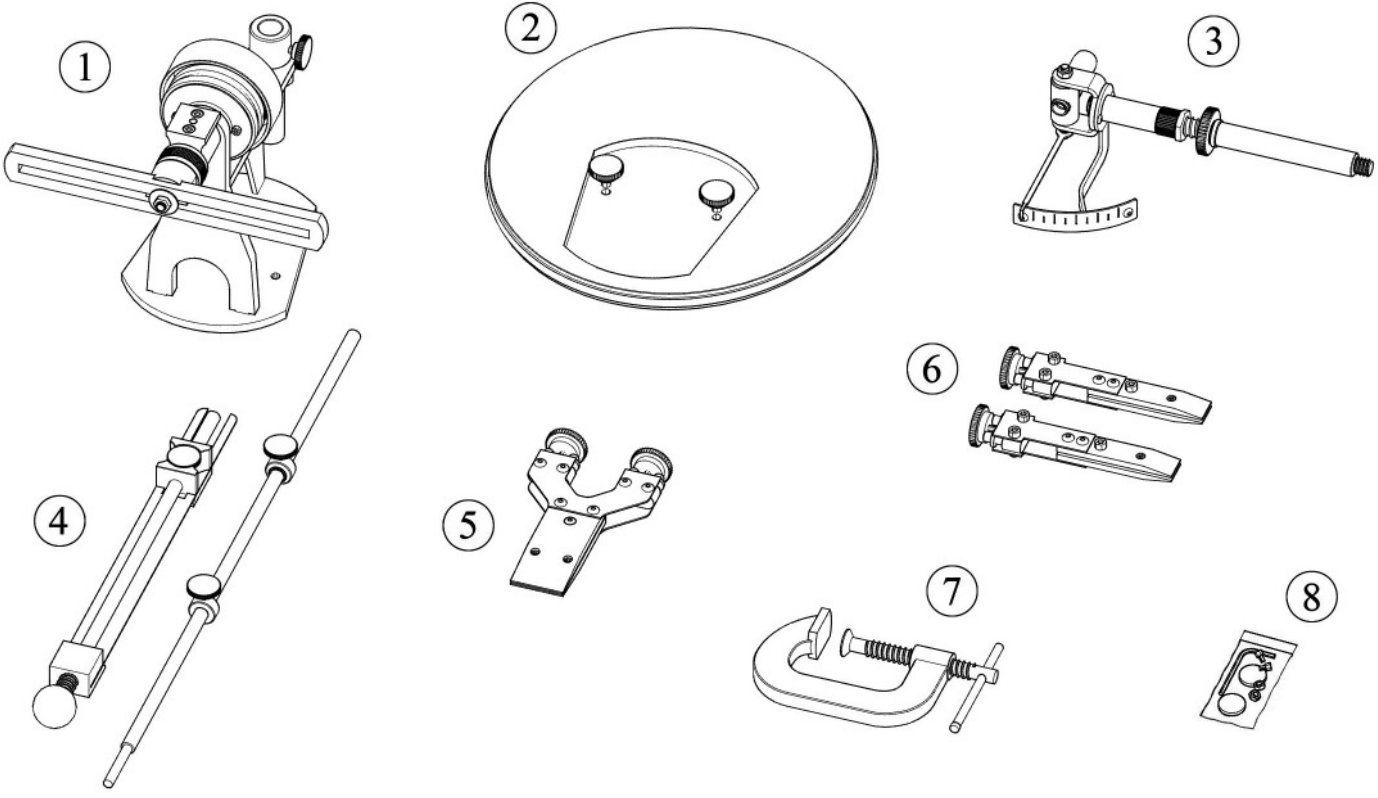
Maintenance:

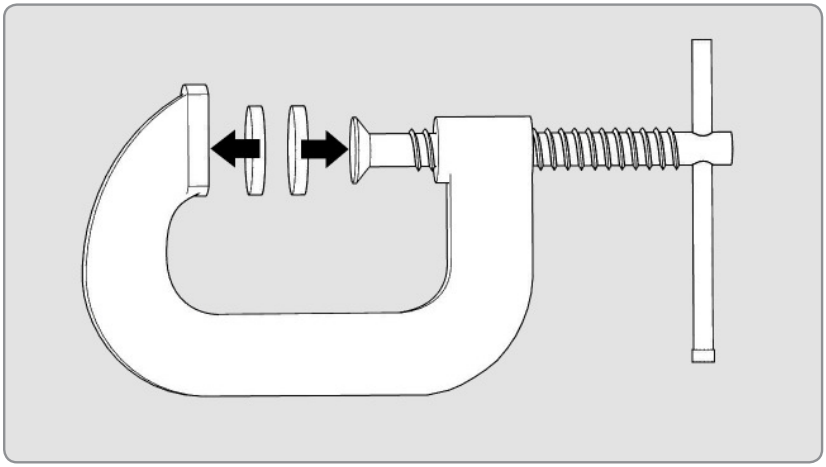
1. Keep your workspace and the sharpening system clean. Wipe the dust and dirt away from the working surfaces and moving components.
2. Change the worn-out components as required.
3. The sharpening system should always be checked before using. All the disrepair should be fixed and the calibration is done. Check the smoothness of all moving components.
4. Working surfaces should be dry and slightly oiled.
5. Check the condition and position of all the mounts, details and components after 50 hours of use.
6. For smearing the connected parts use a machine oil.
7. Damage and wear and tear of the screwed joints. Especially on the holding screws of the spring clamp. As a preventative care of this issue, we recommend not to use the screws without any lube and keep the right order of manipulating them. (E.g. **Full flat grind clamping** at page 35). If some holding screws are got damaged, unscrew and change them. But before unscrewing them, grind the end of the screw off, just because it can be squashed during the work. Do not apply much force when unscrewing during the repair operation because it damage the clamp threads.
8. If you have any difficulties with repair, address to the product vendor.

1.	Body
2.	Stand
3.	Vertical angle bar with gauge
4.	Abrasive Holder
5.	Single Clamp
6.	Double Clamp
7.	G-clamp
8.	Spare parts

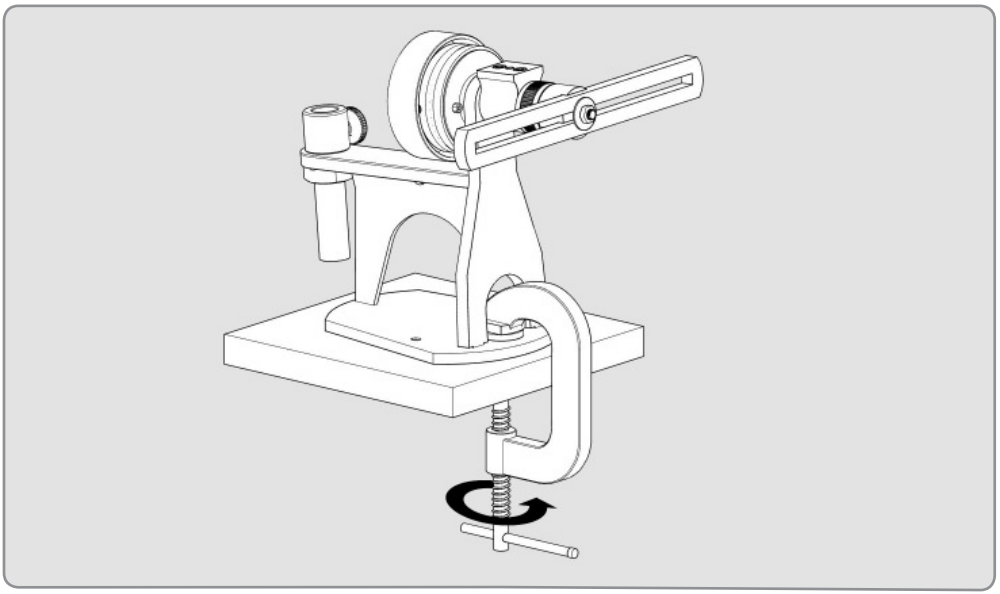
Assembling

TSPROF K02 Knife Sharpener Components List



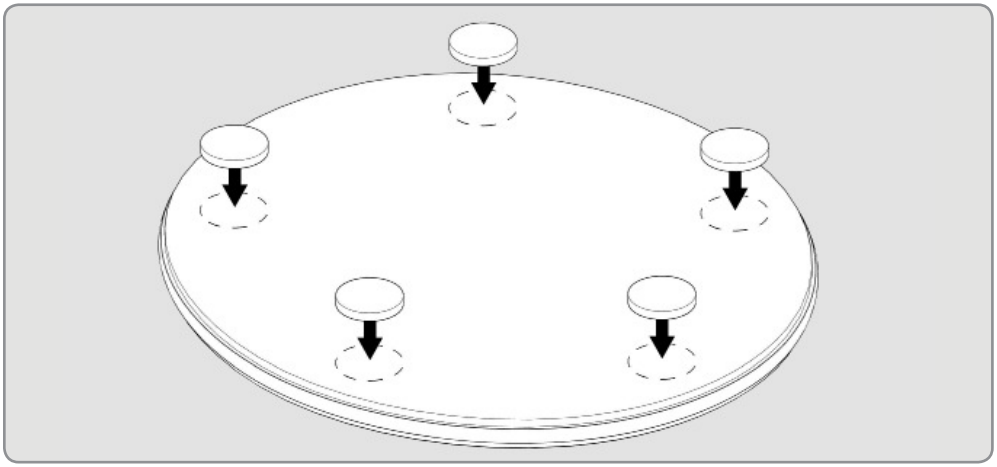


1. Stick softening spacers from the spare parts to the G-clamp contact surfaces.

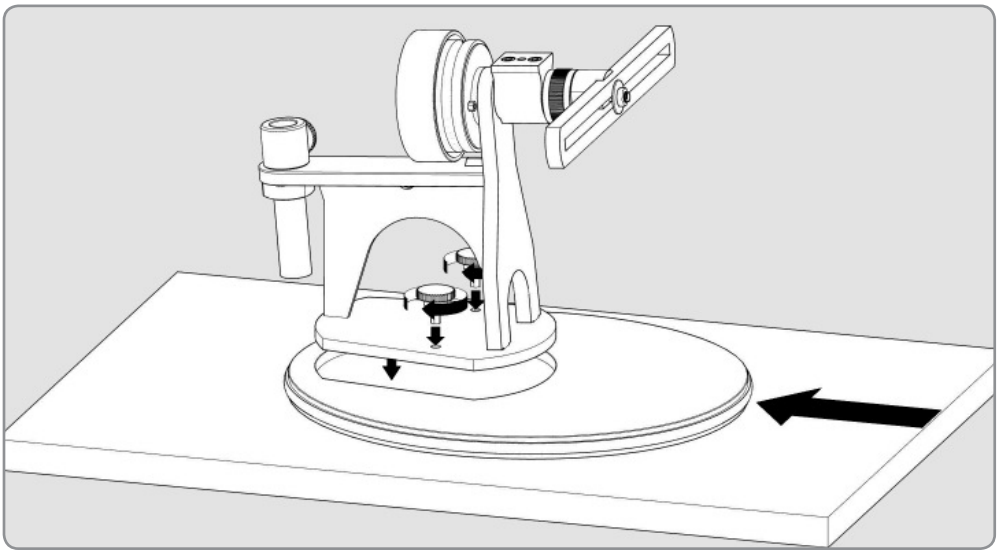


2. Attach the body to a table using the G-clamp.

Installation method - 2

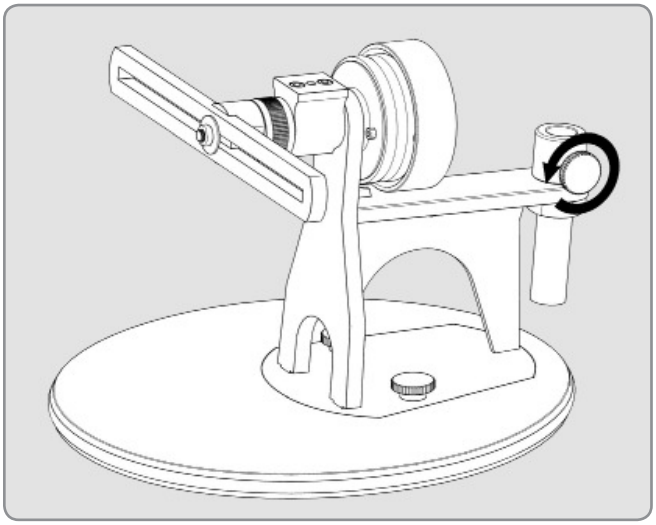


1. Stick 5 self-adhesive silicone feet from the spare parts to the underside of the stand.

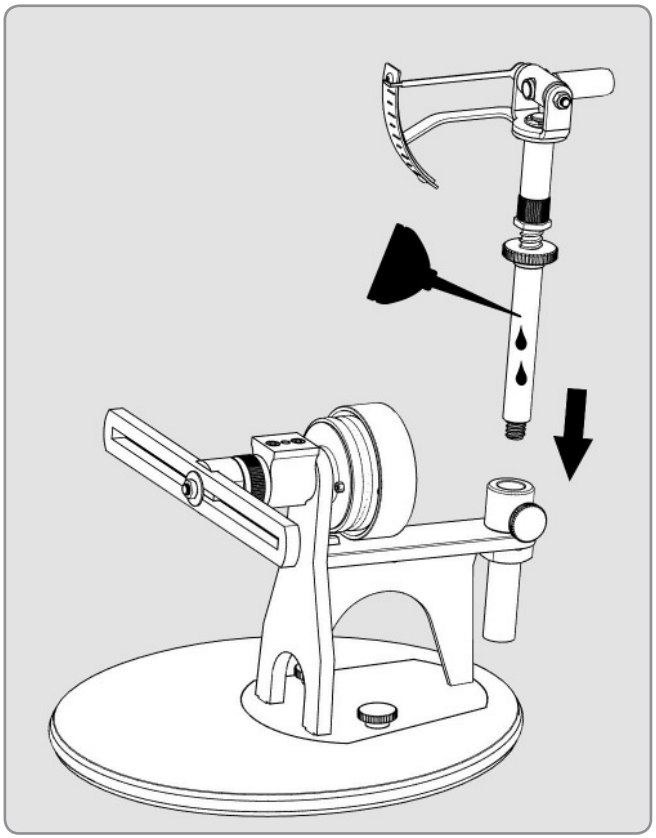


2. Place the sharpener body into the hollow part of the stand. Attach by tightening the thumbscrews. The stand should be placed on a flat stable surface at some distance from a table edge.

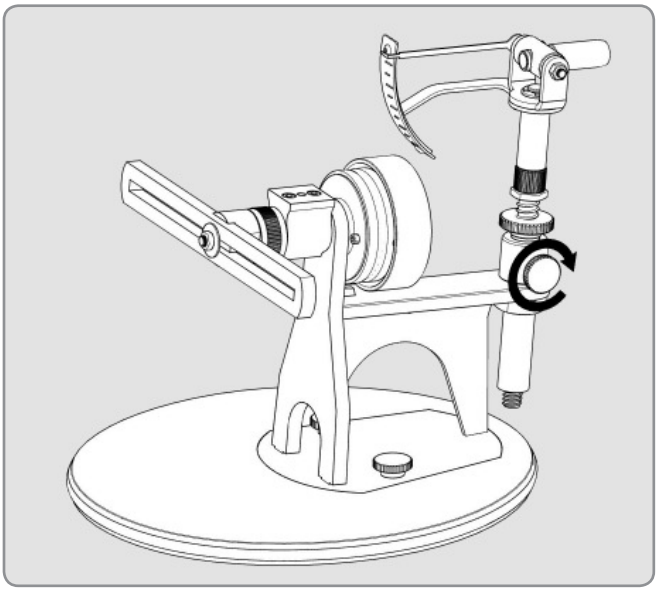
Base unit assembling



1. Loosen the thumb-screw fixing the vertical bar.

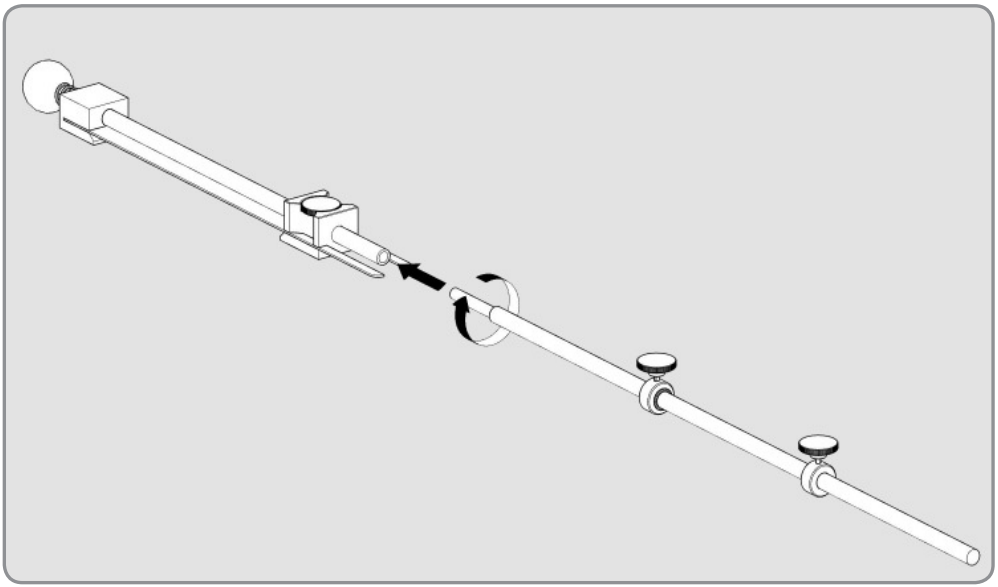


2. Lubricate the vertical bar with a drop of a liq-uid grease and install it.

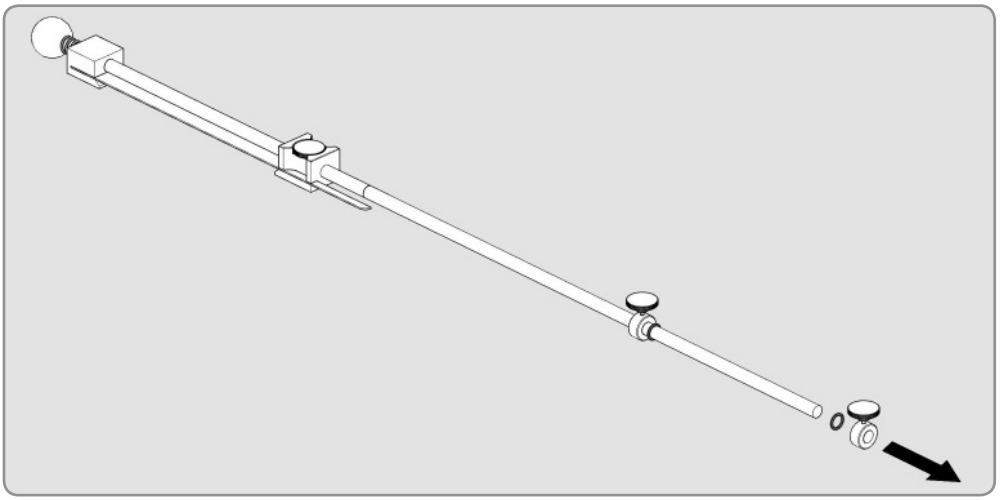


3. Tighten the thumb-screw fixing the vertical bar.

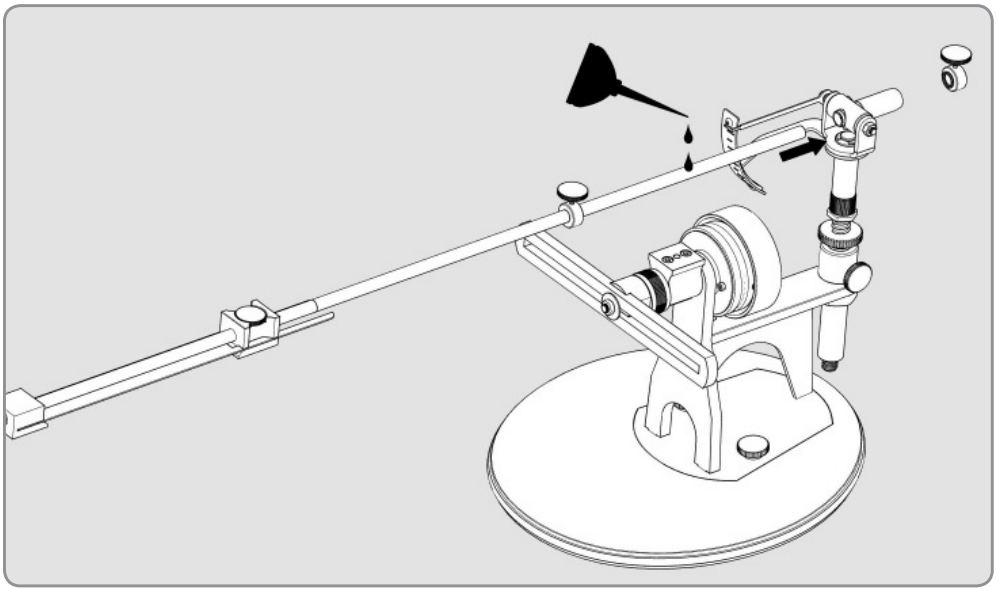
Abrasive Holder assembling



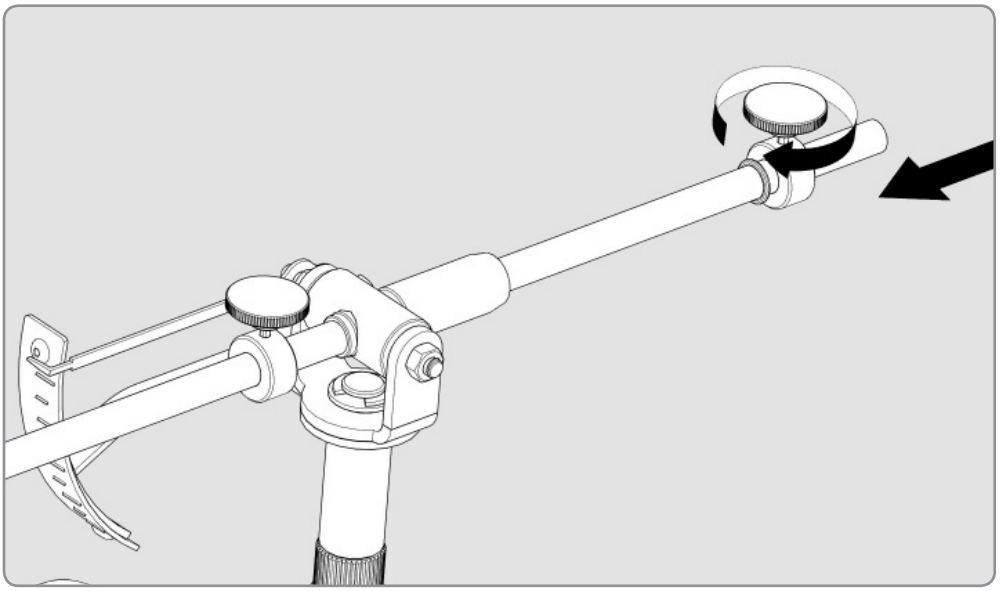
1. Assemble the abrasive holder.



2. Remove the outermost stopper and its bumper.

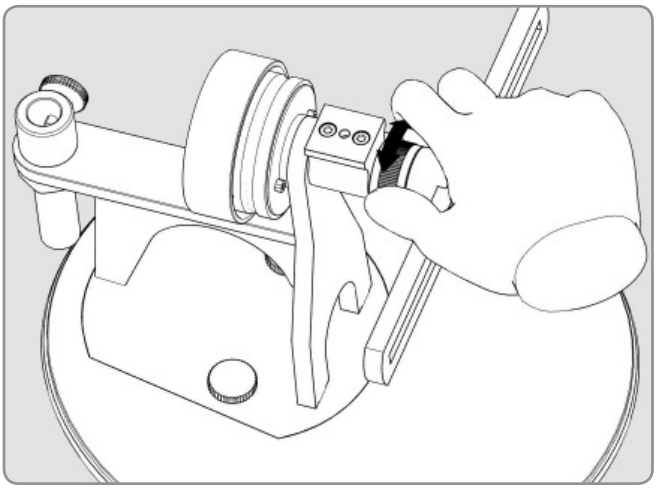


3. Lubricate the guide with a drop of a liquid grease and install the abrasive holder into the vertical bar bush.



4. Install the bumper and the stopper back to their places.

Adjustment of the rotary gear fixation effort

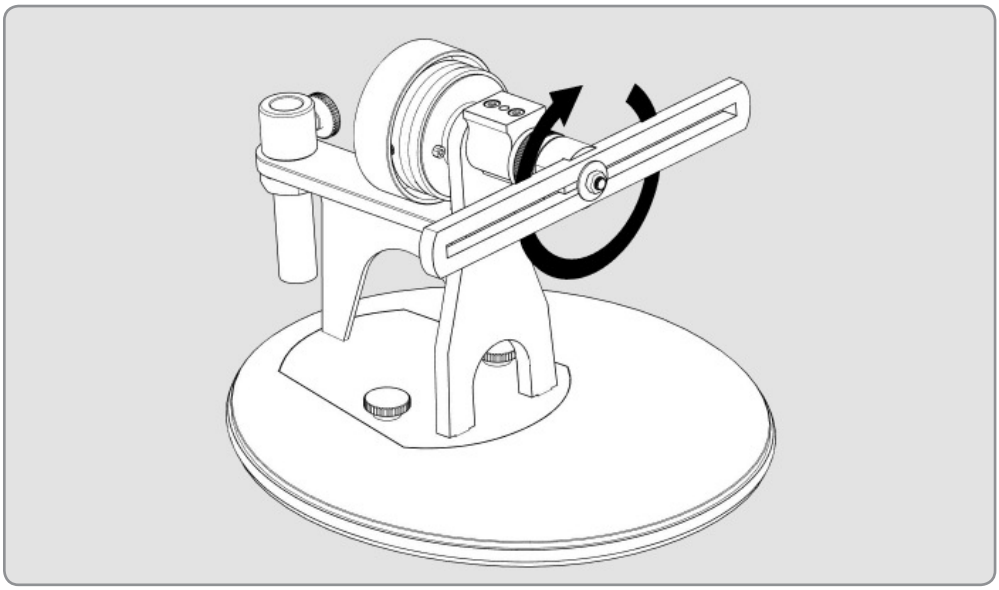


Note:
You should tighten the calibration wheel only with your hands, tightening too much may damage the rotary gear.

Note:
Be aware of rotary gear triggering when the force is applied to a blade during the process of sharpening.

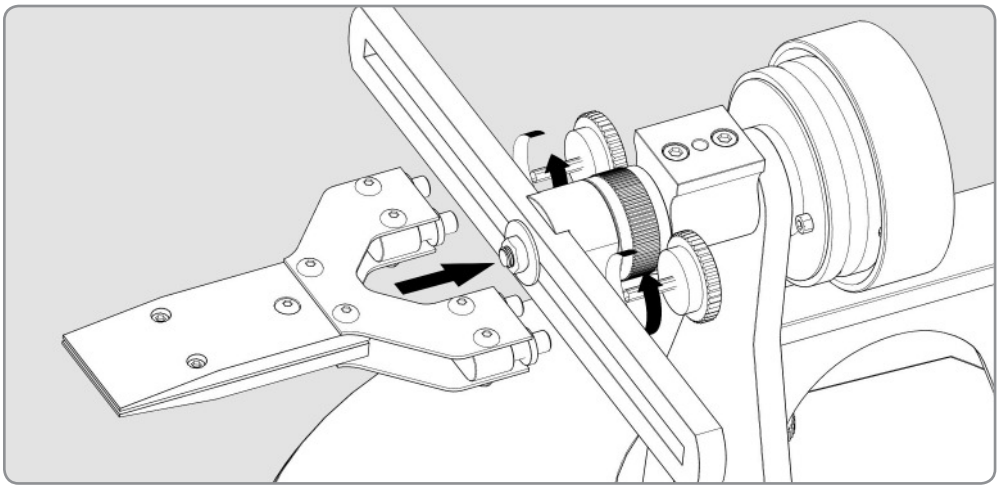
Note:
For increasing the fixation effort, turn the rotary gear clockwise (as shown in the figure 2), for decreasing - counter-clockwise.

1. By turning the calibration wheel, set a necessary rotary gear fixation effort. Choose an effort so it doesn't flip during the process of sharpening.



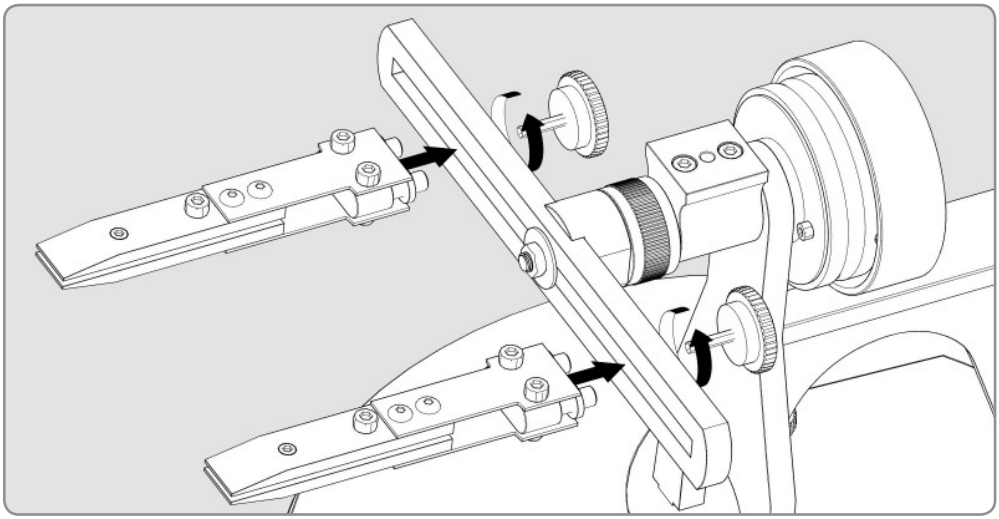
2. Turn the rotary gear clockwise.

Installation of the Single Clamp

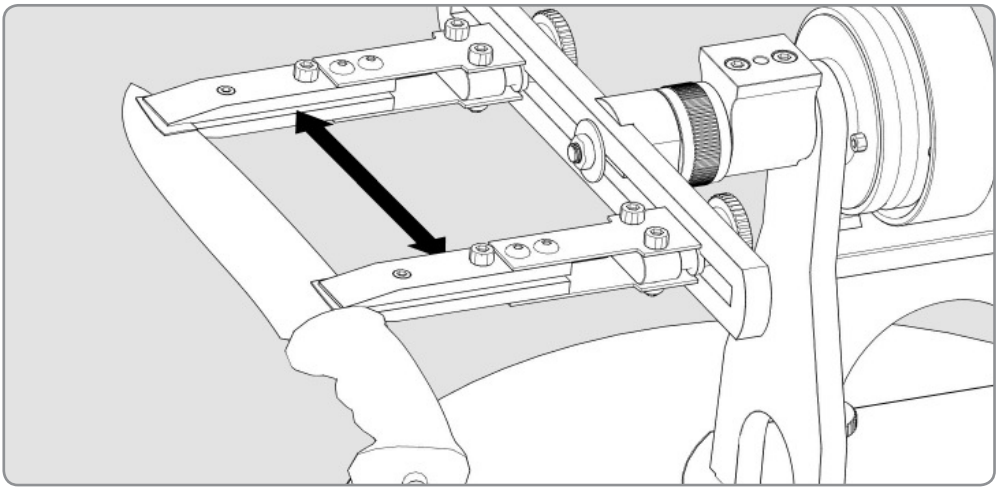


1. Install the clamp into the frame and tighten it with the fixing screws.

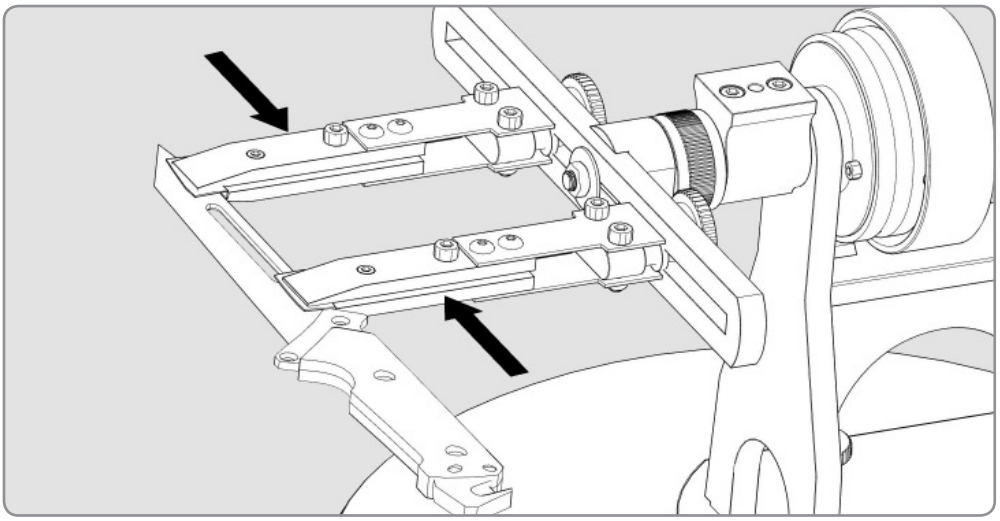
Installation of the Double Clamp



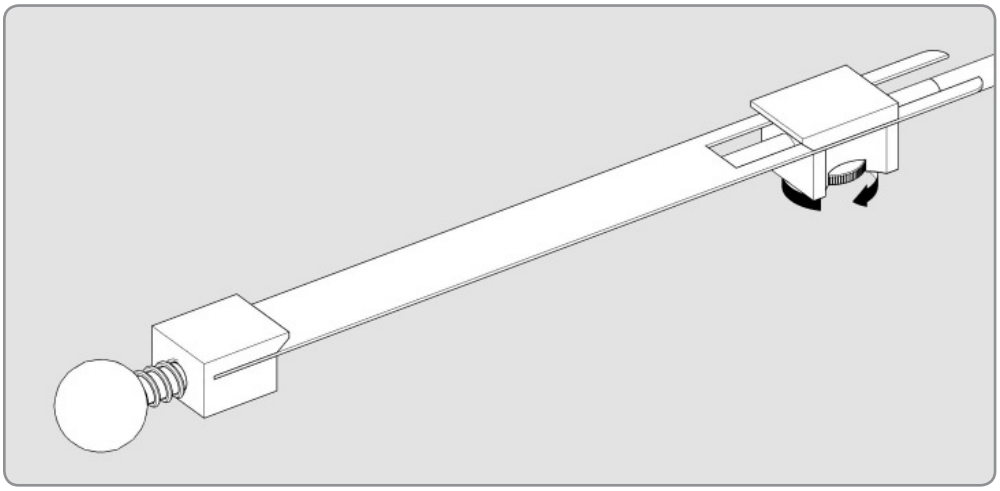
1. Install the clamp jaws into the frame. Slightly tighten the fixing screws.



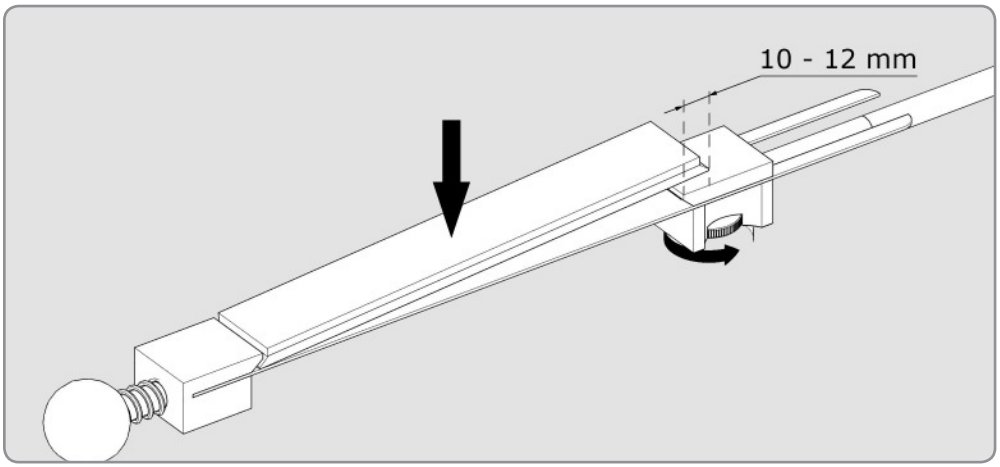
2. Adjust the jaws position according to the length and geometry of a knife blade and tighten the fixing screws.



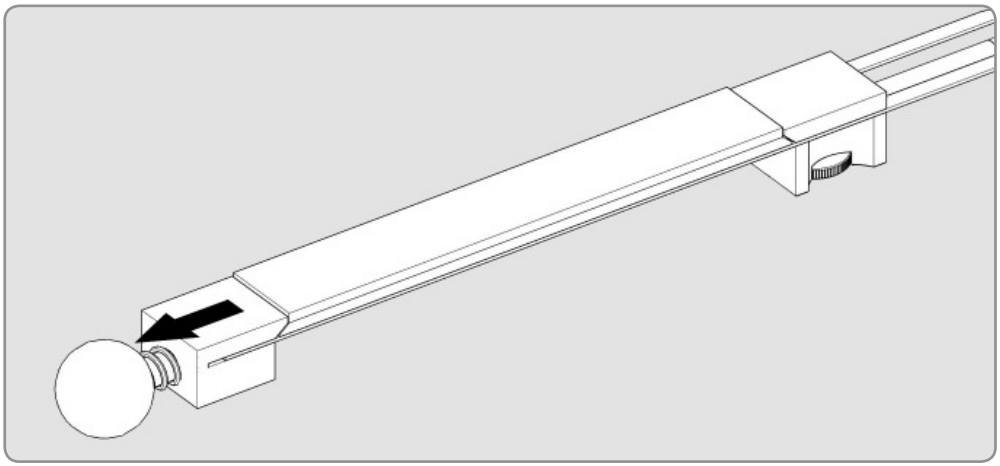
Installation of an abrasive



1. Loosen the fixing thumbscrew on the second thrust bar.



2. Moving the second thrust bar, set the distance between the thrust bars to 10 - 12mm less than the abrasive length. Tighten the fixing thumbscrew on the second thrust bar.



3. Pulling the first thrust bar towards the handle, squeeze the spring and insert the abrasive.

Calibration of the Sharpening system and Clamps

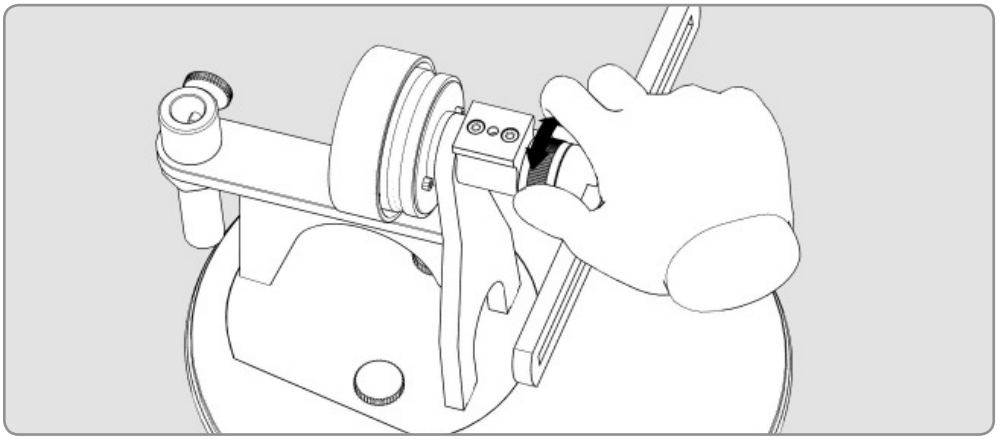
<u>WARNING!</u> Be carefull performing the calibrations described in this manual, incompetent or careless actions can lead to breakage of the mechanisms of the sharpening system.

Required tools: spanners - 7mm, 10mm and 24mm, hex keys - 2mm, 2.5mm or torx - t8, t10.

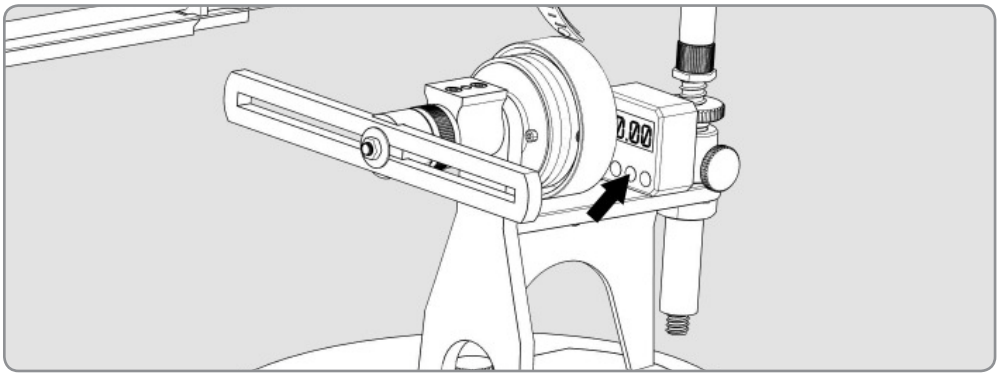
If an angle deviation is <= 0.3° (or other value of required accuracy), then an adjustment is not needed. Minor deviation calibration is not recommended.

All the calibrations should be performed on a rigid stable surface.

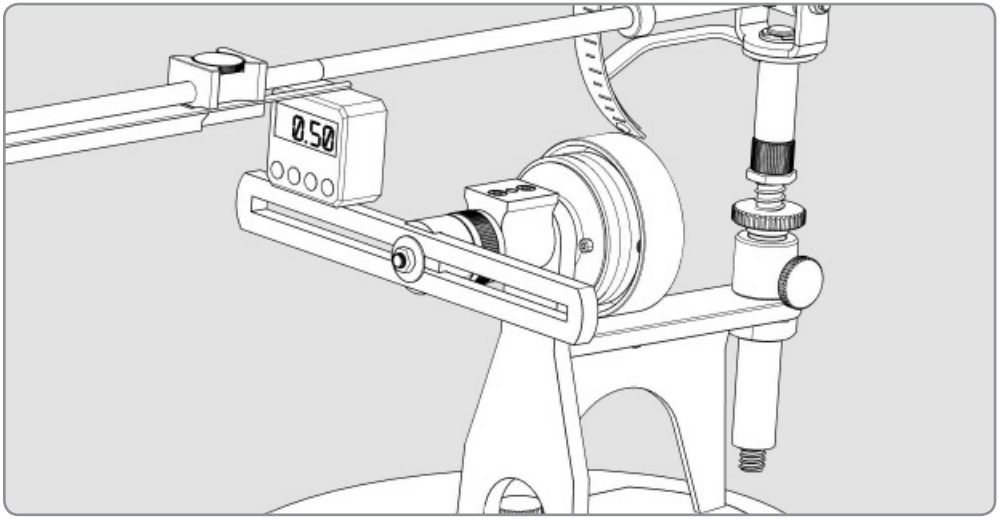
Calibration of horizontal frame - Method 1



1. By turning the calibration wheel, set a slight rotary gear fixation effort.

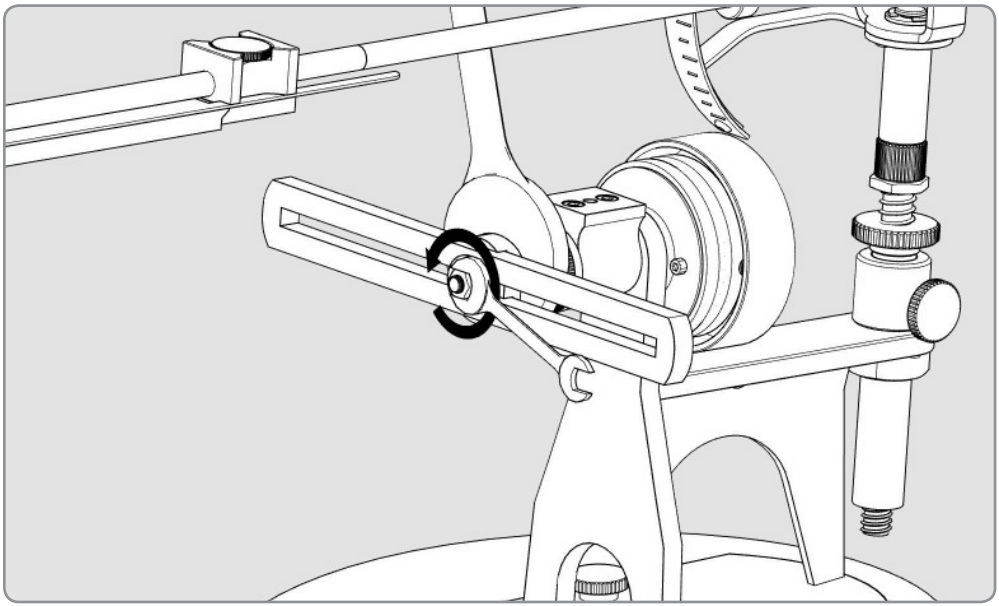


2. Place the digital gauge on the sharpener’s base unit and reset its value.

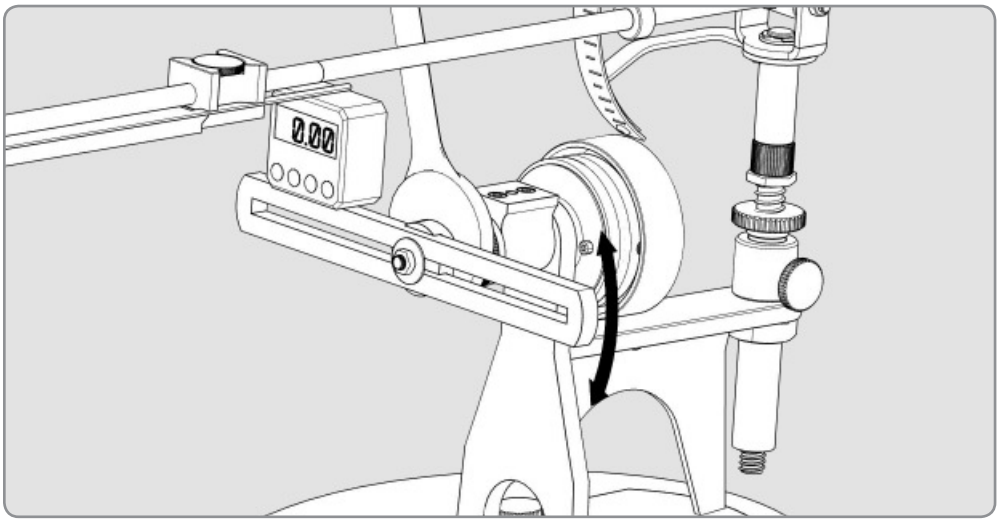


3. Place the digital gauge on the frame. If the gauge shows a deviation of <= 0.3° (or other value of required accuracy), adjustment is not needed.

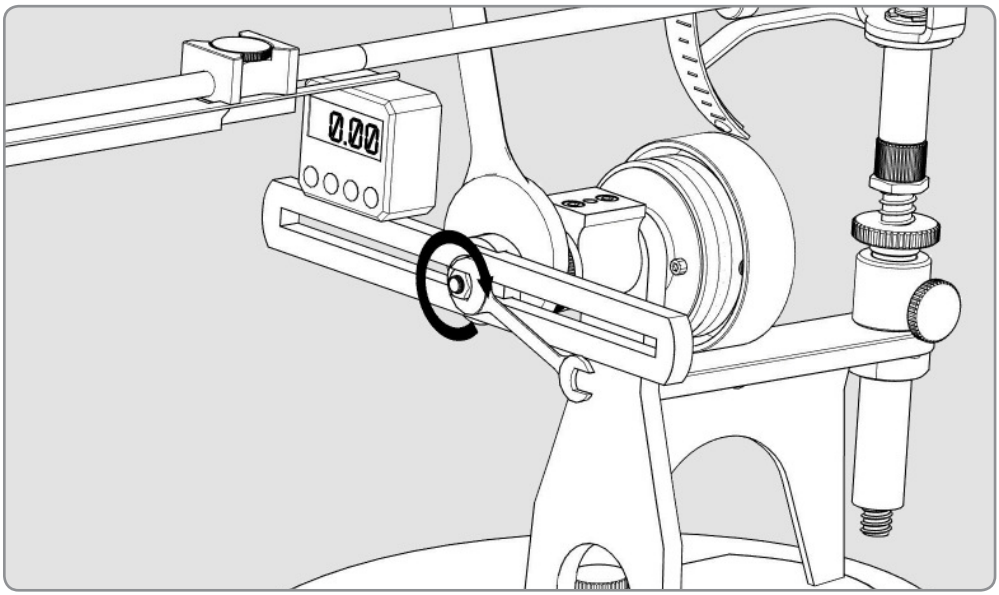
   Next steps are needed to perform the calibration.



4. Holding the frame clutch with a 24mm spanner, loosen the fixing nut with a 10mm spanner.



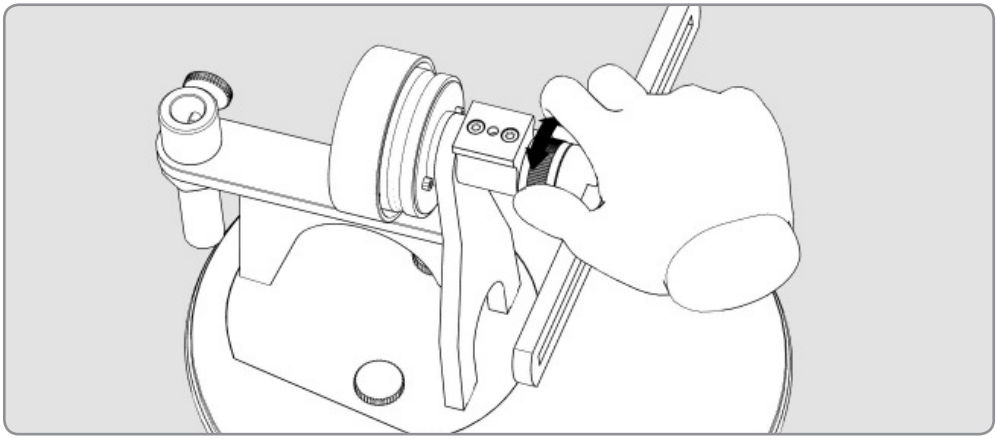
5. By turning the frame, adjust its position.



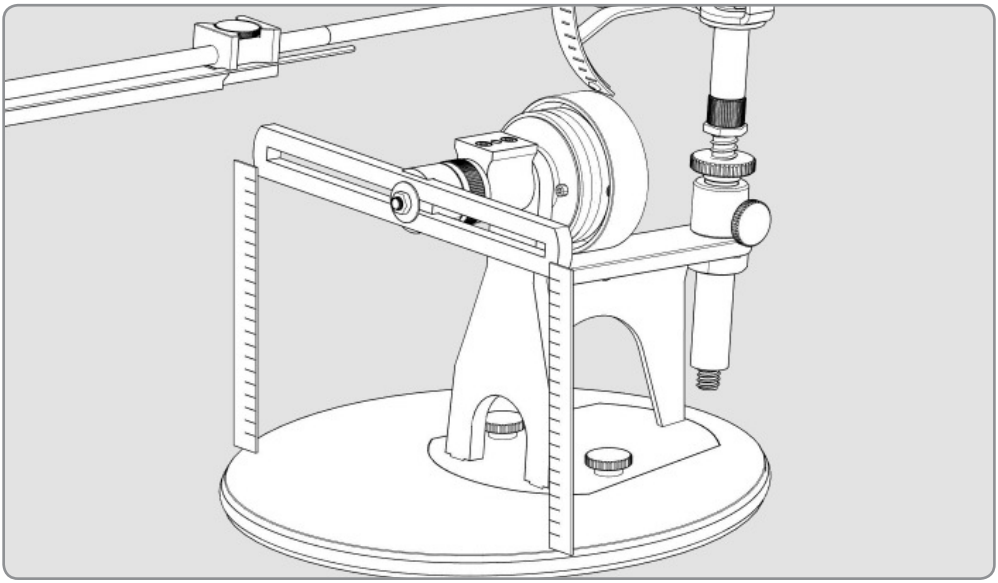
6. Holding this position with a 24mm spanner, tighten the fixing nut with a 10mm spanner.

Calibration of horizontal frame - Method 2

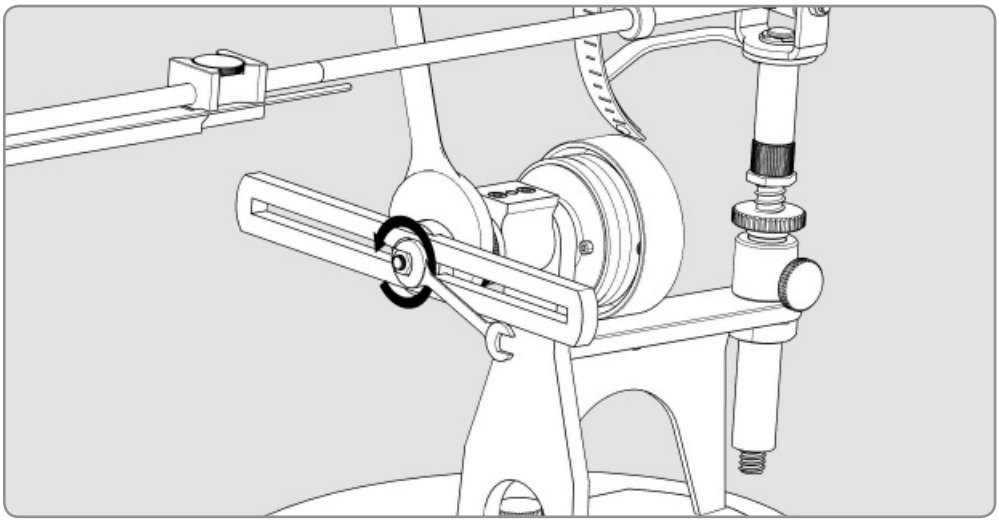
Tools required: a ruler, spanners - 24mm and 10mm.



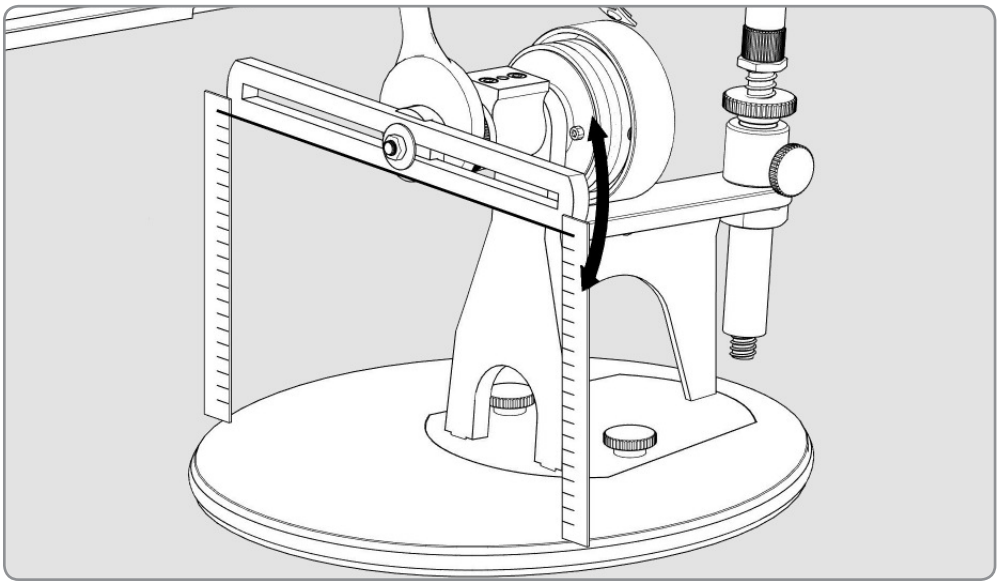
1. By turning the calibration wheel, set a slight rotary gear fixation effort.



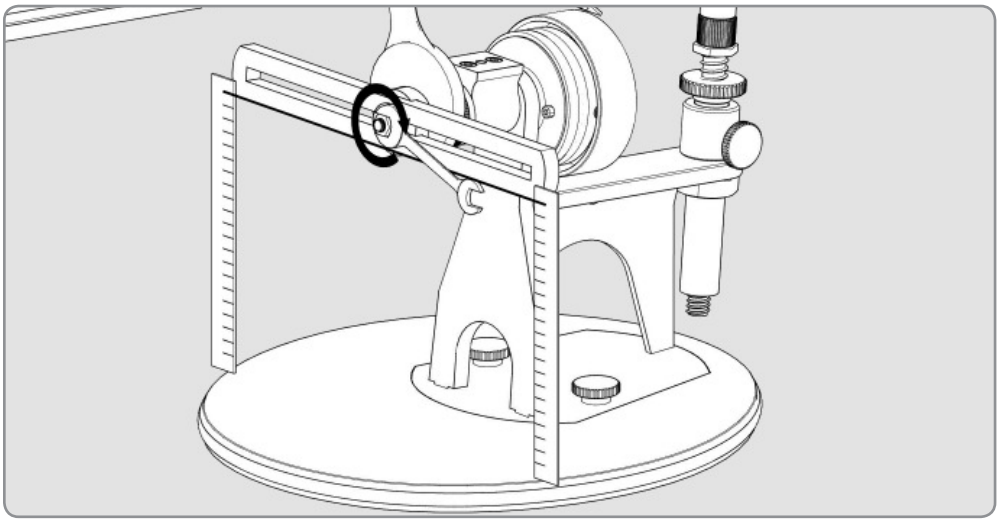
2. Position a ruler straight vertically. Measure the distance from the ends of the frame to a table.



3. Holding the frame clutch with a 24mm spanner, loosen the fixing nut with a 10mm spanner.



4. By turning the frame, adjust its position so the measured distances are about equal.

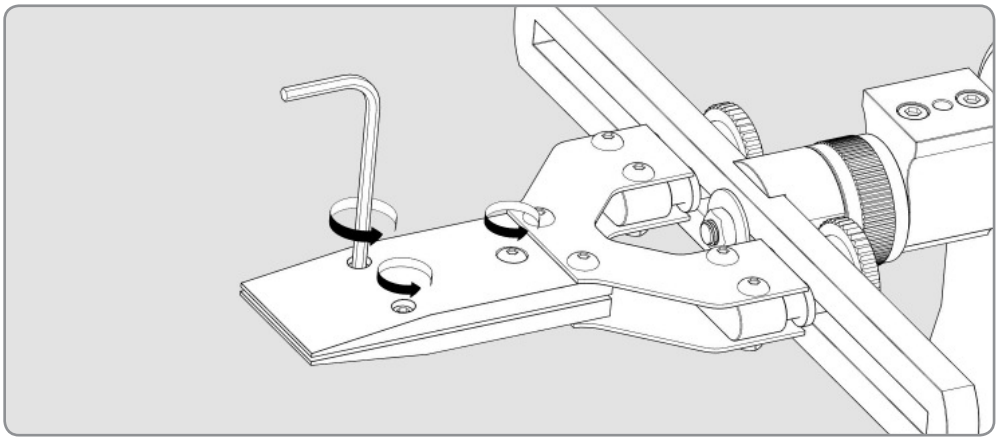


5. Holding this position with a 24mm spanner, tighten the fixing nut with a 10mm spanner.

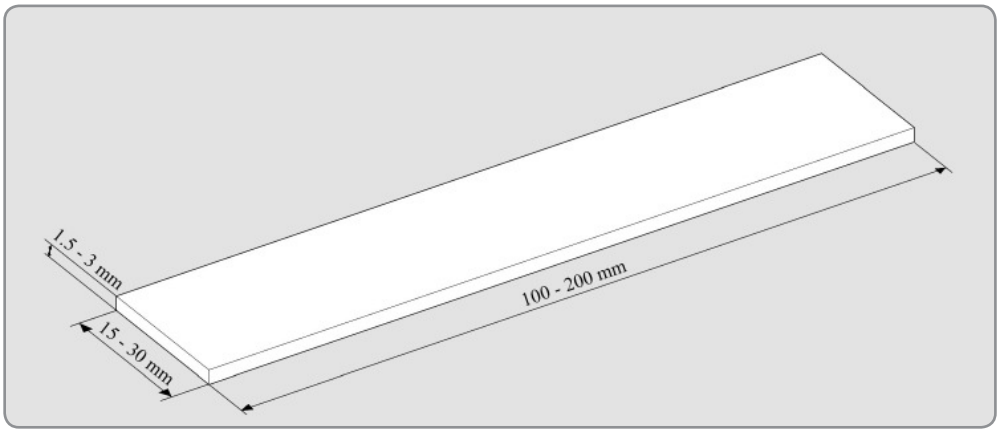
Turning Clamp angle calibration

Calibration should be made to eliminate angle asymmetry when the clamp rotates, which may emerge during transportation or after a long operation period.

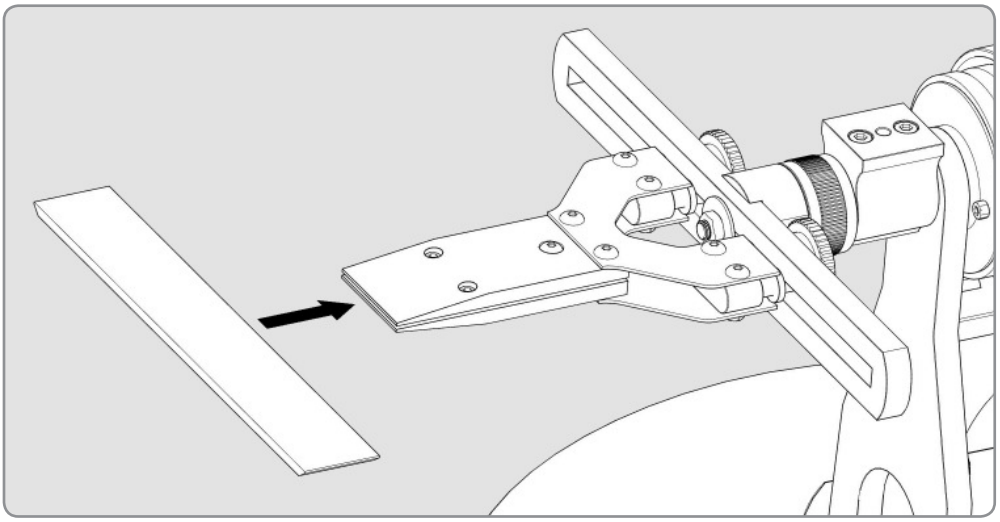
Tools required: a digital gauge, hex key.



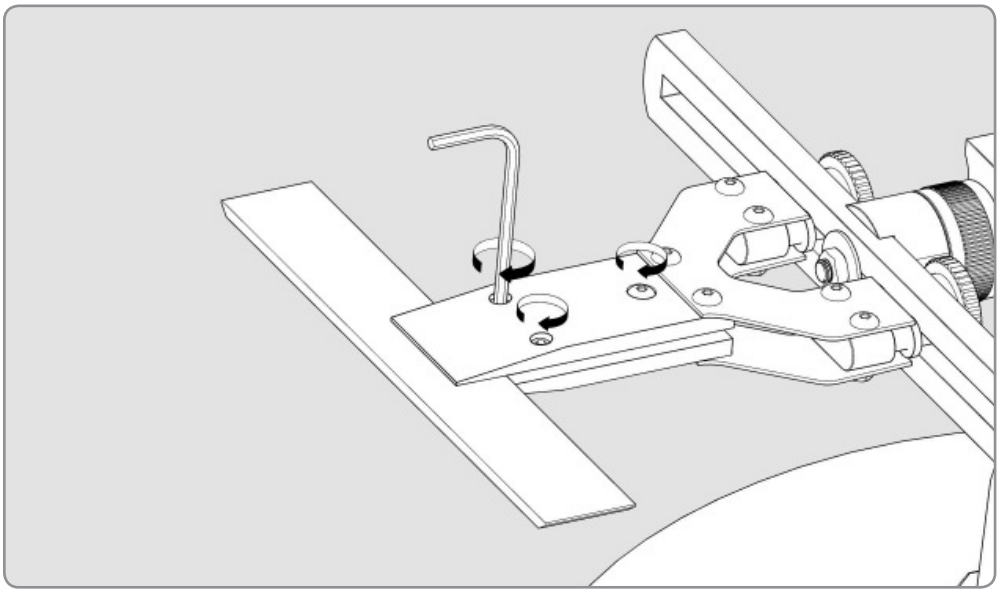
1. Loosen the holding screws.



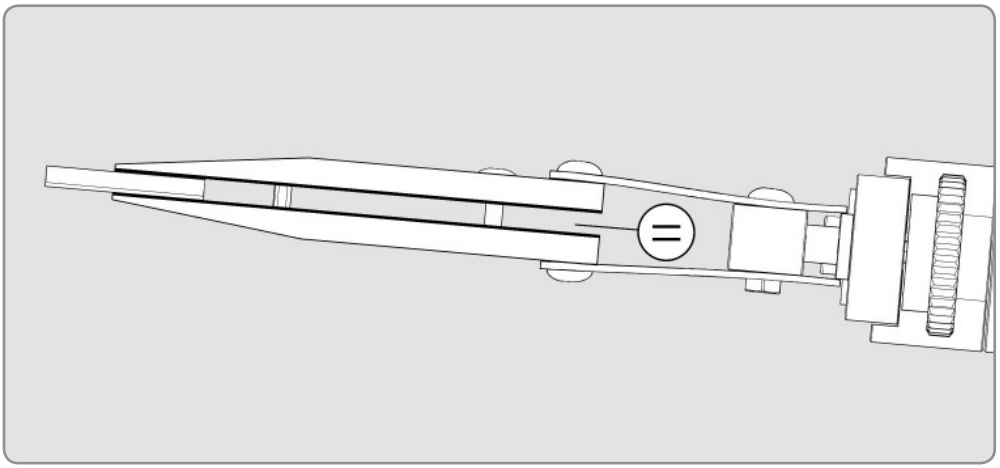
2. Take a flat rigid plate 15 - 30mm wide, 1.5 - 3mm thick, and 100 - 200mm long.



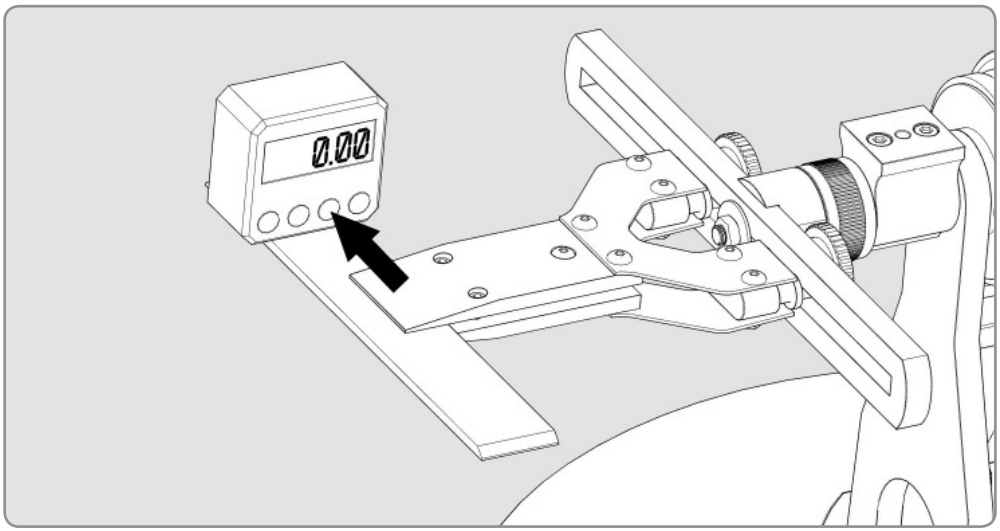
3. Install the plate into the clamp.



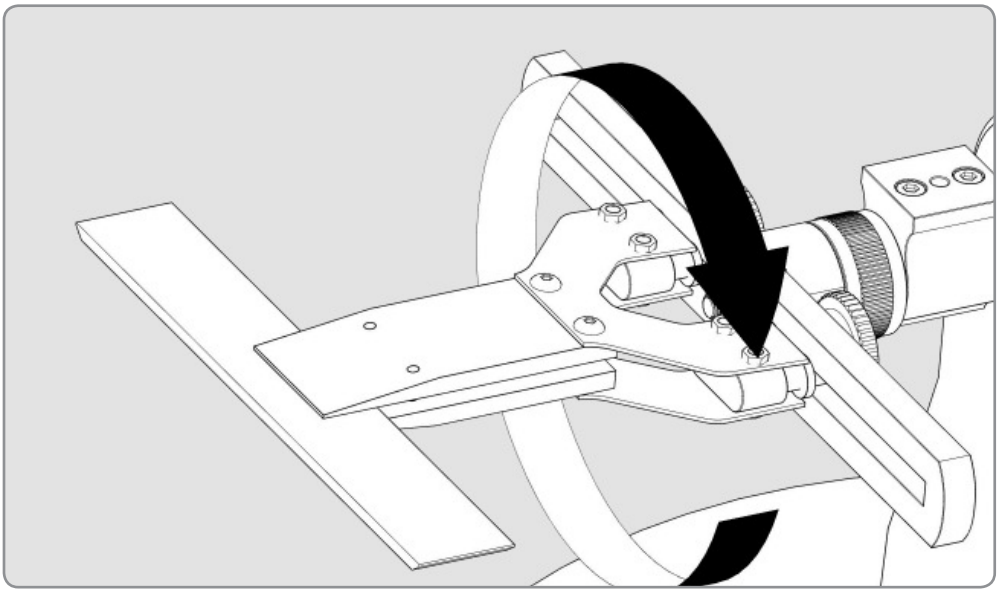
4. Tighten the front holding screws slightly; final tightening should be made at the back screw.



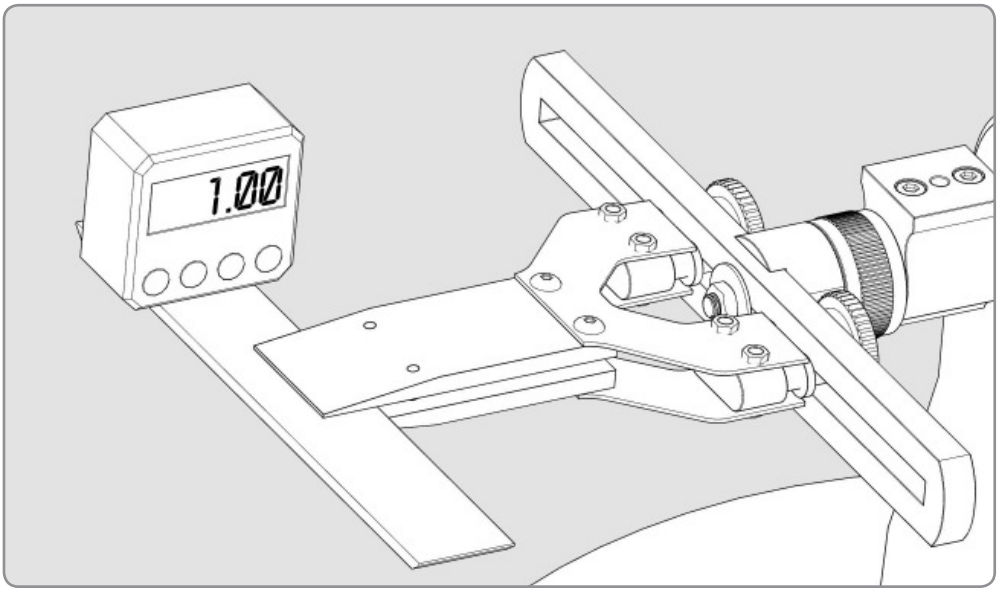
5. Thus, the jaws of the clamp should be parallel.



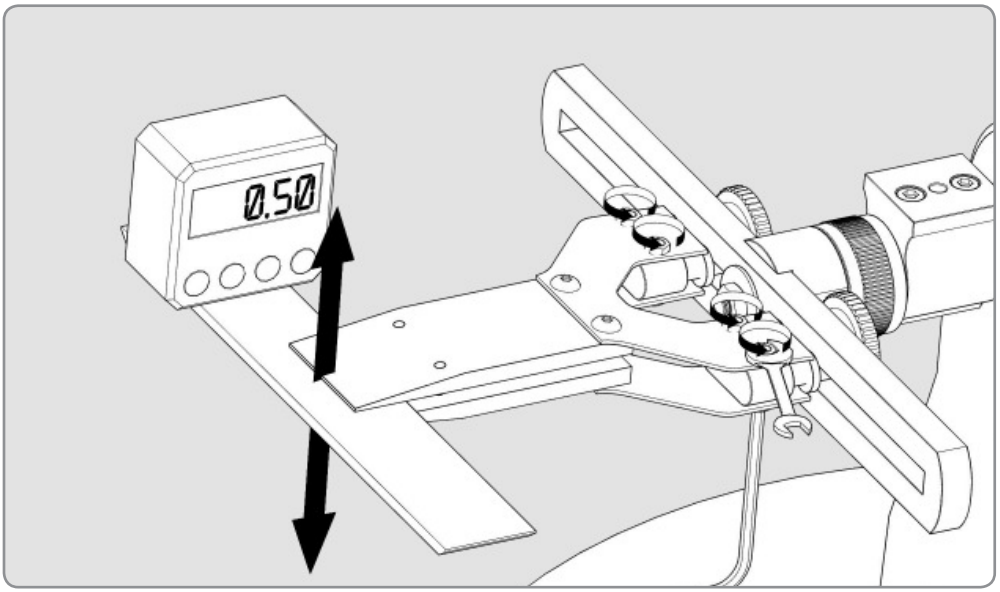
6. Place the digital gauge on the plate along the clamp's rotation axis and reset its value.



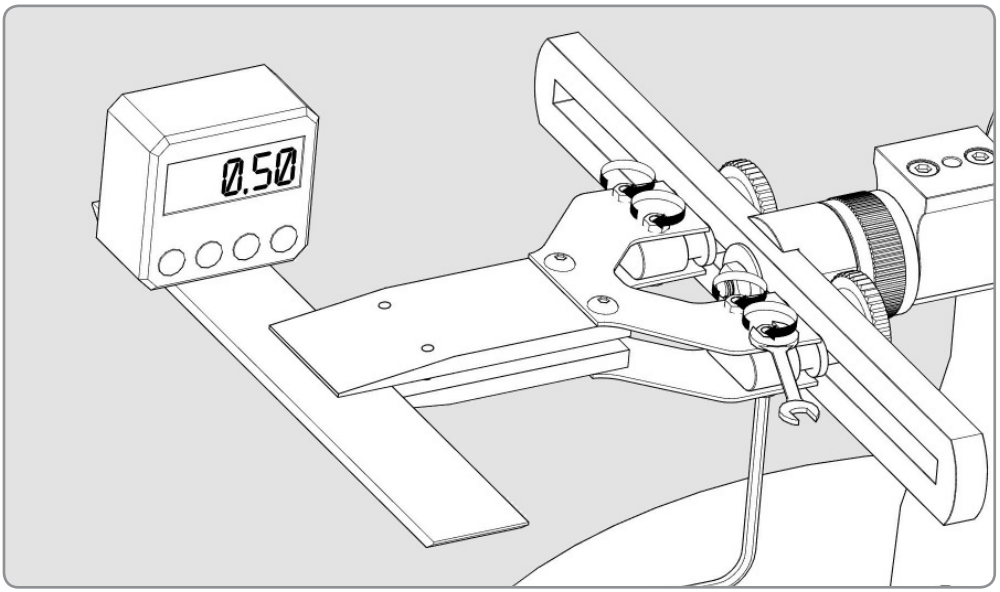
7. Flip the clamp over.



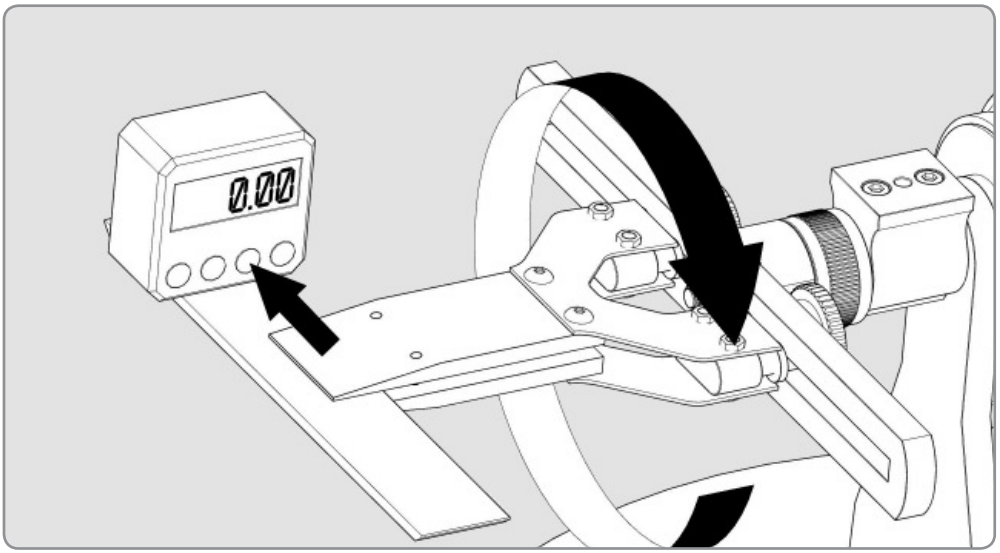
8. Make a measurement. The gauge will show the angles difference when the clamp is flipped. If the deviation is <= 0.3° (or other value of required accuracy), adjustment is not needed.



9. Loosen the screws to level this difference. Adjust the angle manually until the gauge value is 1/2 of the difference measured before.

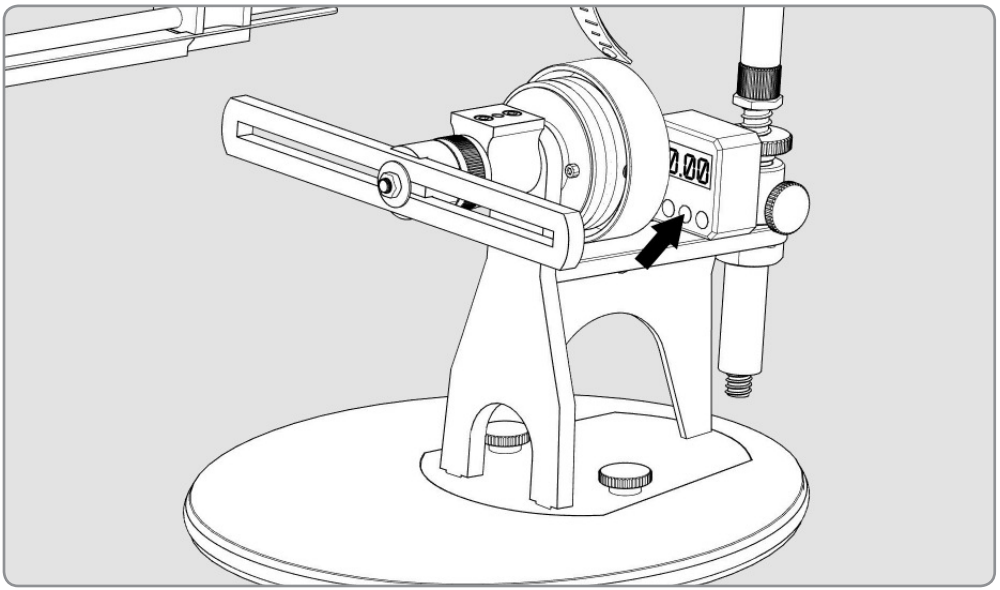


10. Holding this gauge value, tighten the screws.

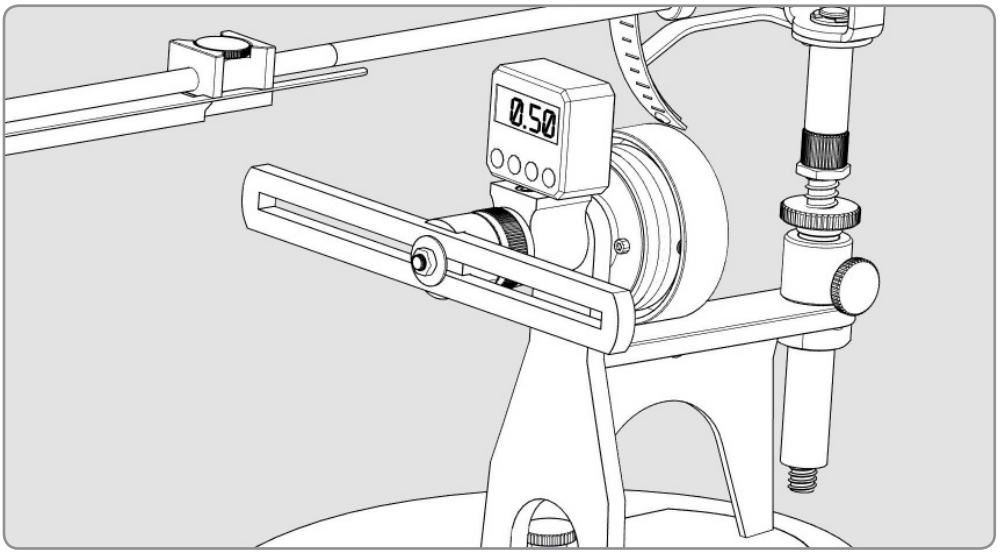


11. Repeat the procedure in order to ensure an accurate setting.

Digital gauge platform horizontal calibration

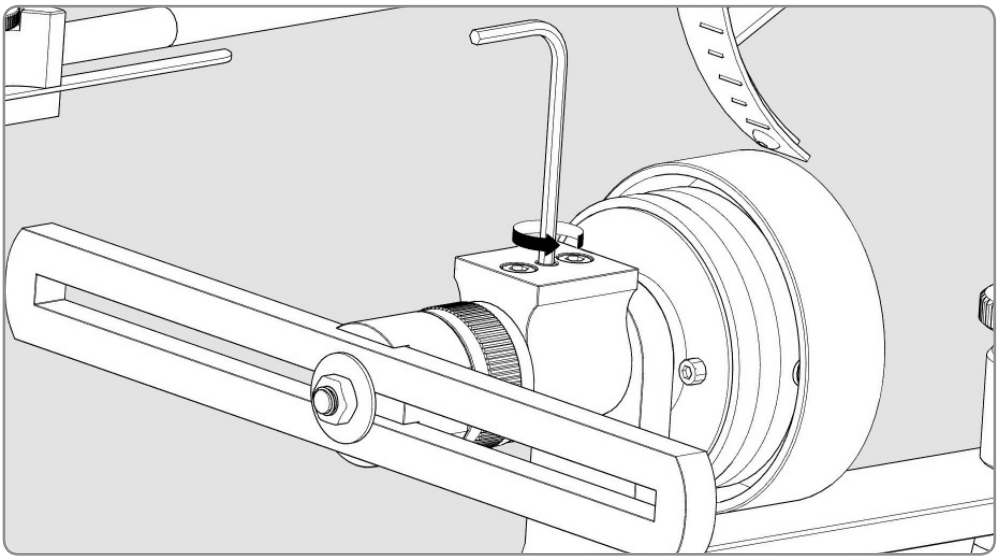


1. Place the digital gauge on the sharpener’s base unit and reset its value.

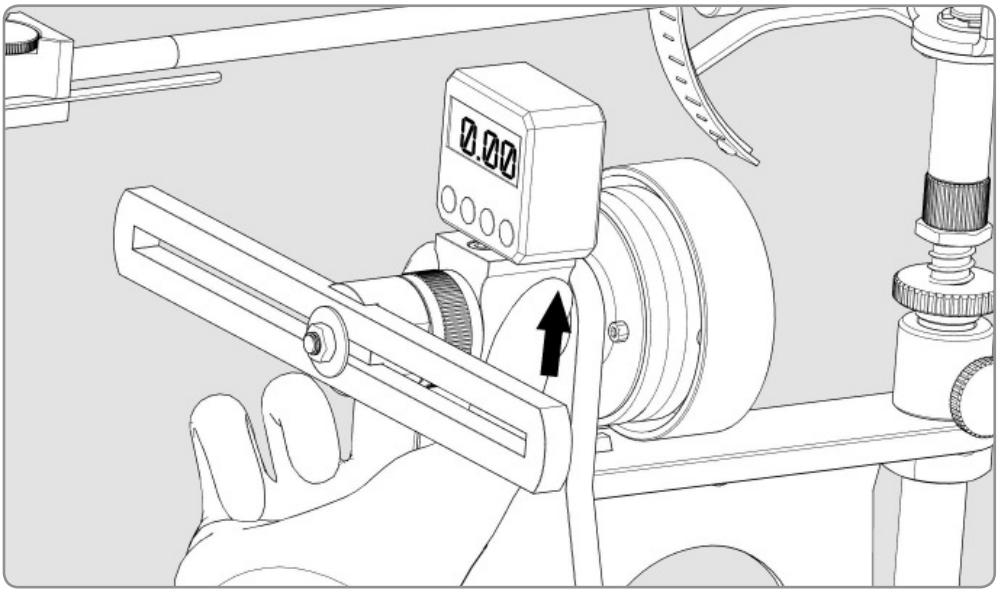


2. Place the digital gauge on the digital gauge platform. If the deviation is <= 0.3° (or other value of required accuracy), adjustment is not needed.

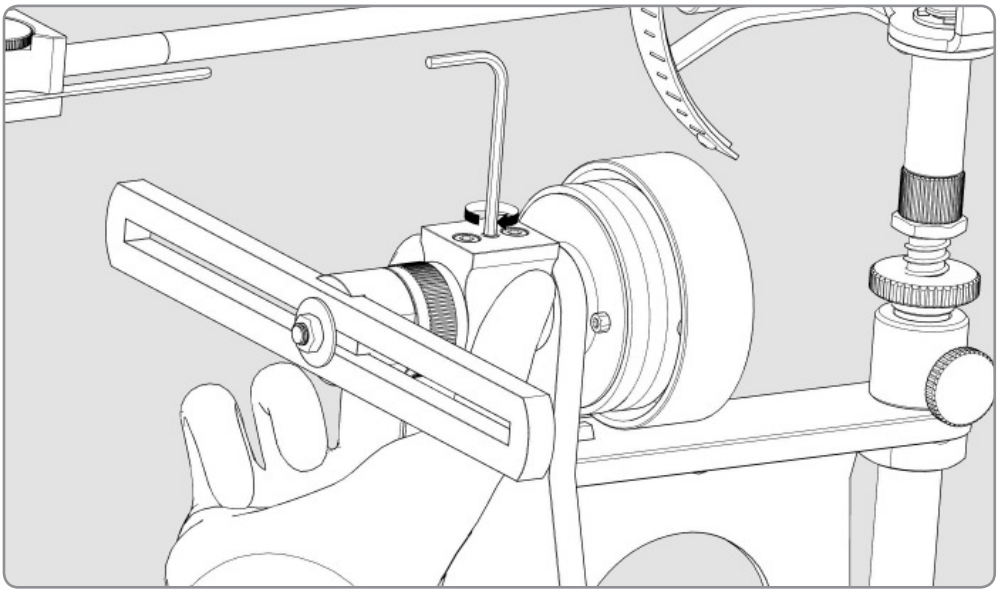
   Next steps are needed to perform the calibration.



3. Loosen the calibration screw with a 2mm hex key or torx t8, half-turn is enough.



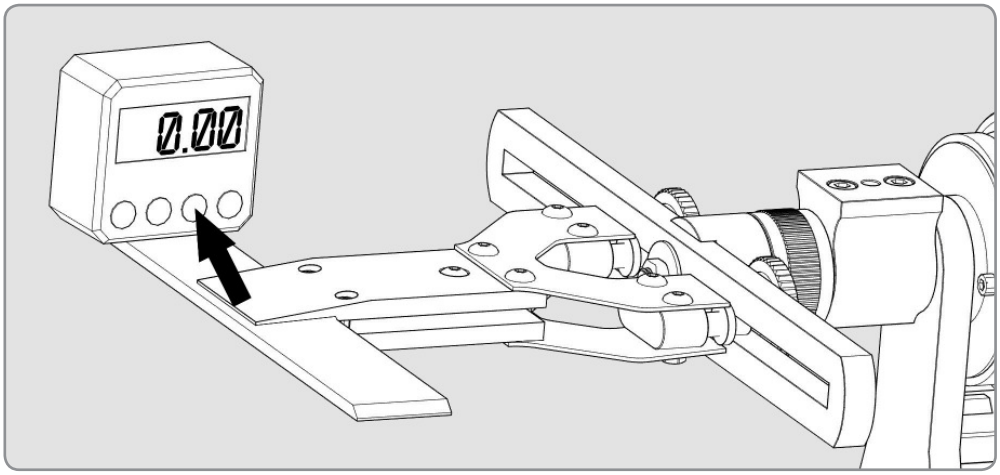
4. Holding the digital gauge platform with a hand from below and pressing it up, adjust its angle according to the digital gauge value.



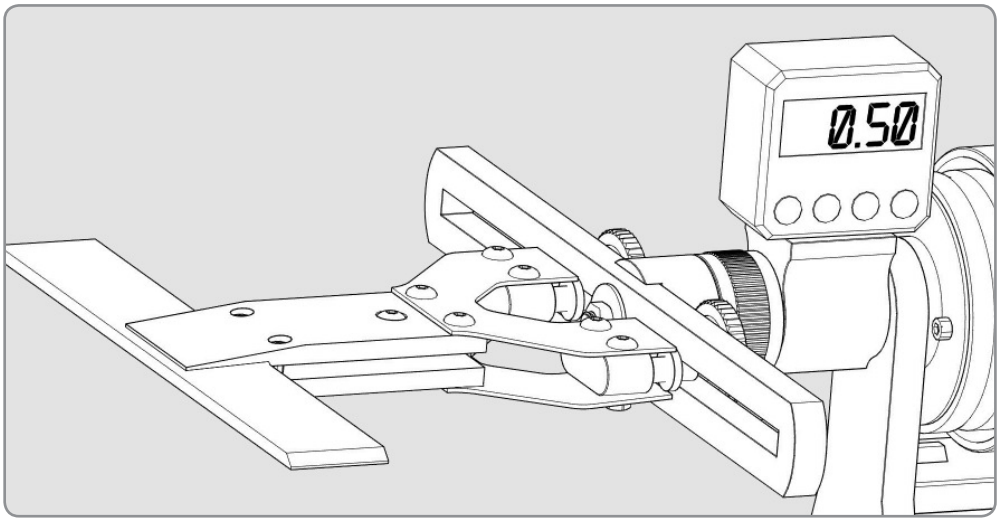
5. Keep holding the platform in the chosen position, remove the digital gauge and tighten the calibration screw.

Digital gauge platform parallel calibration

This calibration is performed after the **Turning Clamp angle calibration**.



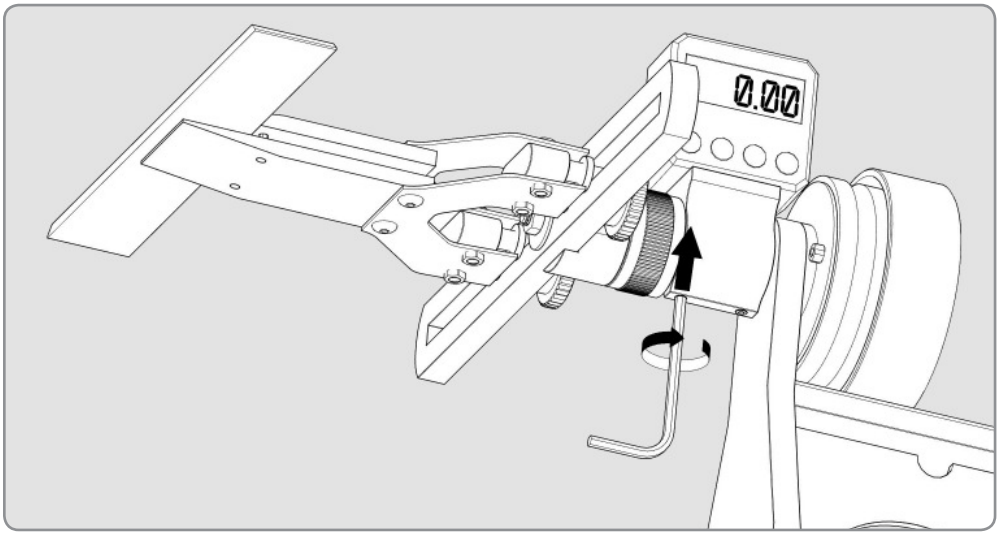
1. Place a digital gauge onto the plate and reset its value.

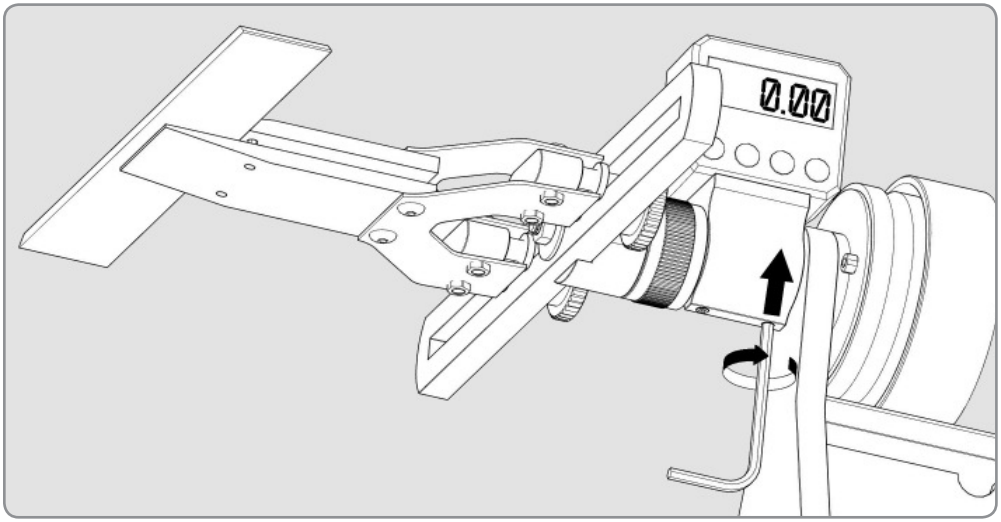


2. Place a digital gauge on the digital gauge platform strictly as it’s shown in the figure.

The gauge will show the angle difference. If the deviation is <= 0.3° (or other value of required accuracy), adjustment is not needed.

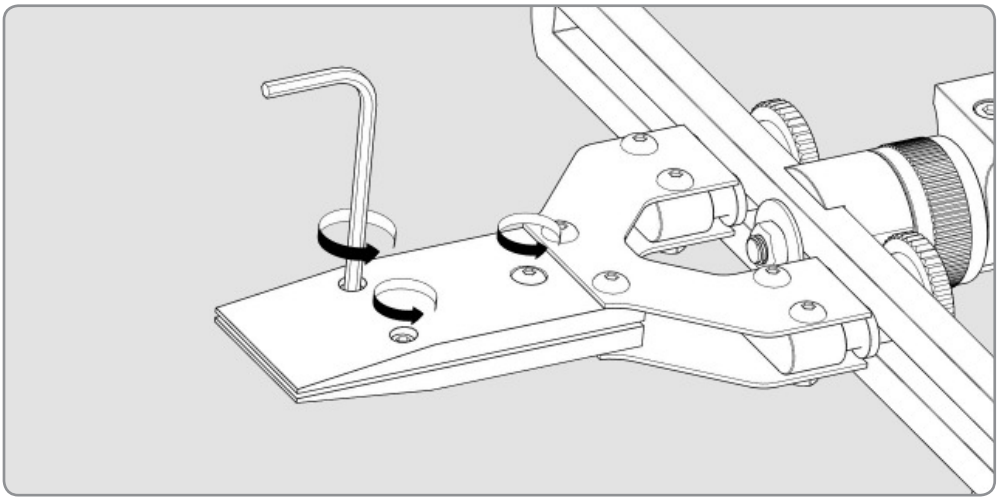
Next steps are needed to perform the calibration.



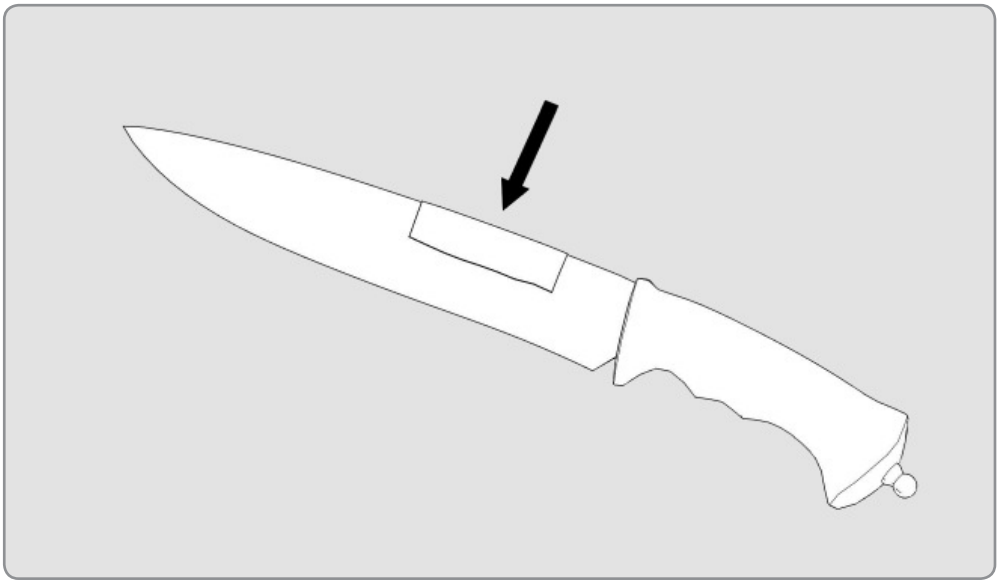


3. Adjust the inclination of the platform to minimize the deviation. Use a 2mm hex key or torx t8 to set its angle according to the digital gauge value.

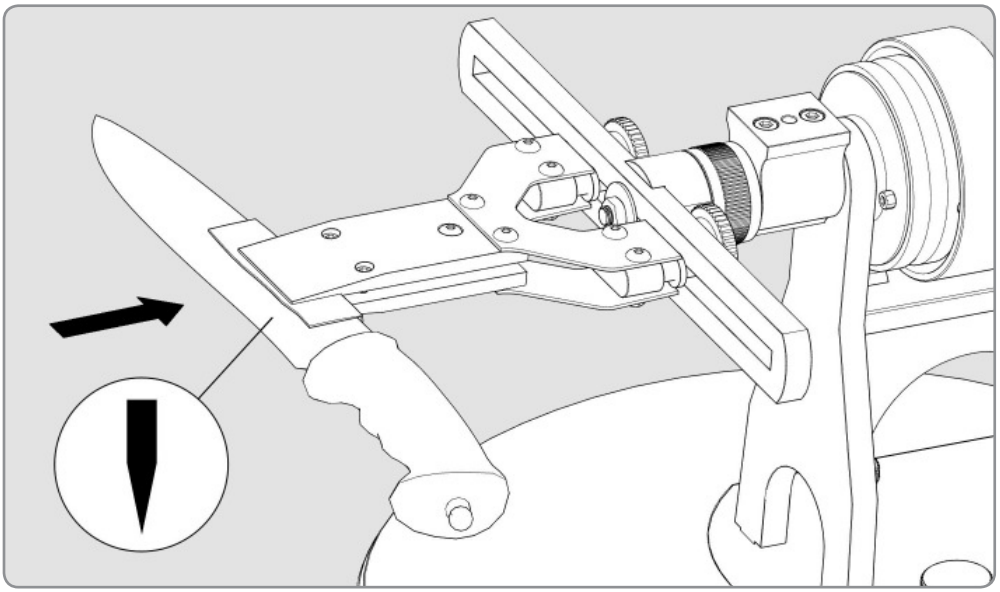
Installation of a knife into the Single Clamp



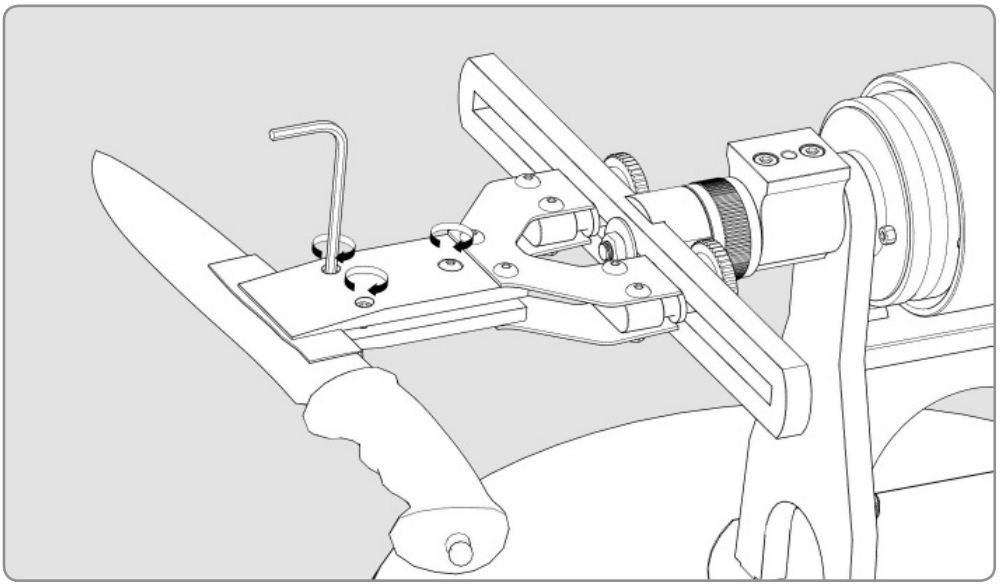
1. Loosen front and back holding screws.



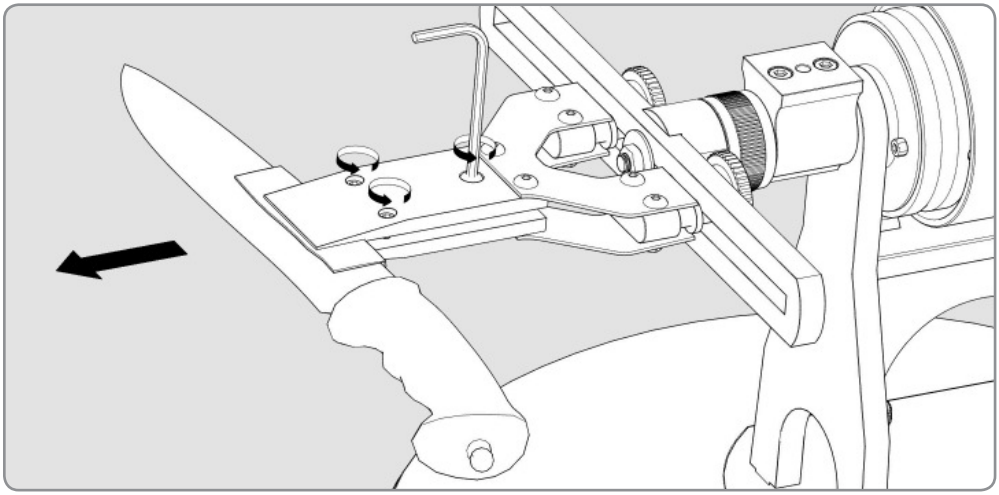
2. Stick a piece of leather or masking tape on the place of contact with the jaws in order to avoid damage to polished or coated knives.



3. Install a knife into the clamp.

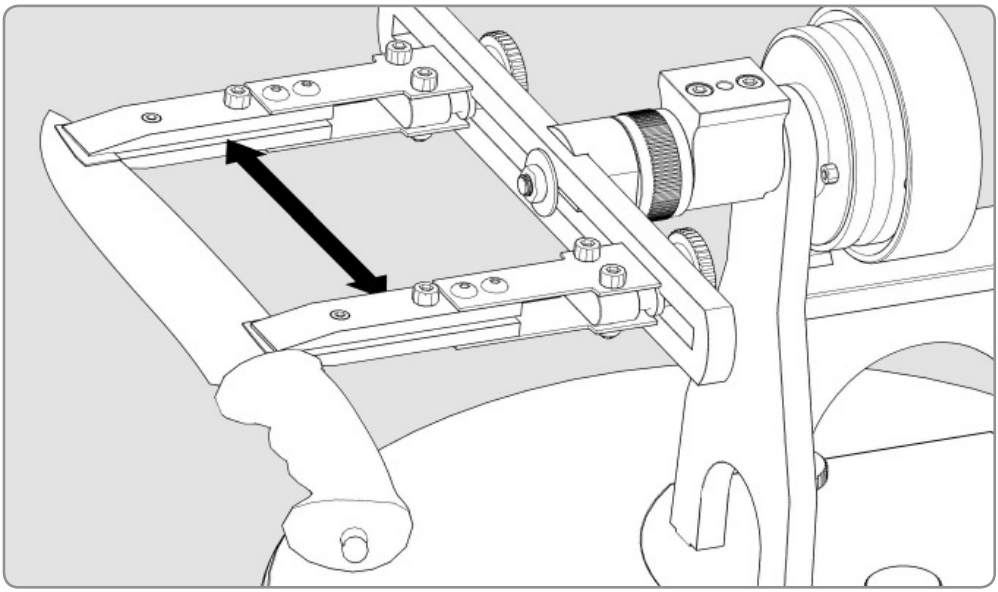


4. Tighten the front holding screws slightly; final tightening should be made at the back screw.

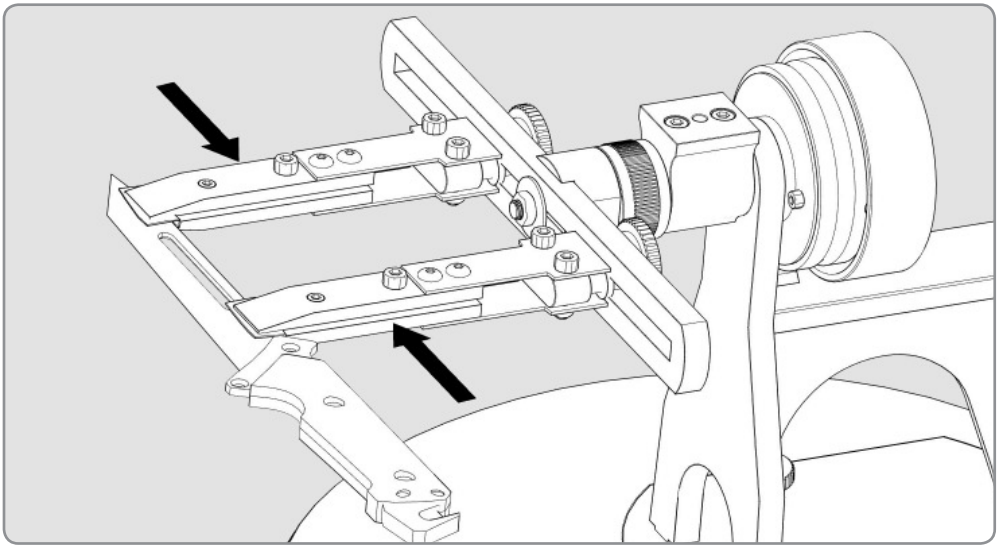


Loosen the tightening screws inversely to remove the knife.

Installation of a knife into the Double Clamp

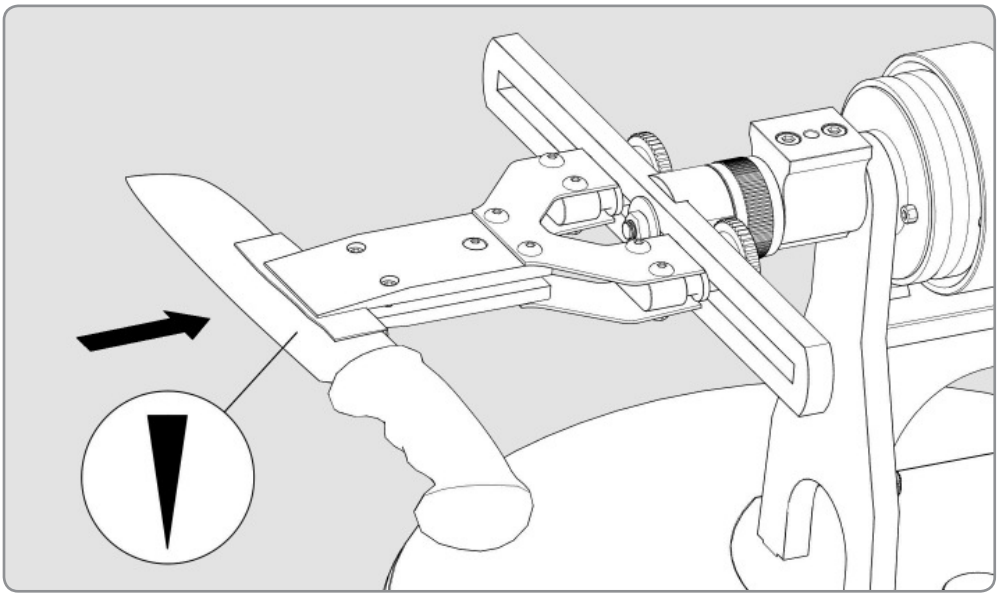


1. Adjust the jaws position according to the length and geometry of the knife blade and tighten the fixing screws.

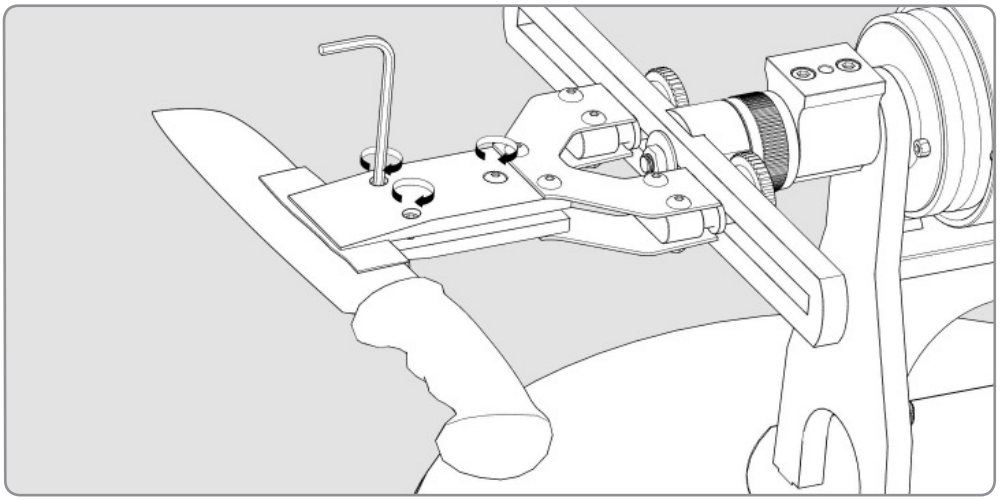


2. The rest clamping steps are the same as in the **Single Clamp installation**.

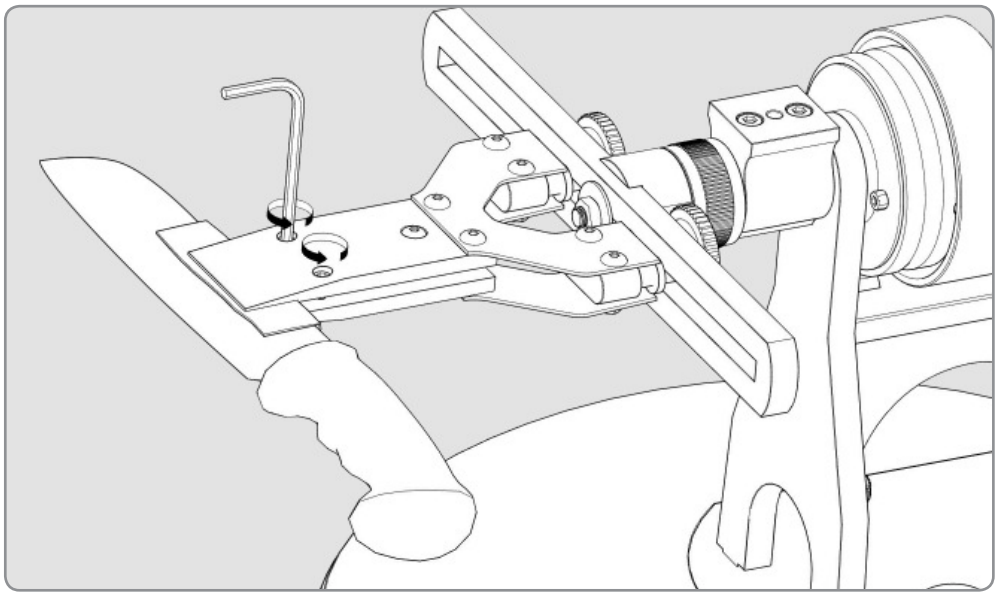
Full flat grind clamping



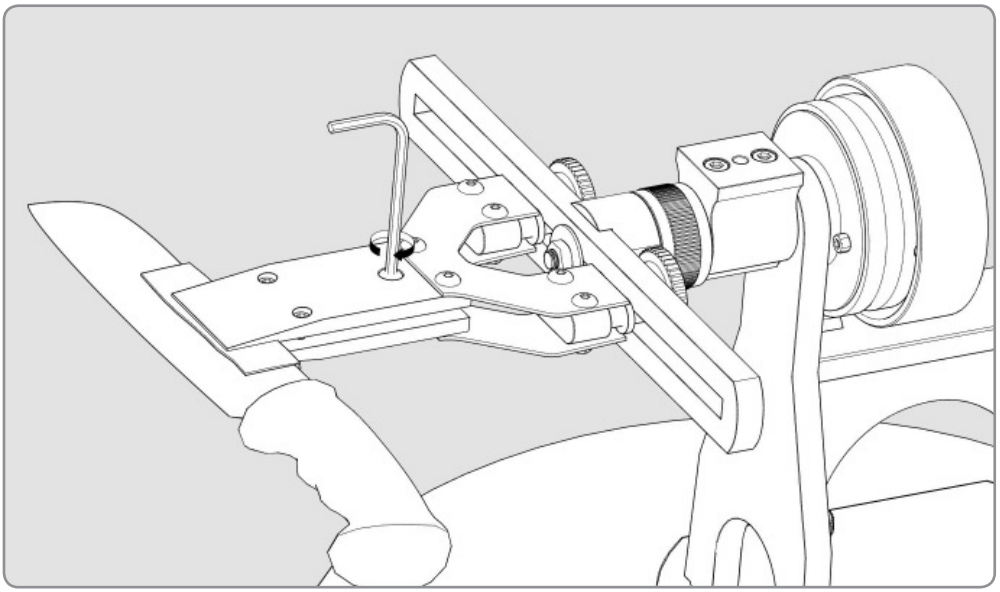
1. Install a knife into the clamp.



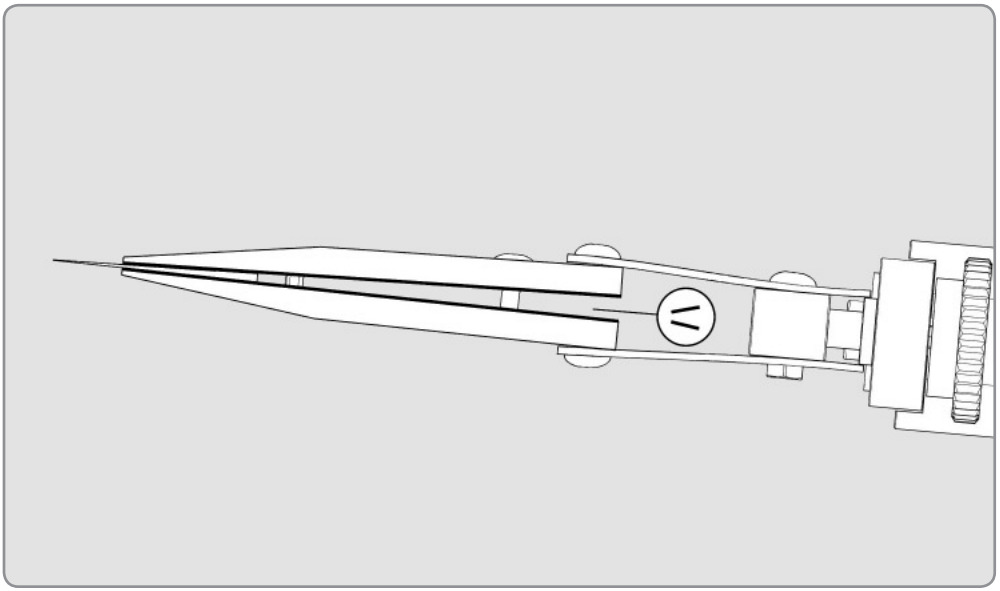
2. First - tighten the front holding screws slightly, then tighten the back one.



3. Loosen the front holding screws slightly.

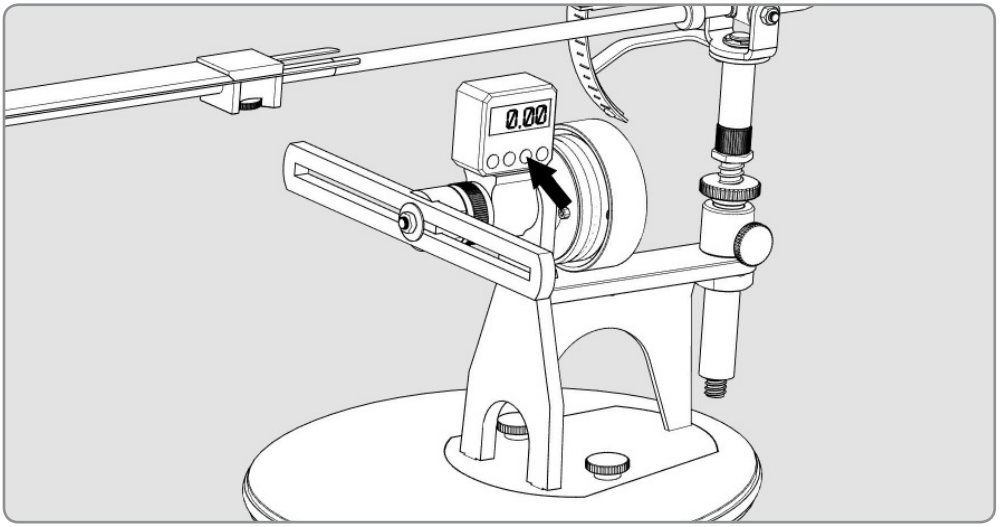


4. Tighten the back screw a little bit more.

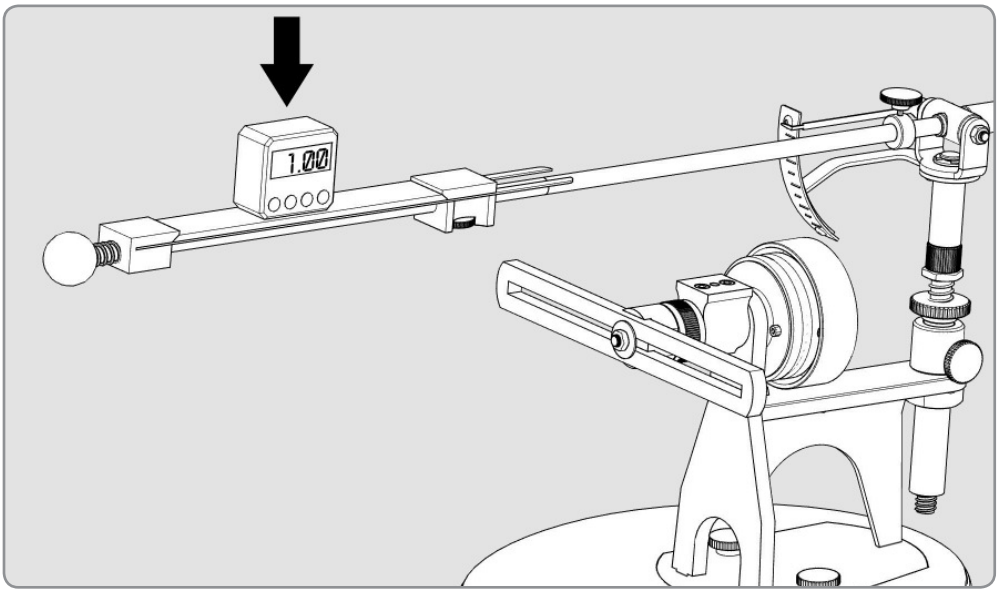


5. Thus, the jaws will settle at an angle to each other, as shown in the figure.

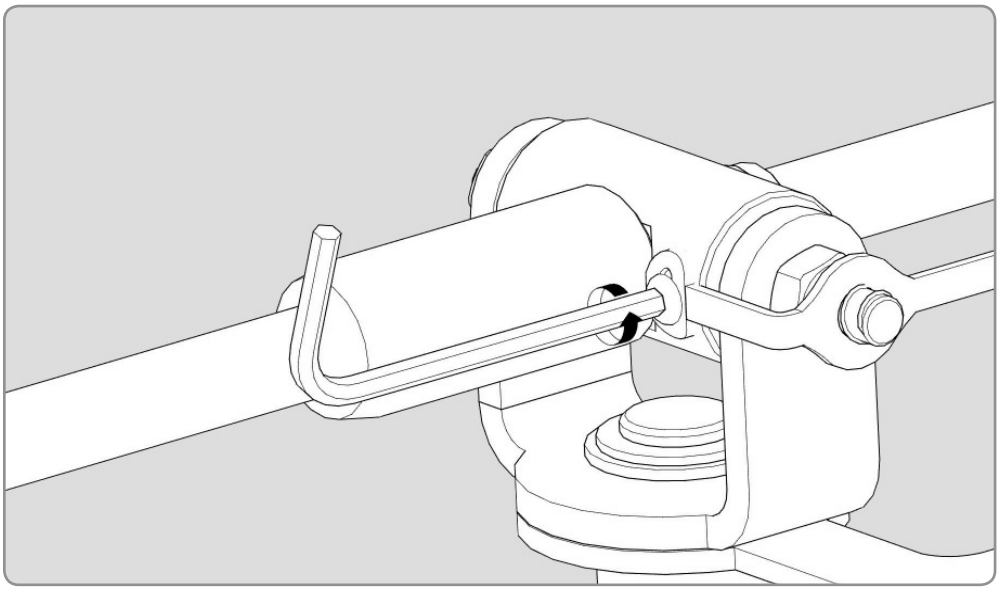
Calibration of the in-built gauge



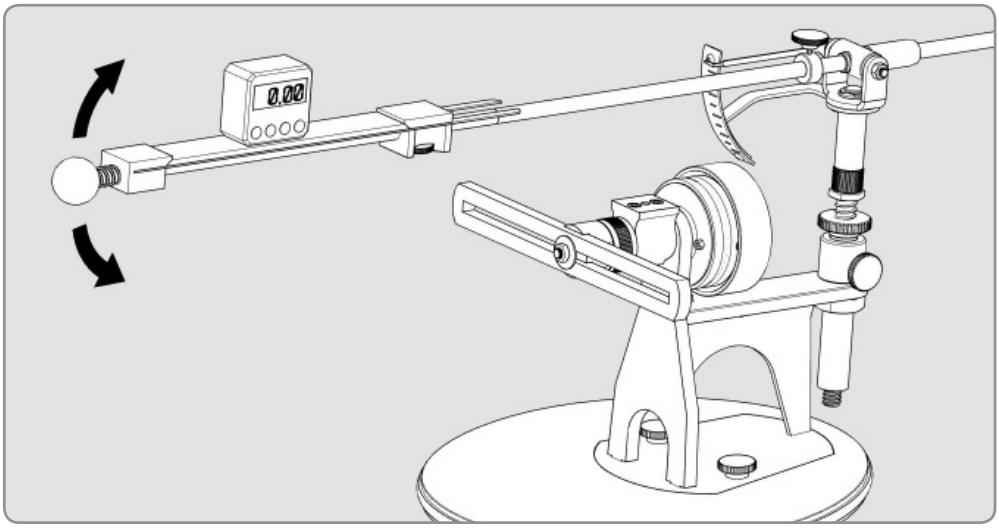
1. Install the digital gauge on the digital gauge platform. Arrange the device as shown in the figure and reset it.



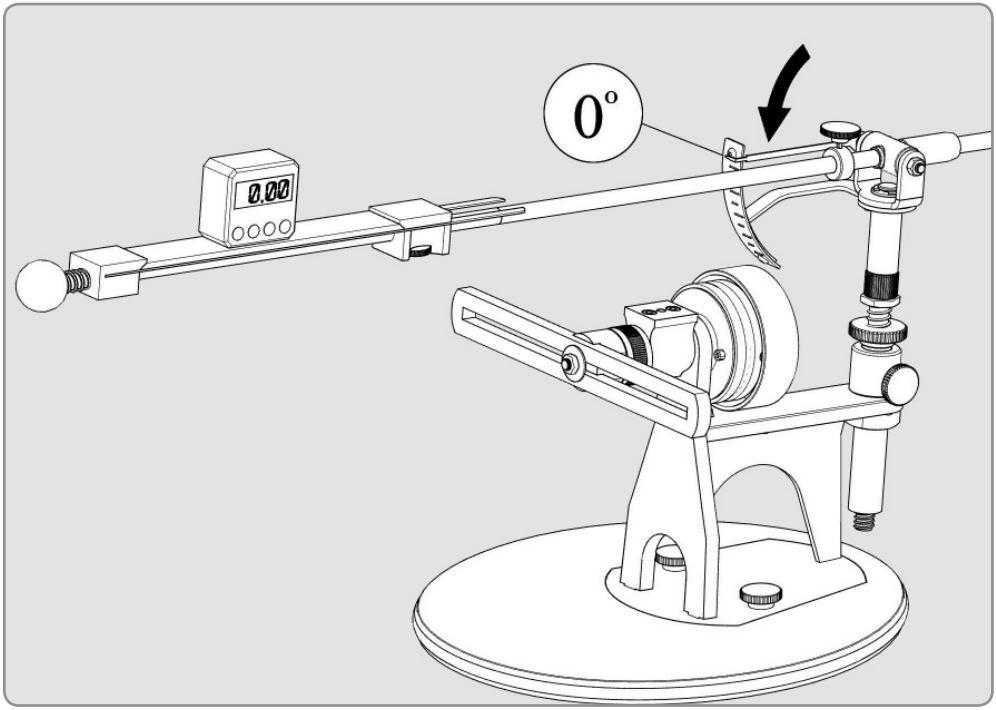
2. Install the digital gauge on the abrasive holder’s reference plate.



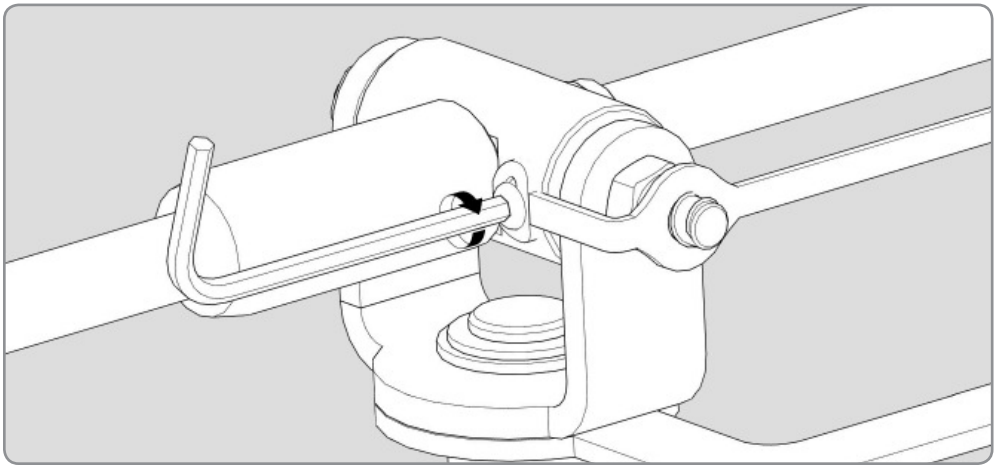
3. Loosen the screw at the back of the in-built gauge pointer.



4. Incline the bar until the digital gauge displays zero or a minimal value.

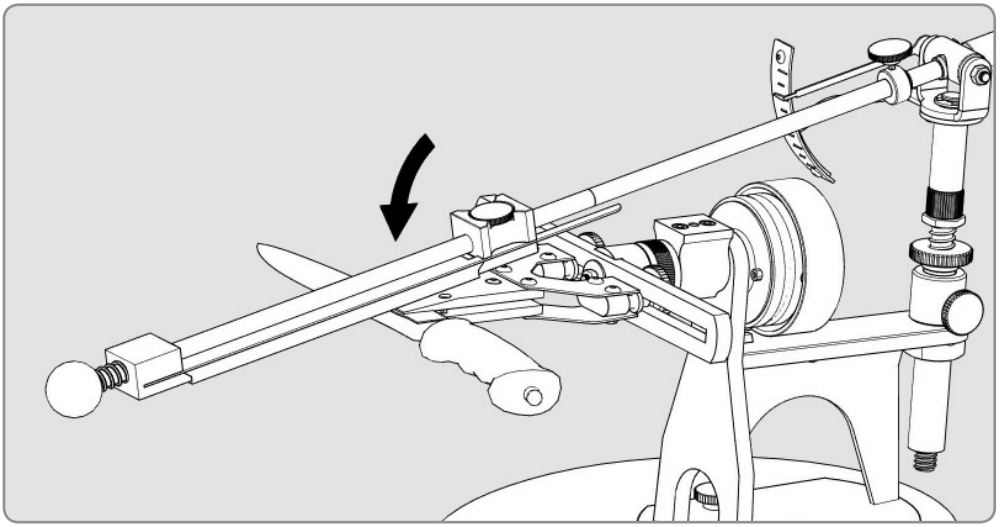


5. Holding the bar in this position, turn the pointer to the 0 mark on the angle gauge.

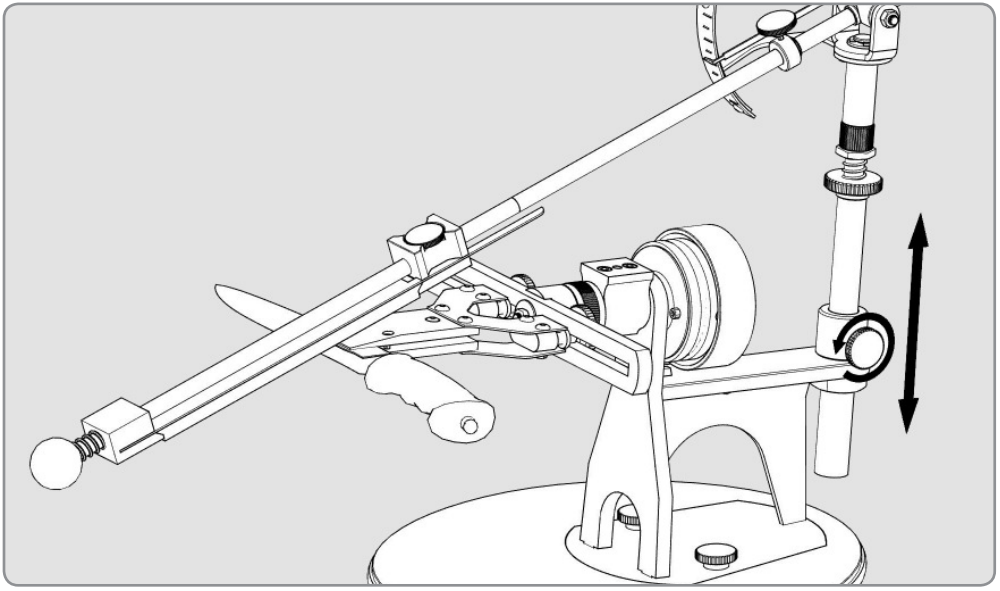


6. Tighten the screw at the back of the pointer.

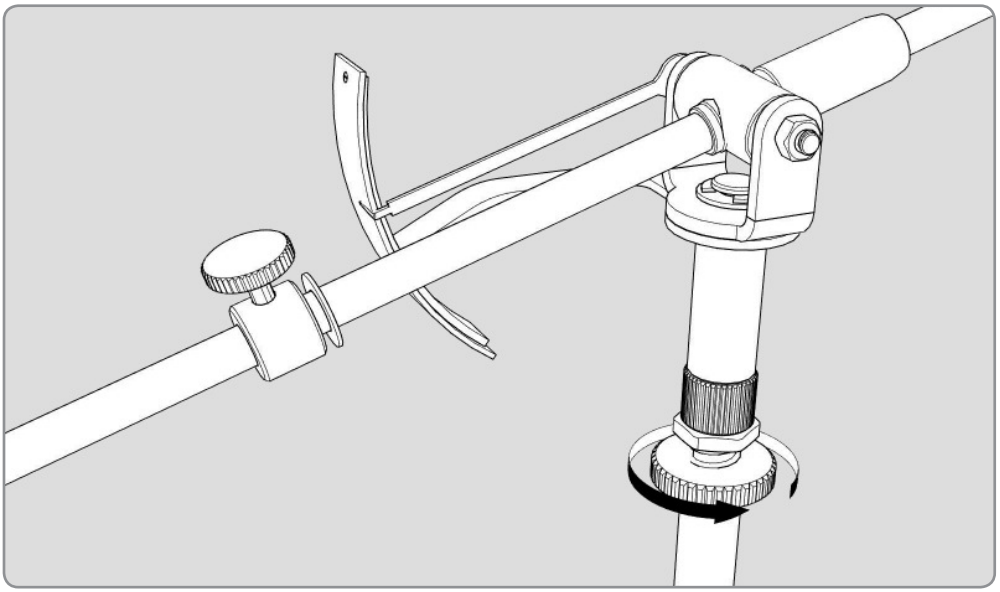
Adjustment of the sharpening angle



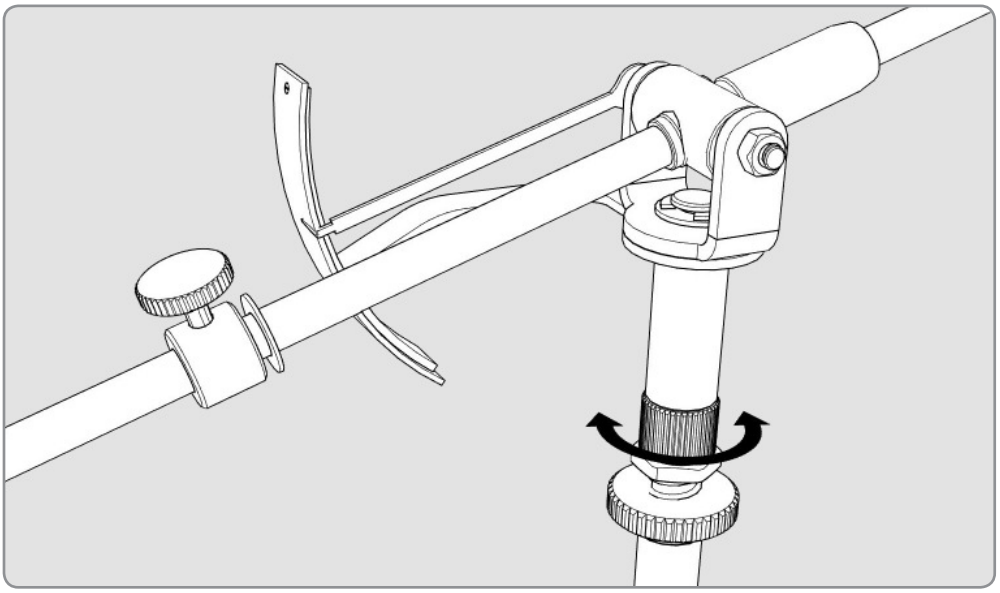
1. Install an abrasive and lean it against the cutting edge. Pay attention that the abrasive thickness affects the sharpening angle.



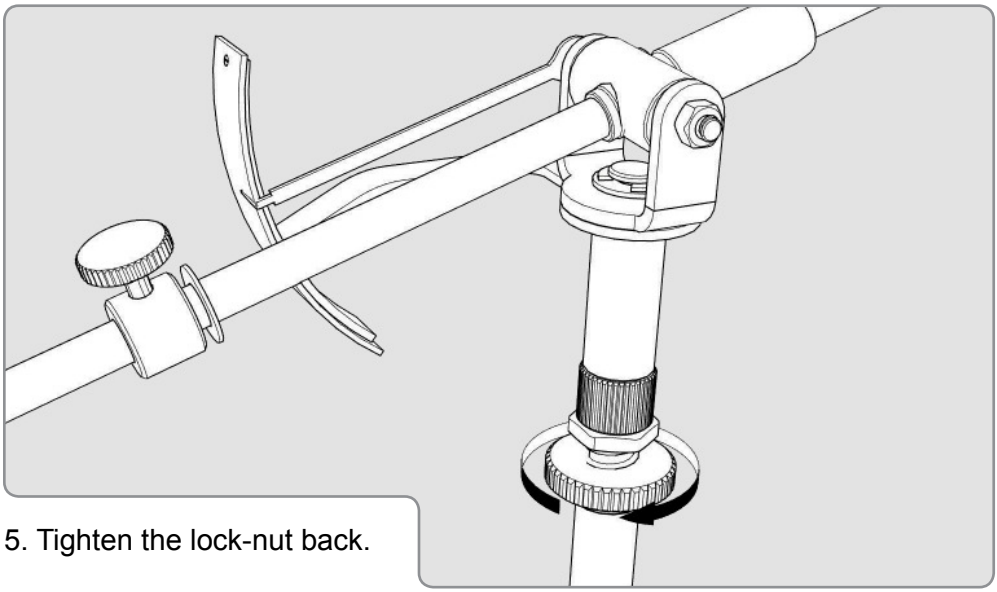
2. Loosen the thumbscrew on the vertical angle bar to set the required angle approximately by moving it up and down. Tighten the thumbscrew back.



3. Loosen the lock-nut.

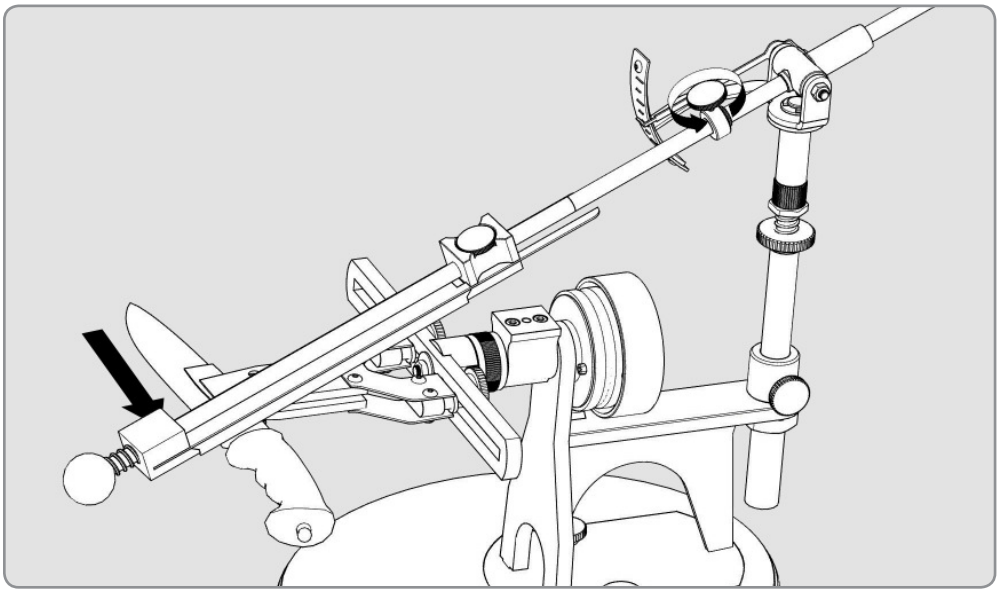


4. Turn the fine adjustment screw and set the exact sharpening angle.

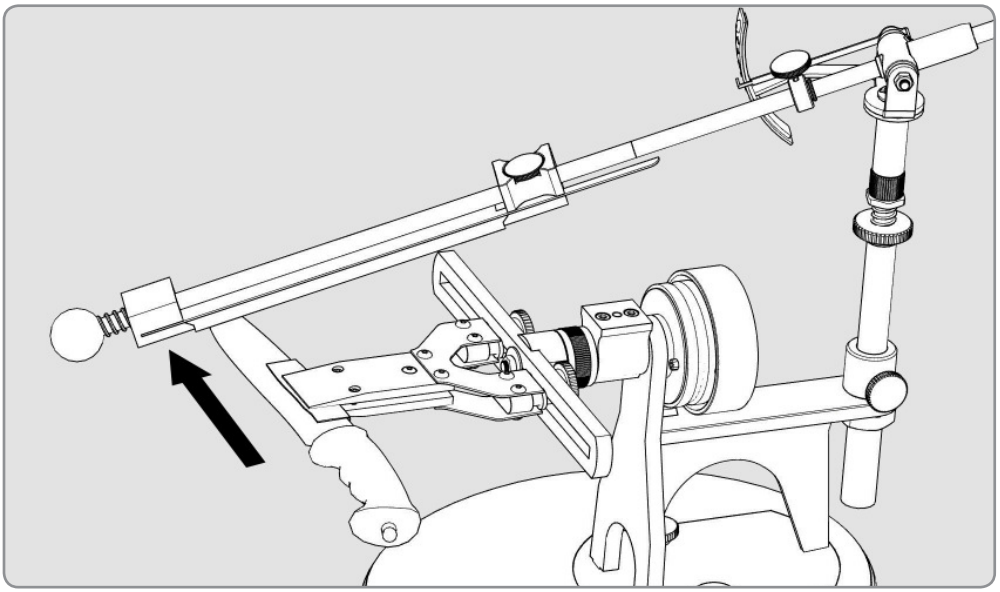


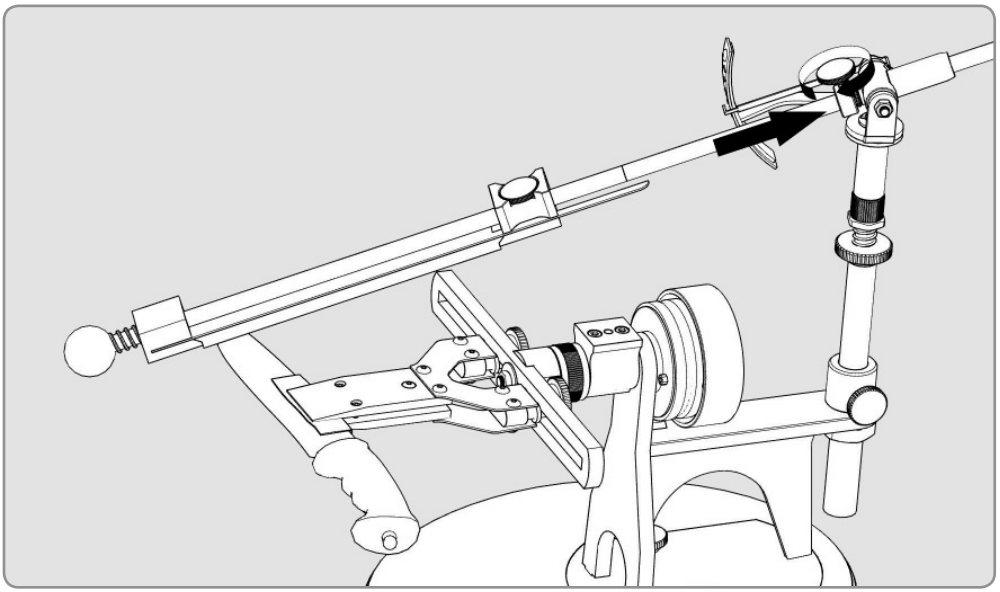
5. Tighten the lock-nut back.

Bar stoppers adjustment

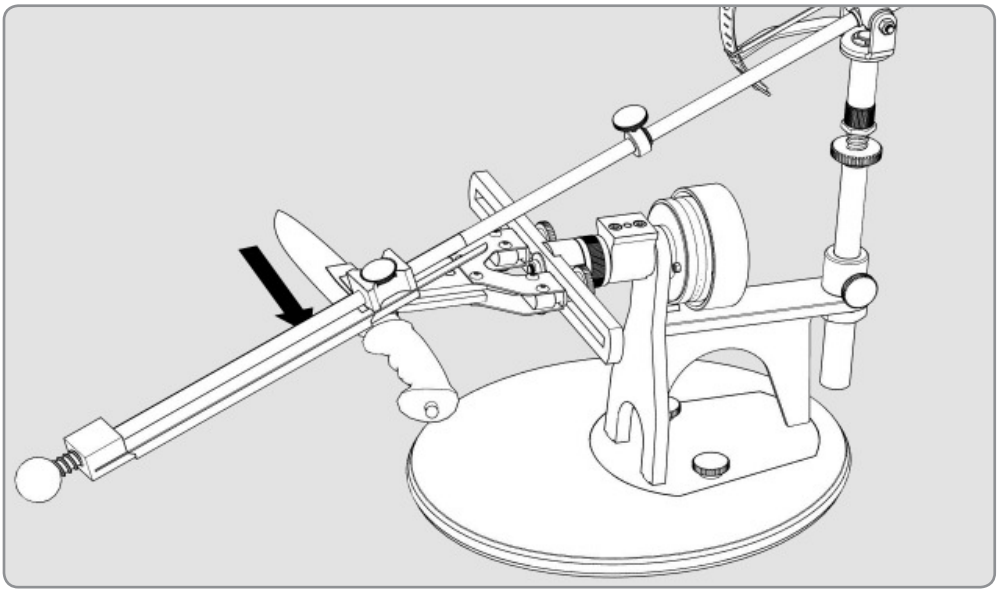


1. The stoppers are adjusted after setting the sharpening angle. Loosen the near stopper and position the near abrasive edge against the cutting edge of a blade as it’s shown in the figures.

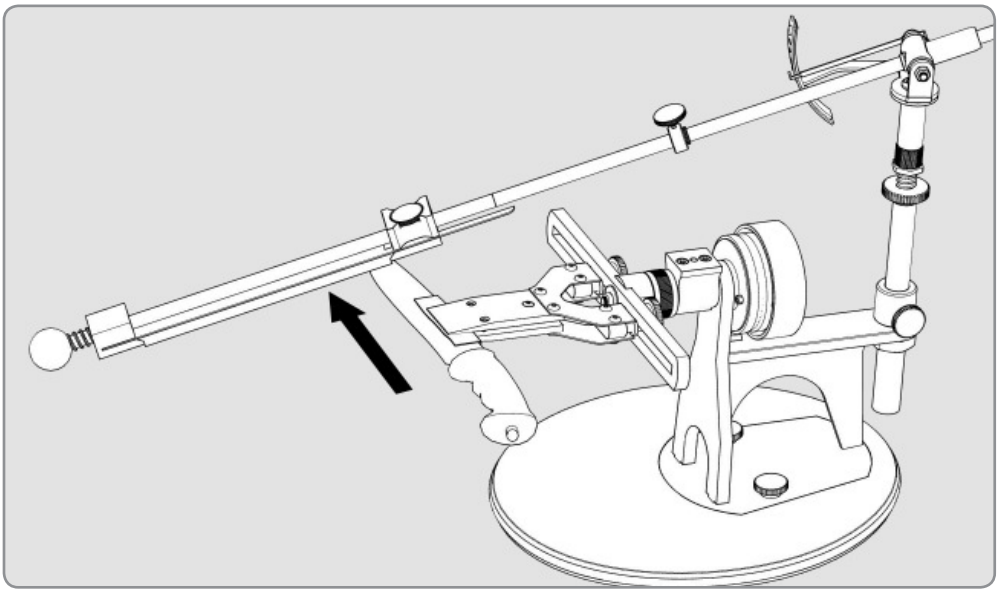


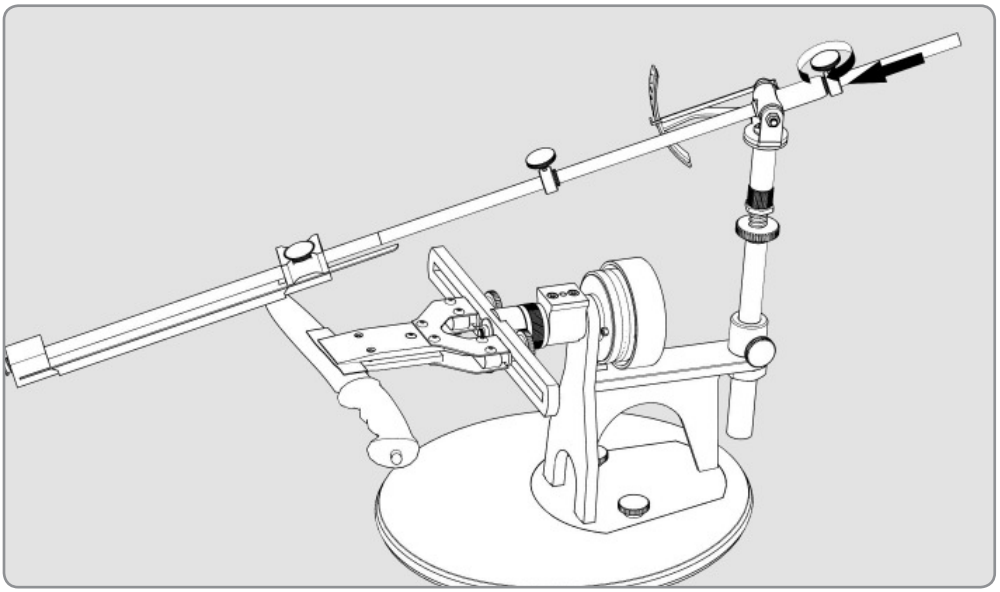


1. Holding the abrasive in this position, move the stopper to the bush and tighten its thumbscrew.

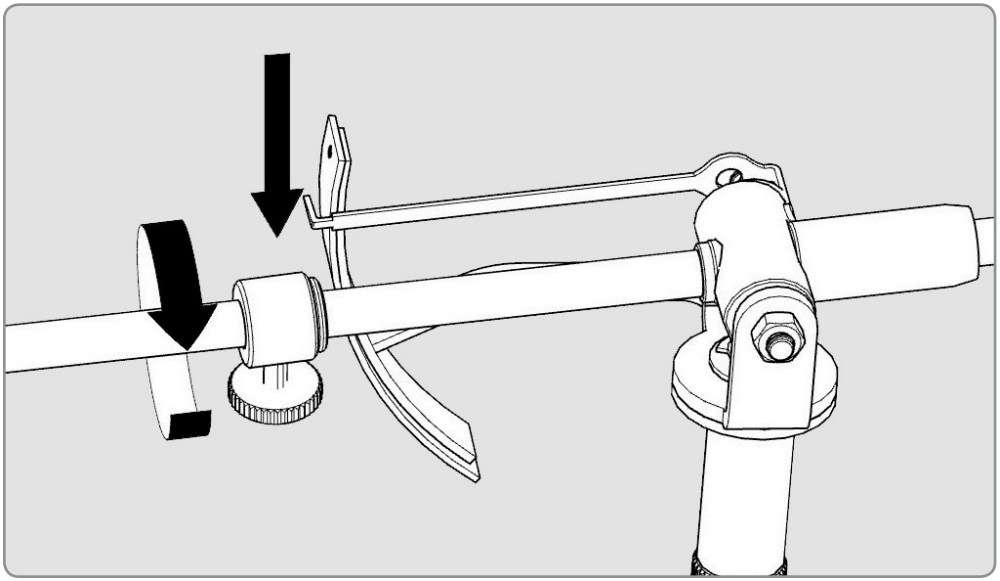


The procedure for the second stopper is the same.

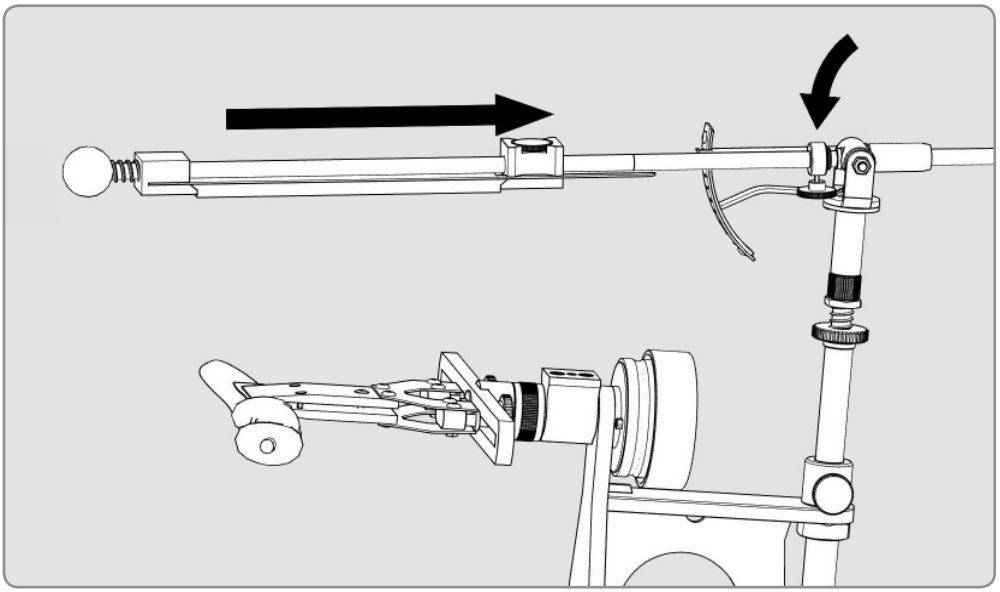




Bar parking



1. When the abrasive is not in use, the bar can be parked. Turn the near bar stopper’s thumbscrew downwards, as indicated in the figure.



2. Slide the bar against the stop and release it.

KNIFE TP SHARPENER

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Настоящая Инструкция по эксплуатации содержит сведения на октябрь 2016 года.