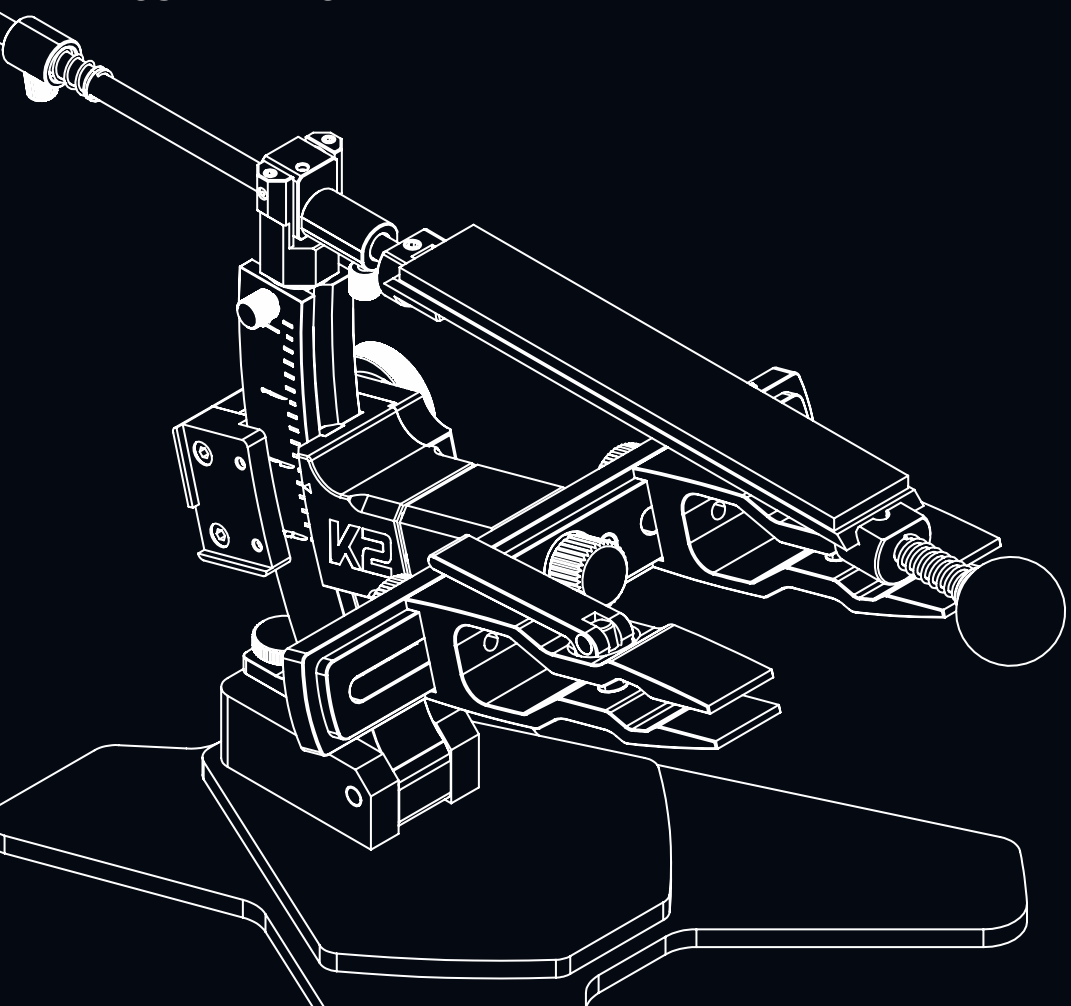
KADET K2

TSPROF KADET K2
SHARPENING SYSTEM

USER MANUAL



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Watch the video manual

ATTENTION!

Before using the sharpening system, thoroughly read this User Manual (hereinafter referred to as the Manual). Incorrect use of the System may lead to its breakdown. Strict adherence to the rules of this Manual will prevent injuries and damage to the System.

The manufacturer is not responsible for any damage caused by improper use of the System.

1. Purpose

The TSPROF Kadet K2 sharpening system (hereinafter referred to as the System) is a universal sharpening system that provides double-sided sharpening of knives without removing the blade from the clamps for sharpening the back side of the blade.

The system is intended for household use at an ambient temperature of 5–35°C.

2. Specifications

Specification	Value
Knife spine thickness	up to 7 mm
Knife blade length	up to 330 mm
Knife blade width	up to 40 mm
Minimum sharpening angle*	12°*
Maximum sharpening angle*	28°*
Compatible abrasvie length	from 10 to 160 mm
Compatible abrasvie thickness	from 3 to 15 mm
System weight	2 000 gr

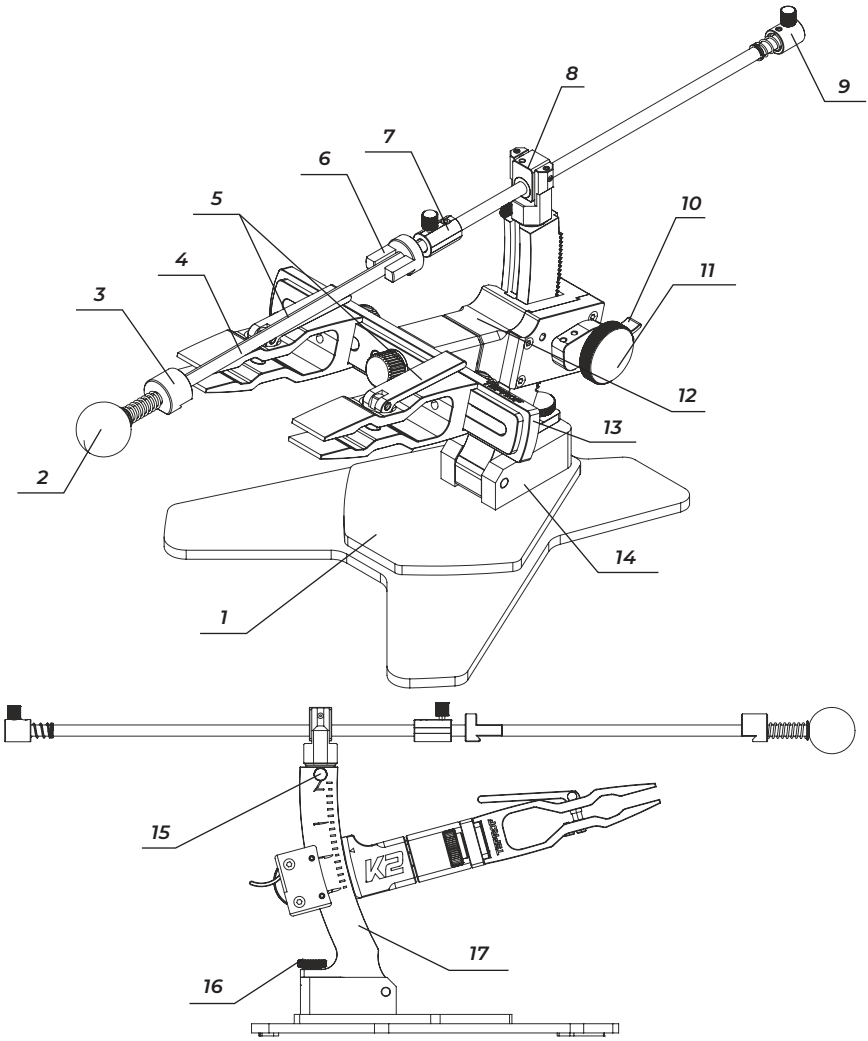
**when the clamped blade width sticking out from the edge of the clamp jaws is 17 mm, abrasive stone thickness is 4 mm, and blade spine thickness is 2.4 mm. Angles may vary depending on knife and abrasive specifications*

Table 1

3. Safety requirements

- Before using the System, be sure to read this User Manual carefully. Use of the device by persons not familiar with this manual is strictly prohibited.
- The System is not intended for use by persons (including children) with reduced physical, mental, or intellectual abilities, and lack of experience and knowledge, unless they are supervised or instructed by a person responsible for their safety.
- The System may be operated by minors only under adult supervision.
- Before starting work with the System, prepare the workplace. There must be no foreign objects in the working area of the System. The workplace must be well illuminated.
- To prevent cuts, do not touch the cutting edge of the knife with your hands. It is recommended to wear cut-resistant gloves when working with the System
- Do not leave exposed, uncovered knives or the system prepared for use within the reach of children and animals.

4. Design



(Fig. 1)

1. Base
2. Ball-handle
3. Movable abrasive stop
4. Abrasive holder
5. Clamp, 2 pcs.
6. Fixed abrasive stop
7. Bushing-coupling
8. Glide hinge unit
9. Stroke limiter
10. Locking lever
11. Adjustment knob
12. Movable body
13. Clamping arm
14. Rack base
15. Thumbscrew M3x5x12
16. Thumbscrew M5
17. Arc-shaped rack

Your TSPROF Kadet K2 system has a number of features:

- The folding stand with hinge unit and the collapsible abrasive holder significantly reduce the overall dimensions of the system for convenient storage and transportation.
- The adjustable swiveling mechanism with automatic locking allows you to work without reinstalling the knife in the clamps and maintain the same angle on both sides of the knife. The adjustment knob in the center of the arm allows you to set the locking force of the swiveling mechanism.
- The position of the cutting edge (hereinafter, CE) remains unchanged at all stages of operation, including changing the sharpening angle and flipping the knife fixed in the clamps. This is important for holding the abrasive and its working stroke in the plane of the table, as well as for conveniently observing the CE sharpening process.
- The arc-shaped rack is made from a single piece of aluminum and integrated with a rack-and-pinion height adjustment mechanism. When you turn the adjustment knob, the swiveling mechanism moves smoothly around a virtual center located at the cutting edge. After setting the required angle, you can securely lock the swiveling mechanism in place with the locking lever.
- The system design has increased resistance to dynamic effects on the sharpening angle.
- The clamping arm is designed to work both with the included Kadet Quick clamps and with clamps from the Pioneer, Kadet, K03 and K4 sharpening systems.

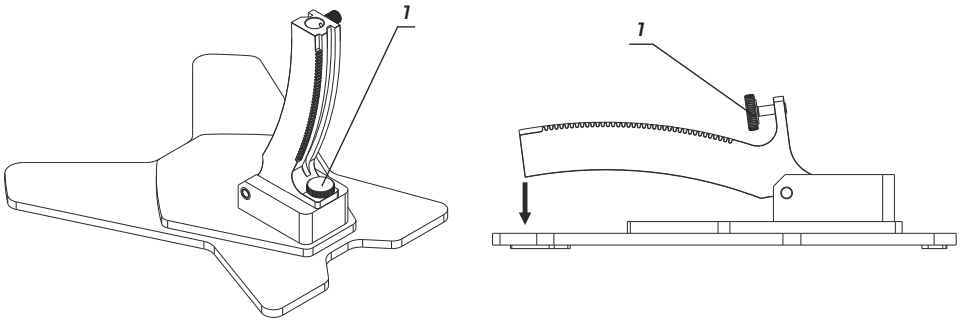
5. Preparing for operation

5.1 Operating position of the arc-shaped rack:

- position the arc-shaped rack vertically relative to the base;
- secure the rack by tightening the locking knob (1) clockwise.

5.2 Folding the rack:

- fully unscrew the locking thumbscrew (1) counterclockwise while holding the rack with your hand. Then lower the rack.



(Fig. 2)



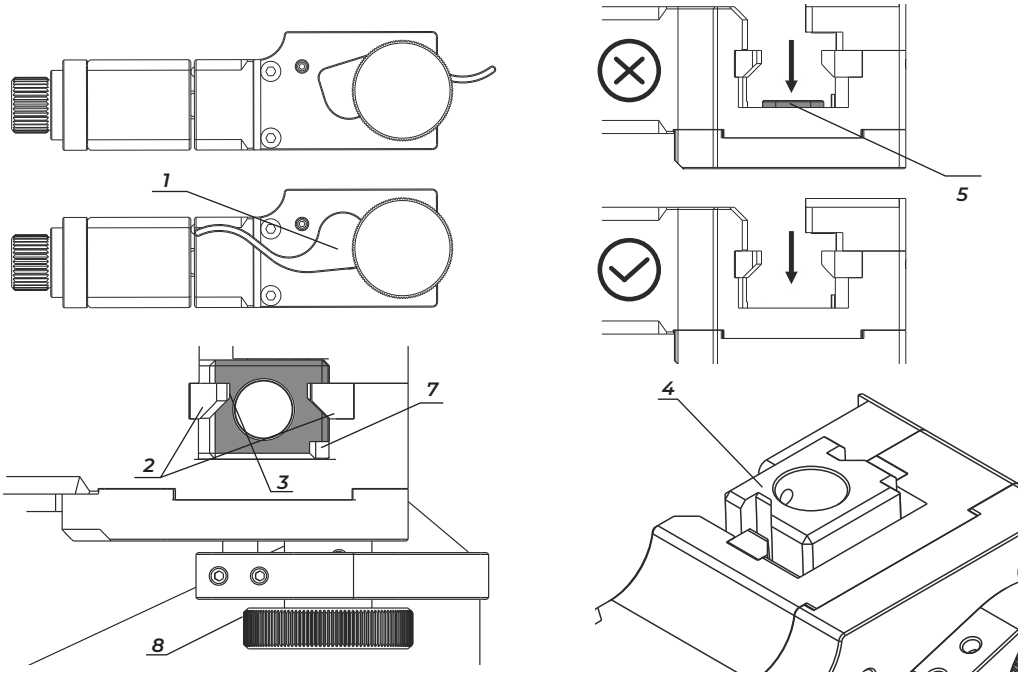
Do not fold the arc-shaped rack with the swiveling mechanism installed!

Do not allow the rack to strike the base sharply.

5.3 Installing the swiveling mechanism:

Installation is performed with the hinge unit removed

- loosen the locking lever (1);
- align the mounting blocks (2) with the grooves (3) on the arc-shaped rack (4); block (5) must be pressed in as shown in Fig. 3;
- smoothly, without sudden force, move the swiveling mechanism body (6) down the arc-shaped rack until the gear engages the rack teeth (7);
- continue moving it along the arc-shaped rack using the height adjustment knob (8).

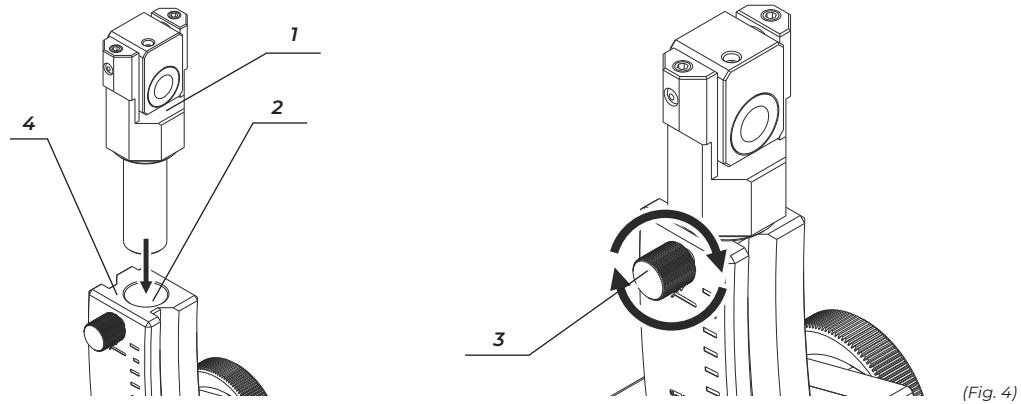


(Fig. 3)

5.4 Installing the hinge unit:

The hinge unit (1) is supplied removed from the stand (4) to prevent damage.

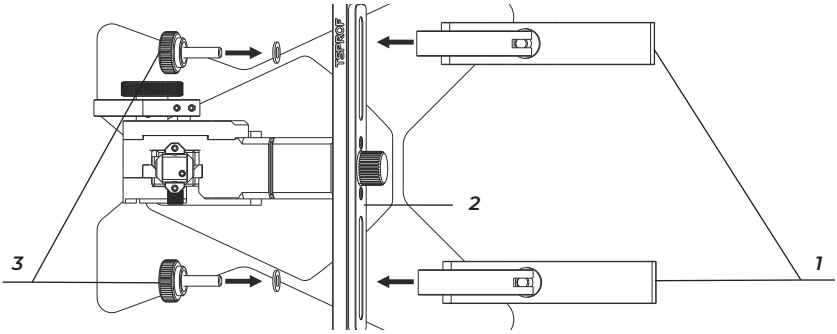
- place the hinge unit into the mounting socket (2) with light pressure;
- secure the hinge unit with the M3x5x12 thumbscrew (3).



(Fig. 4)

5.5 Installing the clamps:

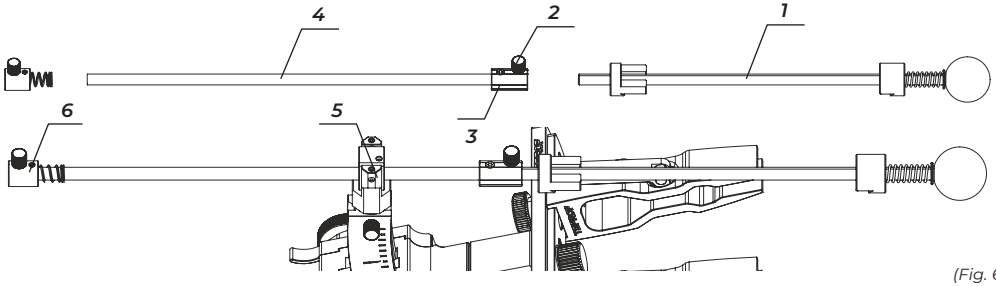
- place the clamps (1) on the arm (2) one at a time and tighten the M5x18 thumbscrew (3) on each clamp until fully tightened.



(Fig. 5)

5.6 Assembling and installing the abrasive holder:

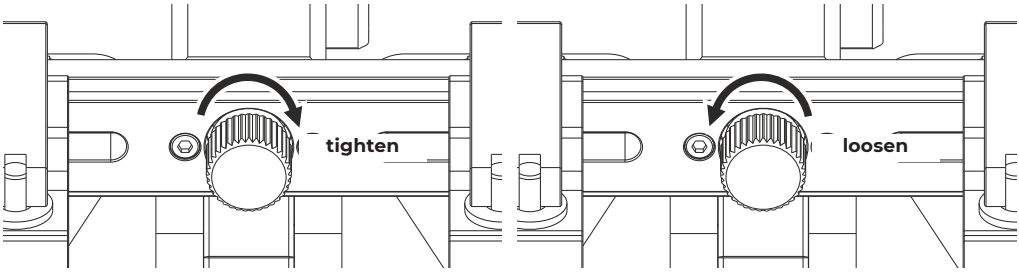
- loosen screw (2), insert the abrasive holder (1) into the coupling (3), and secure it with screw (2);
- insert the guide rod (4) into the hinge unit (5), then install the abrasive stroke limiter (6).



(Fig. 6)

5.7 Adjusting the arm swivel force:

Turn the adjustment nut on the front of the swiveling mechanism to set the desired arm locking force. Turning the nut clockwise increases the locking force, while turning it counterclockwise decreases it. Adjust the locking force so that the arm rotates with slight resistance. (Fig. 7)



(Fig. 7)

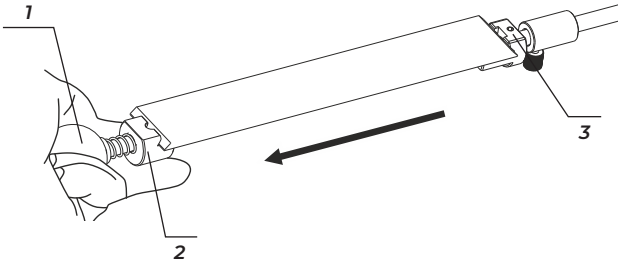
WARNING!

Overtightening the swiveling mechanism shortens the service life of the sharpening system and may cause malfunction. For finishing operations, you can reduce the locking force to make flipping the swiveling mechanism easier. For extended profiling and grinding operations, you can tighten the adjustment nut until the swiveling mechanism is fully locked.

5.8 Installing an abrasive:

To install an abrasive on a standard length 160 mm backing plate:

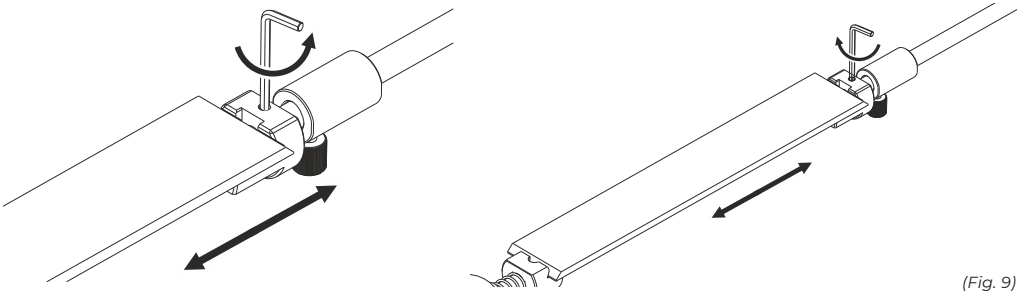
- pull the movable stop (2) toward you, overcoming the spring resistance;
- for convenience, rest the holder's wooden ball handle (1) against your palm or thumb;
- insert the abrasive stone backing plate into the groove of the fixed stop (3);
- align the stone and release the movable stop (2).



(Fig. 8)

To install an abrasive of another length, adjust the position of the fixed stop:

- loosen the fixed stop screw using a 2.5 mm hex key;
- adjust the position of the fixed stop;
- tighten the screw and install the abrasive.



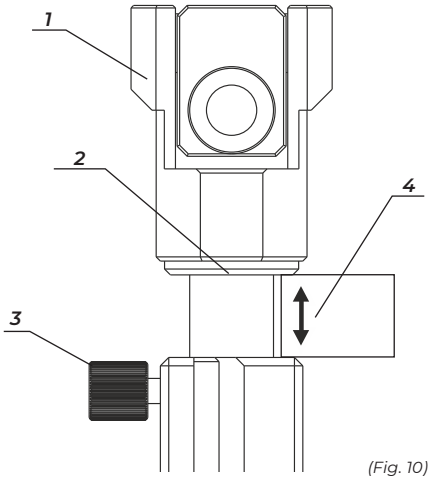
(Fig. 9)

5.9 Abrasive thickness compensation:

When working with abrasives of different thicknesses, it is recommended to compensate for the difference in thickness in order to maintain the sharpening angle. To do this:

- before starting work, take the first abrasive;
- loosen the M3x5x12 thumbscrew (3) that secures the hinge unit (1);
- raise the hinge unit by the height of the abrasive (4); the projection (2) on the hinge unit should lightly touch the abrasive surface;
- secure the position of the hinge unit with the M3x5x12 thumbscrew (3);
- during sharpening, repeat these steps when changing to an abrasive of a different thickness.

When working with abrasives of the same thickness, leave the hinge unit in the lower position.



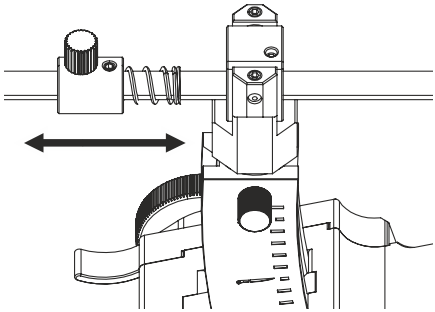
(Fig. 10)

5.10 Abrasive stroke limiter:

To prevent the abrasive from slipping off the blade, set the holder stroke using the limiter:

- loosen the limiter thumbscrew;
- determine the maximum abrasive stroke so that its surface does not extend beyond the knife cutting edge along the entire length;
- position the limiter close to the hinge unit and tighten the thumbscrew.

Although there is a spring in front of the limiter, avoid sharp impacts of the limiter against the hinge unit.

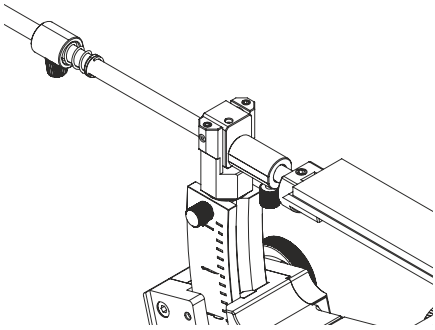


(Fig. 11)

5.11 Parking the abrasive holder:

To place the holder in the parking position:

- turn the holder so that the working surface of the abrasive faces upward;
- carefully move the abrasive holder away from the knife and lower the abrasive holder guide rod. Friction between the rod and the hinge unit body prevents the rod from moving freely.

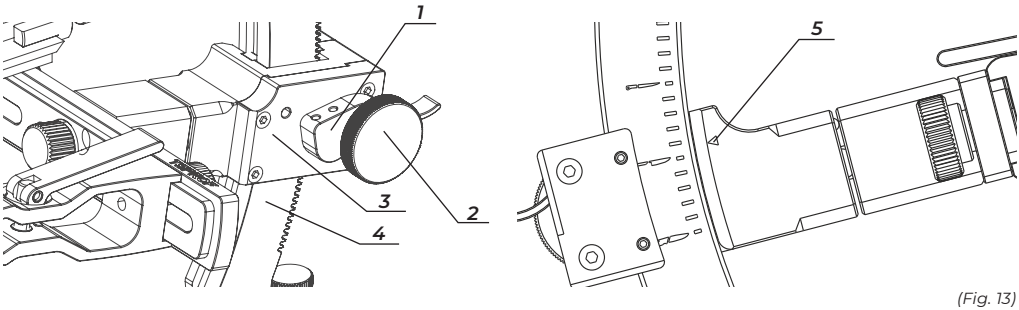


(Fig. 12)

5.12 Setting the sharpening angle:

To set the sharpening angle:

- loosen the locking lever (1) and turn the adjustment knob (2) to move the swiveling mechanism (3) along the arc-shaped rack (4) until the indicator (5) aligns with the required angle value on the sharpening angle scale;
- reference angle values are given in Table 2;
- lock the height adjustment mechanism with the locking lever (1). A sufficient degree of locking is achieved when the locking lever is parallel to the height adjustment mechanism body.



(Fig. 13)

***The exact angle depends on the distance of the knife CE from the edge of the clamp jaws, the thickness of the abrasive together with the backing plate, and the use of the abrasive thickness compensator. Moving the CE in the jaws by 17±8 mm results in a deviation of the scale reading from the actual sharpening angle by 4±1%.**

5.13 Using the Axicube angle finder for sharpening:

For more precise angle setting, use the Axicube electronic sharpening angle finder:

Turn on the angle finder in P2 mode:

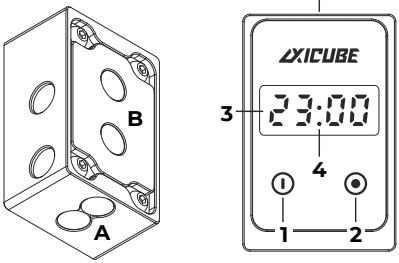
To change the operating mode, press ⏻ + ⦿

1. Place Axicube with base A on the abrasive holder.

2. 2. To reset, press ⦿ for 0.5 s → 88.88 → 00.0

3. Place Axicube on the angle finder platform with base A.

4. Set the required sharpening angle.



A, B - Measuring bases
1. Power button; 2. Reset button;
3. Display; 4. Separator;
5. USB port.

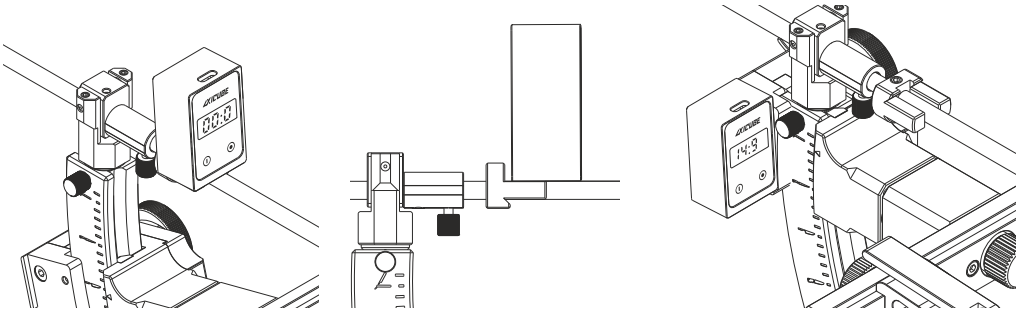
To find the angle:

1. Place Axicube on the angle finder platform with base A

2. To reset, press ⦿ for 0.5 s → 88.88 → 00.0

3. Place Axicube with base A or base B on the abrasive holder.

This allows you to check whether the knife is installed correctly and determine whether the sharpening angle needs to be changed in certain areas.



(Fig. 14)

The Axicube electronic angle finder was developed specifically for sharpening systems. It allows you to set the sharpening angle with precision up to 0.1°. Powerful neodymium magnets are used to attach the angle finder to surfaces. They are mounted in pairs on the bottom, side, and rear walls of the device. A USB Type-C port is used to charge the device. One battery charge is sufficient for 24 hours of continuous operation, and the angle finder indicates the need for charging at startup with the message “Lo.” on the display. Charging takes 15–20 minutes at a current of up to 0.5 A and a voltage of 5 V. For uninterrupted operation, the device requires monthly charging.

More about Axicube

6. Operating procedure

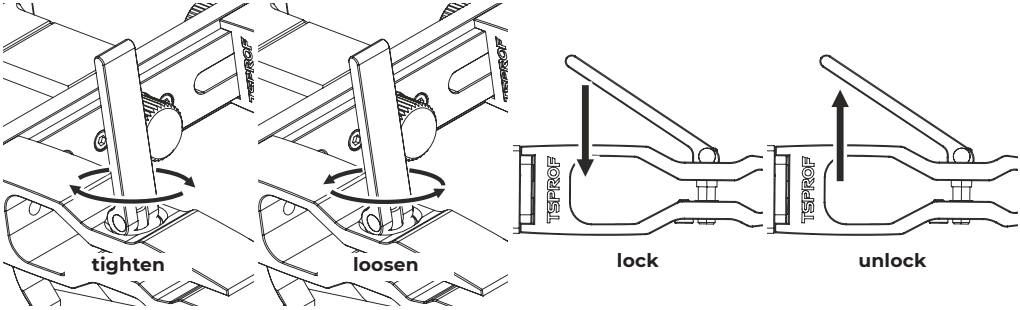
Remember that you are working with a sharp knife.
Be attentive and careful during sharpening.
Carelessness during sharpening may result in serious injury.
Do not leave the system unattended with a knife clamped in it.

6.1 Clamping the knife:

To prevent scratches on the knife, it is recommended to apply masking tape to the knife at the clamping points before sharpening:

- adjust the closing of the clamp jaws using the locking lever so that the distance between the jaws in the open position is slightly greater than the thickness of the spine of the knife being sharpened. The clamp jaws must fit tightly against the knife without gaps;
- position the knife in the clamps so that the longest straight section of the knife is as parallel to the arm as possible;
- lock the knife in the clamps using the eccentric lever.

Do not overtighten the nuts, as this may cause the clamp jaws to bend in the opposite direction!



(Fig. 15)

6.2 Selecting the sharpening angle:

Select a sharpening angle suitable for your knife. The table below will help you:

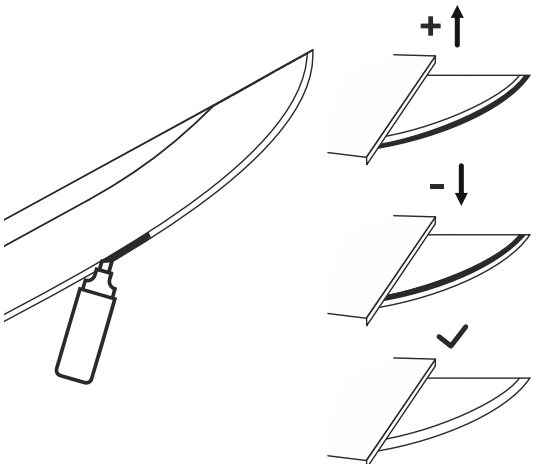
	13 | 15	16 | 20	21 | 22	23 | 25	26 | 29	30 | 34	35 | 40	41 | 45	46 | 50	51 | 55	56 | 60
Fillet knife											
Chef knife											
Cleaver											
Hunting knife											
Folding knife (EDC)											

The sharpening angles in the table are specified for each side of the knife.

Table 2

You can also sharpen the knife at its existing sharpening angle. To do this:

- color the knife bevel with a marker;
- pass the abrasive over the colored area;
- adjust the sharpening angle so that, when the abrasive moves, the marker is completely removed from the colored area.



(Fig. 16)

6.3 Sharpening the knife

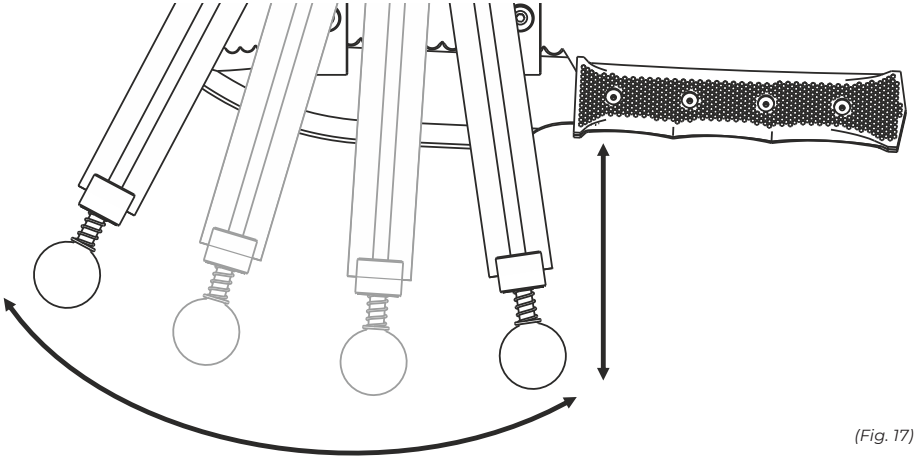
Each knife, steel, and abrasive has its own characteristics. The general sharpening principles described below may be modified depending on the characteristics of a particular knife.

Sharpening is performed with reciprocating strokes, with the abrasive moving 30–80 mm along the cutting edge. The abrasive is moved along both sides of the cutting edge until symmetrical bevels are formed on each side of the blade.

Proceed to the next abrasive stone after a burr has formed along the entire length of the cutting edge on each side of the blade.

WARNING!

Sharpening the knife does not require pressure, regardless of the stage. Avoid pressing the abrasive hard against the knife cutting edge. High-quality sharpening is achieved under the weight of the abrasive and abrasive holder alone.



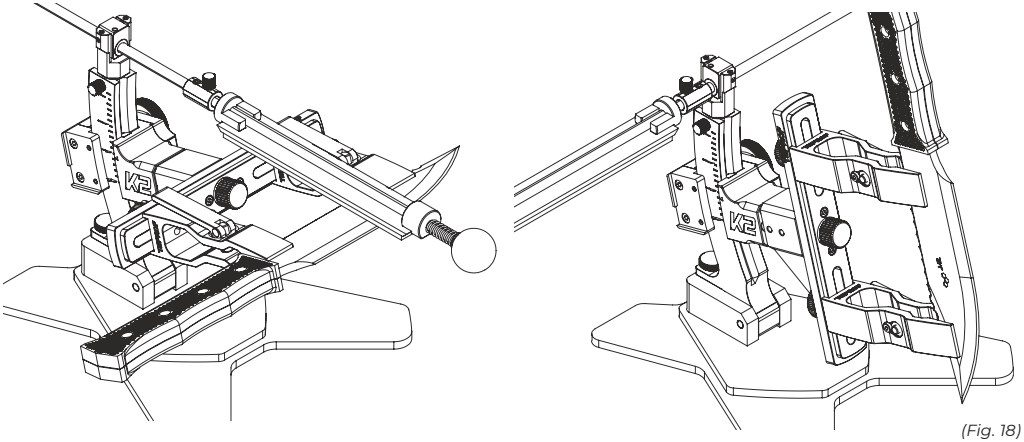
(Fig. 17)

6.4 At each stage, abrasives of different grits are used, from the coarsest (F120) to the finest (F1000 and above). Select the abrasive based on the condition of the knife, the sharpening tasks, and the desired result.

- After completing each sharpening stage on one side of the knife, move the abrasive holder aside and place it in the parking position.
- Visually check that the knife bevel width is symmetrical on both sides
- Holding the arm, flip it together with the clamped knife by 180°
- Continue sharpening the opposite side of the knife

WARNING!

Be careful when flipping the knife. Remember that a knife is a potentially dangerous tool. Stay attentive and focused throughout the entire sharpening session. Watch the position of your hands and the direction of the knife tip.



(Fig. 18)

Proper knife sharpening involves many nuances.
You can learn more about various aspects of sharpening on our Youtube channel: https://www.youtube.com/c/TSPROFSharpening

7. Cleaning and maintenance

After finishing work, remove all traces of contamination from the surfaces of the system.

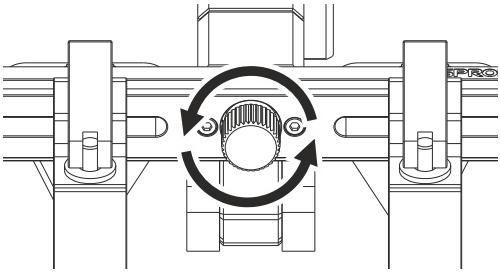
For proper operation of the system, it is recommended to clean and lubricate the friction surfaces with neutral industrial oil.

To extend the service life of the sharpening system, it is recommended to replace the lubricant on the swiveling mechanism shaft at the first signs of contamination of the unit's friction parts (squeaking, unusual noises). Use tribotechnical compounds to lubricate the swiveling mechanism (Suprotec Universal M, Liqui Moly LM 47, Eurol Molybdenum Disulphide MoS_2, or compounds with similar characteristics).

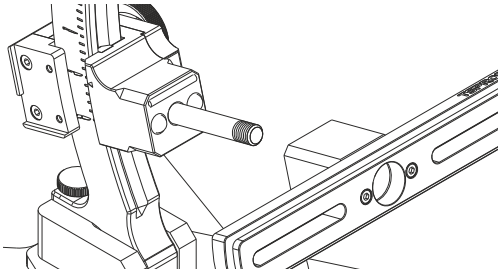
The use of other compounds to lubricate the swiveling mechanism may adversely affect the operation of the unit and the wear rate of its parts.

Do not wash the system with abrasive or cleaning agents or under running water!

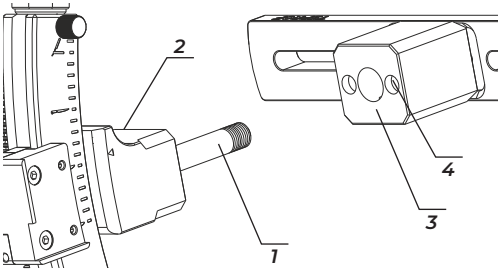
Swiveling mechanism maintenance procedure



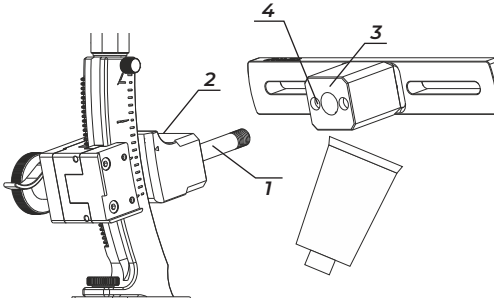
1. Unscrew the arm locking force adjustment knob.



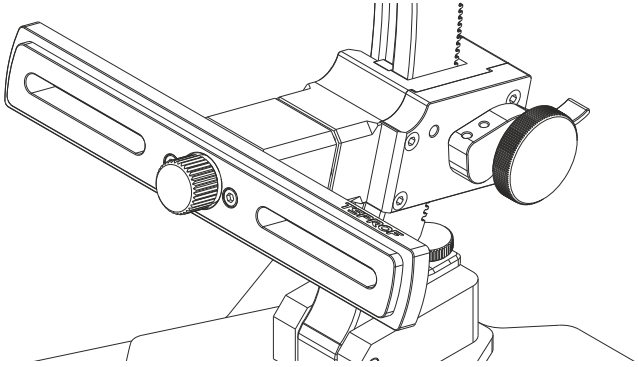
2. Carefully remove the clamping arm (including the arm holder) from the shaft of the swiveling mechanism.



3. Use a dry cloth to clean the shaft (1), the mating part of the swiveling mechanism body (2), the axial hole, and the mating surface of the arm holder (3), including the circular seating grooves (4). Remove all old grease and traces of contamination.



4. Apply the tribotechnical compound to the shaft (1) and the mating surface of the arm holder (3), including the circular grooves (4) on the mating surface of the arm holder. Use your finger to distribute the compound evenly over the surfaces subject to friction during operation of the unit.



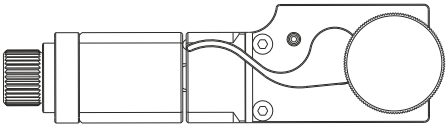
5. Reassemble the swiveling mechanism. If necessary, remove excessive grease with a cloth.

8. Storage and transportation

Store the system in its original packaging or in a dust-protected place at a temperature of +1 to +40°C. Transportation by all modes of transport is permitted at a temperature of −40°C to +50°C. If the system is transported at subzero temperatures, it may be used only after being kept at room temperature for at least 3 hours.

WARNING!

To prevent weakening of the height adjustment mechanism locking, store the system only with the turning mechanism locking lever loosened (Fig. 19)



(Fig. 19)

9. Disposal

Dispose of the system and packaging in accordance with the applicable rules and regulations governing production and consumer waste. Where possible, dispose of paper, polymer, and metal waste in containers intended for those materials.

10. Warranty

The current warranty terms are specified on the Manufacturer's website.

In the event of discrepancies, the terms posted on the Manufacturer's website take precedence.

The warranty period for the product is 1 year from the date of sale, but no more than 1.5 years from the date of manufacture.

The warranty period may be extended in accordance with special programs offered by the Manufacturer.

The date of sale is the date on which the shipping documents are issued and/or the warranty card is completed.

This warranty entitles the Buyer to free repair of the product if defects related to materials or assembly are found. Warranty, non-warranty, and post-warranty repairs are performed only directly by the Manufacturer.

The warranty does not cover packaging materials.

Warranty repair of partially or fully disassembled equipment is excluded. Such repair is available on a paid basis.

Warranty repair is not performed in the following cases:

- when the equipment is used for purposes other than those specified in the operating instructions;
- in the event of external mechanical damage to the equipment;
- when defects arise due to failure to comply with storage and transportation rules, force majeure, or adverse atmospheric or other external effects on the equipment, such as rain, snow, high humidity, heat, aggressive environments, etc.;
- when damage occurs due to failure to comply with the operating conditions specified in the instructions or due to unauthorized design modifications;
- when foreign objects enter the equipment;
- when defects and failures arise due to untimely scheduled technical and preventive maintenance, including cleaning and lubrication of the equipment in accordance with the requirements of the operating instructions.

Setup, adjustment, technical maintenance, and preventive maintenance of the equipment (for example: cleaning, washing, lubrication, replacement of technical fluids) are not warranty services and are provided on a paid basis.

The equipment is removed from warranty coverage if the operating rules specified in the operating instructions are violated.

To send the product for warranty, non-warranty, or post-warranty service, send a claim to the manufacturer's official email.

11. Quality control and sale certificate

This TSPROF Kadet K2 sharpening system complies with the technical documentation and has been found suitable for operation.

Serial number:

_____

Quality control date:

_____

Quality control inspector:

_____ /_____

To be completed at the time of sale:

Date:

_____

Seller's signature:

_____

Stamp