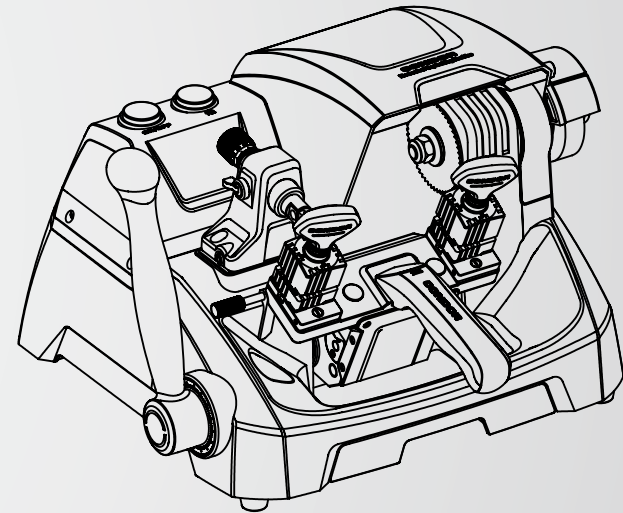


CONDOR

Horizontal key cutting machine
XC-003

User Manual

V1.0



Xhorse®



XC-003
Horizontal key cutting machine

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1. Safety precautions and warnings

To avoid personal injury or damage to the machine, please be sure to read the operating manual carefully and observe the following installation precautions before using the machine.

- Please use the machine in the safe environment.
- Please put the machine on a stable, horizontal, load-carrying workbench.
- Do not expose the machine to the sun or put it in a humid, greasy, dusty or other harsh environment.
- Please keep the machine dry and clean, and keep a distance of 30cm from the wall to allow ventilation.
- Please wear safety goggles that meet ANSI standards
- When the machine is working, please take care of your clothes, hair, etc. to avoid being involved in the machine.
- When the machine is working, it is necessary for someone to monitor the real-time running situation of the machine, do not stay away from the machine.
- When the machine is working, do not put any objects on the machine.
- When the machine is not used or being serviced, turn off the power.
- In the event of an abnormality, immediately disconnect the power supply, the switch is located at the rear side of the machine.
- Please put the machine in a place where children can't reach it.

2. General information

2.1 Machine description

Dear customer, thank you for choose CONDOR XC-003 Horizontal key cutting machine. The CONDOR XC-003 is a specialized machine designed for locksmiths around the world to quickly and accurately duplicate and process many types of automotive and residential mechanical keys.

In order to avoid personal injury, please read this manual carefully before using the machine and comply with it when using the machine. Please keep this manual for your reference.

2.2 Machine features

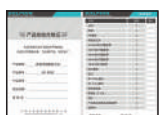
CONDOR XC-003 is a new generation of horizontal manual key cutting machine with the following features.

- Exquisite design, modern and technological.
- One-piece casting, all-aluminum body structure, strong and durable.
- Convenient for operation, press down on the secondary handle to pause the motor, and lift up to resume automatically.
- Four-sided rotary clamps for cutting many types of keys.
- Fine-adjustable guides for high-precision cutting requirements.

3. Product list

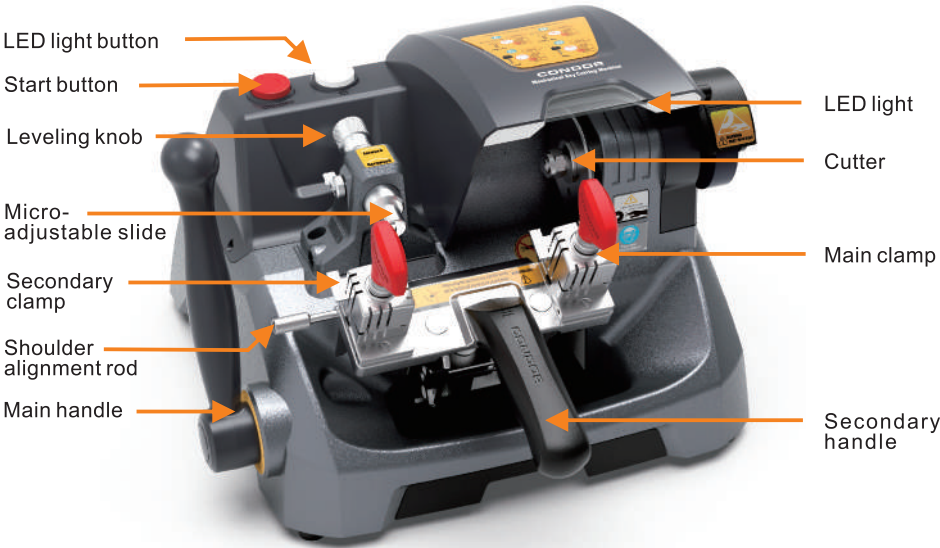
The following items are included in the original package, please contact your dealer if you have any missing items.

Name	Picture	Quantity	Instruction
Machine		1	Cutting machine
Align stopper		2	Calibration tool
2.5mm hexagon bar wrench		1	For the jackscrew adjustment of shoulder stopper
3mm hexagon bar wrench		1	For the screw of the clamp base
4mm hexagon bar wrench		1	Fine adjustment of the lateral movement of the tool holder, longitudinal tightening screw adjustment of the key cutting guide head
5mm hexagon bar wrench		1	Micro-adjustable slide
Round rod (for change cutter)		1	For change cutter
19mm open spanner		1	For change cutter
φ1.2mm auxiliary needle		2	For assisted key clamping
φ1.7mm auxiliary needle		2	For assisted key clamping
Power cord of Mainland China (1.5m)(optional)			Power connection cable

Power cable of UK standard (1.5m) (optional)			Power connection cable
Power cable of US standard (1.5m) (optional)			Power connection cable
Power cable of EU standard (1.5m) (optional)			Power connection cable
Brush			For cleaning of cutting chips
Product inspection certificate Packing list		1	Product factory inspection certificate Product factory packing statistic
User Manual		1	Instructions for assembling and using the key cutting machine

4. Overview

4.1 Machine structure diagram



4.2 Machine specification

Power parameters	220/110v 50/60Hz AC
Rated input power	180w
Motor speed	1800rpm
Motor torque	1.0Nm
Clamp space	112mm
Travel of table	50mm
Working temperature	0~50°C
Humidity	10-90%
Machine dimension	425*457*284mm
Package dimension	570*565*375m
Net weight	24.5KG
Gross weight	29KG



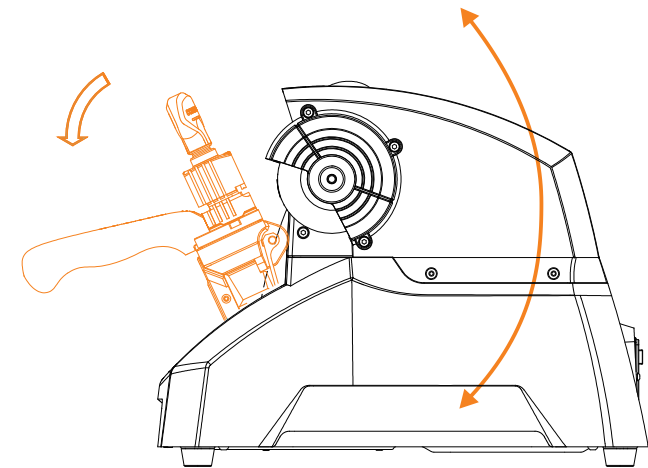
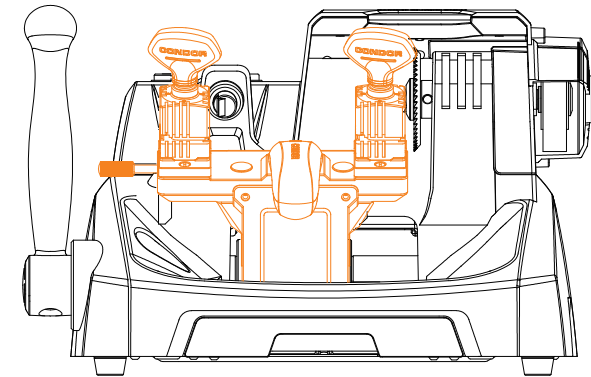
Picture of machine dimension



Package dimension

4.3 Description of main parts and functions

4.3.1 Secondary handle

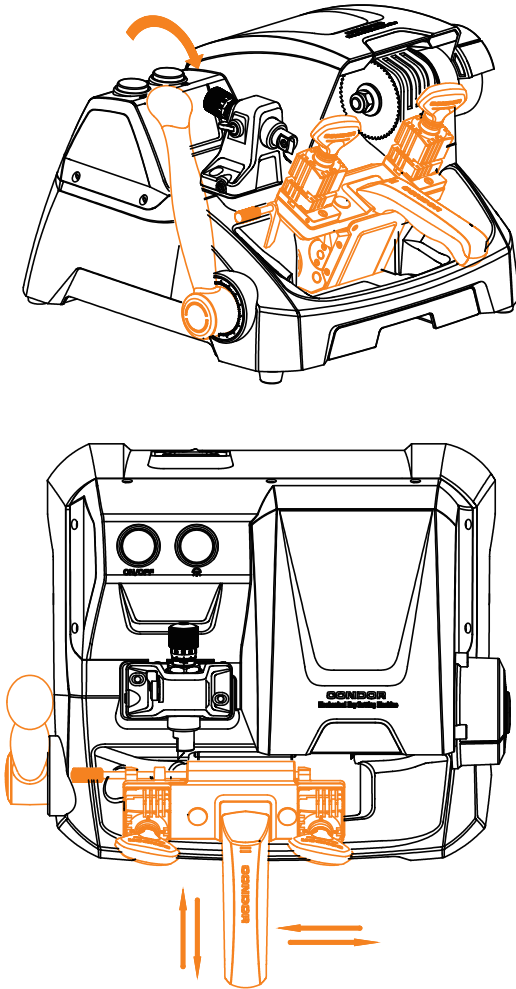


The machine has the following two working modes:

Standard mode: After plugging in and turning on the power, press the red button to start the spindle motor, push the secondary handle down, hear the sound of the clamp sliding table stuck to the lower position, then the motor is locked, push down again to unlock it and at the same time the motor resumes running, short press the red button to turn off this mode.

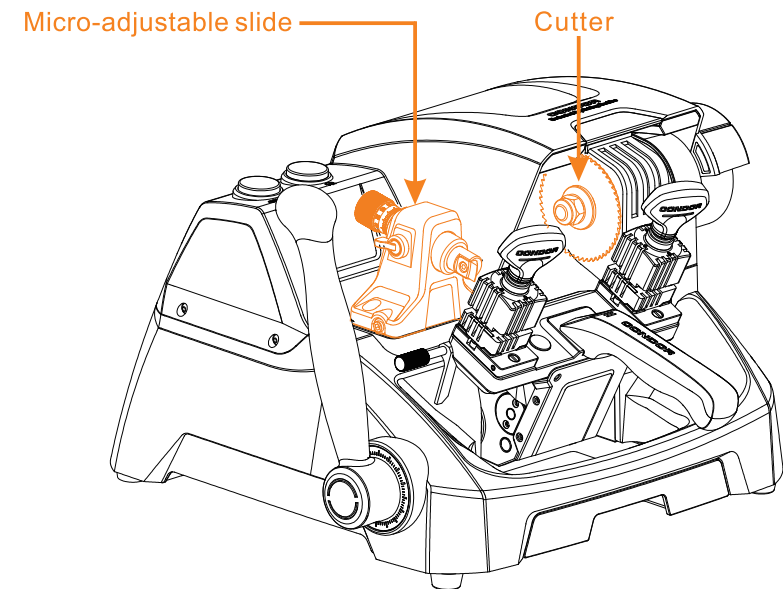
Continuous run mode: Press and hold the red button for 2 seconds and then release it, then enter the running mode after 2 beeps, the motor will keep running continuously without being affected by the position of the secondary handle, which is convenient for polishing the key, short press the red button to turn off this mode.

4.3.2 Slide module



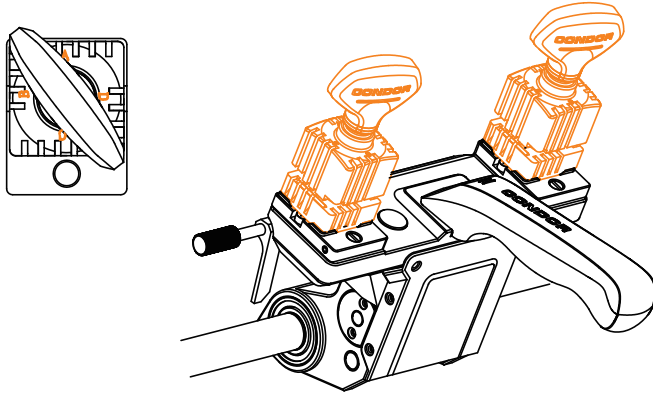
The slide module can be controlled by operating the main/secondary handles to realize the lateral and longitudinal movement for key cutting. Hold the main handle up and down to move the slide module laterally, and hold the secondary handle up and down to move the slide module longitudinally.

4.3.3 Micro-adjustable slide



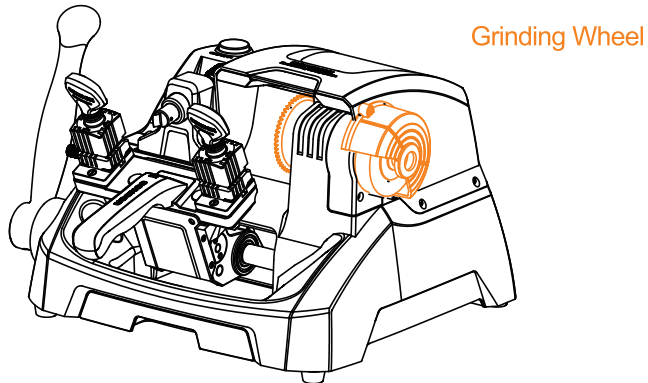
Adjust the micro-adjustable slide to align the key cutting guide with the cutter, refer to 5.2 for details.

4.3.4 Clamp



Put the key in correct position and clamp it. The four sides (A, B, C, D) of the clamp can hold different types of keys, the left side is the secondary clamp, which is used to hold the original key, and the right side is the main clamp, which is used to hold the key blade. Please ensure that the left and right clamps use the same clamping surface, and choose the appropriate clamping surface according to the different types (please refer to 6.2 Selection of clamp cutting surfaces and 9 Appendix of this document), and be sure to clamp the key well before cutting.

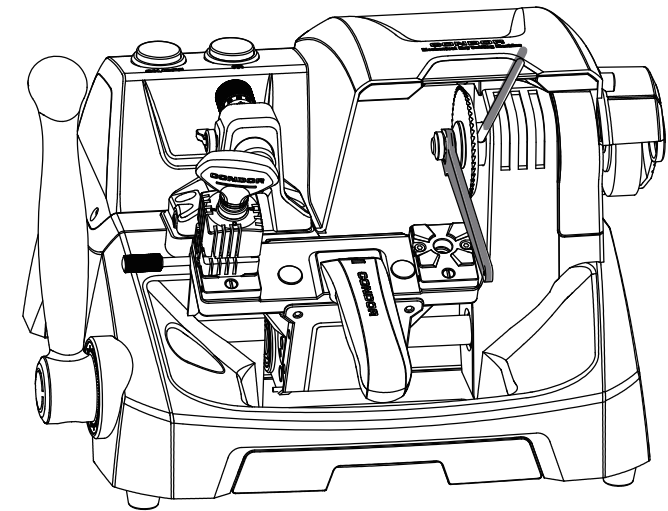
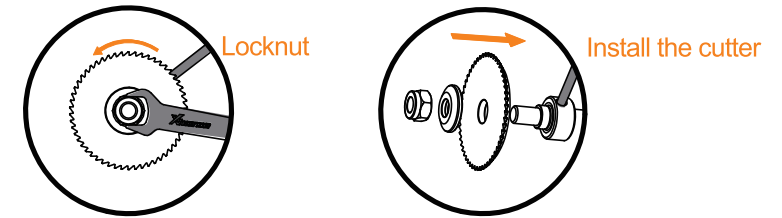
4.3.5 Grinding Wheel



Used to polish the key burrs after cutting, can be used to polish the key after cutting the key, it is recommended to use the Continuous run mode.

5. Machine installation and adjustment

5.1 Cutter installation



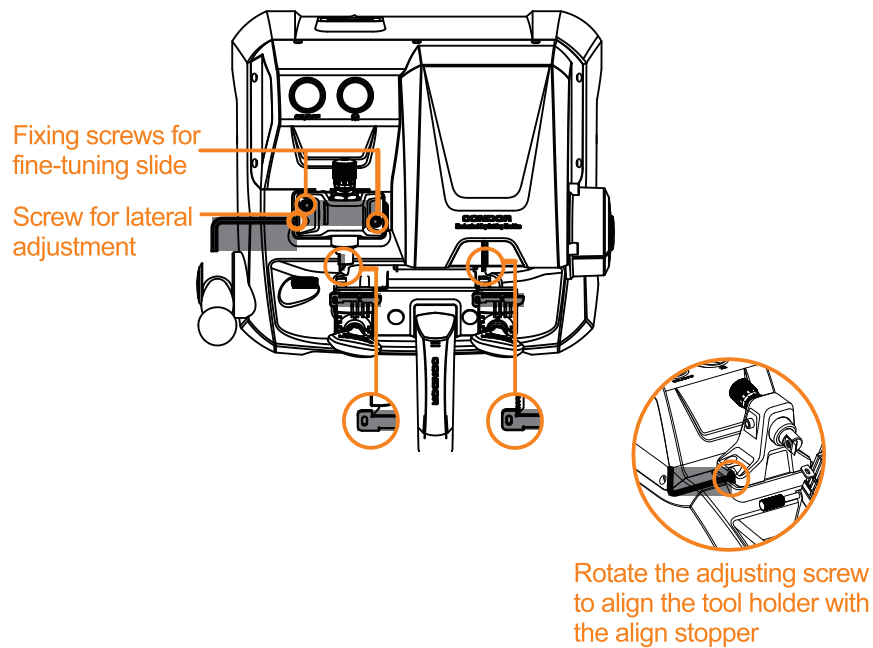
- ① When the machine is turned off, slowly rotate the spindle, align the spindle pin holes with the machine pin holes, and then insert the round rod (for change cutter) into the bottom.
- ② Install the cutter to the spindle, the cutter is distinguished between front and back sides (flat side facing left, beveled side facing right), install the cutter pressure plate and locknut (left-hand thread nut).
- ③ Use a 19mm open spanner to tighten the locknut counterclockwise, then pull out the round rod (for change cutter).

Refer to 5.2 to calibrate the fine-tuning slide after installing the cutter.

5.2 Micro-adjustable slide

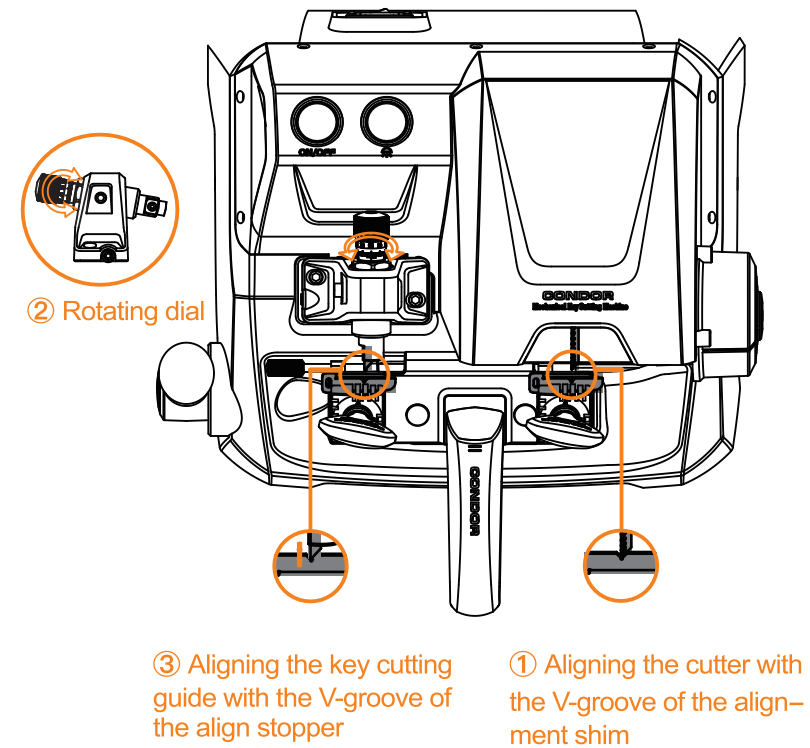
The fine-tuning slide has been adjusted at the factory. If any deviation or misuse is found, please adjust it as follows. First of all, turn the main and secondary clamps to the A side, and clamp the align stopper on each of the two clamps, put the B corner of the shim tightly against the clamp, and then tighten the clamp, and then make the fine-tuning slide lateral and longitudinal adjustments, respectively.

5.2.1 Micro-adjustable slide lateral adjustment



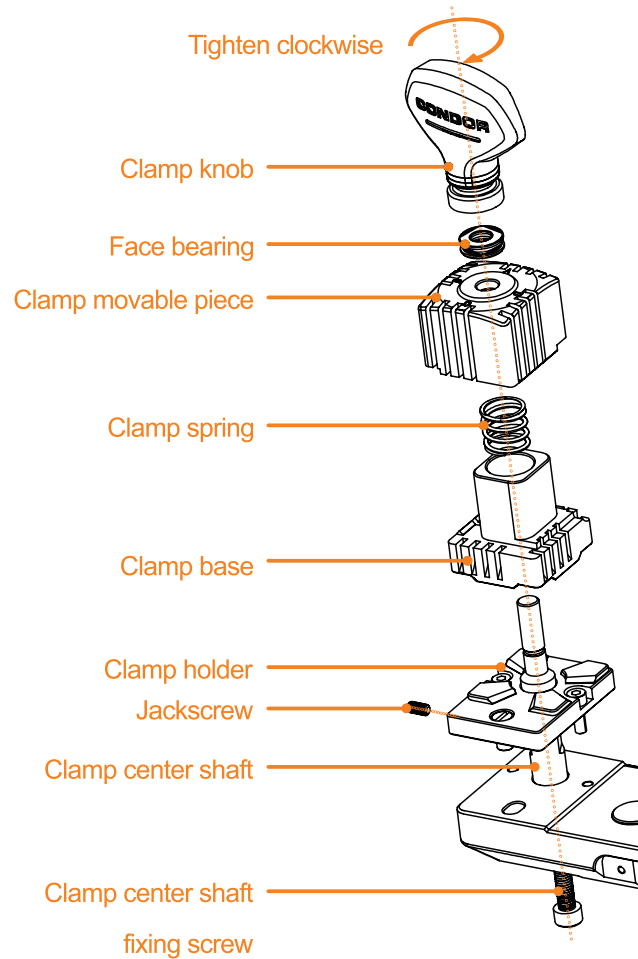
For lateral adjustment, after clamping the align stopper, turn and slide the slide module so that the left side of the cutter is tight against the shim, slightly loosen the slide module fixing screw, and slowly adjust the left adjusting screw with an hexagon bar wrench so that the left side of the key cutting guide is just touch to the shim, and then finally tighten the fixing screw.

5.2.2 Micro-adjustable slide longitudinal adjustment



When adjusting in the longitudinal direction, slowly rotate the slide module so that the cutter is aligned with the V groove of the align stopper, and then rotate the fine-tuning slide dial so that the key cutting guide is also just aligned with the V groove of the align stopper, rotate the dial by 1 small frame, and the key cutting guide will move back and forward by 0.02mm.

5.3 Clamp installation

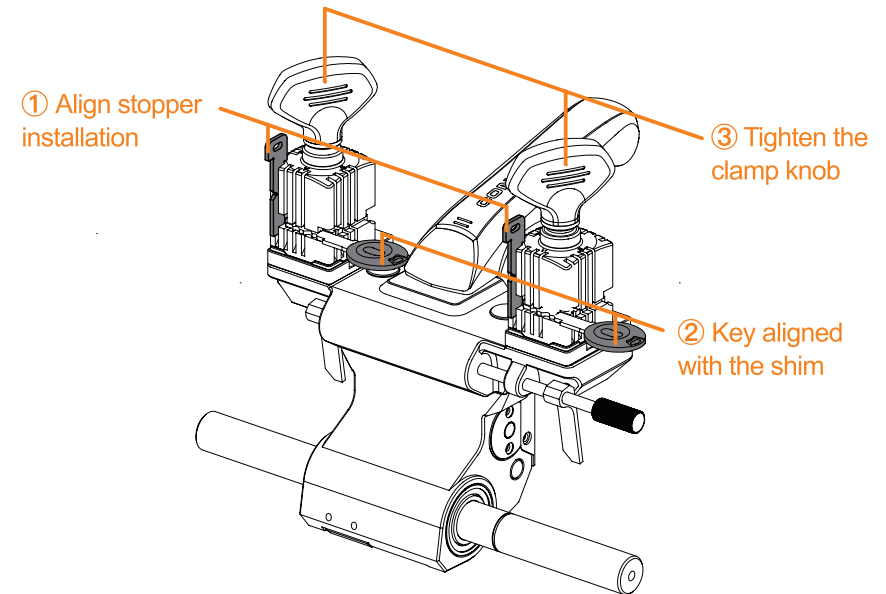


Please do not disassemble the clamp under normal use. If disassembled by mistake, please install and restore according to the above picture, when installing, please note that the clamp should correspond to each other, otherwise it can not be used normally.

6. Instruction for use of the machine

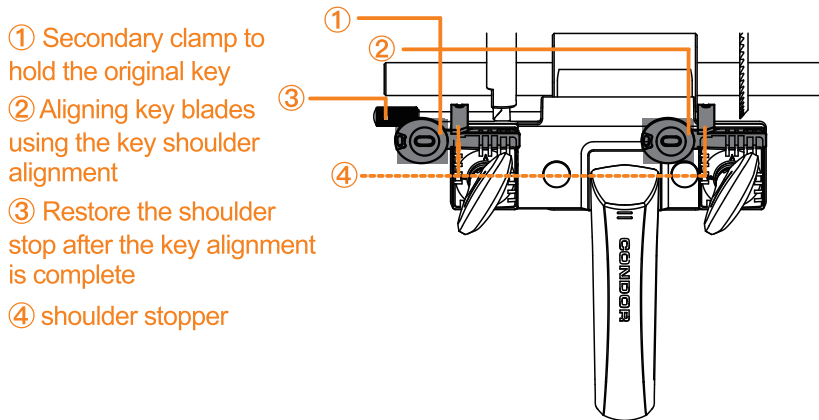
6.1 Key alignment method

6.1.1 Key tip alignment



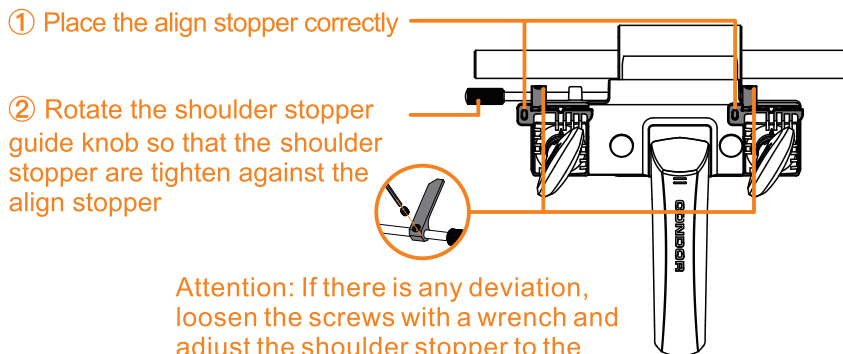
When aligning the key tip, please use the align stopper, insert the shim into the alignment slot, slowly push the key until it touches the shim, then tighten the clamp and remove the shim.

6.1.2 Key shoulder alignment



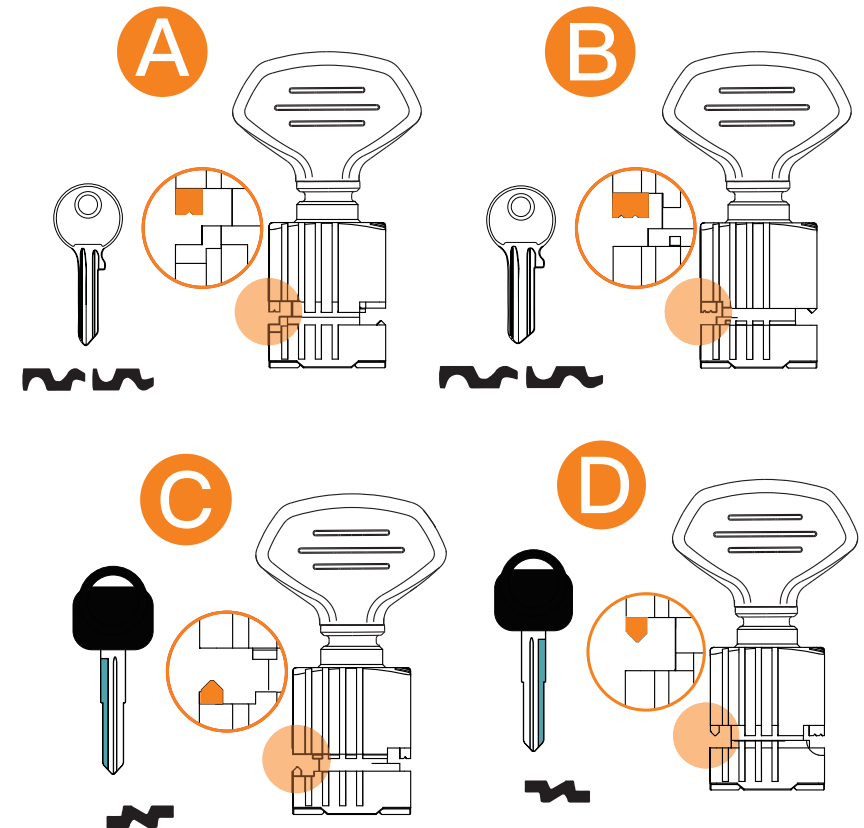
Fix the original key on the secondary clamp, then use the shoulder stopper to align it, after that align the key blade with the shoulder stopper and clamp it, finally rotate the stop to the initial state.

Calibration: When using the machine, if you find that the shoulder stopper space is not the same as the clamp space, you need to calibrate the shoulder stopper. According to the picture below, install the align stopper, rotate the shoulder stopper guide so that the left and right shoulder stopper are just about to tighten against the align stopper at the same time, if there is any deviation, you can loosen the tightening screw that holds the shoulder stopper, slowly move the stop to tighten against at the same time, and then lock the tightening screw. Remove the align stopper.



Attention: If there is any deviation, loosen the screws with a wrench and adjust the shoulder stopper to the correct position.

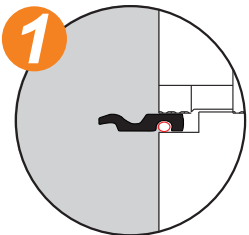
6.2 Selection of clamp surfaces



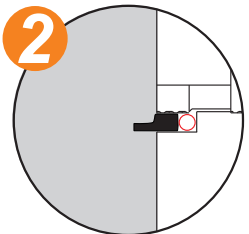
There are four sides of the clamp, A, B, C and D. For different types of keys, choose the appropriate clamping surface according to the above diagram, or refer to the appendix.

6.3 Instruction for use of the auxiliary needle

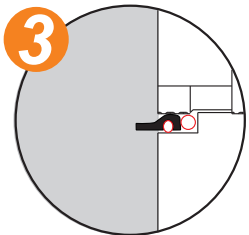
When using A or B side of the clamp, if the clamping surface is too small or the clamping depth is too deep to cut the complete key bit, you can use the auxiliary needle to change the size or depth of the clamping surface to ensure normal processing, as shown in the following figure:



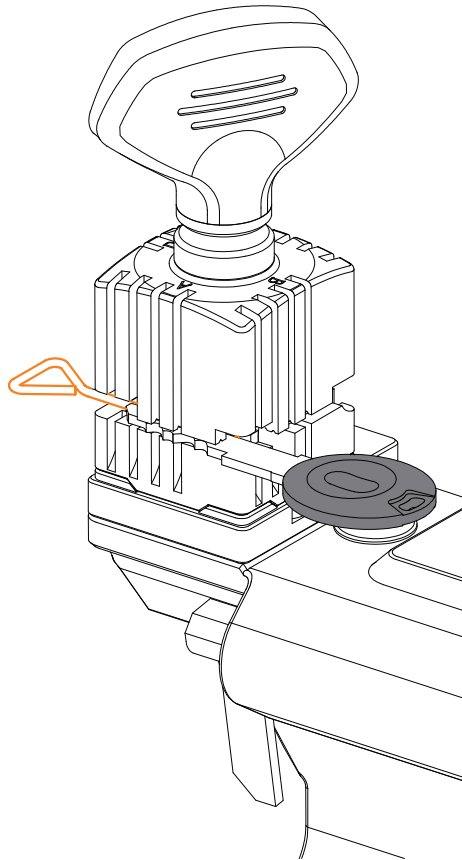
Clamping surface
is too small



Clamping depth
is too deep



Clamping surface
is too small
Clamping depth
is too deep



7. Maintenance

- Before cutting the key, please use a brush to clean the shavings on each part of the working area to ensure the precision of cutting;
- Do not use any oily products and detergents to clean the machine parts to avoid damaging or corroding the machine parts;
- Do not rinse the machine and parts directly with water or wipe the machine with a wet cloth to prevent leakage of electricity or rusting of metal parts;
- Do not use air guns, blowers, or other equipment to clean the cutting area of the machine under no circumstances to avoid shavings being blown into the interior of the machine and causing a safety risk;

8. Warranty and after-sales instructions

The CONDOR XC-003 machine warranty is one year, based on the date on the transaction voucher, or if there is no transaction voucher or if the transaction voucher is lost, then the factory date recorded by the manufacturer shall prevail.

The warranty is not free of charge in the following cases:

- The machine malfunctions as a result of not using the machine according to the instructions;
- Damage to the machine caused by self-repair or modification;
- Machine failure due to drop, collision or improper voltage;
- If the machine is damaged due to force majeure;
- Used for a long period of time in harsh environments or carried on vehicles or ships, resulting in malfunction or damage to the machine;
- The machine shells and shields are soiled or damaged as a result of use.

For after-sale product maintenance and technical support, please contact your dealer or scan the QR code below to download the Xhorse APP and consult online customer service.



Xhorse APP

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