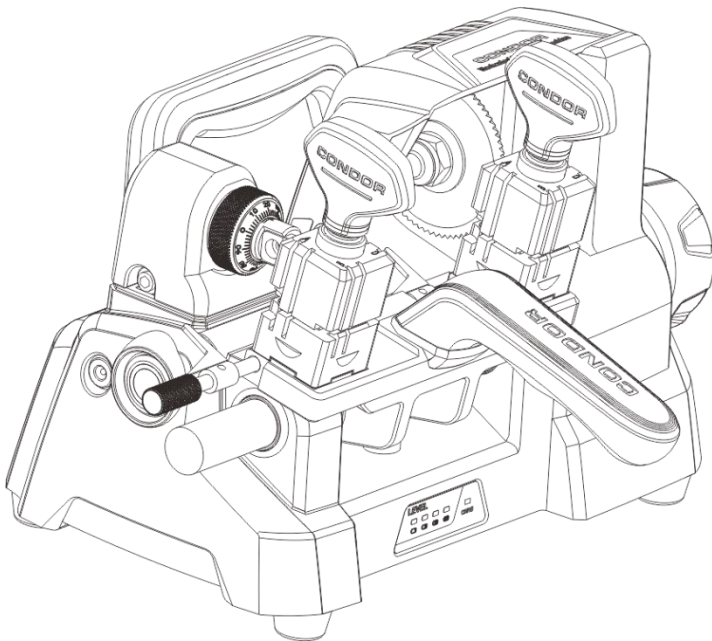


CONDOR

Mechanical Key Cutting Machine

XC-009

User Manual





XC-009

Mechanical Key Cutting Machine

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1 Safety Precautions

To prevent personal injury or machine damage, users should carefully observe the instructions provided by this operation manual and adopt the following safety precautions:

- Use the machine under the safe condition
- Place the machine on a horizontal surface, which should be firm enough to carry the weight of the machine.
- Do not exposure machine in scorching sun or place the machine in any wet, oily, dusty area.
- Keep the machine clean and dry and keep a distance of 30cm from the wall for ventilation.
- Wear safety glass that meets ANSI standards.
- When the machine is working, keep clothing, hair, etc. away from all moving parts.
- Do not leave the machine while it is operating.
- Do not place anything on the machine while it is operating.
- Power plug with ground wire must be connected when charging. Do not use power plug that is out of power and loose.
- Turn off the switch when the machine is not in use or in service.
- Shut down the machine immediately when any exception occurs. The switch on the left side of the machine.
- Keep the machine out of reach of children.

2 General Information

2.1 Machine Description

Thank you for choosing CONDOR XC-009 Mechanical Key Cutting machine.

CONDOR XC-009 Mechanical Key Cutting machine is a portable special device specially designed for global locksmiths. It is small in volume, light in weight and easy to carry. It can quickly and accurately copy and process variety of automobile and resident mechanical key types.









Please read it carefully before use. It is crucially important if you wish to operate the machine safely and efficiently.

2.2 Characteristics











CONDOR XC-009 is a new generation of mechanical Key Cutting machine with the following characteristics:

- Beautifully designed, full of modernity and technology.
- Integrated Casting, Aluminum structure, Durable.
- Small volume, Light weight, Easy to carry
- Ergonomics designed, More comfortable, simple and convenient.
- Micro-adjusted guide for high-precision cutting requirements.
- Built-in lithium battery, Super long endurance ability






3 Product Packaging Checklist

Name	Image	Quantity	Description
Main Body		1	Key Machine body
Handle		1	Control handle, accessory processing
M6 screw		2	Fixed handle
Tools		1	Tools placed
Key spacer		2	stopper
2.5mm Allen wrench		1	Tool for removing
3mm Allen wrench		1	Tool for removing
4mm Allen wrench		1	Tool for trimming slide

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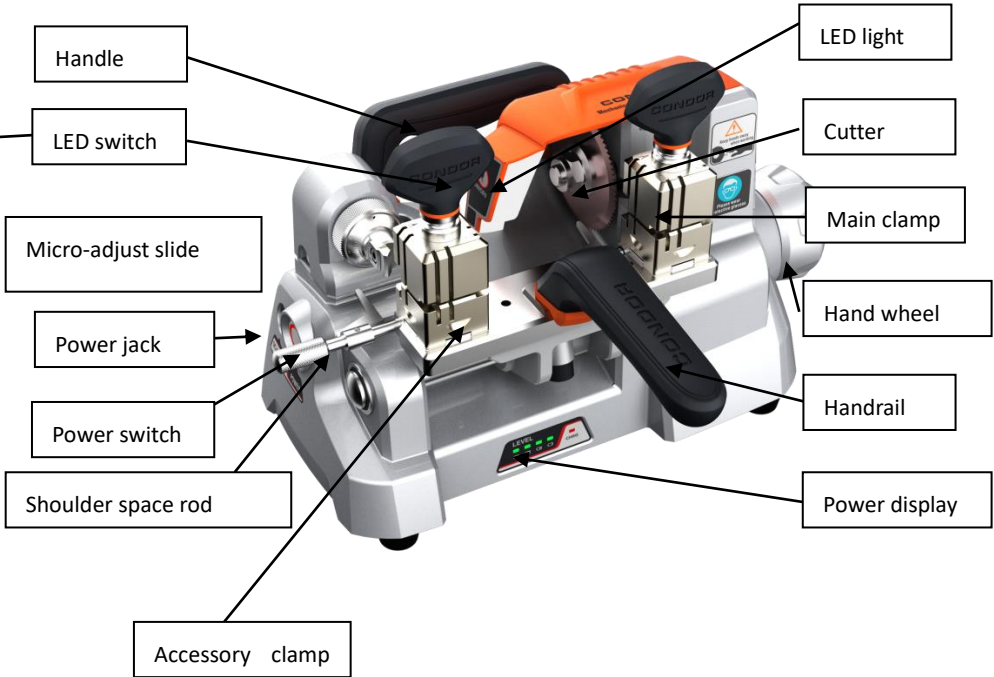
5mm Allen wrench		1	Tool for trimming slide
Tool change rod		1	Change the cutter
19mm open spanner		1	Change the cutter
file		1	Tool for polish
Φ 1.2mm nozzle cleaner		2	Tool for putting the key
Φ 1.7mm nozzle cleaner		2	Tool for putting the key
Power Adapter		1	Charger Device
Battery (Optional)		1	Power Device
Power cord (1.5m) (optional)		1	Connect to power (Chinese Standard)
Power cord (1.5m) (optional)		1	Connect to power (British Standard)

Mechanical Key Cutting Machine CONDOR XC-009

Power cord (1.5m) (optional)		1	Connect to power (European Standard)
Power cord (1.5m) (optional)		1	Connect to power (American Standard)
Brush		1	Tool for cleaning
Quality certificate and Product Packaging Checklist		1	Product delivery inspection certificate and packing statistics
User Manual (Take photo)		1	Key machine installation and operation instructions

4 Overview

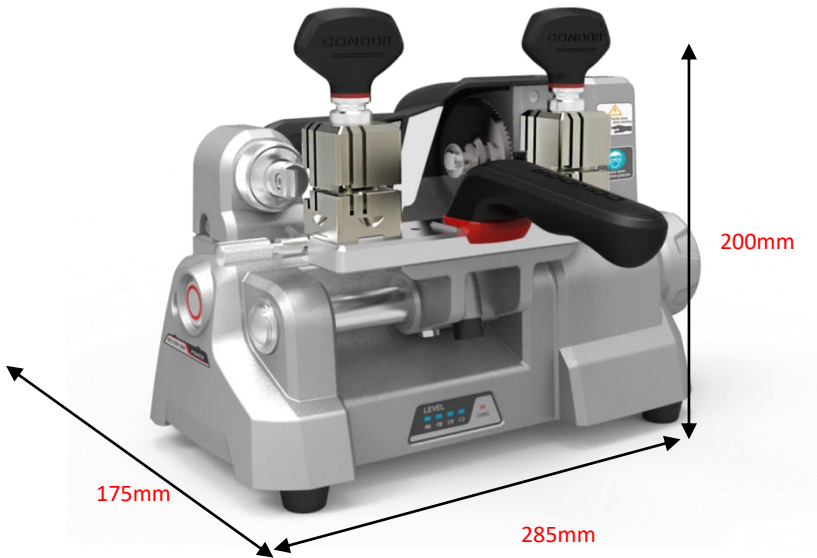
4.1 Schematic



4.2 Specifications

Input Voltage	90-264V AC
Input Frequency	47-63Hz
Consume	110W
Power Parameter	12-18V DC /3A
Battery Capacity	2600mAh/22.2V
Spindle Speed	900rpm
Motor Torque	1.2Nm
Clamp Spacing	95mm
Table Travel	46mm
Working Temperature	0-50°C
Humidity	10-90%
Net Weight	10.8kg
Gross Weight	12.5kg
Machine Dimensions	285mm*175mm*200mm
Packing Dimensions	420mm*310mm*300mm

Mechanical Key Cutting Machine CONDOR XC-009



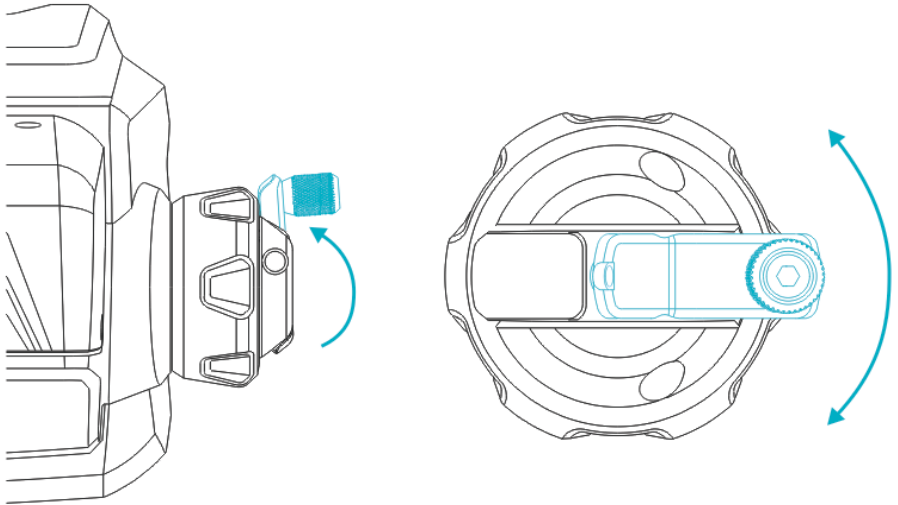
Machine Dimensions



Packing Dimensions

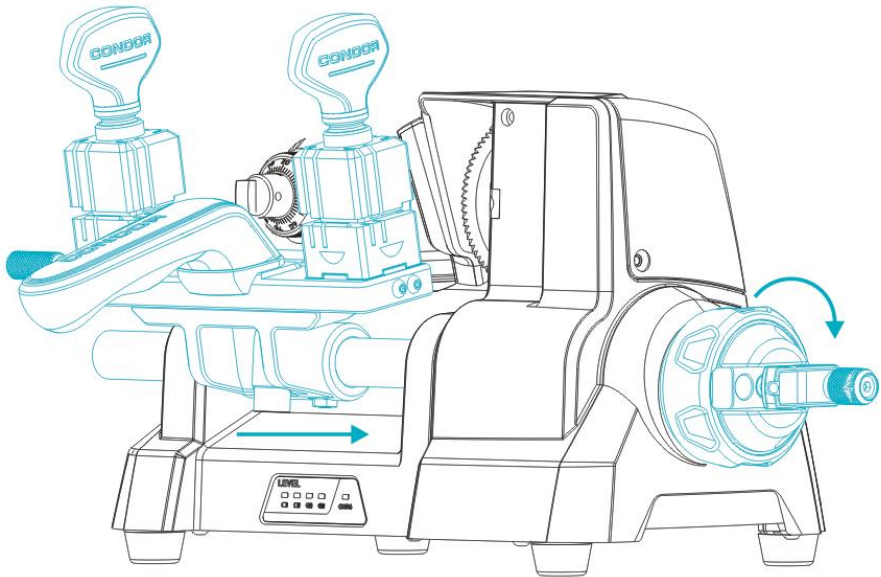
4.3 Main Parts and Function Declaration

4.3.1 Hand Wheel



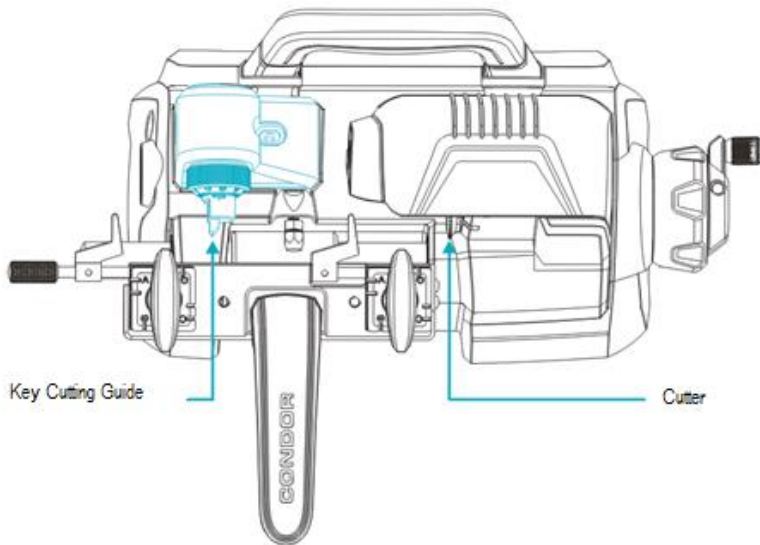
Unscrew the small hand wheel and turn the small hand wheel to achieve cutting feed. By rotating the hand wheel, the clamp slide can be controlled to move left and right, so as to achieve lateral feed during the cutting of the key. The hand wheel adopts a concealed structure, which opens outward when in use and can be hidden after use.

4.3.2 Skid Platform



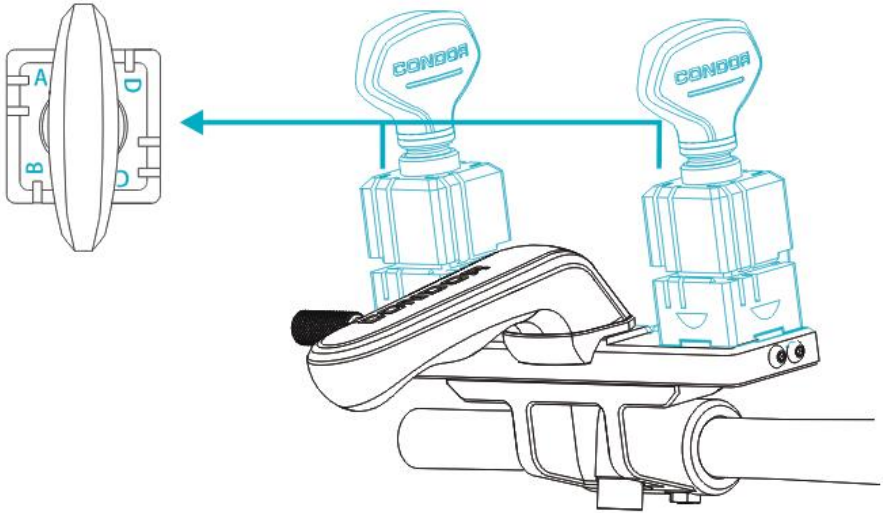
The clamp Skid Platform can be rotated about the axis of rotation and moved axially to achieve lateral and longitudinal feed of the key. Rotating the hand wheel to realize the lateral feed of the Skid Platform, holding the handrail and rotating around the axis to realize the key longitudinal feed, the Skid Platform has a lateral stroke of 46mm and the clamp spacing is 95mm.

4.3.3 Micro-adjust slide



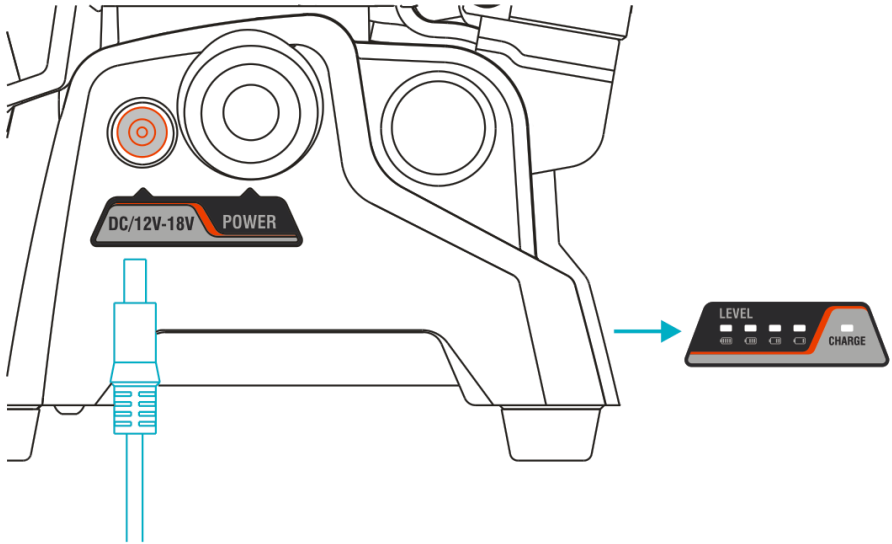
Adjust the Micro-adjust slide to align the cutter with key cutting guide.

4.3.4 Clamp



Allocation and clamp the key, the four-side (A、B、C、D) can be used to copy different key types. The left side is accessory clamp, placed original key, the right side is main clamp, placed blank key. Ensure that left and right clamp use the same cutting surface. Select the proper cutting surface according to different types (refer to chapter 6.2 clamp cutting surface selection and chapter 9 appendix). Be sure to clamp the key before cutting.

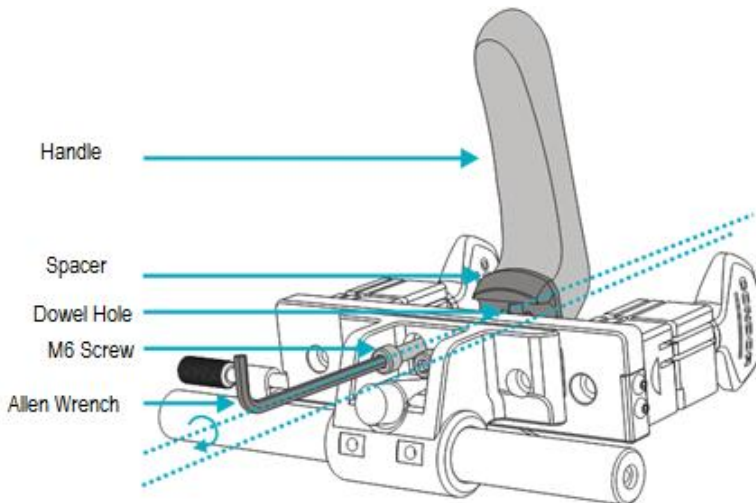
4.3.5 Power Parts



- There is a battery capacity indicator in front of the machine. When the power is low, the indicator is red. Please charge it in time. When power is fully, please unplug the power cord in time. It can be filled about 3-4 hours. After it is full, the machine can be cut the keys 60-100 continuously.
- Please use original power cord and adapter.
- Please use power socket with ground wire.
- Do not cut the key when charging.

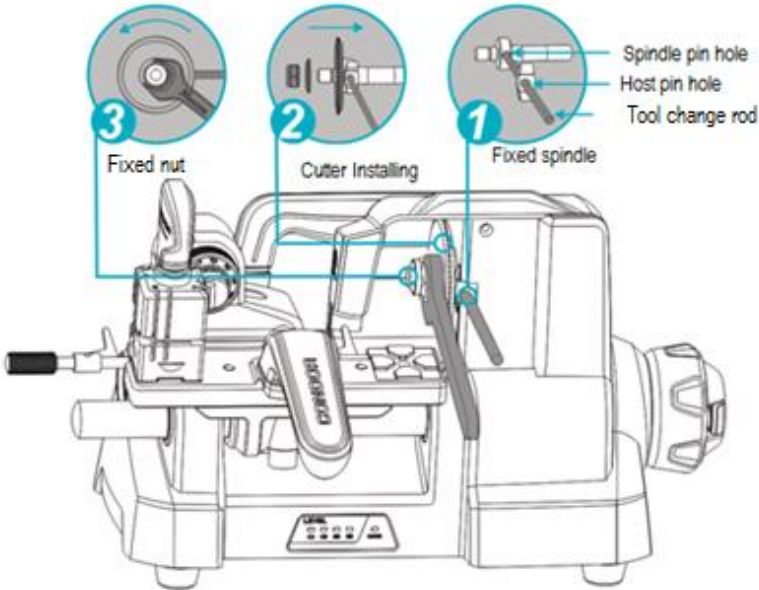
5 Equipment Installing and Debugging

5.1 Handle Installing



In order to save space, the handrail is separately from the whole machine in the package. Please open the box and install the handrail according to above picture.

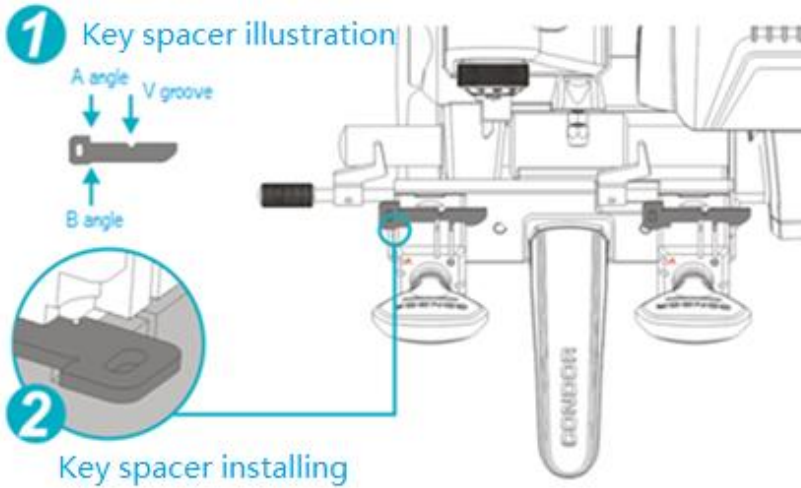
5.2 Cutter Installing



- 1) While the machine is stopped, slowly rotate the spindle, align the spindle pin hole with the host pin hole, and then insert the tool change rod into the end.
- 2) Installing the cutter on the spindle. Pay Attention to the front and back surface of cutter (with the word facing left), install the cutter block and lock nut (anti-nut).
- 3) Use the 19mm open spanner to tighten the lock screw counterclockwise. Then pull out the tool change rod. After installing the cutter, please refer to chapter 5.3 Fine Adjustment Slide Calibration.

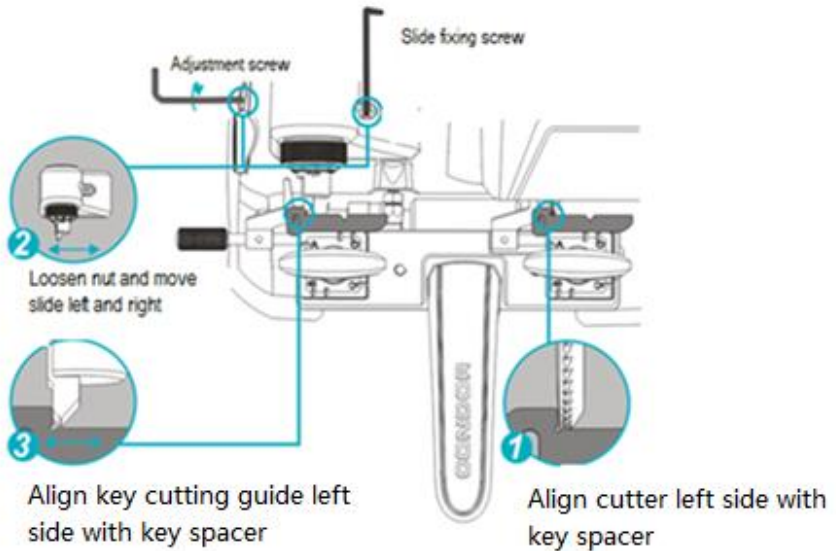
5.3 Micro-adjust Slide Calibration

Micro-adjust slide calibration has been finished at the factory. If deviation or incorrect operations are found, please adjust it as follows.



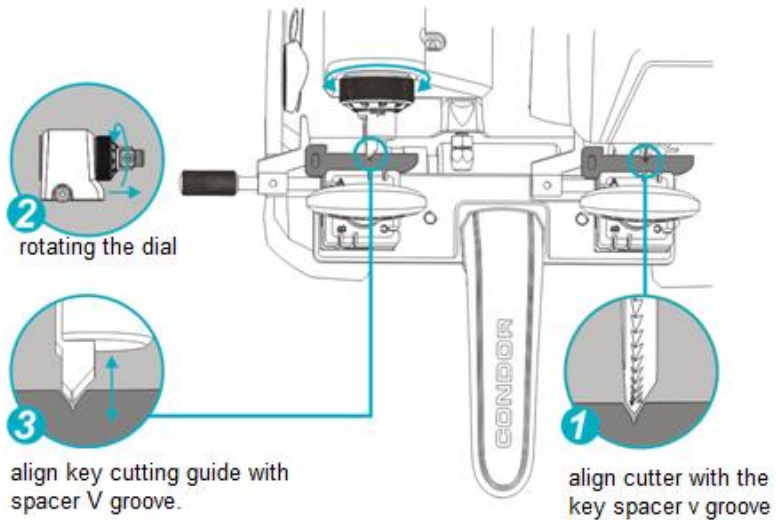
Firstly, both clamps are screw to A side, and clamp the Key spacer on both clamps. Closed the Key spacer to clamp, the clamp is tightened. And adjust the lateral and longitudinal adjustment of the slide separately.

5.3.1 Lateral Micro-adjust Slide Calibration



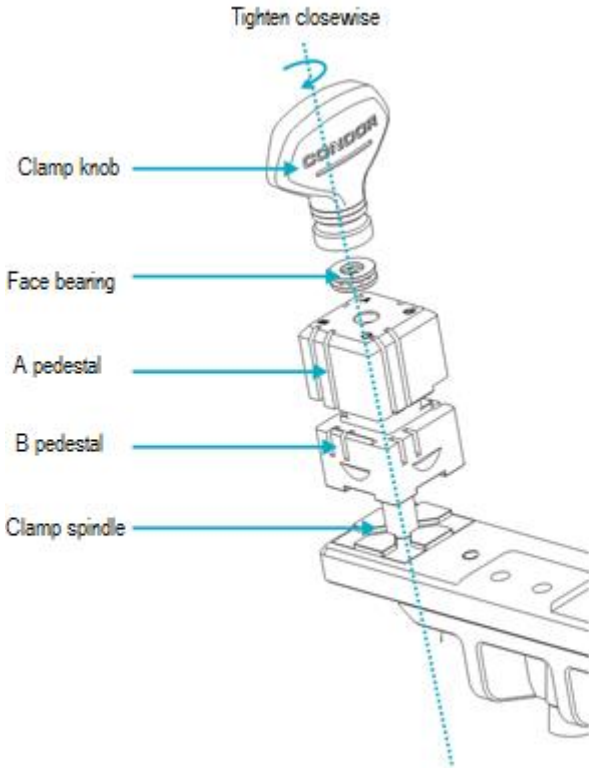
Perform lateral adjustment. After clamping the Key spacer, rotate and slide the clamp slide, the left side of cutter is close to the Key spacer, loosen the slide fixing screw slightly, and slowly adjust the left adjustment screw with an Allen wrench. The left side of the key cutting guide is just close to the Key spacer, and the fixing screw is tightened.

5.3.2 Longitudinal Micro-adjust Slide Calibration



When the longitudinal direction adjusting, slowly rotates the clamp skid platform, align the cutter with the key holder v groove, then rotates the Micro-adjust slide dial, align the key cutting guide with the key holder v groove, rotates the dial 1 small lattice, the key cutting guide moves 0.02mm than before.

5.4 Clamp Installing

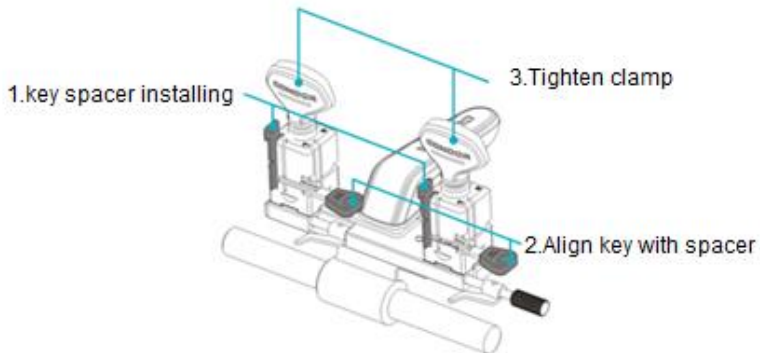


Do not remove the clamp under normal condition. If it is accidentally disassembled, please install according to the above figure. Pay attention to the clamp surface, otherwise it will not work normally.

6 Use of Equipment

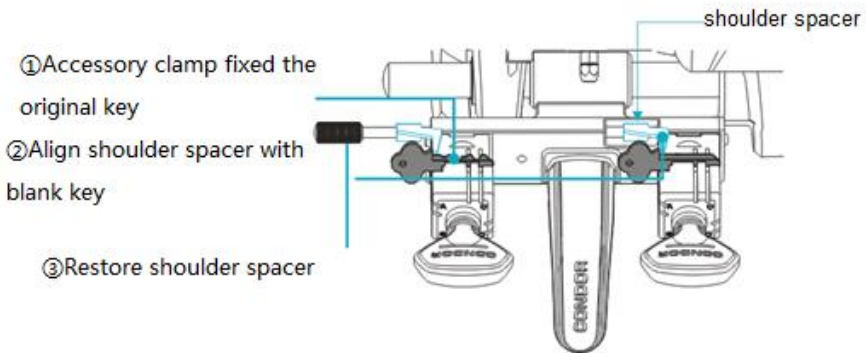
6.1 Key Alignment

6.1.1 Head spacing

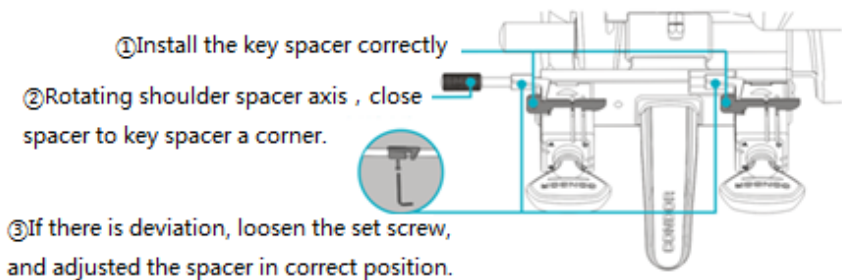


When the key head is spacing, use the alignment block, insert the positioning block into the spacing slot, slowly push the key until it touches the key spacer, the clamp is tightened to remove the key spacer.

6.1.2 Shoulder spacing

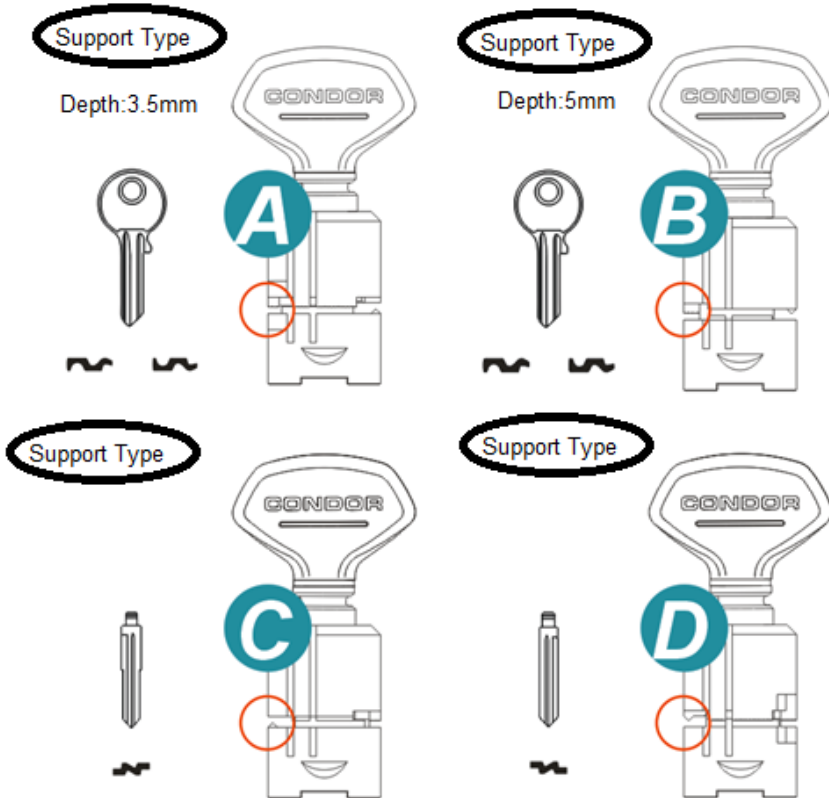


The original key is fixed on the accessory clamp, the shoulder spacer is aligned, then the blank key is aligned to the shoulder spacer, clamped, and finally the shoulder spacer is rotated to the initial state.



If it is found that the distance between the shoulder position and the fixture is inconsistent, it is necessary to calibrate the shoulder spacer. As shown in the following figure, installed the alignment block (refer to chapter 5.3), rotating the shoulder spacing axis, make the left and right shoulder spacer just close to the alignment block A angle, if there is deviation, release the set screw. Slowly move the shoulder spacer, and adjusted the spacer in correct position, then lock the set screw tightly. Remove the key spacer that it can be used normally.

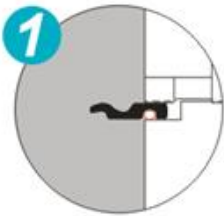
6.2 Clamp cutting surface selection



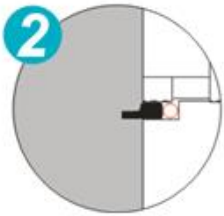
Clamp have A, B, C, D on all sides, different types of keys according to the above image to select the appropriate clamping surface, or reference appendix.

6.3 Use of needle

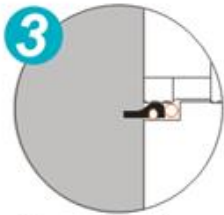
When using A or B surface, the clamping depth too deep, cutting less than the complete , you can use the needle, change the clamping depth to ensure normal processing, as shown in the following figure:



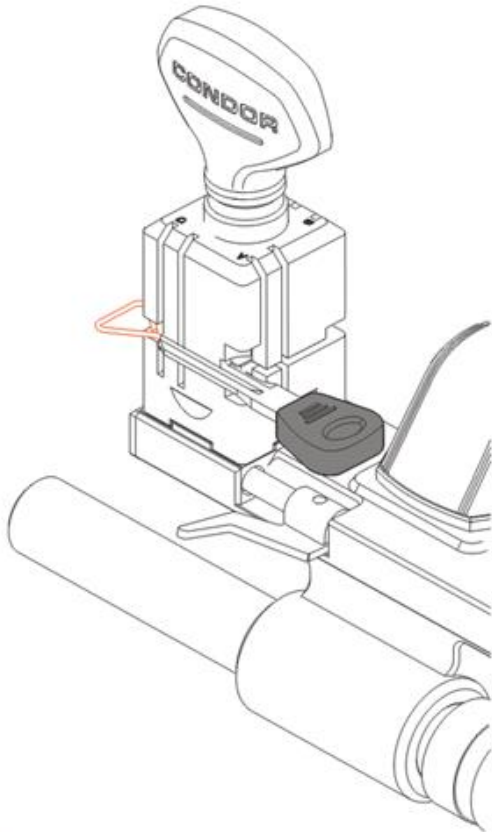
Clamping surface too small



Clamping depth too deep



Clamping surface too small
and Clamping depth too deep



7 Maintenance

- Before cutting the key, please use the brush to clean up the debris of the parts of the processing area to avoid the impurity damage and corrosion the machine parts, affecting the key processing accuracy.
- Do not use any oily products and detergents to clean all parts of the machine to avoid damage or corrosion the machine parts.
- Do not wash machine and parts with water directly, do not wipe the machine with wet cloth, in case of leakage of machine or rust of metal parts
- In order to avoid the debris blown into the machine inside, causing safety problems, please do not use air guns, hair dryers and other cleaning equipment cleaning processing area.

8 Quality assurance and after-sales instructions

CONDOR XC-009 warranty period is one year, subject to the date on the transaction voucher, if no transaction voucher or transaction voucher is lost, the factory record date shall prevail.

The following conditions are not free warranty:

- Failure to use the instructions as required
- Machine damage caused by self repair or modification
- Machine failure due to drop, collision or improper voltage
- Machine damage caused by force majeure
- Used for a long time in harsh environments or on vehicles or ships, causing machine malfunctions or damage.
- The normal use of the machine causing the daily wear.

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Product After-sale repair and technical support, please contact the dealer or use WeChat scanning QR code, attention to the official WeChat public accounts of the Xhorse (WeChat: SZ-Xhorse).












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9 Appendix

Type	Common Vehicles	Character	Key Shape
BYD56	BYD F3	Milling two tracks 12 feet	
BYD66	BYD F0	Milling two tracks 6 feet	
BT74	FAW Pentium	Milling two tracks 8 feet	
B107	Buick LaCrosse	Milling two tracks 10feet	
CY24	Chrysler 300C,PT Cruiser, Cherokee, Dodge, Jeep	Milling two tracks 8feet	
DW04R	Buick Excelle, Lova, Spark, Aveo, Sail Chang' an, JAC Chun Ling	Milling two tracks 8 feet	
DW05	Epica,Captiva	Milling two tracks 8 feet	
FO38R	Ford Mercury, Edge, F150, Escape, Lincoln, Mustang	Milling two tracks 8 feet	




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GM37	Buick, Old GL8, Old Regal, Firstland, Park Avenue	Milling two tracks 10 feet	
GT15	Nanjing Fiat Palio, Palio Weekend Old Ferrari	Milling two tracks 9 feet	
HU49	Jetta, Santana, Golf, Old Audi 100, 246 Santana, 256 Jetta Hong Qi B4	Milling two tracks 7 feet	
HU46	Opel Antara	Milling two tracks 10 feet	
HU87R	Suzuki Swift, new Alto, Jimny, SX4, Vit ara	Milling two tracks 10 feet	
HYN11	06-09 Kia Rio, Elantra, Tucson, Ce ratoRefine	Milling two tracks 8 feet	
HYN7R	Hyundai Sonata, Molnca, Santa Fe	Milling two tracks 8 feet	
HY15	Hyundai Sonata, Sonata NFCKia K2	Milling two tracks 8 feet	
HY16 HY17	Hyundai ELANTRA, Kia Forte,	Milling two tracks 10 feet	

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MIT11R	Mitsubishi, Soueast, Bei Douxing, Xiali	Milling two tracks 8 feet	
MAZ24	Mazda 3, Mazda 5, Mazda 6, Family	Milling two tracks 10 feet	
MIT8	Mitsubishi, Daihatsu, Chrysler	Milling two tracks 8 feet	
NE38	Australian Honda, Ford, MGMINI, Nissan, Land Rover	Milling two tracks 10 feet	
NE71R	Rover	Milling two tracks 10 feet	
NE72	Peugeot 206,207,C2,07 Picasso	Milling two tracks 6 feet	
NSN11	Nissan Vanette, CEFIRO,Bluebird, Cedric	Milling two tracks 8 feet	
NSN14	Nissan Teana, Tiida, Livina smart card	Milling two tracks 10 feet	
QR51	Chery A3, A5, Tiggo Eastar	Milling two tracks 8 feet	
SX9	Citroen Elysee, Picasso, Fukang, Geely Free Cruiser, Shanghai Maple	Milling two tracks 5 feet	

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TOY38R	Carnival, Jinbei, Xiali, Daewoo	Milling two tracks 8 feet	
TOY43	Toyota Camry, Raiz, Corolla EXChevy Cross	Milling two tracks 10 feet	
TOY43R	Subaru XV, GreatWall M4, Cowry	Milling two tracks 10 feet	
YM28	Opel	Milling two tracks 10 feet	