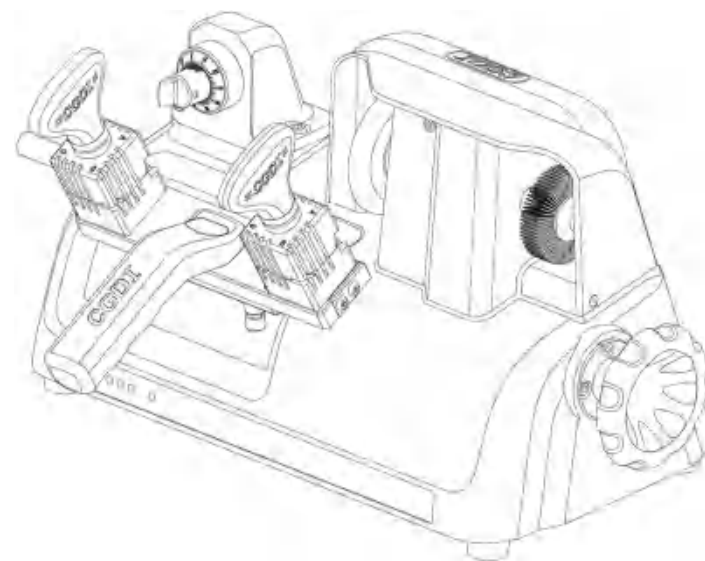




Compact Manual Key Cutting Machine W1

小型卧式钥匙切割机W1



Customer Service

If you have any questions or problems while using this product, please contact our team.

via WhatsApp : +86 13602538824/+86 13500065304

Website: www.cgdiglobal.com

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服务支持:

如果您在操作本产品过程中有任何疑问或者问题

请致电售后服务热线: 0755-28833004

联系技术QQ: 800163968

访问: WWW.CGPROGCAR.COM

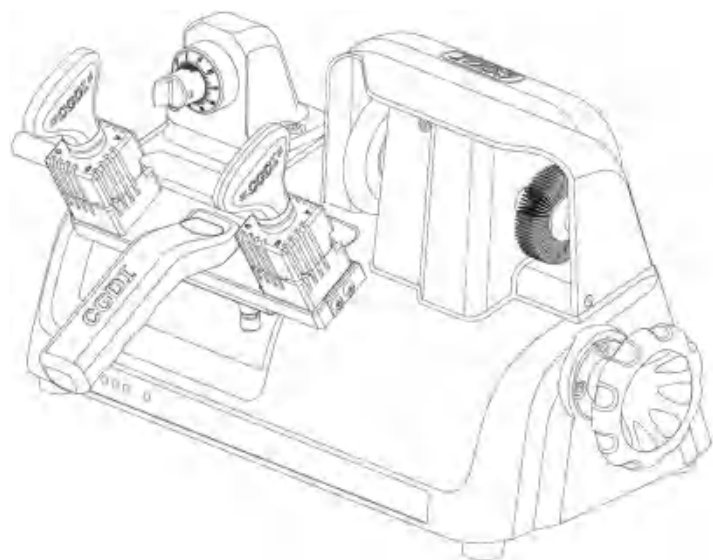
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User manual 使用说明书

Please read this instruction manual carefully before using this machine

使用本产品之前请仔细阅读本说明书

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**Compact Manual Key Cutting Machine
W1**

Disclaimer and Limitation of Liability

All information and illustrations in the manual are the latest information. Shenzhen Changguang Technology Co., Ltd. reserves the right to make changes without notice.

Our company does not bear any direct, indirect, special, incidental damages or any indirect economic damages.

Notes:

Before operating or maintaining the machine, please read the user manual carefully, especially the safety precautions and warnings.



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1. Safety precautions

In order to ensure the safety of the operator, and to avoid damage to the machine, key and property loss, the operator must carefully read this operation manual before using the machine and observe the following safety precautions:

-  Please use the machine in a safe environment.
-  Do not expose the machine to direct sunlight or place it in damp, oily, dusty, or other harsh environments.
-  Keep the machine dry and clean. Do not subject it to heavy pressure, drops, or immersion in water.
-  Place the machine on a stable, reliable, level workbench.
-  Maintain a distance of at least 30cm between the machine and the wall for ventilation and heat dissipation.
-  Wear ANSI-compliant safety goggles during operation.
-  Do not allow clothing, hair, hands, or other tools near the key-cutting area while the machine is operating.
-  Do not place any items on the machine while it is operating.
-  A dedicated person should monitor the machine's operation in real time while it is running. Do not leave the machine unattended.
-  If the machine will not be used for an extended period, it is recommended to unplug it.
-  Please use the original lithium battery or power adapter. When charging, it must be connected to a grounded power outlet.
-  In case of any abnormality, immediately disconnect the power.
-  Keep the machine out of reach of children.

2. Product Description

The W1 compact manual key cutting machine is a professionally designed key processing machine.

It features a compact size, lightweight design, easy operation, and excellent portability.

The W1 enables fast and precise duplication of various automotive keys and civilian mechanical keys.

2.1 Features

The machine has the following features:

- 👍 Modern, minimalist design with smooth lines
- 👍 Integrated full-aluminum unibody, strong and durable
- 👍 Compact and lightweight for easy portability
- 👍 Ergonomic design with intuitive operation
- 👍 Adjustable guide system for precise cutting
- 👍 Cutting and polishing in one step
- 👍 Built-in high-performance lithium battery for long runtime(Optional)

2.2 Overview



Compact Manual Key Cutting Machine-Product Description

2.3 Product list

Name	Picture	Quantity	Config-uration	Description
Machine		1	Standard	Key Cutting Machine
Align Stoppter		2	Standard	Stoppter
Φ 1.2mm needle		2	Standard	Tool for puyting the key
Φ 1.7mm needle		2	Standard	Tool for puyting the key
Power Adapter		1	Standard	Power connection tool
Chinese standard power cable(1.5m)		1	Optional	Power connection tool
British standard power cable(1.5m)		1	Optional	Power connection tool
American standard power cable(1.5m)		1	Optional	Power connection tool
European standard power cable(1.5m)		1	Optional	Power connection tool
Built-in battery		1	Optional	Mobile power
Product inspection certificate		1	Standard	Product factory inspection certificate, packingstatistics
Product manual		1	Standard	Key machine Instruction

Compact Manual Key Cutting Machine-Product Description

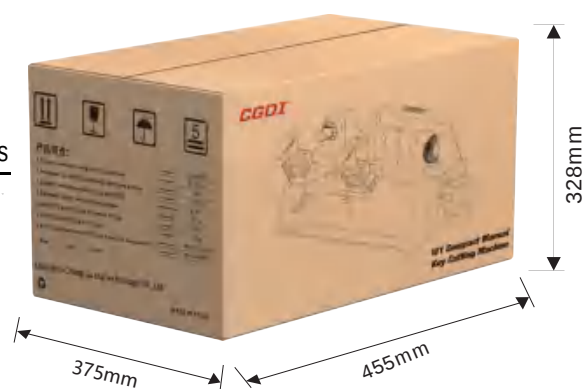
2.4 Product Specifications

Input Voltage	100~240V AC
Input Frequency	50~60/Hz
Power Consumption	50W
Power Supply Parameters	12V DC/5A
Battery Capacity	2600mAh
Spindle Speed	2100rpm
Motor Torque	1.0Nm
Clamp Spacing	95mm
Table Stroke	70mm
Operating Temperature	0~45℃
Operating Humidity	10~90%
Machine Net Weight	11.2kg
Gross Packaging Weight	12.1kg
Machine Dimensions	385mm*185mm*205mm
Packaging Dimensions	470mm*370mm*340mm

Machine Dimensions

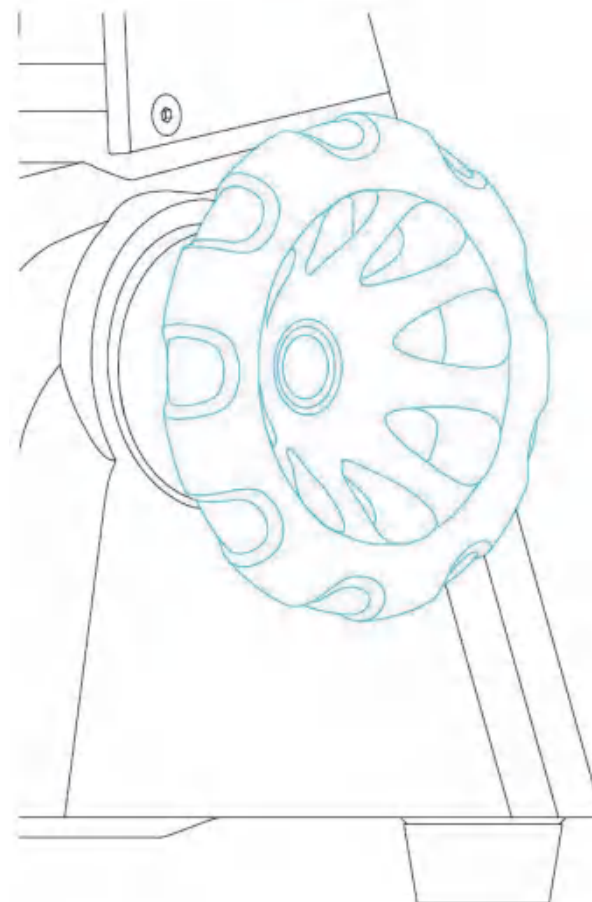


Packaging Dimensions



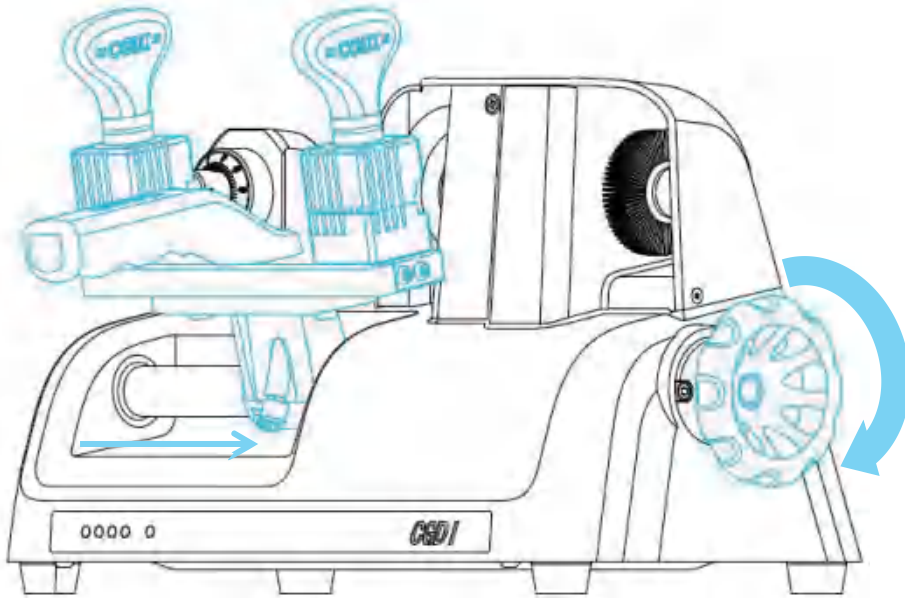
2.5 Main parts and function declaration

2.5.1 Hand Wheel



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.

2.5.2 Sliding platform



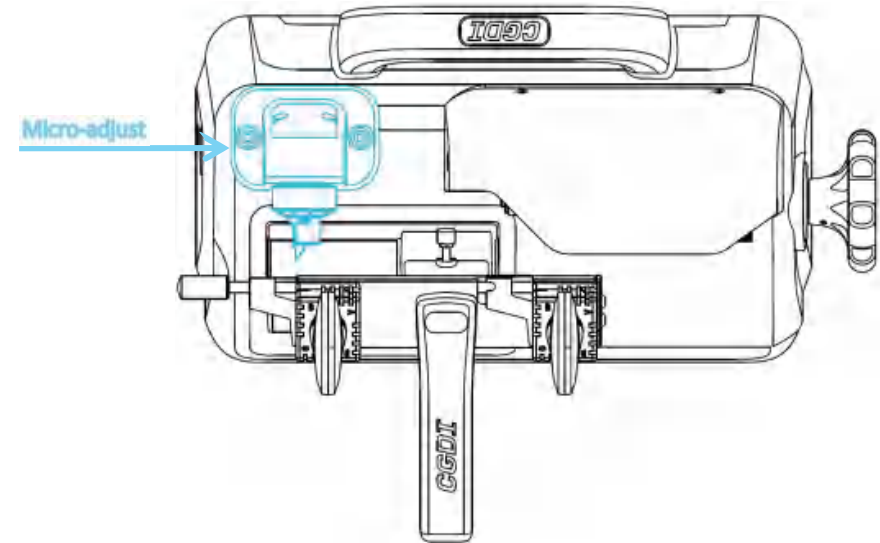
The clamp sliding platform can be rotated about the axis of rotation and moved axially to achieve lateral and longitudinal feed of the key. The operation method is as follows:

- Lateral feed : Rotating the hand wheel to realize the lateral feed of the sliding platform.
- Longitudinal feed: Holding the handrail and rotating around the axis to realize the key longitudinal feed.

Key dimension parameters:

- The sliding platform has a lateral stroke of 70mm
- The clamp spacing is 95mm

2.5.3 Micro-adjust slide

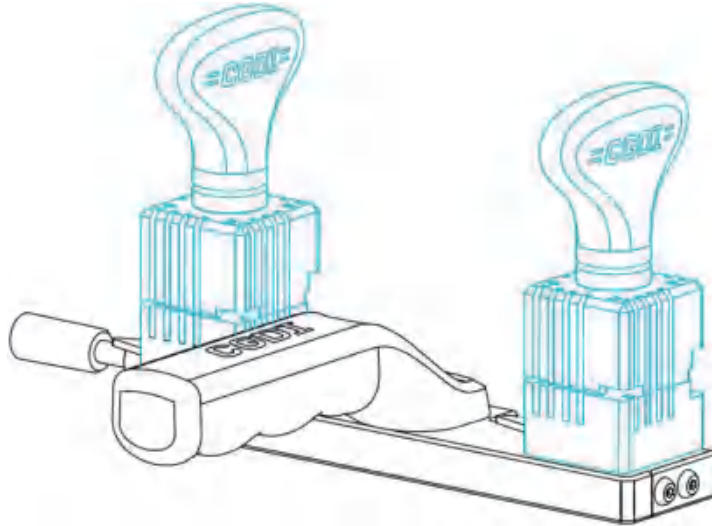


This product's fine-tuning slide is equipped with a high-precision contour probe. During cutting, this probe conforms to the original key tooth trajectory, synchronously guiding the cutter head to track and cut the key blank, thus achieving precise replication of the tooth shape.

The fine-tuning slide and contour probe have been precisely calibrated before leaving the factory. If calibration is required or deviations occur due to operation, please adjust according to the steps described in Section 3.1 of this instruction manual.

Compact Manual Key Cutting Machine-Product Description

2.5.4 Clamp



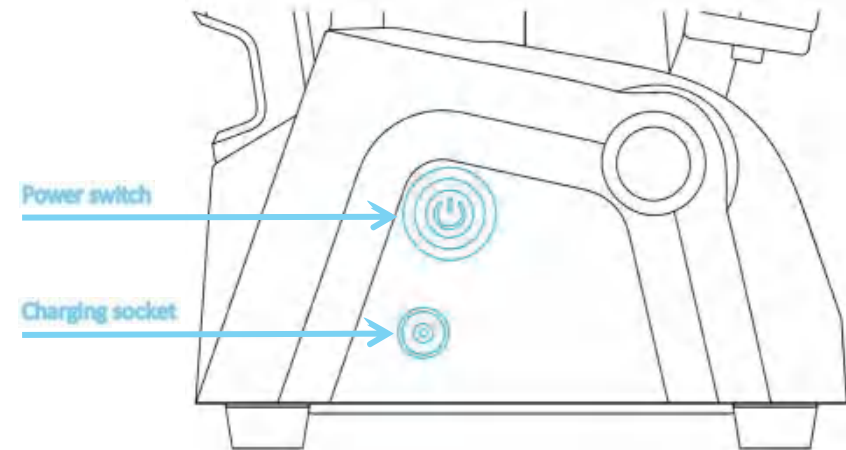
There are four-sided (A, B, C, D) that can be used to copy different key types. Please follow these steps during operation:

1. Select the right side: Based on the type of the original key, rotate the same side on both the main and auxiliary clamps (e.g., use side "A" for both).
2. Correctly place the key:
 - The left auxiliary clamp is used to hold the original key.
 - The right main clamp is used to hold the key blank.
3. Clamp and secure: Before processing, be sure to tighten the clamping knobs to ensure that both the original key and the key blank are firmly clamped and not loose.

Please note that different side correspond to specific key types. Please refer to Section 4.1 of this instruction manual for selection.

Compact Manual Key Cutting Machine-Product Description

2.5.5 Power parts



To meet the needs of different customers, the built-in battery of this product can be selected according to requirements.

Battery-included version:

1. Battery version:
 - Plug the 12V DC power cord into the charging socket on the side of the machine.
 - Plug the AC power adapter into a grounded safety outlet.
2. Power display:
 - A battery level indicator light is located on the front of the machine. When the indicator light shows low battery, please charge the device promptly.
 - When the power is full, please disconnect the power cord in time.
3. Charging Time:
 - Under normal conditions, a full charge takes approximately 3-4 hours.

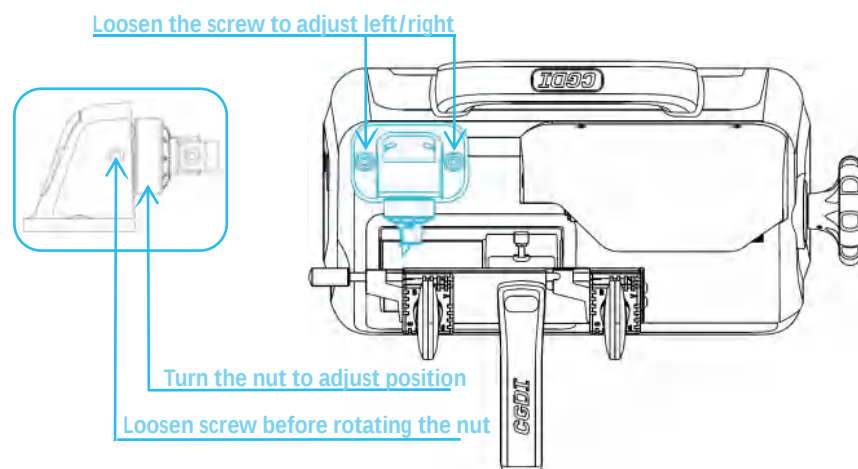
Without battery version :

- Plug the 12V DC power cord into the charging socket on the side of the machine.
- Plug the AC power adapter into a grounded safety outlet.

3. Machine installing and setting

3.1 Micro-adjust slide calibration

Micro-adjust slide calibration has been finished in the factory. If deviation or incorrect operations occurred, please adjust as follows.



This machine supports precise positional adjustment of the micro-adjust slide and the contour probe. The adjustment procedures are as follows:

1. Lateral Adjustment (Front and back of Contour Probe):

- Operation: Loosen the locking screw of the micro-adjust slide. Move the entire slide left or right to adjust the longitudinal position of the contour probe accordingly.
- Fixing: After reaching the desired position, re-tighten the locking screw securely.

2. Longitudinal Adjustment (Left and Right of Contour Probe):

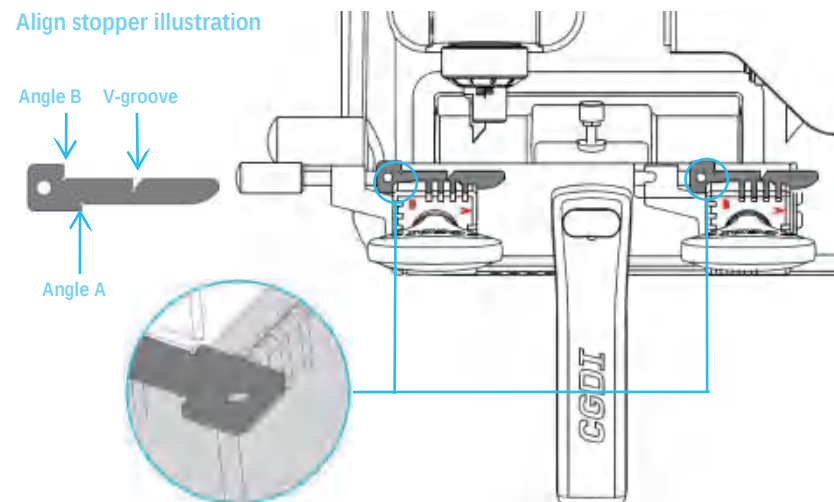
- Operation: Rotate the adjustment nut to finely adjust the lateral position of the contour probe. Before adjustment, loosen the corresponding locking screw.
- Fixing: After adjustment is completed, re-tighten the locking screw to secure the position.

Notes: Refer to the adjustment procedure described in Section 3.2 of this manual. Before performing any adjustment or operation, ensure that the machine is powered off and not in operation.

3.2 Contour Probe Adjustment

The contour probe has been precisely calibrated before leaving the factory. If recalibration is required, or if deviation occurs due to improper operation, adjust the contour probe according to the procedures below.

Align stopper illustration



- Ensure that the machine is powered off and not in operation.
- Install positioning plates on both the main clamp and auxiliary clamp, and position them using the A locating shoulder.
- **Note:** Both sides must be clamped using the B surface simultaneously (as shown in the illustration above).

Adjustment Procedure:

1. Lateral Adjustment of the Contour Probe

- (1) Pre-loosen the screws: Slightly loosen the two fixing screws on the micro-adjust slide and the one side locking screw.
- (2) Align the cutter wheel: Rotate and slide the clamp slide table so that the left side of the cutter wheel just contacts the left edge of the V-groove on the positioning plate.
- (3) Align the contour probe: Move the micro-adjust slide so that the left side of the contour probe just contacts the left edge of the V-groove on the positioning plate.

Compact Manual Key Cutting Machine-Machine installing and setting

2. Longitudinal Adjustment of the Contour Probe

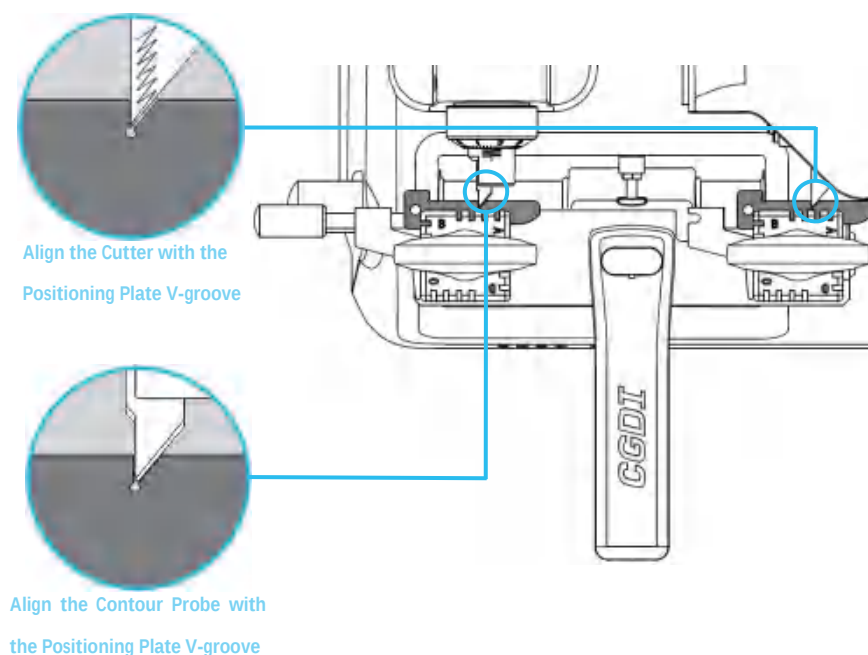
(1) Check V-groove alignment: Observe whether both the contour probe and the cutter wheel are aligned with the center of the V-groove on their respective positioning plates.

- If aligned: The adjustment is complete. Proceed directly to Step 3.
- If not aligned: Continue with Step 2 for fine adjustment.

(2) Fine adjustment: Rotate the adjustment nut on the micro-adjust slide to precisely align the contour probe and the cutter wheel with their respective V-grooves.

- Adjustment accuracy: Each single graduation on the dial corresponds to a 0.02 mm longitudinal movement of the contour probe.

3. Final Fixing: After completing all adjustments, securely re-tighten the side locking screw to fix the contour probe in position.



Compact Manual Key Cutting Machine-Machine installing and setting

3.3 Shoulder Spacer Adjustment

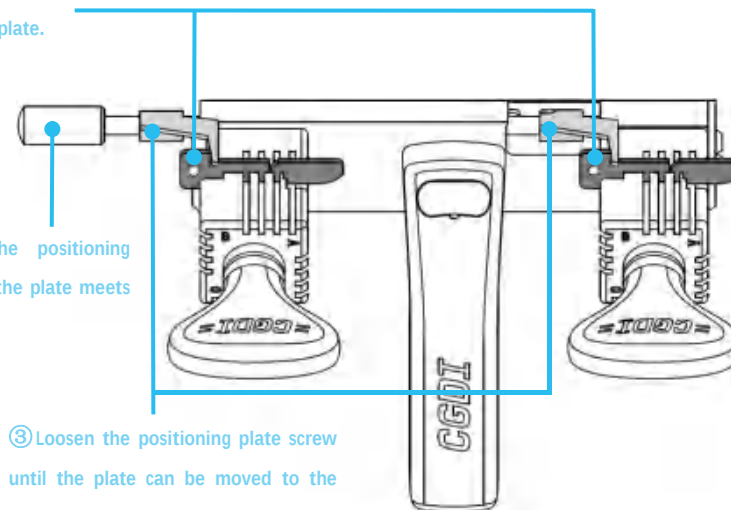
The shoulder spacers are properly adjusted before leaving the factory.

If deviation is detected or if misoperation occurs, adjust the shoulder spacers according to the following procedures.

① Correctly clamp the positioning plate.

② Adjust the positioning shaft so that the plate meets shoulder A

③ Loosen the positioning plate screw until the plate can be moved to the correct position



- Ensure that the machine is powered off and not in operation.
- Correctly install the align Stopper on both the main clamp and auxiliary clamp. (refer to Section 3.2 of this manual for detailed installation instructions).

Adjustment Procedure

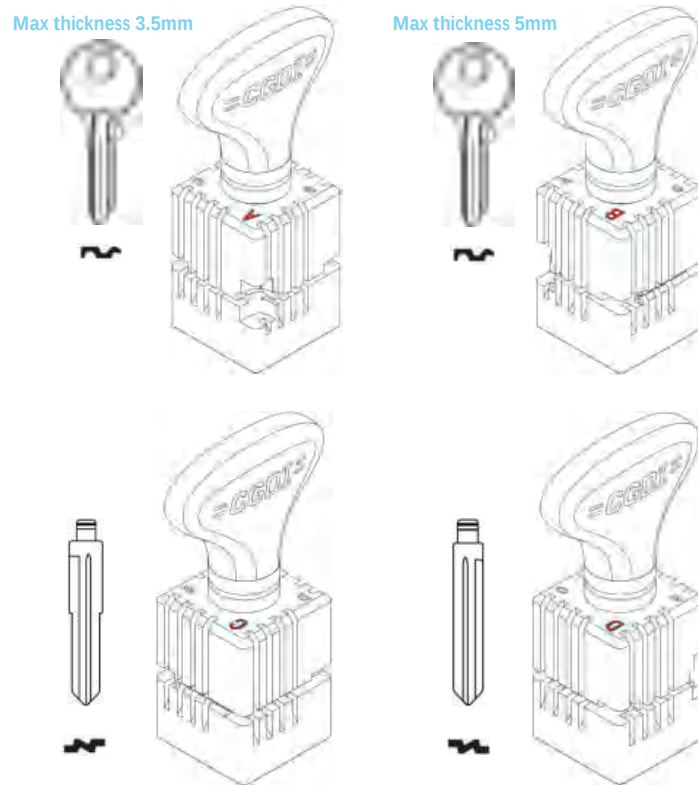
1. Align the Shoulder Spacers: Rotate the shoulder locating shaft so that the left and right shoulder spacers are simultaneously aligned with and firmly seated against the A locating shoulder of the positioning plate.
2. Fine Adjustment:
 - If both sides do not contact the locating shoulder at the same time, loosen the set screw securing the shoulder spacer.
 - Slightly move the shoulder spacer until both left and right sides make stable and simultaneous contact with the A locating shoulder of the positioning plate.
3. Completion: After adjustment is completed, remove the positioning plates. The machine is now ready for normal machining operation.

4. Machine operation

4.1 Clamp cutting surface selection

The machine is equipped with a four-side rotatable clamp.

Four clamping positioning surfaces A, B, C, and D are provided to accommodate different types of keys. According to the key model and tooth profile standard to be duplicated, select the correct clamping surface by referring to the illustrations below. The selected clamping surface must strictly match the key type; otherwise, copying accuracy cannot be guaranteed.



4.2 Use of the Needle

To ensure machining stability, when the key thickness is insufficient or the key blade is too narrow, the supplied needle may be used to assist clamping.

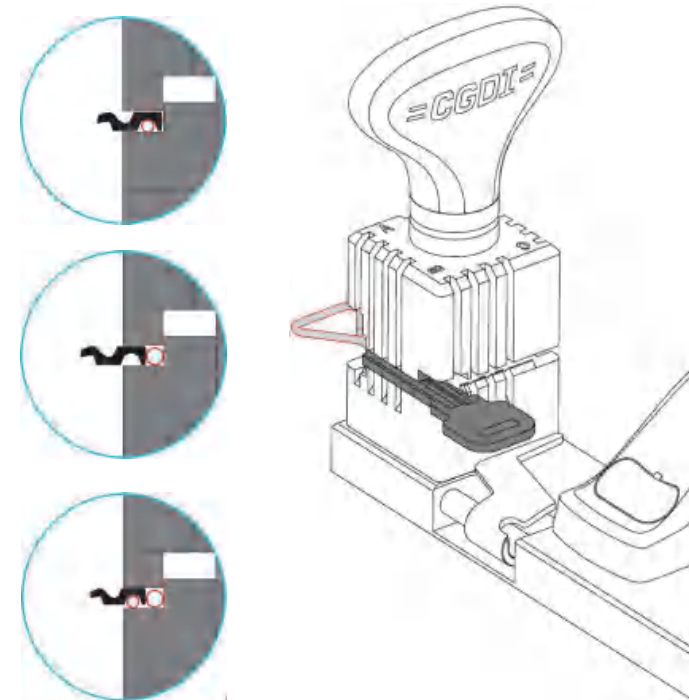
Operating Requirements:

- **Placing the needle:** Place the needle between the key and the clamp to fill the gap and ensure the key is firmly clamped.
- **Consistency requirement:** The same specification and the same number of needles must be used on both the main clamp and auxiliary clamp. Failure to do so may result in copying errors and abnormal machining.

Note:

The support needle is an auxiliary clamping aid only.

Priority should always be given to ensuring that the key itself is accurately positioned on the corresponding clamping surface.



4.3 Key alignment

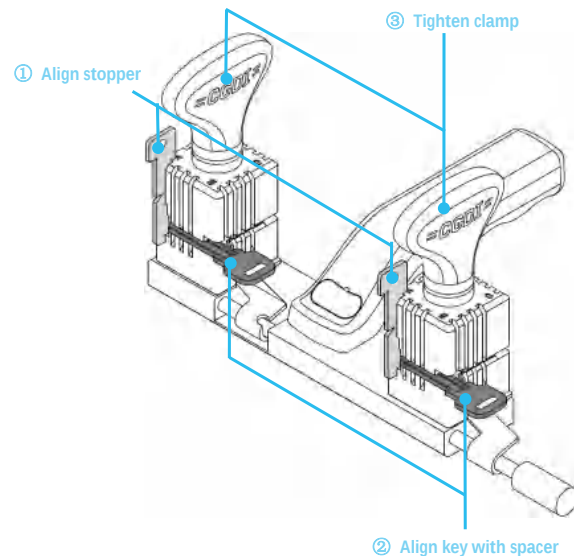
4.3.1 Tip align

When positioning by the tip is required, use the supplied align stopper and proceed as follows:

1. Insert the align stopper: Insert the positioning plate vertically into the positioning slot of the clamp.
2. Insert the key: Insert the original key or key blank into the clamp from the left side, ensuring it is seated against the inner surface of the clamp.
3. Align the key: Push the key forward until the tips of the bitting fully contact the surface of the align stopper.
4. Clamp the key: Tighten the clamp knob to securely fix the key in position.
5. Remove the positioning plate: After clamping, remove the positioning plate from the positioning slot to prepare for machining.

Note:

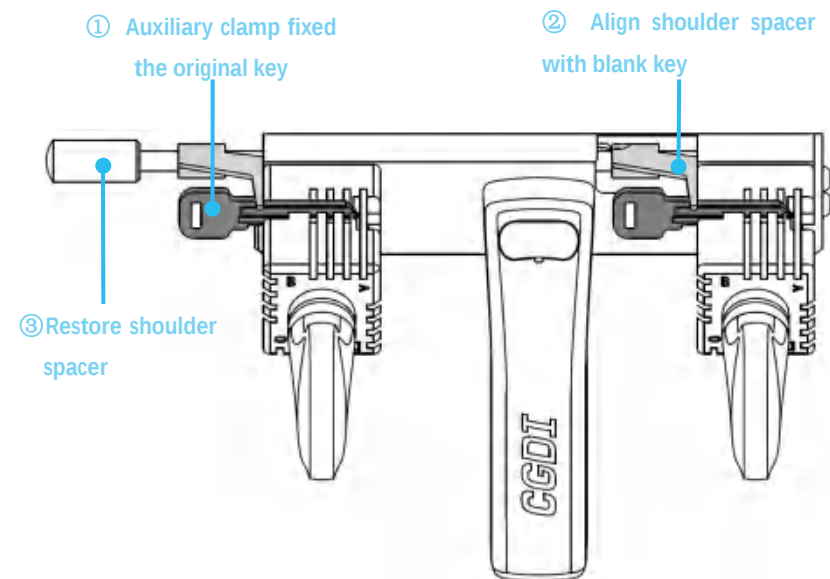
This procedure must be performed separately on both the main clamp and the auxiliary clamp to ensure that the original key and the key blank share the same positioning reference, thereby achieving accurate duplication.



4.3.2 Shoulder spacing

When positioning by the shoulder spacer is required, proceed as follows:

1. Preparation: Rotate the positioning rod handle to move the shoulder spacer on both the main clamp and auxiliary clamp to the open position (away from the clamping area).
2. Clamp the original key: Install the original key on the auxiliary clamp and lightly secure it.
3. Align the original key reference: Rotate the handle of the Shoulder stopper rail to move the shoulder spacer of the auxiliary clamp until it contacts the shoulder of the original key, establishing the positioning reference.
4. Clamp and align the key blank: Insert the key blank into the main clamp, push it to the right so that its shoulder contacts and aligns with the shoulder spacer of the main clamp, then tighten the clamp knob to secure the key blank.
5. Reset the shoulder spacers: Before starting machining, rotate the positioning rod handle back to return the shoulder spacers on both sides to the open position, preventing interference during the cutting process.



5. Maintenance

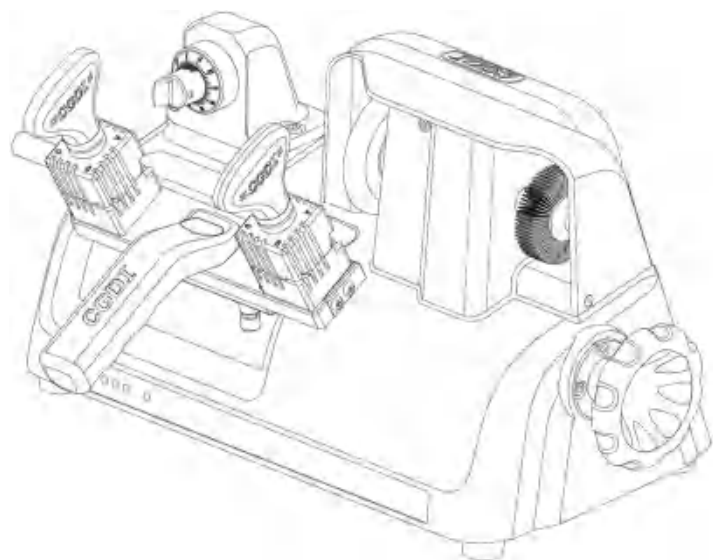
-  Before performing any maintenance operation, ensure that the machine is stopped and the power supply is disconnected.
-  The personnel performing maintenance must ensure that no one reconnects the power supply during maintenance.
-  Maintenance work must be carried out by qualified professionals, with appropriate safety protection measures in place.
-  Before and after key cutting operations, use a brush to clean chips and debris from the machining area to maintain optimal performance and protect machine components.
-  Do not use compressed air, air guns, or blowers to clean the machine, as debris may be blown into the internal components, creating safety hazards.
-  Do not use oil-based products or chemical cleaning agents to clean any parts of the machine, as this may cause damage or corrosion.
-  Do not rinse the machine or its components with water, and do not wipe the machine with a wet cloth, as this may cause electric leakage or corrosion of metal parts.
-  Do not drop the machine or subject it to severe impact.
-  Always use original manufacturer-approved parts.
-  Do not replace the battery yourself or use chargers other than those supplied with the product package.

6. Warranty

Shenzhen Changguang Technology Co., Ltd. (hereinafter referred to as the “Company”) warrants to the original retail purchaser of this product that, for a period of one year from the date of delivery. (If no valid proof of purchase is available, the factory shipment date recorded by the Company shall prevail.) The Company will, under normal use conditions, provide repair or replacement services for the product or its accessories if a failure occurs due to defects in materials or workmanship, subject to verification of proof of purchase.

This warranty does not apply to the following conditions:

-  Damage or malfunction caused by failure to operate the machine in accordance with this manual.
-  Damage resulting from unauthorized repair, modification, or alteration.
-  Damage caused by dropping, impact, or improper voltage supply.
-  Damage caused by force majeure events.
-  Damage or malfunction caused by long-term use in harsh environments, or use on vehicles or vessels.
-  Normal wear and tear resulting from regular use of the machine.



W1
小型卧式钥匙切割机

免责声明和责任限制

说明书中的所有信息、图示均为出版截止时的最新信息。深圳长广科技有限公司保留对其进行更改而不另行通知的权利。

本公司不承担任何直接、间接、特殊、附带的损坏赔偿或者任何间接经济损失。

注意：

对设备进行操作或维护前，请认真阅读本说明书，尤其是安全警告。



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1. 安全警告

为了操作者的安全, 同时避免对机器、钥匙造成损坏及财产的损失, 操作者请务必在使用机器前仔细阅读本操作手册, 并遵守以下安全注意事项:

- 请在安全的环境下使用机器
- 请勿暴晒机器或将机器放置在潮湿、油污、多粉尘等恶劣的环境下
- 请保持机器的干燥和清洁, 切勿有重压、跌落、浸水等行为
- 请将机器放置在稳固可靠的水平承重工作台上
- 请保持机器与墙壁至少30cm的距离, 以便通风和散热
- 作业过程中, 请佩戴符合ANSI标准的护目镜
- 机器操作过程中,切勿让衣服、头发、手等其他工具靠近钥匙切割区
- 机器工作时, 请勿在机器上放置任何物品
- 机器工作时, 需要有专人监视机器的实时运行情况, 切勿远离机器
- 若长时间不使用, 建议拔出电源插头
- 请使用原装锂电池或电源适配器, 充电时须连接有接地线的电源插座
- 发生异常情况时, 请立即切断电源
- 请将机器放置在儿童接触不到的地方

2. 产品概述

感谢您选择小型卧式钥匙切割机 W1。

小型卧式钥匙切割机 W1 是一款精心打造的钥匙加工专用设备，具有体积小，重量轻，操作简便，方便携带的特点。可以快速精准地复制加工各类汽车钥匙和民用机械钥匙。

2.1 产品特点

小型卧式钥匙切割机W1产品拥有以下特点：

- 👍 现代简约，线条流畅，充满科技质感
- 👍 采用一体化全铝机身，坚固耐用，质感出众
- 👍 轻量化设计，体积小巧，方便外出携带与操作
- 👍 符合人体工学，握持舒适，简单易用
- 👍 配备可调式导向系统，确保稳定精准的切割效果
- 👍 切割打磨，一步到位，省时省力
- 👍 内置高性能锂电池，提供持久续航，满足长时间作业需求

2.2 产品示意图



2.3 产品及配件介绍

名称	图例	数量	配置	说明
主机		1	标配	机器主体
定位片		2	标配	校准工具
Φ1.2mm 针		2	标配	装夹钥匙辅助工具
Φ1.7mm 针		2	标配	装夹钥匙辅助工具
电源适配器		1	标配	接电工具
国标电源线 (1.5m)		1	选配	接电工具
英标电源线 (1.5m)		1	选配	接电工具
美标电源线 (1.5m)		1	选配	接电工具
欧标电源线 (1.5m)		1	选配	接电工具
内置电池		1	选配	移动电源
产品检验合格证 装箱清单		1	标配	产品出厂检验证明 产品出厂装箱统计
产品使用说明书		1	标配	机器使用说明

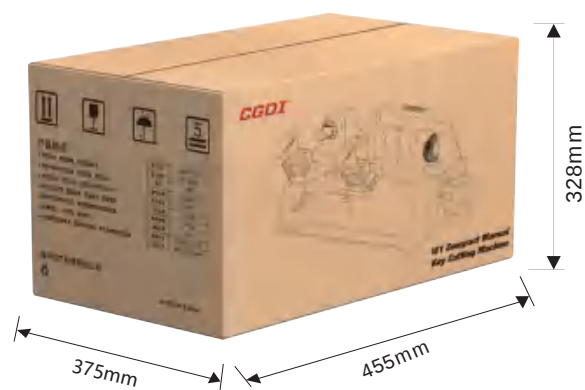
2.4 产品规格参数

输入电压	100~240V AC
输入频率	50~60/Hz
功耗	50W
电源参数	12V DC/5A
电池容量	2600mAh
主轴转速	2100rpm
电机扭矩	1.0Nm
夹具间距	95mm
工作台行程	70mm
工作温度	0~45℃
工作湿度	10~90%
机器净重	11.2kg
包装总重	12.1kg
机器尺寸	385mm*185mm*205mm
包装尺寸	470mm*370mm*340mm

机器尺寸图

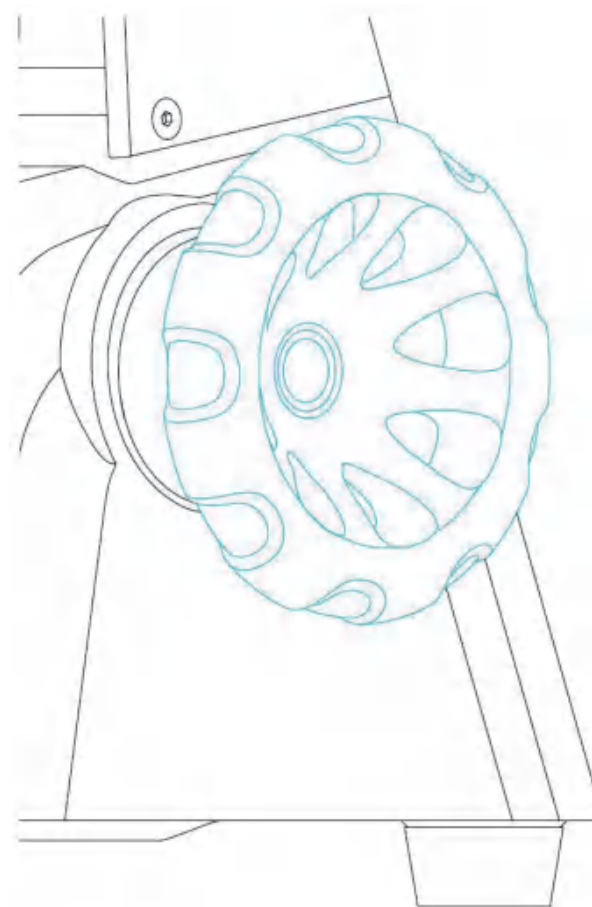


包装尺寸图



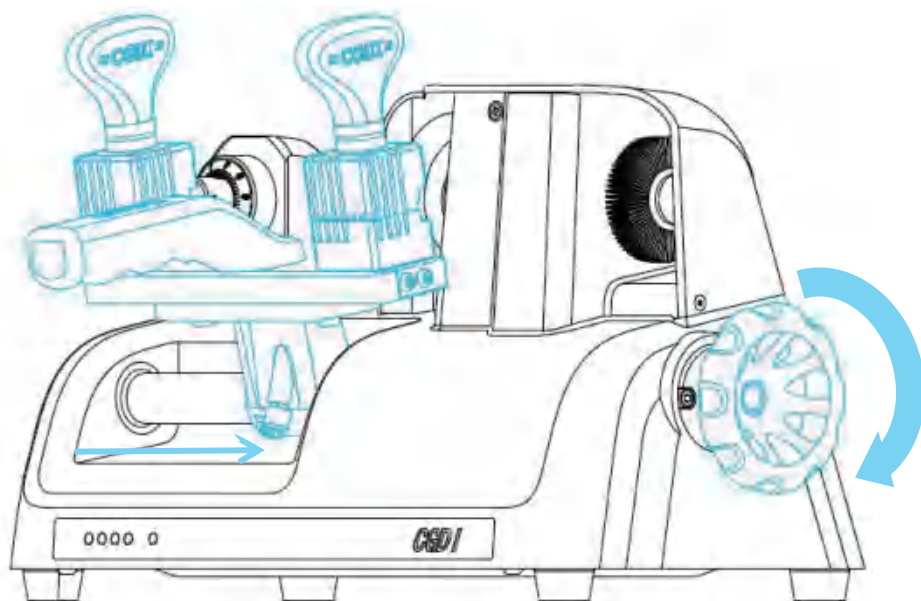
2.5 主要部件及功能说明

2.5.1 手轮



通过旋转手轮，可控制夹具滑台左右移动，从而实现加工钥匙过程中的横向进给。

2.5.2 夹具滑台



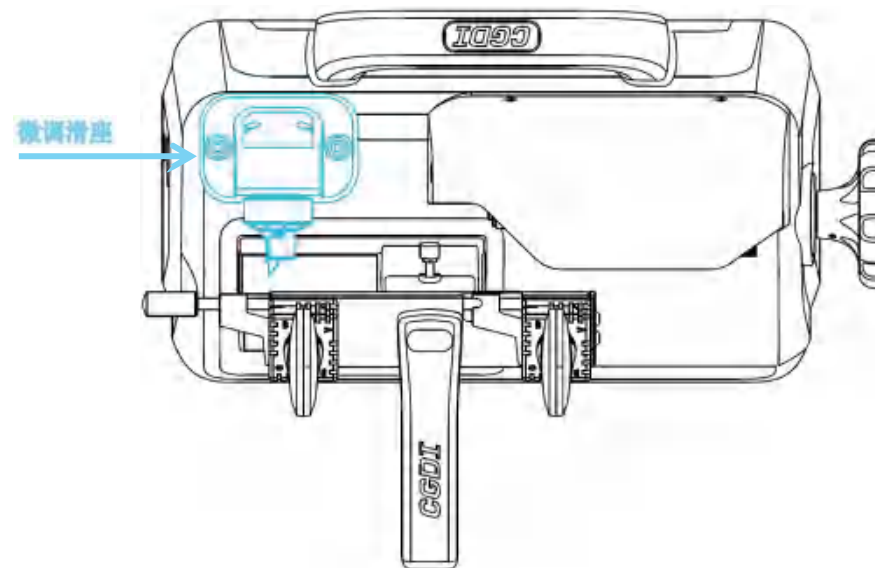
本产品夹具滑台采用旋转与横向平移复合式设计，通过绕转轴旋转和沿转轴轴向水平移动，实现钥匙切割时的纵向和横向进给。具体操作方式如下：

- 横向进给：转动手轮，即可控制夹具滑台横向平移，完成钥匙的横向切割进给。
- 纵向进给：手握夹具把手，使夹具绕转轴转动，即可实现钥匙的纵向切割进给。

关键尺寸参数：

- 夹具滑台横向行程：70mm
- 主副夹具间距：95mm

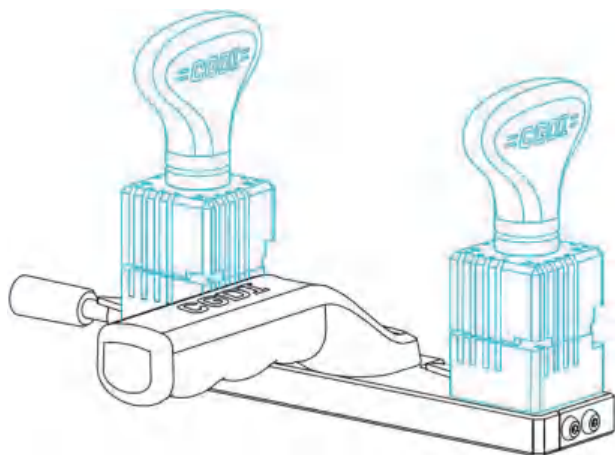
2.5.3 微调滑座



本产品微调滑座配备高精度仿形探头。在切割加工时，该探头可贴合原钥匙齿形轨迹，同步引导刀盘对钥匙坯进行跟踪切削，从而实现齿形的精确复制。

微调滑座与仿形探头在出厂前已完成精密调校。如需校准或因操作导致偏差，请依据本说明书第 3.1 章节所述步骤进行调整。

2.5.4 夹具



为适配多种钥匙类型，夹具设有 A、B、C、D 四个夹持定位面。操作时，请遵循以下步骤：

1、选择对应夹持面：根据原钥匙的类型，在主夹具与副夹具上旋转相同的夹持面（如均使用“A”面）。

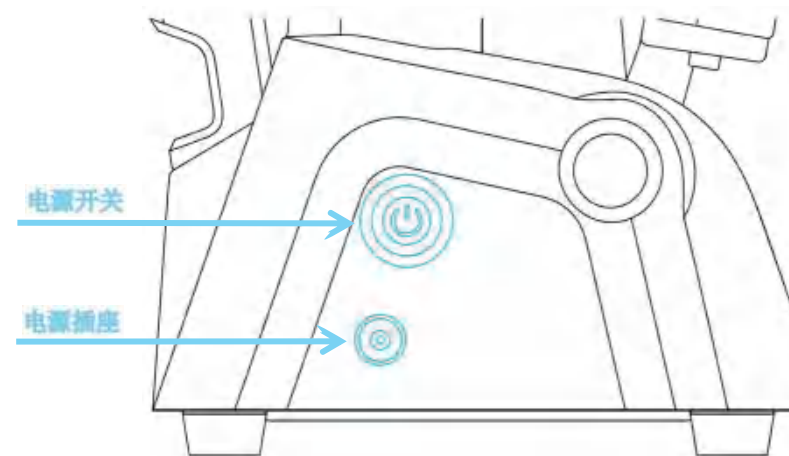
2、正确放置钥匙：

- 左侧副夹具用于装夹原版钥匙
- 右侧主夹具用于装夹钥匙坯

3、夹紧固定：正式加工前，请务必旋紧夹具旋钮，确保原版钥匙与钥匙坯均已牢固夹持，无松动。

请注意，不同夹持面应对应特定的钥匙齿形制式，请参照本说明书第 4.1 章节内容进行选择。

2.5.5 充电操作与电量指示



1、连接电源：

- 将 12V DC 电源插头插入机身侧面的充电接口。
- 将电源适配器的交流插头接入带接地线的安全电源插座。

2、电量状态指示：

- 机器正面设有电池电量指示灯。当指示灯提示电量不足时，请及时为设备充电。
- 电量充满后，请及时断开电源。

3、充电时长：

- 在正常条件下，电池完全充满约需 3~4 小时。

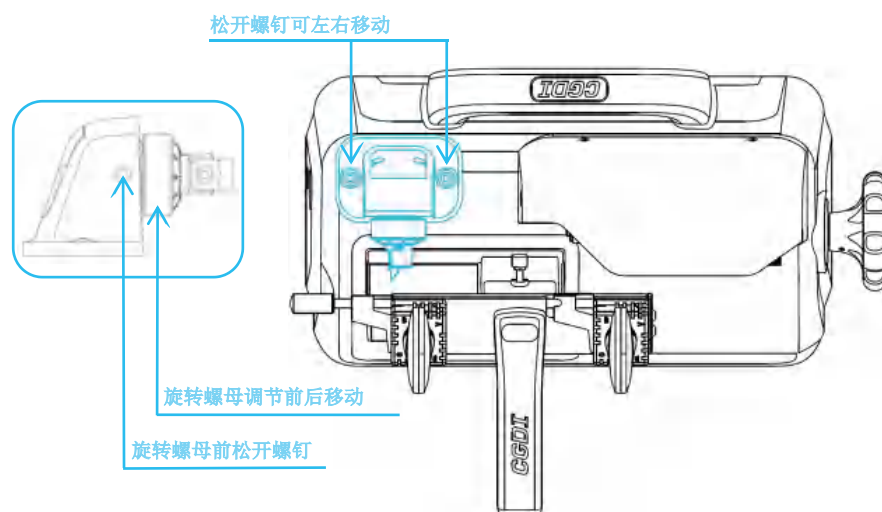
无电池版：

- 将 12V DC 电源插头插入机身侧面的充电接口。
- 将电源适配器的交流插头接入带接地线的安全电源插座。

3.设备调试

3.1 微调滑座调节

微调滑座在出厂前已完成精密调校。如需校准或因操作导致偏差，请按照下述方法对其进行调整。



本设备支持对微调滑座及仿形探头进行精细位置调节，具体操作如下：

1、纵向调节（仿形探头左右位置）

- 操作：松开微调滑座的锁紧螺钉，左右平移整个滑座，即可带动仿形探头进行纵向调节。
- 固定：移动至所需位置后，请重新锁紧该螺钉。

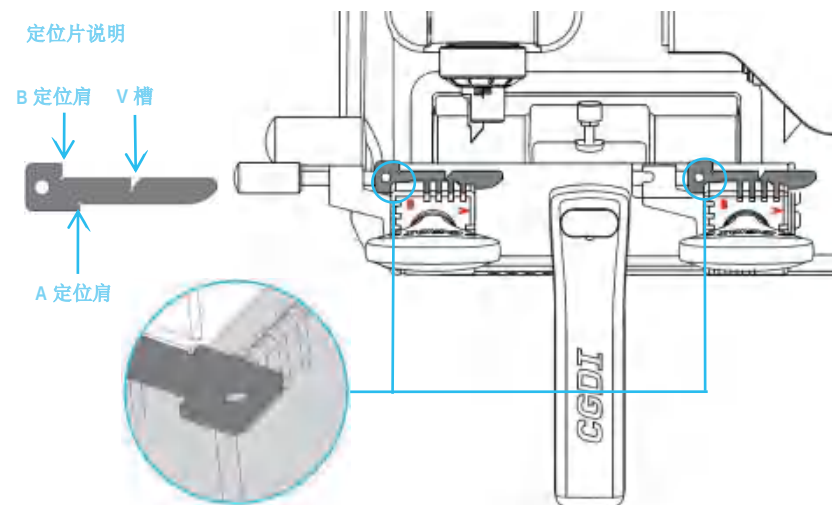
2、横向调节（仿形探头前后位置）

- 操作：旋转调节螺母，可对仿形探头进行横向位置微调。操作前，请先松开其对应的锁紧螺钉。
- 固定：调节完成后，请重新锁紧该螺钉。

注意：调试步骤参照本说明书第 3.2 章节描述内容。在进行任何操作前，请确保机器处于非工作状态。

3.2 仿形探头调节

仿形探头在出厂前已完成精密调校。如需校准或因操作导致偏差，请按照下述方法对其进行调整。



- 确保机器处于非工作状态。
- 在主、副夹具上分别安装定位片，使用 A 定位肩进行定位。
- 注意：两侧需同时使用 B 面进行装夹（如上图所示）。

调节步骤

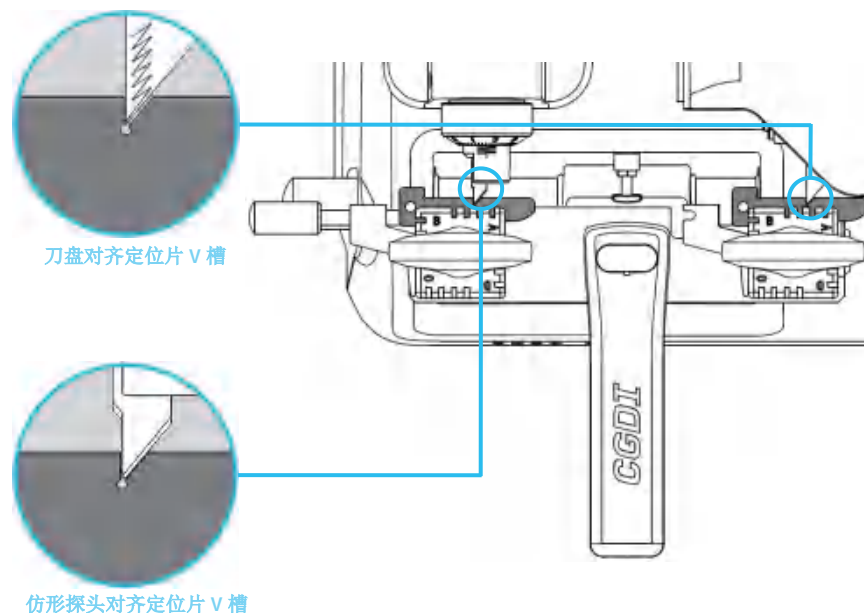
1、仿形探头横向调节

- （1）预松螺钉：稍微拧松微调滑座的 2 颗固定螺钉与 1 颗侧面固定螺钉。
- （2）对齐刀盘：转动并滑动夹具滑台，使刀盘左侧恰好紧贴定位片 V 槽左侧边。
- （3）对齐探头：移动微调滑座，使仿形探头左侧恰好紧贴定位片 V 槽的左侧边。

2、仿形探头纵向调节

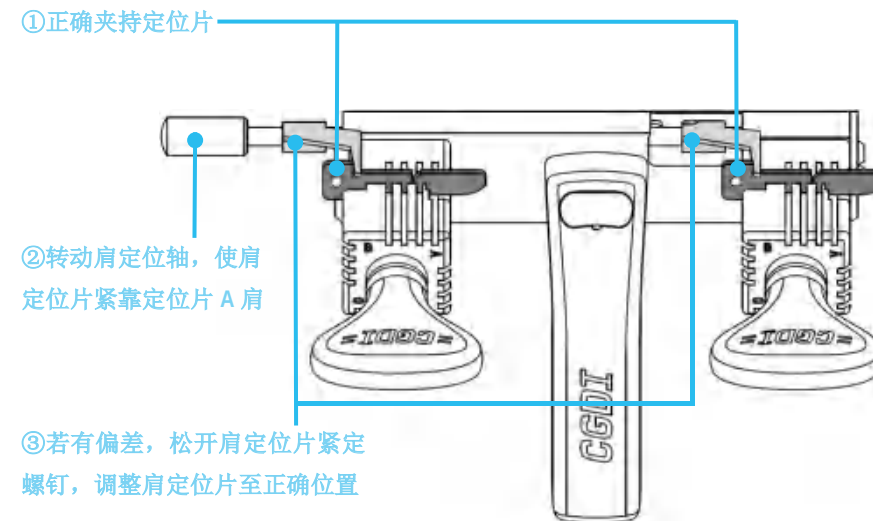
- （1）对齐 V 槽：观察仿形探头与刀盘是否均对其定位片的 V 槽中心。
 - 若已对齐：调节完毕，请直接执行第 3 步。
 - 若未对齐：请执行第 2 步进行微调。
- （2）精确微调：旋转微调滑座螺母，使仿形探头与刀盘对齐各自 V 槽。
 - 微调精度：旋转刻度盘 1 小格，仿形探头纵向移动 0.02mm。

3、最终固定：完成所有调节后，请重新锁紧侧面固定螺钉。



3.3 肩定位片调节

出厂时肩定位片已经调试完成。若发现偏差或误操作后，请按照下述方法对其进行调整。



- 确保设备处于非工作状态。
- 在主、副夹具上正确装夹定位片（具体方法请参照本说明书第 3.2 章节内容）。

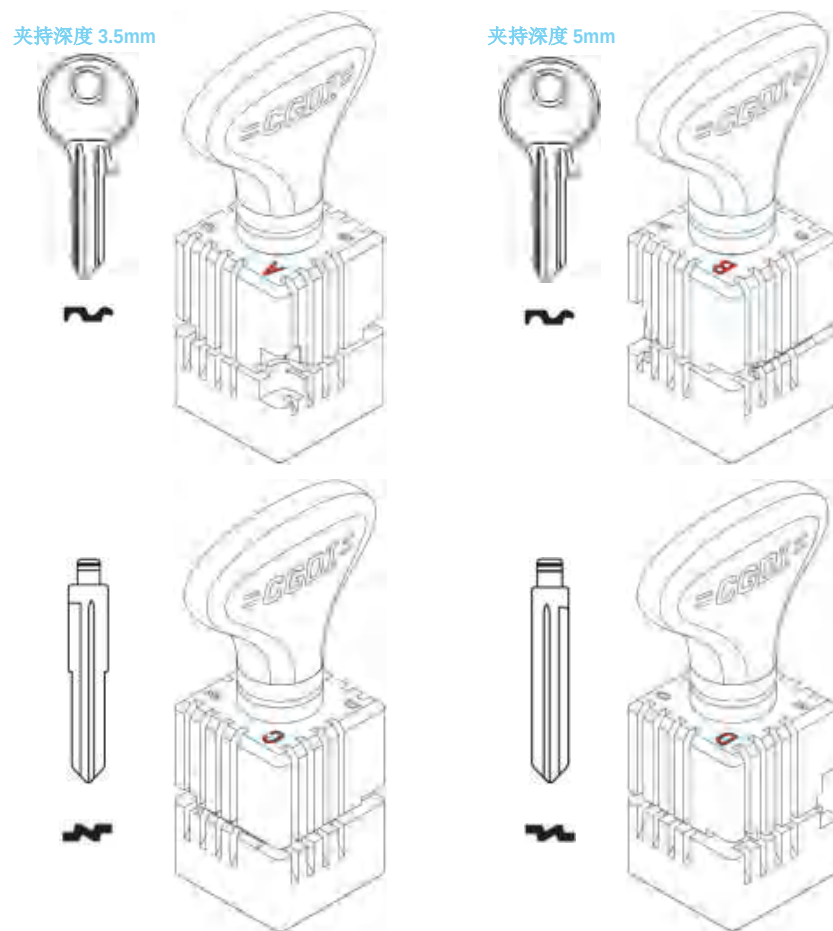
调节步骤

- 1、对齐肩定位片：转动肩定位轴，使左、右两个肩定位片同时与定位片 A 肩对齐并靠紧。
- 2、精细调节：
 - 若发现两侧未能同时靠紧，请将固定肩定位片的紧定螺钉松开。
 - 轻微移动肩定位片，直至实现左右两侧同时稳定靠紧定位片的 A 定位肩。
 - 重新拧紧紧定螺钉，固定肩定位片位置。
- 3、完成操作：调节完毕后，取下定位片，设备即可正常投入加工作业。

4.加工前准备

4.1 夹具加工面选择

机器配备可四面旋转的夹具。设有 A、B、C、D 四个装夹定位面，以适应不同类型钥匙的装夹需求。请根据待复制钥匙的型号与齿形制式，参照下方图示，选择正确的装夹面。主夹具与副夹具必须使用同一编号的装夹面，且装夹面选择须与钥匙类型严格匹配。



4.2 通针使用

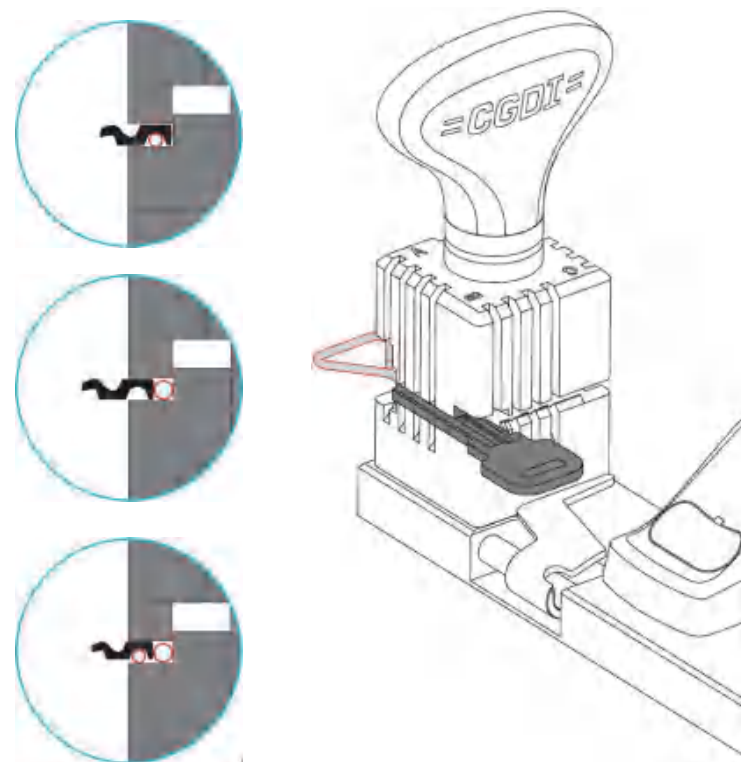
为确保加工稳定性，当遇到钥匙厚度不足或钥匙杆过窄的情况时，可使用随机附赠的通针进行辅助装夹。

操作要求：

- 放置通针：将通针放置于钥匙与夹具之间，以填补空隙，确保钥匙被牢固夹持。
- 规格一致：在主、副夹具上必须使用相同规格、相同数量的通针，否则将导致复制误差，无法正常加工。

注意：

此方法仅为辅助措施，应优先确保钥匙本身在对应夹持面上的定位准确。



4.3 钥匙装夹

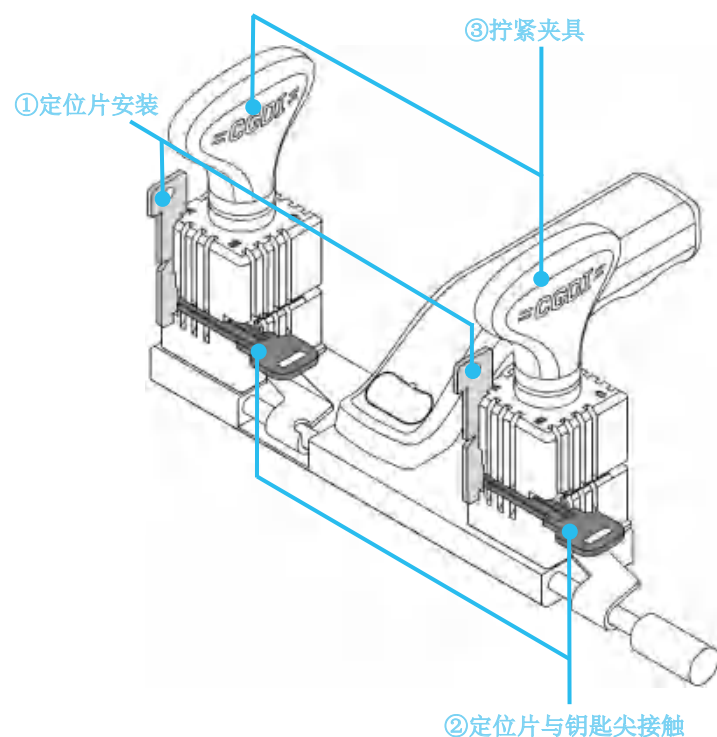
4.3.1 钥匙头定位

当需要通过钥匙头进行定位时，请使用随机附赠的定位片，并按以下步骤操作：

- 1、放置定位片：将定位片垂直插入夹具的定位槽中。
- 2、放入钥匙：将原版钥匙或钥匙坯从左侧放入夹具，并贴紧夹具内表面。
- 3、对齐定位：向前推动钥匙，确保其齿尖完全接触到定位片的表面。
- 4、夹具固定：旋紧夹具旋钮，将钥匙牢固夹持。
- 5、移除定位片：夹紧后，即可将定位片从定位槽中抽出，以便开始加工。

注意：

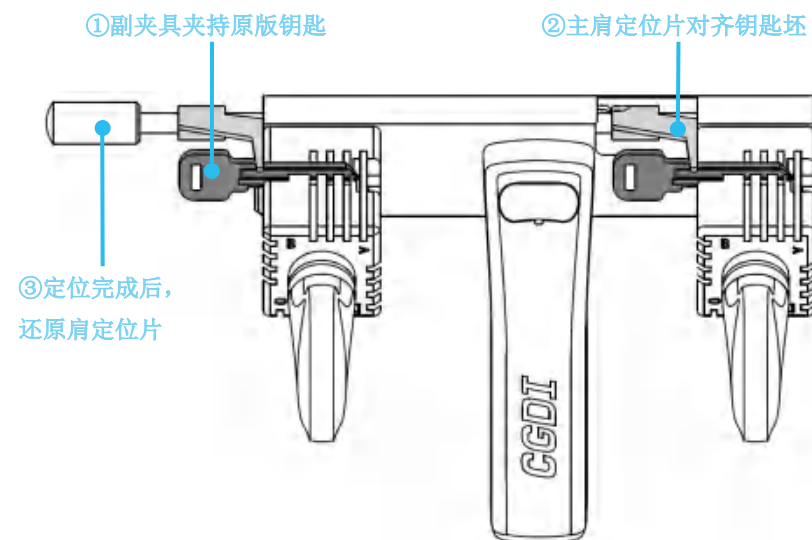
此步骤需在主、副夹具上分别操作，确保原钥匙与钥匙坯的定位基准一致，以获得精确的复制效果。



4.3.2 钥匙肩定位

当需要使用钥匙肩部进行定位时，请按以下步骤操作：

- 1、预备状态：旋转定位杆把手，将主、副夹具的肩定位片均调整至打开状态（即远离装夹区域）。
- 2、固定原版钥匙：将原版钥匙装夹与副夹具上并初步固定。
- 3、对齐原钥匙基准：旋转肩定位杆把手，使副夹具的肩定位片移动至其贴合原版钥匙的肩部，形成定位基准。
- 4、固定并对照钥匙坯：将钥匙坯放入主夹具，向右推抵，使其肩部与主夹具的肩定位片贴合对齐，然后拧紧夹具旋钮，将钥匙坯牢固固定。
- 5、复位定位片：加工开始前，请将肩定位杆把手旋回，使两侧肩定位片退回至打开状态，以免干涉切割过程。



5.维护保养

- ☀ 任何的维护操作前设备应处于停机状态，电源应切断。
- ☀ 执行维护的操作人员应该确保任何人不可以接插设备电源。
- ☀ 设备的维护应该由专业人员进行，并配备专业安全保护措施。
- ☀ 加工钥匙前后，请使用刷子将加工区域内的废屑清理干净，使设备保持良好性能以及部件的完整
- ☀ 切勿使用气枪、吹风机等清洁设备，以免碎屑被吹进机器内部，
- ☀ 造成安全隐患请勿使用任何油性产品和清洁剂清洗机器各部件，以免损伤或腐蚀机器零部件
- ☀ 切勿用水直接冲洗机器及部件，请勿使用湿布擦拭机器，以防造成机器漏电或金属部件生锈
- ☀ 切勿使机器跌落或者遭受严重撞击
- ☀ 始终使用原厂配件
- ☀ 切勿自行更换电池或者使用非包装中配套的充电器

6. 质保及售后说明

深圳长广科技有限公司(以下简称"公司")向作为本产品原始零售购买者承诺,自交货之日起一年内(若无交易凭证,则以公司记录的出厂日期为准),如果在正常使用情况条件下,产品或配件存在工艺或者材料方面缺陷导致设备故障,凭交易凭证,公司将依据情况为您提供维修或更换服务。

此保修不适用于以下情况：

- ☀ 未按说明书要求使用而造成机器故障的
- ☀ 因自行修理过改装导致机器损坏的
- ☀ 因跌落、碰撞或不当电压造成机器故障的
- ☀ 因不可抗力造成机器损坏的
- ☀ 长时间在恶劣环境中或车辆、船舶上搭载使用，造成机器故障或损坏的
- ☀ 机器正常使用情况下，造成的日常磨损的