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1、Safety precautions and warnings

To avoid injuries to operators,please read this product user manual carefully Before you start and follow the safety notes listed below

1-1 Power supply precautions

●Do not use damaged wires or loose socket
●Do not plug more devices at the same socket
●Do not pull wire or touch the metal part of power supply
●Unplug the machine when it is not in use for a long time
●If any problem happens,please contact technique support

1-2 Installation precautions

●Do not place the machine in a place that is damp,greasy and dusty
●Do not put things like candle or cigarette end on the machine
●Always use the machine under safe environment
●Put the machine on the stable platform

1-3 User precautions

●Do not have clothes,hair,hands and other tools close to the machine when
it is working
●Do not put things like tool or container on the machine

1-4 Other precautions

●Do not disassemble the machine if you don’t get permission from factory technique support.
●Keep the children away from the machine when it is working

2、General information

2-1 Machine description

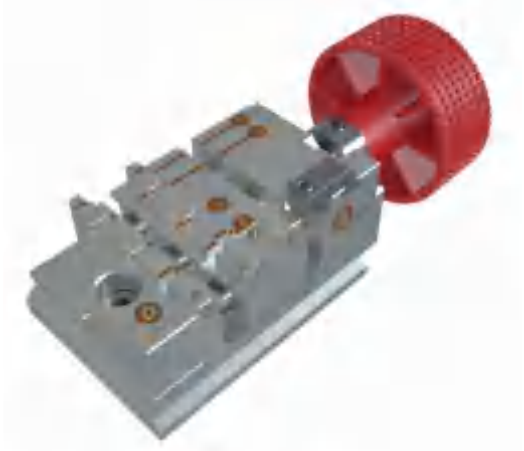
Dear customer,thank you for using 2M2 tank automatic key cutting machine,it is a portable and light weight,especially designed for locksmiths in the world to work outdoor.To avoid injuries and damages to the machine,please use the machine correctly according to product user manual.Please read the manual carefully before you start to use the machine.

2-2 Machine characteristics

●Smart control and operation on APP and build-in database
●Portability and build-in Lithum battery with a long battery life(optional)
●Equipped with B clamp(standard clamp),F021 clamp(optional)
●Cutter and probe work in parallel
●Aluminum structure
●Imported ball screw with high precision
●Cross rail with high rigidity
●Supporting online update
●Operating in multiple languages

3、Product packaging checklist

Name	Sample picture	Qauntity	Description
Machine		1	Key cutting machine
Adapter		1	Power supply
1.5m Power cord of Mainland China (optional)		1	Power Cord
1.5m Power cord of UK standard (optional)		1	Power Cord
1.5m Power cord of US standard (optional)		1	Power Cord
两插美规线（选配）		1	Power Cord

1.5m Power cord of EU standard (optional)		1	Power Cord
Power cord of Italy standard (optional)		1	Power Cord
Switzerland Standard (optional)		1	Power Cord
Battery		1	Key cutting machine Battery
Brush		1	Cleaning tool
2.0 cutter		1	2.0*7*D4-L35 cutter
1.5 cutter		1	1.5*5*D4-L35 cutter
1.0 probe		1	1.0*7*D6-L35 probe
Standard clamp B		1	For single sided keys, double sided keys, internaltrack keys, externaltrack keys, SX9, household Key.

Standard clamp B		1	Clamp B D area
		1	Clamp B area
		1	Clamp B-stopper (key position)
8.0 hexagon bar wrench		1	Clamp installation tool
2.0 hexagon bar wrench		1	Installation key tool
4.0 hexagon bar wrench		1	Single sided key Installation
2.5 hexagon bar wrench		1	cutter/probe installation tool

F clamp (optional)		1	F021/TBE1 key clamp
Blue spanner for clamp F		1	For cap of clamp F
Red spanner for clamp F		1	For main axis of clamp F
Warranty			Machine Warranty

4、Overview

4-1 Structure

4-2 Specification

Input voltage	100-250V AC
Input frequency	50-60Hz
Power	190W
Power parameter	24V DC/8A
Battery capacity	65Wh
Principal axis rotation speed	10500rpm
Working temperature	-20℃-50℃
Humidity	10-90%
Gross weight	10KG
Net weight	17KG
Machine size	25.1cm*28.5cm*34.8cm
Package size	49.3cm*43.1cm*49.4cm

4-3 Software overview

4-3-1 Introduction

● Supporting self-calibration

●Supporting key duplication and cutting for vehicle/motorcycle/household keys

● Supporting universal key decode for multiple key types

● Operation on APP through Bluetooth

● Build-in key database

4-3-2 Smart phone operation system

●Android: Android 4.0 and above version

●IOS:IOS 8.0 and above version

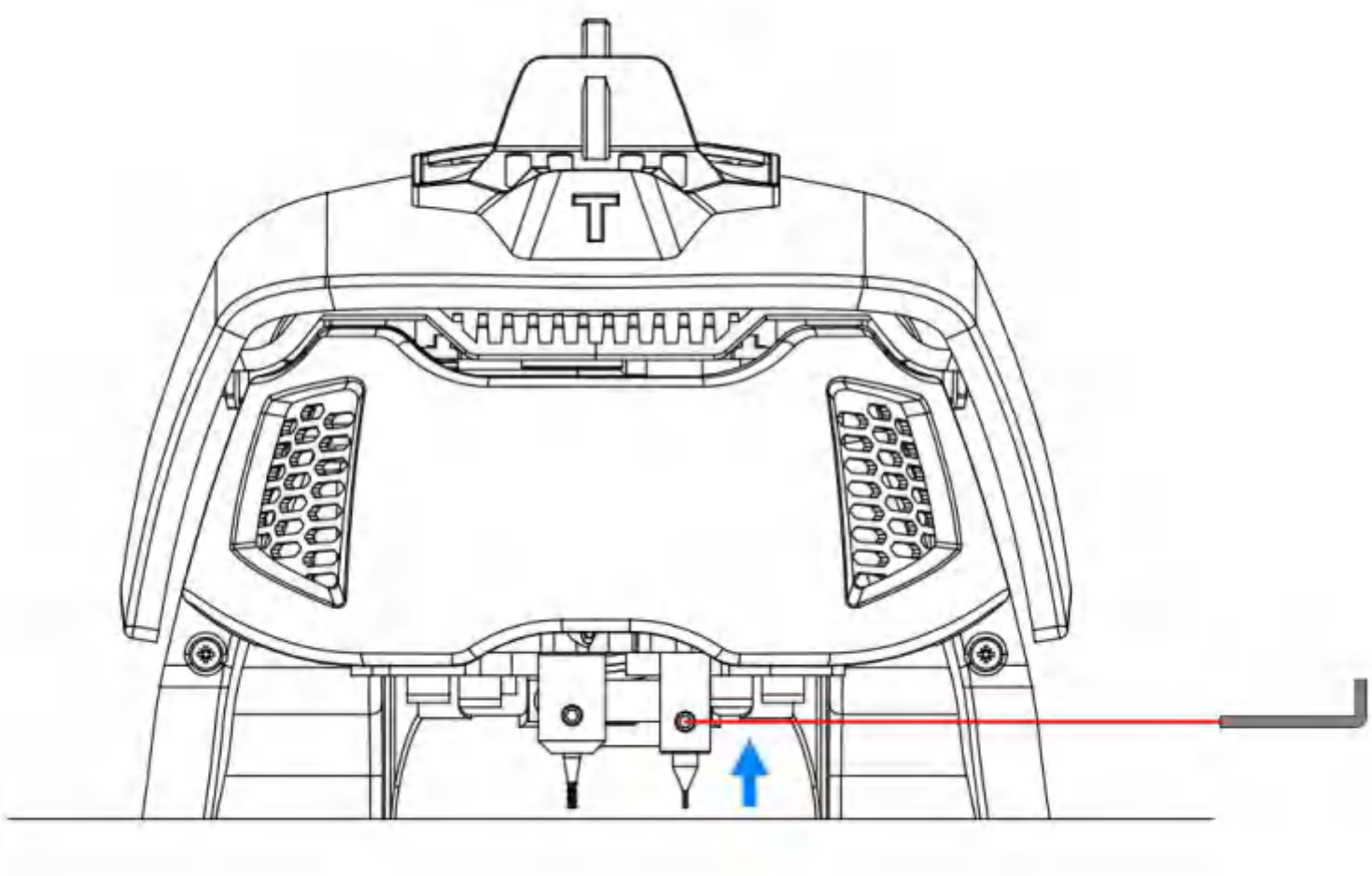
4-3-3 Software update

●Online update on APP

●Update via upgrade suite

5、Installation instruction

5-1 Cutter and probe installation

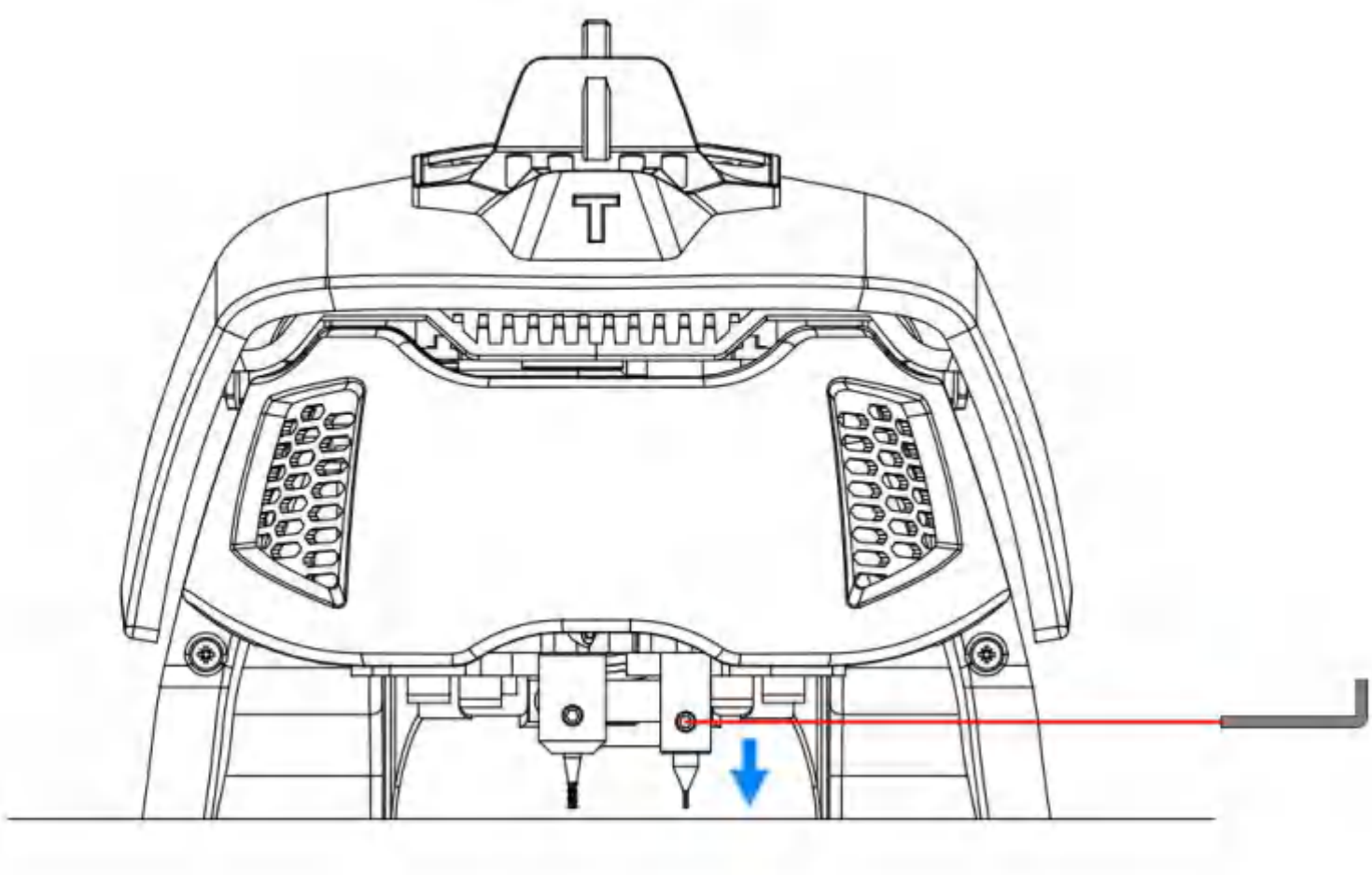


Installation steps:

Insert cutter and probe onto the top depend on the arrow,and then use 2.5mm hexagon bar wrench to lock the screw.

Notes: when pushing both cutter and probe onto the top,probe Height is higher than cutter height.

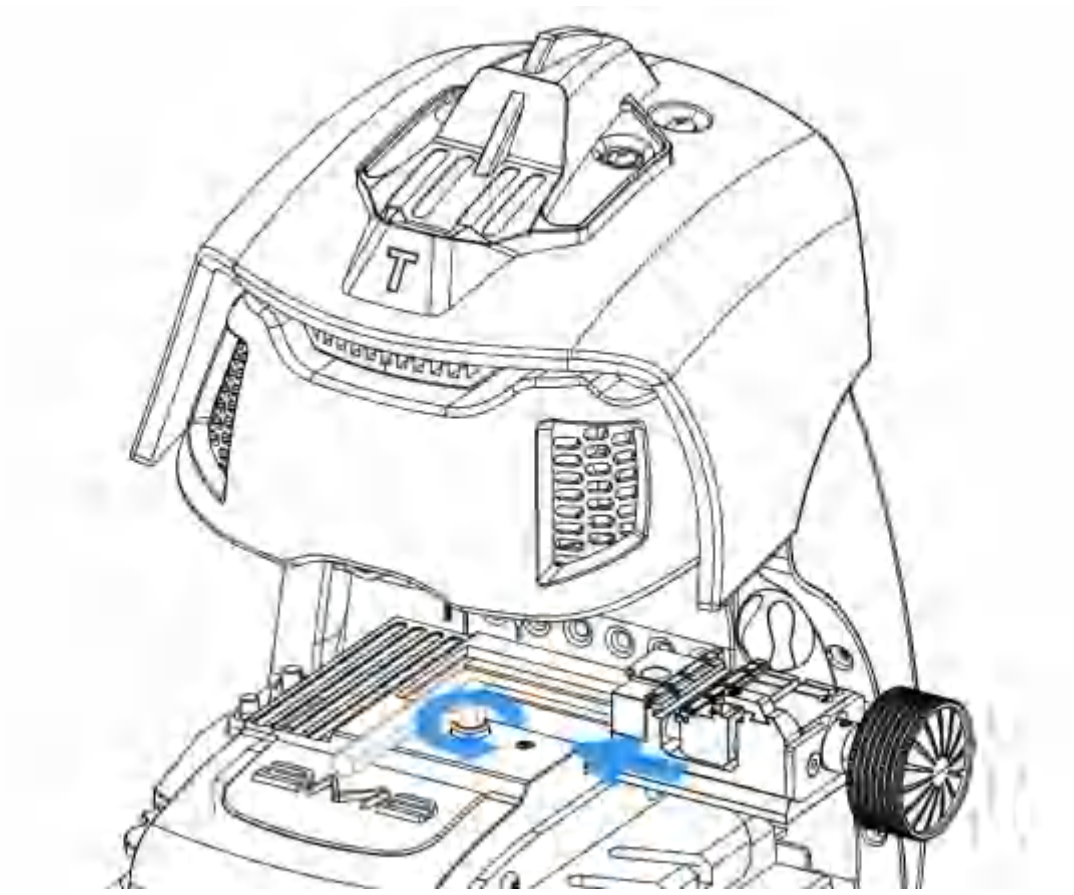
5-2 Cutter and probe unistallation



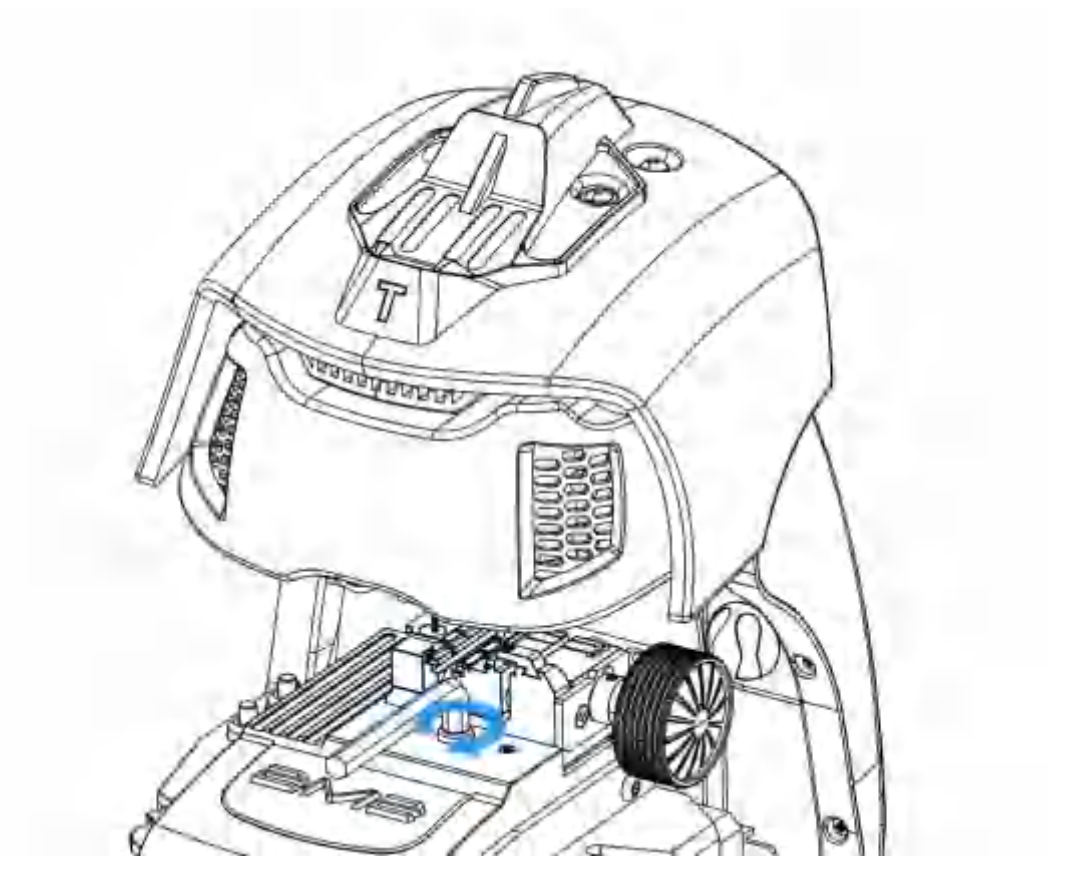
Uninstallation steps:

Use 2.5mm hexagon bar wrench to unscrew the locks for cutter and probe until they are loosened off.

5-3 Clamp installation



Picture 1



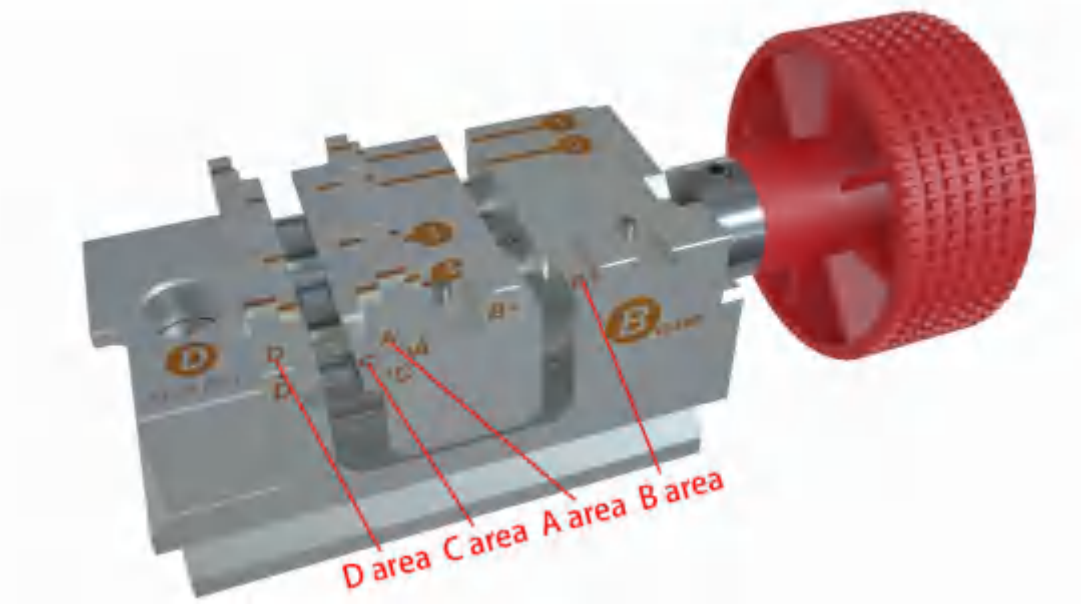
Picture 2

Installation steps:

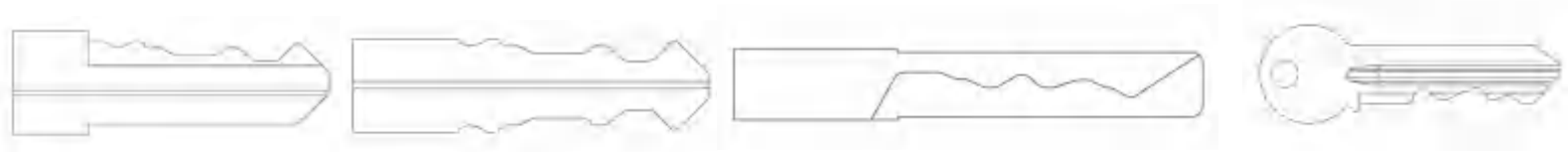
Unscrew the lock for the clamp,insert the clamp along the rail depend on the arrow(picture 1).and then use 8mm hexagon bar wrench to screw the lock(picture 2).

5-4 Pictures of clamp

B Clamp



Supporting types



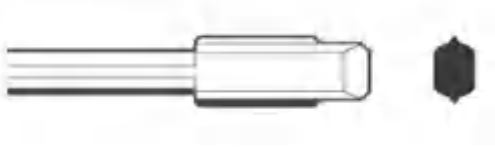
Single sided key　Double sided key　2 Track external　Residential

4 Track external　Channel track　4 Track internal

SX9

F Clamp（F021/TBE1）

Supporting types



F021/TBE1

5-5 Standard clamp B range

Key types	Cutting side pictures	Clamp cutting sides	Description
2 track external			Clamp B A area
4 Track external			Clamp B A area
Channel track			Clamp B A area
4 Track internal			Clamp B A area
Single sided key			Clamp B B area
Double sided key			Clamp B B area
Residential key			Clamp B D area
SX9			Clamp B B area
F021/TBE1			Clamp F

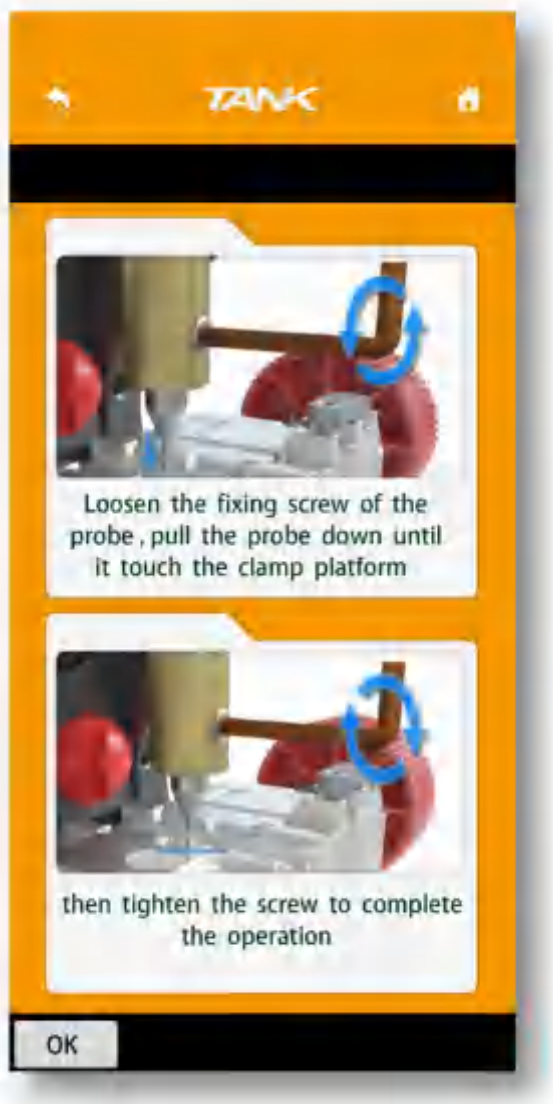
6、Operation instructions on APP

6-1 Height level adjustment

Enter 2M2 TANK mian interface and click on “settings”

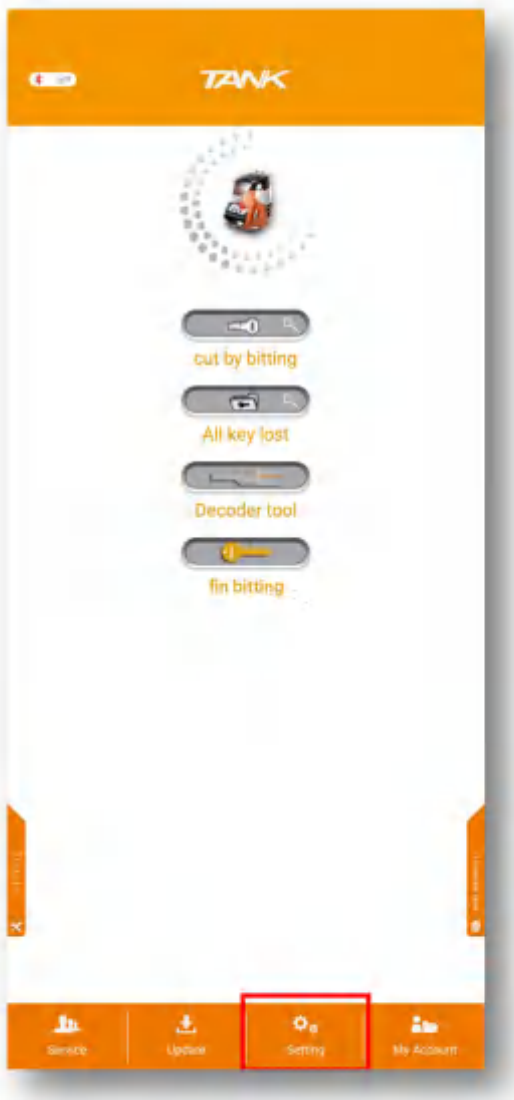
Click on“probe and cutter”

Installation and then click“OK”

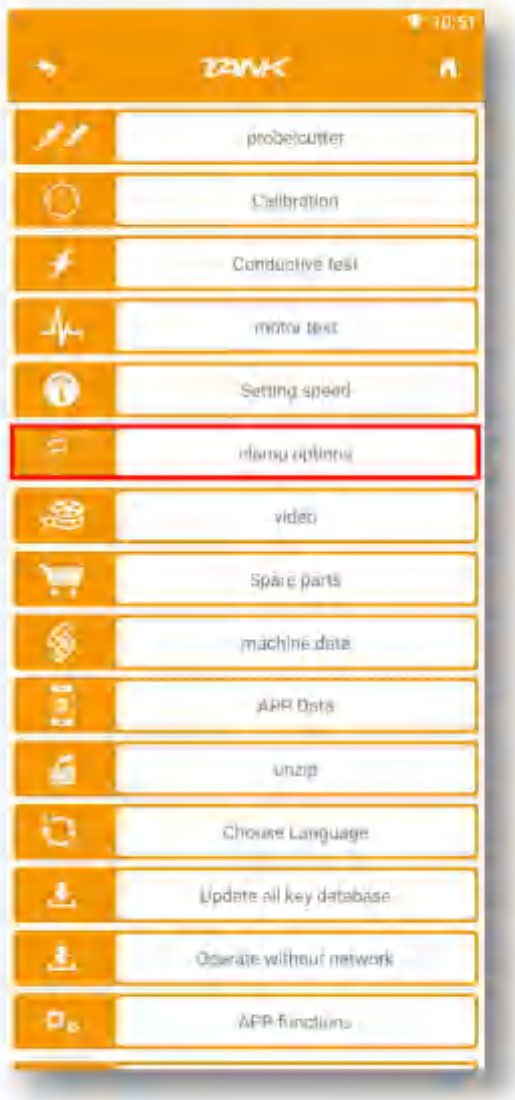


Loosen off the screw until it touches the clamp

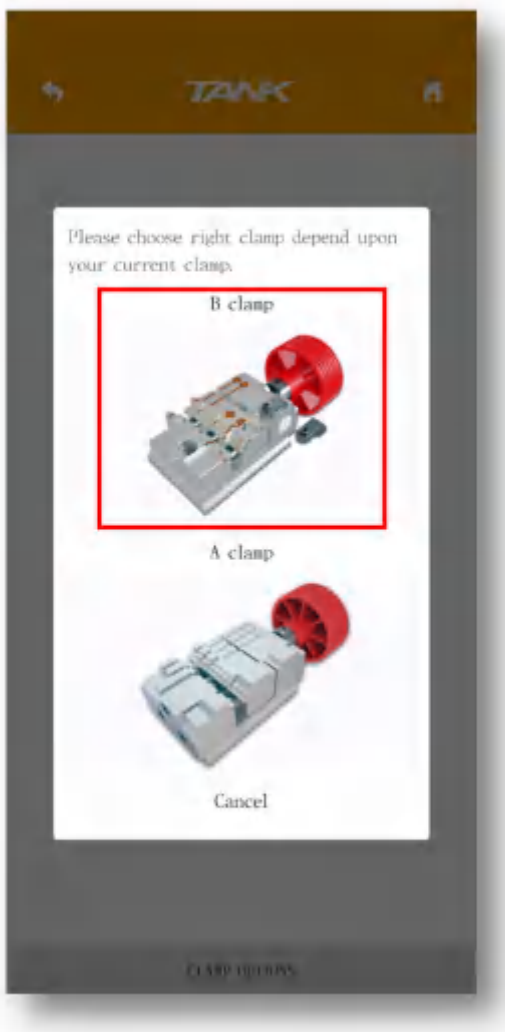
6-2 Standard clamp calibration



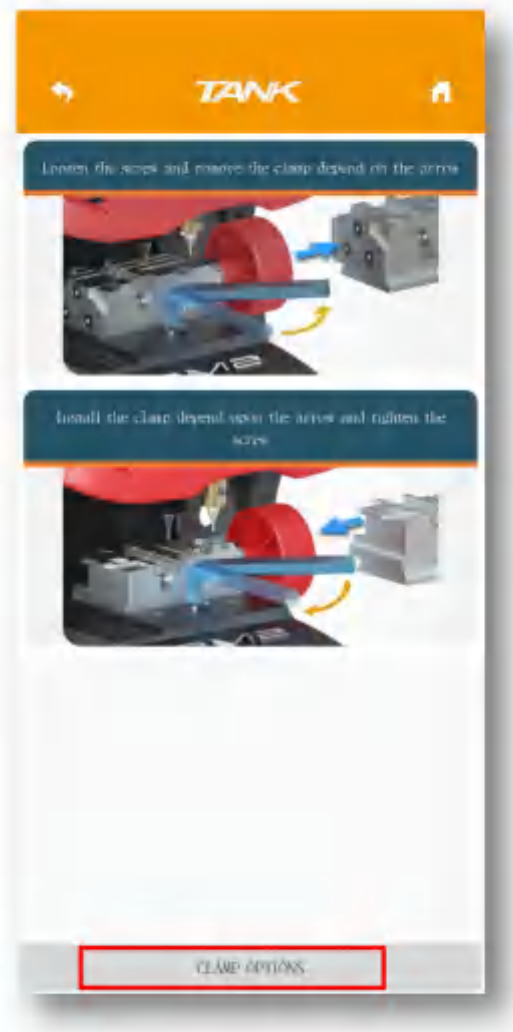
Enter 2M2 TANK interface,click “settings”



Click “clamp options”



Select clamp depend on your current clamp”



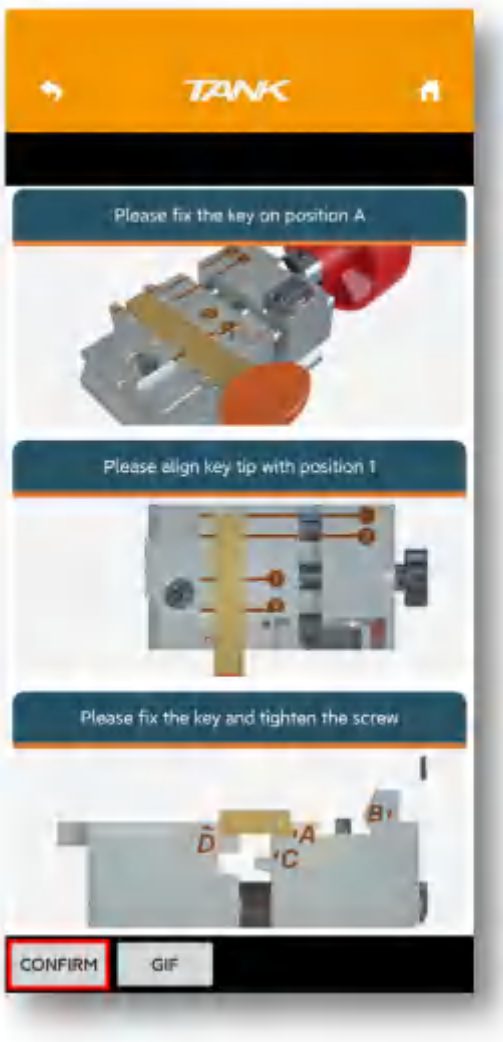
Remove the clamp from the picture instruction

(notes:If clamp B is ready,directly click “calibration”)

6-3 Calibration

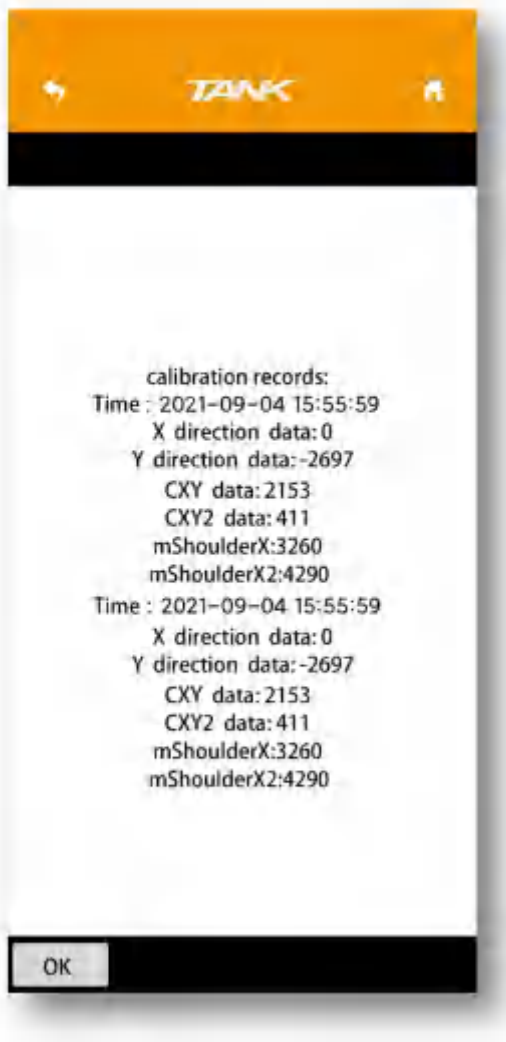
Enter “2M2 Tank ” interface,and then click on “settings”

click on “calibration”



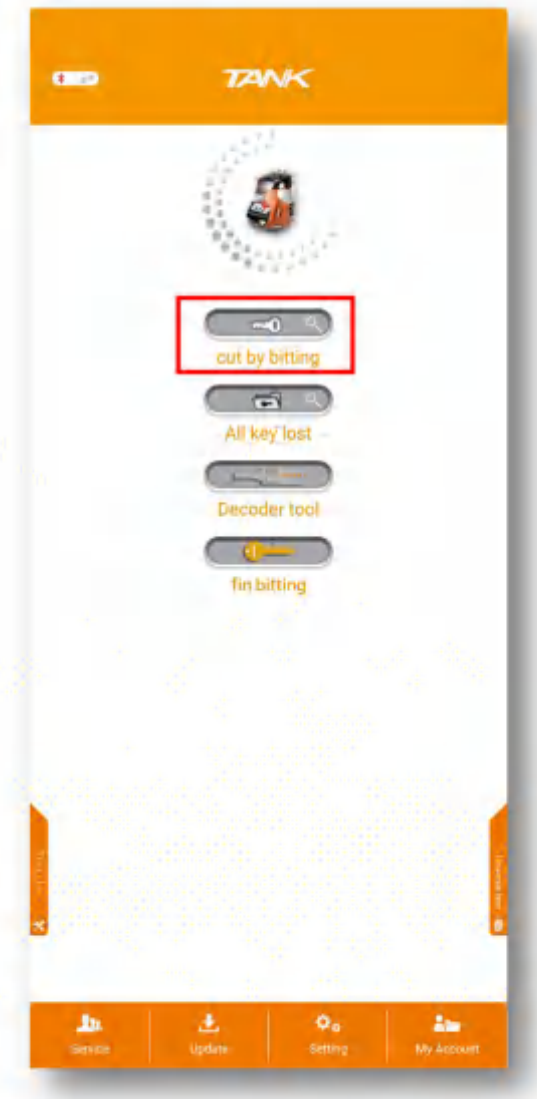
Install HON66 key blank, Click “OK”

Clean the particles and click “OK”

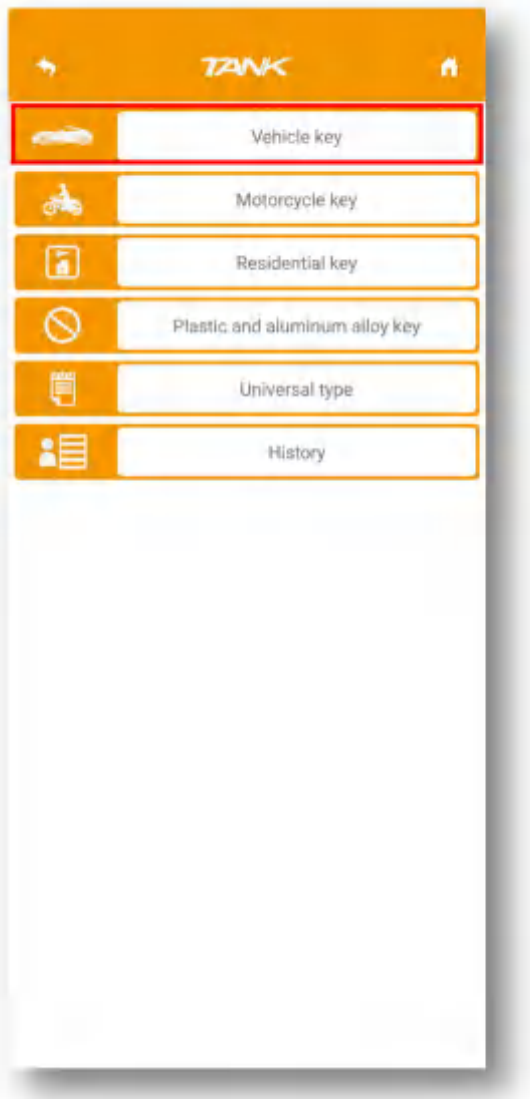


If it’ s ready,click “OK”

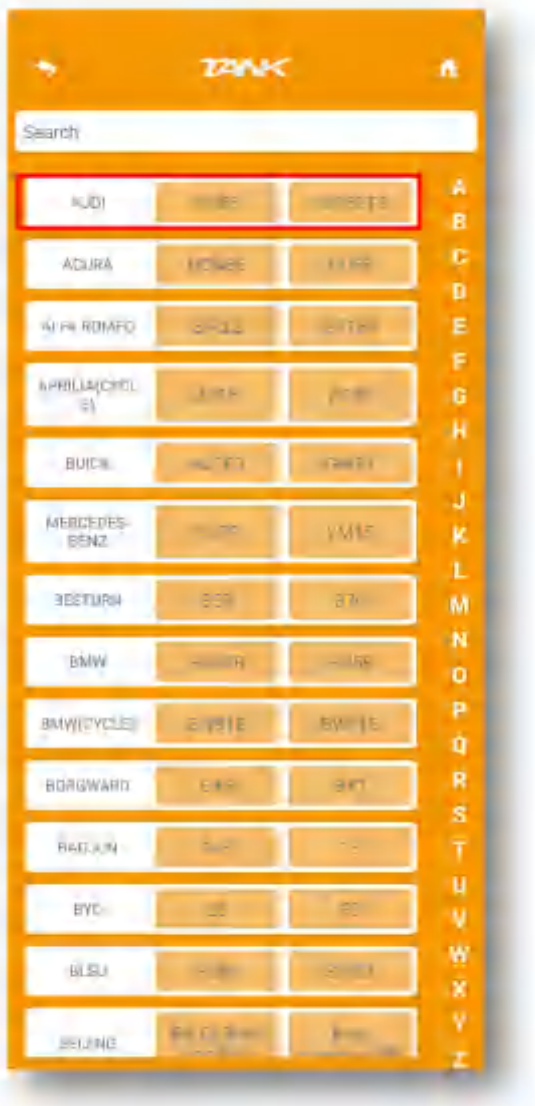
6-4 How to use cut by bitting



Click “cut by bitting”

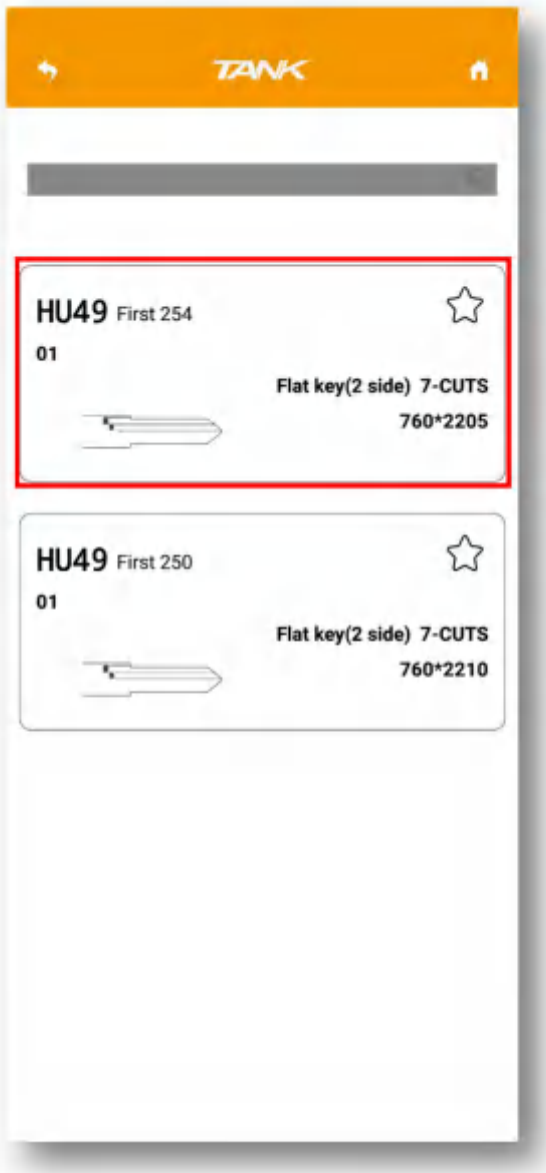


Click “Vehicle key”

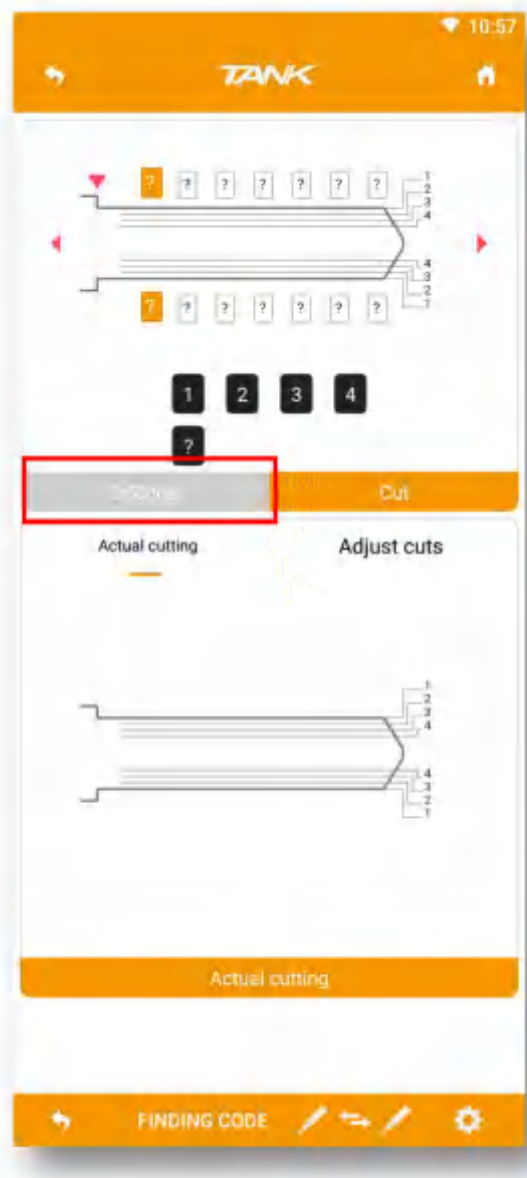


Select vehicle

Select car Series



Select key



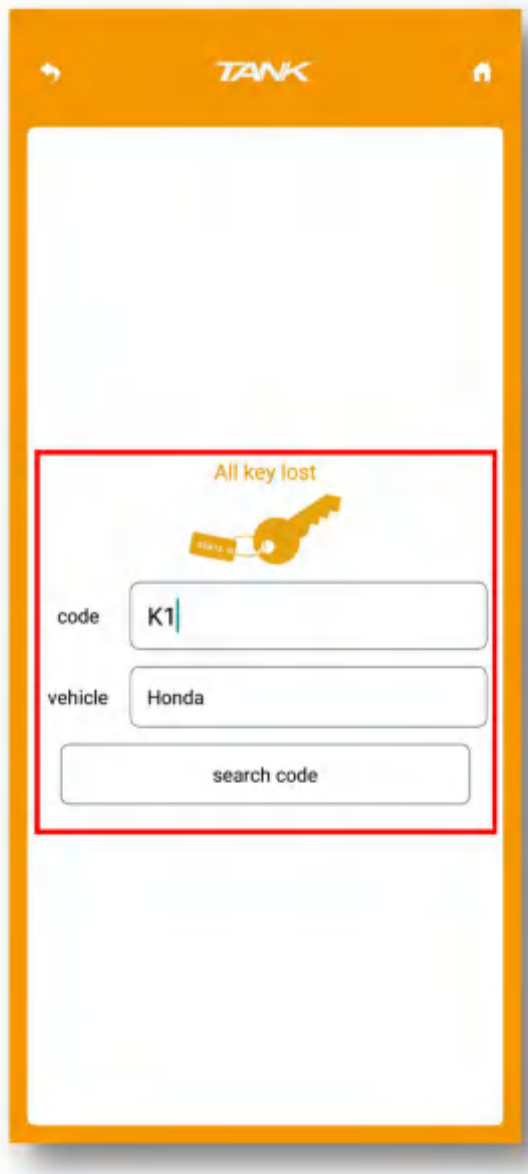
Click “decode”

Click “cut”

*Operation depend on App guide

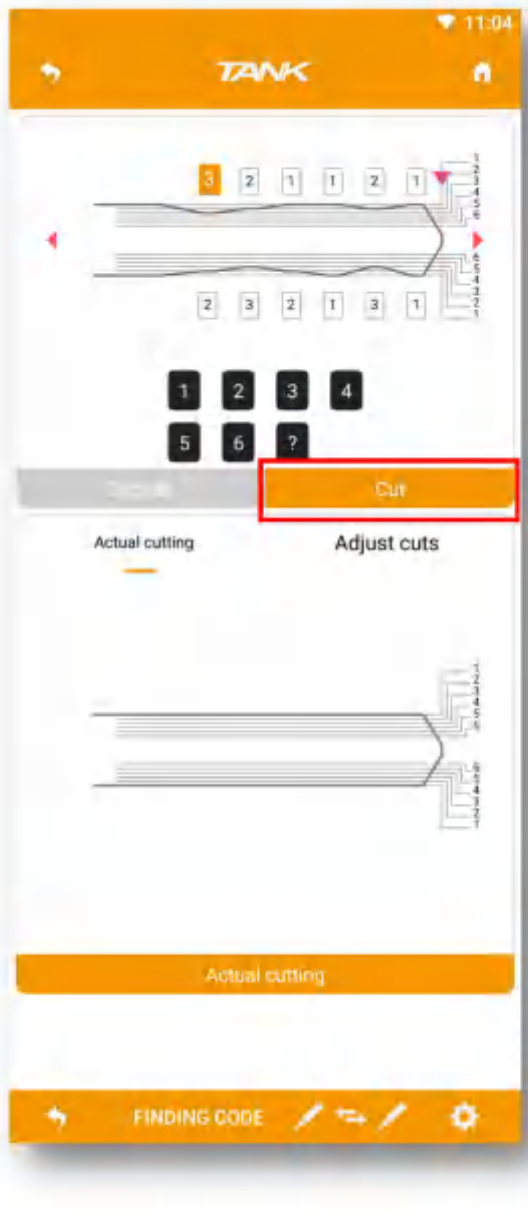
6-5 How to use all key lost

Enter 2M2 TANK main interface,select “all key lost”



Input lock number and vehicle

Select right one depend on the list.



Please click “cut”

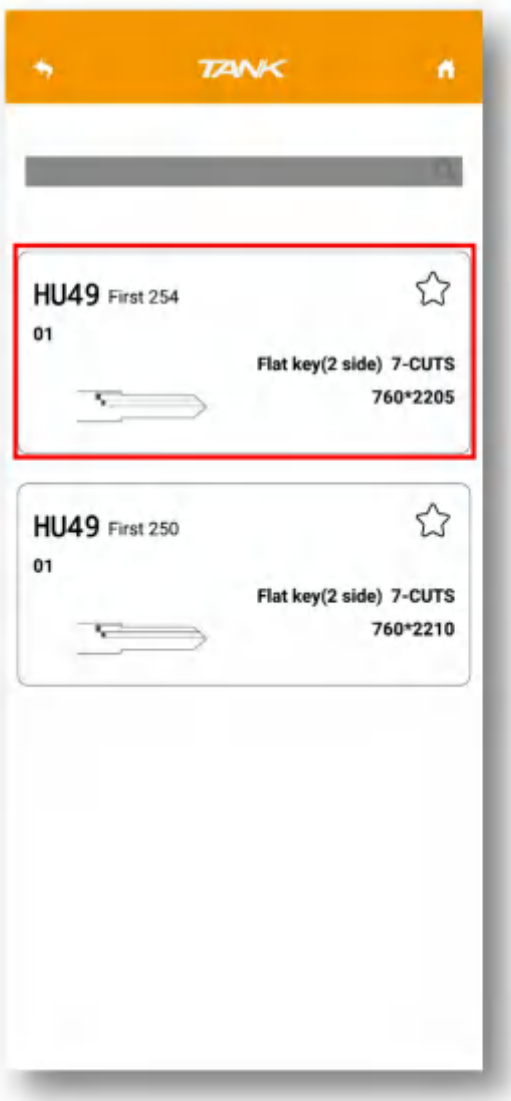
*Operation depend on App guide

6-6 How to use find bitting

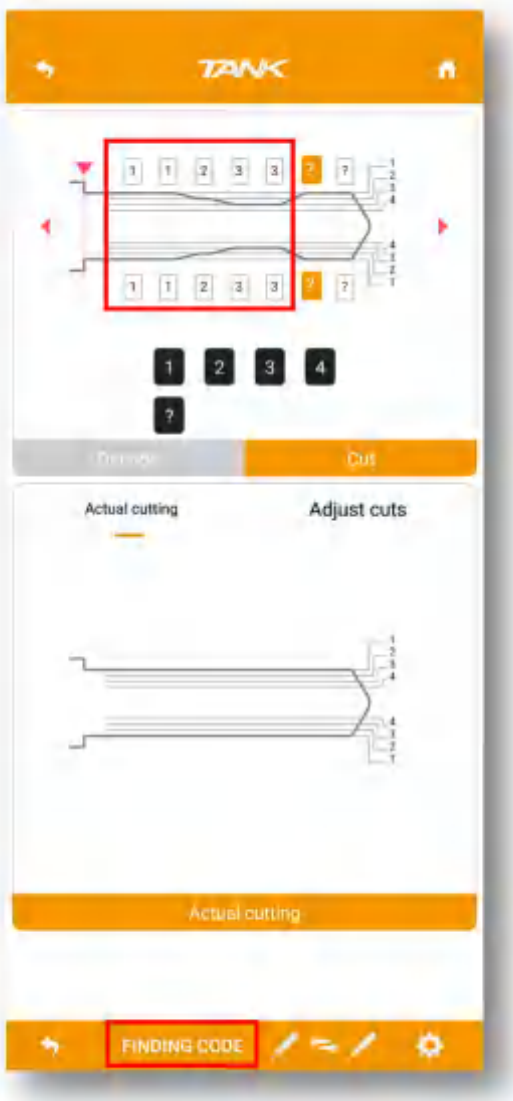
Click “find bitting”

Select vehicle

Select vehicle



Select key



Input key cuts that it already had

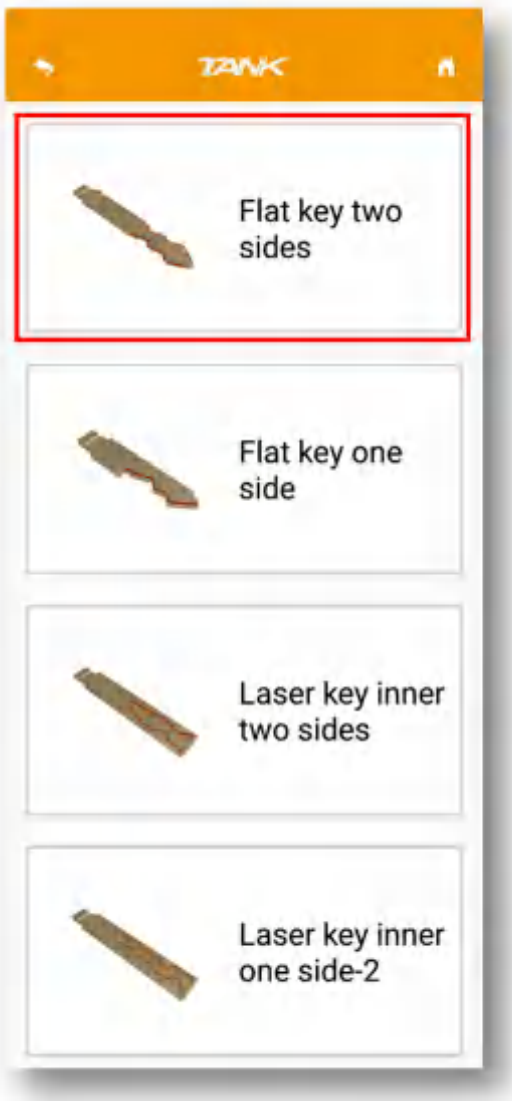
Select the right cut number in

*Operation depend on App guide

7、How to use universal key duplicate

Click “tools”

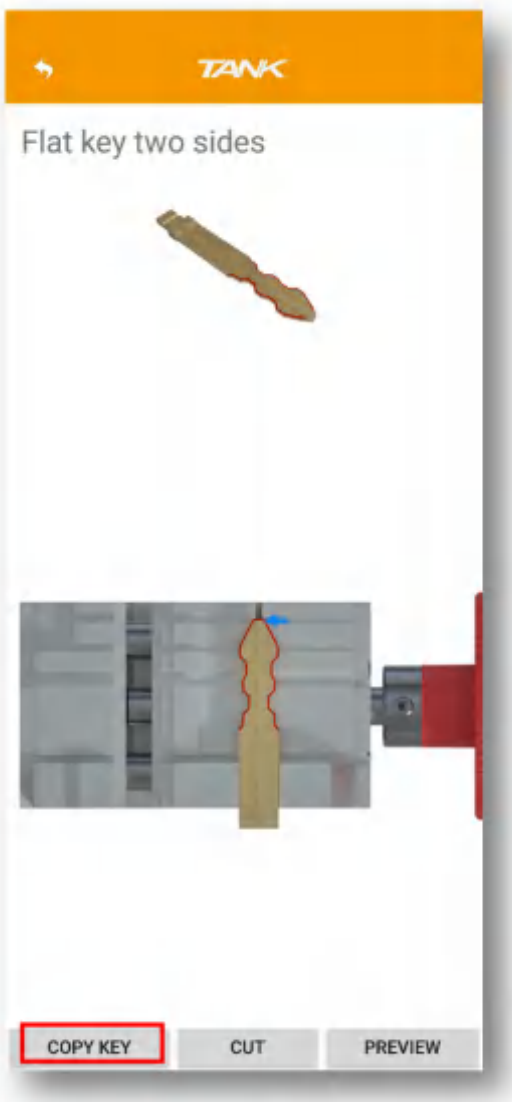
Click “universal key duplicate”



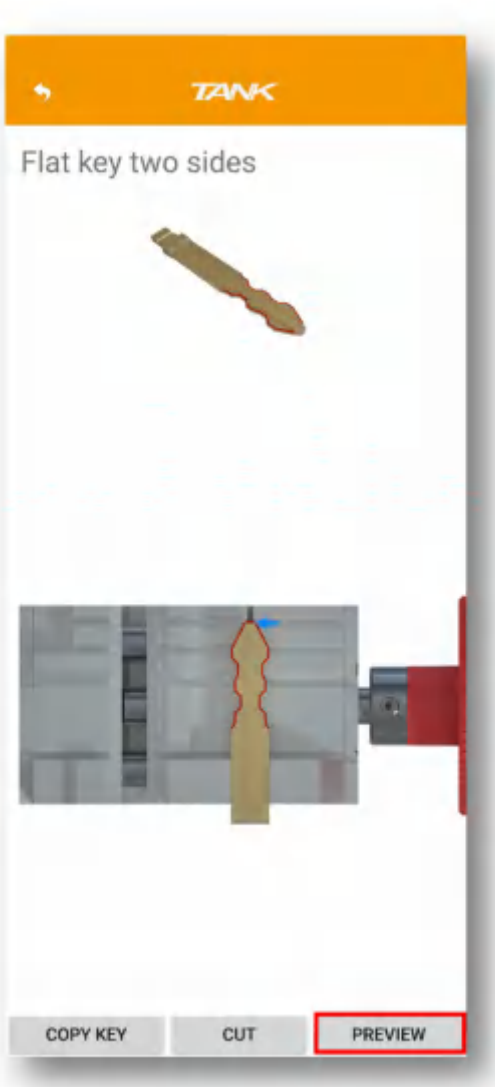
Select key type

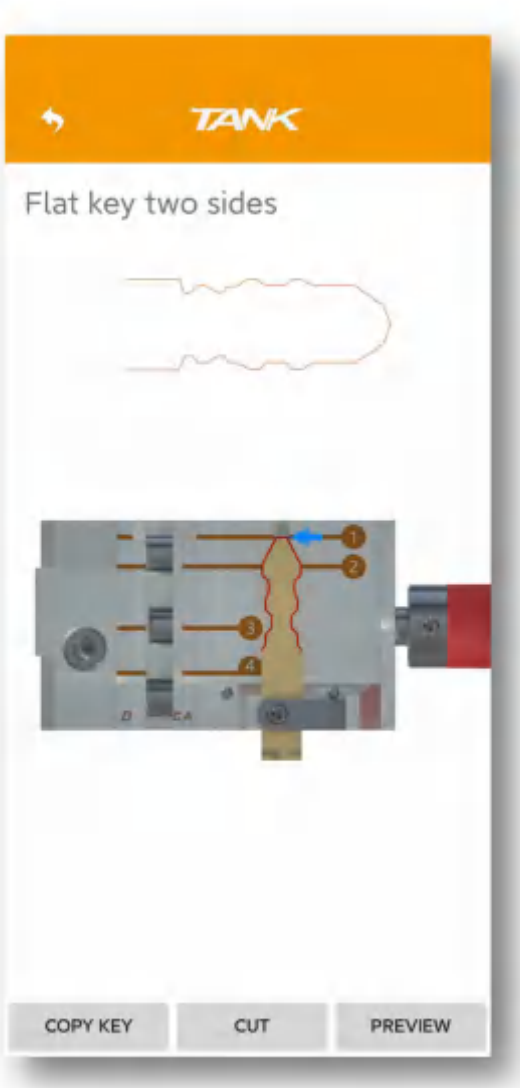
Select way of alignment

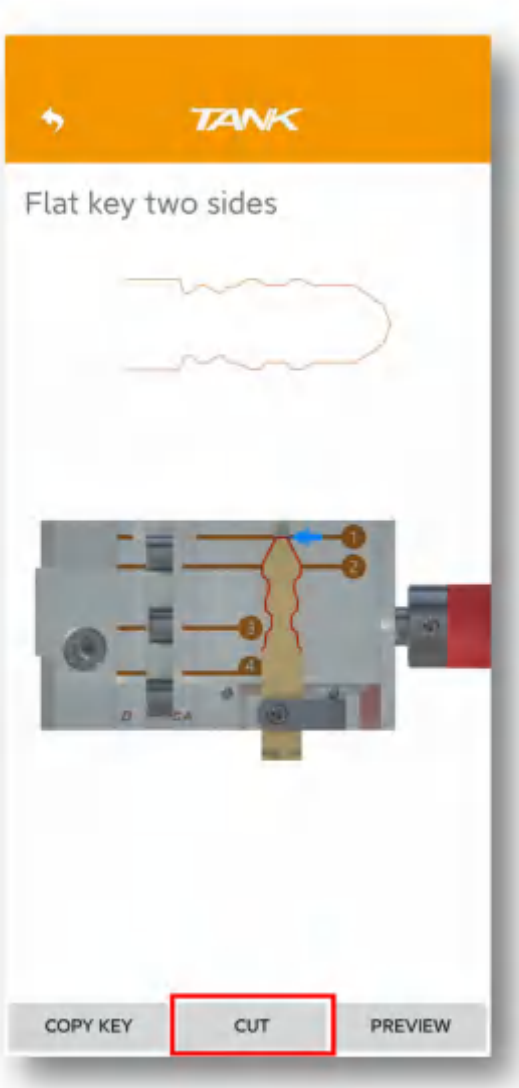
Select way of installation



Click “copy key”







Select preview　　It will appear key shape　　Select ‘cut’ after copy（Directly cut without preview）（Preview is to judge correction of the key）

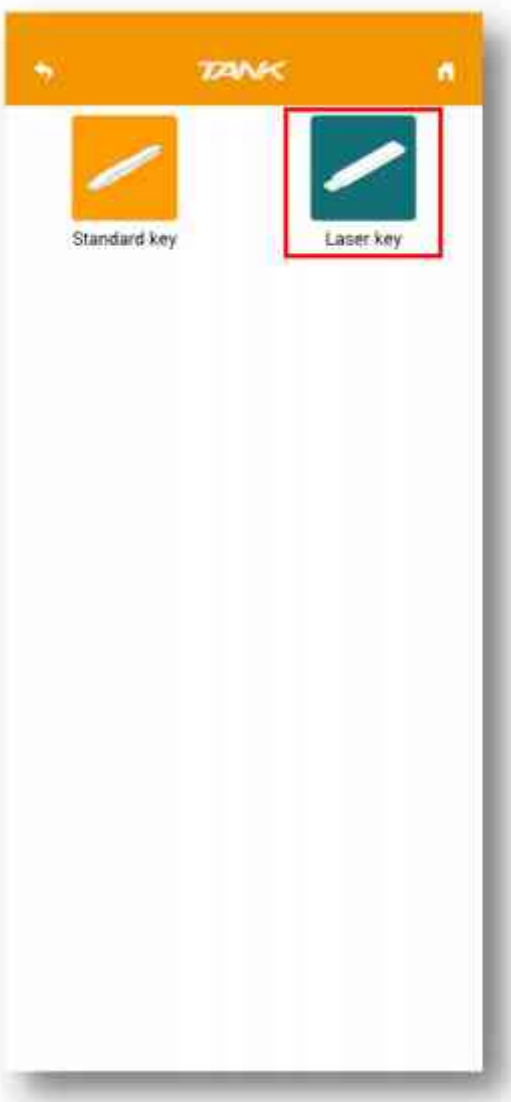
*Operation depend on App guide

8、How to use generate key type

Select ‘tools’

Select ‘generate key type’

Super key blank instruction



Select ’ key type’

Select’ country’

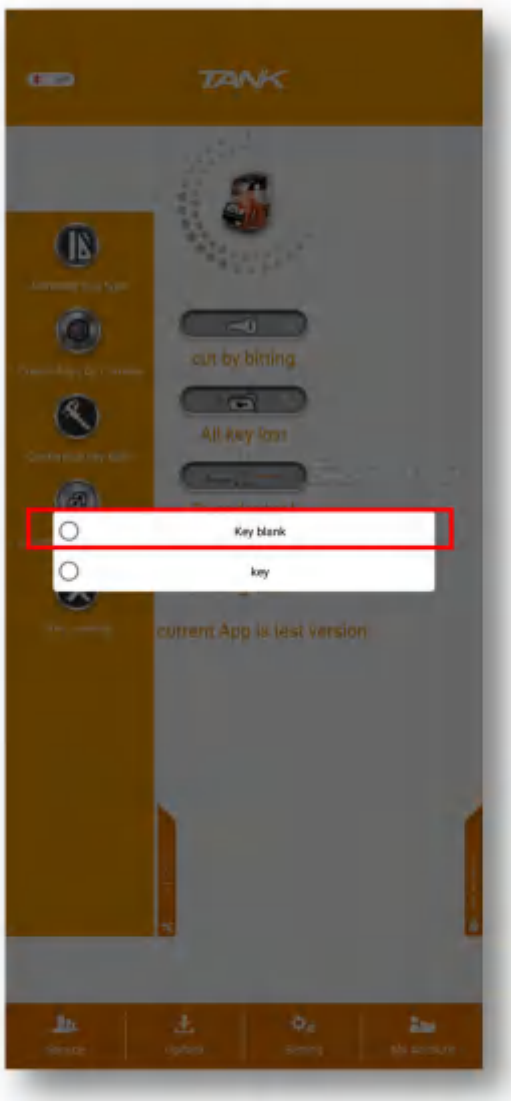
Select key blank that you need

(*notes: This function just generate key blank, Operation depend on App guide)

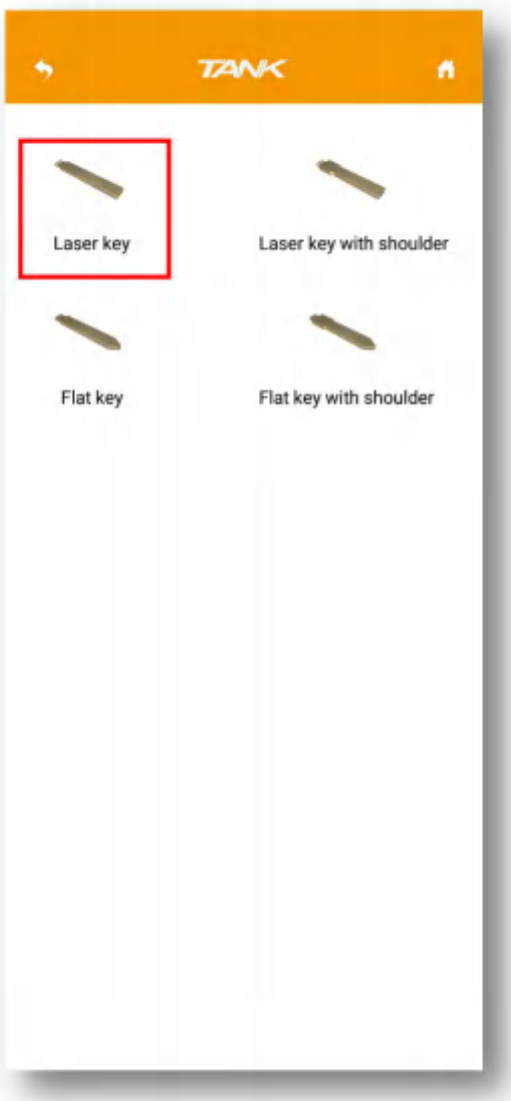
9、How to use customize key type

Select ‘tools’

Select’ customize key data’

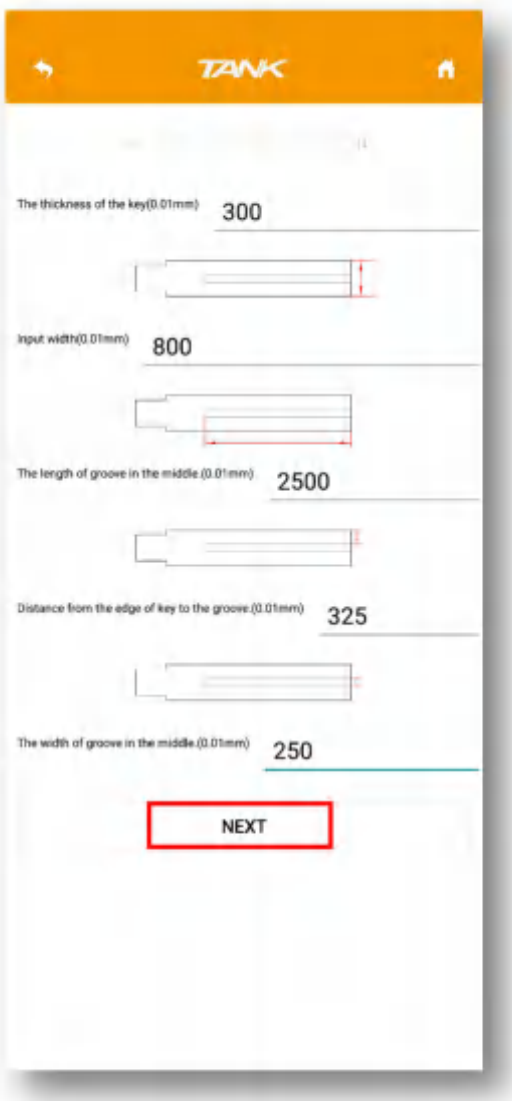


Select’ key blank’



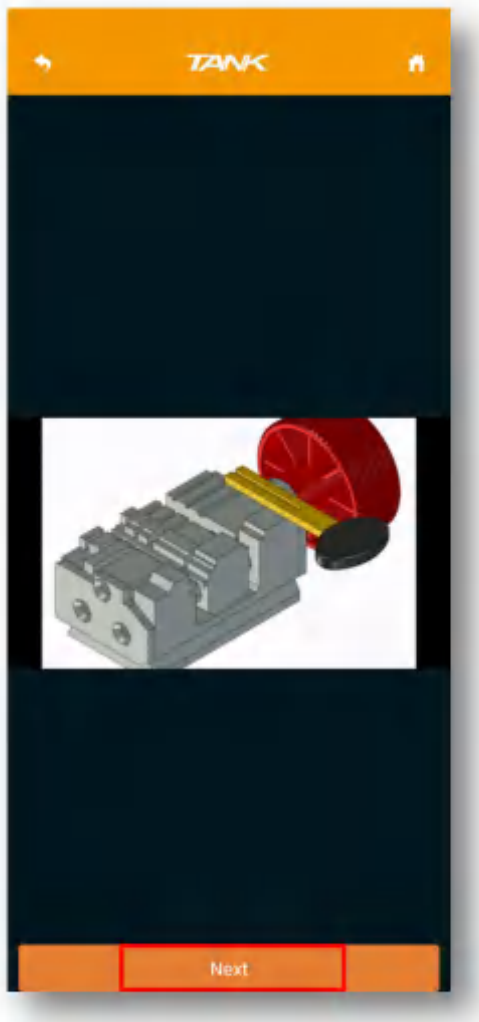
Select key type

Select features

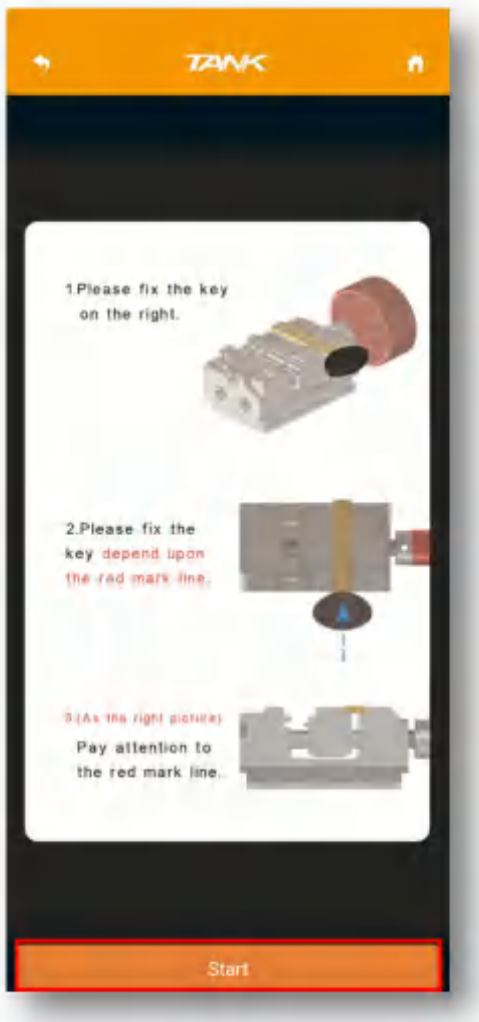


Input data and click ‘next’

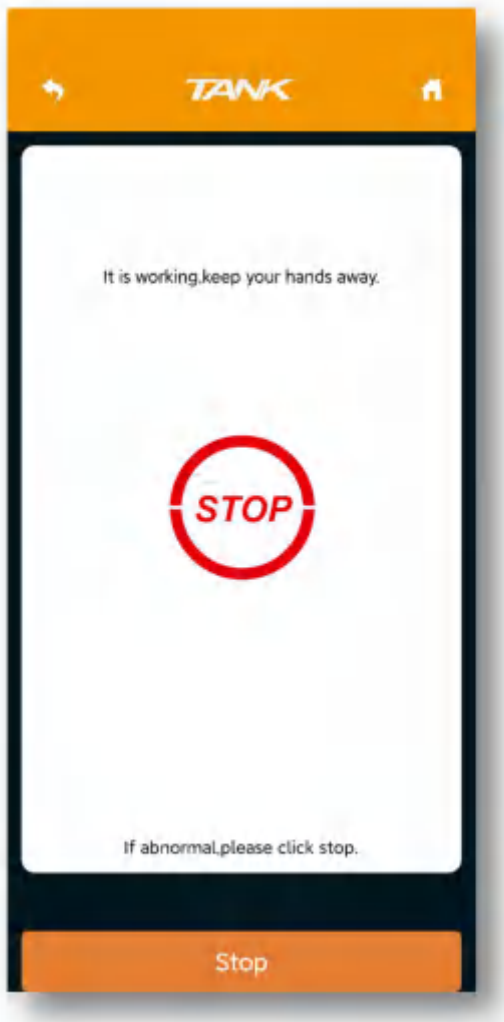
（注意所填数据单位为：0.01mm）



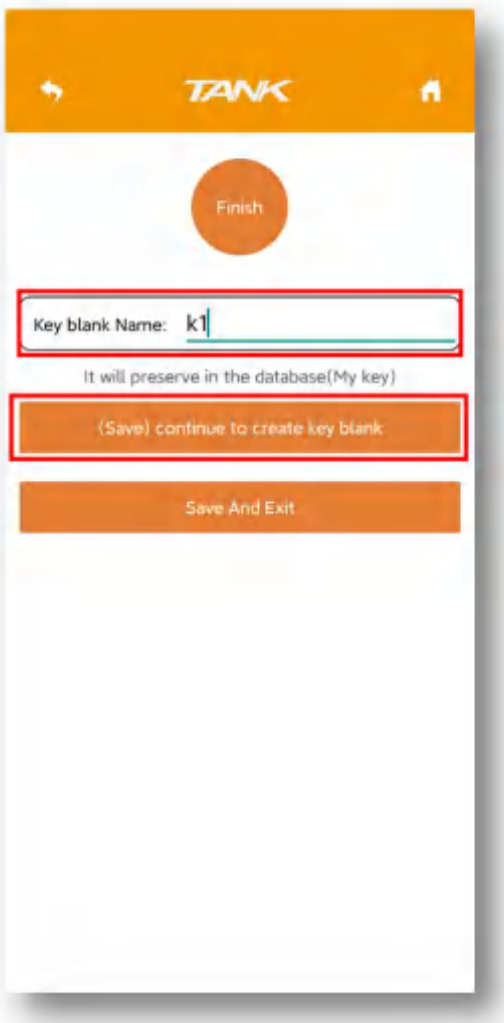
Installation animation



Install key depend on the picture

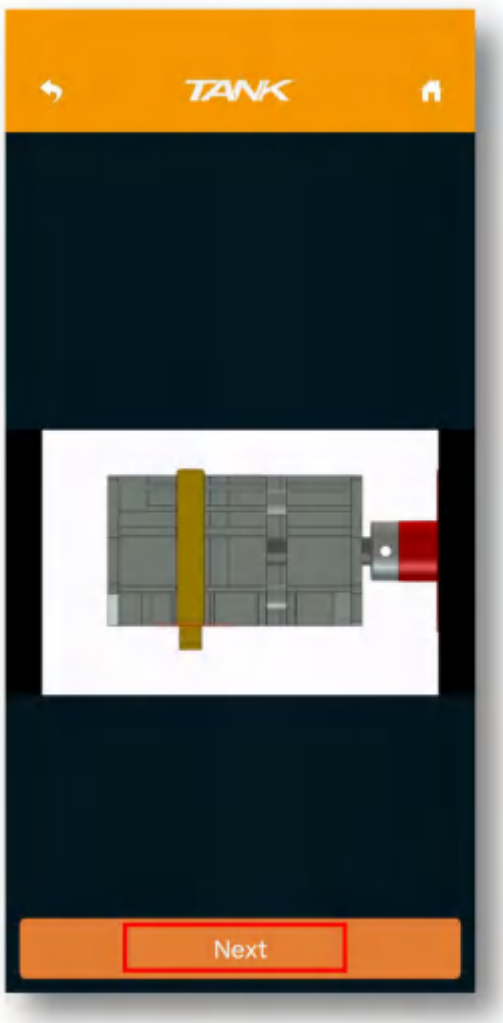


It’s working,please wait.

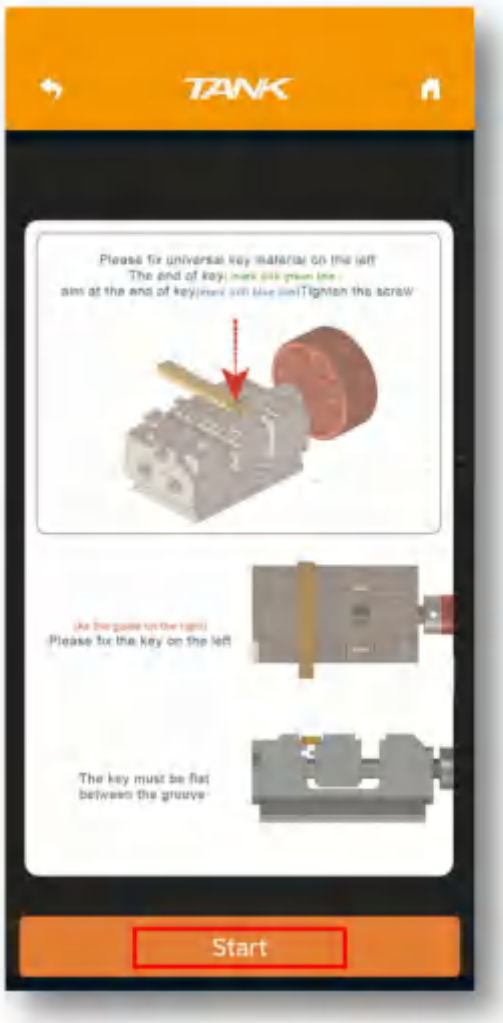


Name the key blank and save and exit
Compare with installation a new key blank

Select super key blank and then click ‘next’

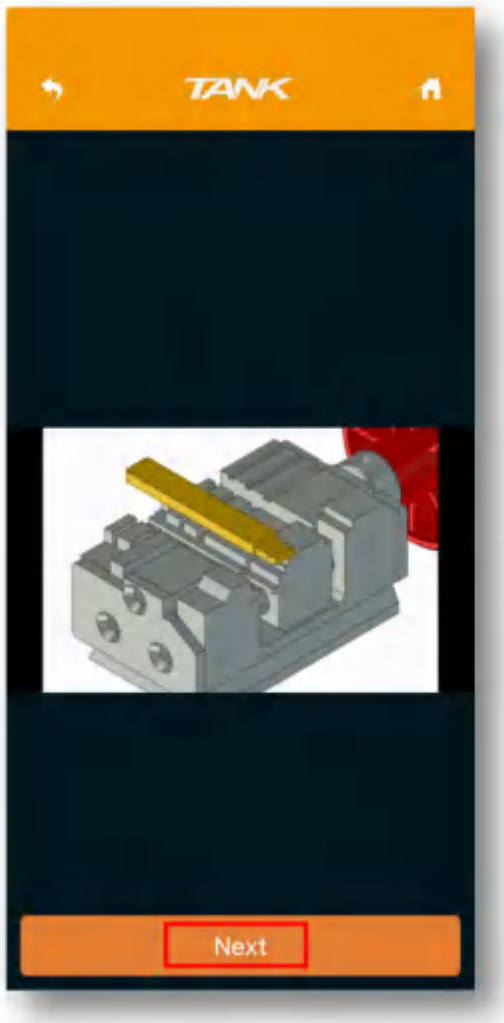


Compare with installation and click ’ next’

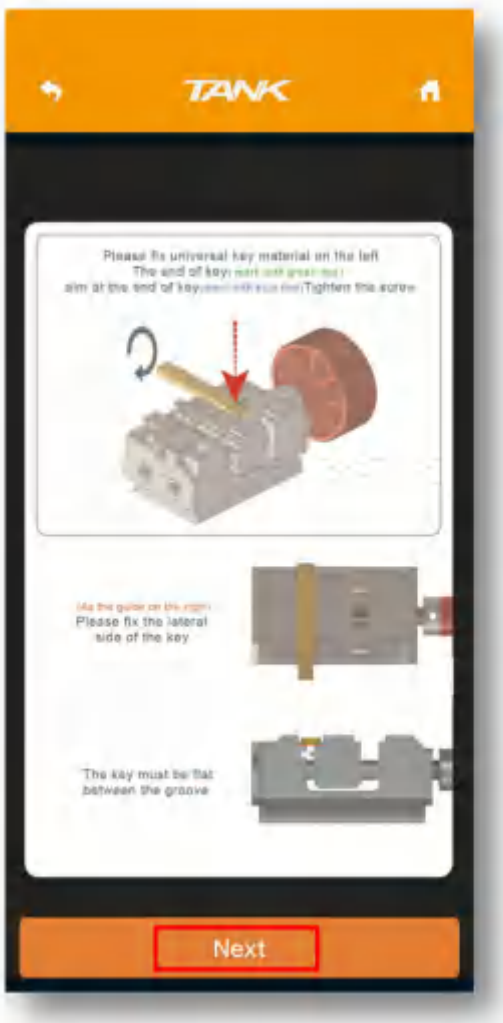


Install super key blank and click ‘start’

It’ s working,please wait.



Click’ next’



Install super key blank and click ‘next’

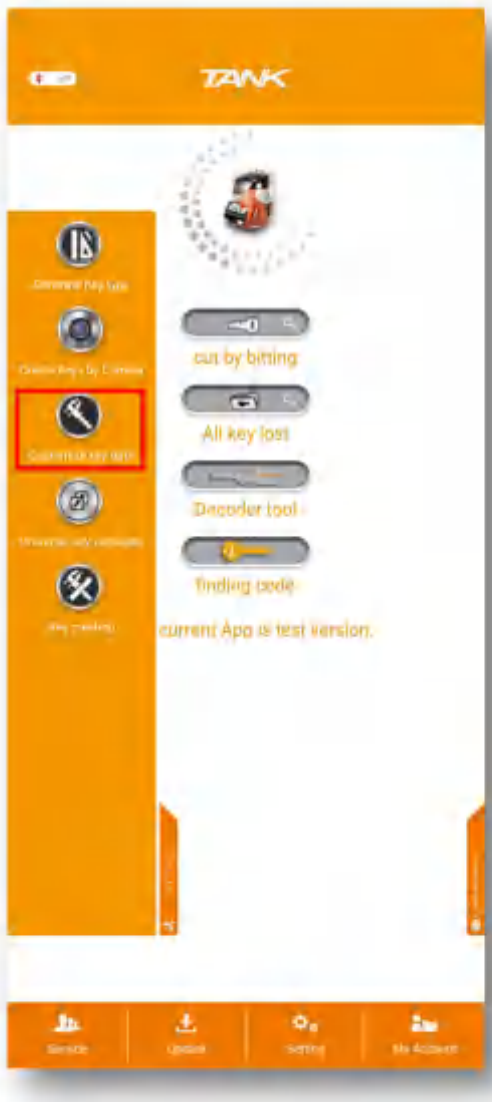
It’ s cutting the other side,please wait.

Continue to creat another one or exit.

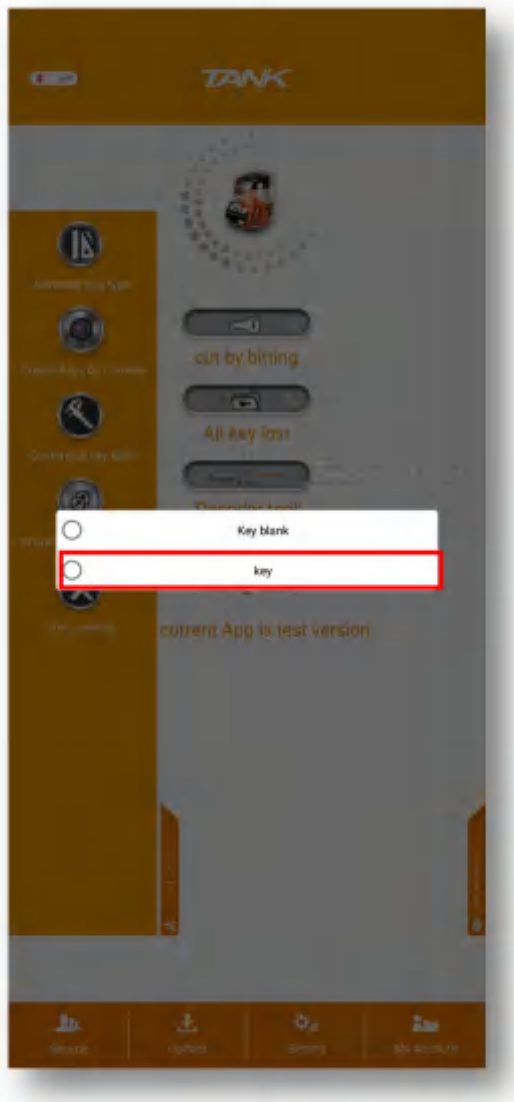
10、How to use customize key data

（Laser key as a sample）

Select ‘tools’



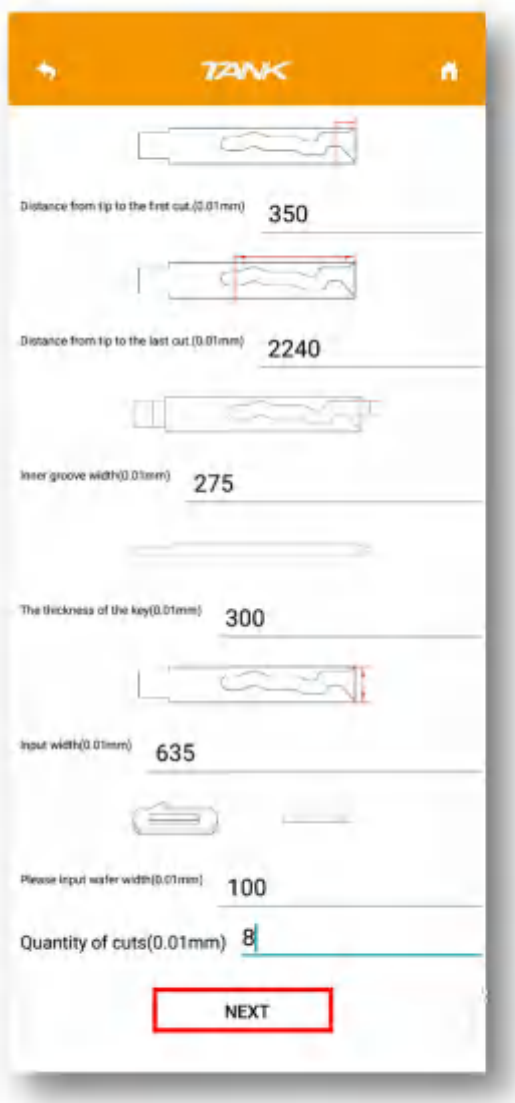
Select ‘customize key data’



Select ‘key’

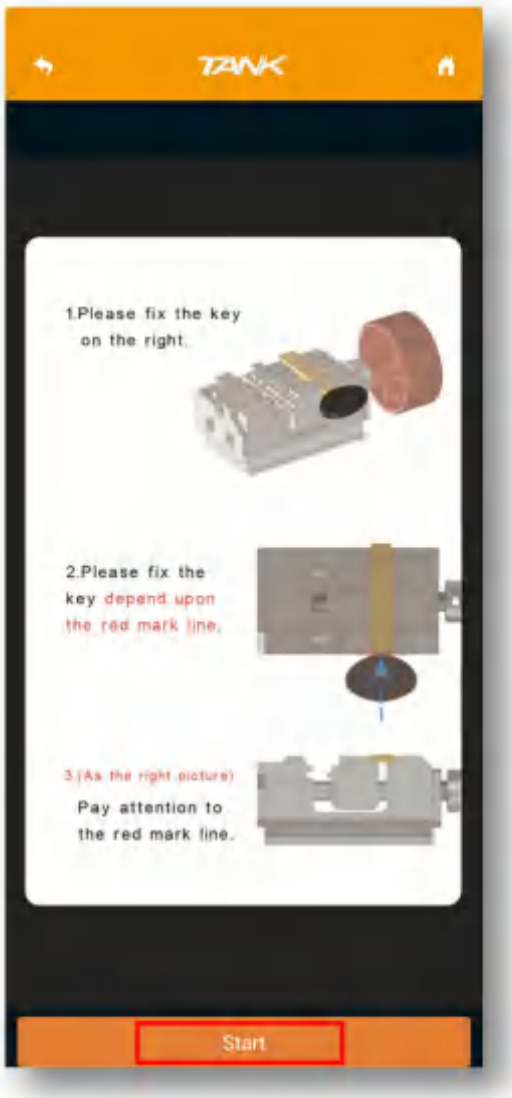
Select key type

Select groove position

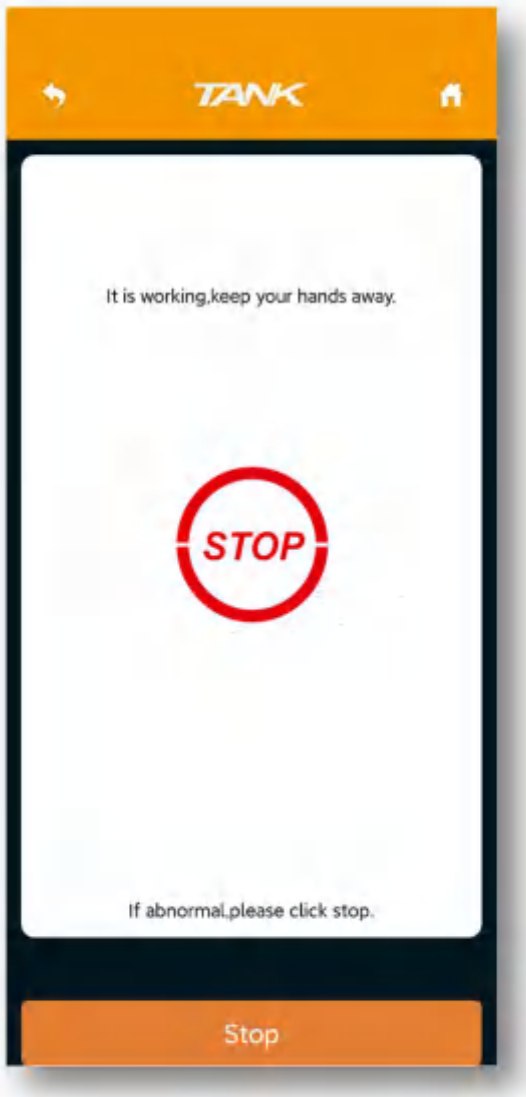


Input data by measuring and click ‘next’

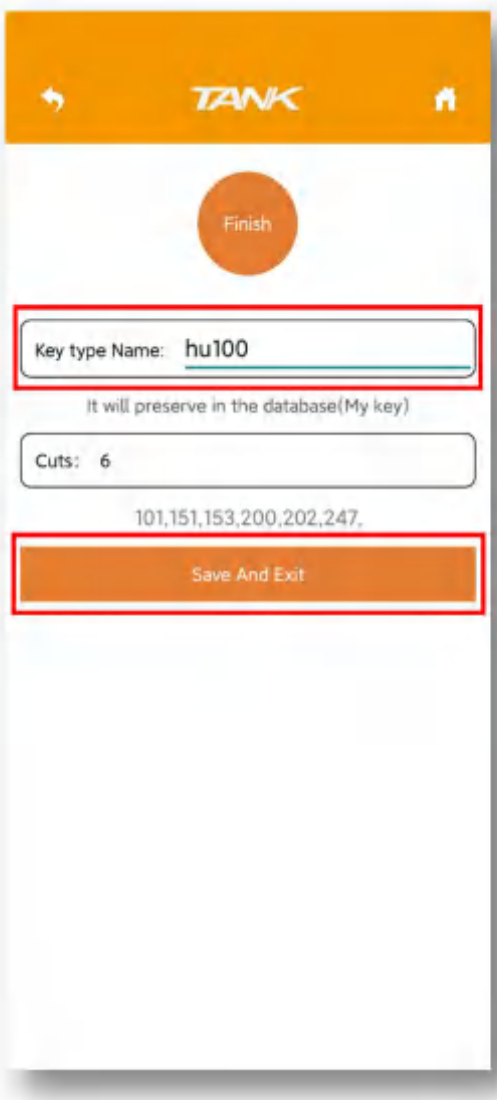
Installation animation



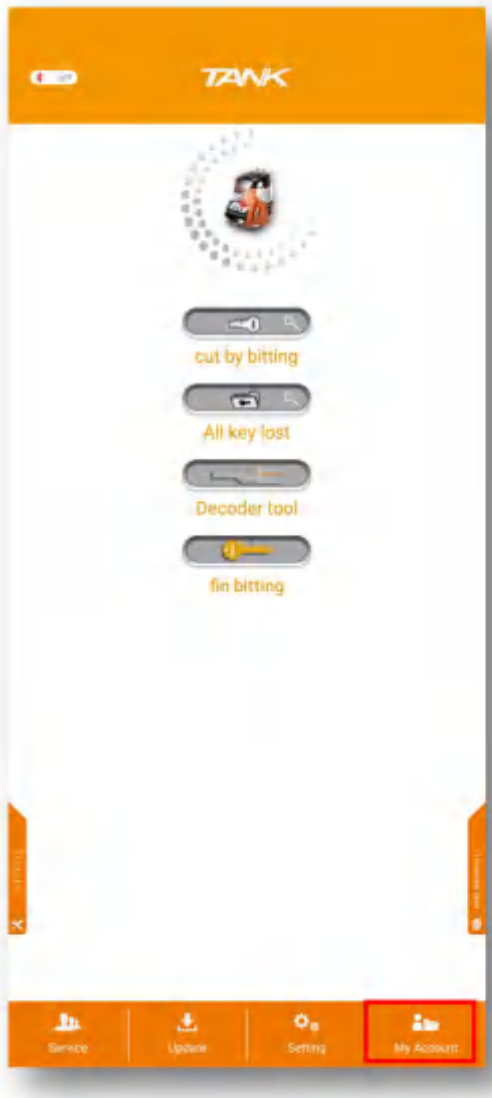
Install the key and click ‘start’



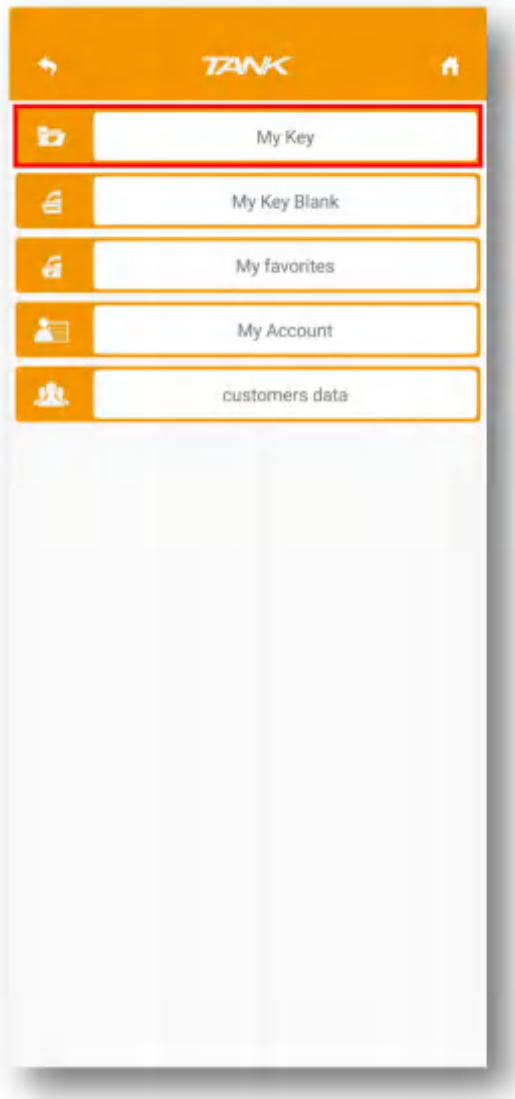
It’s working,please wait.



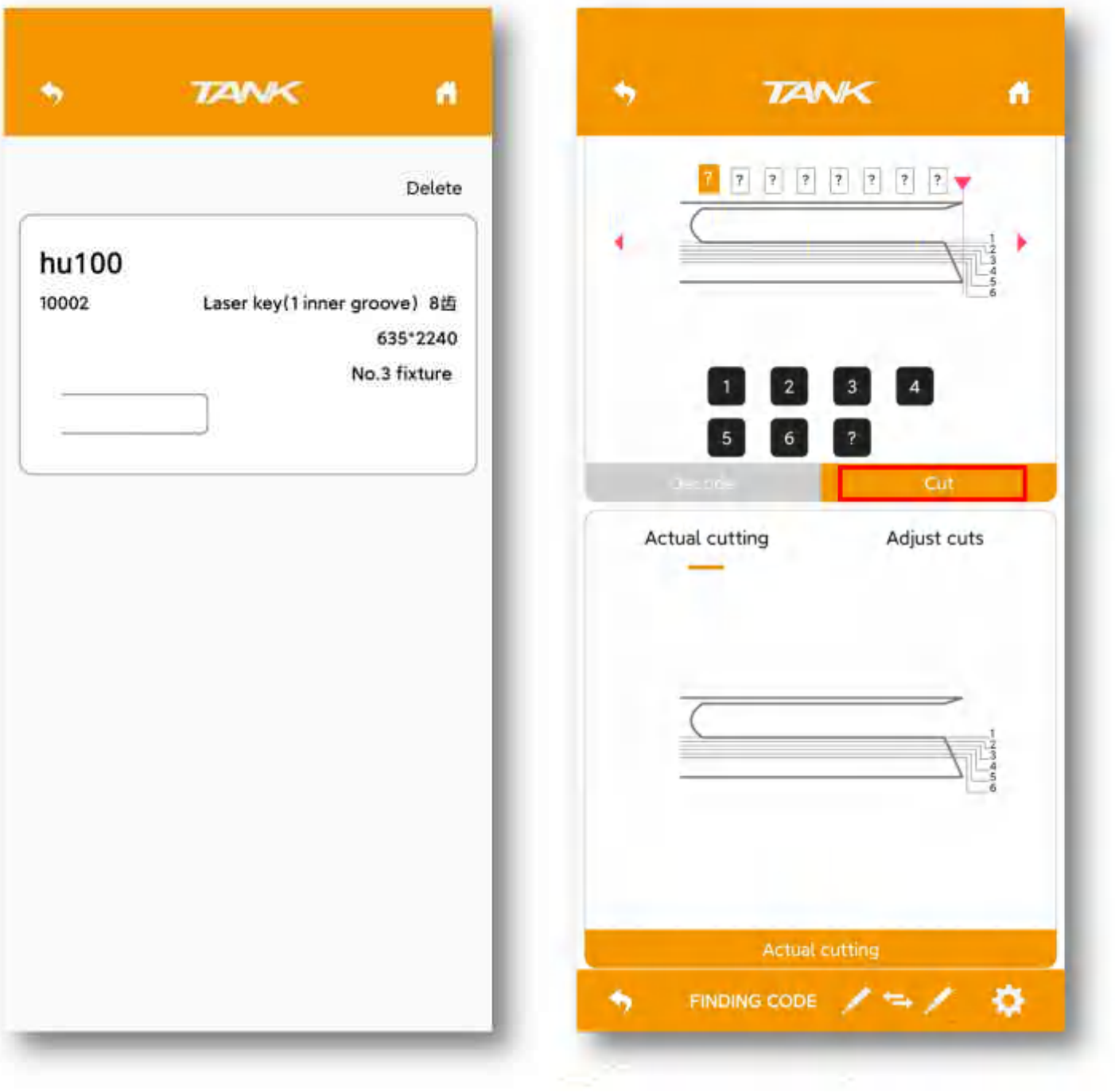
Name the key and



Click ‘My account’



Click ‘my key’ Save and exit



Click the key that you create　　Click ‘cut’

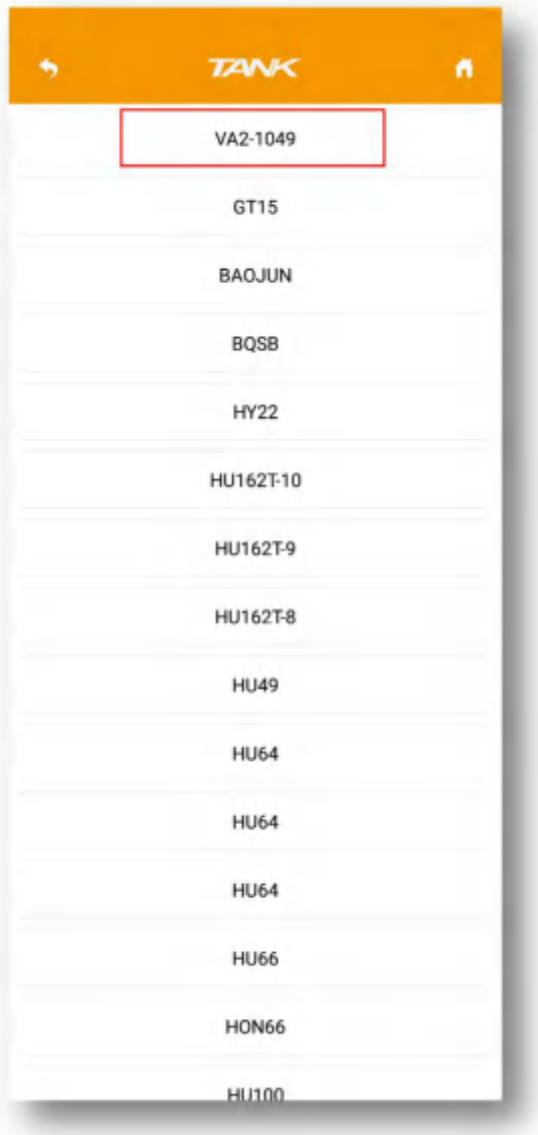
***Operation depend on App guide**

11、Decoder tool

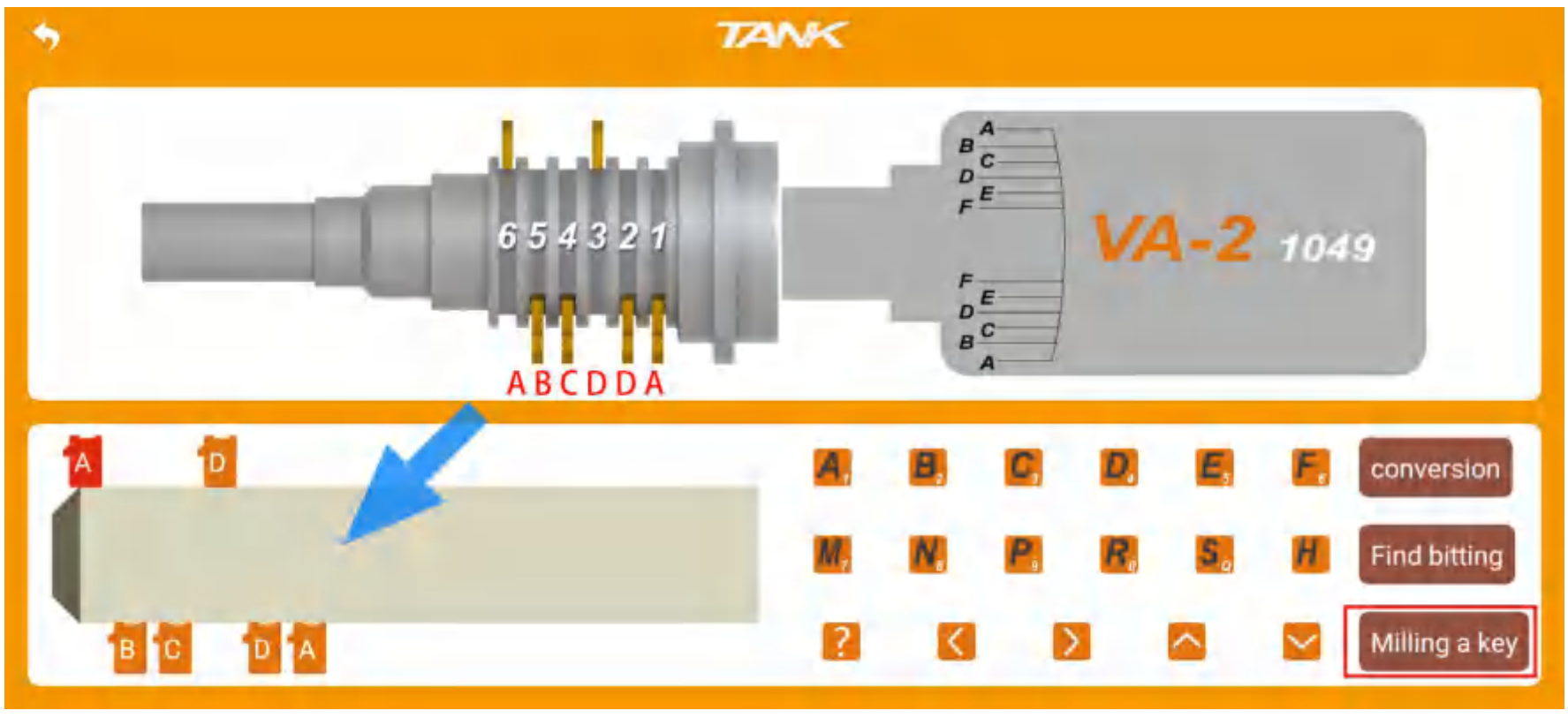
It’s convenient for locksmiths to transform cuts after decoding via this function.

11-1 How to use decoder tool

Select ‘decoder tool’



Select key type that corresponds with

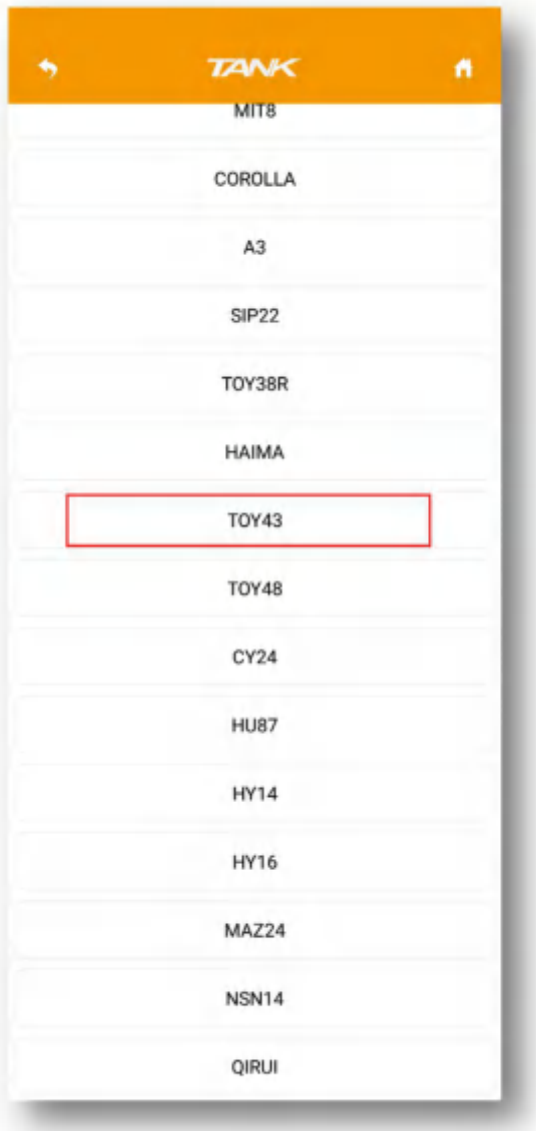


Input the cuts that you decode into the space,and then click ‘key cut’.

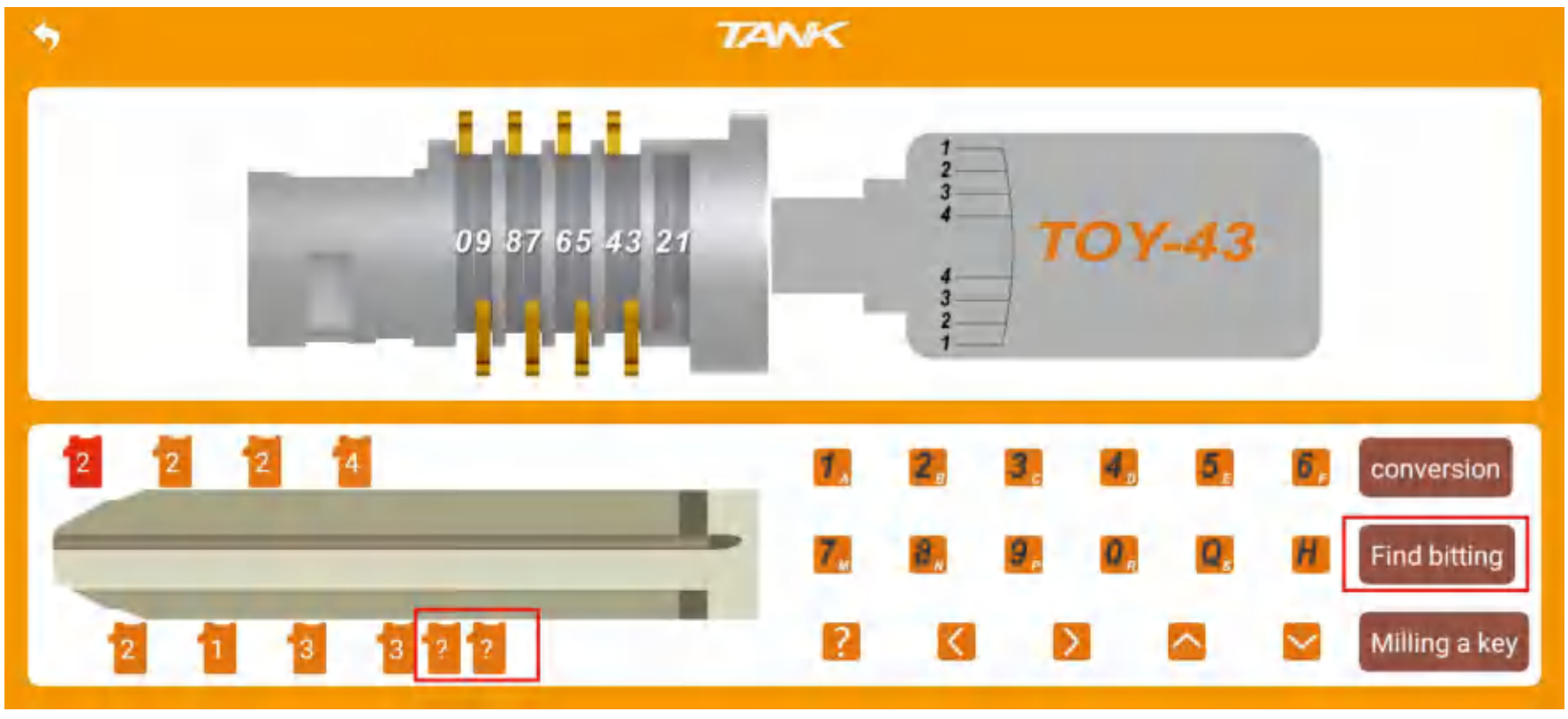
Notes: If the cuts that need to transform,Click ‘transform’.

11-2 How to find bitting via decoder tool

Select ’ decoder tool’



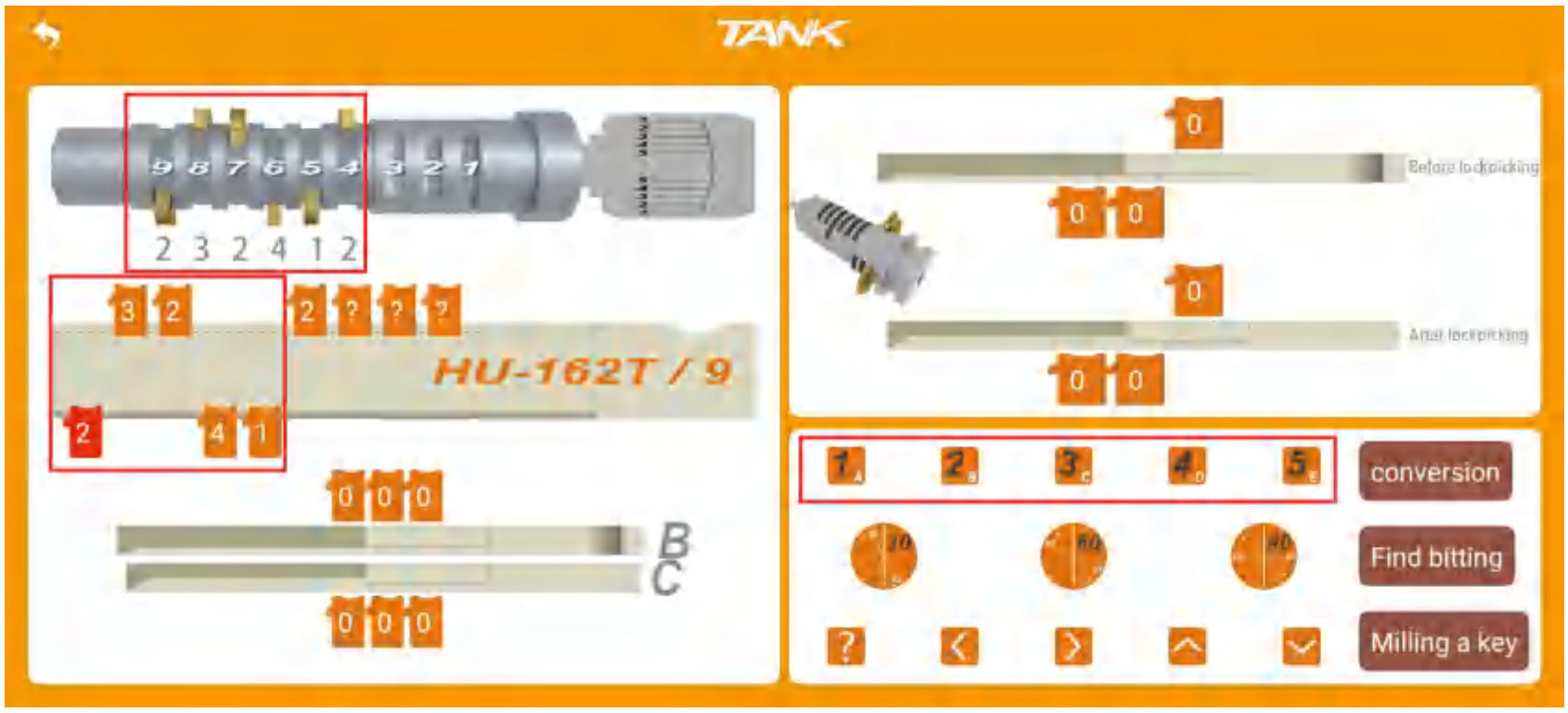
Select key type that corresponds with



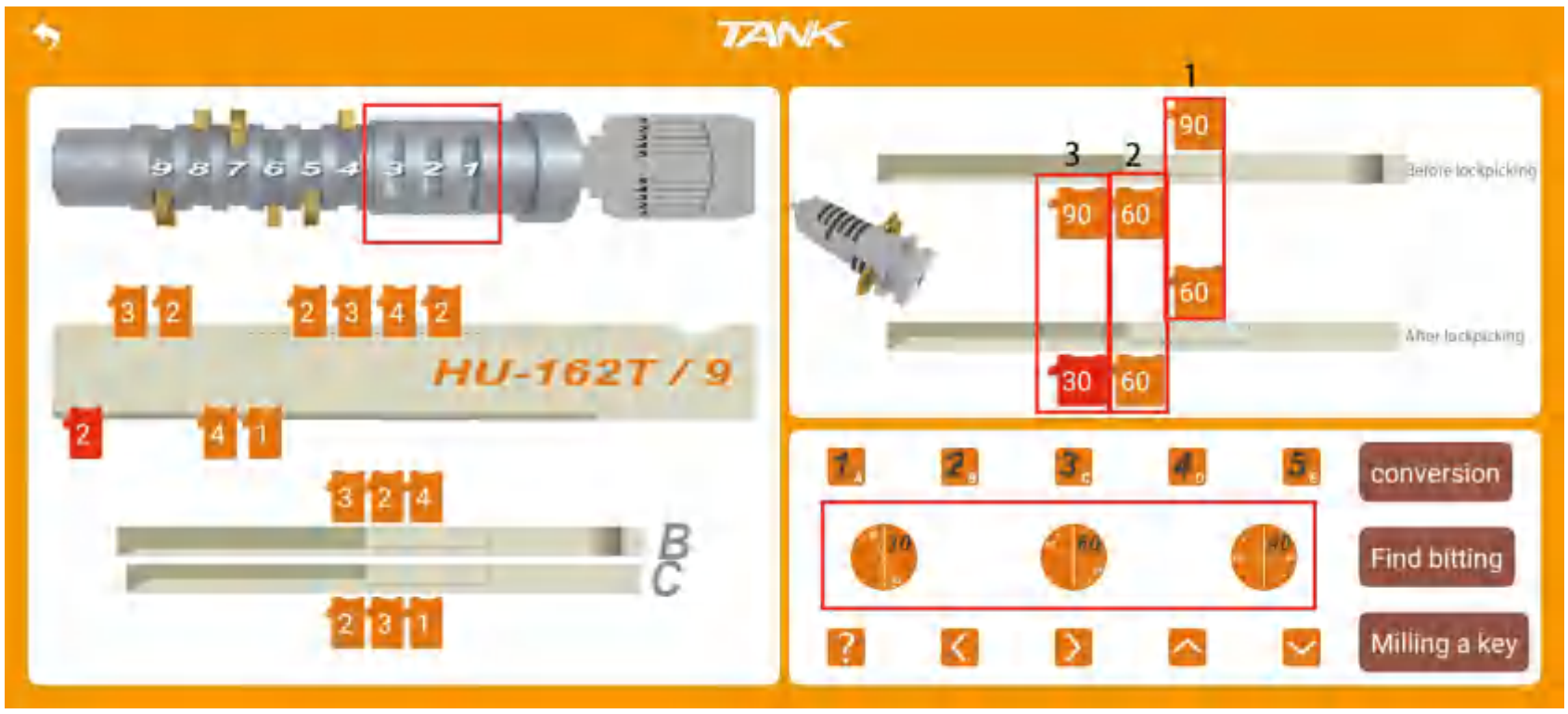
When the key type that you select has ?, it is the cuts that tools can not decode.you can click ‘find bitting and cuts appear.

(Notes: When decoding the lock,it’s not sure the cuts number, you can click ‘find bitting’ on the right,cuts number will appear immediately.)

11-3 HU162T-9 cuts



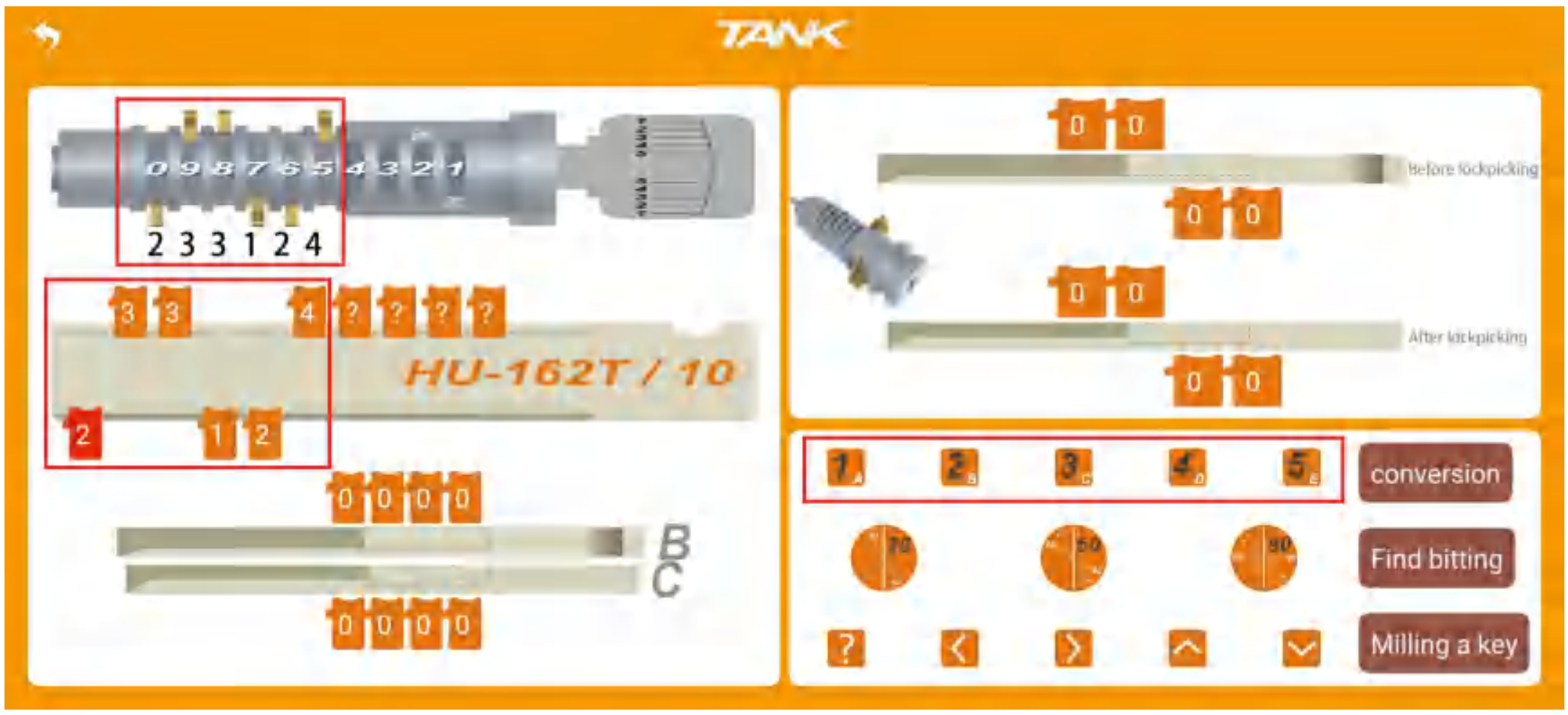
As the picture, decode the last 6 cuts, and then input cuts into wafer tables in order. Input via keyboard on APP.



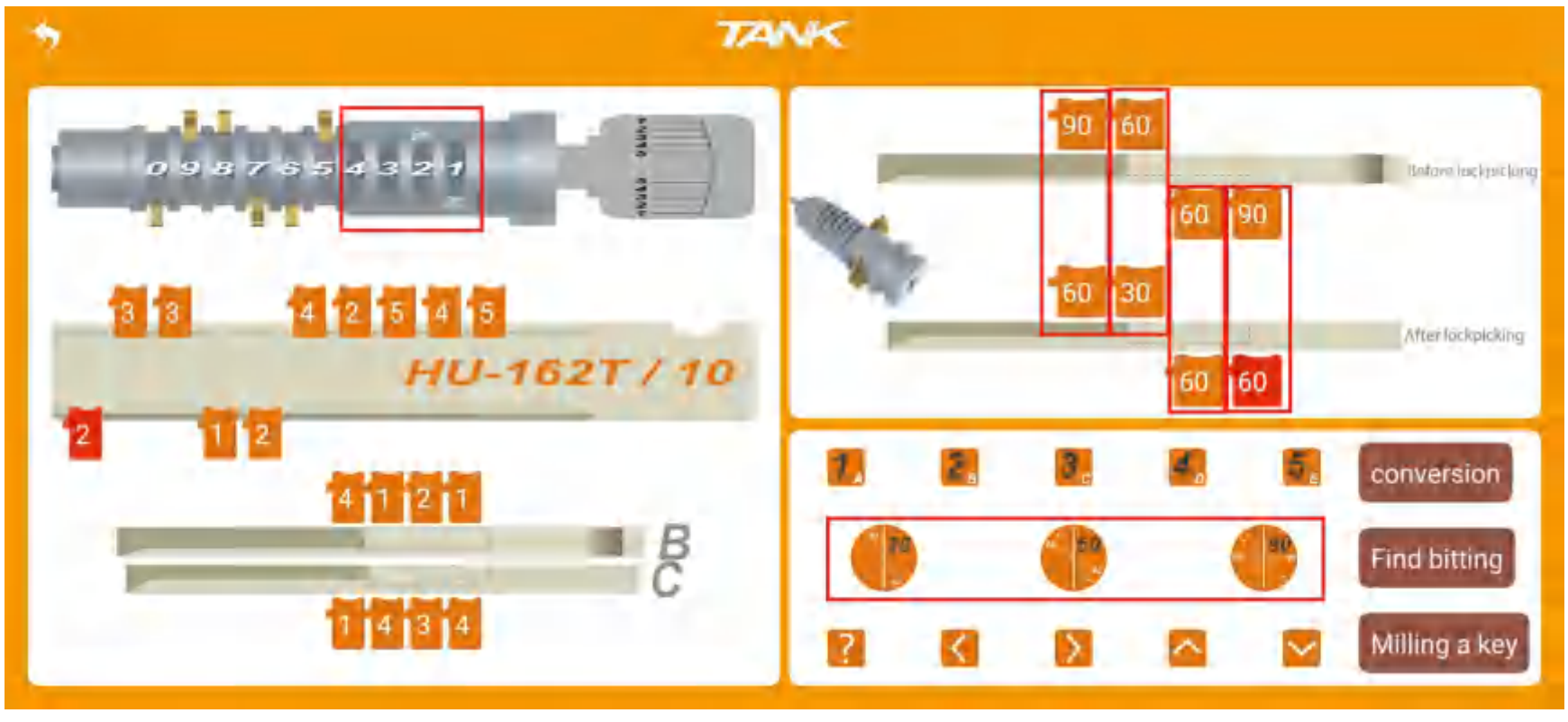
As the picture, input 3, 2, 1 respectively depend on degrees of decoding lock, input via keyboard on APP.

After operation, and then click ‘transform’, cuts will be converted into the correct cuts, No need calculating. and then click ‘key cut’ and operate on App guide.

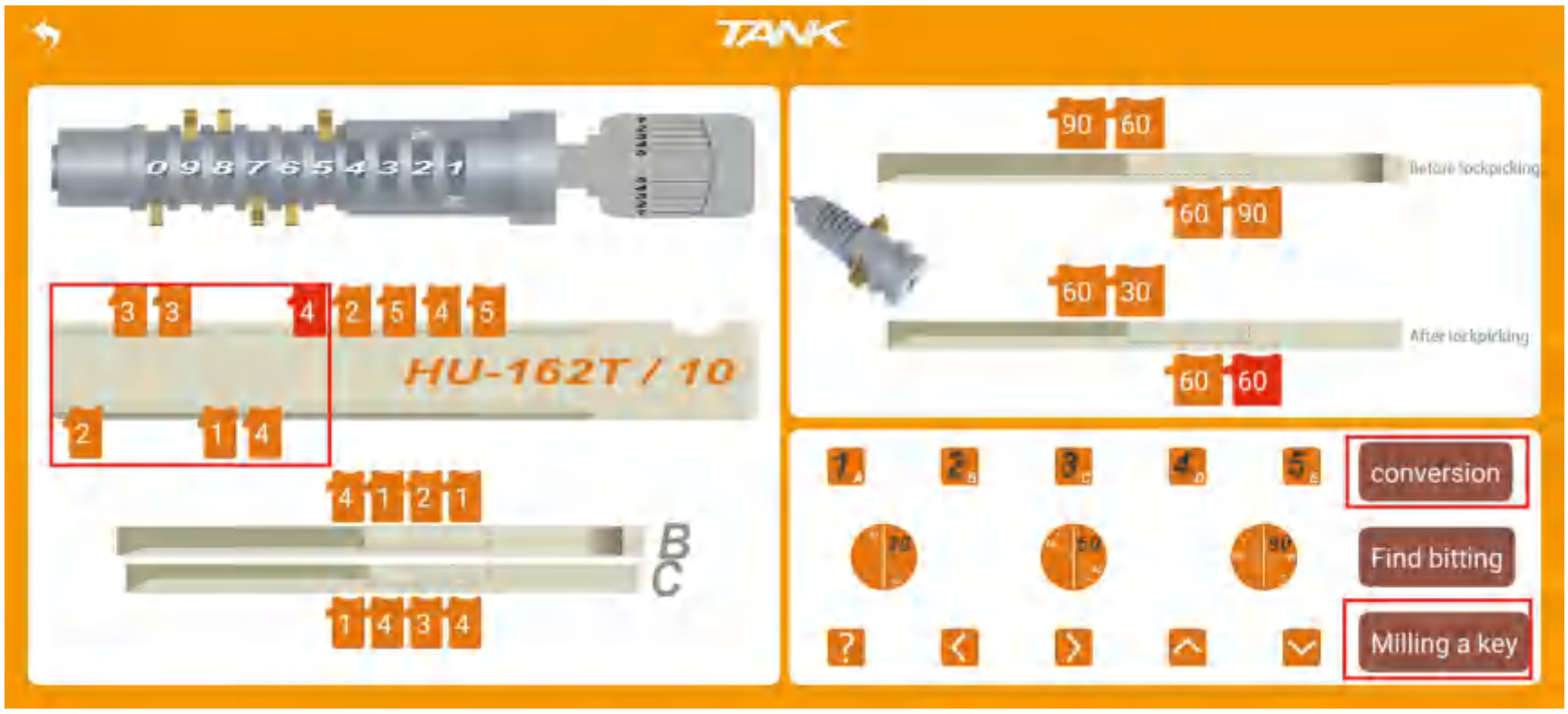
11-4 HU162T-10 cuts



As the picture, decode the last 6 cuts, and then input cuts into wafer tables in order. Input via keyboard on APP.



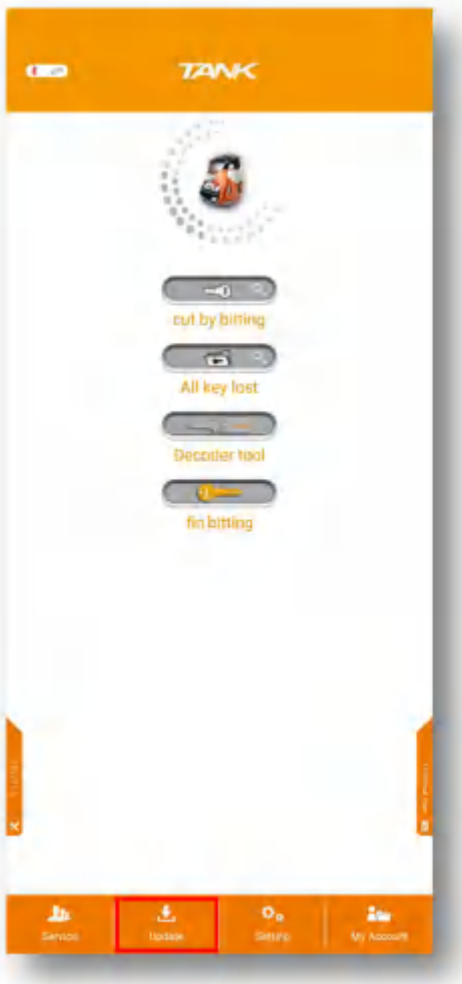
As the picture, input 4, 3, 2, 1 respectively depend on degrees of decoding lock, input via keyboard on APP.

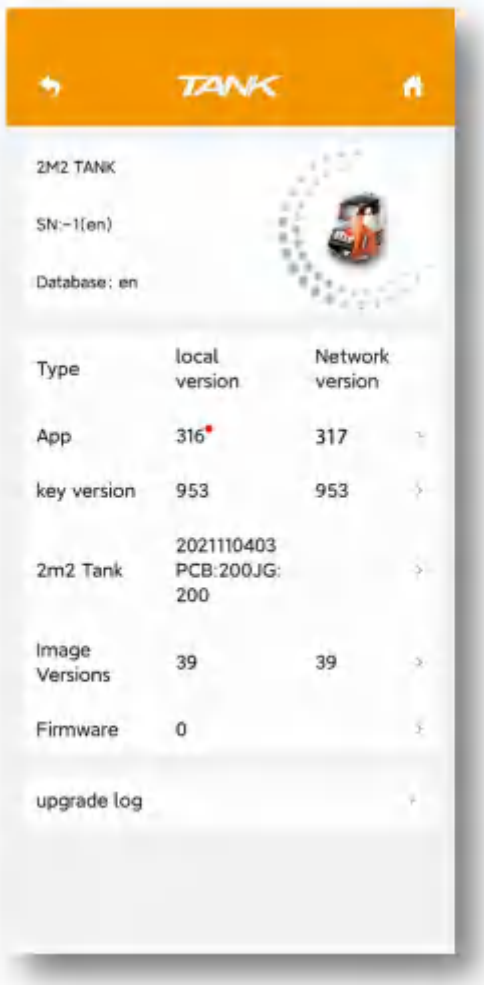


After operation, and then click ‘transform’, cuts will be converted into the correct cuts, No need calculating. and then click ‘key cut’ and operate on App guide.

12、Update

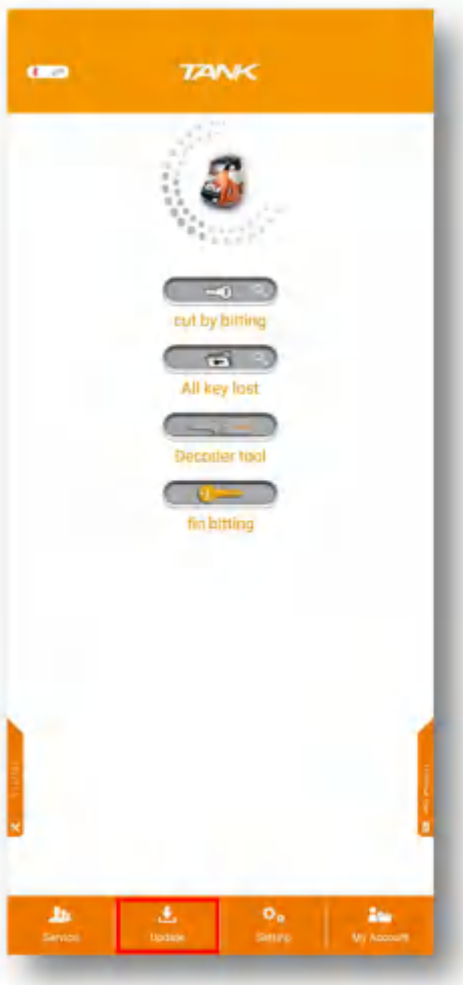
12-1 APP update





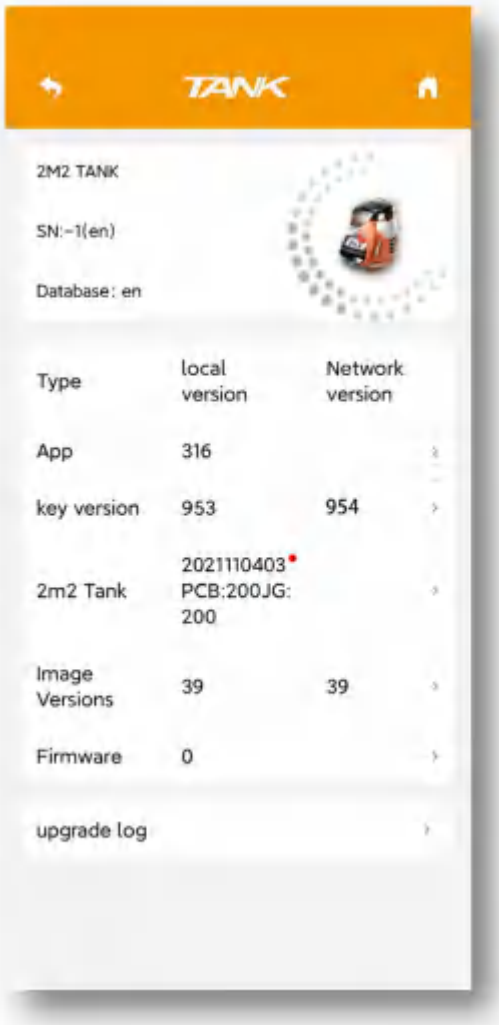
Click ‘update’.When APP version number has red point,please click it and update. If not,it’s not necessary to update it.

12-2 Update key database



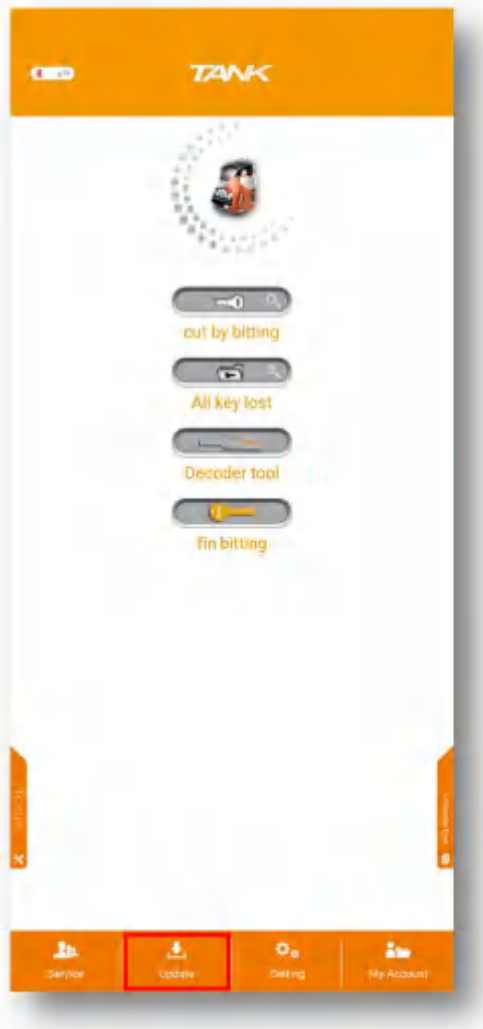
Click ‘update’. When the key version number has red point,please click it and update. If not,it’s not necessary to update it.

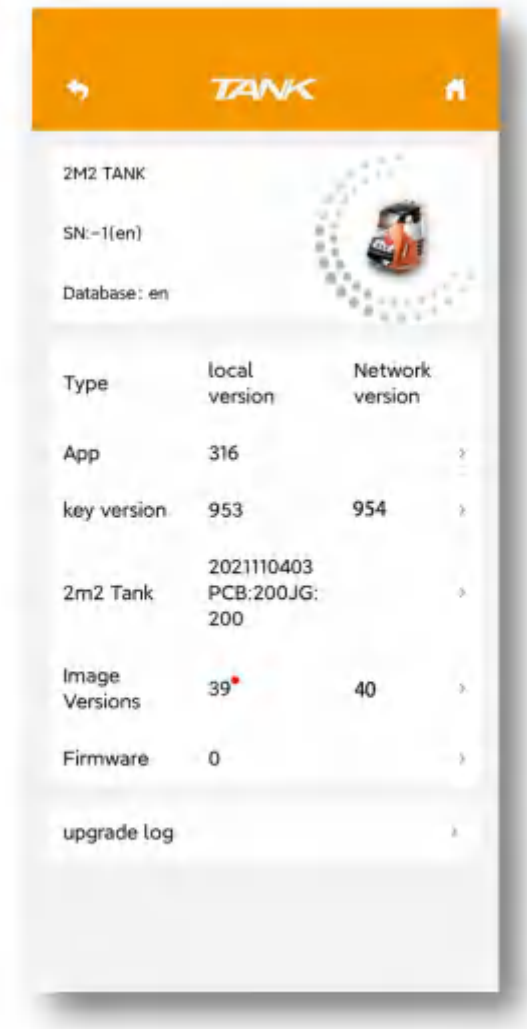
12-3 Firmware update



Click ‘update’. When 2m2 Tank series number has red point,please click it and update. If not,it’s not necessary to update it.

12-4 Update image





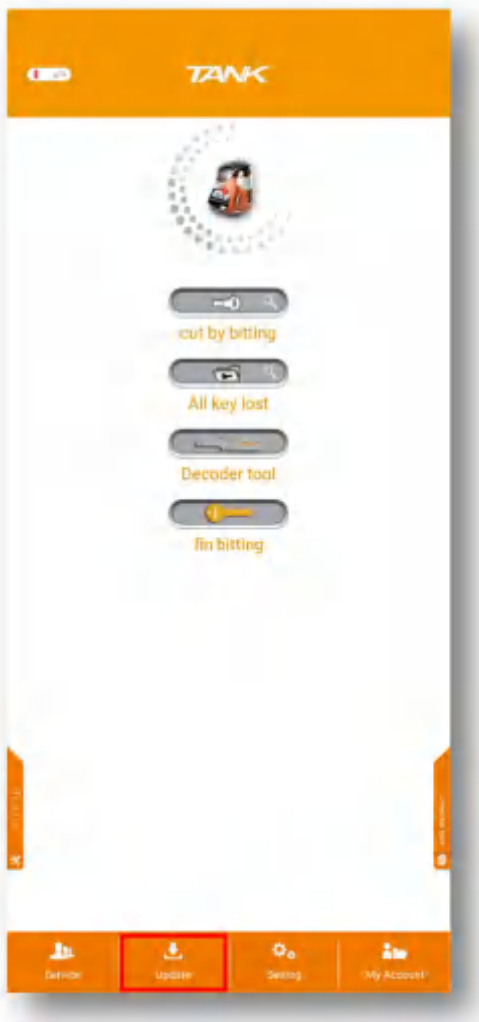
Click ‘update’. When image version has red point,please click it and update. If not, It’s not necessary to update.

12-5 Update operation view

Click ‘update’.When firmware series number has red point,please click it and update.

If not,it’s not necessary to update.

12-6 Update log



Click ‘update log’,and enter update information.

13、Maintenance

- Please clean the area around clamps with a brush before the machine starts to work.This is to assure cutting precision and avoid components damage by metal particles.
- To avoid damage or corrosion to the machine,please do not use detergent or other cleaning products to clean the machine.
- Please do not flush or wet the machine with water,in case rust and electrical current leakage.
- Under any circumstance,please do not try to clean the working area with air guns and drying machines,in case any metal carvings getting inside the machine.

14、Warranty

2M2 MagicTank has a warranty of 2 year for machine and battery.The warranty starts from the product that you received.

Within warranty,free maintenance and repairing is not provided if the machine becomes dysfunctional due to the following reasons:

- Operation without referring to or violating the user manual
- Modifications or repairs to the machine by individuals
- Falling,knocking or wrong voltage
- Force majeure
- Use of the machine in environment that are bad for the machine for a long time

Thanks for your reading,welcome to use 2M2 tank automatic key cutting machine.