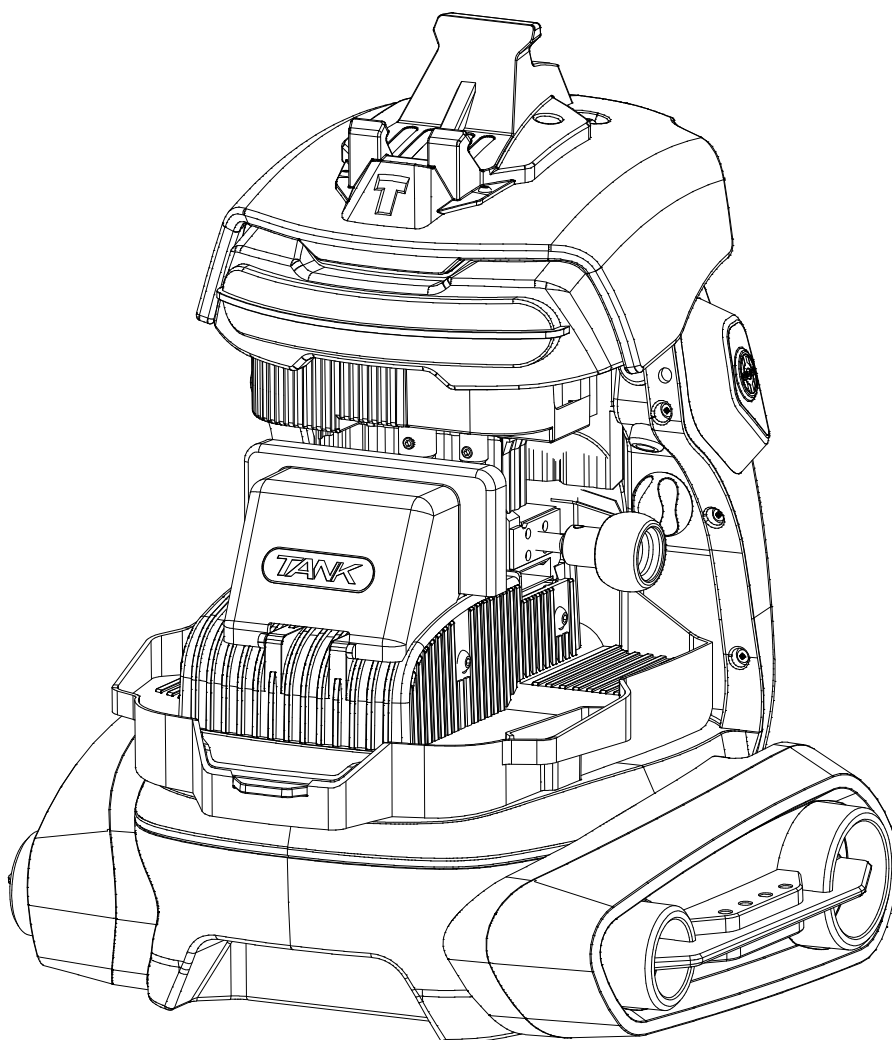




2M2[®]

TANK 2 PRO CNC KEY CUTTING MACHINE MANUAL



TANK 2 Pro

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1、SAFETY PRECAUTIONS AND WARNINGS

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.
- Please pay attention to the safe use of electricity: when using the machine, try to choose a socket with an earth wire.

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

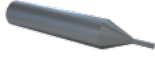
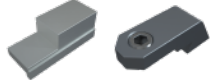
2-1 Machine description

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.

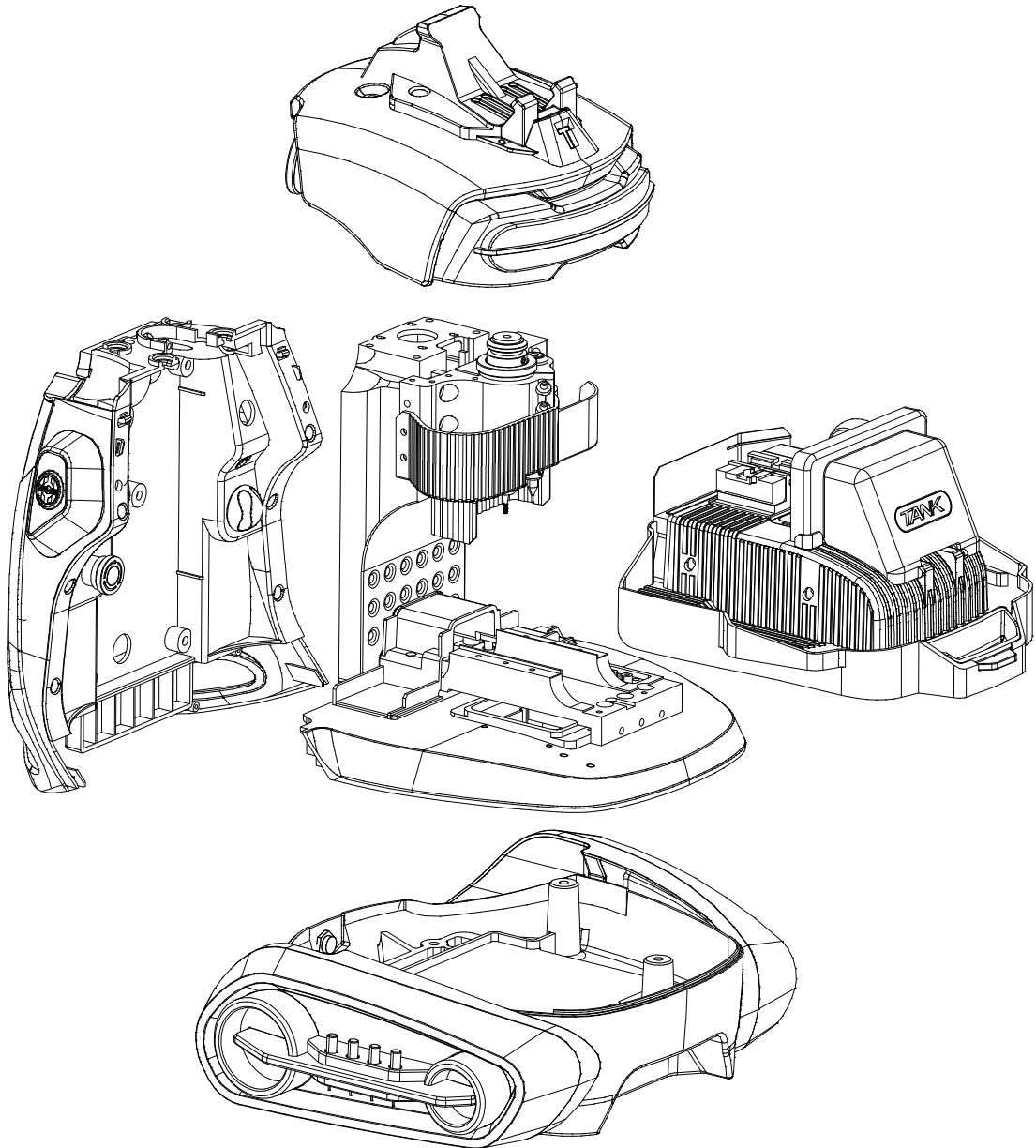
2-2 Machine characteristics

- Smart control and operation on APP and build-in database.
- Portability and build-in Lithium battery with a long battery life(optional).
- Equipped with C clamp(standard clamp),FO21 clamp(optional).
- Cutter and probe work in parallel.
- Aluminum structure.
- Imported ball screw with high precision.
- Cross rail with high rigidity.
- Supporting free online update.
- Operating in multiple languages(Currently available in English, Spanish, Portuguese, Farsi, German, French, Hebrew, Hindi, Indonesian, Italian, Korean, Polish, Russian, Vietnamese, Japanese and other languages).

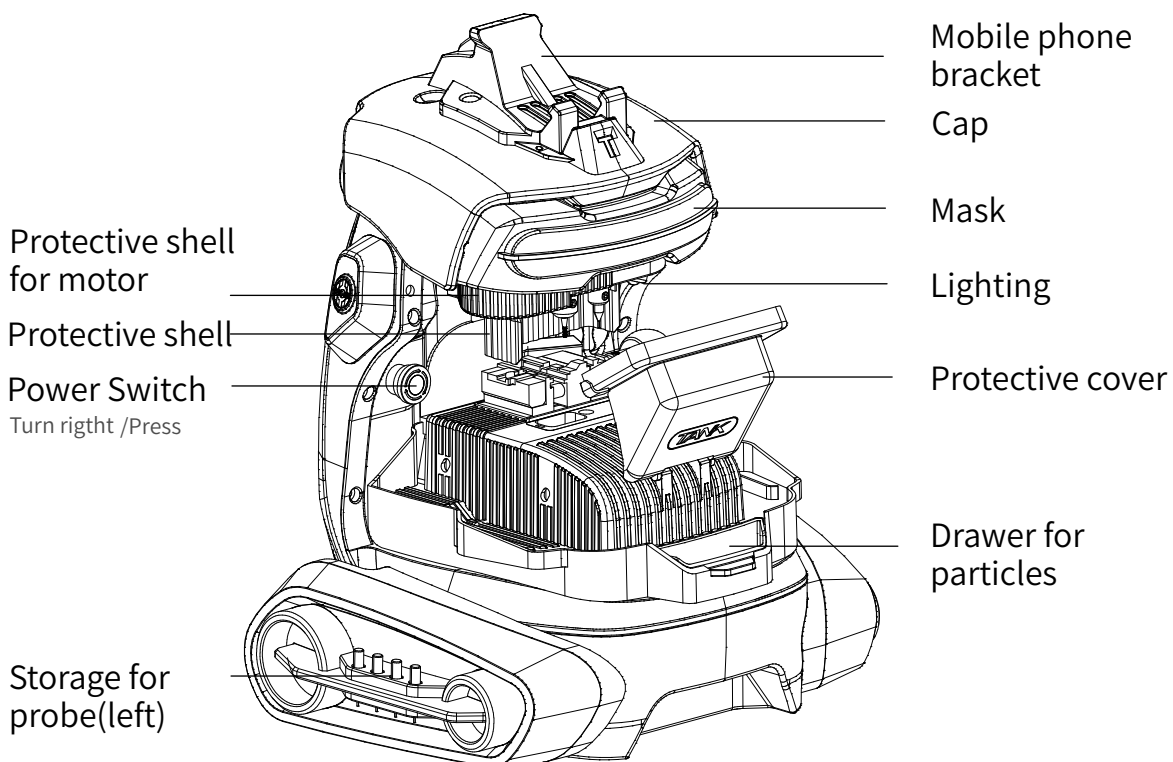
3. PACKAGING LIST

PICTURE * Subject to actual product	ACCESSORIES	QUANTITIES
	1.5 cutter 2.0 cutter	1 each
	Probe	3
	Power adapter Power cord	1
	Brush	1
	Blow	1
	Stopper Pressing tool	1 each
	Screw	2 each
	4.0mm Hexagon bar wrench	1
	2.0mm Hexagon bar wrench	1
	2.5mm Hexagon bar wrench	1
	Belt for motor	4
	S#	3
	T#	3
	L#	3
	Hon66#	1
	XYZ sensor	1 each

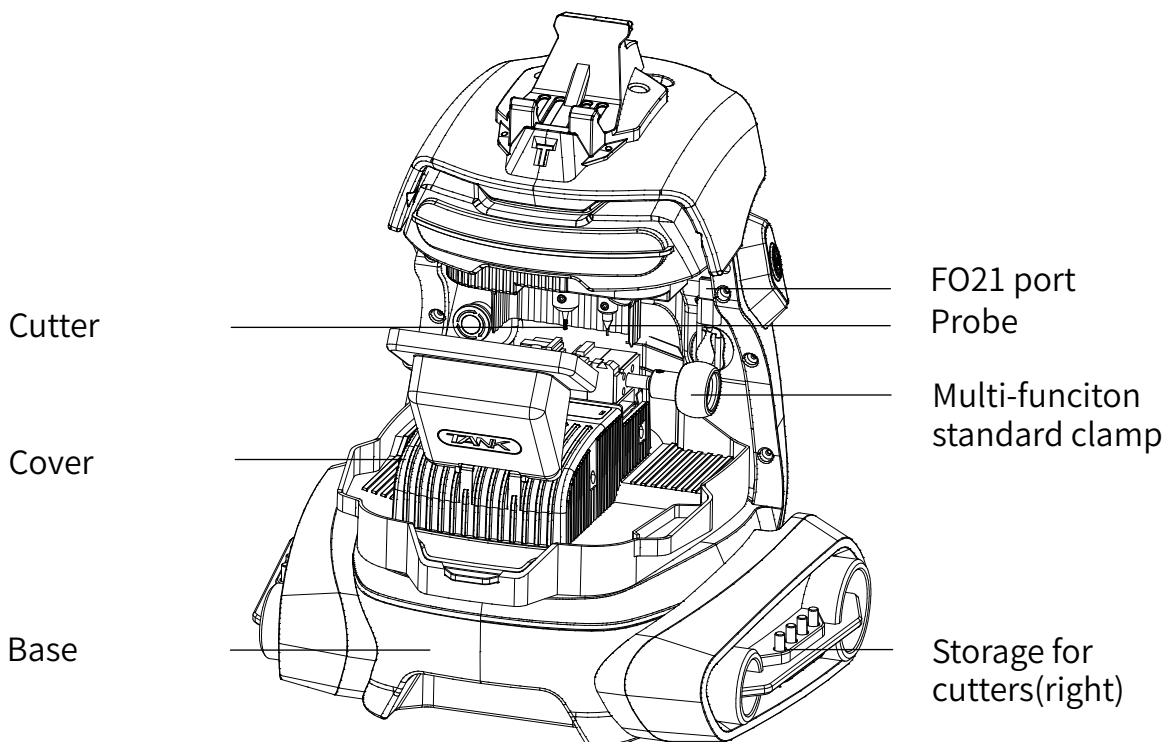
4-1、OVERVIEW

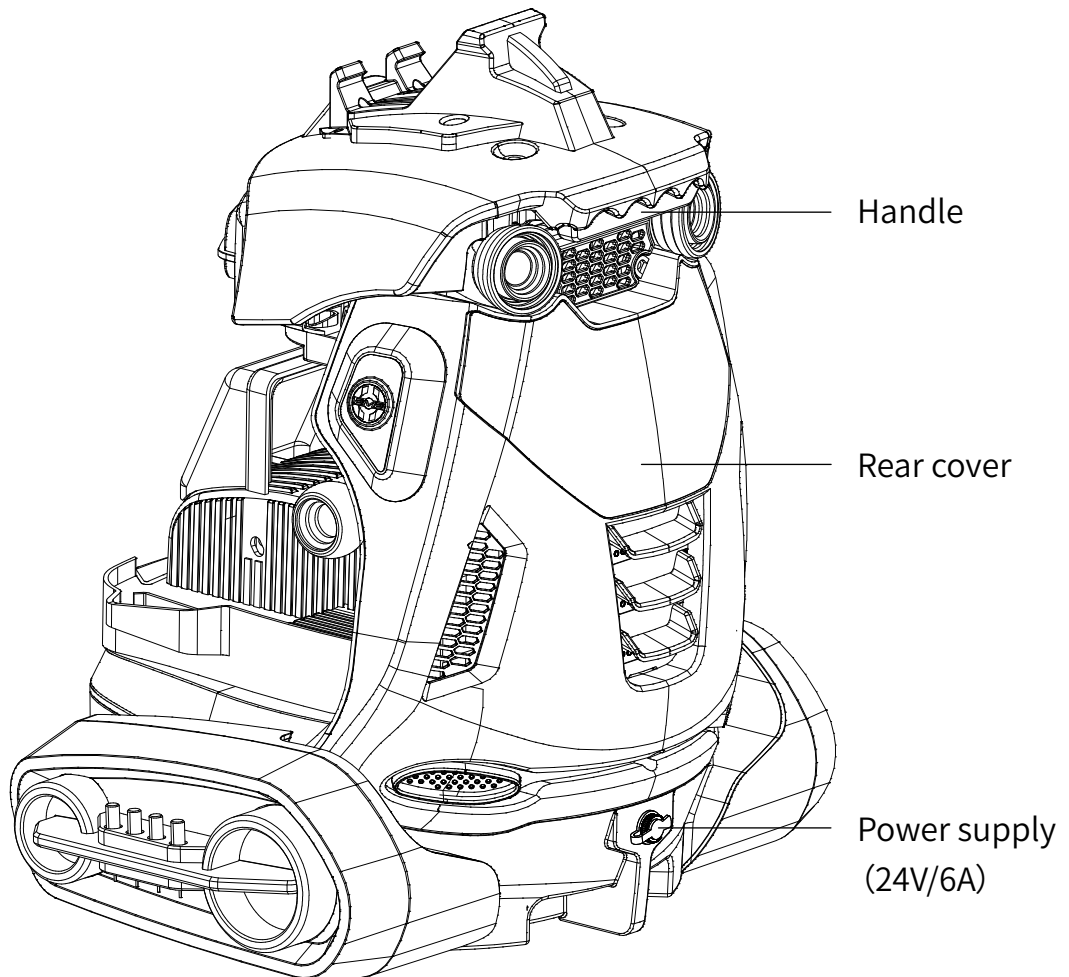


4-2、PART NAME



(Battery and FO21 fixture are optional)





4-3、SPECIFICATION

Input voltage	100-240V AC
Input frequency	50-60Hz
Power	144W
Power parameter	24V DC/6A
Battery capacity (optional)	8000mAh
Principal axis rotation speed	10000rpm
Working temperature	-20°C-50°C
Humidity	10-90%
Net weight	13KG
Gross weight	16.5KG
Machine size	36cm*27cm*41cm
Package size	43cm*35cm*45cm

4-4、SOFTWARE OVERVIEW

4-4-1 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

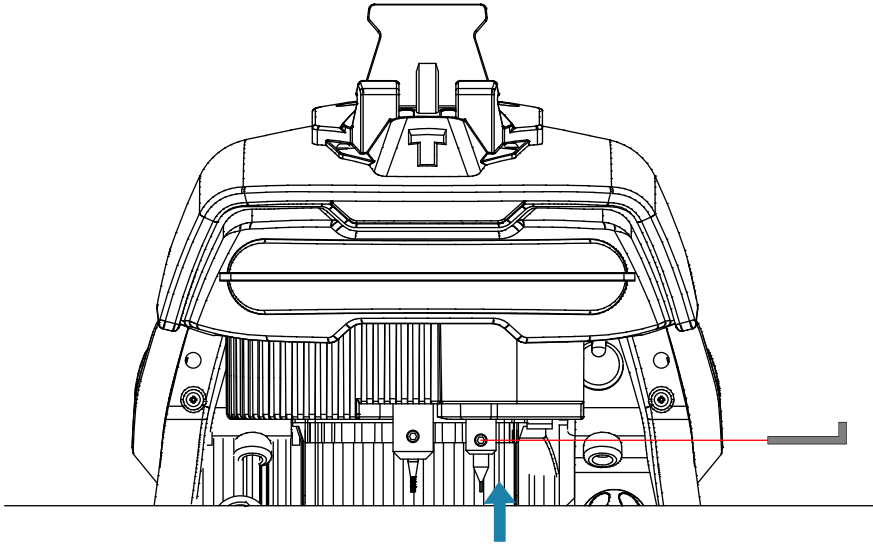
4-4-2 Smart phone operation system

- Android: Android 5.0 and above version
- iOS: iOS 12.0 and above version

4-4-3 Software update

- Online update on APP

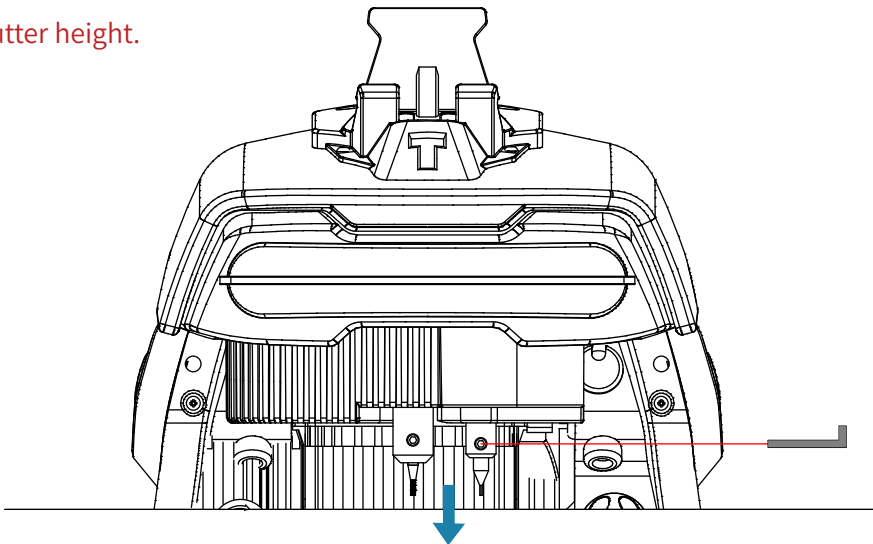
5、INSTALLATION INSTRUCTION



5-1 Cutter and probe installation:

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

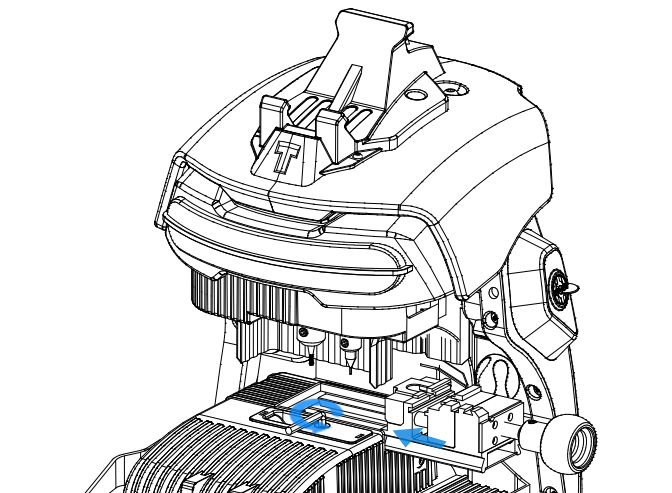
Notes: when pushing both cutter and probe onto the top, probe Height is higher than cutter height.



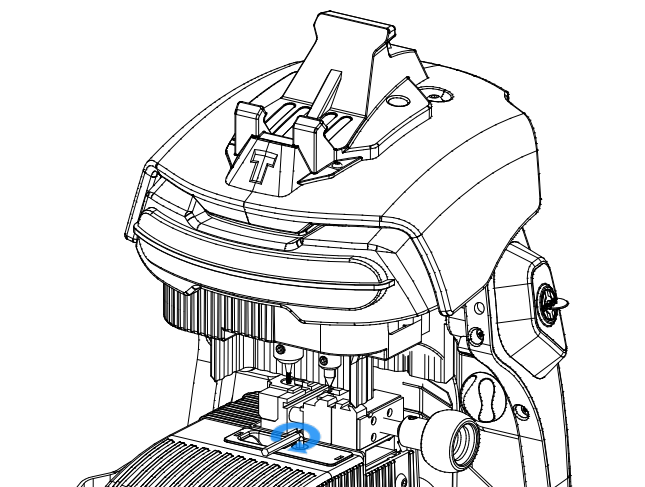
5-2 Cutter and probe uninstallation:

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



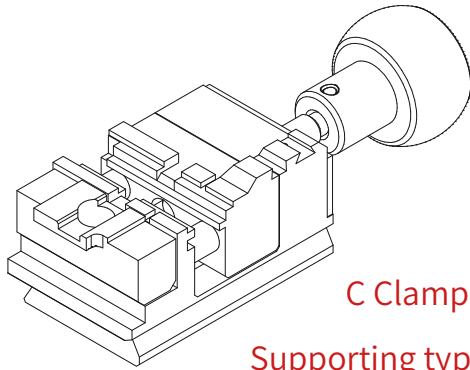
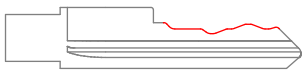
Picture 2

Installation steps:

Unscrew the lock for the clamp, insert the clamp along the rail depend on the arrow (picture 1).

and then use 4mm hexagon bar wrench to screw the lock (picture 2).

5-4, PICTURES OF CLAMP



Standard key



Flat key



Inner groove key 2 tracks



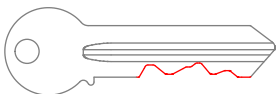
Inner groove key 4 tracks



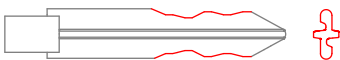
Sided groove key 2 tracks



Sided groove key 4 tracks



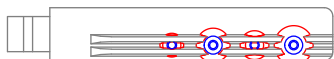
Standard key



Crucifix key



Snake key

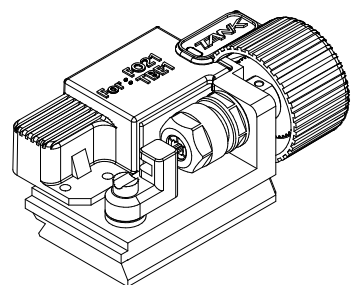


Dimple key



Dimple key

F Clamp (FO21/TBE1)

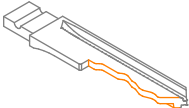
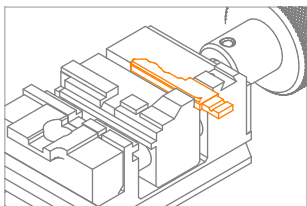
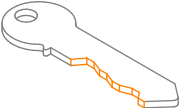
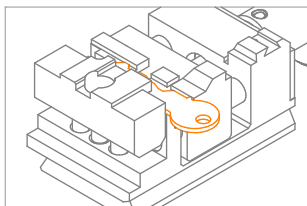
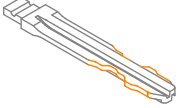
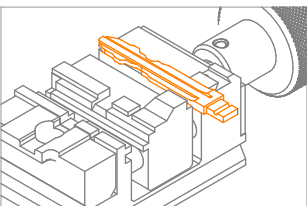
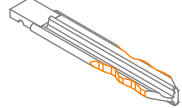
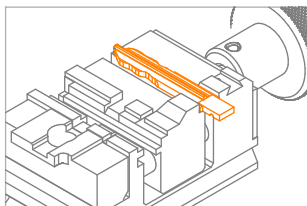
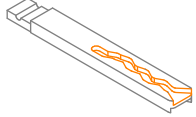
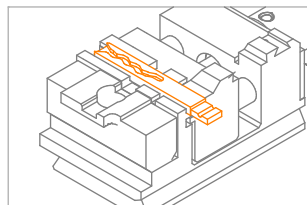
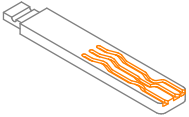
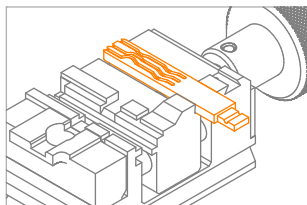
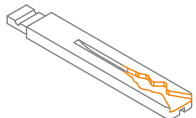
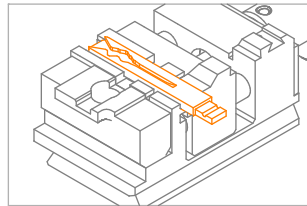
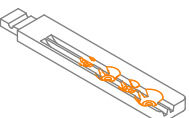
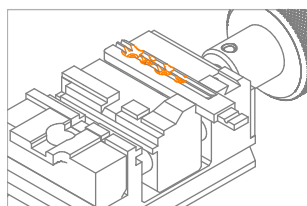
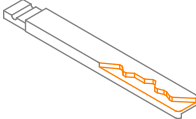
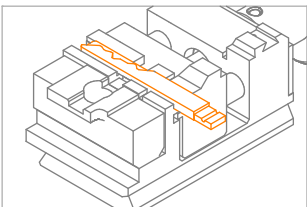
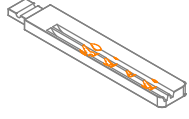
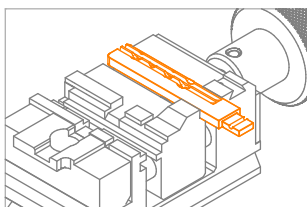
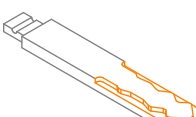
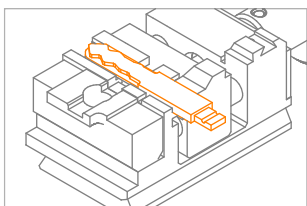
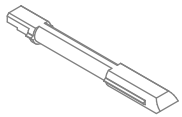
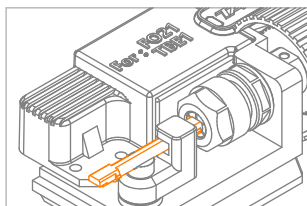


Supporting types:



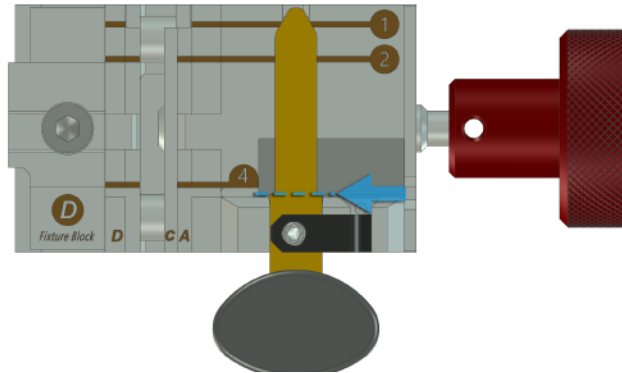
FO21/TBE1

5-5、FIXTURE GUIDE

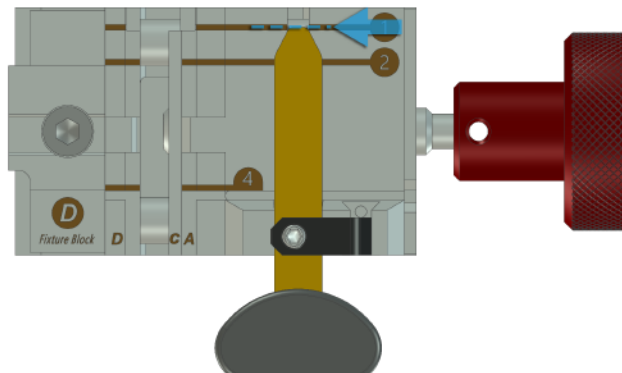
Key types	Clamping method	Key types	Clamping method
Standard key 		Standard key 	
Flat key 		Crucifix key 	
Inner groove key 2 tracks 		Snake key 	
Inner groove key 4 tracks 		Dimple key 	
Sided groove key 2 tracks 		Dimple key 	
Sided groove key 4 tracks 		FO21/TBE1 	

6、KEY INSTALLATION

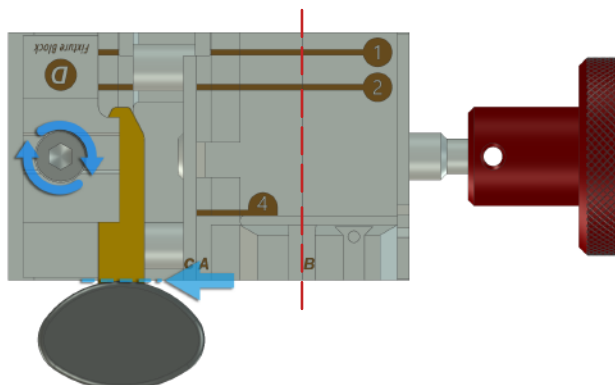
Flat key(with shoulder):
use stopper to against the shoulder and install the key on the right.



Flat key:
Align the key with the 1st line. pay attention, please ignore it if the key is too short to reach the first line.

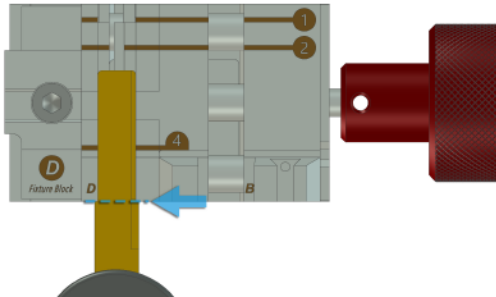


Standard key: Please operate depending on the guide picture.



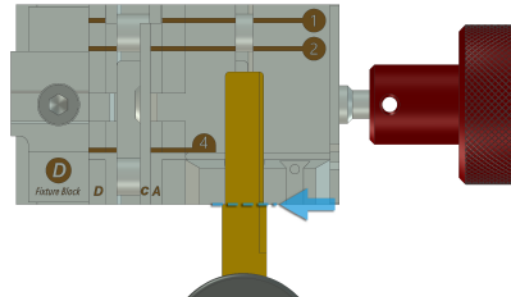
Laser key(with shoulder):

Please install the key shoulder against the clamp, such as HU66/SIP22.



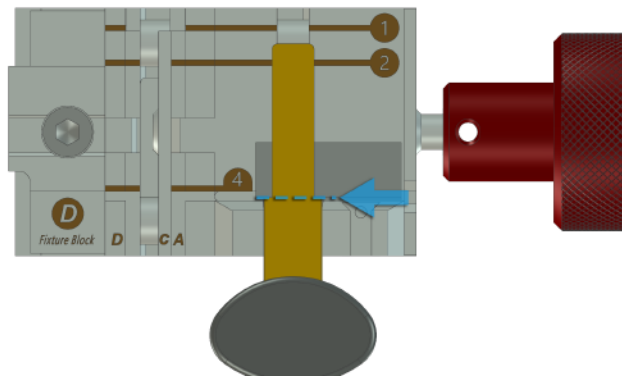
Special installation:

install HU66 on the right, put key shoulder against the clamp.



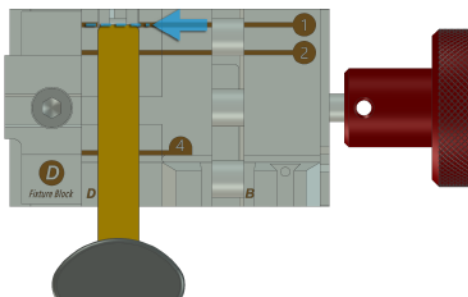
Thin laser key(with shoulder)(thickness <2.8mm):

install the key on the right, put key shoulder against the clamp.



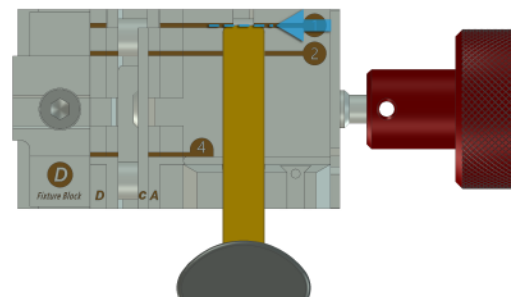
Laser key:

please align the key tip with the 1st line, please try the best if the key is too short to reach the 1st line.



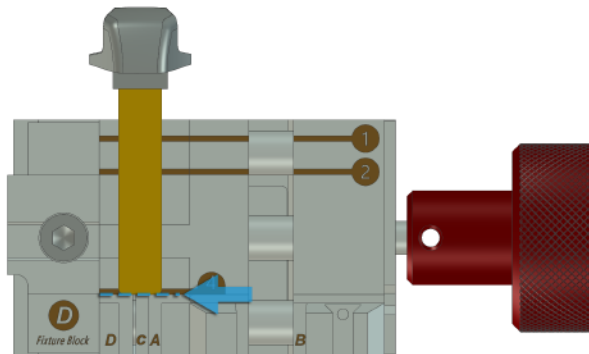
Special installation:

if the key has lateral groove or the tip chamfer, please install the key on the right depending on the reminder.



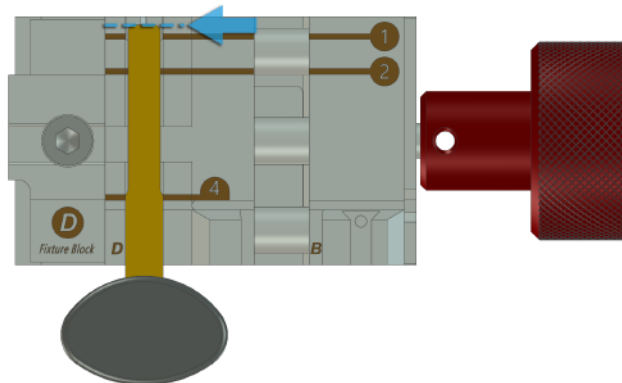
Smart key:

please install the key depending on the picture and align the tip with the 4th line.

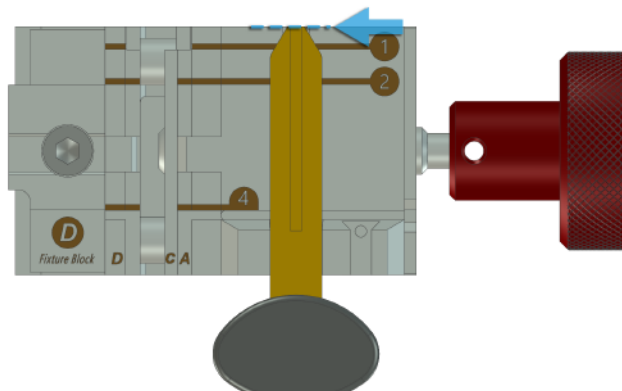


HU101 special installation:

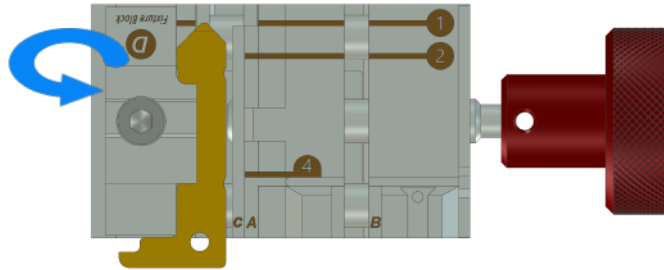
The key tip must overpass the 1st line and stay between 1st and 2nd line.



The key tip of HON77 must align with the edge of the clamp depending on the picture. It can not be cut if the key is too short to reach it.

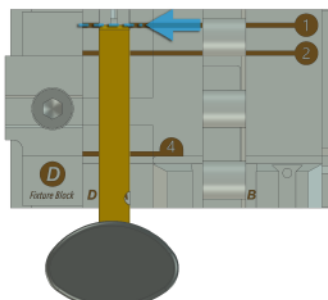


Part D: install the key depending on the guide picture.

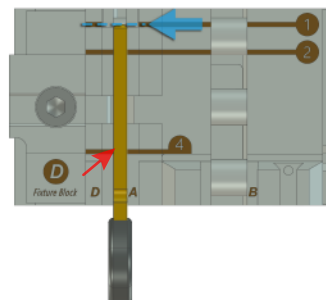


HU162T key:

install the key(side A) and align the tip with 1st line. The key has a groove on the side B, please ignore if the key is too short to reach the 1st line.

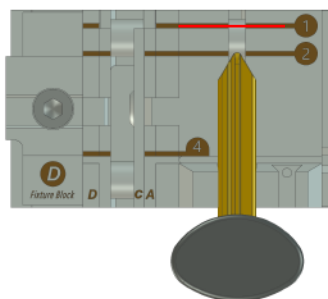
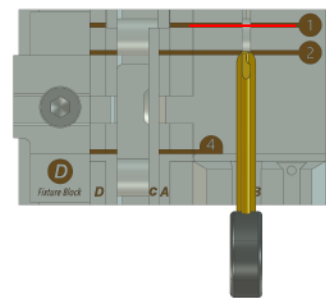


A-side



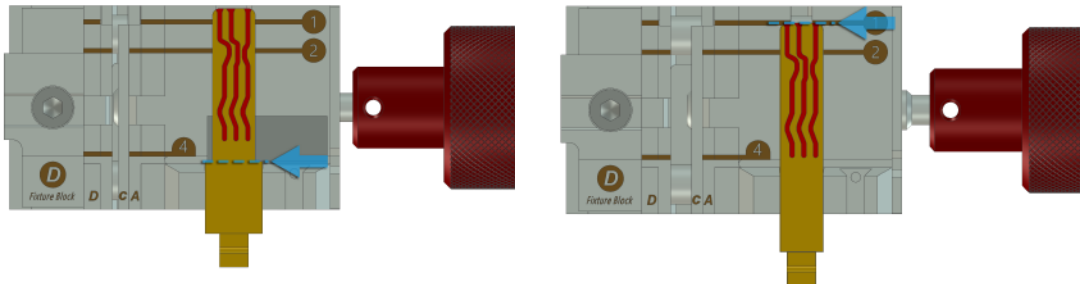
B-side

Crucifix key: Please align the tip with the 2nd line.

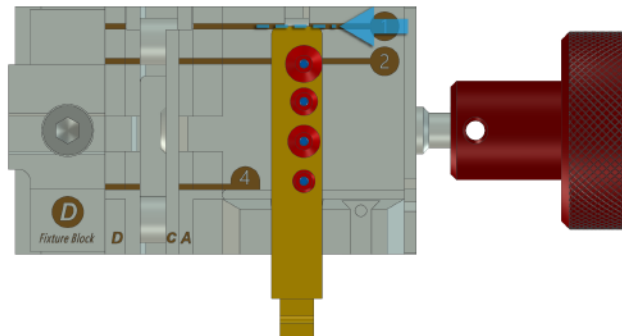


Snake key:

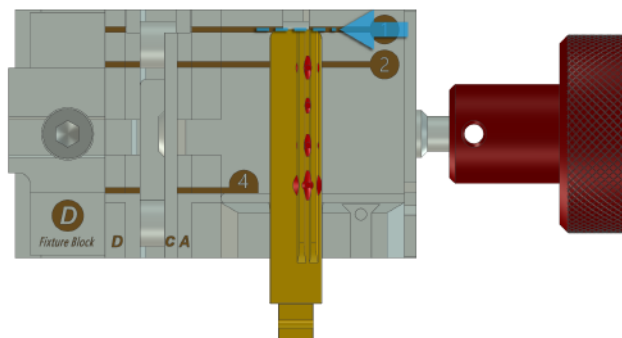
If it's the key with shoulder, please use the stopper to be against the shoulder, if not, please align the tip with the 1st line.



Dimple key: Please align the tip with the 1st line.

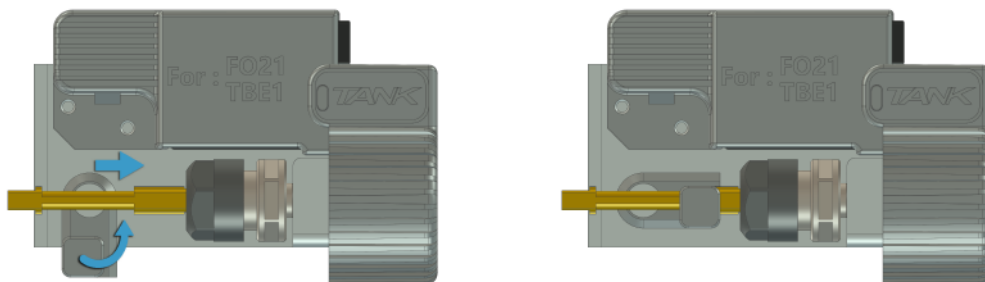


Dimple key: Please install the key on the right and align the tip with the 1st line.



FO21/TBE1:

Please insert the key till the end and use the small tool to keep the key balance.



Please install the key depending on the guide picture:

The key has to align the tip with the 1st line (if the key is not long enough, it may not reach the 1st line, the machine can look for the tip automatically). If it's the key with shoulder, it has to align the shoulder with the 4th line. Please use the stopper to locate the shoulder. But Hu66 & SIP22 has to use shoulder to be against the clamp (depending on guide picture), all flat key has to be installed on the right.

Special installation:

1. HU101 has to overpass the 1st line, HON77 has to align with the edge of the clamp depending on the picture.
2. If selecting key duplication, some of laser keys should be installed on the right (depending on guide picture), VA2 should be installed depending on guide picture.
3. Some of smart keys should be installed on the other side and select 'the 2nd side' (depending on guide picture).

7、OPERATION INSTRUCTIONS ON APP

7-1、How to download the Tank APP?

Scan QR code

App Store

Search ' MagicTank ' in App Store for iPhone .

MagicTank

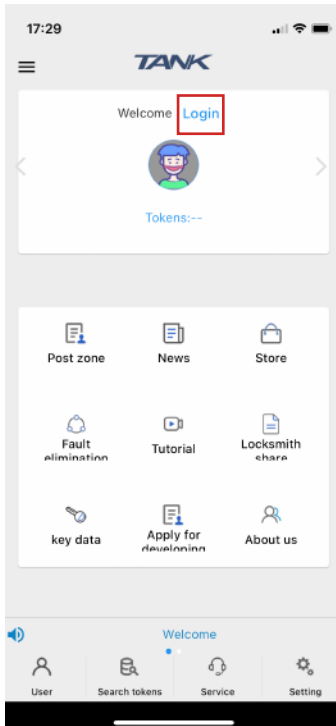
Google Play

Search ' MagicTank ' on Google Play.

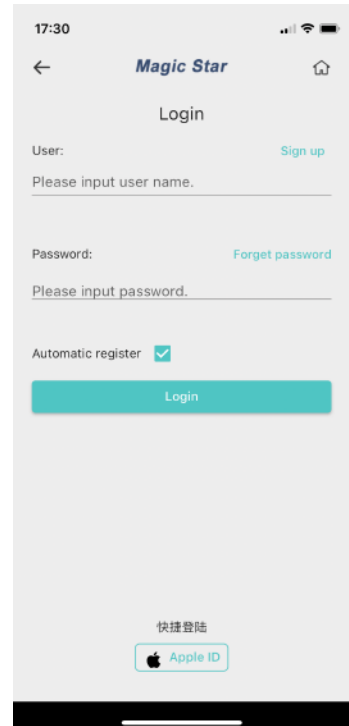
MagicTank

7-2、How to sign up ?

1.Please register

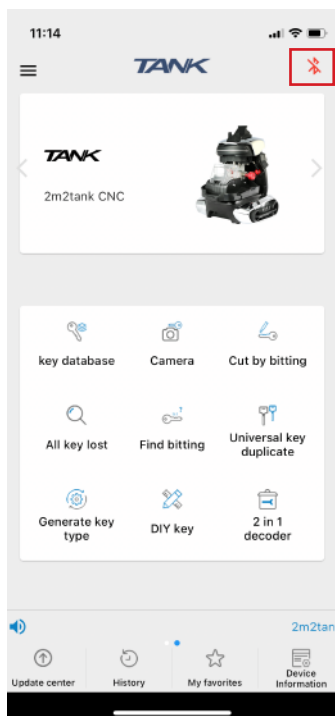
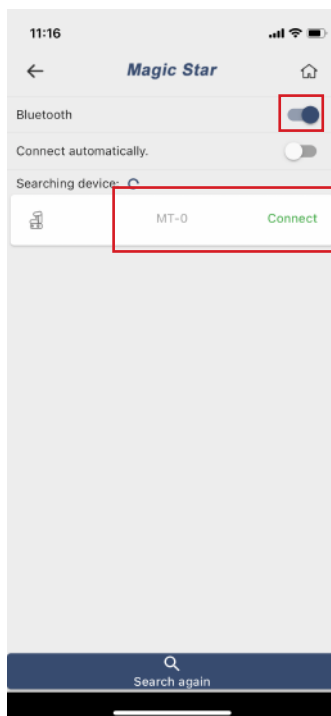
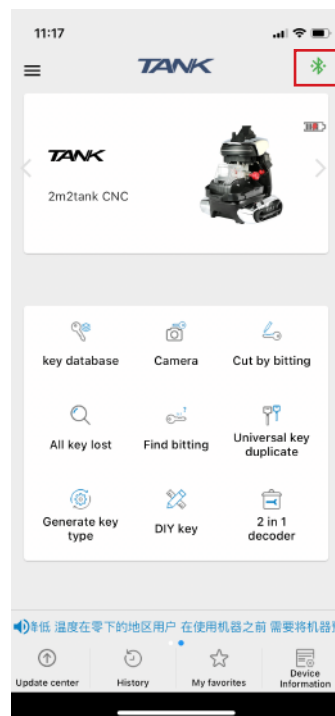


2.Please sign up via phone number.



7-3、Bluetooth connection

1. Click bluetooth logo.
2. Click bluetooth switch and then click series number.
3. Connection is ok.



7-4、Height level adjustmen. (*Required calibration after receiving a new machine.)

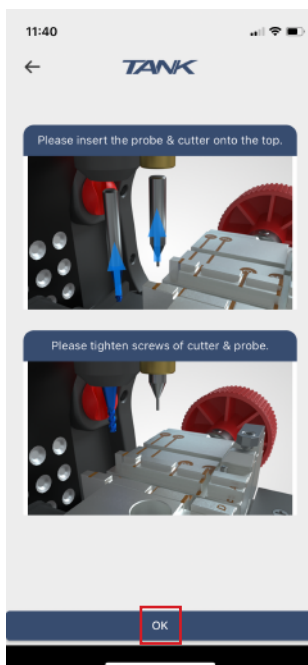
1. Enter 2M2 TANK APP and click ‘Device information’.



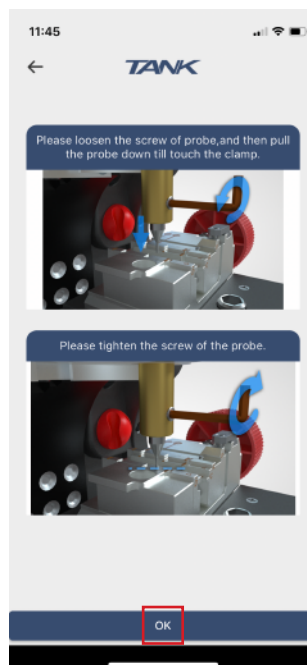
2. Click ‘change cutter & probe’.



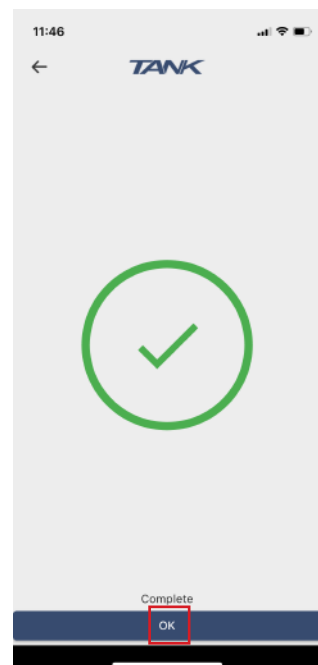
3. Installation and then click “OK”.



4. Loosen off the screw until it touches the clamp.

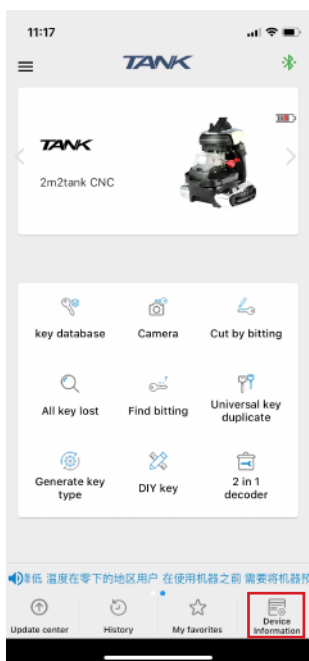


5. click “OK”.



7-5 、Clamp calibration (*Required calibration after receiving a new machine.)

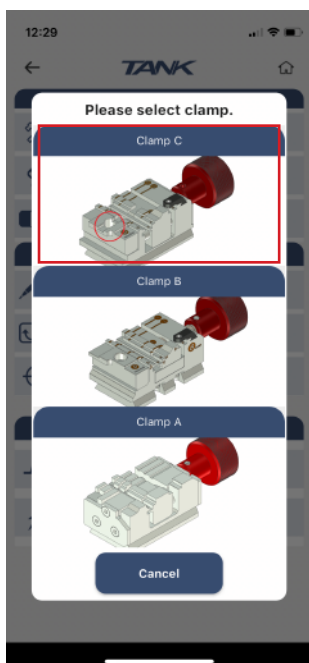
1.Enter 2M2 TANK interface,click“settings”.



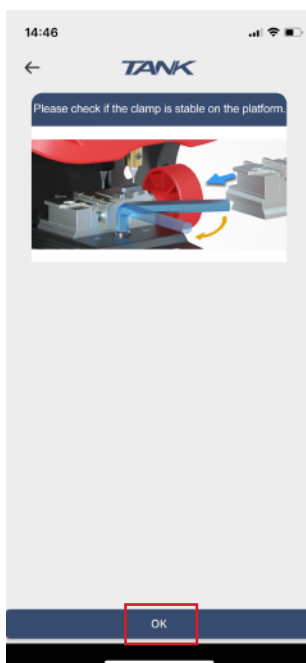
2.Click“clamp options”



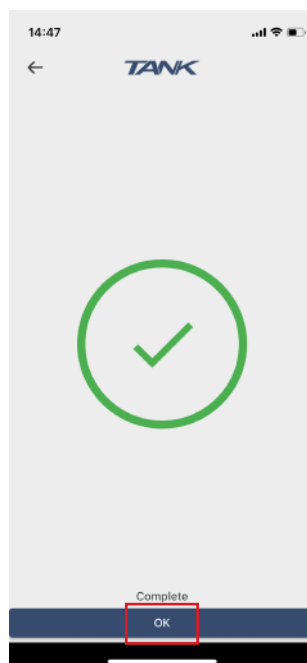
3.Select clamp depend on your current clamp”.



4.Please check the clamps for looseness.

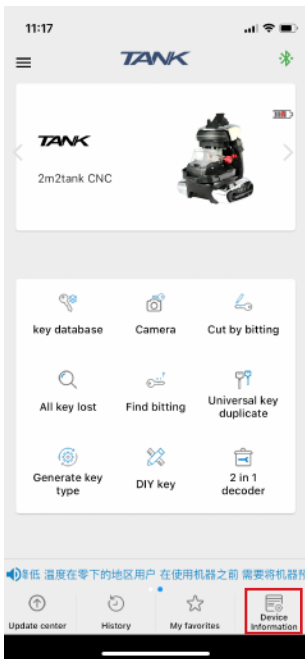


5.click“OK”.

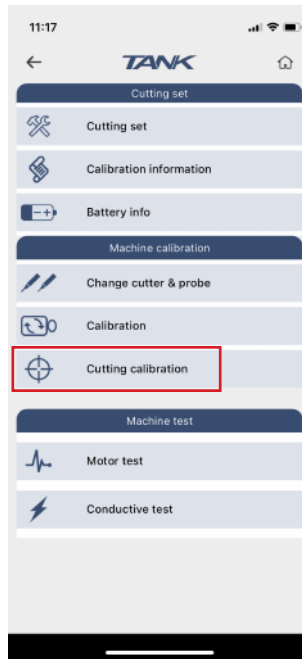


7-6、Cutting calibration (*Required calibration after receiving a new machine.)

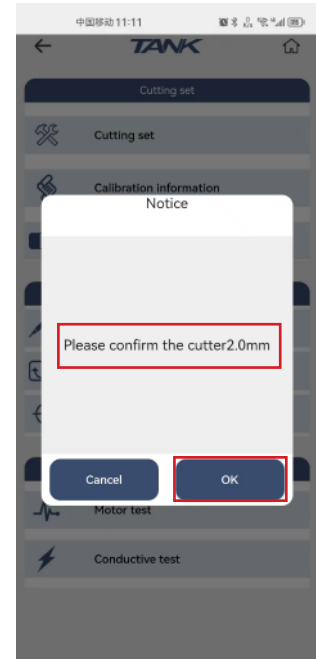
1.Click“settings”.



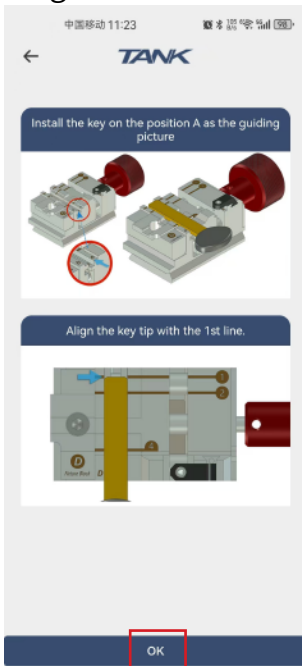
2.Click“Cutting calibration”



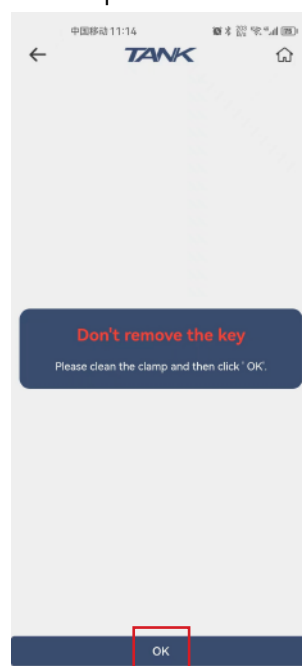
3.Please confirm the cutter 2.0mm --ok.



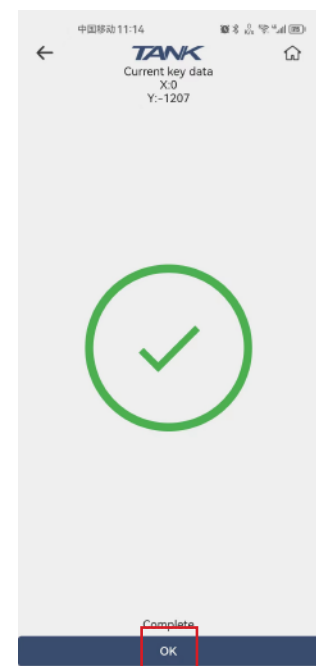
4.Install HON66 key blank (25#) on the left (pay attention, the tip has to be aligned with the first line).



5.Clean the particles and click “OK”
(The key continues to be clamped in the fixture)

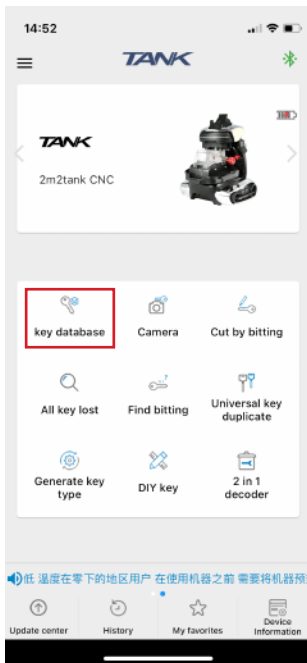


6.click“OK”.

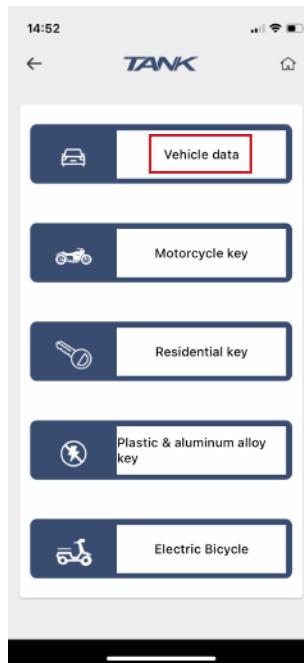


8、How to use 'Key database' ? (Buick as sample)

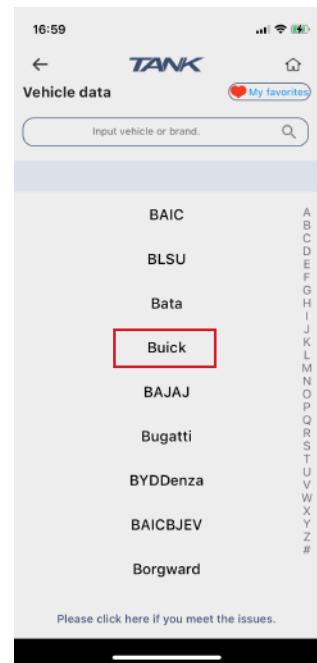
1.Click 'Key database'.



2.vehicle data



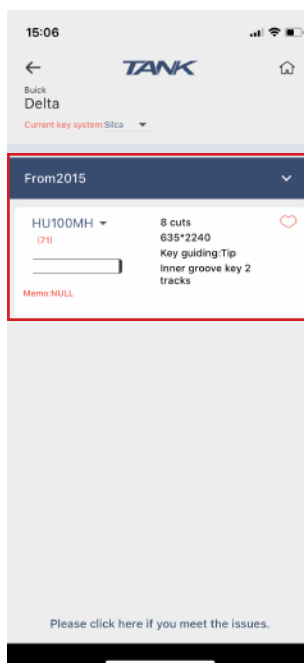
3.Select Model - Buick



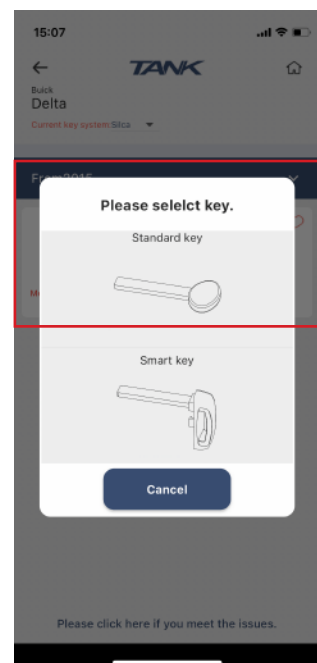
4.Choose a car - Delta



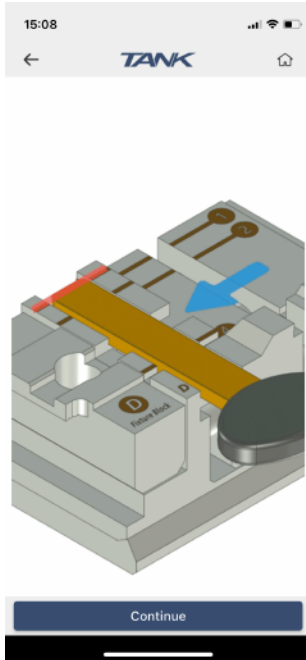
5.Selection process HU100



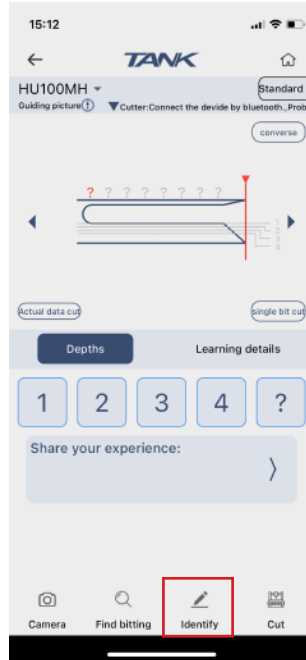
6.Select key type
(See if the key needs to be counter-clamped)



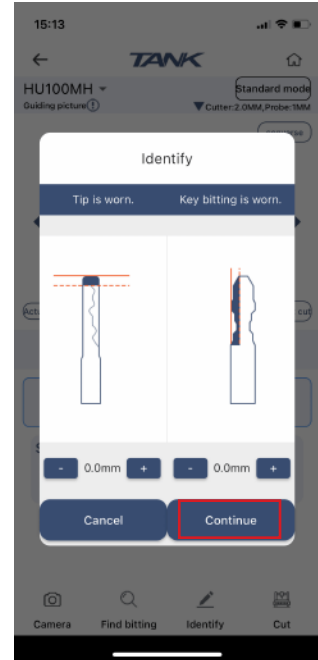
7. Install the key on the left (pay attention, please align the tip with the 1st line).



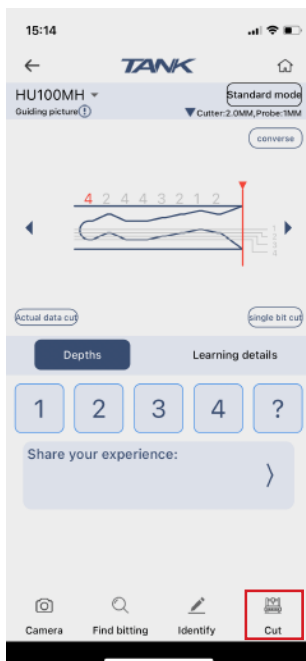
8. Click “Identify”



9. Click ‘Continue’

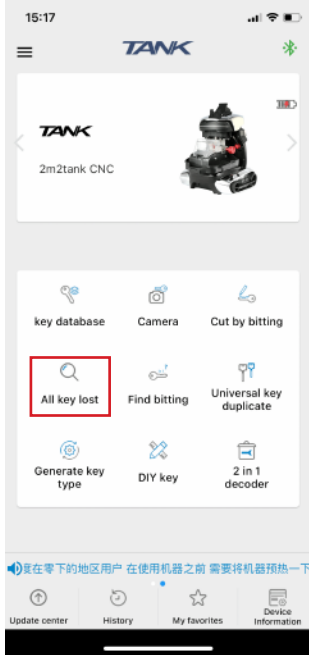


10. Click “cut”.



9. How to use all key lost (Toyota as sample)

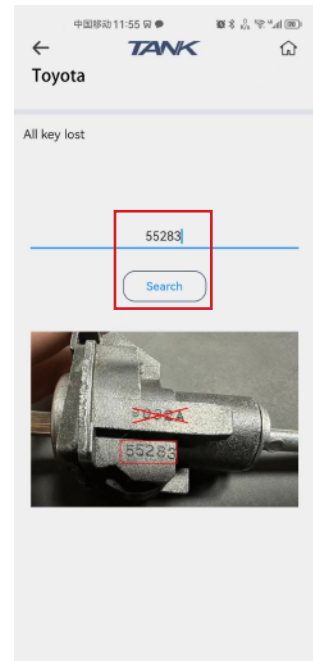
1. Enter 2M2 TANK APP and click 'All key lost'



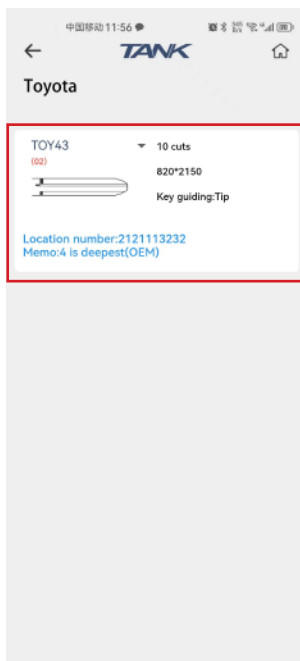
2. Select Model - Toyota



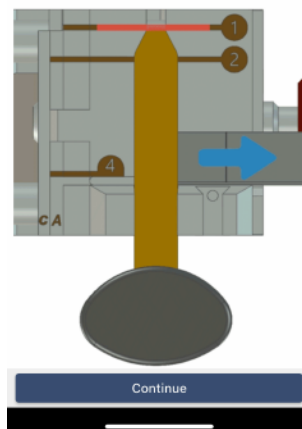
3. Input 'lock number' - Search.



4. Selection process



5. Install the key on the right (pay attention, please align the tip with the 1st line).

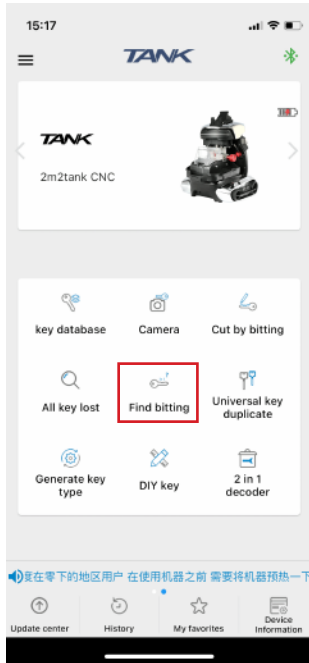


6. Click "cut".

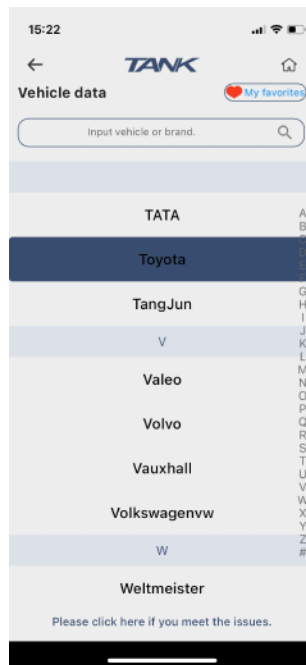


10、How to use 'Find biting' ? (Toyota as sample)

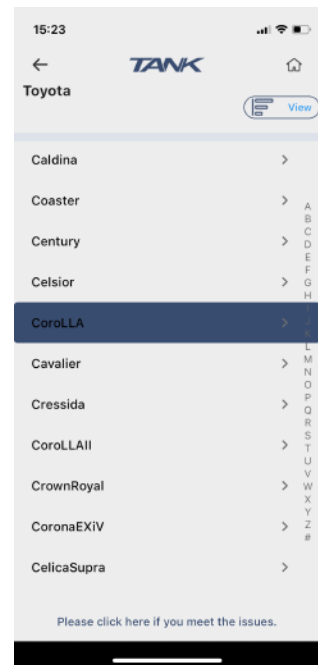
1.Enter 2M2 TANK APP and click 'Find biting'



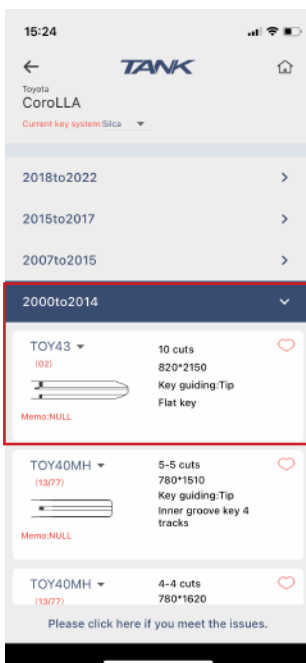
2.Select Model - Toyota



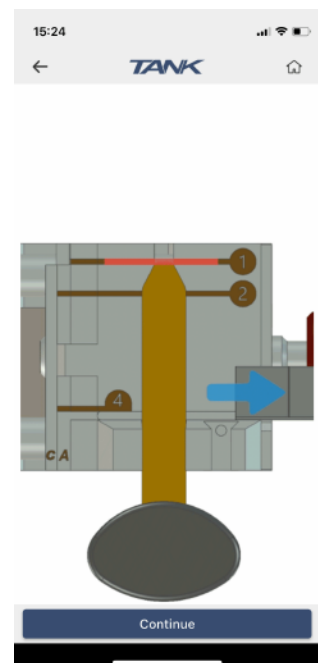
3.Choose a car series-Corolla



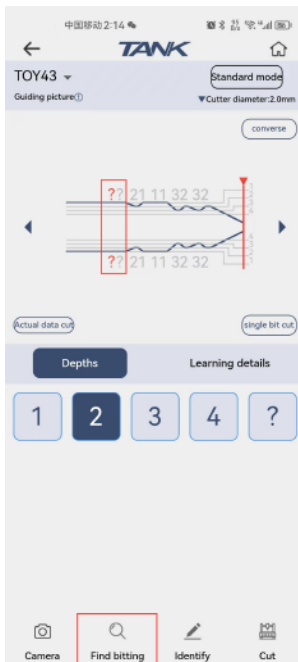
4.Select year 2000-2014
TOY43.



5.Install the key on the right
(pay attention,please align
the tip with the 1st line).



6. Input door biting and then click 'Find biting' .

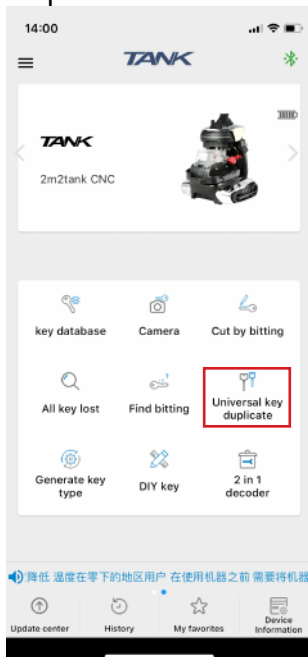


7. If key biting appear, and then cut it one by one.

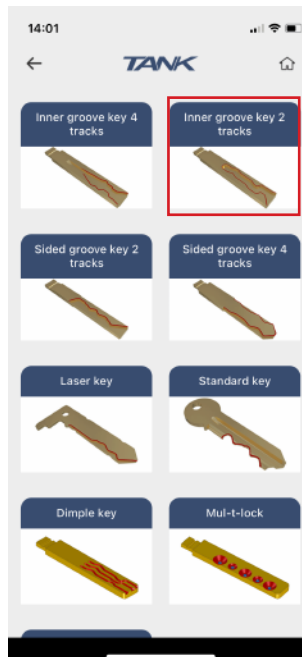


11. How to use 'universal key duplicate' ? (Inner groove key 2 tracks as sample)

1. click 'Universal key duplicate'



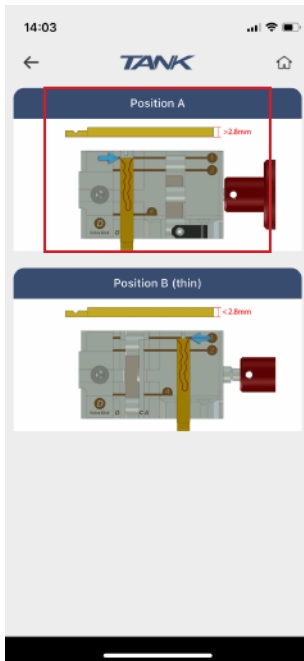
2. Select key type



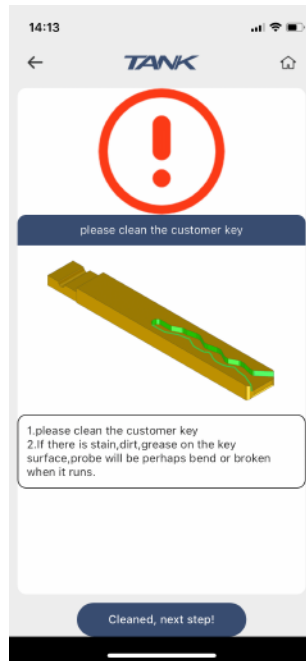
3. Select Alignment



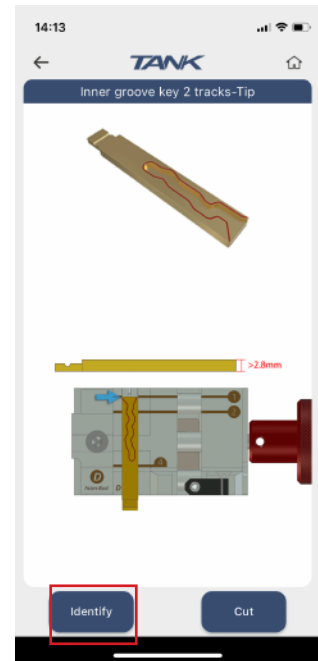
4. Please select depending on the thickness of the key.



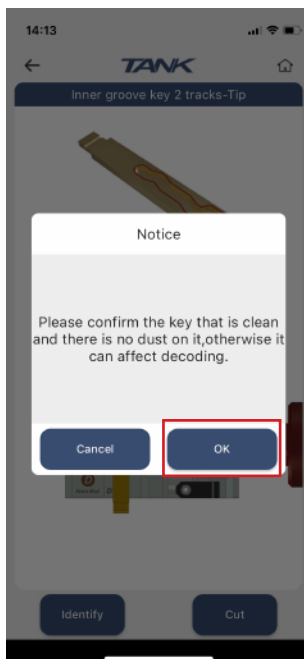
5. After cleaning the key - next step.



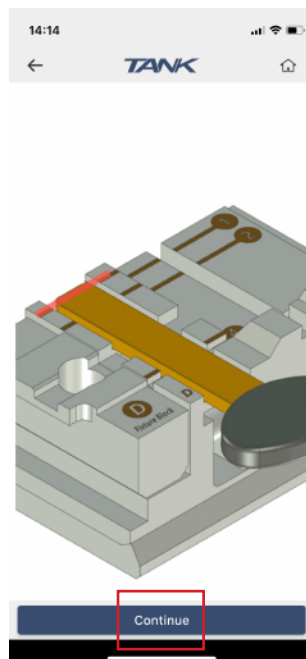
6. click 'identify'.



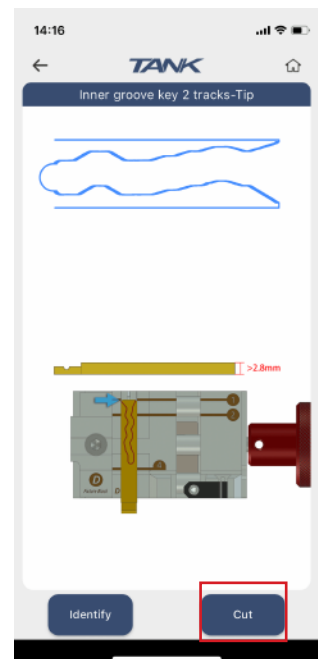
7. OK



8. Install the key on the left (pay attention, please align the tip with the 1st line).



9. cut

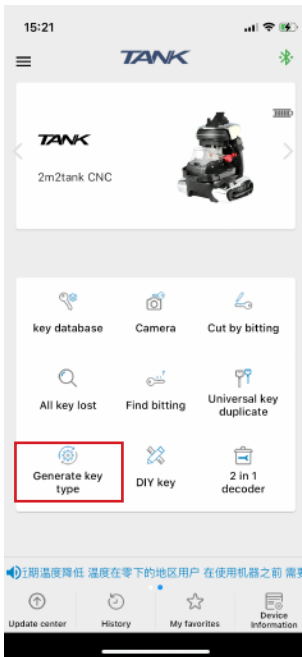
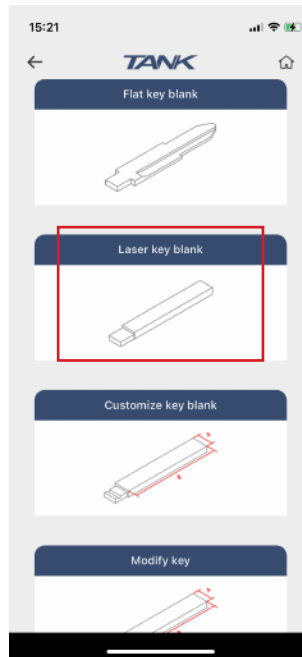
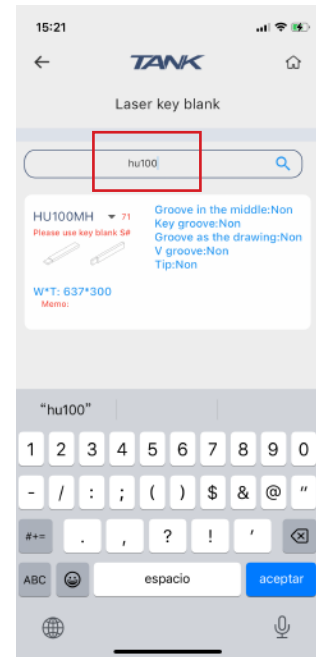


12、How to use generate key type?

12-1、Generate key type (HU100 as sample)

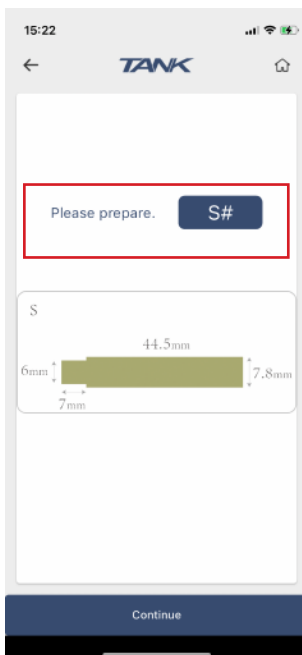
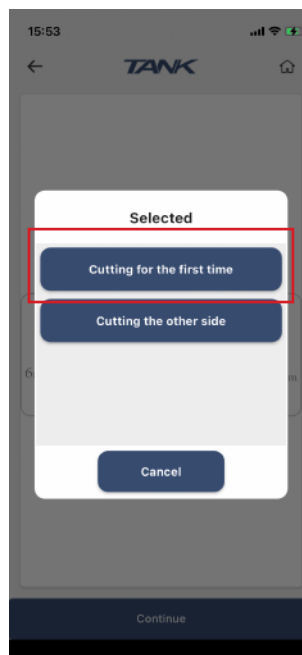
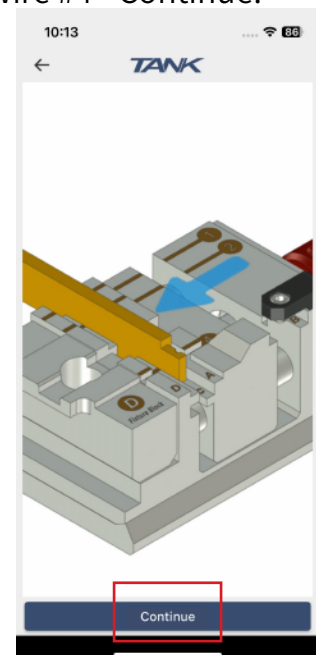
1.Click 'generate key type' . 2. 'Laser key blank'

3.Enter the key you want to make HU100 and select the programme.



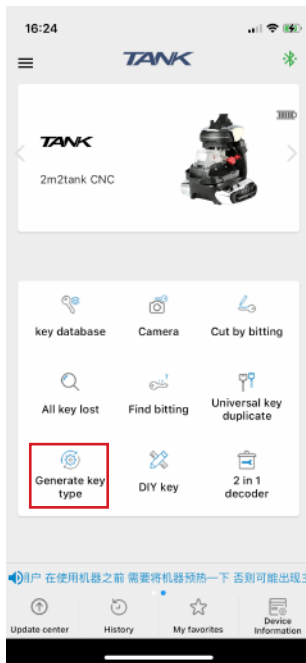
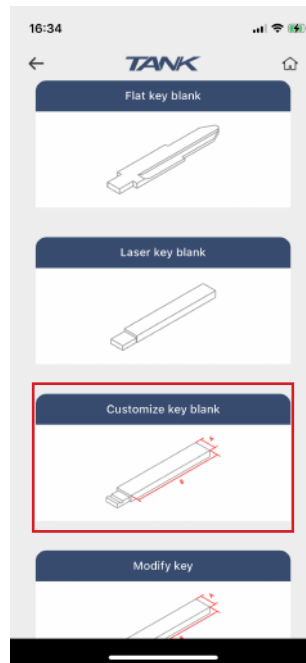
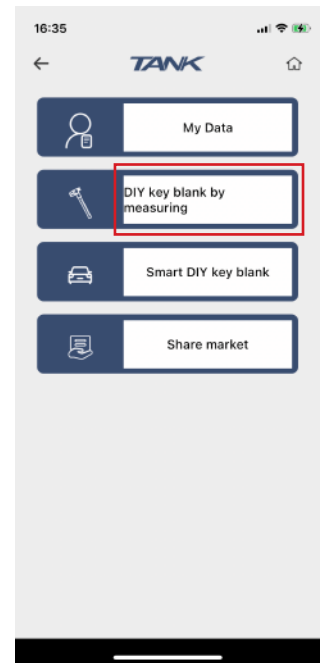
4. Select 'key blank S#' 5.cutting for the first time

6.Place the key in the C-clamp block and align the end of the key with wire #4 - Continue.



12-2、How to DIY key blank?(HU66 as sample)

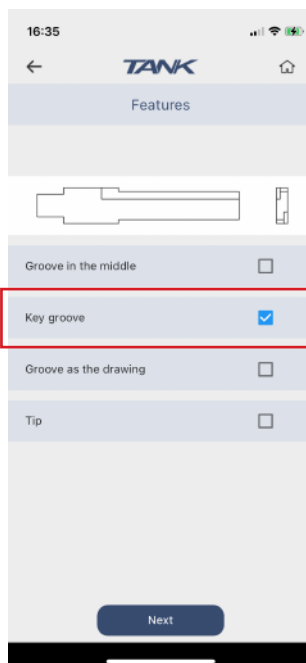
1.Click' Generate key type. 2.Customize key blank' . 3. Selecting measurements to create a model.



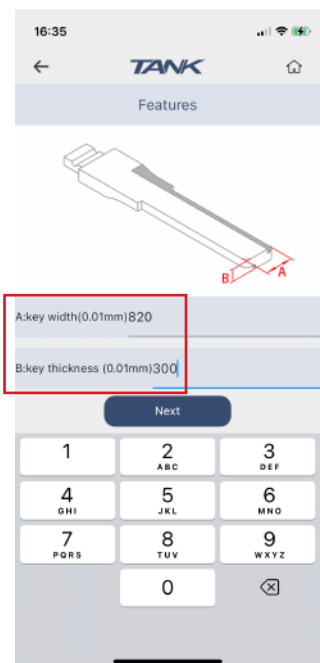
4.Select Positioning Type



5.Selection of upper edge grooves



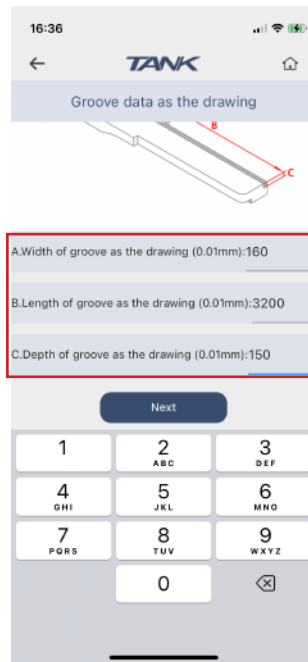
6.Fill in the data - Next



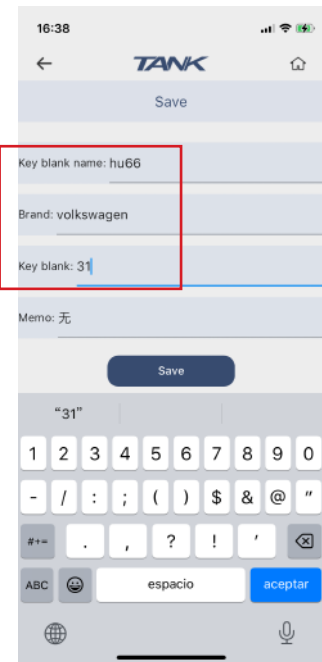
7.Fill in the data - Next



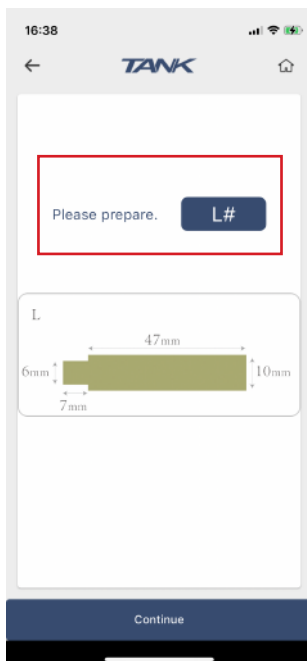
8.Fill in the data - Next



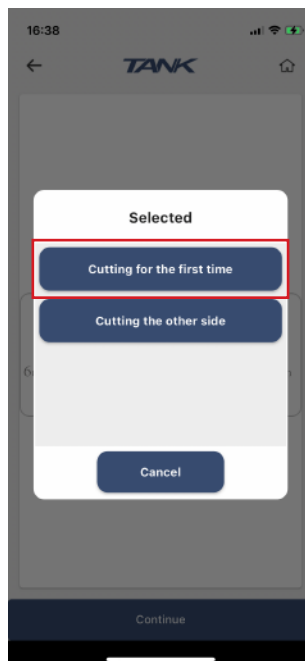
9.Fill in the name - brand - click save
(Save and choose whether to exit or continue as needed)



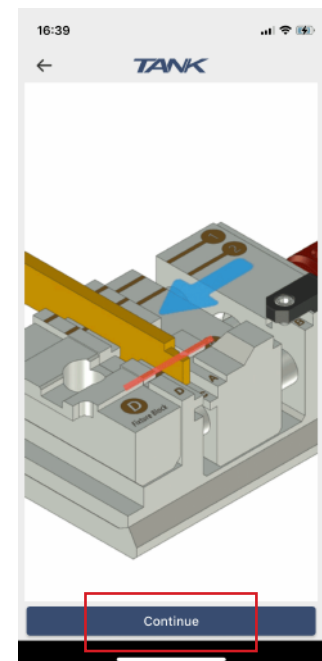
10.Follow the prompts to prepare the key supermodel embryo L - click to continue.



11.Select "cutting for the first time."

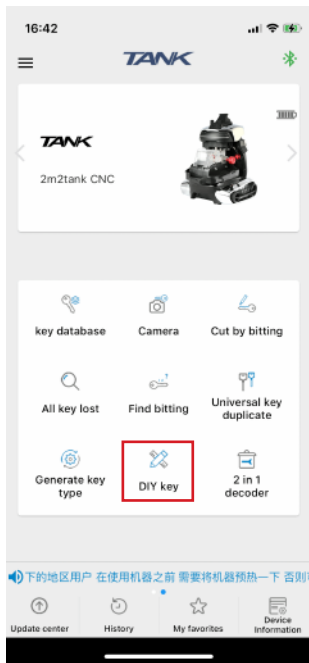
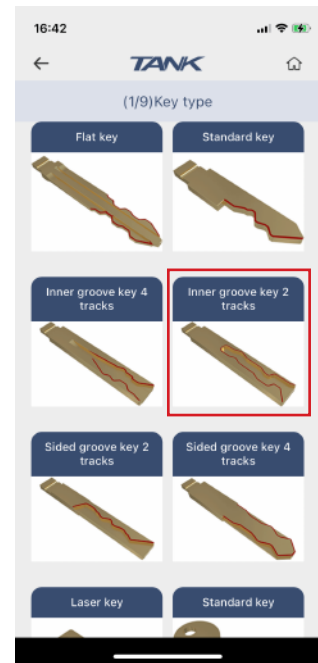


12.Place the key in the C-clip block with the end of the key aligned with line 4- Click to continue.



13、How to use ‘DIY key’ ? (Hu66 as sample)

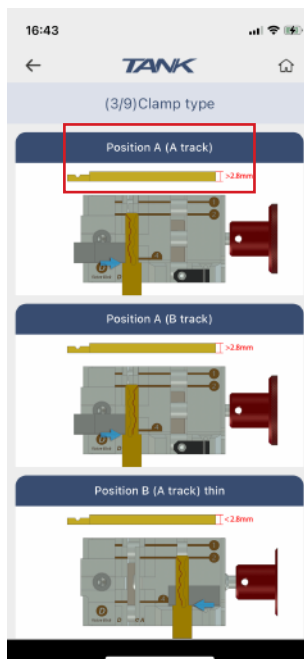
1. Click “DIY key”
2. Click “DIY key by measuring”
3. Select key type.



4. Click ‘Shoulder’



5. Position A (>2.8mm)



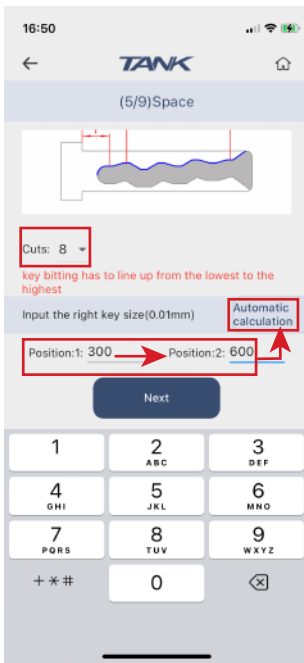
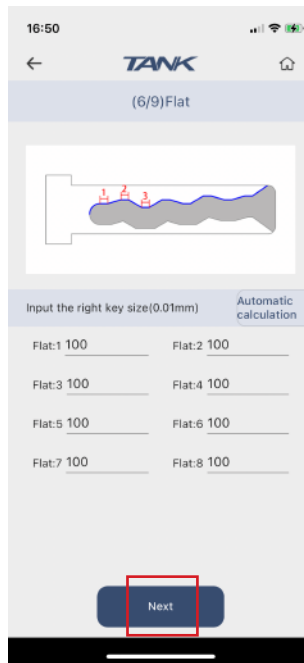
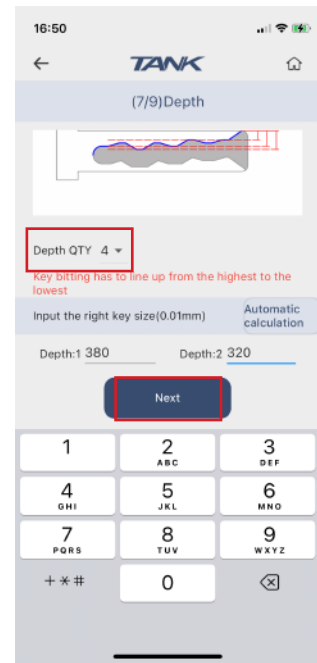
6. Input key thickness, Depth and other information after measuring, and then click ‘next’.



7. Selection of tooth position
 - input of tooth position value
 - automatic calculation
 - next step.

8. next

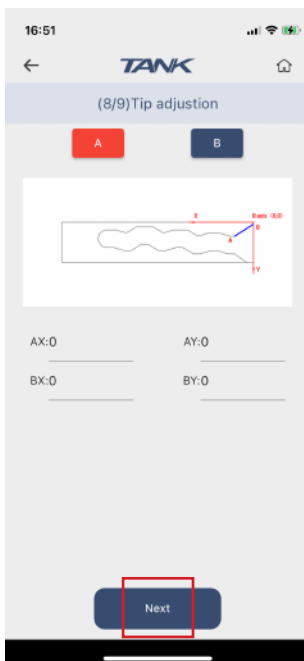
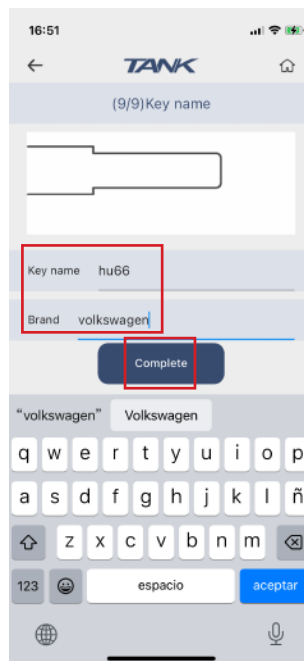
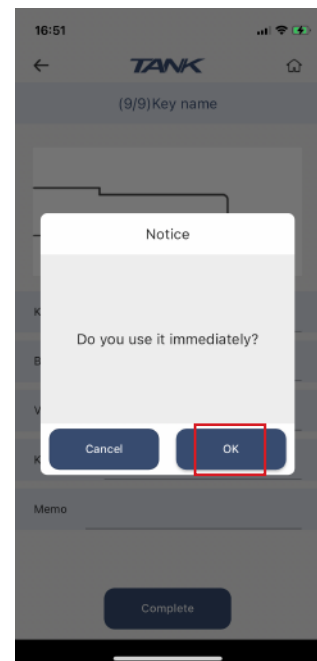
9. Tooth depth option 4
 - automatic calculation
 - next step



10. Next

11. Fill in the key name,
 brand, Embryo number
 - Click Complete.

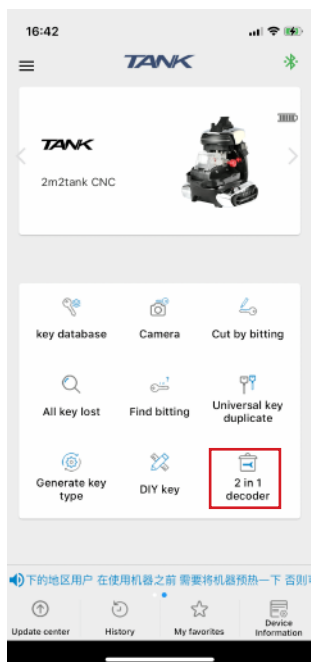
12. Choose to exit or
 continue processing
 keys as needed.



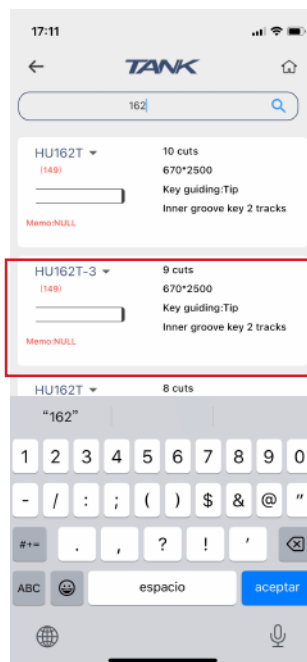
14、2 IN 1 DECODER

14-1、How to use '2 in 1 decoder' ? (HU162T-9 cuts as sample)

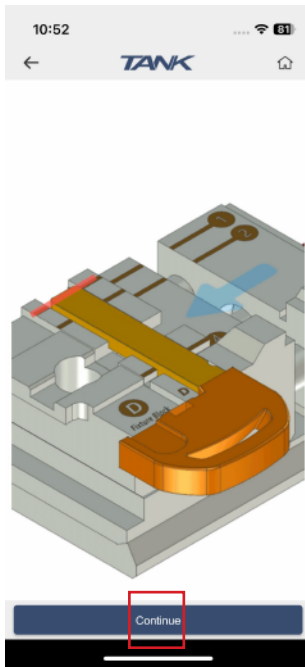
1. Click '2 in 1 decoder'



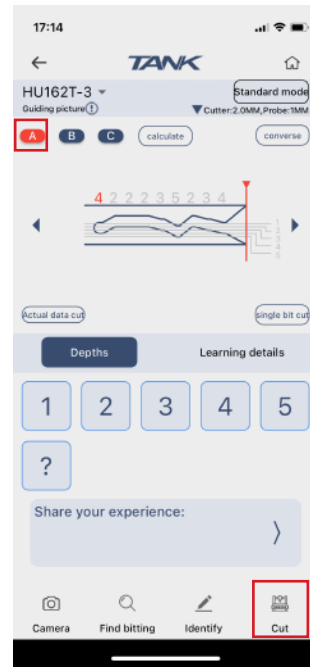
2. 'HU162T-9 cuts'



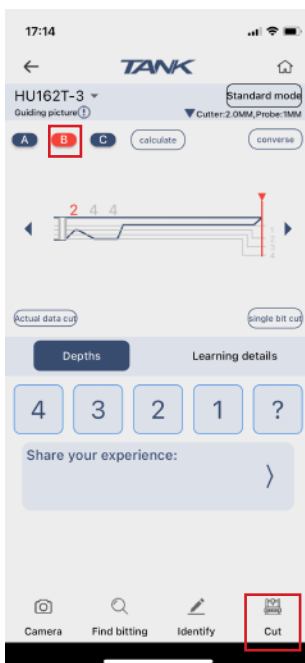
6. Install the key on the left (pay attention, please align the tip with the 1st line).



7. Click on Side A - Cutting



8. Click 'B' ---' cut'

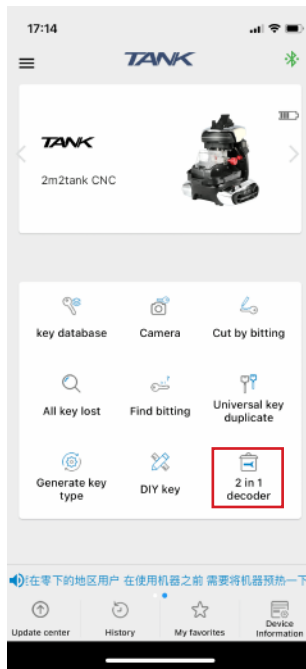


9. Click 'C' ---' cut'

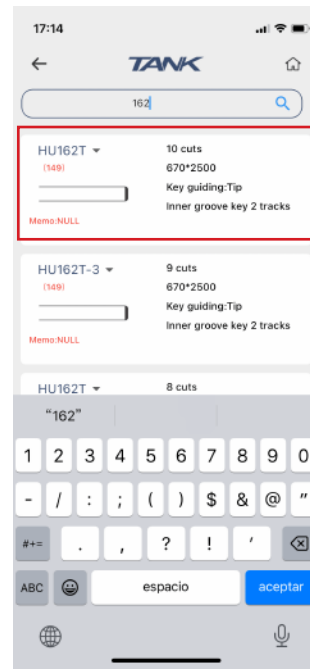


14-2 HU162T-10 cuts

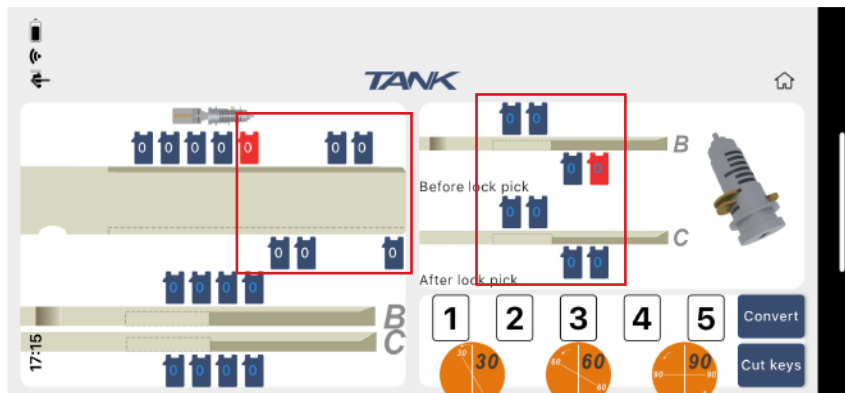
1. Click '2 in 1 decoder'



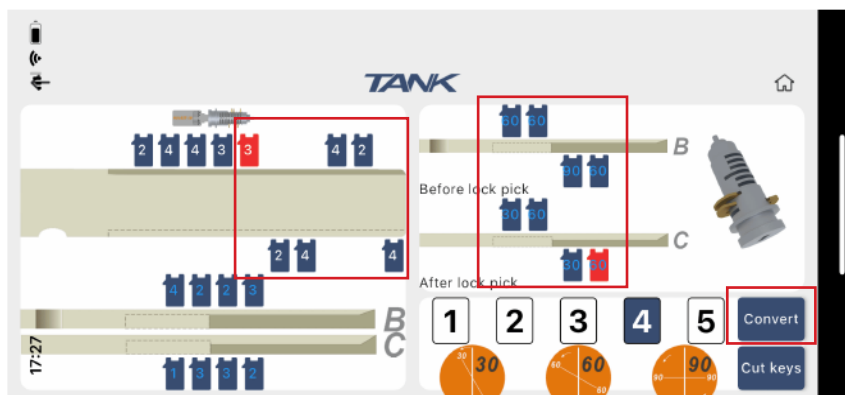
2. 'HU162T-10 cuts'



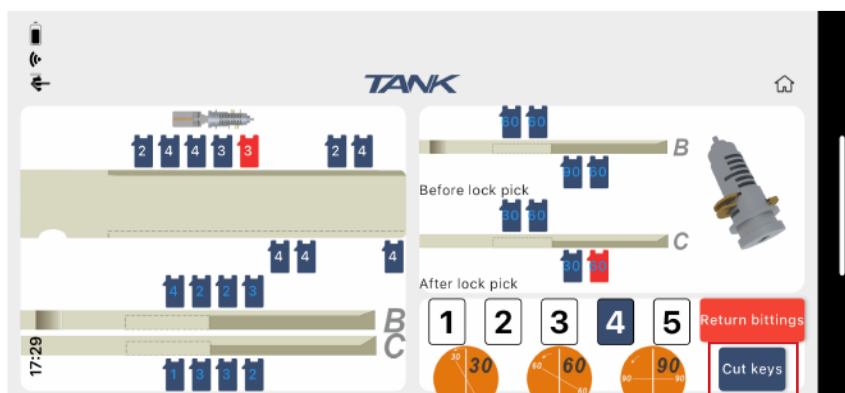
3. Input the key cuts that you decode via 2 in 1 decoder.



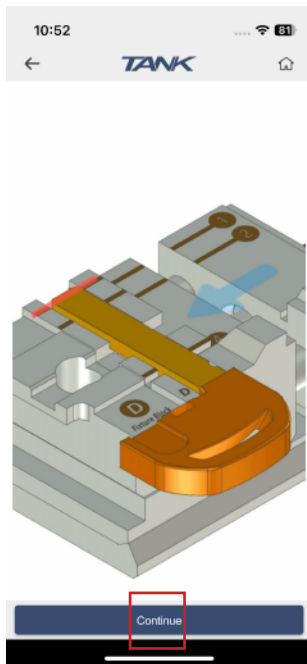
4. Enter the angle and tooth number and click on Convert Tooth Number.



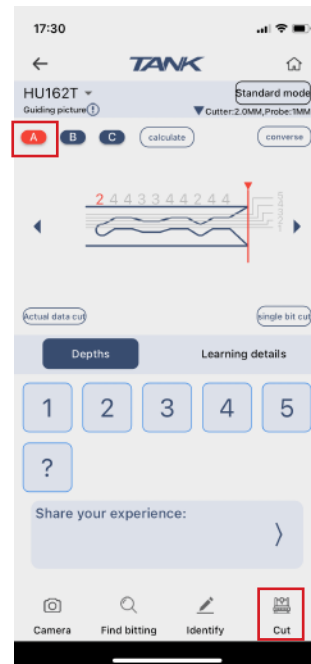
5. Click 'Cut key'.



6. Install the key on the left
(pay attention, please align
the tip with the 1st line).



7. Click on Side A - Cutting



8. Click 'B' --- cut'

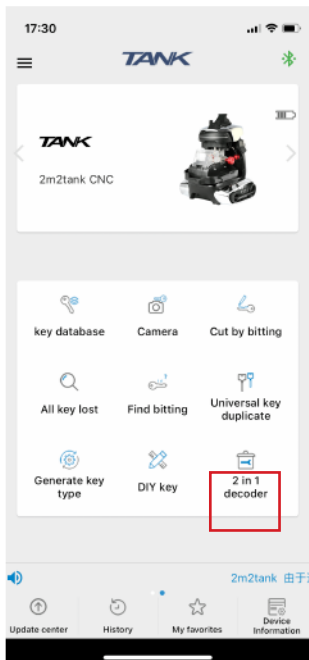


9. Click 'C' --- cut'

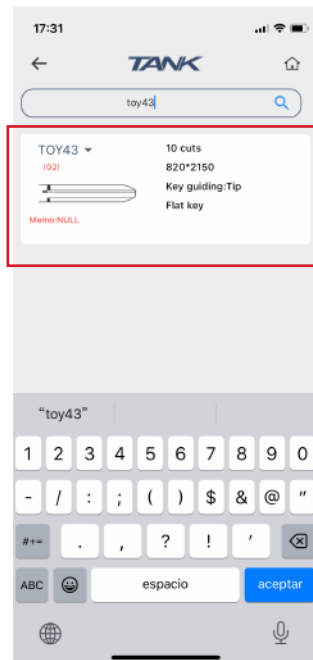


14-3 TOY43

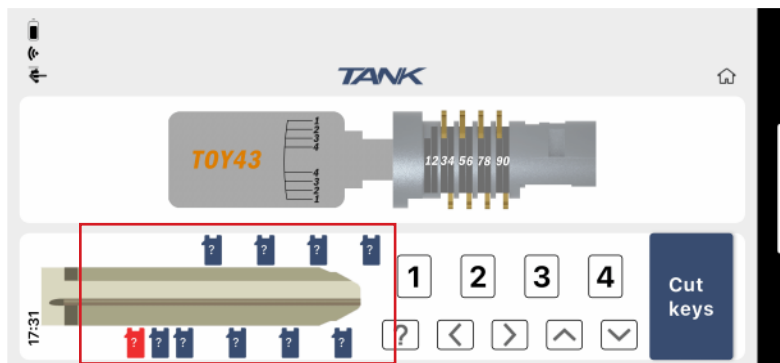
1. Click '2 in 1 decoder'



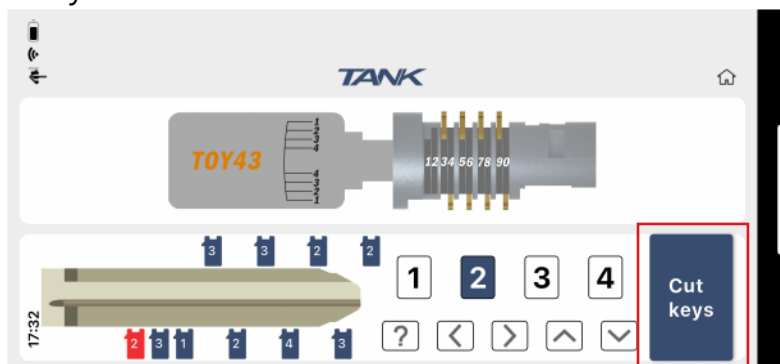
2. Enter TOY43 in the search box and select the corresponding programme.



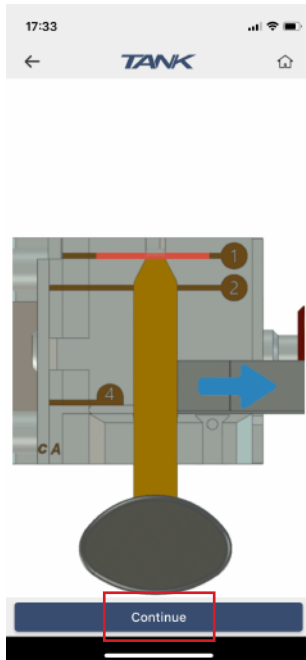
3. Please input the key cut that you decode by 2 in 1 decoder.



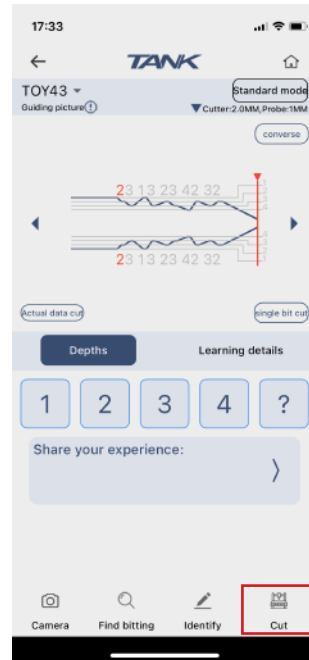
4. Click 'cut keys'.



5. Install the key on the right (pay attention, please align the tip with the 1st line).



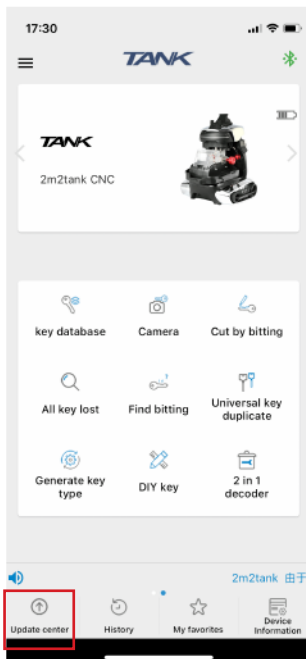
6. Click on Cutting after getting the tooth number.



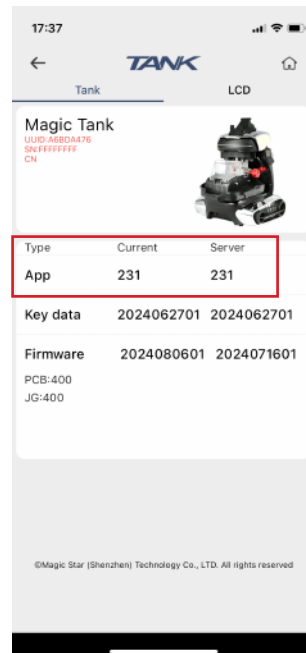
15. UPDATE

15-1 APP update

1. Click 'Update center'.

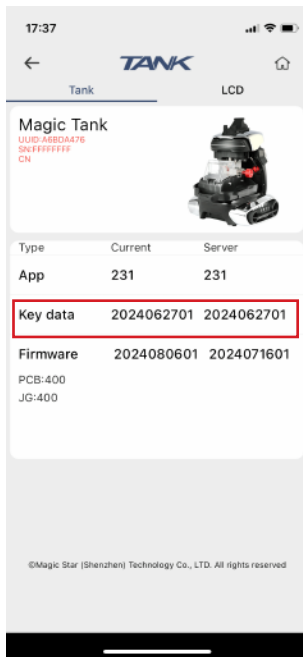


2. Check whether the local version and the server version are the same, the server version is the main, inconsistent points upgrade.

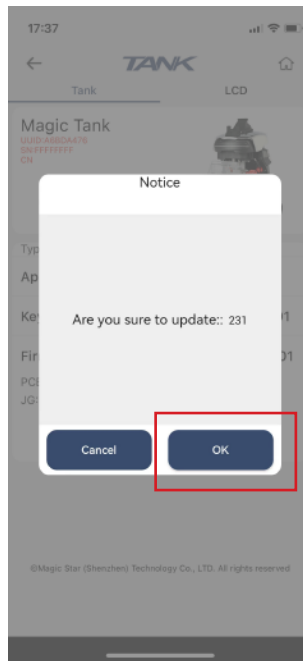


15-2 Update key database

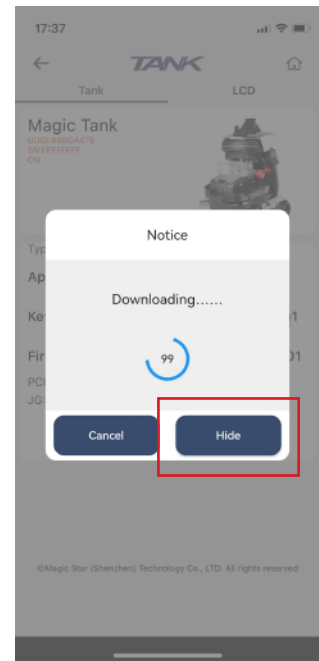
1.Long press on database version .



2.click"OK"

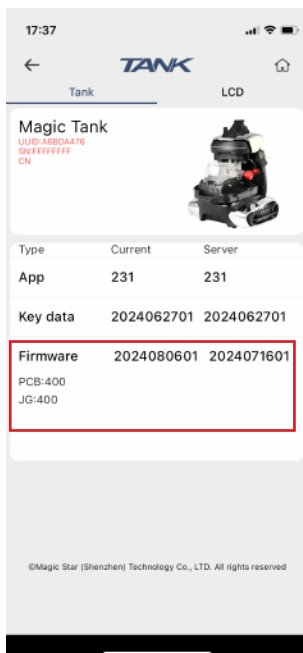
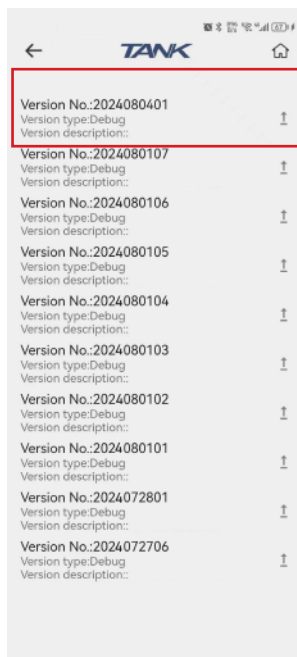
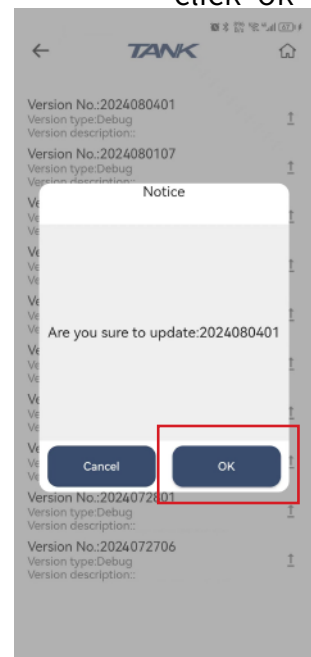


3.Downloading.



15-3 Firmware update

1.Click version number that circled and then click the first one for updating.
-click"ok".



16、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.
- Please clean or blow particles on the machine after cutting keys.

17、WARRANTY

1. Warranty period from the activating day;
 - 2 years warranty (machine structure, screw ball, Main board and others);
 - 1 year warranty contains battery (optional) and power adapter.
2. 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 damage.
 - Scratches and abrasions on machines and fixtures as well as decorative parts are not warranted after one week of confirmation of receipt (exterior parts only).



Magic Star (Shenzhen) Technology Co.

Warranty

Customer Name: _____

Telephone Number: _____

Address: _____

Date of purchase: _____

Description of the problem: _____

Certificate of Conformity

Pseudolaric acid: _____ Tank CNC machine

Product Model: _____ TANK 2 Pro

Inspector: _____  

Makers: _____ Magic Star (Shenzhen) Technology Co.

Address: _____ 301,3rd Building, 28# Junhua North Road,
 _____ Sanlian Community Longhua street,
 _____ Longhua District Shenzhen.

This product has been inspected and meets the factory requirements,
 and is allowed to leave the factory.