

EDS G^eX

ELECTRONIC DERAILLEUR SYSTEM

LANXI WHEEL TOP CYCLE INDUSTRIES CO.,LTD

TEL:+86(579) 83881076 83888356



Contact us

Download the app

Please use "Goodle Play" or "APP Store" and search for "WHEEL TOP" to download the software!

Important hint

For safety reasons, be sure to read this user manual carefully before using the product and follow the instructions to use it correctly.

Safety description

Before you install, you must read and understand the safety instructions that came with the product. Improper installation of parts is extremely dangerous and can lead to serious or even fatal personal injury.

If you have any questions about the installation of the parts, please consult a professional bicycle mechanic.

Note

This manual is a complete system installation guide that covers the entire process from unboxing each component to the start of the ride. Complete the appropriate installation and setup in the order described in this manual. After you complete the previous step, you can start the next step. Please refer to the official website for the sales area of this product, if it is sold in an unauthorized area, you will be responsible for it.

This device complies with Part 15 of the FCC Rules.

Note

The operation must meet the following two conditions:

- (1) This device must not cause harmful interference,
- (2) This device must accept any interference received, including interference that may result in undesirable operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are intended to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and radiates radio frequency power that, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to electronic equipment, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Adjust the orientation of the receiving antenna.
- Increase the distance between the device and the receiver.
- Connect the device to one outlet on a different circuit connected to the receiver.
- Ask a dealer or an experienced technician for help.

This equipment complies with the FCC radiation exposure limits for an uncontrolled environment. This equipment should be installed and operated at a distance of at least 20 cm between the radiator and your body.

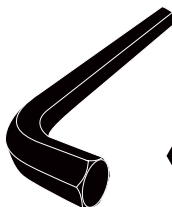
Directory

Tools needed	- - - - -	01
Dual control handle	- - - - -	02
Rear derailleur	- - - - -	03
Transmission charging	- - - - -	04
System pairing	- - - - -	05
Transmission system installation	- - - - -	08
Brake system installation	- - - - -	09
Transmission calibration	- - - - -	11
Transmission adjustment	- - - - -	19
Transmission shift	- - - - -	21
Overview of indicators	- - - - -	24
Maintenance	- - - - -	25

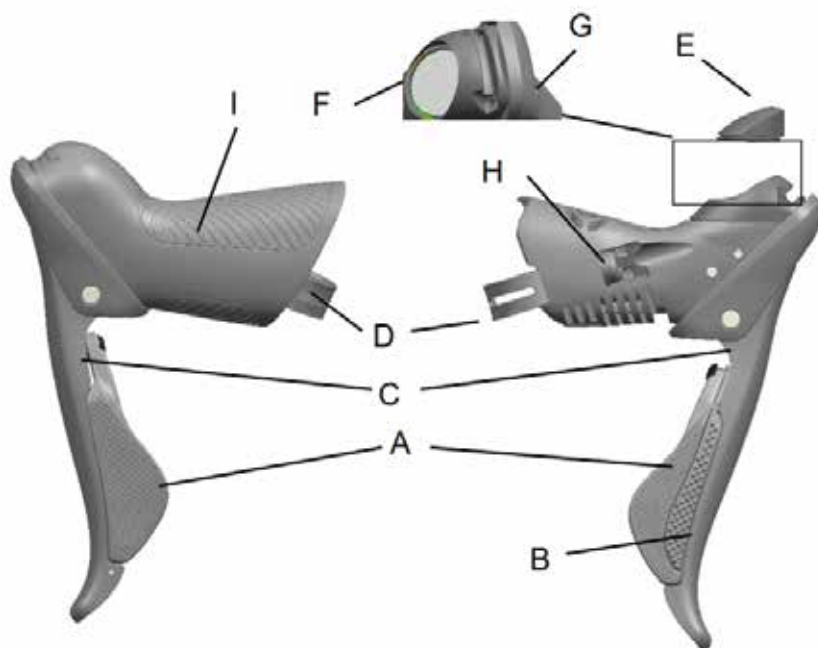
The tools you need

Installing parts requires very specialized tools and supplies. If you encounter problems with installation, we recommend that you have it installed by a professional bicycle mechanic.

(2mm/3mm /4mm /5mm Allen wrench, gloves, goggles)



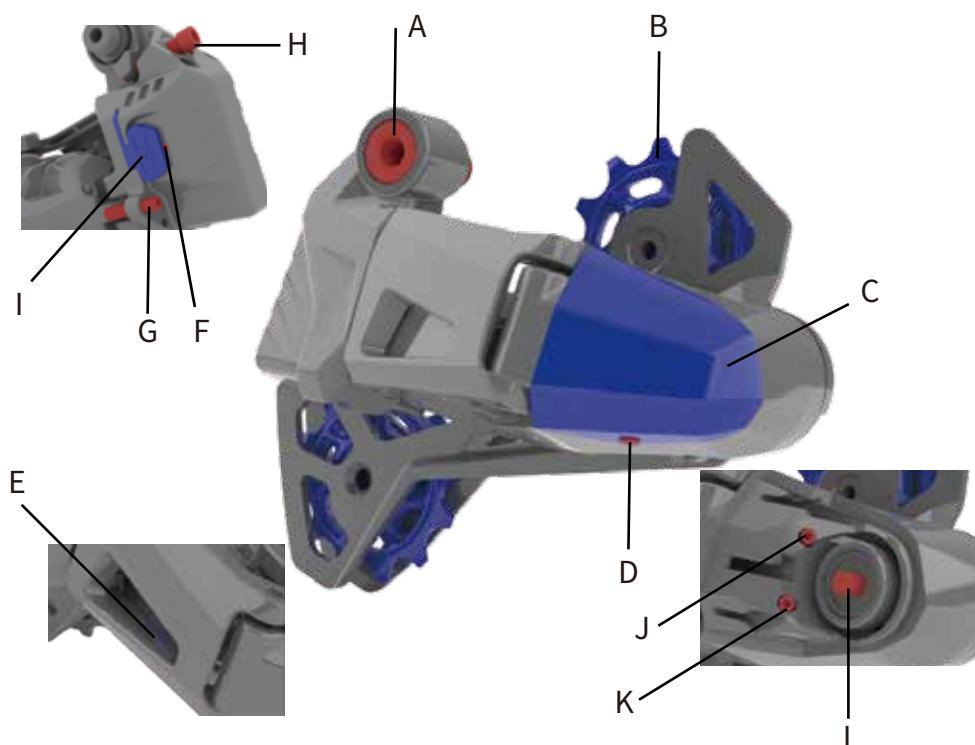
Dual joysticks



A. Large keys
B. Small buttons
C. Brake levers
D. Clamp rings
E. Battery cover

F. Battery holder
G. LED lights
H. Set screws
I. Silicone coat

Rear derailleurs



A. Installing bolts

B. Guide wheel

C. Guide chain seat cover

D. Retaining bolts for retaining cover

E. LED indicator light

F. Battery LED indicator light

G. Maximum flywheel limit screw

H. Pull the tension screws back

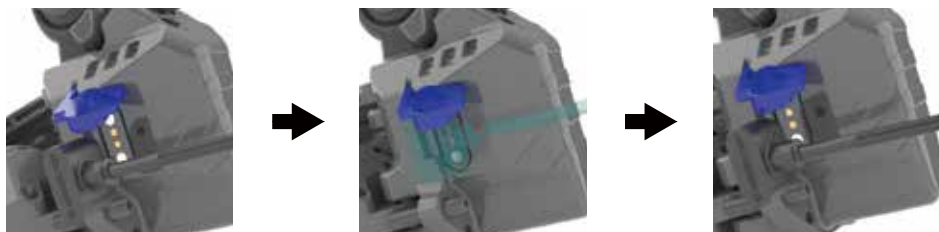
I. dust cover

J. Trim screws

K. Minimum flywheel limit screw

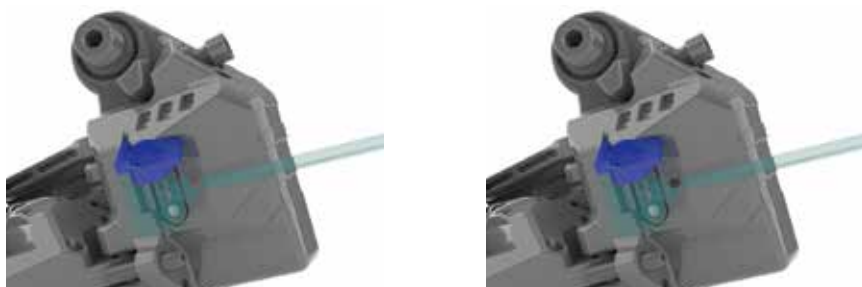
L. Damping adjustment bolt

Transmission charging



Rear Derailleur

1. Open the dust cover and plug on the magnetic connector of the charging cord.
2. Start charging.
3. The indicator light goes out, and charging is over. Remove the magnetic connector of the charging cable.



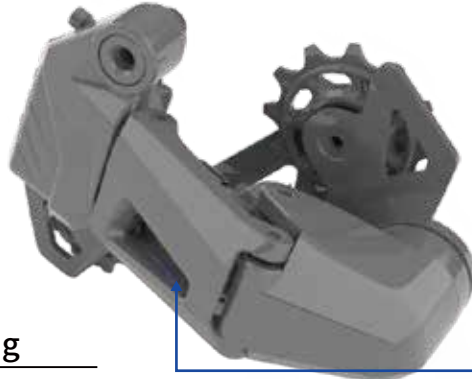
Battery LED indicator description

● Red Charging ● Extinguished Completion

Precautions

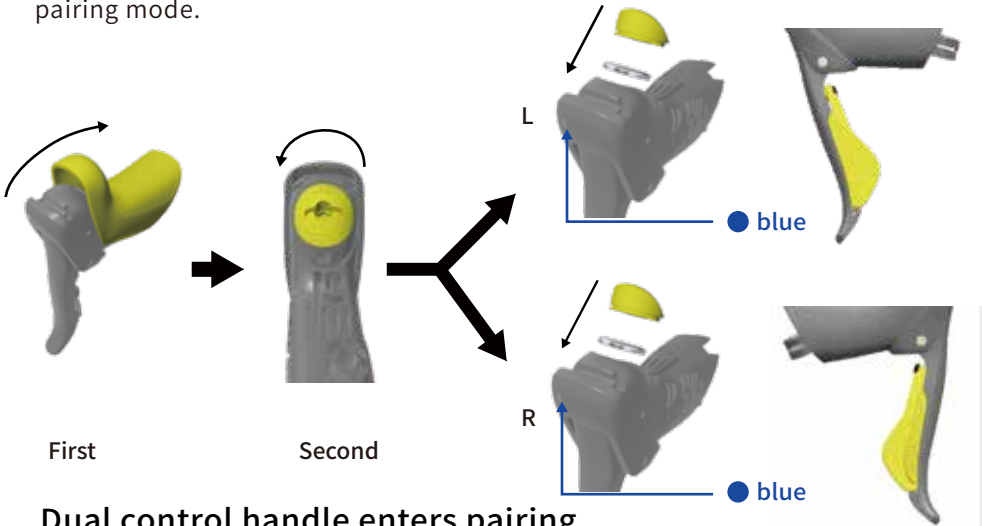
1. Please confirm that the DC connector with USB port voltage is 5.0Vdc and the current is less than 2 Adc.
2. If the battery is not fully charged after 6 hours of charging, stop charging.
3. Make sure your hands or gloves are dry when operating the charge.
4. The product cannot be used when charging, and when the battery temperature is greater than 50°, stop charging in time and contact the after-sales service.
5. If you need to replace the battery, please pay attention to use special tools to remove the screws
6. Do not use unlicensed third-party batteries (especially rear derailleurs), which may cause the transmission to not work properly.

System pairing



Enter the pairing

Remove the rear dial dust cover and connect the magnetic connector of the charging cable connected to the power supply to the magnetic connector of the rear dial. The indicator light flashes blue to enter pairing mode.



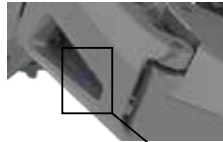
Dual control handle enters pairing

Unscrew the left/right hand shifter battery cover, press and hold the manual shifter button, install the battery until the manual indicator light ^{Third} Blinking blue to enter pairing mode.

Note: If the blue light does not flash, please repeat this operation. When entering pairing mode, if pairing is not performed after 30 seconds, the mode will be automatically exited.

System pairing

First
Enter pairing
mode



● blue

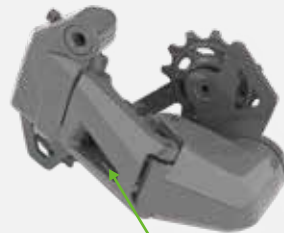


● blue

Second
Connect/pair

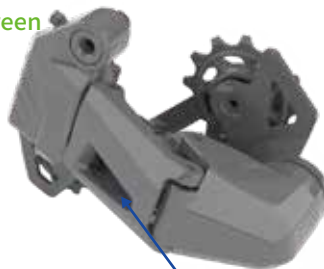


● green



● green

Third
Pairing complete



● blue

Dual joystick pairing

First Back dial and dual control hand change enter pairing state (please press "back dial to enter pairing, dual control handle to enter pairing" to operate)

Second After a single handle is successfully paired, the backward dial and manual change indicators flash green, and then the backward dial continues to enter the pairing mode, and the blue light continues to flash to continue the handle pairing (the left and right handles need to be paired separately)

Third After the pairing is completed, the blue light of the successfully paired device flashes 5 times

Note: If the blue light does not flash, please repeat this operation "Step 1", when entering the pairing mode, if the pairing operation is not performed after 30 seconds, it will automatically exit the mode.

Precautions

1. The transmission equipment is in a shutdown state during transportation, please plug in the magnetic connector to wake up the equipment after unpacking; If you want to shut down the device, please do it on the APP.
2. The derailleur kit has been paired before unboxing, and there is no need to re-pair.
3. During the working process of the transmission, please do not cover it with metal, liquid, or other items that affect wireless communication, otherwise it will affect the normal operation of the transmission kit.
4. If there is an error during the pairing process, you need to repeat the pairing operation again.
5. If any parts are replaced, added or removed, only the rear derailleur needs to be paired with the changed parts, and if the rear derailleur is changed, all accessories need to be re-paired.
6. In order to improve the success rate of pairing, the pairing order needs to be strictly implemented according to the user manual.
7. After starting pairing, it will automatically exit the pairing mode if there is no operation within 10s.
8. If there are multiple transmissions around, pair them sequentially and do not operate the other transmissions during this period.
9. When pairing in batches, it is recommended to use the APP to scan the code in turn to pair.
10. The default state of the transmission device is racing mode, if you want to adjust it to leisure mode, please switch it on the APP

Transmission system installation

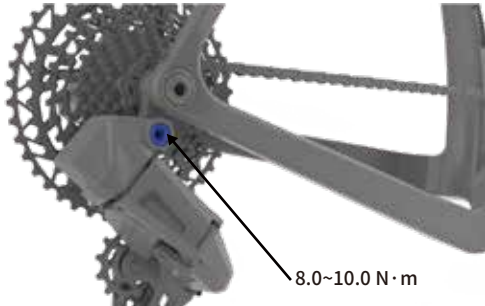
6~8N·m



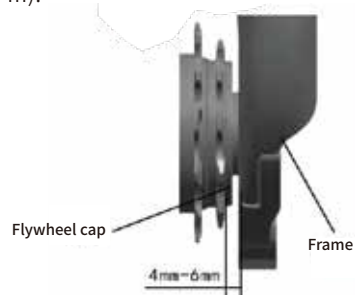
5

Dual joysticks

Flip open the rubber sleeve from the top end, loosen the set screws with a 5mm Allen wrench, and then thread the clamp ring through the handlebar. Attach the hand adapter to the handlebar and tighten the fixing bolt (6~8N·m).



8.0~10.0 N·m



Flywheel cap

Frame

4mm-6mm

5

rear derailleur

Use a 5mm Allen wrench to install the transmission on the frame hook, and use a suitable chain to alternately pass through the two guide wheels of the transmission.

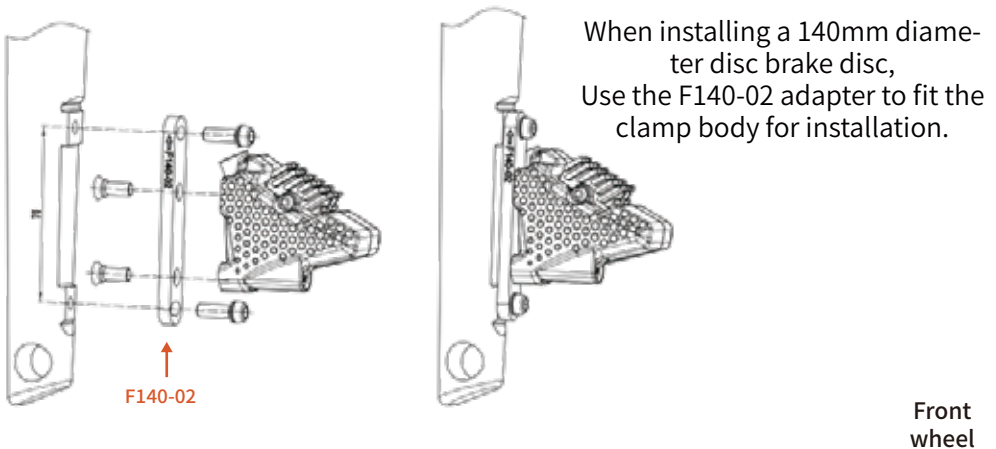
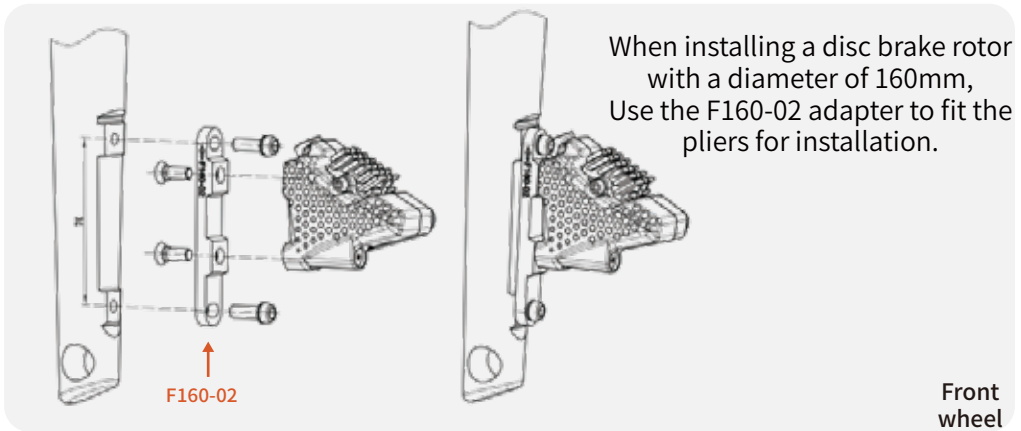
The transmission performance is optimal when the distance between the inner plane of the rear lower fork and the outer side of the minimum tooth blade of the flywheel is maintained by 4-6 mm.

Precautions

1. Install the bolt to lock the old torque by 8.0-10 NM.
2. If the tightening operation is incorrect, it may lead to the following phenomena: deformation of the hook hole; Installation or disassembly cannot be carried out; Poor variable speed performance.
3. Do not apply grease to the threaded hole of the mounting stud or hook.
4. Incorrect chain selection will reduce the reliability of speed change, which may lead to failure in serious cases.
5. The transmission is compatible with 10-52T flywheel.

Brake system installation

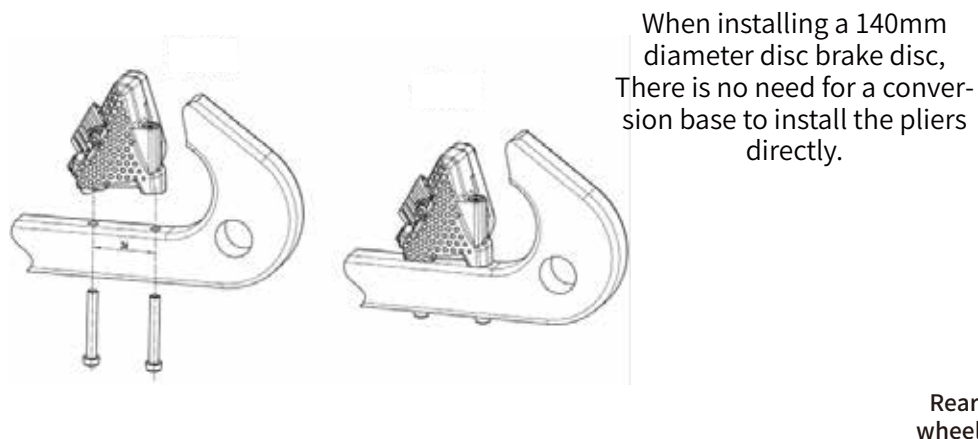
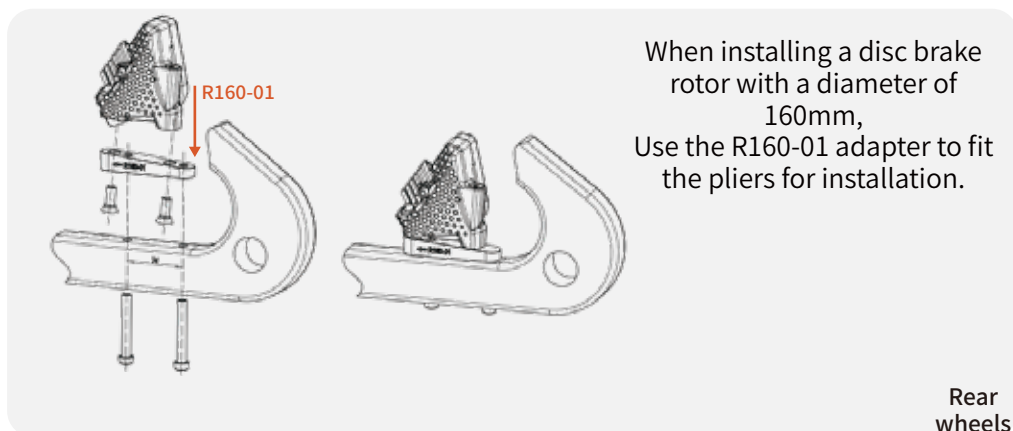
Front-brake caliper body safety and adapter mounting



Pay attention to the arrows and text directions!

Brake system installation

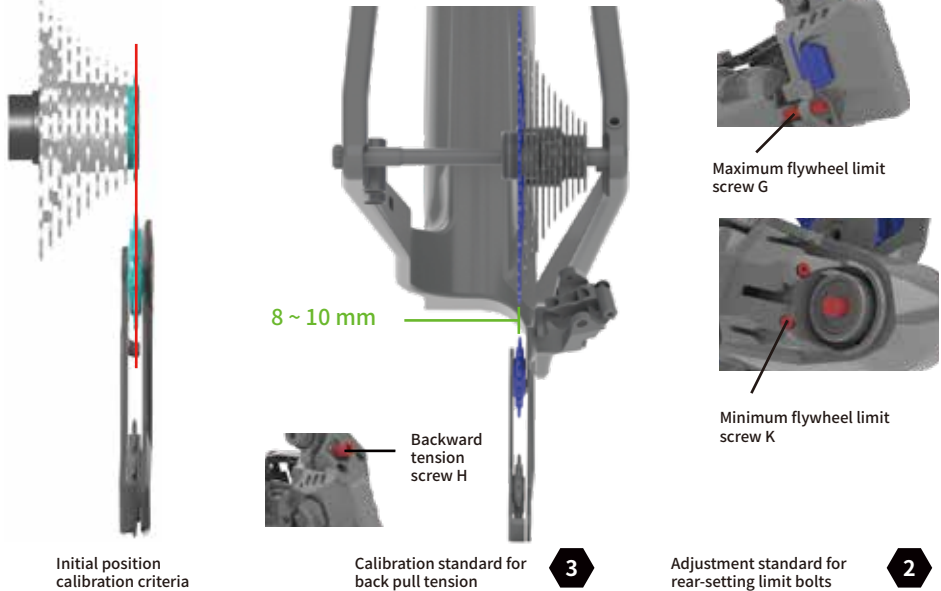
Rear-brake caliper body safety and adapter mounting



Pay attention to the arrows and text directions!

Transmission calibration

Debugging standard



Calibration standard for rear puller

Initial position calibration criteria

Initial calibration of the transmission (" **A. Fine screw mode** "is recommended) up to the rear stringer **align the center of the upper guide wheel with the center of the minimum gear.**

Calibration standard for back pull tension

Set **the front shift to the small plate** and **the back shift to the maximum flywheel**, and adjust the "rear shift tension screw H" until the distance between **the upper guide wheel and the maximum flywheel plate is about 8-10mm.** (Different rear sprocket sizes will vary and the optimal distance will vary, here the size is for reference only)

Adjustment standard for rear-setting limit bolts

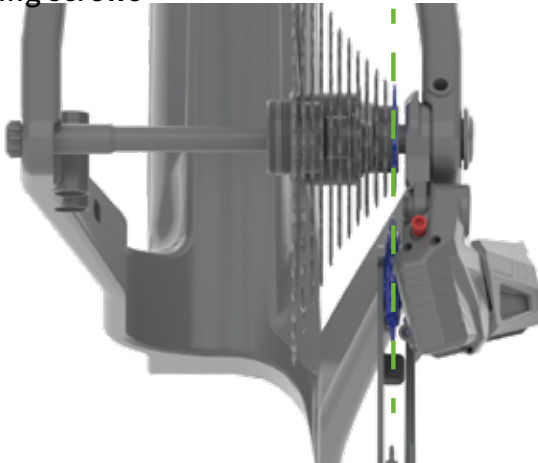
Note: The following operations can only be performed after the adjustment of "After initial calibration" (" A. Fine screw method "is recommended)"&" Back tension Calibration "!

Switch back to the minimum flywheel (gear 1), adjust the "minimum flywheel limit screw G" until it gently touches the limit, and then turn the bolt 1/4 turn; Switch back to the maximum flywheel, adjust the "maximum flywheel limit screw K" until it gently touches the limit, and then turn the bolt 1/4 turn;

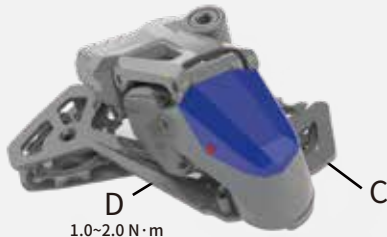
Test the speed change, whether it is normal, if it cannot be lowered to the lowest/highest, please try to turn the bolt 1/4 turn again.

Transmission calibration

A. Fine tuning screws

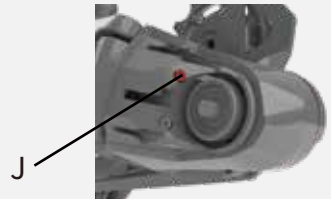


First



1.5

Second



2

Initial calibration of rear derailleur

Step 1: Use a 1.5mm Allen wrench to unlock the retaining bolt D of the cover and push the cover C of the guide chain seat forward.

Step 2: Operate the fine-tuning screw J **until the center of the upper guide wheel is aligned with the center of the smallest flywheel tooth.**

Step 3: Install the chain guide seat cover C back to its original position and lock the cover fixing bolt D..

Precautions

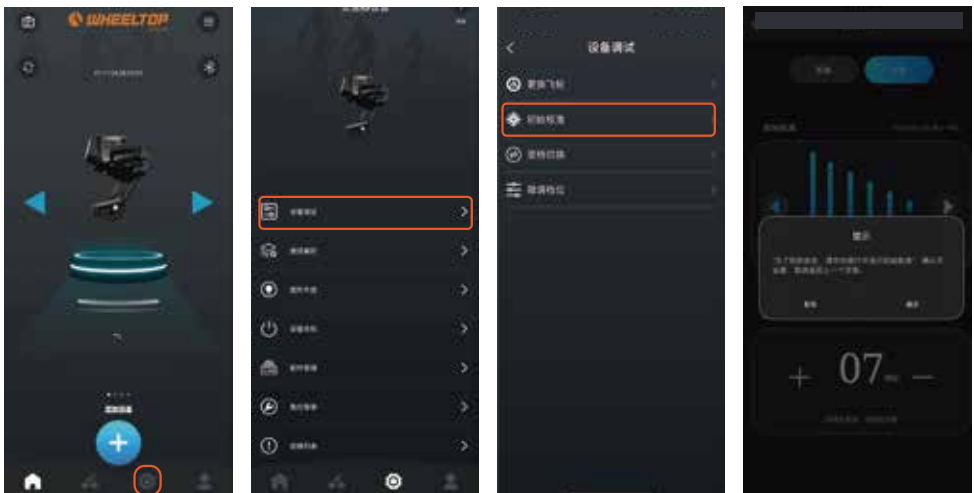
1. When debugging, please ensure that the rear dial position is in 1 gear and the front dial is in the market position!
2. Keep turning the sprocket, otherwise the transmission may be damaged.
3. Do not perform initial calibration during the ride!

Transmission calibration

B.APP

Initial calibration

Please use the APP to check, by clicking "Equipment debugging" - "Initial calibration" in the Settings selection.



Homepage ⇨ Settings Page - Device debugging ⇨ Initial calibration ⇨ Debug page

Matters need attention

1. When debugging, please ensure that the rear dial position is in 1 gear and the front dial is in the market position!
2. Keep turning the sprocket, otherwise the transmission may be damaged.
3. Do not perform initial calibration during the ride!
4. **A. Trimming screws is recommended.**

Transmission calibration

B.APP

Initial calibration

Until the center of the guide wheel on the rear stringer is aligned with the center of the minimum gear.



When you click the button on the left, turn back away from the small teeth

Note:
Please ensure that **the upper and lower gears are adjusted smoothly and the device is no different**



When you click the button on the right, back turn close to the small teeth

Note:
Please ensure that **the upper and lower gears are adjusted smoothly and the device is no different**

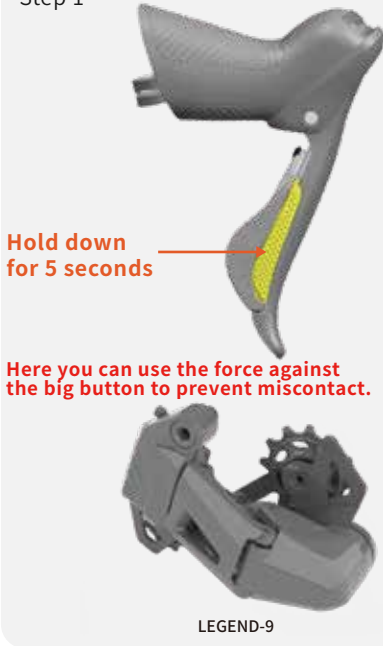
Matters need attention

1. Please ensure that the rear dial is in the minimum flywheel position (01 gear)!
2. After commissioning, gently tighten the "minimum flywheel limit screw D".

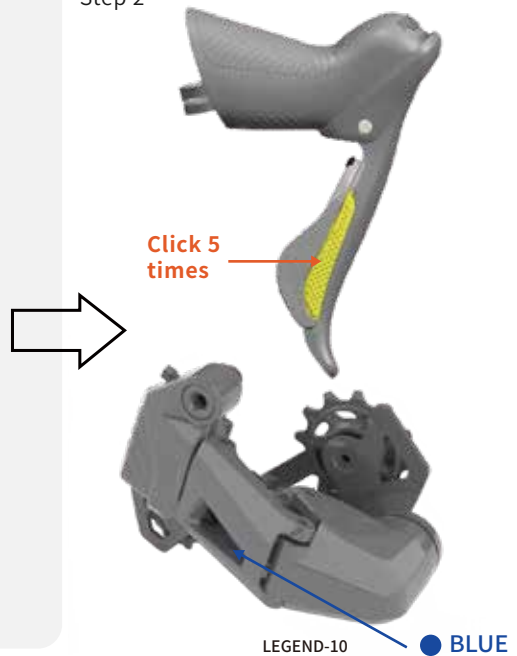
Transmission calibration

C.Handle trimming mode

Step 1



Step 2



Initial position calibration of rear puller

Enter initial position calibration

Step 1: Long press the small button for 5 seconds and then the dial indicator will light up. (LEGEND-9)

Step 2: Click the small button 5 times to enter the "Initial Position Calibration" within 3 seconds after the light is on.

The rear switch indicator is steady blue. (LEGEND-10)

Matters need attention

1. The "Initial position calibration" function can fine-adjust the shaft square distance between the transmission and the sprocket (0.2mm each time), which can optimize the performance of the transmission and improve the smoothness of the shift.

2. It is necessary to turn the sprocket when adjusting the transmission, otherwise it may damage the transmission.

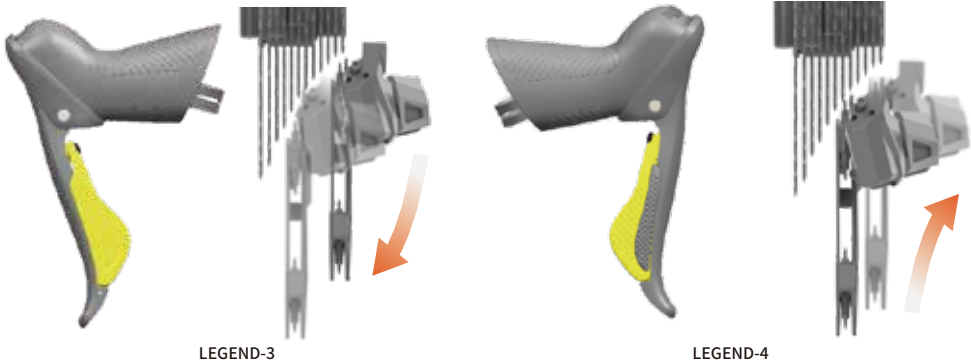
3. You are advised to use A. Trimming Screws for fine tuning.

4. Do not perform initial calibration during the ride!

Transmission calibration

C.Handle trimming mode

Step 3



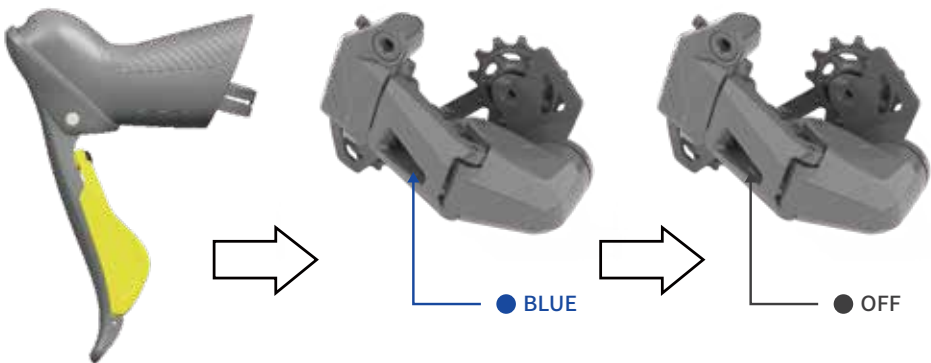
Initial position calibration of rear puller

Press the right-hand enlargement button, and move backward towards the large teeth (LEGEND-3);

At the same time, press the left hand enlargement button, and move backward towards the small teeth plate (LEGEND-4).

Press the left hand enlarge button for 3 seconds to exit the initial calibration mode.

Align the center of the upper guide wheel of the rear derailleur with the center of the smallest gear.

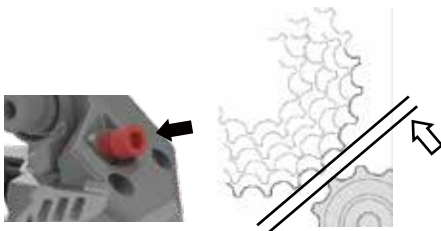
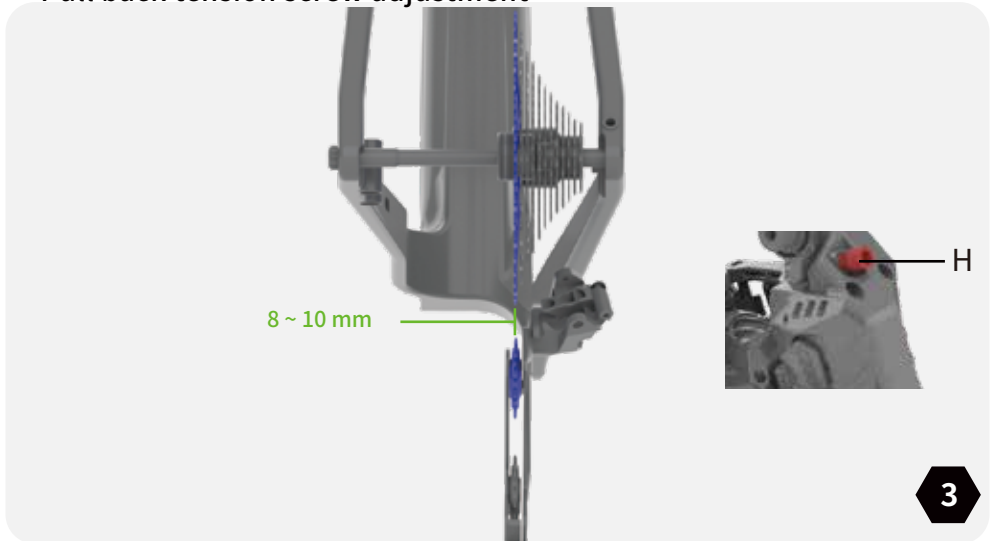


Exit initial calibration

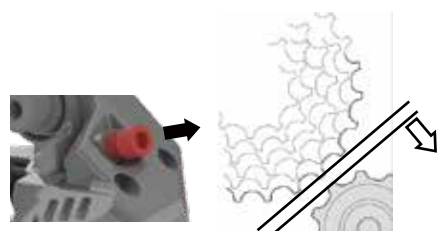
Press the left hand button to exit the mode.

Transmission calibration

Pull back tension screw adjustment



LEGEND-1



LEGEND-2

Note: Please make sure to complete the "Initial Position Calibration" before doing this!

Operate the rear shift to the maximum flywheel tooth, and adjust the rear shift tension screw H

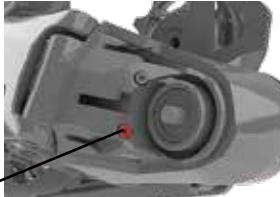
Until the distance between the upper guide wheel and the maximum flywheel tooth is about 8 to 10 mm.

Adjust the rear derailleur tension screw H forward, and the upper guide chainwheel of the rear derailleur gradually approaches the largest gear (LEGEND-1).

Adjust the rear derailleur tension screw H backward, and the upper guide chainwheel of the rear derailleur gradually moves away from the largest gear (LEGEND-2).

Transmission calibration

Limit screw adjustment



K

Minimum flywheel limit screw



G

Maximum flywheel limit screw

Maximum/small flywheel limit screw

Note: Please make sure to complete the "initial position calibration" and "tension screw adjustment" before performing this operation!

After operation, shift it to the minimum flywheel position, adjust the minimum flywheel limit screw K until it gently touches the limit position, and then turn the bolt 1/4 turn.

After operation, shift it to the maximum flywheel position, adjust the maximum flywheel limit screw G until it gently touches the limit position, and then turn the bolt 1/4 turn.

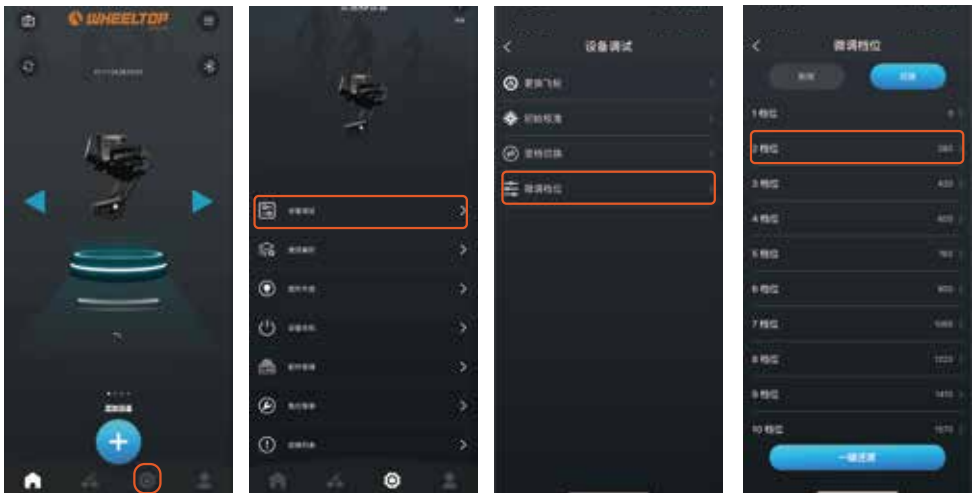
Precautions

1. The "Initial Position Calibration" function can finely adjust the shaft distance between the transmission and the sprocket wheel (0.2mm each time), which can optimize the performance of the transmission and improve the smoothness of shifting.
2. Be sure to turn the sprocket when adjusting the transmission, otherwise the transmission may be damaged.
3. It is recommended to use "A. Fine Adjustment Screw Method".
4. Do not use "Initial Position Calibration" during riding
5. Make sure to adjust the maximum/minimum flywheel limit screws correctly!

Transmission adjustment

Trimming gear

Please use the APP to view, by clicking "Equipment debugging" - "Fine-tuning gear" in the Settings selection.



HomePage ⇨ Settings Page - Device debugging ⇨ Trimming gear ⇨ File selection (for example, select "2 gear")

Matters need attention

1. Make sure to complete the "initial position calibration" before performing this operation!
2. Do not fine-tune the gear during the ride!

Transmission adjustment

Trimming gear

Click on the corresponding gear to adjust the value (two adjustment methods) :

1. Click Add or subtract button to change the value
2. Click the value and enter the modified value



When the number gets bigger, rear pull close to the frame

Note:

1. Please ensure that **the upper and lower gears are adjusted smoothly, and the device is no different**
2. After adjusting the value, **you need to switch other gears** and then switch back to verify the changed value



When the value goes down, pull back away from the frame

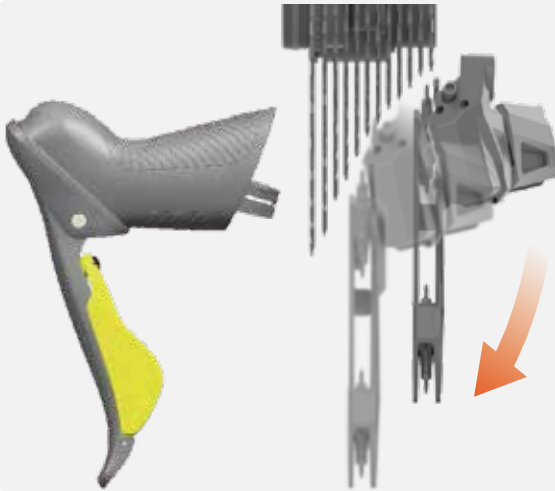
Note:

1. Please ensure that **the upper and lower gears are adjusted smoothly, and the device is no different**
2. After adjusting the value, **you need to switch other gears** and then switch back to verify the changed value

Note: If there is an anomaly when adding or subtracting the gear, try to adjust the value of the current gear and the adjacent gear so that the tooth tip of the rear-set upper guide wheel is aligned with the flywheel of the corresponding speed

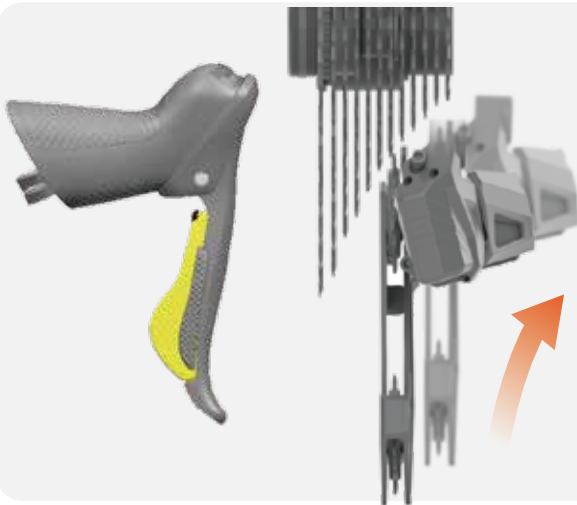


Transmission shift



Upshift/upshift operation

Press the left hand enlargement button to increase the gear and move the transmission towards the large teeth. The indicator light flashes every time you press it, **Press and hold to continuously upshift.**



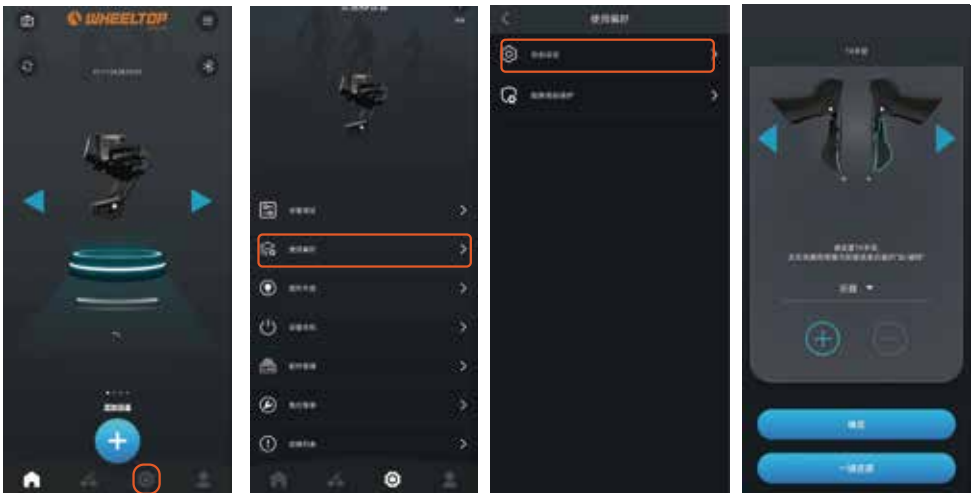
Downshift/downshift operation

Press the right-hand enlargement button to downshift the transmission and move towards the toothed teeth. The indicator light flashes every time you press it, **Press and hold to continuously downshift.**

Overview of the indicators

Free setting

Please use the APP to view, by clicking "Use preferences" - "Free Settings" in the Settings selection.



HomePage ⇒ Settings Page - Use preferences ⇒ Free settings ⇒ Debug page

Matters need attention

1. Please click the Confirm button after each modification!

Overview of the indicators

Free setting

Select the button that needs to change the function, select the function that needs to be set, and click the Confirm button.



Click the upper direction button
Select the key that you want to adjust



After selecting the function, click the Confirm button to confirm the use of the function

Note:
After confirmation, press the corresponding button to test whether the function is normal.






Matters need attention

1. In case of change error or can not be changed to the situation, you can try to click "one button restore"!
2. Default right hand change - big button - back dial up; Right hand change - big + small button - back drop;
Left hand change - Big button - front dial cycle shift.

Overview of indicators

Dual control handle

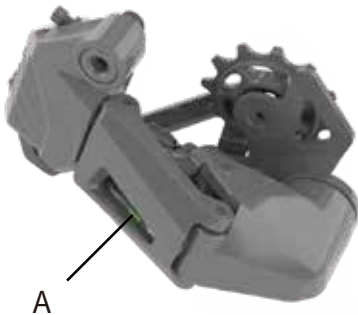


-  Blue: Pairing mode/fine tuning mode
-  Red: The battery is empty
-  Green: Pairing Successful/Shift Mode
-  White: Faulty
-  Yellow: Low battery




Rear derailleur

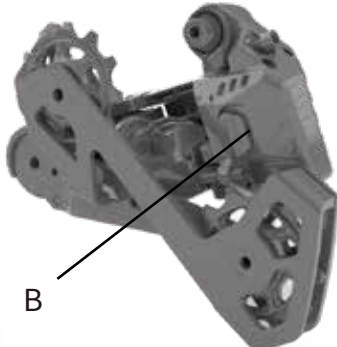
A. Status LED light

B. Battery LED light





A

-  Blue: Pairing mode/fine tuning mode
-  Green: Pairing Successful/Shift Mode
-  Yellow: Low battery



B

-  Red: The battery is empty
-  Red: Charging

Maintenance

Duar Joy Stix battery

Remove the hand cover, and remove the used battery. Insert the new CR2032 battery into the negative terminal, then fasten the battery cover and tighten it, and unfold the rubber sleeve.

Accessory replacement

If the rear derailleur, front derailleur or hand transformer is damaged separately and needs to be replaced, refer to "Transmission system installation"

When changing the front derailleur, when the hand changes, you only need to re-pair the replaced accessories; When replacing the rear dial, all accessories need to be re-paired, please refer to "System pairing".

Precautions

1. Only CR2032 can be used for hand transformer batteries.
2. It is recommended to clean the derailleur regularly.
3. The working temperature of the derailleur is -10°C-50°C.
4. The rear derailleur and front derailleur batteries are designed as one, and non-professionals should not disassemble them. When air transportation, it needs to be disassembled, and it needs to be operated by professionals.



Since 1951