MOONCOOL

CD1 E-TRIKE



OWNER MANUAL

Welcome to the MOONCOOL Family!

You are now the proud owner of a CD1 E-trike! Thank you for choosing MOONCOOL!

Your CD1 E-trike arrived 95% pre-assembled, and this manual is designed to guide you in completing the assembly. Please read this manual from beginning to end before starting assembly, and refer to it often as you work. If you experience difficulty, please ask a mechanically inclined friend for assistance or visit a local bike shop. You can also contact Mooncool Support by emailing support@mooncool.com.

Important Notes

In addition to assembly instructions, you will find very important information regarding safety, performance, and maintenance. It is vital that you read and comprehend all tips and precautions prior to your first ride. For questions, please ask a friend or contact Mooncool Support. Your tricycle shipment includes all the essential tools for assembling and adjusting the CD1 E-trike. However, some tasks are easier with professional tools and skills. We recommend the assistance of a certified tricycle mechanic.

Before allowing anyone to ride your CD1 E-trike, please request that they read this manual before their first ride. This will help avoid accidents or injury. Your CD1 E-trike is a powerful riding machine, and it is important to insist that your friends and family members read this manual before riding.

WARNING: Wear a certified bicycle helmet when riding your CD1 E-trike. For night riding safety, also wear fluorescent or reflective clothing.

WARNING: Ride your CD1 E-trike entirely at your own risk. MOONCOOL cannot predict every riding circumstance, and makes no representation that tricycle riding is a safe activity. MOONCOOL is not responsible for personal injury or product damage.

WARNING: Bodily injury and property damage resulting from the use of your CD1 E-trike may not be covered by your existing insurance policies. It is your responsibility to purchase adequate insurance coverage.

WARNING: Improper assembly of your CD1 E-trike may result in significant damage to your CD1 E-trike and/or bodily injury. If you are uncertain of your skills, hire a qualified tricycle mechanic.

WARNING: The motor, controller, sensor, battery, and cables provided with your CD1 E-trike shall not be used for other purposes, including disassembly or modification. Doing so will violate your warranty and may damage certain components and/or cause bodily injury.

MOONCOOL tricycles are sold with a one-year warranty that covers all defective or damaged parts.

The MOONCOOL Service Department is located in Covina, CA.

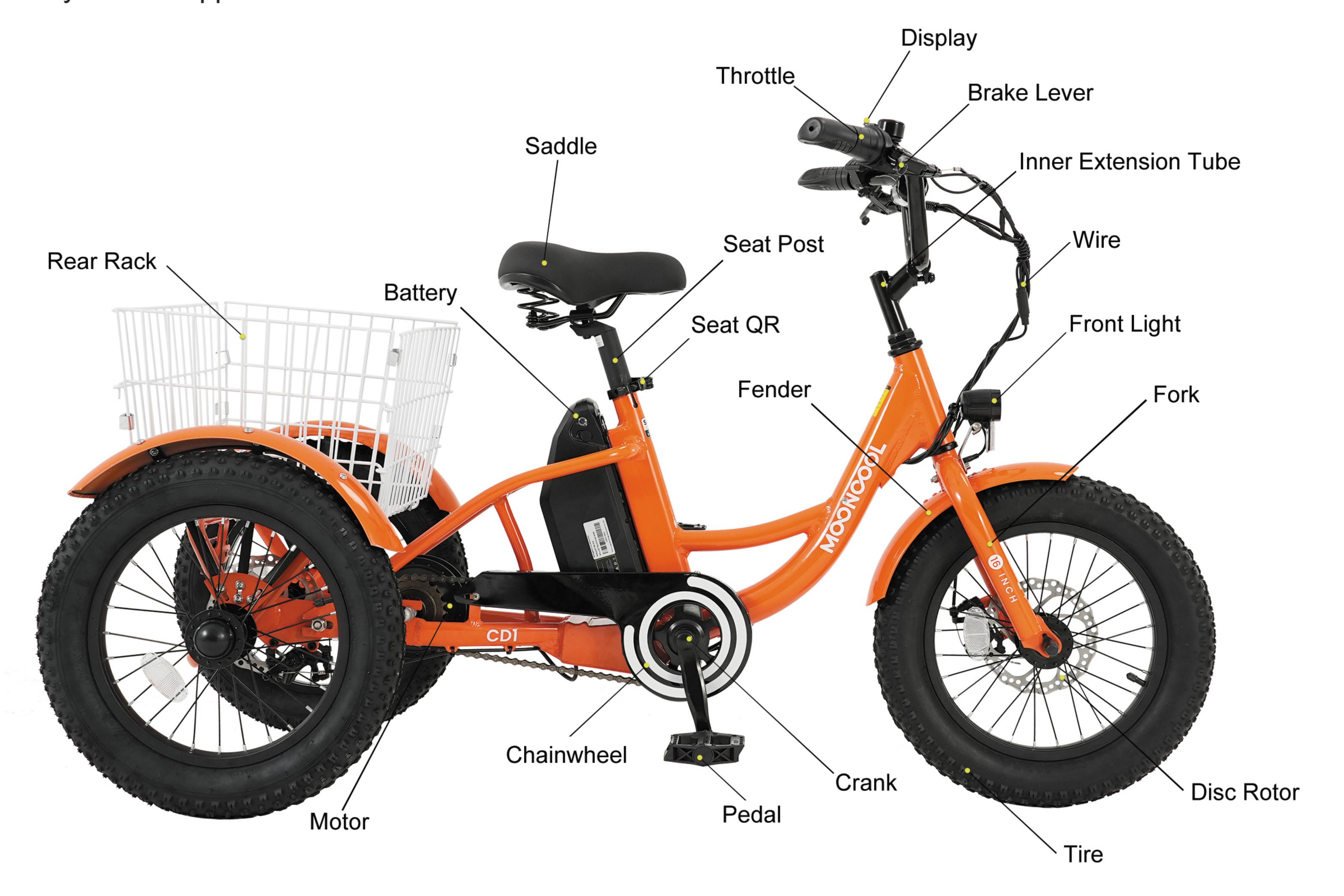
MOONCOOL Service email address: support@mooncool.com

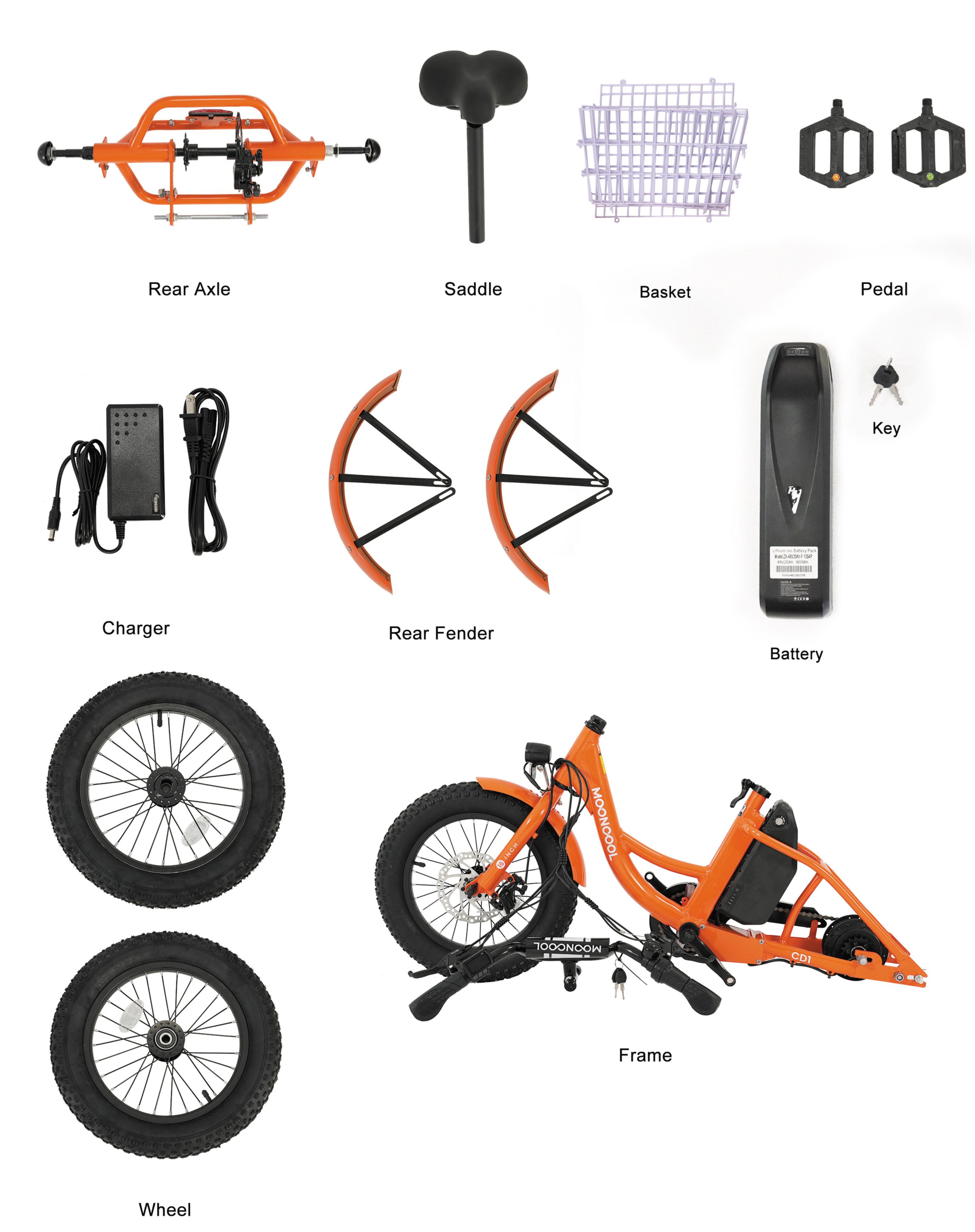
When sending a support request email, please include your order number, photos or videos to help us understand the problem, and a screenshot or photo of your invoice.

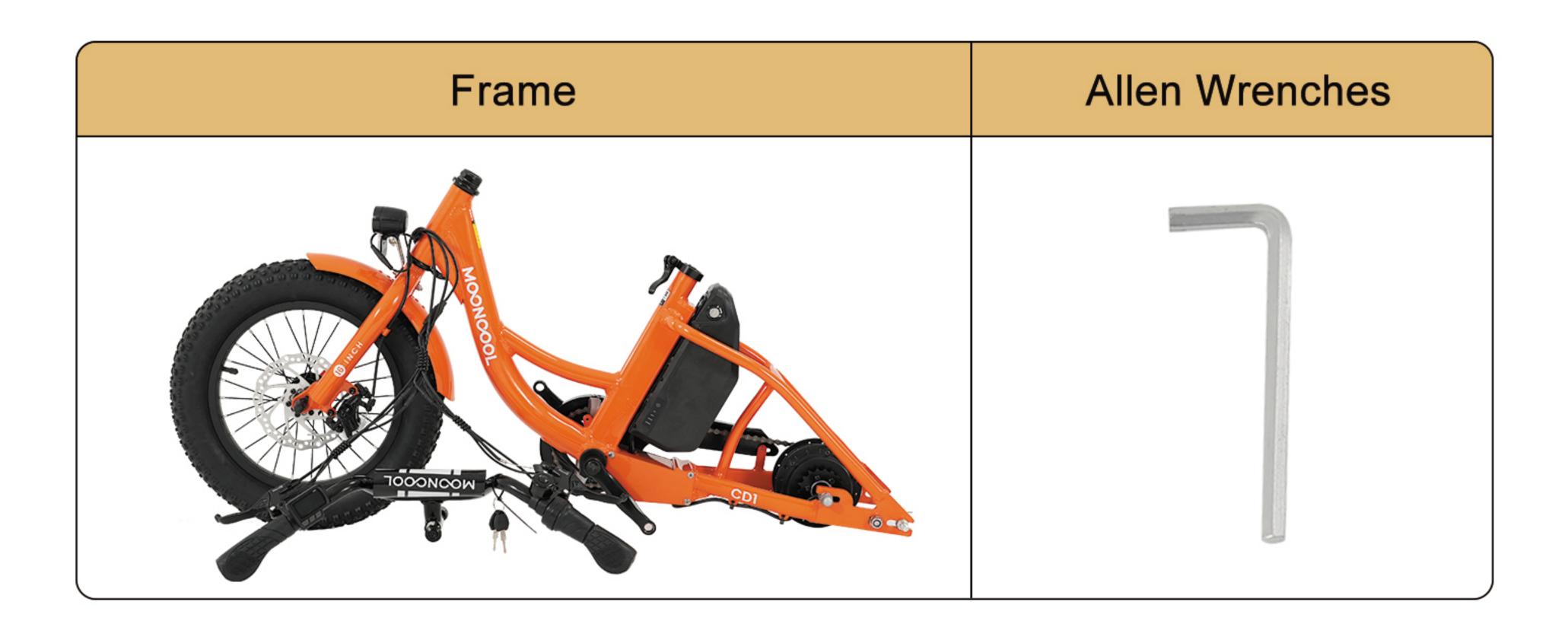
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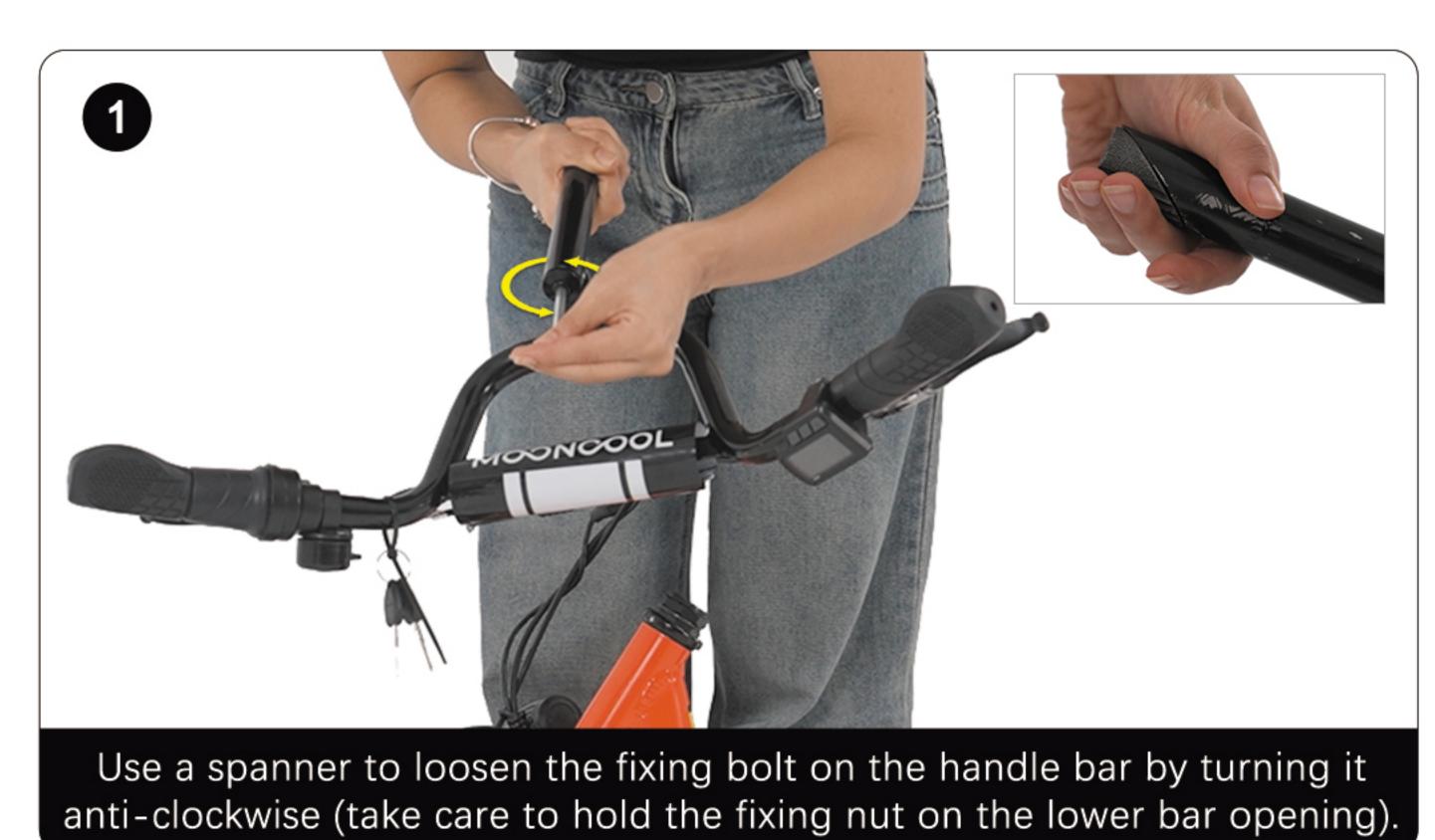
Pictures are for reference only. The products you receive may differ in appearance.

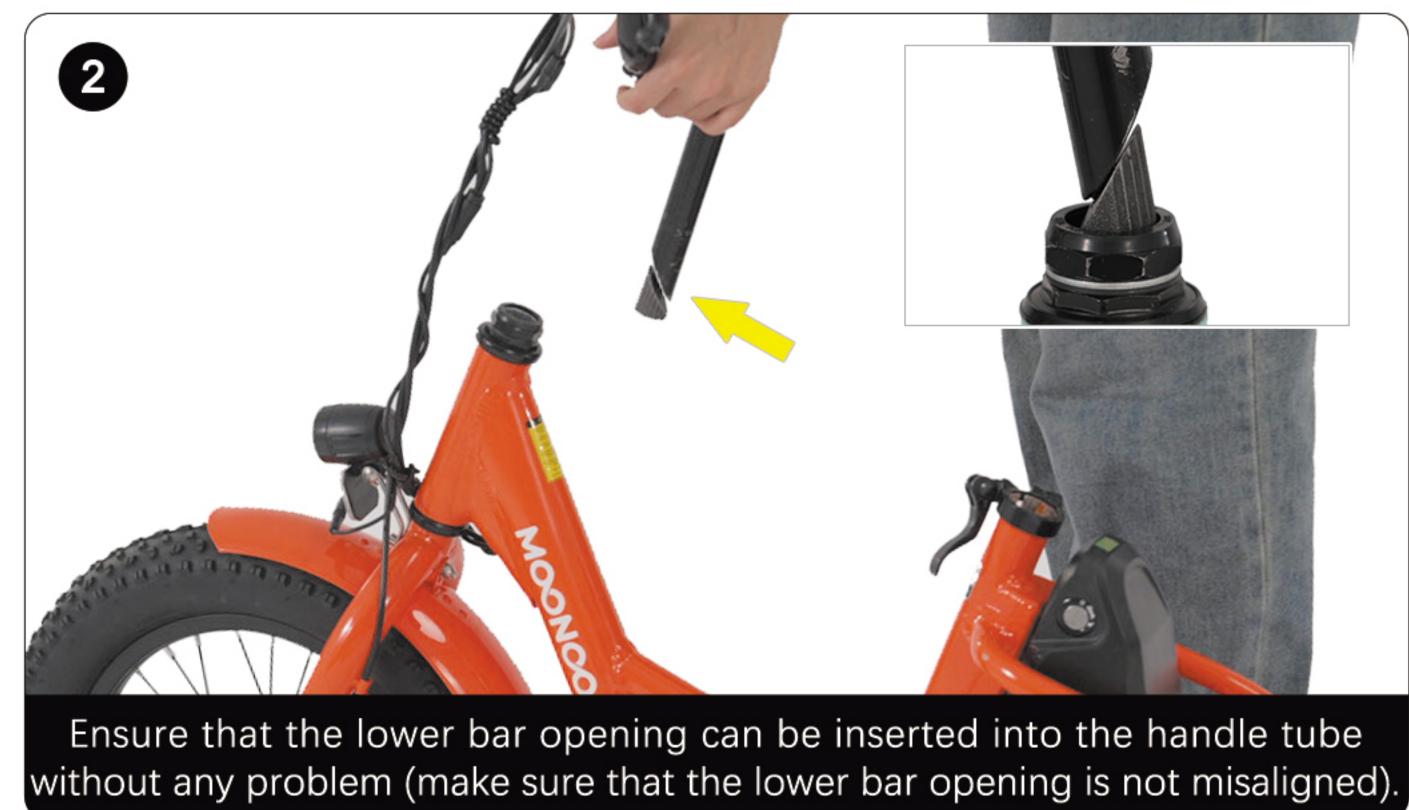






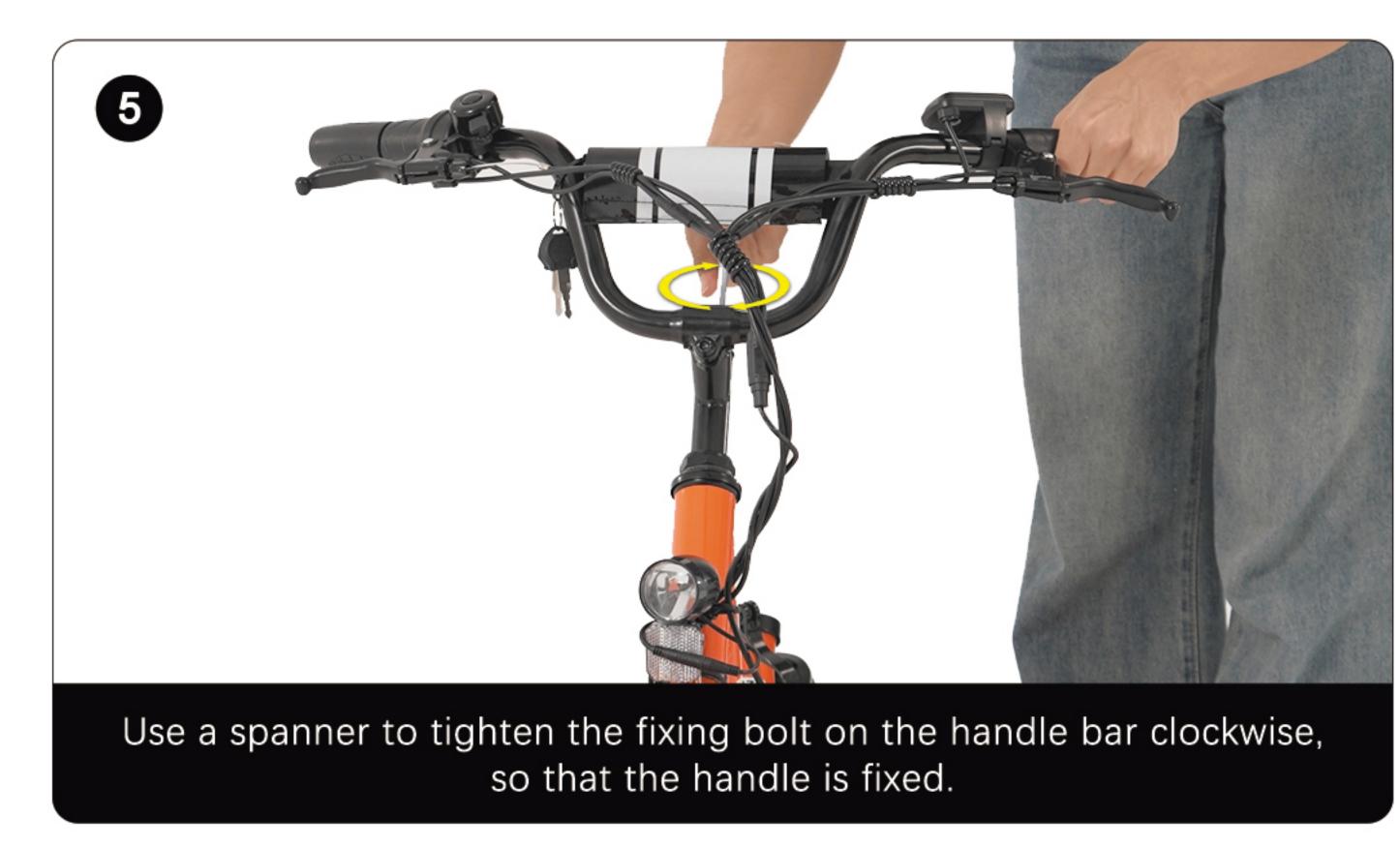
Assembly Steps



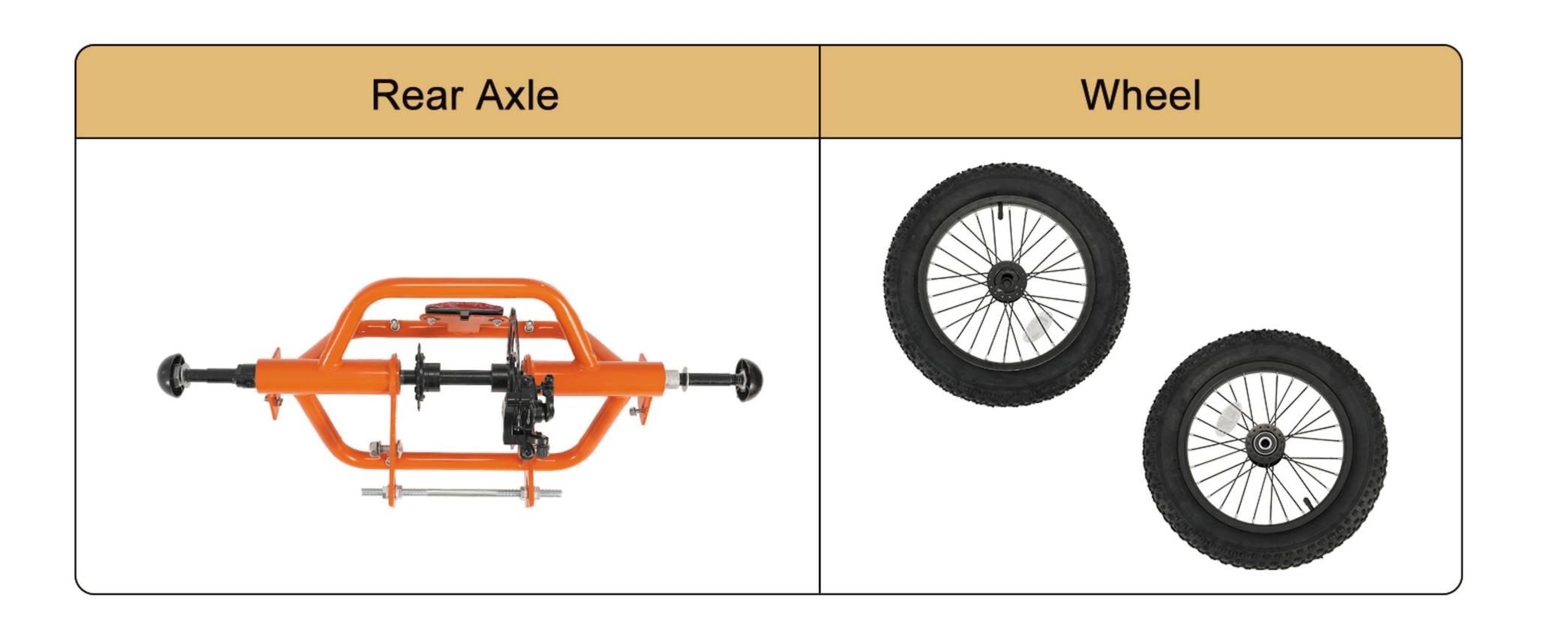






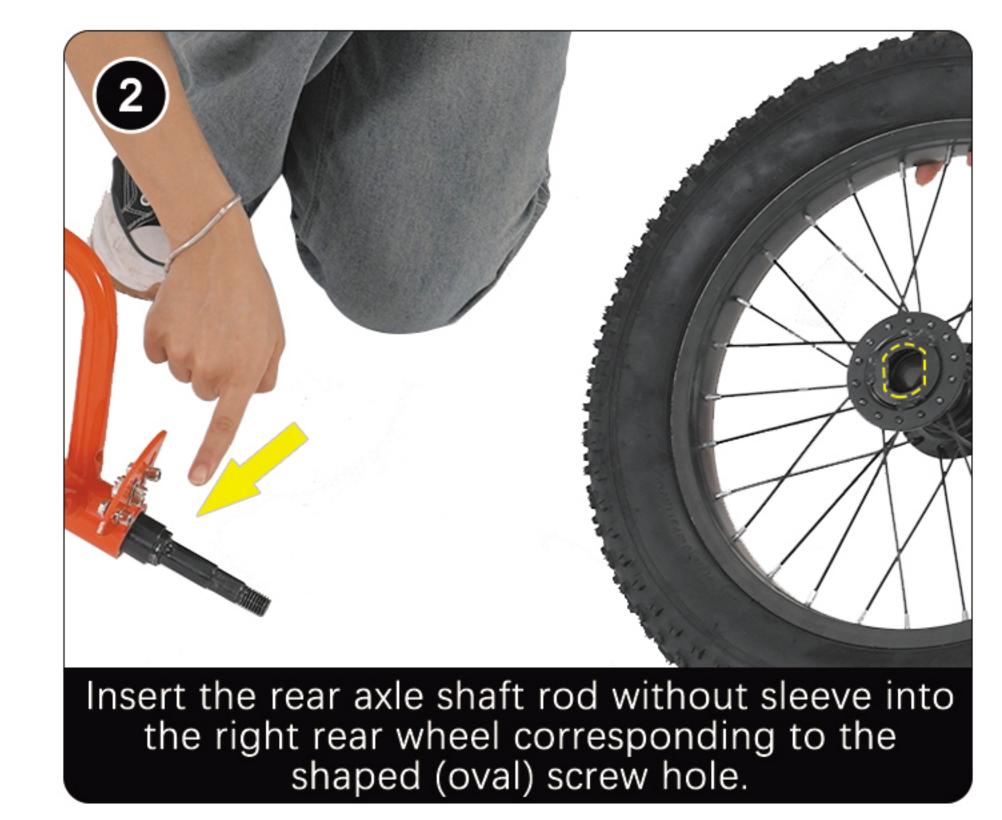


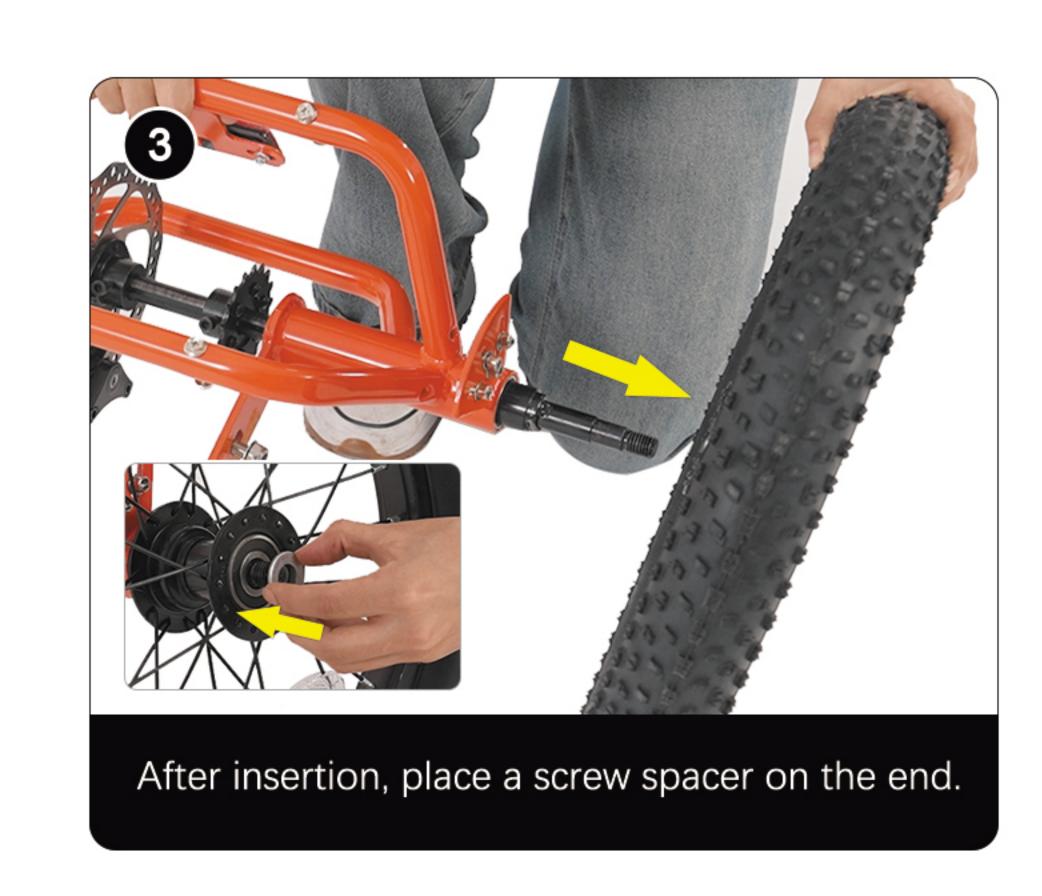
Parts and Tools

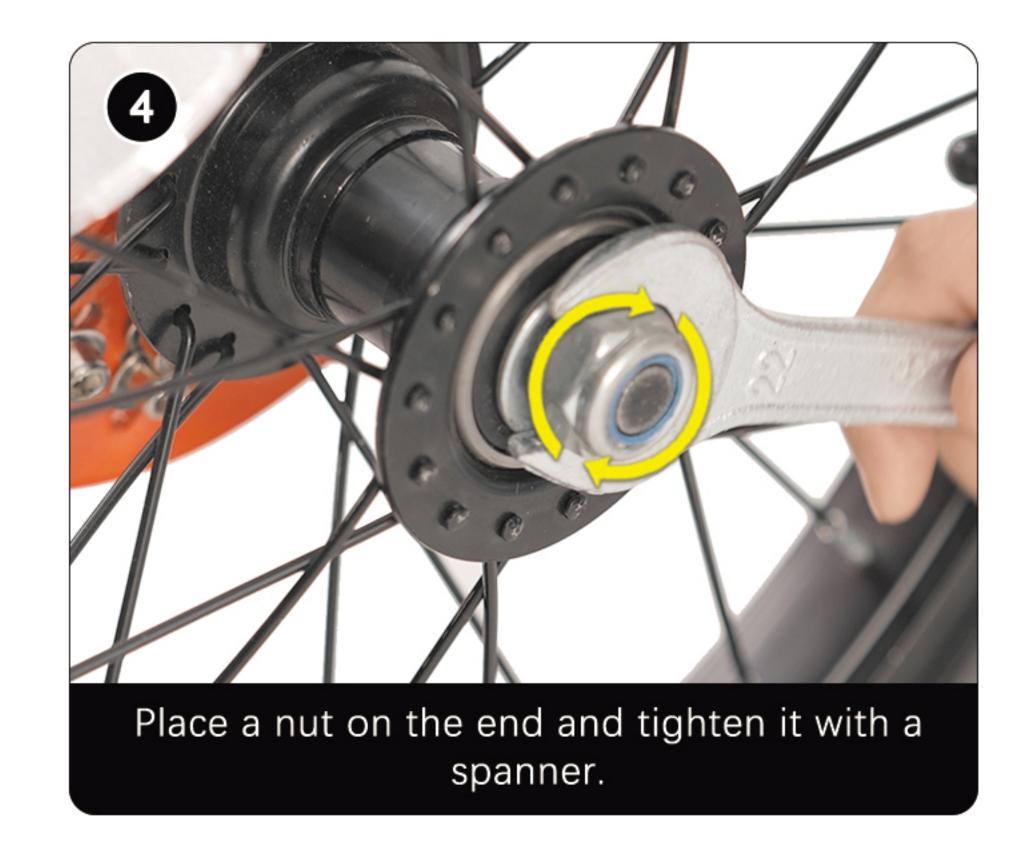


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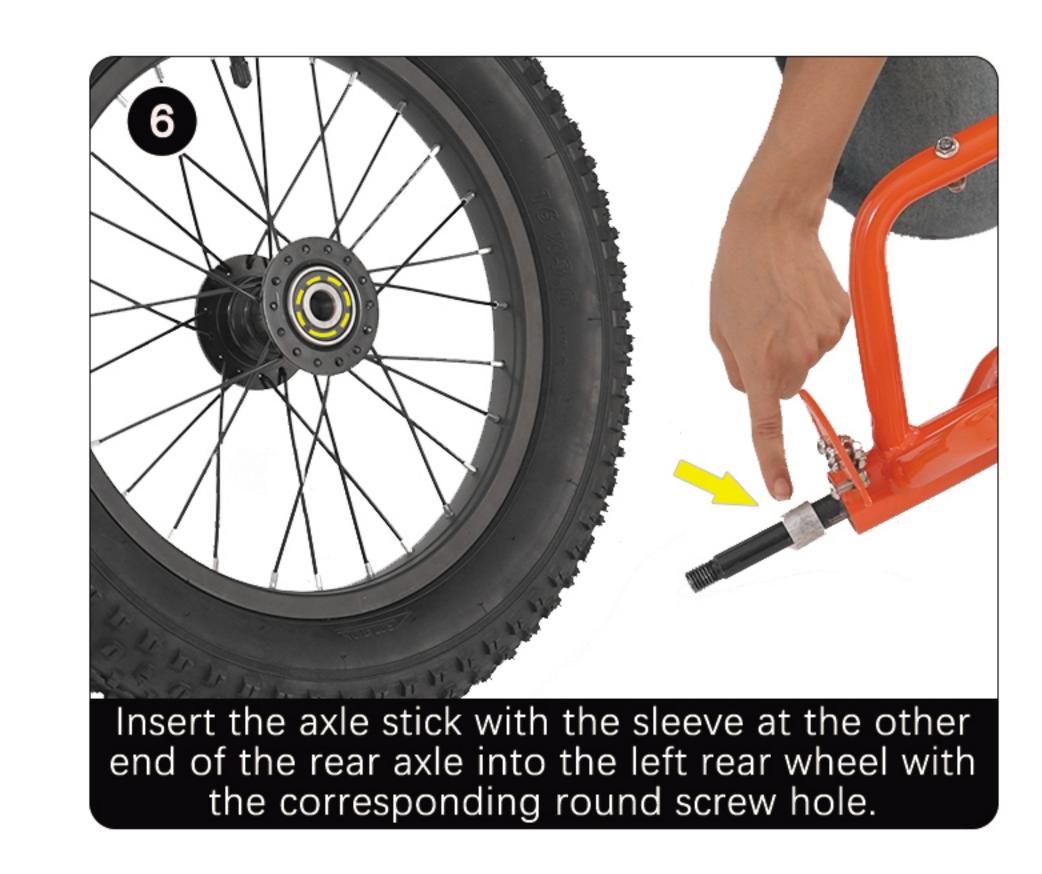


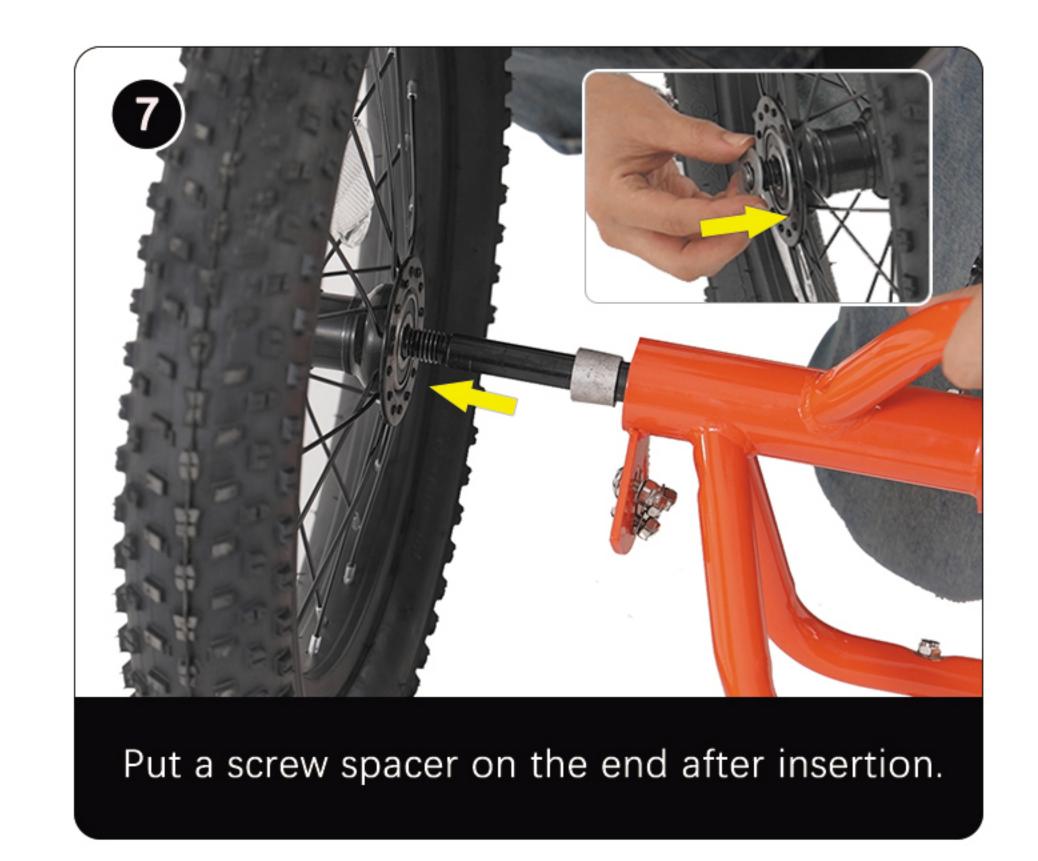


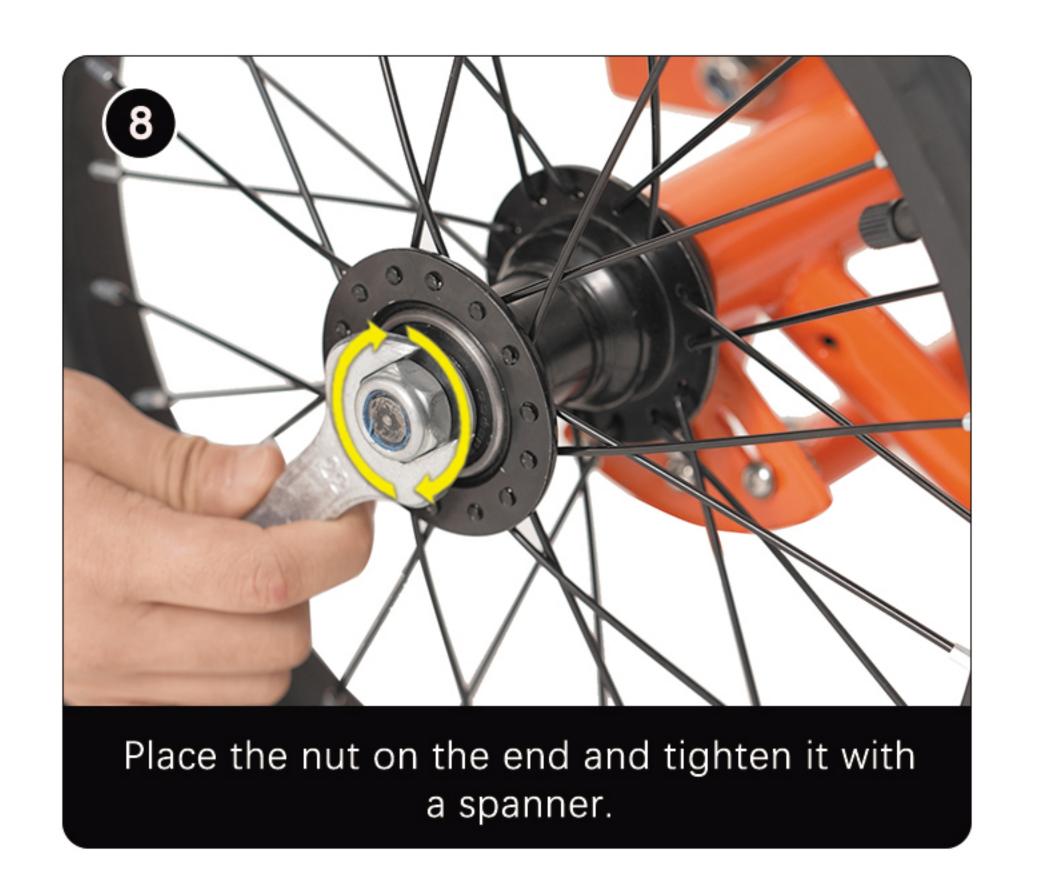


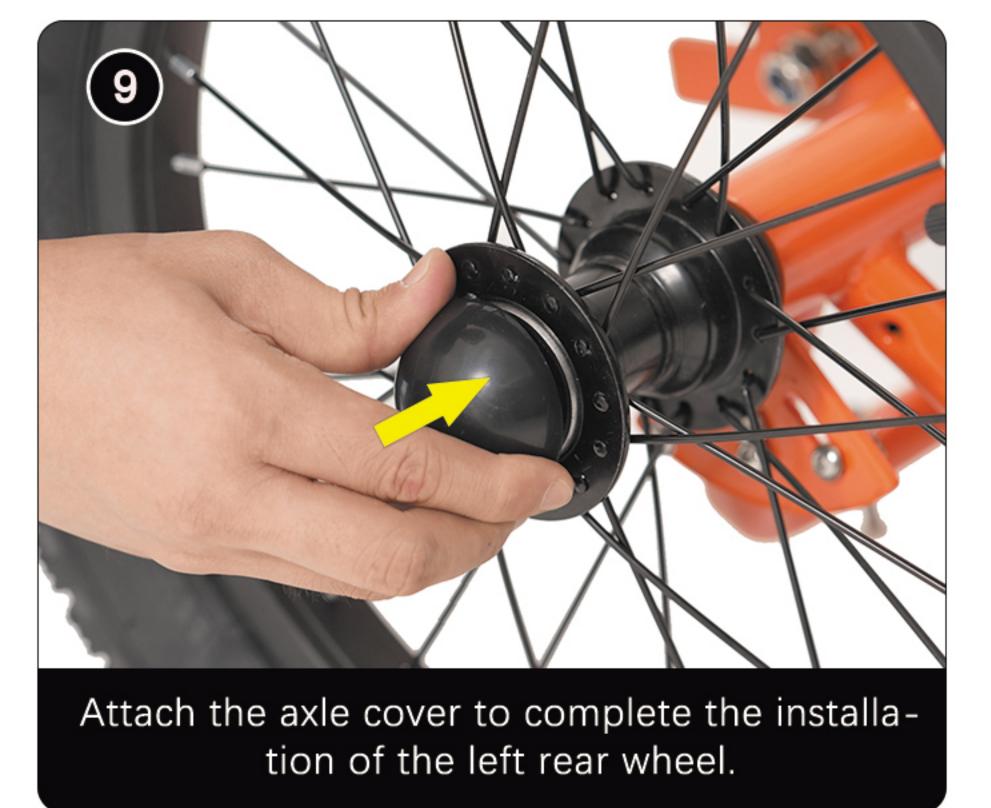




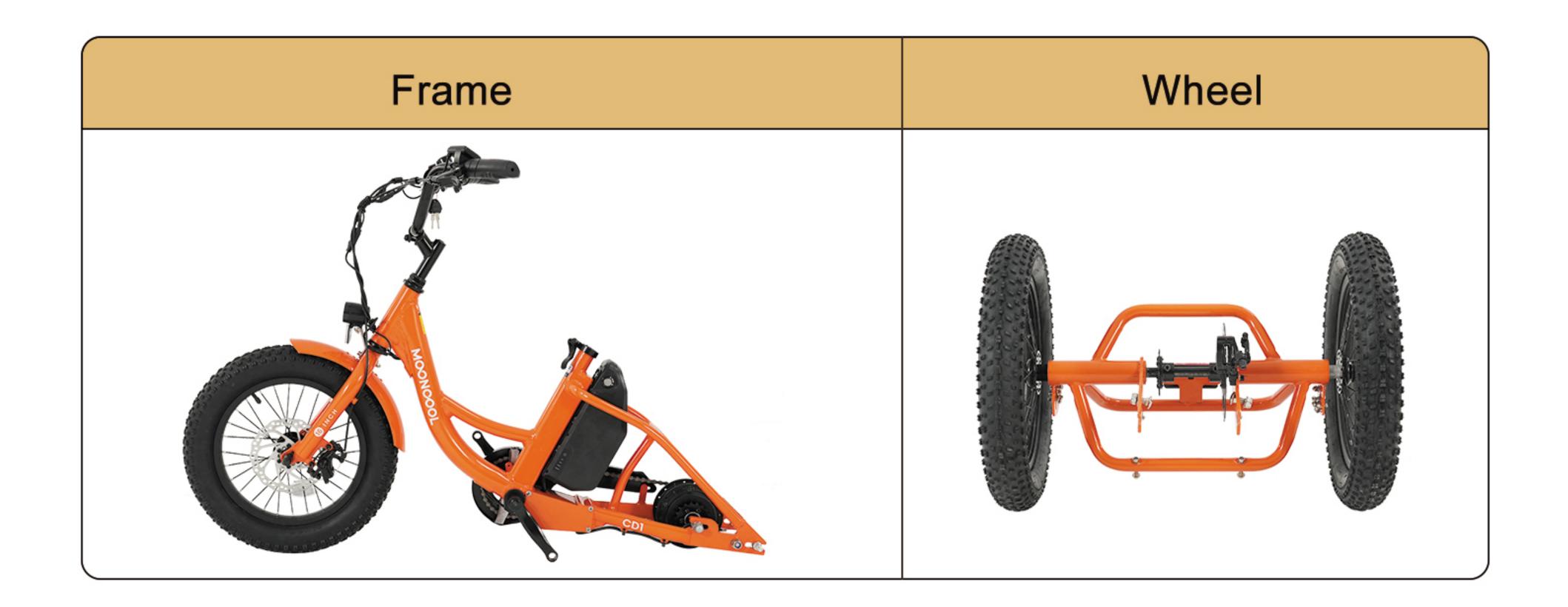






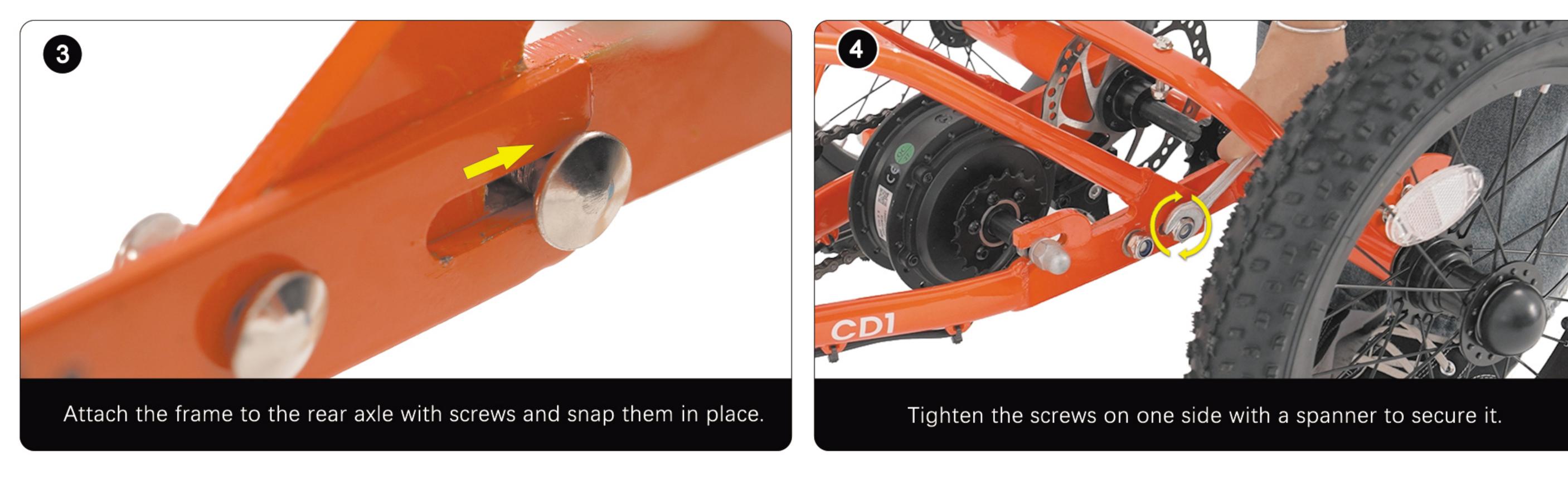


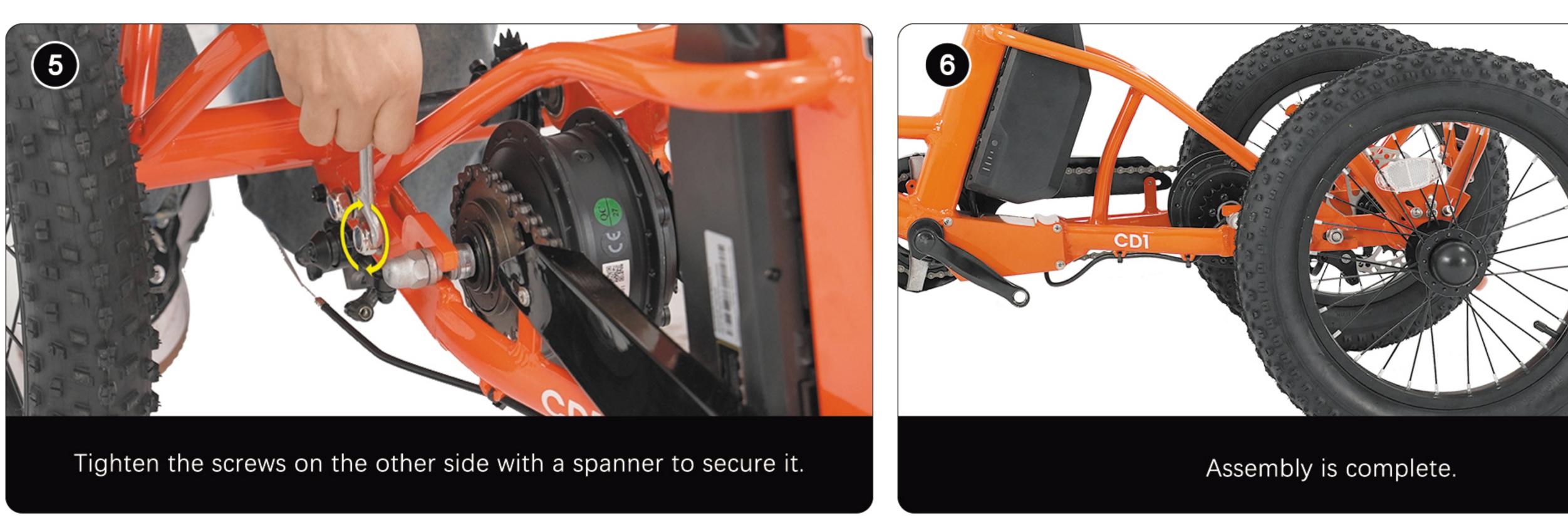
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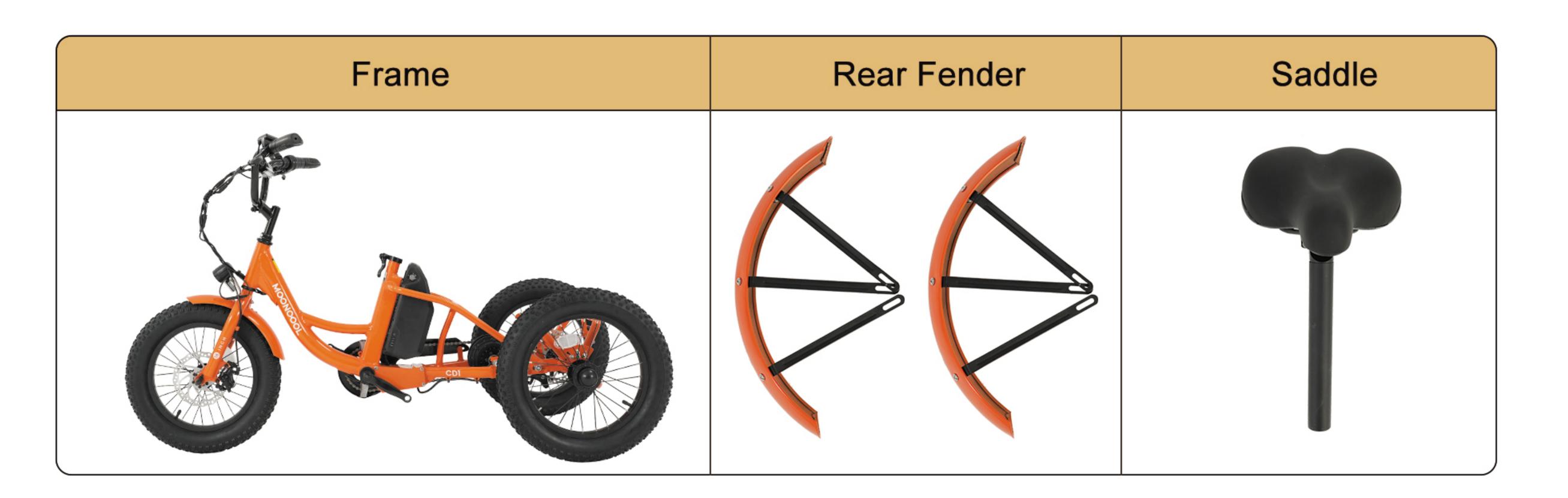
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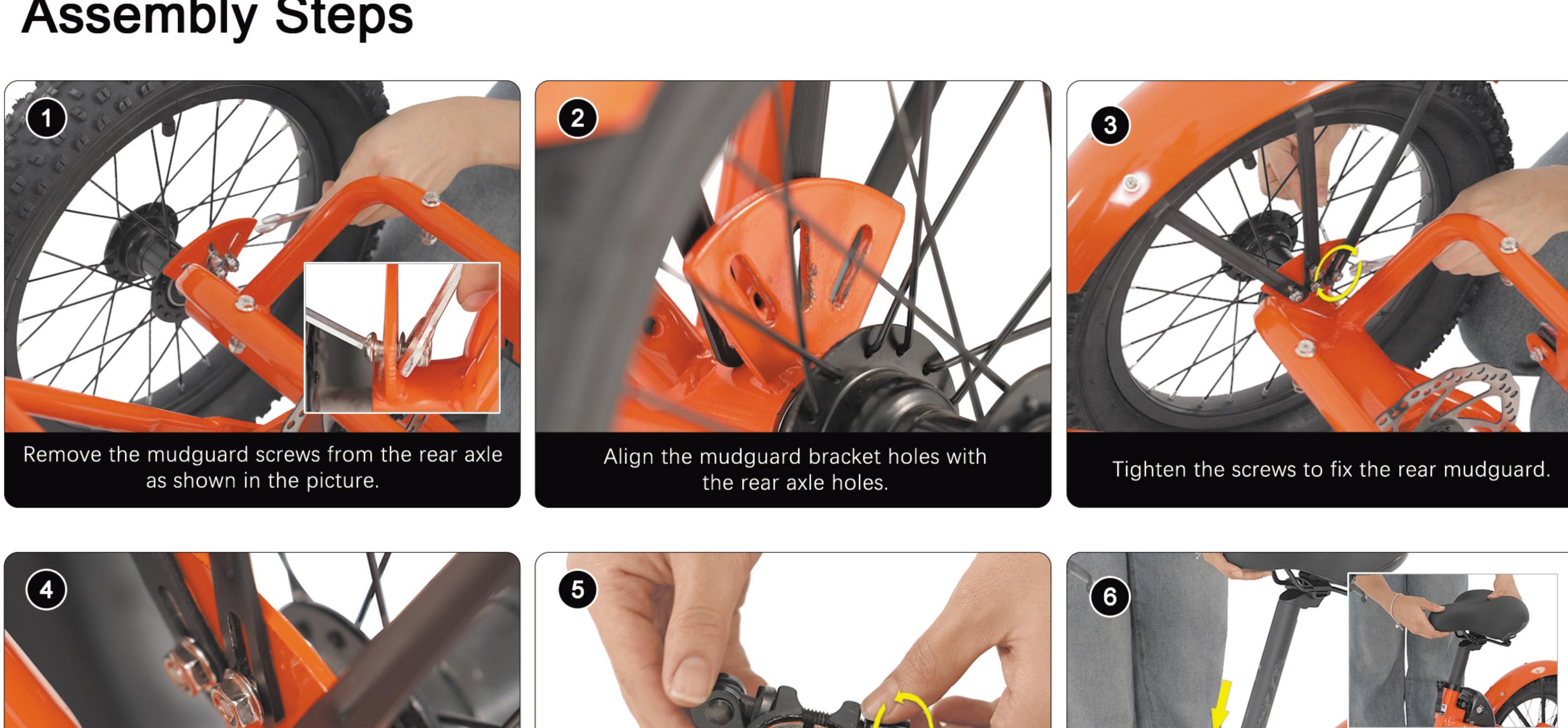




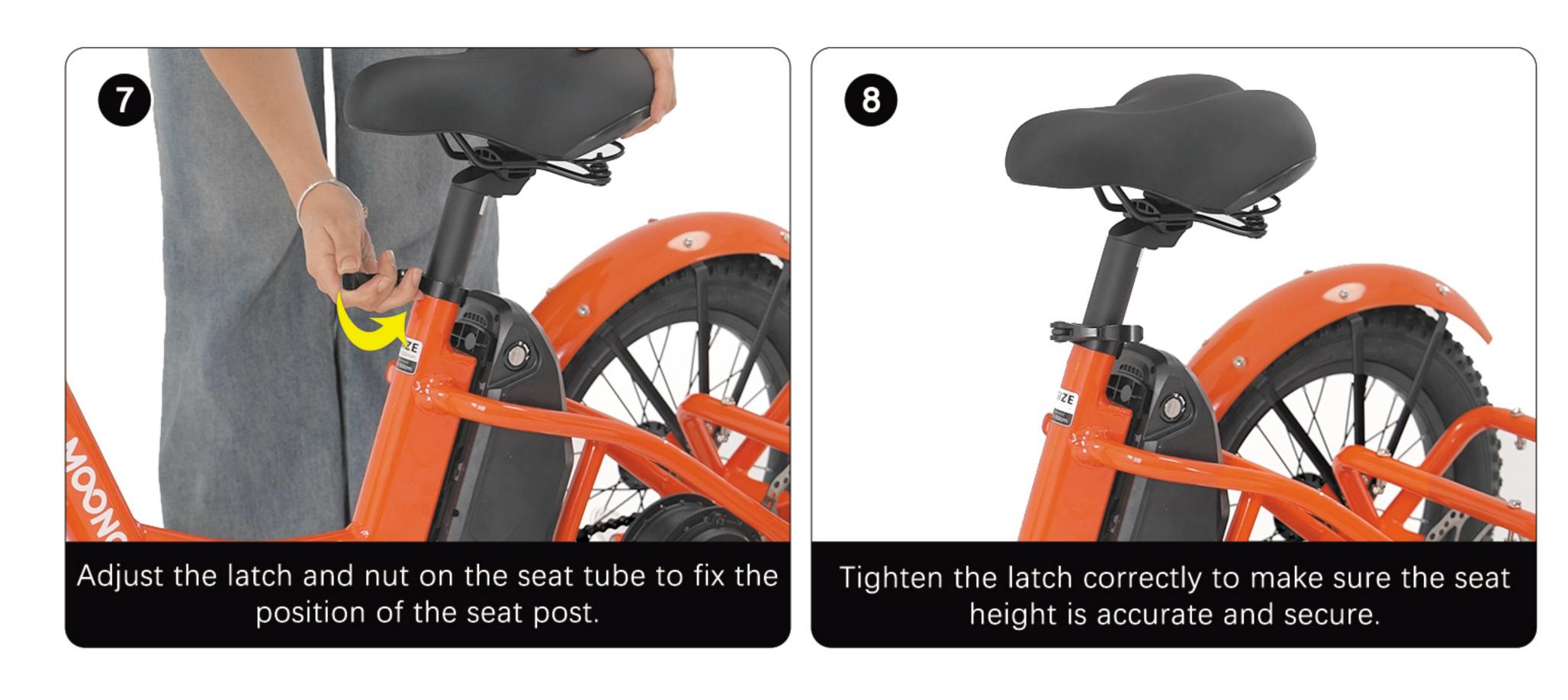
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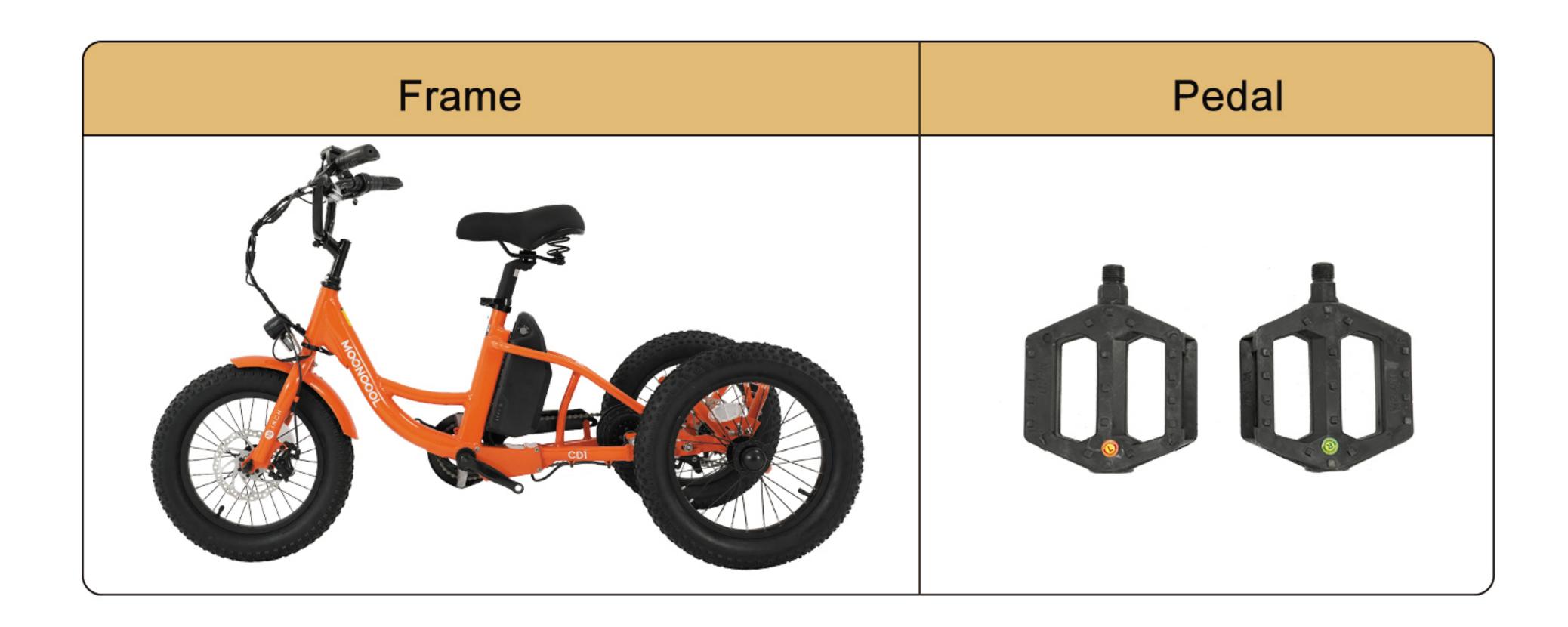


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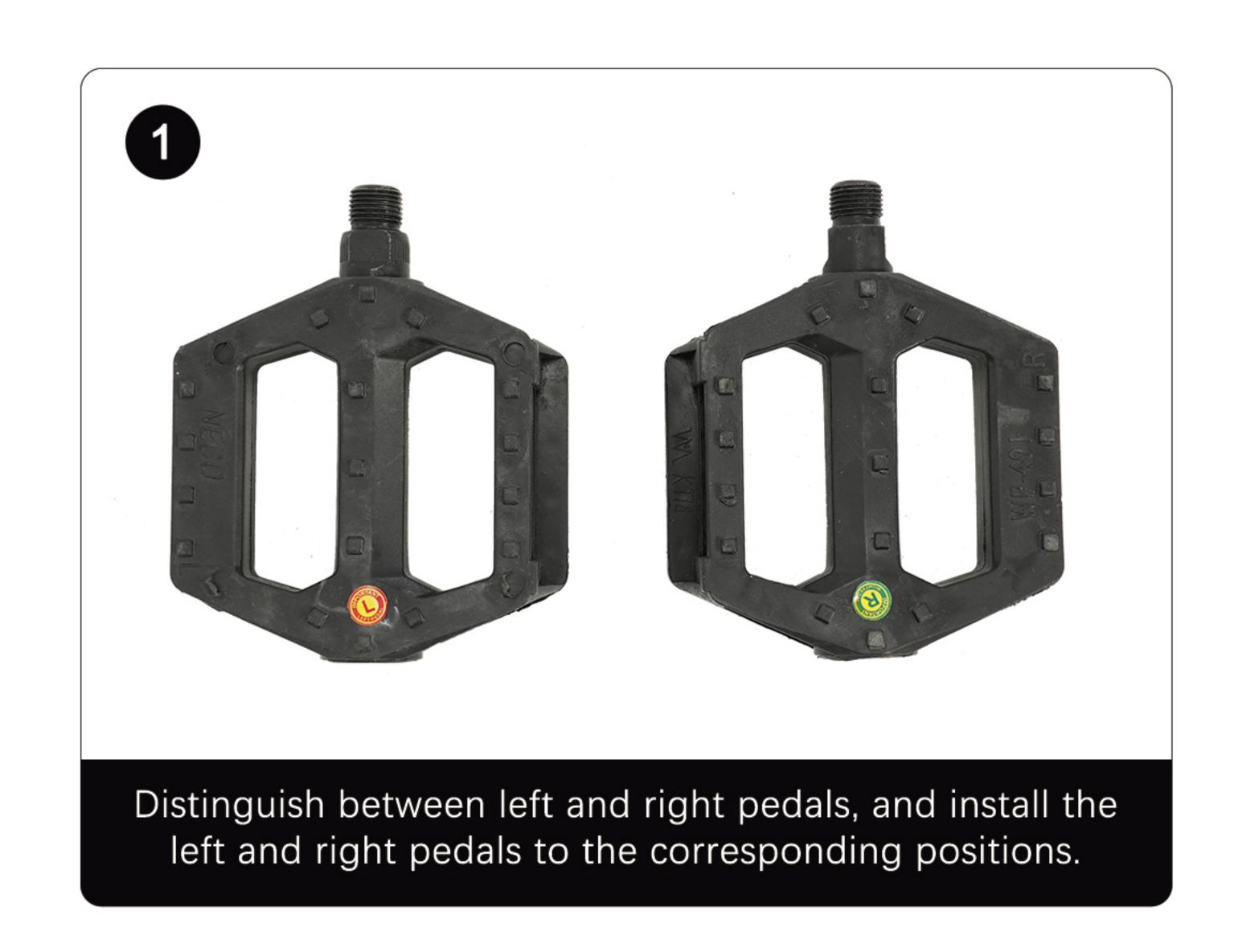


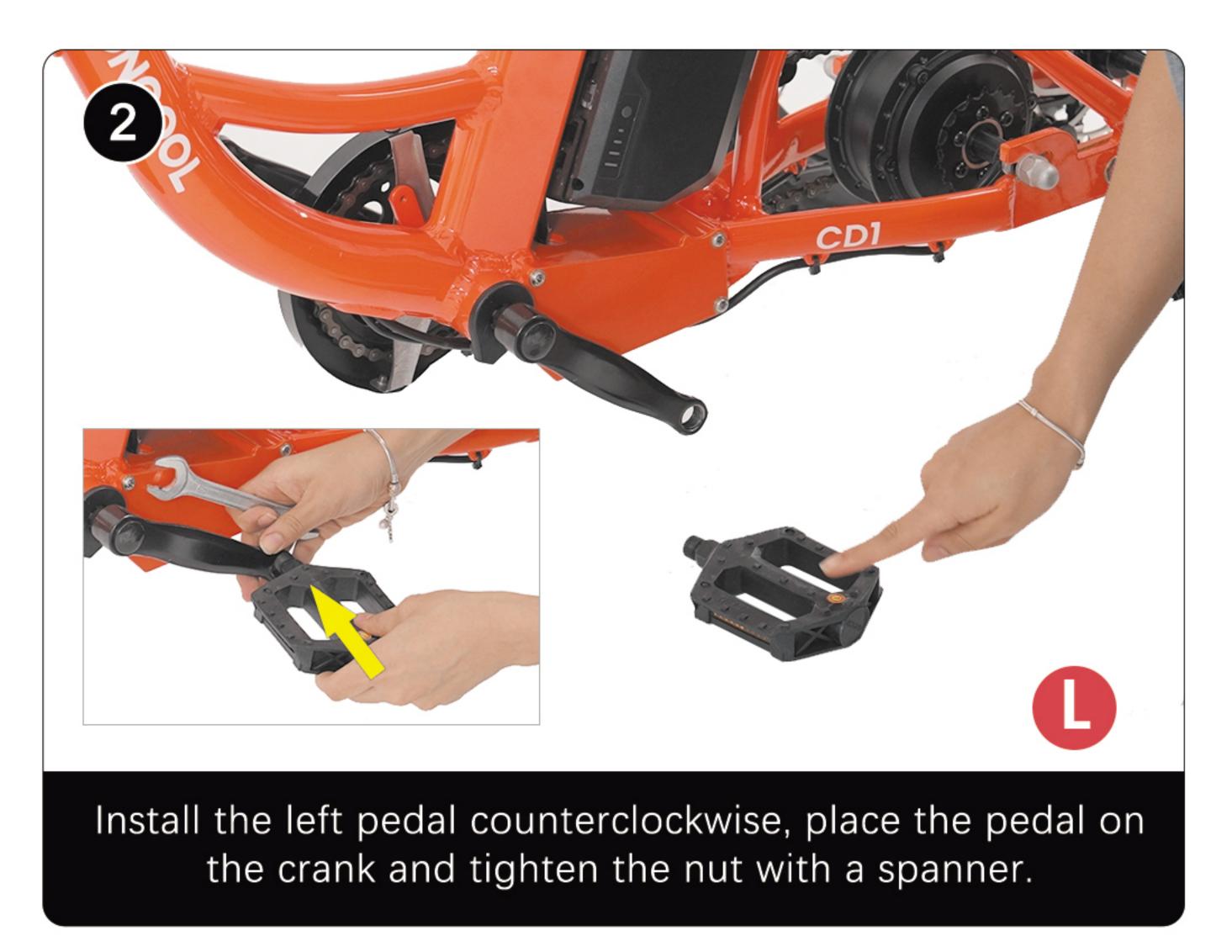


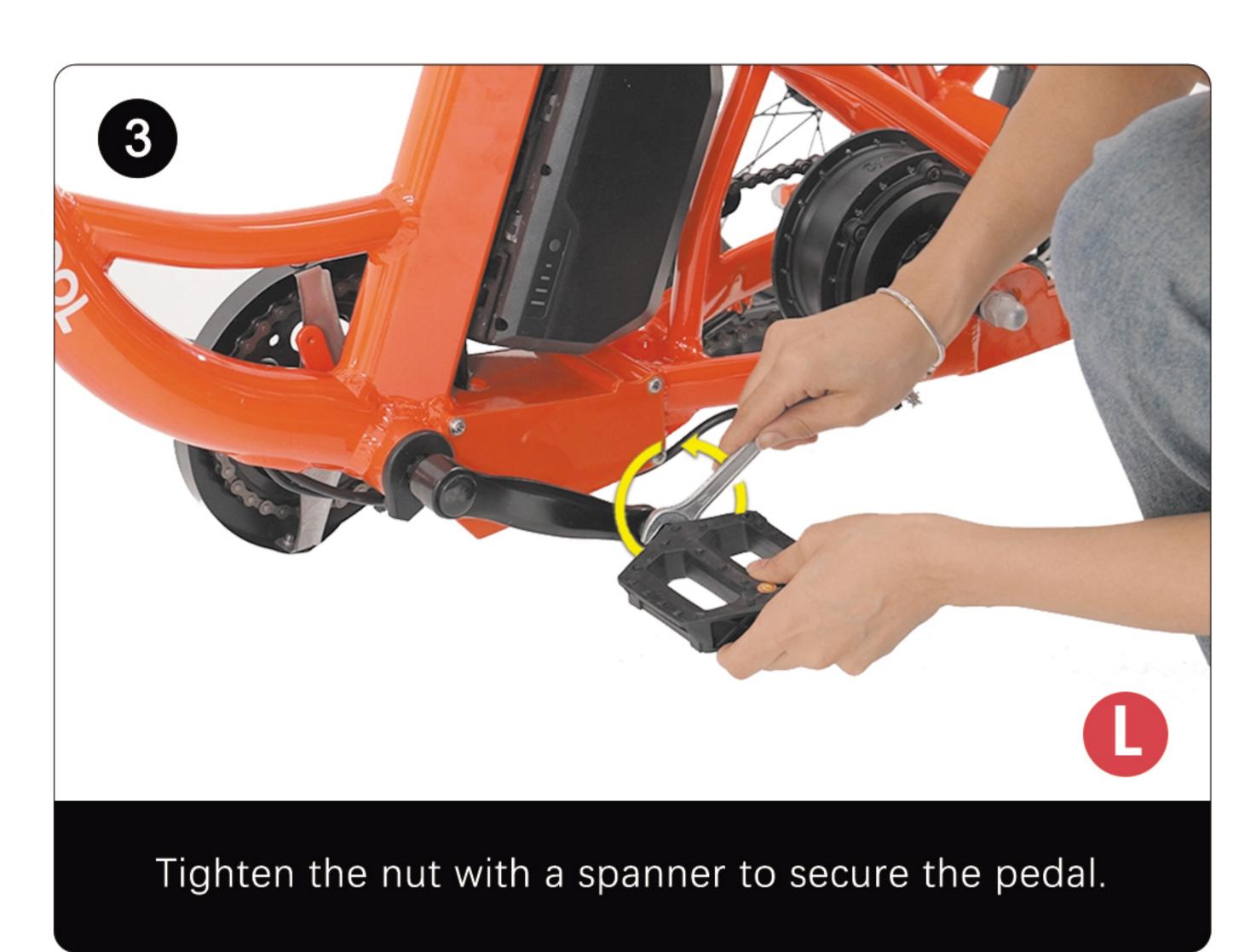


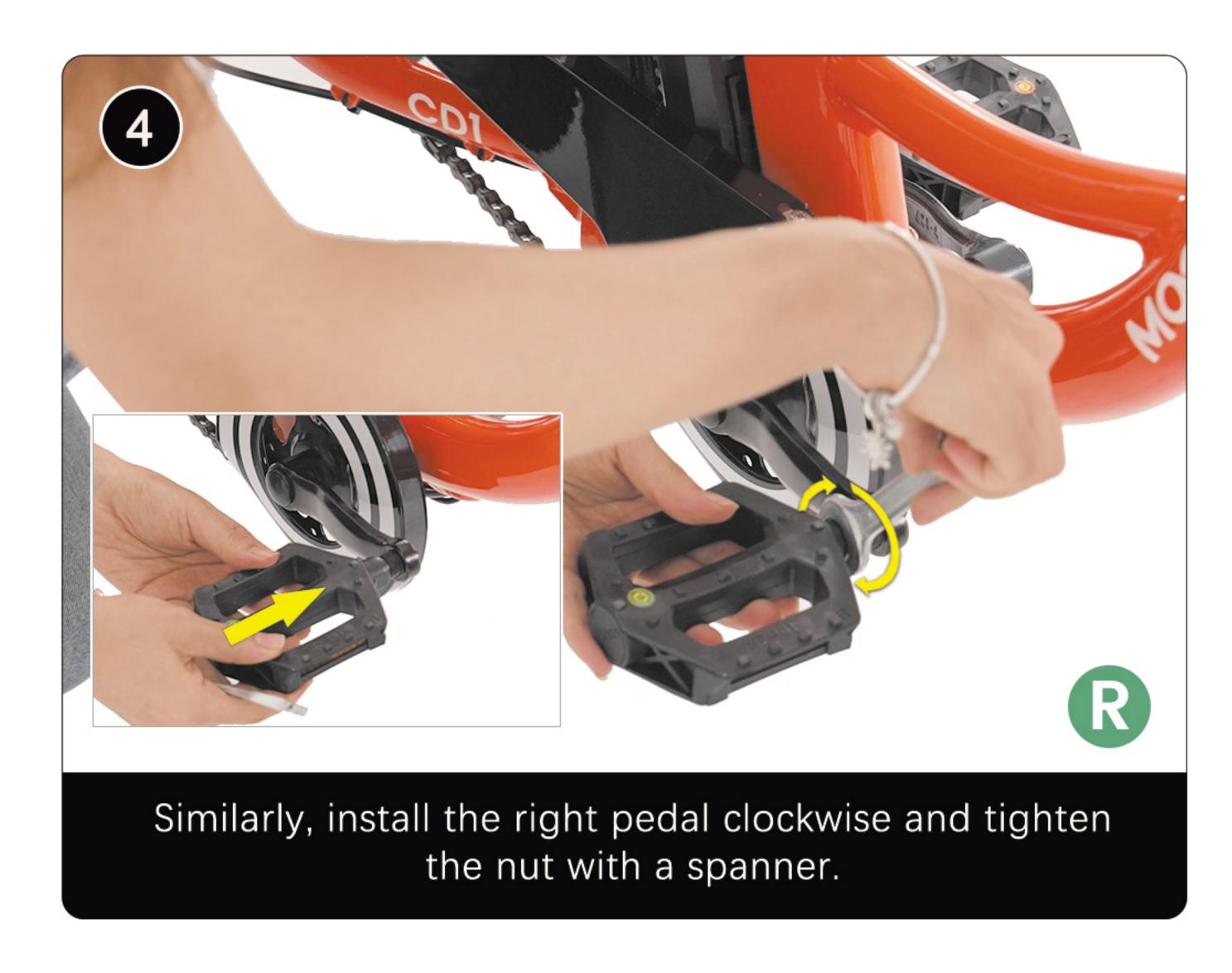


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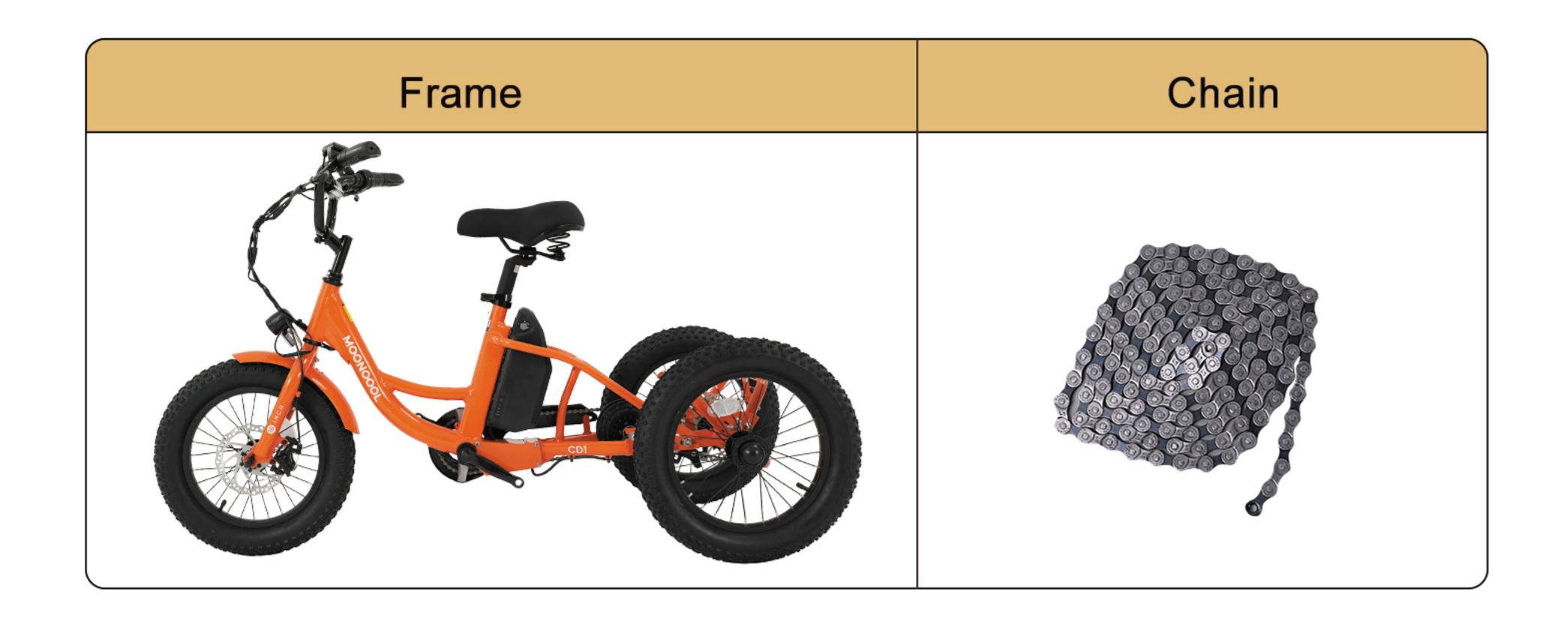




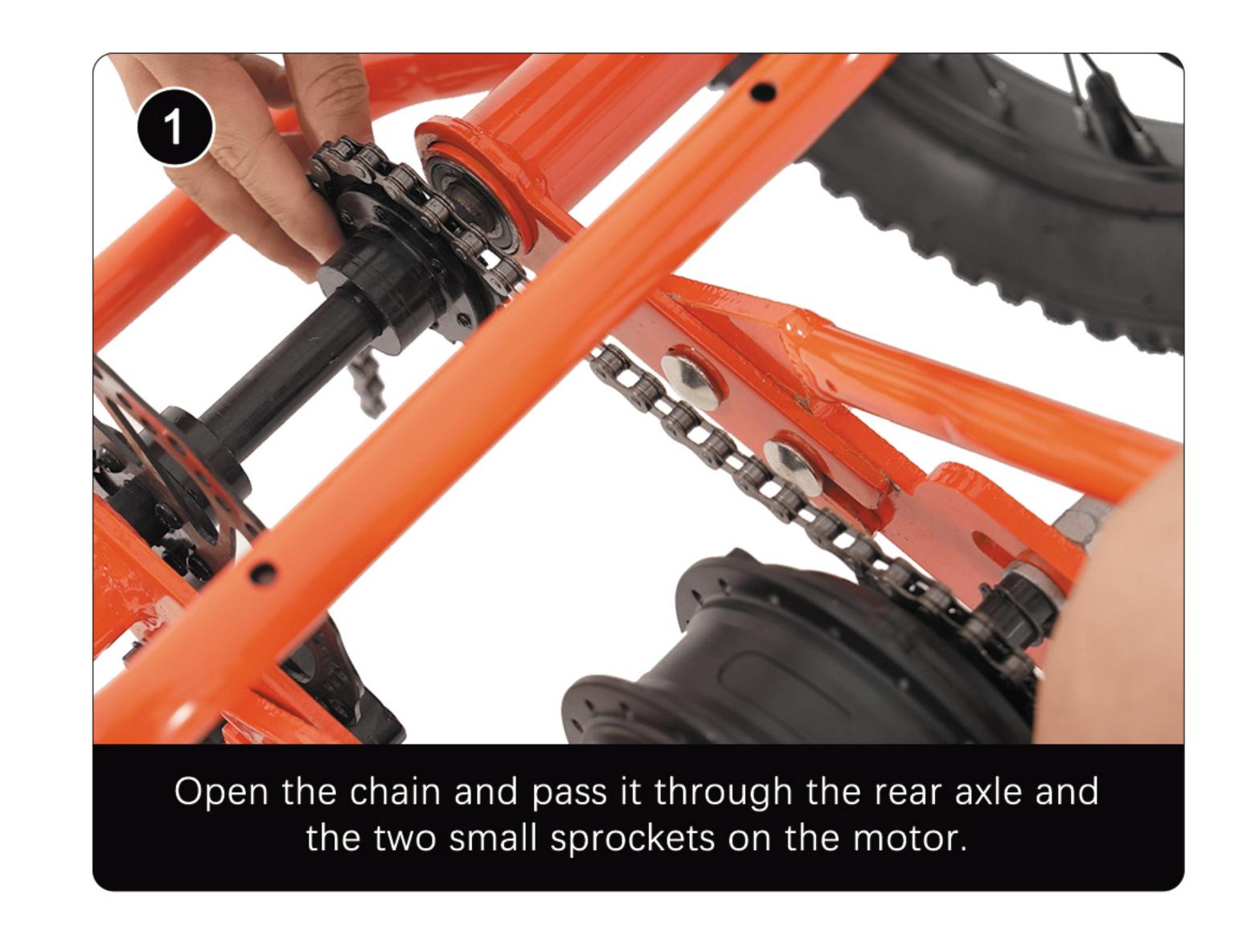




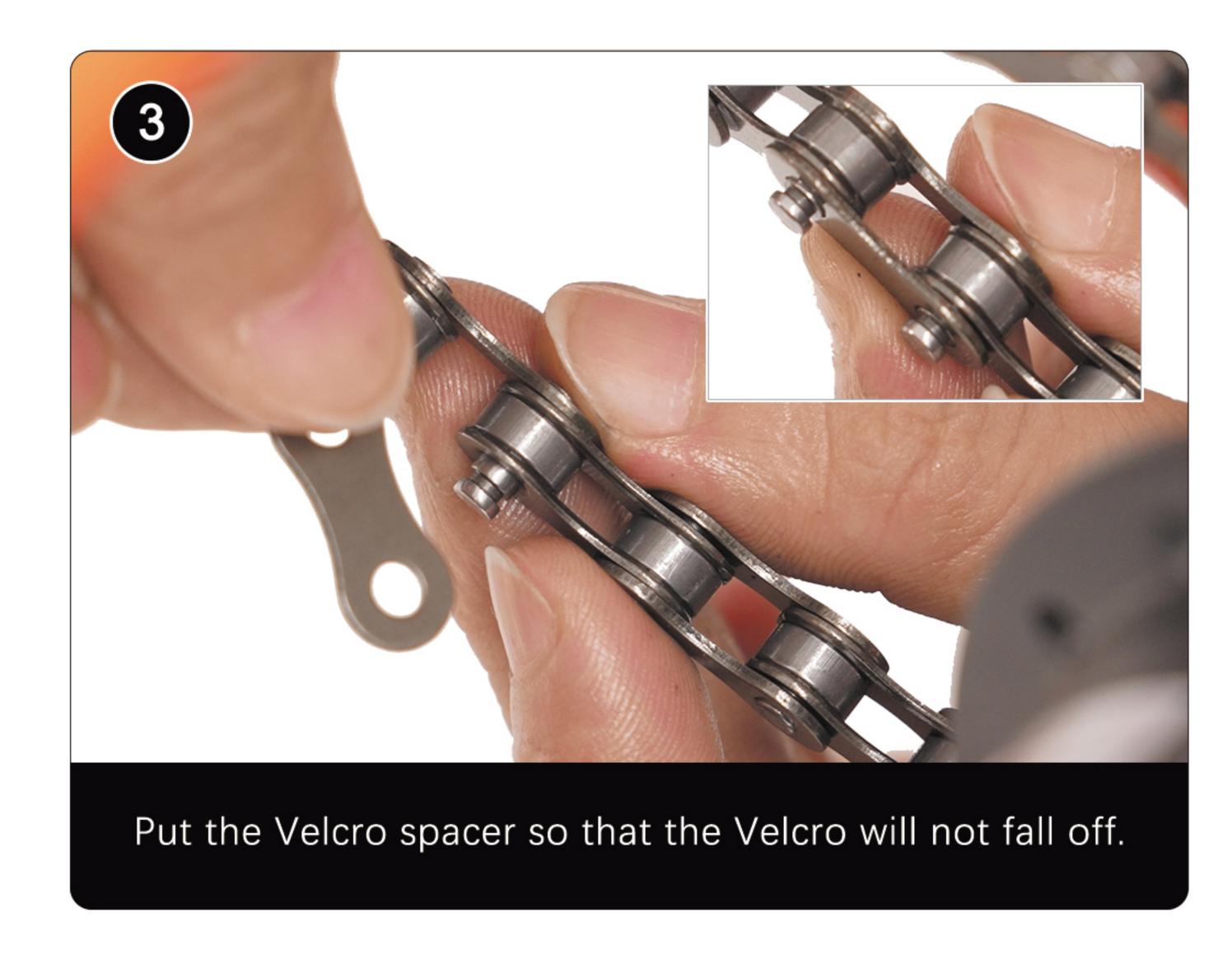
Parts and Tools



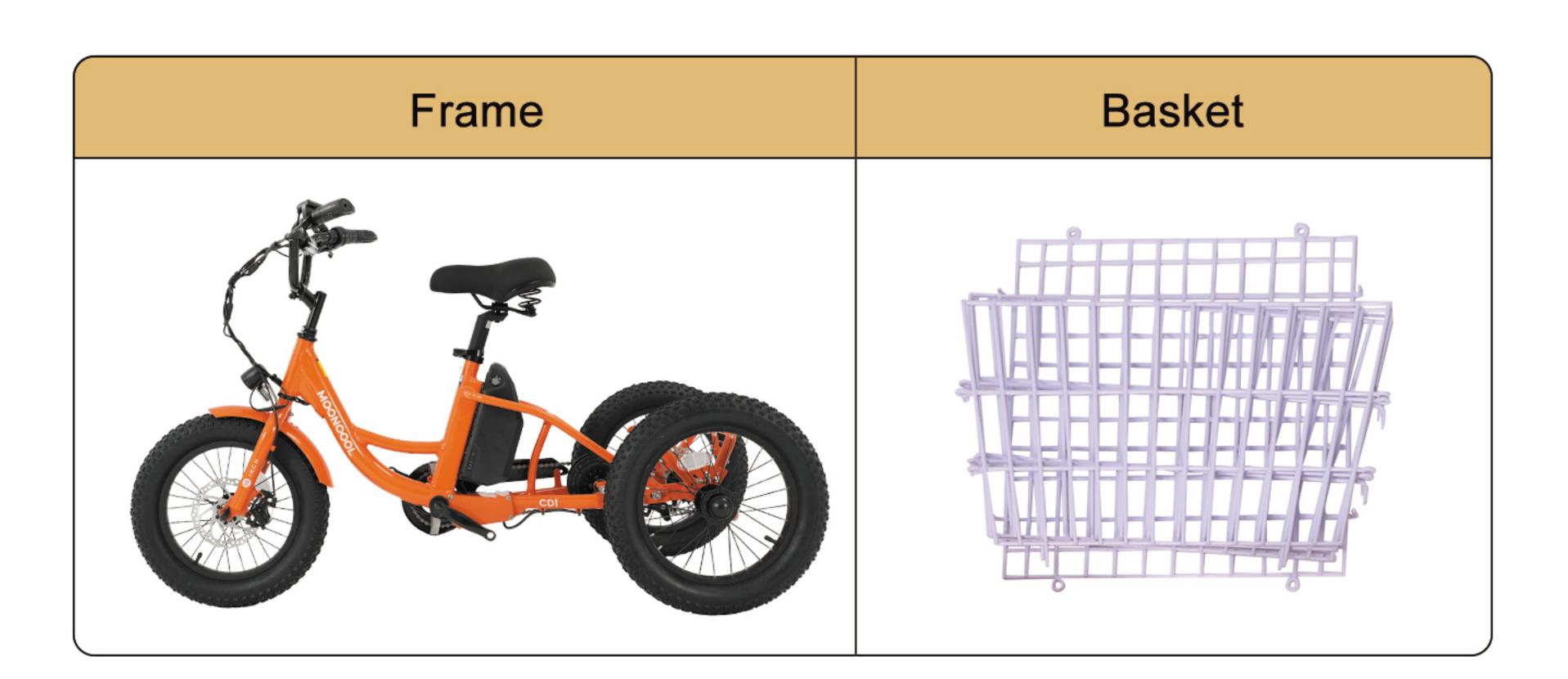
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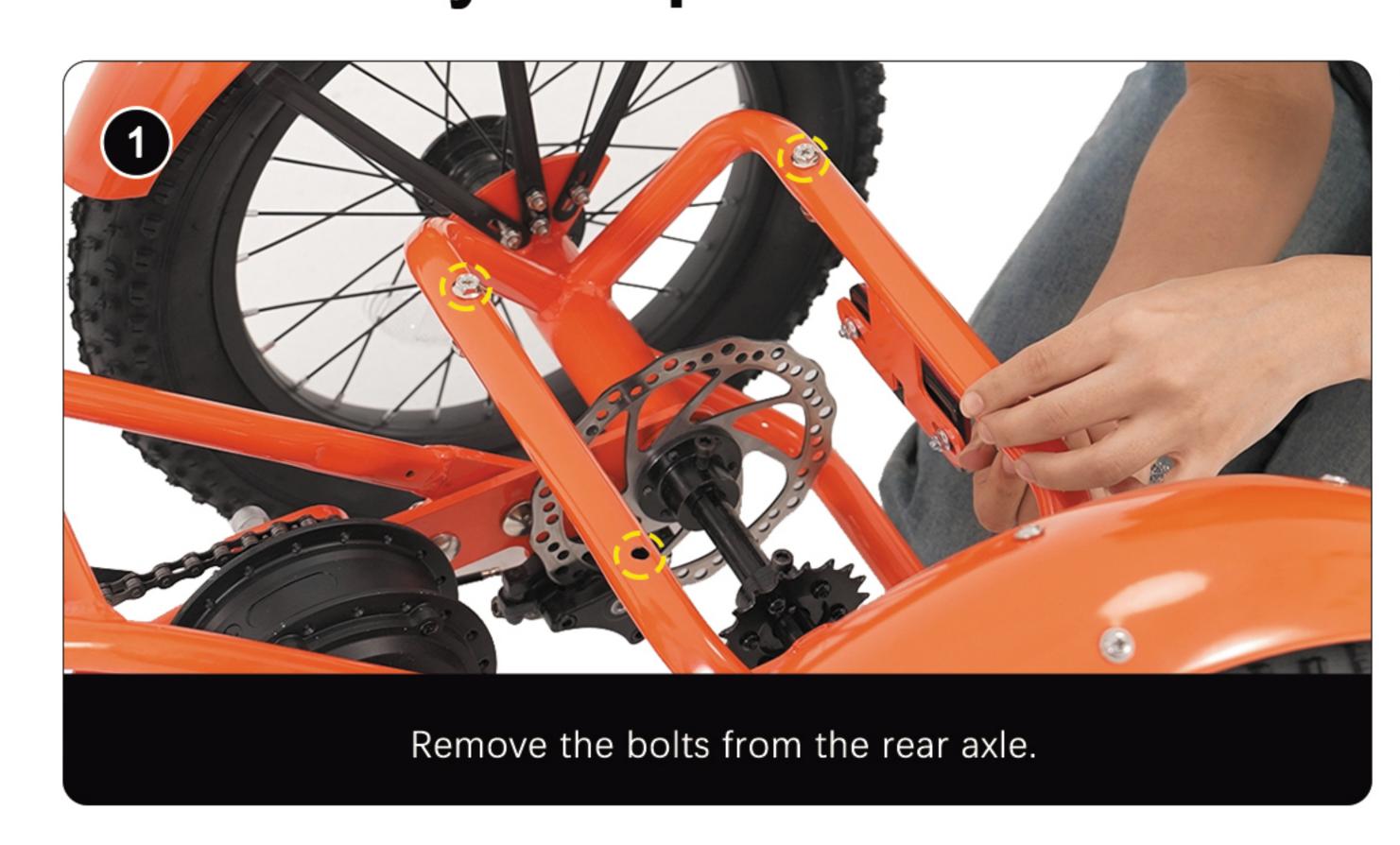


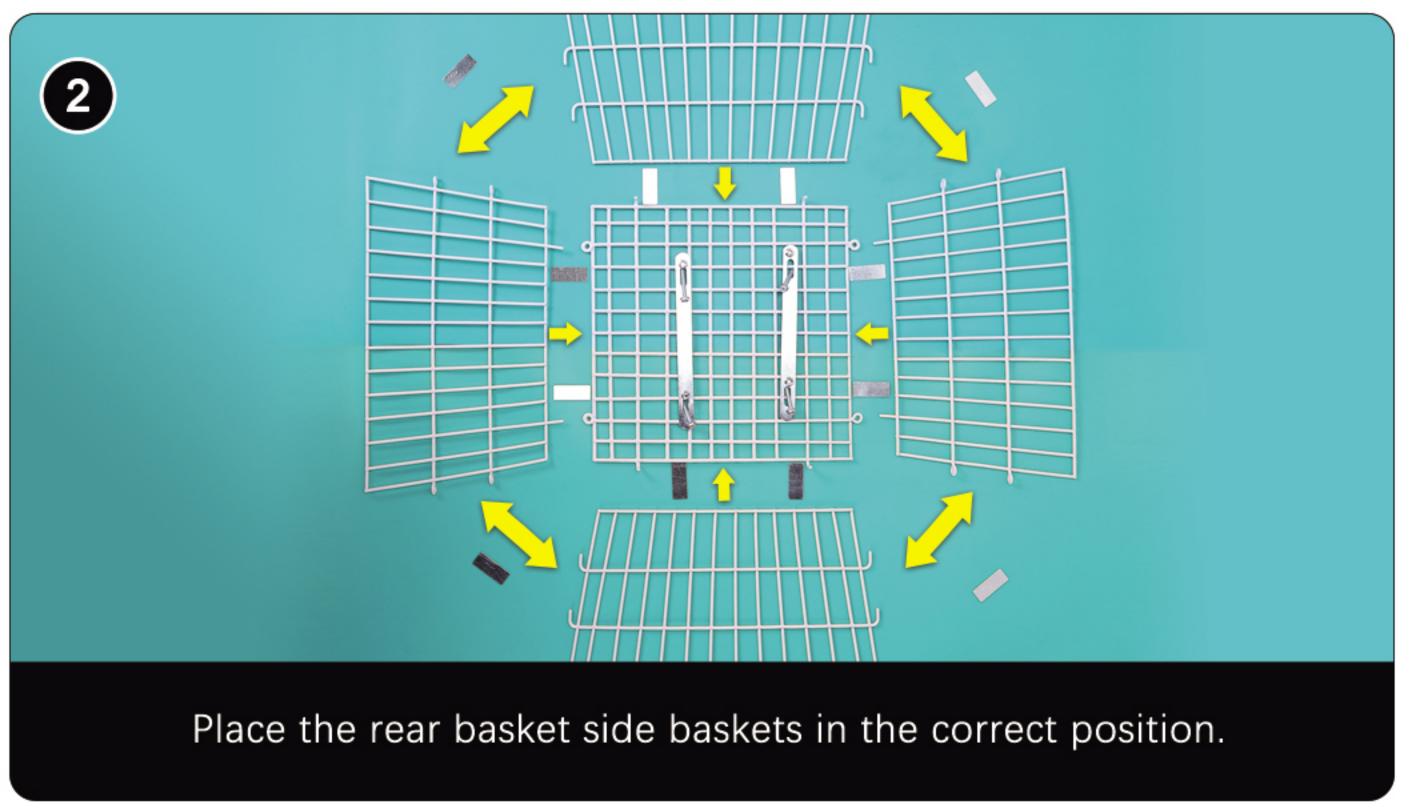




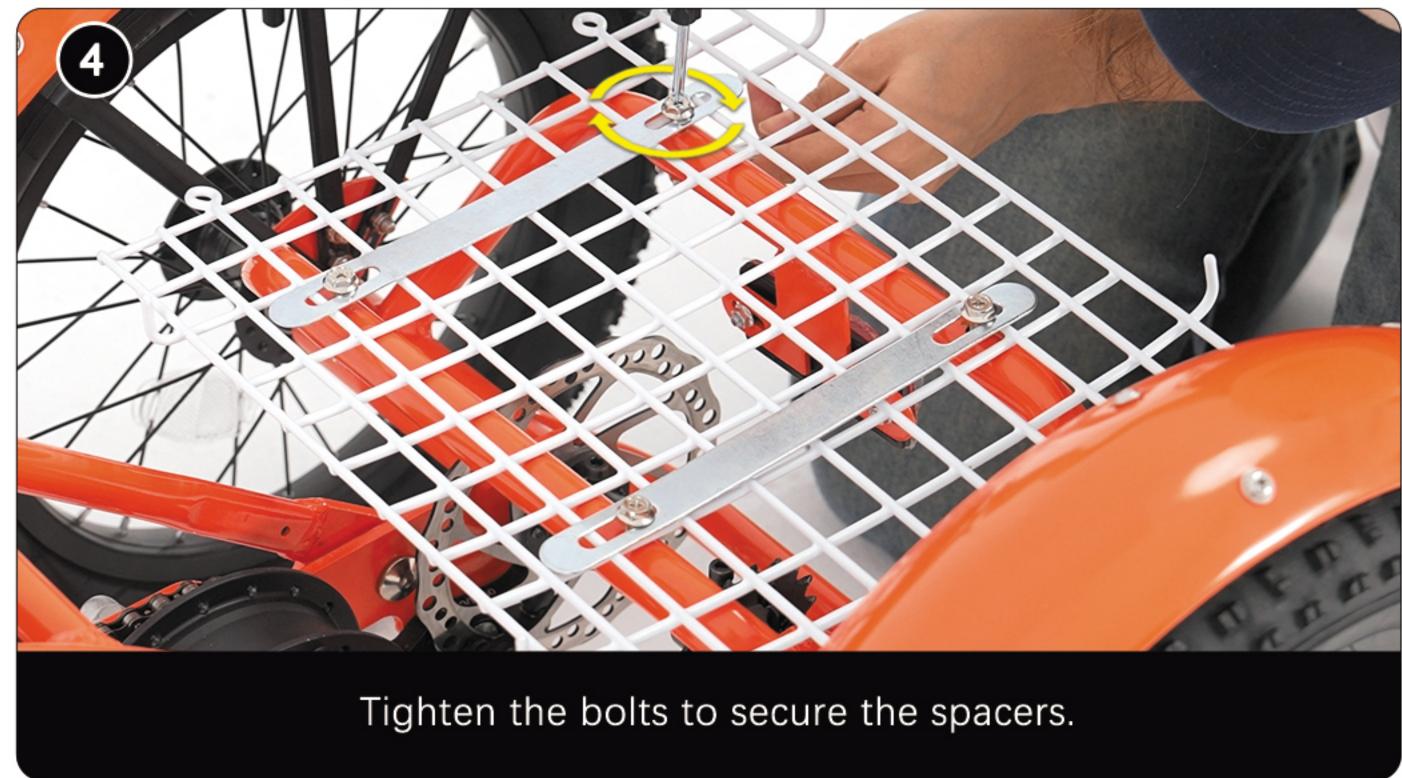


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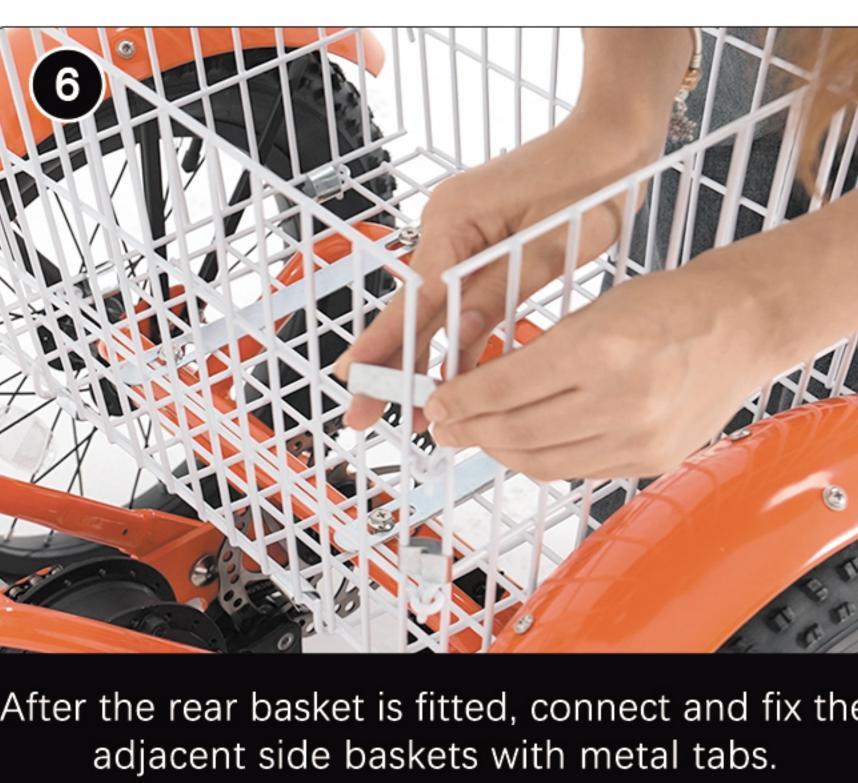


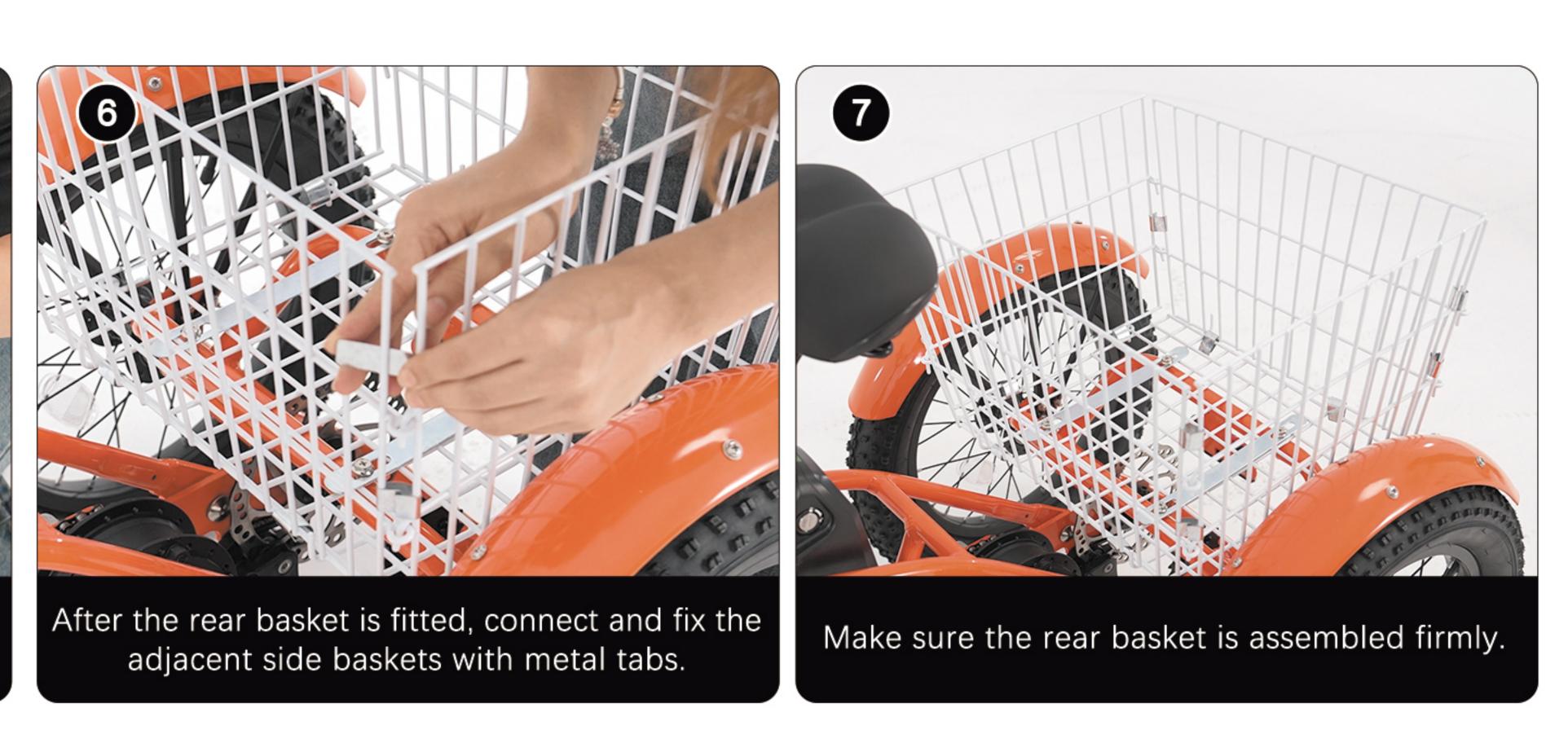




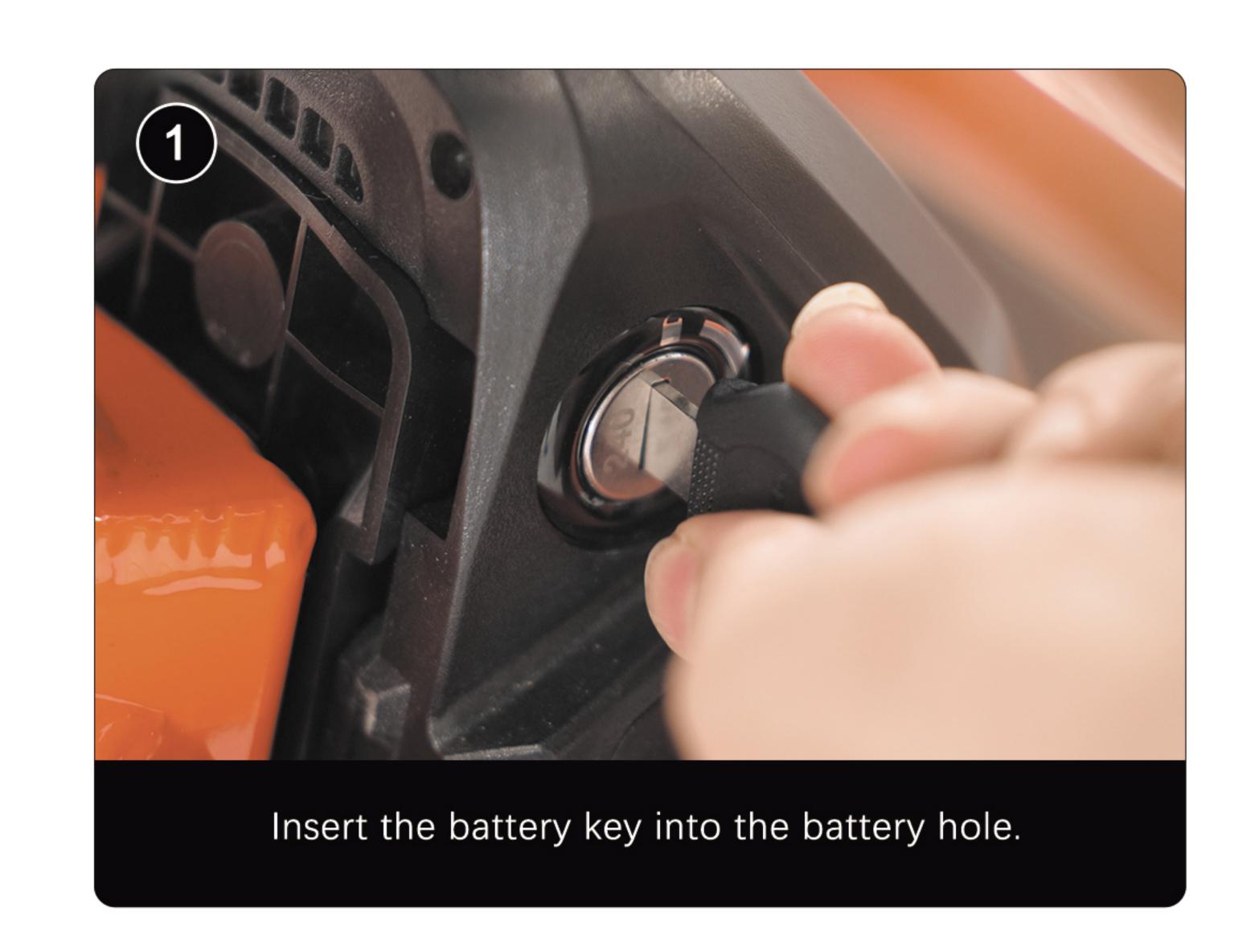


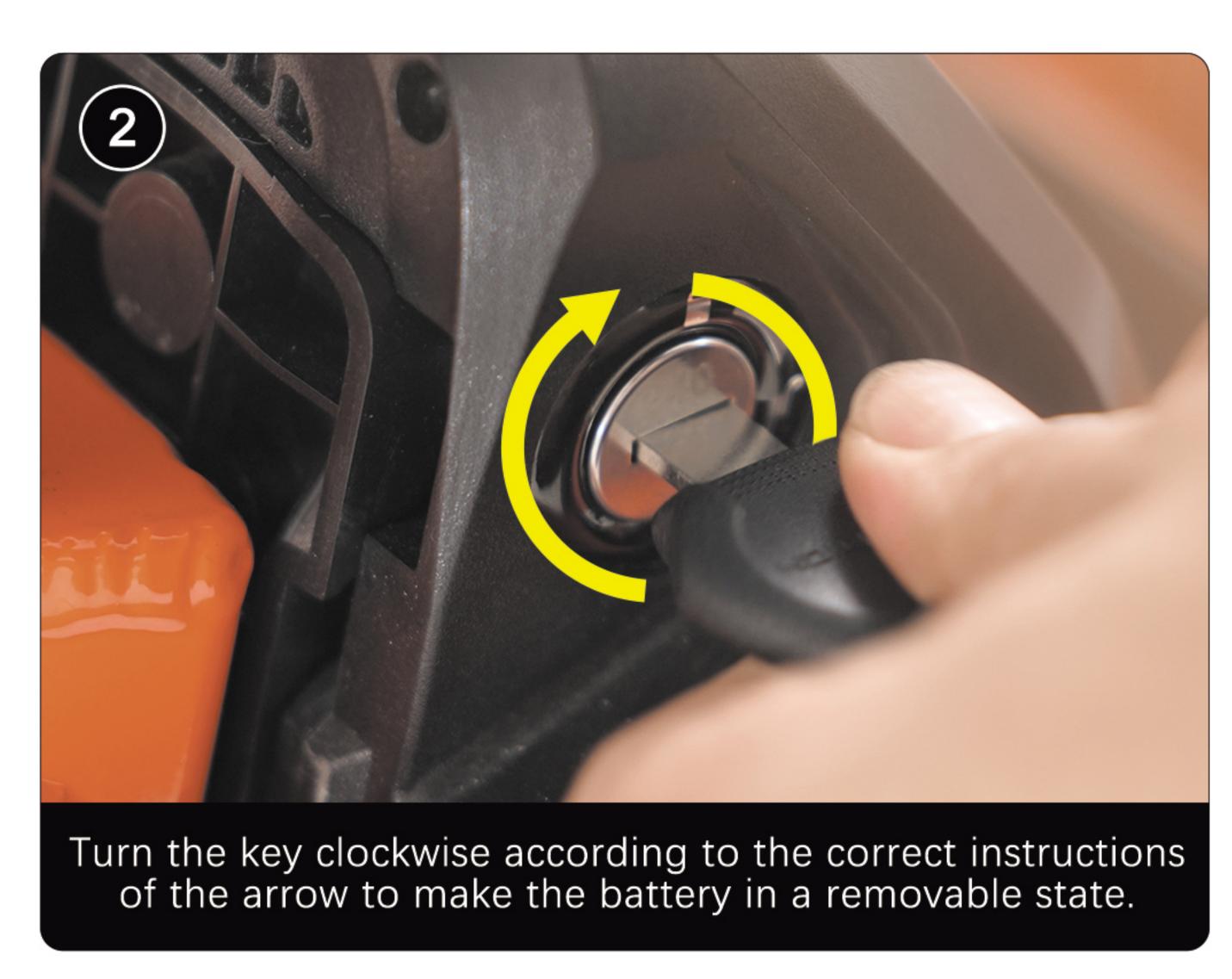


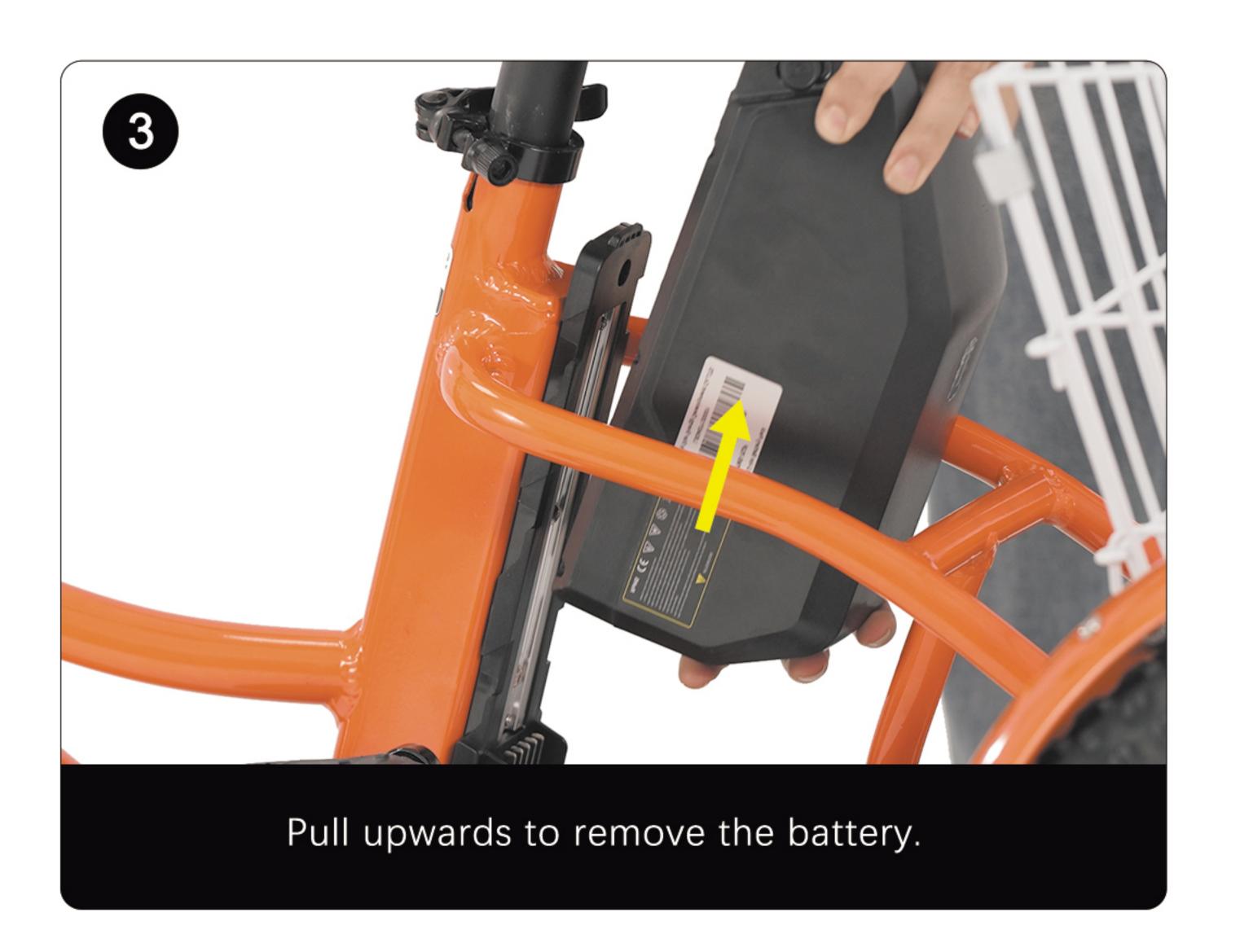


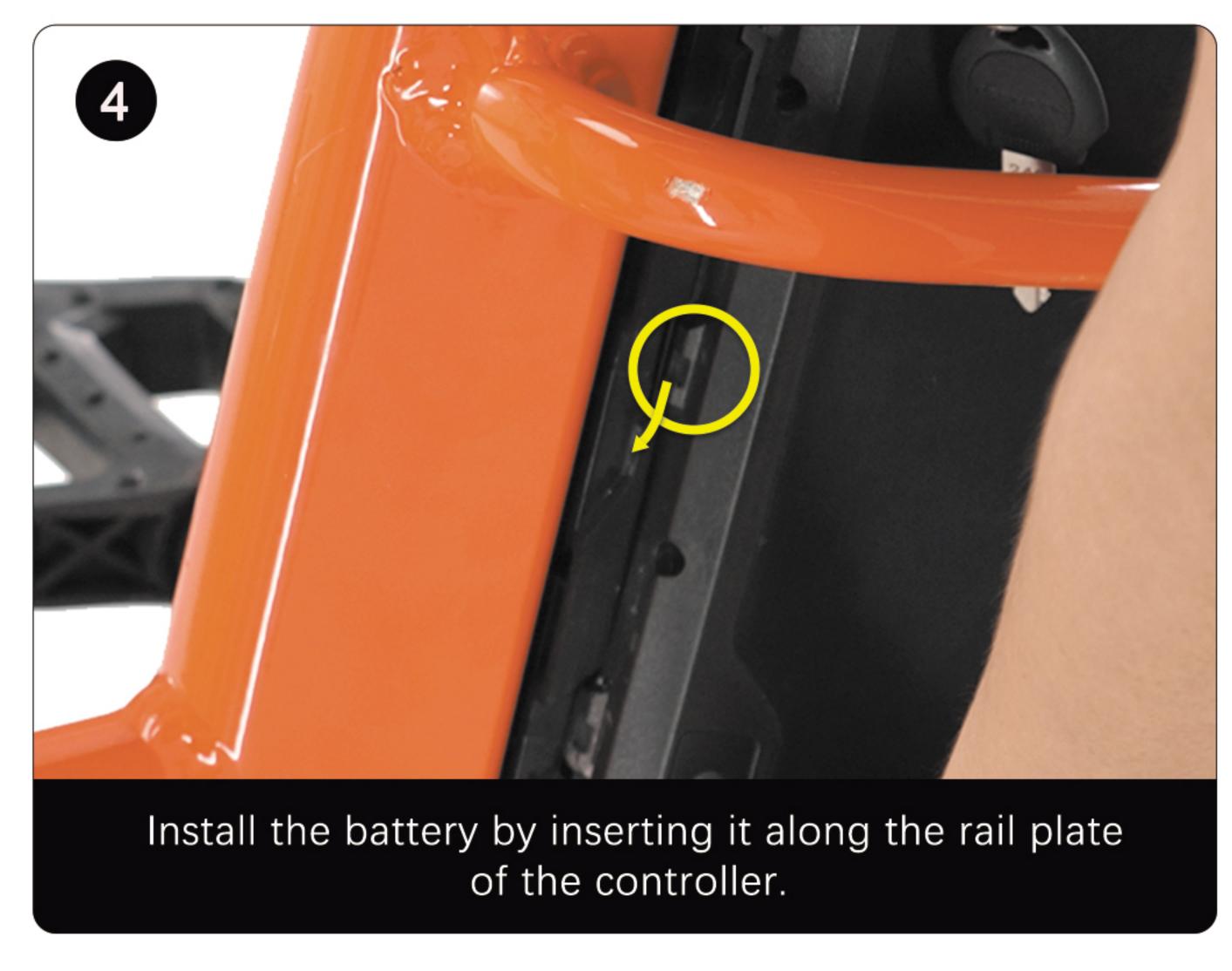


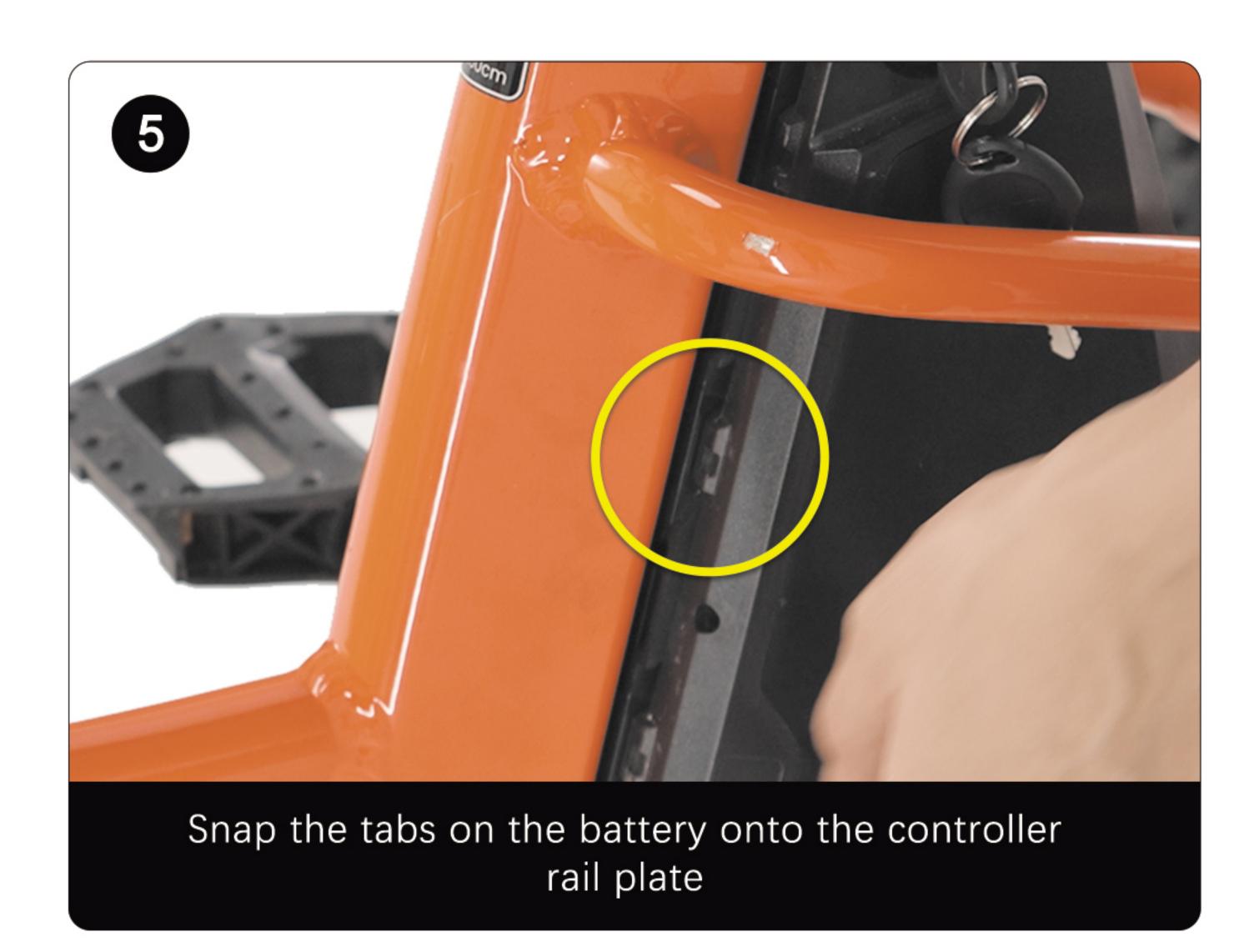
Battery Disassembly/Installation

















The hydraulic brakes are adjusted by a technician at the factory. If readjustment is needed after shipping, follow the instructions below or consult a bike shop.

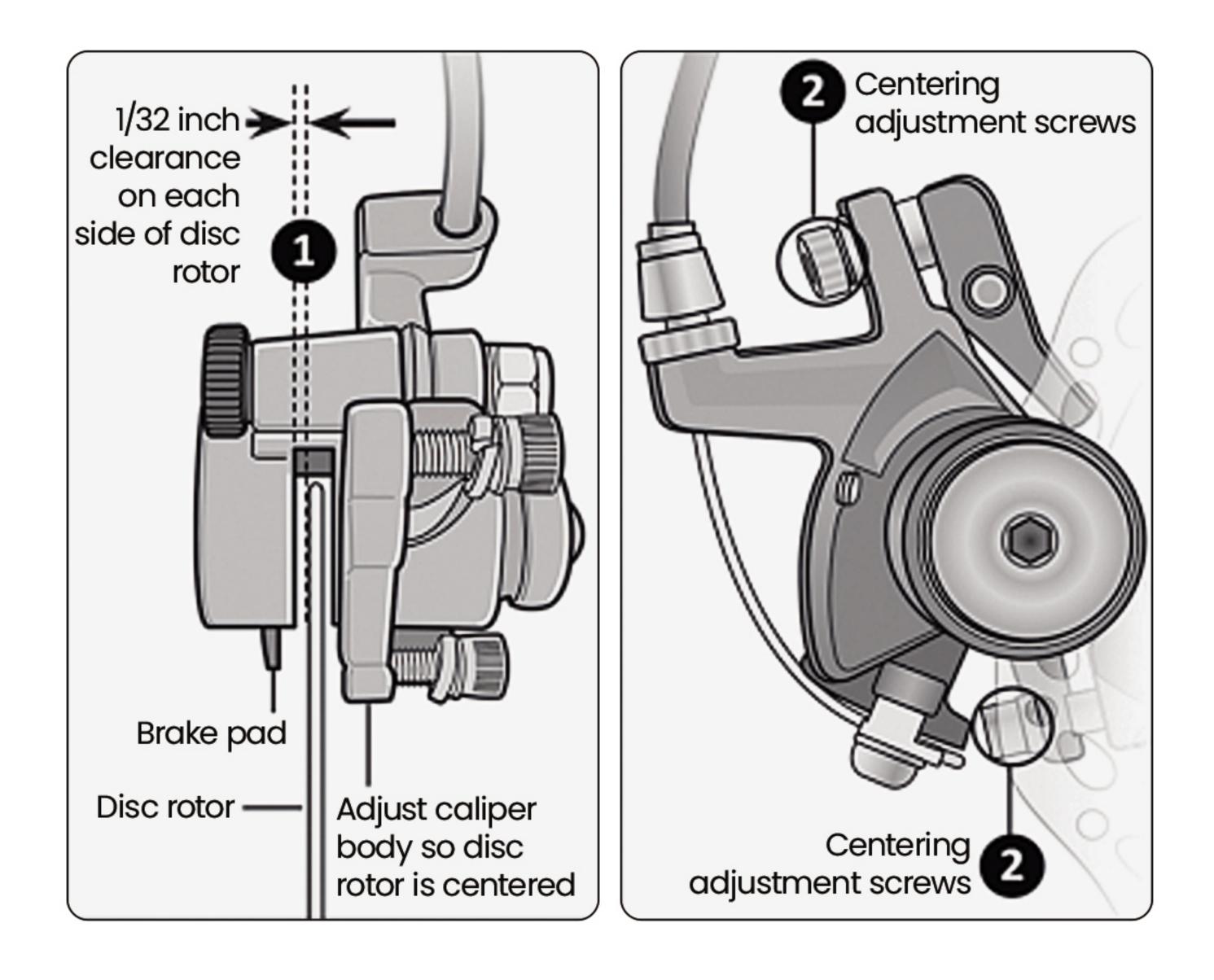
Realign the Caliper Body

- 1 Using a 5 mm Allen wrench, loosen the two centering adjustment screws. Adjust the caliper body until the gap between the disc rotor and the brake pads in the caliper body is even (1/32" per side).
- 2 Tighten the centering adjustment screws.

Alternative method: loosen the two centering adjustment screws until you can wiggle the caliper body. Have a helper firmly squeeze the corresponding brake lever and continue squeezing while you retighten the adjustment screws. The disc should now be centered between the brake pads.



Note: If the shifting is not sensitive, you need to adjust the shifting cable to the proper level



WARNING!

It is your responsibility to obey all state and local laws and regulations pertaining to bicycle and/or e-bike use. Also, follow all safety warnings in this manual. Before every ride, inspect your bicycle to ensure it is in proper riding condition. Check of the bicycle condition before riding.

Brake Operation

WARNING!

- Never apply only the front brake. It could cause an accident and may even throw you over the handlebar. Always apply the rear brake at the same time and never squeeze the front brake harder than the rear brake.
- Never touch a brake disc rotor unless wearing gloves.

Bicycle brakes have a separate hand lever to actuate each brake. The front brake lever is on the left side of the handlebar, and the rear brake lever is on the right side. Carefully follow the previous warning and never apply only the front brake.

You may operate one brake at a time, or all together, however, be careful to pay close attention to front brakes locking up. To avoid this:

- Apply both brakes simultaneously, while shifting your body weight back slightly to compensate for braking force.
- As terrain changes, the rider must practice and learn how the bicycle will respond in a new terrain or weather change. The same bicycle will react differently if it is wet, or if there is gravel on the road etc.
- Always test the brakes and be sure you feel comfortable with the reaction. If the riding conditions are too steep (off road for example) and you are unsure, dismount the bicycle and walk past the questionable terrain before riding again.
- Remember that as you apply the brakes your weight will want to shift forward, and the wheels will want to stop.

Note 1:See the above for information on brake adjustment.

Note 2:If the brakes are not sensitive, you need to adjust the tension of the brake line to the right level.

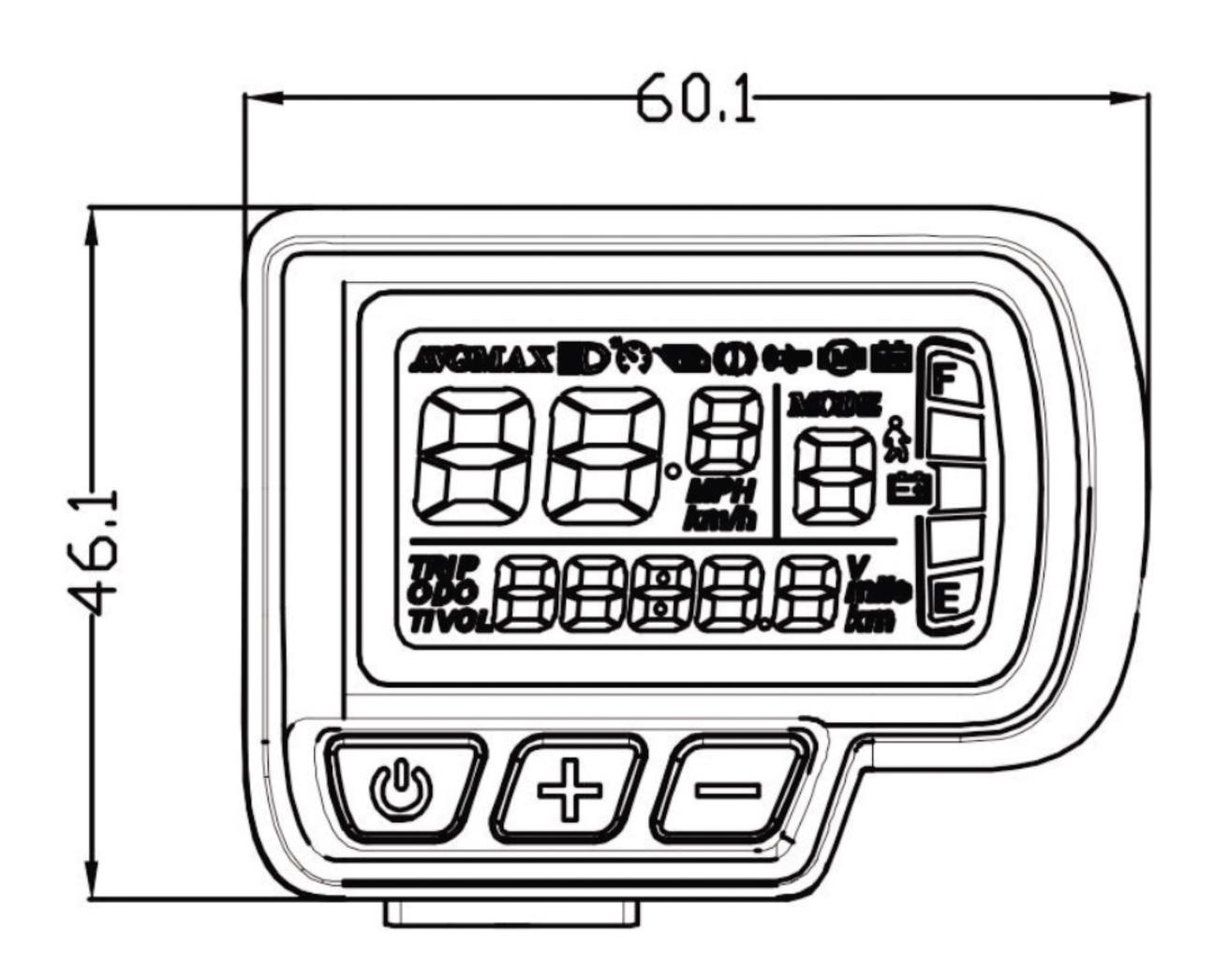


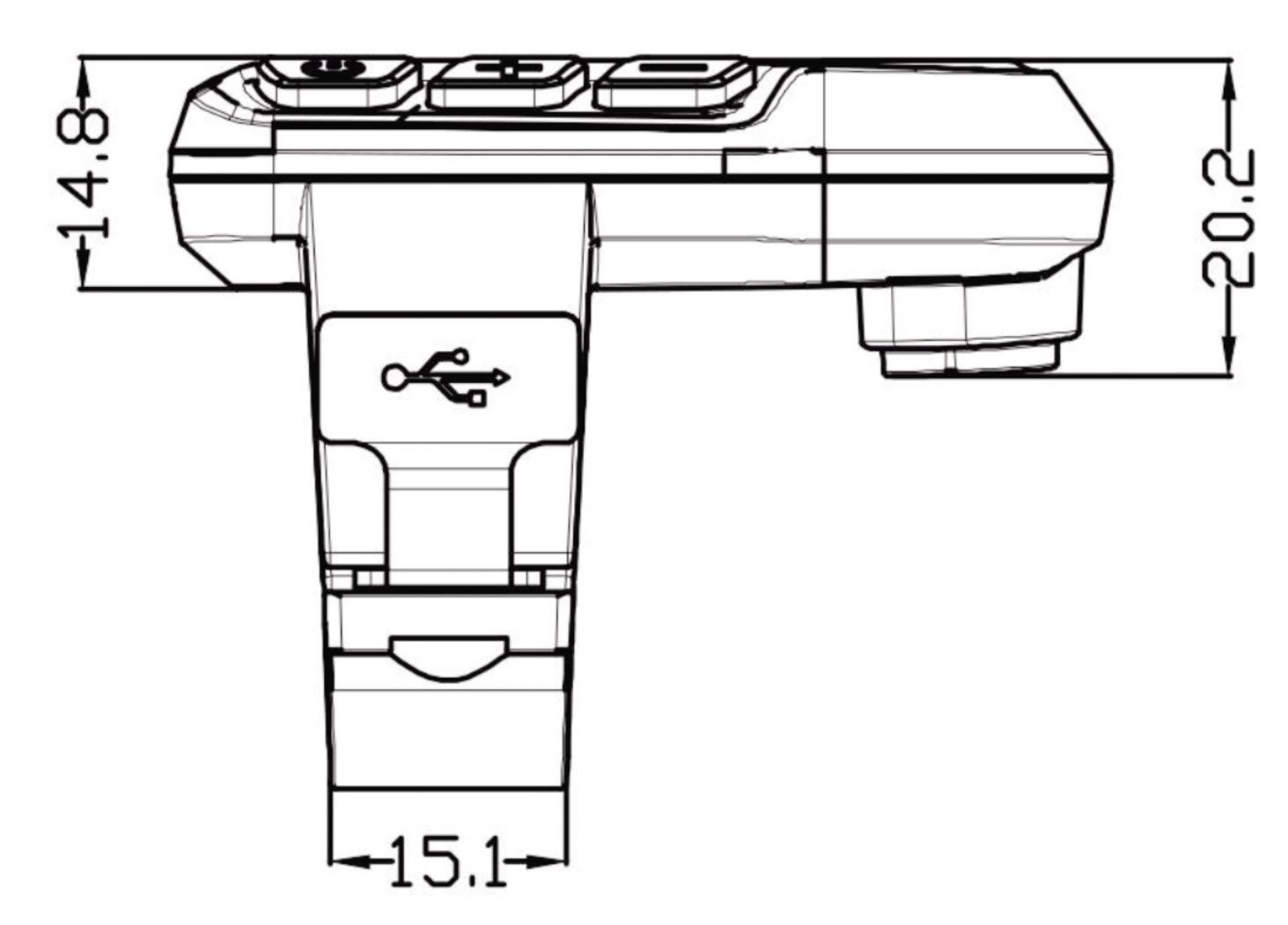


When you turn on the display, the PAS level is automatically set at 0, meaning no Pedal Assist (PAS) and no power to the throttle.

The display is turned on by pressing the "U" button for 2 seconds. For PAS selection, press the + button. A bar indicating the PAS level will appear. Press it again for the next PAS level and another bar appears. With any PAS selection, the throttle is available. The throttle speed is not affected by which PAS level you select.

Display Usage





Appearance Size and Material

The product shell is ABS, the liquid crystal transparent window is imported high hardness acrylic, the hardness value is equivalent to tempered glass.

Working Voltage

DC 24V /36V compatible, 36/48V compatible (instrument selection Settings), other voltages can be customized.

Functional Specification

O Display function

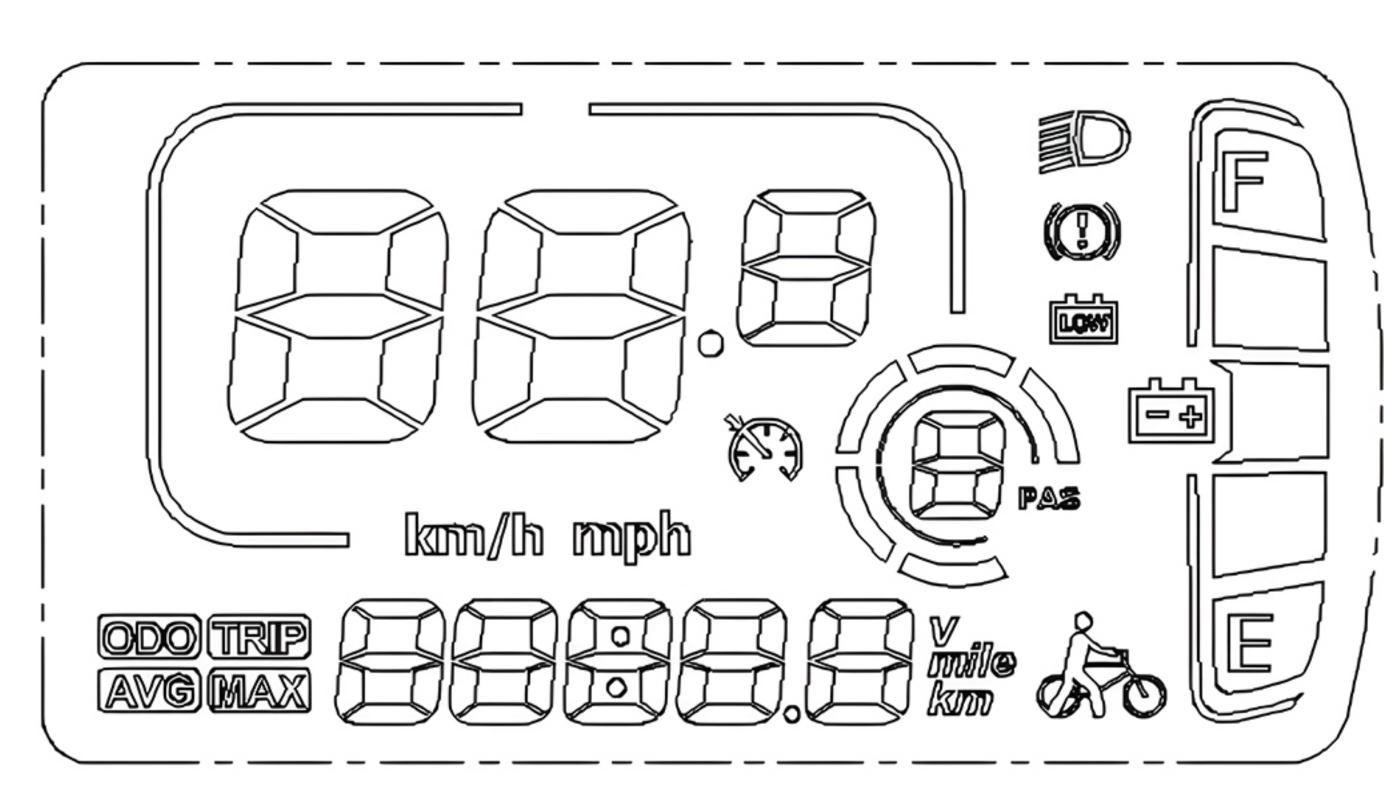
Speed display, power ratio display, power indicator, fault warning, total mileage, cumulative mileage, cruise speed, brake indication, headlight display

② Control and set functional power supply

Switch control, front and rear light switch control, 6Km/h spot control, real-time cruise control, wheel warp setting, 5-speed power ratio setting, maximum speed setting, idle automatic sleep time setting.

© Communication protocol: UART

All contents of the display (full display within 1S after starting)

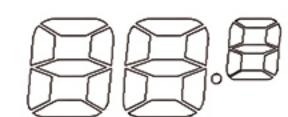


1. Headlamp D 2. Voltage status level POWER	
3. Multifunction display area	

4. Digital voltage VOL, total mileage ODO, single mileage TRIP, running TIME time

5. Speed display area

number of magnets)



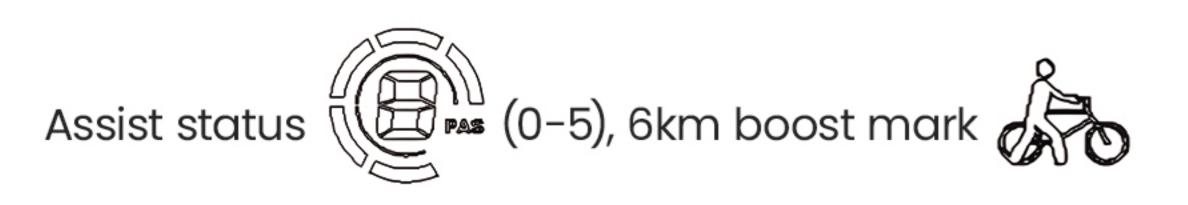
Current speed CUR, maximum speed MAX, average speed AVG Unit MPH, KM/H km/h mph

The meter will calculate the true speed based on the wheel diameter and signal data (the motor Hall also needs to set the

6. Fault status display area, Power off brake handle 🕡 ,

7. Assist status display area

Undervoltage protection www



Error code	Error status
0X00	Normal state
0X21	Current anomaly
0X22	Handle anomaly
0X23	Motor out of phase
0X24	Hall anomaly of machine
0X25	Abnormal braking
0X26	Voltage anomaly
0X30	Communication exception

8. Set

P00: Restore factory Settings (parameter set to 10)

P01: Backlight brightness, level 1 darkest, level 3 brightest;

P02: mileage unit, 0: KM; 1: MILE;

P04: Sleep time: 0, no sleep; Other numbers are sleep time, ranging from 1 to 60; Unit minute;

P16: ODO Clear Setting Hold down the up key 5

Key Introduction

Key definition







Plus key

Minus key On-c

y On-off key

Introduction to key use

Key operation can be divided into short press and long press, and the combination of long press and short press are used for quick/frequent operations, such as:

- 1. When riding, you need to modify the power/speed gear and press the add/subtract button
- 2. Switch the display data in the multi-function area when riding, and press the power button;
- 3. Single key long press is mainly used for mode/switch state, compound key (long press) is used for parameter setting, because operation

Complex, this can reduce misoperation (short press do not do compound key, because easy to trigger by mistake, operation is too sleepy

Difficult) Specific operation explanation:

4. Set/remove 6KM boost function and switch headlight function

After the vehicle is turned on, it is stationary, and long press the reduce button to enter the 6KM/h boost mode

Long press the plus button for 2 seconds to switch the headlight work

Switch LCD

If the current display is working, long press the on/off key for 3 seconds to turn off the display, otherwise turn on the display.

Toggle the contents of the multi-function display area

Press the On/Off key to switch the parameters of the multi-function display area.

Set up parameters

Press and hold the Plus and Minus keys at the same time to enter the parameter setting screen. You can set the following parameters: back light

Degree, mileage unit, sleep time, ODO reset Settings;

In the Settings screen, you can press the On/Off key to switch the above menu items, or press the Plus or minus key

Set the parameter value under the current menu, the parameter will blink after modification, after selecting the set value,

Press the On/Off key to save the Settings of the current menu and enter the next menu item;

Long press the plus and minus keys again at the same time will exit the menu setting, if the meter does not operate, it will also exit the dish after 10 seconds

Single setting.

4. Battery Battery 4.





Fully charge your battery before your first ride. The charger light will change from red to green when the battery is fully charged. Then switch off and remove the charger.

You can choose to charge the battery either on or off the CD1 E-trike. See instructions below. Raise the tricycle seat if necessary.

WARNING: Charge your battery in a place where the temperature is from 50°F - 77°F / 10°C - 25°C.

MARNING:

Never ride your CD1 E-trike without wearing a recently certified helmet for head protection. Follow the helmet manufacturer's instructions for use, proper fit, and care.

Ending your Rides

A. Slowly come to a stop and keep one brake activated.

B. Press the M button to power-down your CD1 E-trike.

C. Use the switch under the battery box to turn off battery. If removing the battery, use the provided key.

Warning

A. Ensure the battery is properly placed and locked before each ride.

B. Never turn on or off the battery or the display while riding your CD1 E-trike.

C. When checking the battery, it's a good time to also check all the quick-releases such as the seat post.

Battery

Important safety notes concerning the battery

/\ WARNING:

For maximum battery life, store the trike in a garage or shelter.

- Do not dismantle or disperse the battery cells.
- Keep the battery away from children.
- Never connect the cathode and anode of the charger. Be sure to not place any conductor from the cathode to the anode, as this will create a short circuit.
- Never get the battery wet other than in a light rain.
- Never place the battery near a heat source or where the temperature exceeds 60°C / 140°F.
- Never get the battery near tools that can puncture or cut.
- If a battery lead occurs and contacts your eyes, do not rub.
 Flush eyes immediately with lots of water.

WARNING: Remove the battery from your CD1 E-trike or from the charger if you notice an unusual odor or heating, discoloration, deformity, or other unusual appearance. Get away from the battery and do not use it.

Contact support@moooncool.com.

Protection

For your safety and a long battery lifespan, please follow the regulations listed below:

1. Requirements on charging and discharging

A. Use only the charger shipped with your Mooncool. Connect the charger to your battery and then plug the charger to an electrical outlet. The light on the charger is red while charging and green when charging is complete. Disconnect the charger when green light appears, or when there is any problem observed.

B. Avoid fully discharging or over-charging your battery. Use a timer to help remember to stop the charger.

2. Requirements on storage

A. Store your battery where temperature is from 50°F–77°F or 10°C –25°C and humidity is moderate. Do not store other items near to your battery.

B. For long-term storage, charge your battery to about 70%. Recharge to 70% every month.

3. Maintenance

A. For testing battery voltage, properly install it and turn on your display. Use the M button to move the display to volt.

B. In the unlikely event that you need to access the battery internals, wear gloves or trim your fingernails.

C. Avoid bending or striking your battery cell. Take care to not drop it or create a short circuit.

D. If you do any soldering/welding in working on your battery, the temperature of your tool tip must not exceed 350°C / 662°F. Make no more than 5 welds of less than 3 seconds each, and allow cooling time after each weld.

Precautions and Guidelines for the Battery

For the longevity of your battery and the performance of your CD1 E-trike, please observe the following precautions:

WARNING: If the battery stops providing power to the CD1 E-trike, assume it is discharged and attach the charger you received with the CD1 E-trike. Charge your battery to about 90%, which takes 6-7 hours normally. Fully discharging your battery can cause severe battery damage.

WARNING: Improper removal, installation, maintenance or storage can damage your battery. Any use of your battery other than to power your CDI E-trike can result in fire, injury, or death.

WARNING: Never short-circuit the battery which may result in an explosion, fire, and serious harm to your health.

WARNING: Remove the battery from your CD1 E-trike or from the charger if you notice an unusual odor or heating, discoloration, deformity, or other unusual appearance. Do not use it, and contact support@moooncool.com.

Factors that Affect the Trike Range

- Life and state of charge of the battery.
- External temperatures.
- Tire pressure.
- The rider's weight.
- Riding style and choice of assistance level.
- Road/path conditions.
- Weather conditions.
- Frequent stops and starts during your rides.
- Condition of bearings and all other moving parts.

Getting the Best Possible Range

- Fully charge the battery.
- Check tire pressure.(recommended depending on body weight, load and route profile)
- Reduce the load.
- Do not ride too fast.
- Maintain a constant speed.

Long Time Storage

If stored for a long time(Don't use it over three months), the battery should be stored in a dry and cool place. The battery should be stored at a temperature of 23+ and a humidity of 45%-75%. Long-term unused batteries should be charged every 1 month.

Disposal of waste batteries

According to the battery law, we are obliged to inform you. Regarding the sale of batteries or the delivery of equipment containing batteries/rechargeable batteries/lamps, we are obliged to inform you of the following.

Do not dispose of your old device in the household waste!

You are legally obligated to return used batteries/rechargeable batteries/lamps as the end user. In the case of a removable battery/accumulato or illuminant, you must return them separately to the appropriate return system. You can return used devices/batteries/lamps to the collection points of the public waste disposal authorities.



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Warning & Safety Recommendations 5.

Charger

Charger function

Trouble shooting. Should there be any difficulties with charging please check if:

- the power cable is connected properly.
- the charger plug or the battery socket is damaged.
- the battery shows any damage on the surface.
- the power socket works and whether the correct voltage is provided. (if necessary, plug in another gadget and check)



This charger is specially made for the lithium battery.

The LED light indicates the battery status as shown on the table below:

Charging cycle and LED indication for lithium battery		
LED	Mode	
Green the battery is not connected		
Red	the batter is charging	
Green the battery is charged, the charger switches off		

WARNING: Read and observe these safety tips regarding use of the charger.

• Keep the charger away from children!

 Use the charger only for the original battery supplied with your CD1 E-trike. Risk of fire, explosion, or other damage is present when using it with any other battery.

Contact support@mooncool.com if you are unsure about use.

- Please make sure that the charger is always kept dry and does not get wet at any time.
- Should there be an incidence of contact with water or any other liquid, make sure to unplug the charger immediately from the power socket and have it inspected by a specialty dealer.
- Always place the charger on a stable and flat surface when
- Please make sure that the charger is always unplugged and removed from the power socket when not in use.
- Before using the charger, always make sure that the plug and the cables are not damaged.
- Never connect a damaged cable or plug to the power socket.
- Never try to disassemble the charger. Wrong re-assembling could cause an electric shock and serious injury.
- Always unplug the charger before cleaning it.
- The charger should only be cleaned with a dry cloth. Never use a wet cloth, oil or any other liquid.
- Do not use an extension cord with this charger. Plug the original cord directly into an electrical socket. There is risk of fire or electrical shock or charger damage when using an extension

Safely Riding your E-Trike

/!\ WARNING:

Before every ride, take time to do a safety check. Be thoroughly familiar with the controls and their condition.

Check everything to ensure the proper assembly of your CD1 E-trike and that it is safe to ride.

Handlebars

Check your handlebars are straight and secure. To check, grip the front wheel between your legs and try to turn the handlebars.

Wheels

Make sure all fenders are securely attached.

Check that the quick-release on the front wheel axle is tight and securely clamped into place.

Seat and post

The seat and post should be straight, fastened tightly and not exceed the max height indicator.

Pedals and chain

Pedals should be fully tightened on both sides.

Your chain should be clean and lubricated.

Brakes

Test the front and rear brakes. Roll your trike forward, and test the brakes one at a time. The wheels should stop completely.

There should be more than the thickness of one finger between the handgrip and the brake lever when it is fully depressed.

Rack

Check that the baskets are secure and bolts are fully tightened.

Kickstand

The kickstand shouldn't wobble. Tighten if necessary.

Tires

Check the inflation on all tires, and adjust it to the PSI indicated on the sidewall.

Electronics

Check to be certain your battery is adequately charged for the distance you want to ride. Ensure that the front and rear lights are working.

Before riding

Adjust the height of the handlebars and saddle to suit the rider, whose toes should be able to just touch the ground.

- Check all lights and displays are working.
- Check that all electrical connections between the CD1 E-trike and the battery are clean and secure.
- Test the front and rear brakes. Roll your trike forward, and test the brakes one at a time. The wheels should stop completely.
- There should be more than the thickness of one finger between the handgrip and the brake lever when it is fully depressed.
- Test the front and rear brakes. Roll your trike forward, and test the brakes one at a time. The wheels should stop completely.
- Make sure your clothing is suitable for riding. Long, loose or flowing garments may become caught in the wheels or chain.
- Wear an approved safety helmet.

Riding your e-trike

Mount the tricycle and press the M button on the display for 2-3 seconds. The display will turn on, indicating that the power is connected.

- Check your surroundings to be certain it is safe to move forward. Set the PAS level to 1 bar. A moment after you begin to pedal, you will feel the motor assistance. If desired, you can begin moving by using the throttle.
- While riding, the battery power will gradually be consumed. The battery bars on the display will disappear one by one. Avoid

full discharge. If needed, turn off the display and use only unassisted pedaling. Recharge ASAP to about 95% of full power.

- Use both brakes together when stopping.
- When riding in wet conditions your brakes will be less effective and a greater stopping distance is needed. In dry conditions your stopping distance should be less than 4 meters; this can increase to 15 meters on wet or snowy roads.
- Never ride through deep puddles or streams. Ensure that water never reaches the motor and controller level.
- Avoid loose gravel, uneven surfaces, sharp dips, potholes and other difficult terrain.
- Don't carry extra passengers or heavy loads, as this will damage the motor and battery.
- Never ride under the influence of drugs or alcohol, or when feeling unwell.
- Always ride with lights at night.
- Learn and follow all state, provincial, or local rules of the road -including the legal age for riding e-trikes. Contact your local government agency for more information.
- If you are new to cycling or an inexperienced rider, find a quiet place to practice and gain confidence before trying to ride on busier roads.

The item underneath this text box is explained above and can be deleted.

Bike storage and maintenance

- Don't leave the trike in the rain for long periods, or in damp conditions: Always store in a dry place.
- Don't leave the trike in direct sunlight for long periods, as this may cause some of the electrical components to overheat and result in operation failure.

Warning

- Don't tamper with, or disassemble complex electrical components.
- Don't touch the bottom of the battery case with keys or other metal objects in case they damage the electrical connectors between the trike and battery.

Keep your CD1 E-trike clean

Clean the chain with a degreasing detergent or a commercially available chain cleaner. Then lubricate the chain with oil or a specialty dry lubricant. Regular chain maintenance can make your CDI E-trike 98% efficient at converting the kinetic energy of pedaling into the forward motion of riding. Your chain is stainless steel and needs very little lubrication. Excess lubricant attracts grit which increases wear.

Check tires, brakes and gears monthly

Check tire pressure at least weekly. Low pressure decreases your range and can cause tire damage. Adjust pressure to the PSI indicated on the tire's sidewall.

Brake adjustment

Brake levers should operate the brakes easily with only a small amount of travel at the handlebars. If there is not enough room for two fingers between the lever and the handlebars then adjustment is essential. See how to adjust above.

Chain adjustment

The chain may become looser after a long period of use and can only be adjusted by removing links, which is best carried out at a bike repair shop.

If you are unsure about brake, gears or chain adjustment, take the bike to be serviced at your local cycle shop.

Warranty

This warranty is extended only to the initial consumer purchaser and is based on normal use. Main parts have a warranty of one year. This covers mechanical and electrical parts: including frame, display, PAS, motor, controller, battery and charger.

The warranty is subject to proper care for and reasonable use of your tricycle. Lights, brake pads, inner tubes, tires, chain, cables, seat etc. are regarded as consumables.

Conditions of warranty

- 1. Your tricycle has been designed for general transportation and recreational use, but has not been designed to withstand abuse associated with stunting and jumping. This warranty ceases when you rent, sell, or give away the tricycle, ride with more than one person, or use the tricycle for stunting or jumping.
- 2. This warranty does not cover ordinary wear and tear or anything you break accidentally or deliberately.
- 3. This warranty does not cover normal wear and tear, improper assembly or maintenance, or installation of parts or accessories not originally intended or compatible with the bicycle as sold. The warranty does not apply to damage or failure due to accident, abuse, misuse, neglect, or theft. Claims involving these issues will not be honored.
- 4. It is the responsibility of the individual consumer purchaser to assure that all parts included in the factory-sealed carton are properly installed, all functional parts are initially adjusted properly, and subsequent normal maintenance services and adjustments necessary to keep the tricycle in good operating condition are properly made.
- 5. This warranty does not apply to damage due to improper installation of parts, installation of any kind of power plant or internal combustion engine, modification or alteration of the brakes, drive train, or frame in any way, or failure to properly maintain or adjust the tricycle.

NOTICE: Tricycle specifications subject to change without notice.

If you are unhappy with your purchase, as long as you contact us within 30 days of the receipt of the item, we will process your return/exchange request. Any request after 30 days will not be honored.

Please make sure to contact us by email:

support@mooncool.com is your initial contact for assistance.

Return & Exchange

Items returned without authorization will not be accepted.

Items must be returned within 30 days after you receive them.

All items must be in the same condition that you received them, unworn or unused, with tags, and in their original packaging. You'll also need the receipt or proof of purchase.

When returning or exchanging items, customers must use a shipping method providing tracking information. Non-returnable items:

On-sale items are non-refundable.

Damaged or lost items resulting from consumer negligence are non-refundable.

General Return Process

Initiate a return: Please email us at support@mooncool.com with photos and/or videos of the items and let us know your order number. Our customer service staff will determine the eligibility for your return request within 3 business days.

Ship the item back: If your return is accepted, we'll send you the return address, as well as instructions on how and where to send your package. (Note: Items returned without authorization will not be accepted).

We recommend that you send your return/exchange in a shipping method providing tracking information as well as a signature because we will not be responsible for lost return/exchange.

Refund or exchange: when we receive your return/exchange, we will inspect the item in 3-5 working days and then provide a replacement for an exchange or issue a refund.

Return Charge

If the return is due to a Mooncool error such as a quality issue or an order-filling mistake, a full refund is provided. If the return is due to a customer error such as ordering the wrong item or size or simply changing your mind, the customer pays for the return shipping.

In all cases, Mooncool customers are never charged a restocking fee for returns.

Refunds

Once your return is received and inspected, we will notify you of the approval or rejection of your refund. If you are approved, the refund will be provided to the original method of payment within 2–3 working days.

If you haven't received the refund within 2-3 working days, please check your bank account again. Then contact your bank or credit card company. It may take some time before a refund is officially posted. If you've done all of this and you still have not received your refund, please contact us at

support@mooncool.com

Please Note: we do not refund our original shipping cost.

When contacting Mooncool support, please provide the following:

- Frame Serial Number
- Order Number
- Motor, Battery, and Controller number.

Attach videos and/or photos to help show us the problem.

Your CD1 E-trike's serial number is unique like a fingerprint. Please record it in a safe place before your first ride. It is useful in case of loss, theft, or damage.

You can find the serial number engraved on the head tube near the headlight or on the bottom of the bearing bracket tube near the pedals.

GETTING ANSWERS to a question is easy, just send an email to support@mooncool.com anytime. Remember, there is a significant difference in time zones between you and Mooncool, so expect a small delay. We will respond ASAP.

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Basic Troubleshooting

Symptoms	Possible Causes	Most Common Solutions
The trike does not work.	 Insufficient battery charge or loose wire connections. Battery not fully seated in the tray. Failure to follow powerup instructions. Brakes are applied or brake lever is not returning to its original position. The battery's discharge fuse has failed. 	 Charge the battery. Clean and repair the connectors. Install battery correctly. Turn on the e-bike in proper sequence. Disengage brakes. Replace discharge fuse.
Irregular acceleration and/or reduced top speed.	 Insufficient battery power. Loose or damaged throttle. 	 Charge the battery or purchase a new battery. Replace the throttle.
The motor does not re- spond when the bike is powered on.	 Loose wiring. Loose or damaged throttle. Loose or damaged motor plug wire. Damaged motor. 	 Repair and/or reconnect. Tighten or replace. Secure or replace. Repair or replace.
Reduced range.	 Low tire pressure. Low or faulty battery. Driving with too many hills, headwind, braking, and/or excessive load. Battery discharged for a long period of time without regular charges, aged, damaged, or unbalanced. Brakes rubbing. 	 Adjust tire pressure. Check the connections or charge the battery. Assist with pedals or adjust the route. Balance the battery; contact mechanic if reduced range persists. Adjust the brakes.
The battery can not be charged.	 Charger not well connected. Charger damaged. Battery damaged. Wiring damaged. Blown charge fuse. 	 Adjust the connections. Replace. Replace. Repair or replace. Replace charge fuse.
The wheels or motor make strange noises.	Loose or damaged wheel spokes or rim. Loose or damaged motor wiring.	 Tighten, repair, or replace. Reconnect or replace the motor.

Troubleshooting Guide

Problem	Possible Causes	Remedy
Slipping chain	 Excessively worn/chipped chain wheel or freewheel sprocket teeth Chain worn/stretched Stiff link in chain Non compatible chain/chain wheel freewheel 	 Replace chain wheel, sprockets and chain Replace chain Lubricate or replace link Seek advice at a bicycle shop
Chain iumning off freewheel sprocket or chain wheel	 Chain wheel out of true Chain wheel loose Chain wheel teeth bent or broken 	 Re-true if possible, or replace Tighten mounting bolts Repair or replace chain wheel/set
Constant clicking noises when pedal-ing	 Stiff chain link Loose pedal axle/bearing Loose bottom bracket axle/bearings Bent bottom bracket or pedal axle Loose crankset 	 Lubricate chain/adjust chain link Adjust bearings/axle nut Adjust bottom bracket Replace bottom bracket axle or pedals Tighten crank bolts
Grinding noise when pedaling	Pedal bearings too tightBottom bracket bearings too tight	Adjust bearingsAdjust bearings
Freewheel does not rotate	Freewheel internal pawl pins are jammed	Lubricate. If problem persists, replace freewheel
Brakes not working effectively	 Brake pads worn down Brake pads greasy, wet or dirty Brake cables are binding/stretched/damaged Brake levers are binding Brakes out of adjustment 	 Replace brake pads Clean pads Clean/adjust/replace cables Adjust brake levers Center brakes
When applying the brakes thev squeal/squeak	 Brake pads toe-in incorrect Brake arms loose Brake pads/rim dirty or wet Brake pads worn down 	 Replace pads Clean pads and rim Correct pads toe-in Tighten mounting bolts
Knocking or shud- derina when apply- ing brakes	 Bulge in the rim or rim out of true Brake mounting bolts loose Brakes out of adjustment Fork loose in head tube 	 True wheel or take to a bike shop for repair Tighten bolts Center brakes and/or adjust brake pads toe-in Tighten headset
Wobbling wheel	 Headset binding Hub bearings collapsed Quick-release mechanism Hub comes loose 	 Replace axle True wheel Adjust headset Replace bearings Adjust quick-release mechanism
Steering not accu- rate	 Wheels not aligned in frame Headset loose or binding Front forks or frame bent 	 Align wheels correctly Adjust/tighten headset Take trike to a bike shop for possible frame realignment
Frequent punctures	 Tire not checked after previous puncture Tire pressure too low Spoke protruding into rim Inner tube old or faulty Tire tread/casing worn Tire unsuited to rim 	 Replace inner tube Replace tire Replace with correct tire Replace with correct File down spoke

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8. CD1 E-Trike Data

Main Parameters of the CD1	
Maximum speed	20 Mph
Maximum permissible load	350 LBS

Main Battery Parameters		
Battery type	Lithium-ion	
Nominal voltage	24V	
Nominal Capacity	10.4Ah	

Main Parameters of the Motor	
Front wheel hub motor	
Power	250W
Voltage	24V

Controller Parameters	
Undervoltage protection value	21V±0.5
Overvoltage protection value	12A

Battery Charger	
Input voltage	AC 100-240V 50/60Hz 2.0A
Output voltage	29.4V DC
Output current	2A