MOKWHEEL

E-BIKE USER MANUAL

www.mokwheel.com

Onyx

MOKWHEEL


ONYX
MOKWHEEL

CONTENTS

Attention

This manual contains detailed information about the product, operation and maintenance guidelines, safety precautions, and other helpful tips for users. All users must read and familiarize themselves with the following information to ensure safe use and prevent tragic incidents. Failure to review this information may result in injury or death.

Before use, be sure to read this manual and all provided component manuals. Keep this manual and other accompanying documents with the bike for future reference.

Since it is impossible to predict all situations or conditions that may arise during riding, this manual makes no representations regarding the safe use of the electric bike under all conditions. Therefore, any unforeseen risks associated with the use of the electric bike are the sole responsibility of the rider.

All contents of this manual are subject to change or withdrawal at any time without prior notice. Please visit www.mokwheel.com to download the latest version. Mokwheel makes every effort to ensure the accuracy of its documentation. However, Mokwheel assumes no responsibility or liability for any errors or inaccuracies that may occur.

Notice

The initial assembly and adjustment of Mokwheel bikes may be challenging and should be performed by two people. Pay special attention to areas marked with this warning symbol and all information starting with “NOTICE” in this manual.

As a parent or guardian, it is your responsibility to ensure the safety and supervision of your child’ s activities. Mokwheel bikes are not designed for children.

Safety Precautions

1. Failure to ensure the proper installation, operation, or maintenance of any component or accessory may result in serious injury or death.
2. Before riding, make sure the bike fits you properly. Riding a bike that is too large or too small may result in loss of control or a fall.
3. Ensure that all bolts are tightened and that the E-bike is properly set up before riding. Conduct regular inspections.
4. Always wear a helmet. Helmets significantly reduce the risk of head injuries. Follow the safety regulations of your state when riding your Mokwheel bike. Riding without a helmet may result in serious injury or death.
5. Wear reflective clothing to make yourself more visible. Keep reflective materials clean and properly aligned. Use headlights and taillights when visibility is low.
6. Wear sturdy shoes and protective eyewear. Check your state' s laws for other potential protective gear requirements.
7. E-bikes are heavier and faster than conventional bikes—exercise extra caution while riding.
8. Ride slowly until you become familiar with the riding conditions. Never ride at excessive speeds or beyond your ability.
9. Alcohol, drugs, fatigue, and distractions greatly impair your judgment and ability to ride safely.
10. Keep your bike in a safe condition by regularly inspecting and maintaining it to ensure a longer product life for your Mokwheel E-bike. Refer to the safety checklist on page 36 of this manual.

11. Ensure that the handlebar grips are not damaged and are properly installed. Loose or damaged grips may result in loss of control and a fall.

12. Check the brake sensor functionality before each ride. The braking system is equipped with sensors that cut off motor power when the brakes are engaged. Make sure the brakes function properly before every ride.

13. Familiarize yourself with the operation of the twist throttle and pedal-assist sensor before use. Always ride at a speed suitable for the area and your experience level.

14. Improper charging, storage, or use of the battery will void the warranty and may result in hazardous situations. Refer to the Battery and Charger section for details.

15. Exercise extra caution when riding in wet conditions. Wet environments may cause feet or hands to slip, leading to falls, serious injury, or death.

16. After any accident, do not ride your bike until it has been thoroughly inspected by a certified e-bike mechanic.

17. E-bikes and their components have limitations on strength and integrity. Avoid extreme riding, as it may cause component failure or result in serious injury or death.

18. Do not ride the bike for any unintended purposes, as this may result in severe injury or death.

19. Off-road riding requires close attention and specific skills. Be mindful of various conditions and hazards.

20. Wear appropriate protective gear and avoid riding alone in remote areas. If off-road riding is permitted, check local rules and regulations.

21. Do not use this product with standard bike trailers, stands, or racks. Contact Mokwheel to verify whether your equipment is compatible with this

22. It is your responsibility to be familiar with the laws and requirements related to product operation in your riding area.

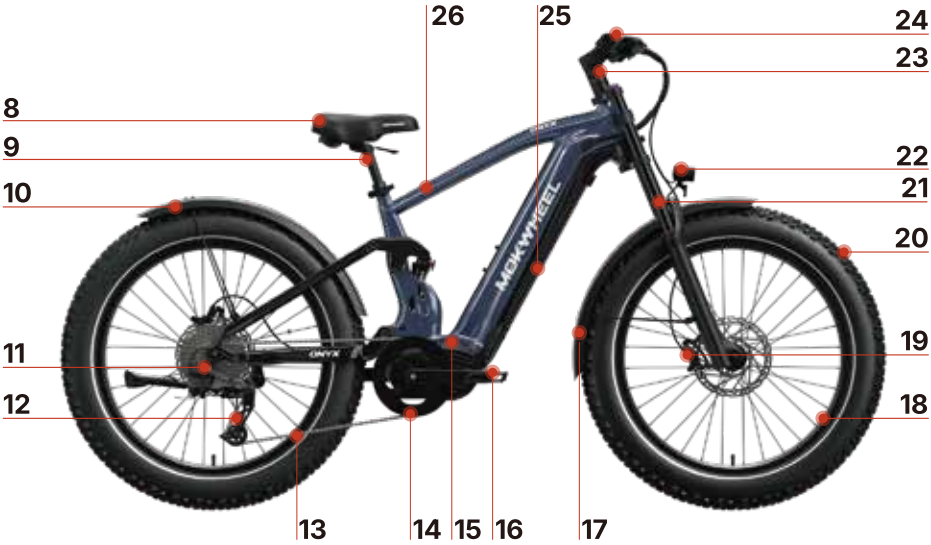
23. Ensure you understand all instructions and safety notices/warnings.

Product Description

Maximum Payload: 560 LBS

Includes rider weight, clothing, riding gear, cargo, and any other carried items.

1. Display
2. Display Button
3. Thumb Throttle
4. Shift Lever
5. Grip
6. Brake Lever
7. Bell



8 Seat
9. Hydraulic Lifting Seat Post
10. Rear Fender
11. Cassette
12. Derailleur
13. Chain
14. Crankset
15. Motor
16. Pedal
17. Front Fender
18. Rim
19. Brake
20. Tire
21. Front Fork
22. Headlight
23. Stem
24. Display
25. Battery
26. Frame

Inverter Instructions

1. Plug the power chord of the inverter into the socket sitting above the pedals in the seat frame

Assembly Instructions

Step 1: Remove Packaging

Gather the necessary tools.
Carefully unpack the Mokwheel electric bicycle and all included accessories.
Important: Make sure all parts listed below are included in the package before proceeding.

1. Frame
2. Front Wheel
3. Front Fender
4. Rear Fender
5. Chain Guard
6. Zip Tie
7. Phillips Screwdriver
8. Rear Light
9. Charger Connector
10. Battery Charger
11. Right Pedal
12. Left Pedal
13. Display
14. Front Light
15. Extra Screws
16. Tool Kit
17. Bike Pump
18. Kickstand

Notice

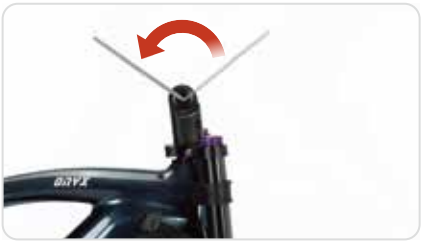
The following assembly steps are general guidelines to assist you in assembling your Mokwheel electric bicycle and are not a comprehensive manual for all aspects of assembly, maintenance, and repair.

We recommend consulting a certified electric bicycle technician for repairs and maintenance.

For detailed instructions, please visit the Mokwheel electric bicycle assembly video at:
https://www.mokwheel.com/pages/electric-bike-guide

Scan the QR code on the right to watch the assembly tutorial.

Step 2: Stem and Display Installation

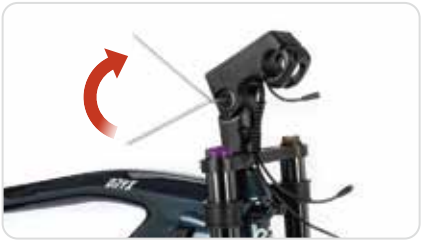


1. Use a hex wrench to loosen the screws on the stem.

2. After loosening the screws, please keep them safe as they will be needed for reassembly.

3. Find the display and place it on the stem according to the direction shown in the picture.

4. Align the display with the holes on the stem.



5. Use a hex wrench to tighten the screws securing the display.

6. Find the corresponding green cable and plug it in securely, following the direction of the arrow.

7. Find the corresponding yellow cable and plug it in securely, following the direction of the arrow.

8. Use a hex wrench to remove the 4 screws underneath the display.

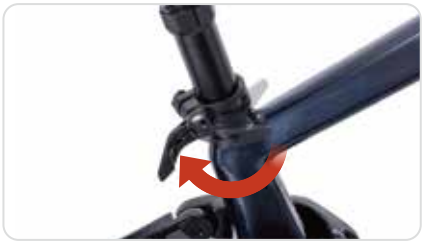
9. Please make sure to keep the accessories and 4 screws underneath the display safe.

10. Place the handlebar onto the stem and align it properly. The alignment mark on the handlebar should line up with the gap between the two fixing components.

11.Use a hex wrench to tighten the 4 screws in a diagonal order.

12. Finally, check if the handlebar is securely tightened.

Step 3: Seat Adjustment



1. Open the clamp below the seat post to adjust the seat height.

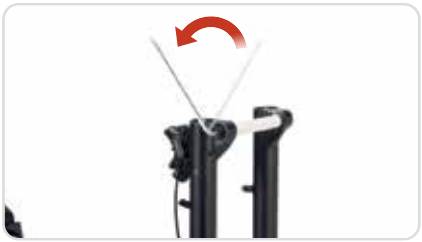
2. Swing the hydraulic lever to raise the seat.

3. Please be careful not to exceed the maximum scale, as this may damage the lifespan of the bike.

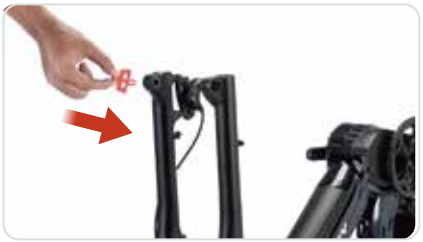
⚠ Notice:

To avoid potential riding hazards, make sure to tighten the seat post clamp and adjust the saddle height within the safe range.

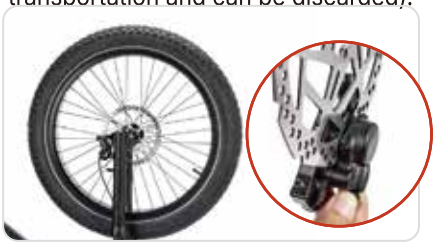
Step 4: Front Wheel Installation



1. Flip the E-bike frame upside down and place it securely.
Remove the front axle protector (this is used to keep the fork upright during transportation and can be discarded).



2. Remove the brake caliper protector.



3. Remove the front wheel axle bolts and keep them in a safe place.

4. Install the front wheel onto the front fork. Make sure the brake disc is properly aligned with the brake caliper before fully inserting the wheel.

5. Install the washers in the correct order and tighten the bolts securely.

Step 5: Kickstand Installation

1. Align the kickstand with the two screw holes.

2.Insert the two hex bolts and tighten them partially using a hex wrench.

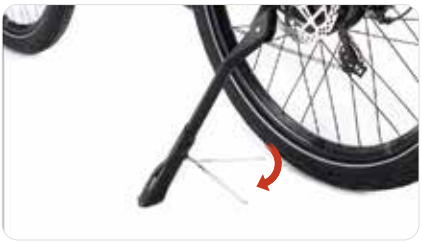
Step 6: Tire Correction

1.To check if you have done it correctly, spin the wheel. You should see a perfect set circle when spinning and not a wobbling circle.

2.Tires may get off-centered due to shipping.To fix this, deflate the tires until the outer tire is susceptible to movement.
Pull on the tire to adjust and make sure the white reflective line shares the same distance with the rims all throughout.Once set, inflate the tires to secure and make sure the tires will not move.

3. Use a bike pump to inflate the tires. Do not over-inflate or under-inflate

Step 7: Kickstand Adjustment



1. Loosen the hex bolt located on the inner side of the kickstand.

2. Adjust the kickstand to the desired length.

3. Tighten the adjustment bolt securely.

Step 8: Front Fender and Headlight Installation

1. Use a hex wrench to remove the fender screws secured beneath the fork (please keep this screw safe).

2. Place the front fender onto the front wheel, aligning it with the holes.

3. Use a hex wrench to tighten the screws on both sides of the fender.

4. Align the fender and headlight with the holes, then tighten using a hex wrench.

5. Connect and secure the headlight cable.

6. Finally, check if the headlight position is correct.

Step 9: Adjust the stem angle

1. Use a hex wrench to loosen the screws on both sides of the stem.

2. After loosening the screws on both sides, you can adjust the angle.

Note: The handlebar angle has already been calibrated at the factory, so no additional adjustment is needed upon receiving the product.

Step 10: Adjust the handlebar angle

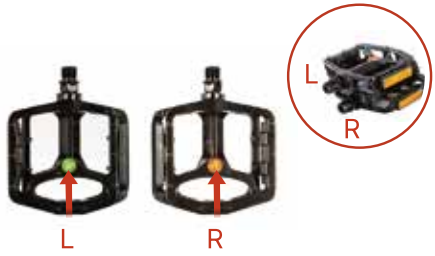
1. Use a hex wrench to loosen the handlebar screws.

2. After loosening the screws, you can adjust the handlebar angle.

3. Fix the adjusted handlebar angle in place.

4. Use a hex wrench to tighten the handlebar screws.

Step 11: Pedal Installation



1. Identify the left and right pedals. **“Left"** and **“Right"** refer to the rider's perspective when seated on the bike.

2.The pedal marked with "L" is for the left side and should be installed on the left crank arm. The pedal marked with "R" is for the right side and should be installed on the right crank arm.

3.Start by threading each pedal into the crank arm by hand to ensure proper alignment, then tighten using a wrench.

The “L” pedal should be tightened counterclockwise.

The “R” pedal should be tightened clockwise.

Step 12: Battery Installation and Removal

1. Battery Installation
Insert the bottom part of the battery into the battery mount socket.
Then, push the top part downward until it clicks into place, securing the battery firmly.

2. Battery Removal
To remove the battery, insert the key and turn it clockwise.
This will release the battery from the bottom mount.

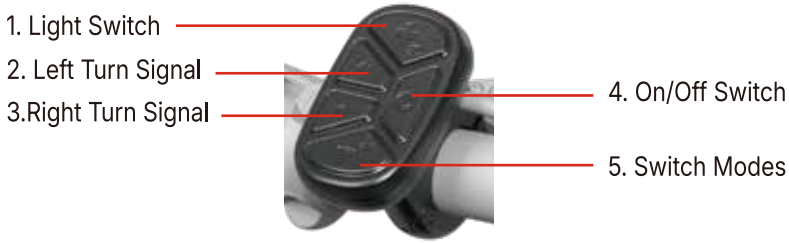
3. Pull the battery outward from the bottom mount and then lift it up to remove completely.

Tip: Use both hands when removing the battery to prevent it from falling.

Display & instructions

1. Left Turn Signal
2. Real-Time Speed
3. Energy-Saving Mode
4. Walk Assist
5. Riding Time
6. More than half: Power mode/POWER.
7. Headlight
8. Single-Trip Mileage

9. The gradient speed bar increases asthespeed rises.
10. Cruise Control
11. Power Mode
12. Less than half: Energy-saving mode/ECO.
13. Right Turn Signal
14. Gear Level
15. Check Error



Displayed Functions

Main Interface

1: SPEED Shows current speed in Mph (interchangeable in settings).

2: PAS (A total of 0~5 levels, 0 being no assist and 5 being max assist).

3: TRIP Shows riding distance for the current ride.

4: TIME Indicates riding time for current ride.

5: Press to turn on head and rear light.

6: Walk Assist: Press and hold [down] to ride at a set speed. This will assist pushing the bike uphill.

7: Cruise Control: Press and hold down while riding to set current speed as the riding speed.

8: Battery Bar. Shows the battery percentage left on the bike. Each bar is 10%.

9: Power Bar. Shows how much power you're engaging with the motor.

Controls:

Press and hold to power on/off

Increase PAS level

Decrease PAS level

Press and hold to turn on the headlight and taillight.

Press and hold to enter Walk Assist This provides a safe level of motor assistance for walking the bike.

1: [Average Trip Speed] Indicates average speed for current trip.

2: [Max Trip Speed] Indicates max speed for current trip.

3: (Total Mileage) Indicates total mileage rode with bike.

Press and hold + to enter interface 2

Press to exit interface 2

Average speed
Indicates the maximum speed for the current trip.

Maximum speed
Indicates the average speed for the current trip.

Total mileage
Indicates the total mileage ridden with the bike.

Single trip distance
Indicates the total distance traveled during the current trip.

Display Interface

Data Page

Password

Power-on mode
(Fully charged)

Eco mode: Left turn signal
+Push assist + Front light

POWER Mode: Cruise Control
+Front Light + Right Turn

POWER mode
power supply.

Second-level
interface

Fault Content

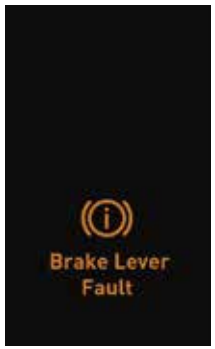
Motor Overheat Protection

Controller Overtemperature Protection

Throttle Fault

Motor Phase Loss

Hall Sensor Fault



Brake Lever Fault

Turn Signal Error

Communication Fault

Torque Sensor Error

Battery Fault

Total Voltage Overvoltage

Total Voltage Undervoltage

Charging Overcurrent

Discharging Overcurrent

Charging Overtemperature

Discharge Overtemperature

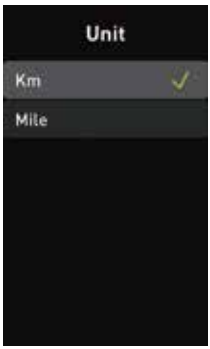
Charging Low Temperature

Discharge Low Temperature

Excessive Voltage Difference

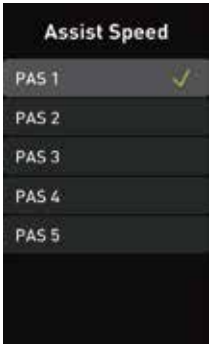
UI - Function Settings UI

Brightness/Unit



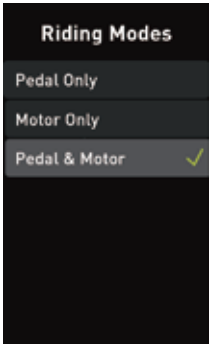
Throttle Speed

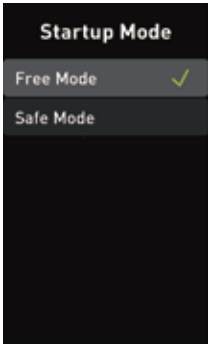
Assist Speed



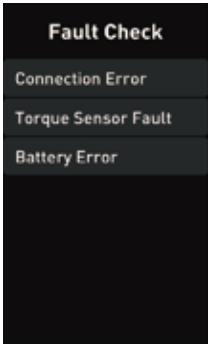
Functional Settings

Riding Modes





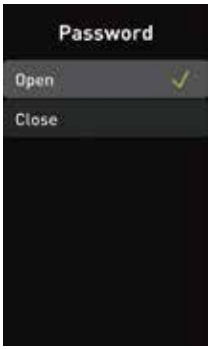
Fault Query



Password Setting

Enter the initial password.
The default password is 0000.

Password Setting

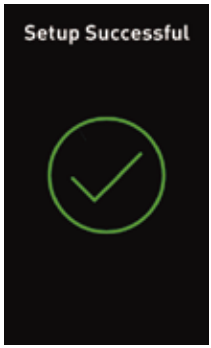


Open Password Setting

Enter New Password

Confirm Password

Password Setting Failed



Password Setting Successful

Function Settings

- Press + to enter this menu.
- Press to scroll up.
- Press to scroll down.
- Press to select the highlighted option.
  (If no operation is performed within 10 seconds, the current settings will be automatically saved and the system will return to the main menu.)

Function Settings

- Brightness: Level 1 is the dimmest and Level 5 is the brightest.
- Units: Switch between Km and Miles.
- Startup Mode:

Free Mode: Allows riding without pedaling.
Safe Mode: Requires pedaling to activate the motor.

- Reset Trip: Clear the current trip data.
- Language: Switch the display language.
- QR Code: Displays the QR code for this bike.

Battery & Charger

or

A. Recharge the battery on e-bike directly.

B. Remove battery from the e-bike and recharge separately.

BATTERY CHARGING
A single full charge will take 5 to 6 hours.

Battery Charging Tips

Always charge the battery after each use. Short rides will not damage the battery even if it is not fully charged.

- ★ When the power is connected or during charging, do not cover the battery. Ensure it is placed in a well-ventilated, open space. Do not charge the charger upside down, as this can restrict cooling and reduce the battery's lifespan.
- ★ Before starting each charge, inspect the cables, charger, and battery for any signs of damage.

⚠ Notice

Charging Instructions
First, connect the battery, then connect the power supply, and ensure the charger's red indicator light turns on. The red light indicates that the battery is charging, while the green light indicates that the battery is fully charged.

Always charge the battery at temperatures between 41°F and 113°F, and ensure the battery and charger are not damaged before starting the charging process. If you notice any abnormalities during charging, stop immediately and contact Mokwheel support for assistance.

When the Battery is Removed

- Do not touch the "+" and "-" terminals at the bottom of the battery.
- Handle with care to avoid dropping or damaging the battery pack.

Air Shocks

Rebound adjustment knob (Red)
+ direction rotation, increase damper (slow)
- direction rotation, decrease damper (fast)

Compression Adjuster (Blue)
+ direction rotation, lock-out
- direction rotation, open up

Pneumatic Shock Absorber Air Pressure Value (psi)

The maximum air pressure value of the gas pressure shock absorber is mostly 250psi (A0Y36 vice chamber maximum 80psi), and the factory is 150psi or less for most of the mountain bikes, the load bearing and the recommended air pressure values are as follows (not the maximum load bearing, it is the weight of the rider plus the car weight, the value is for reference only)

Weight (lbs)	Main air chamber (psi)	Negative air chamber
120	90	50
140	105	50
160	120	55
180	135	65
200	150	70
220	165	75
240	180	80
260	195	85
280	210	85

Battery Charging Tips

1. Place the charger in a safe location, away from children.
2. Fully charge the battery before each use. This helps extend the battery's lifespan and reduces the risk of overcharging the battery pack.
3. Do not use chargers other than those purchased directly from MOKWHEEL to charge the battery.
4. Avoid exposing the battery to liquids, dirt/debris, or metal objects.
5. Do not pull on the charger's cables. When unplugging, carefully remove the AC and DC cables by holding the plastic plug.
6. If you notice any unusual odors or overheating from the charger/battery, stop charging immediately and contact MOKWHEEL E-bike customer service.

⚠ Notice

Please follow the above procedures and safety information to charge your MOKWHEEL E-bike with extreme care. Failure to adhere to the correct charging procedures may result in damage to your MOKWHEEL electric bicycle, charger, personal property, as well as serious injury or even death.

Do:

- If the battery will not be used for an extended period, fully charge it and recharge it every two months.
- Store it in a cool, dry place.
- Charge the battery after each use.
- Only use the charger specified by Mokwheel to charge the battery.

Do Not:

- Use it to power other electrical devices. Improper use may damage the battery, shorten its lifespan, and potentially cause
- Disassemble or modify the battery or charger.
- Place the battery near fire or corrosive substances.
- Allow any liquids to come into contact with or inside the battery/charger.
- Expose the battery/charger to extreme weather conditions.
- Continue using a damaged battery/charger.
- Use the battery/charger for any purpose other than its intended use.

Extending Range and Battery Life

⚠ Notice

To ensure the hub motor does not overheat or become damaged due to overload, it is recommended that users pay close attention and adhere to the following guidelines:

* Use pedal assistance when climbing hills or accelerating from a standstill.
* Avoid sudden starts and stops.
* Accelerate gradually.

Brakes

Your electric bicycle is equipped with disc brakes for maximum reliability. Squeezing the brake levers generates friction between the wheel brakes and the brake discs, slowing down the wheels. To stop quickly, apply increased pressure to the brake levers.

It is important to understand how the brake levers control the front and rear brakes. The left brake lever controls the front brake, while the right brake lever controls the rear brake.

When using the front brake, the rear brake should always be engaged. Using only the front brake to slow down or stop at high speeds may cause the rider to be thrown off the saddle and result in injury from a fall. When slowing down or stopping, it is best to apply even pressure to both brake levers.

Electric bicycles with disc brakes may produce a slight scraping sound when the wheels are turning without the brakes applied. This is normal.

Notice

While riding, avoid using only the front brake, as this can cause the front wheel to lock up and lead to loss of control. Always use both the front and rear brakes together for balanced and safe braking.

Ensure that when full hand pressure is applied, the brake levers do not touch the handlebars (Figure 1). If this occurs, the brakes must be adjusted by increasing the cable tension.

Figure 1

A quick adjustment to the brakes can be made by tightening or loosening the threaded adjuster on the brake lever until the brakes reach a safe and fine-tuned state (Figure 2). If the brakes still do not function properly, further adjustments by an experienced bicycle mechanic may be required.

Figure 2

Notice

1. Disc brakes may become hot during use. Avoid touching the disc brakes immediately after use.
2. Slippery weather conditions can lead to skidding and require a longer distance to stop. When riding in wet or slippery conditions, brake earlier and avoid sudden stops.

Shock Absorption

The shock absorption function is designed to absorb impacts and can be locked or loosened using a knob. Increase the shock absorption intensity on rough roads or hillsides to reduce impact, and decrease it when riding on smoother surfaces.

Electric Bike Care Guide

To ensure safe riding, you must ensure that your electric bicycle is properly maintained. For your safety, please follow the basic guidelines below and have it regularly serviced by a certified electric bicycle technician.

1. Keep the battery fully charged when not in use to maintain it properly.
2. Never submerge the electric bicycle or any of its components in water, as this may damage the electrical system.
3. Regularly inspect the wiring and connectors to ensure there is no damage and that the connections are secure.
4. Clean the frame with a damp cloth soaked in a mild, non-corrosive detergent solution, then wipe it dry with a cloth.
5. When storing the electric bicycle, avoid leaving it in the rain or exposing it to corrosive materials. If the bicycle gets wet, dry it afterward and apply anti-rust treatment to the chain and other unpainted steel surfaces.
6. Riding on beaches or in coastal areas may expose your electric bicycle to corrosive saltwater. Frequently wash your bicycle and wipe or spray all unpainted parts with anti-corrosion treatment.
7. If the hub or bottom bracket bearings are submerged in water, they should be removed and re-greased to prevent damage.
8. If the paint on any metal surface is scratched or chipped, use touch-up paint to prevent rust. Clear nail polish can also be used as a preventive measure.
9. Regularly clean and lubricate all moving parts, tighten components, and make adjustments as needed.
10. Damage caused by corrosion is not covered under warranty. Give your electric bicycle special care to prevent corrosion and extend its product lifespan.

Safety Checklist

NOTICE: it is important to carry out the following checks before riding. 

Component or Condition	Check Before Every Ride	Regular Inspection*
Tire pressure	X	
Tire wear/damage	X	
Brake pad adjustment	X	
Wheel quick release adjustment	X	
Head and tail lights	X	
Controls and displays	X	
Seatpostquickreleaseadjustment	X	
Brake pad wear		X
Brake cable tension/wear		X
Spoke tension		X
Wheel truing		X
Hub bearings		X
Chain lubrication		X
Derailleur adjustment		X
Reflectors		X
Battery and charger		X
Headset adjustment		X
Bottombracketadjustment		X
All bolts,nuts&mounting hardware		X

* Every 5 to 10 rides depending on length and conditions of ride.

NOTICE: it is important to carry out the following checks before riding.

Component or Condition	Clean and/ or Lubricate	Adjust/ Tighten	Repair/Replace if Necessary
Tire pressure		X	
Tire wear/damage		X	
Brake pad adjustment		X	
Wheel quick release adjustment			X
Head and tail lights			X
Controls and displays			
Seatpostquickreleaseadjustment		X	
Brake pad wear			X
Brake cable tension/wear		X	X
Spoke tension		X	
Wheel truing		X	
Hub bearings	X	X	
Chain lubrication	X		
Derailleur adjustment	X	X	X
Reflectors			X
Battery and charger			
Headset adjustment	X	X	
Bottombracketadjustment	X	X	
All bolts,nuts&mounting hardware		X	X

* Every 5 to 10 rides depending on length and conditions of ride.

Disclaimer

At MOKWHEEL, we take customer safety very seriously and always recommend that you carefully comply with local, state, and federal laws before purchasing our products.

- MOKWHEEL is highly capable and can reach higher levels as the rider's skills improve. We require all MOKWHEEL users to always exercise caution and take responsibility for their own safety and the safety of others.
- Some counties, states, and towns have different laws/regulations. Please check with local authorities and adhere to local speed/power limit regulations when commuting on roads or in specific areas, such as parks, tracks, trails, or private residential areas.
- Children under 16 should always be supervised by an adult. MOKWHEEL should not be operated by anyone below the recommended age limit.
- Always wear a helmet, elbow pads, and knee pads. We recommend avoiding sandals or riding barefoot; please wear athletic shoes when riding MOKWHEEL.
- Before every ride, inspect and secure all fasteners and wheels to prevent wear. Replace any worn or damaged parts immediately.
- Please use sound judgment and carefully consider all aspects to avoid causing harm, damage, or loss. We recommend purchasing basic insurance for riders and communicating with local authorities before riding.
- MOKWHEEL is not responsible for the actions of others after your electric bicycle is discarded. The consequences of your actions depend entirely on the purchaser and how you fulfill your responsibilities. If you need further information, we are happy to provide advice based on our knowledge.

Notice

When the service life of any component is exceeded, it may result in unexpected loss of functionality. This could lead to serious injury or even death. Therefore, pay attention to signs of wear, such as cracks, scratches, or changes in the color or operation of components, as these may indicate that the service life has been exceeded. Replace any worn parts immediately.


MOKWHEEL