



KBO

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KBO FLIP

Owner's Manual

Thank you for your purchase!

This manual contains details of the product, information on its operation and maintenance, and other helpful tips for owners. Read it carefully and familiarize yourself with the KBO Flip before using it to ensure safe use and prevent tragic accidents. Be sure to retain this manual as your convenient KBO Flip information source.



To prevent your KBO Flip from being stolen and cannot be found, it is suggested that you record the serial number of your bike(Near the left crank connection).

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About Manual

All information in this manual should be carefully reviewed and if you have any questions you should contact KBO Bike immediately. The notes contained within the manual and marked by this dialogue balloons symbol should also be given special care. Users should also pay special attention to information marked in this manual beginning with NOTICE.

Because it is impossible to anticipate every situation or condition which can occur while riding, this manual makes no representations about the safe use of bicycles under all conditions. There are risks associated with the use of any bicycle which cannot be predicted or avoided, and which are the sole responsibility of the rider. You should keep this manual, along with any other documents that were included with your bicycle, for future reference, however all content in this manual is subject to change or withdrawal without notice. Visit www.kbobike.com to download the latest version. KBO Bike makes every effort to ensure the accuracy of its documentation and assumes no responsibility or liability if any errors or inaccuracies appear within. Assembly and first adjustment of your KBO Bike require special tools and skills and it is recommended that this should be done by a trained bicycle mechanic if possible.

Product Specification

Battery	36V 15.6Ah Lithium Battery	Front Fork	Front Suspension Fork
Motor	500W Geared Motor	Bike Frame	6061 Aluminum
Display	LCD Display	Brake	160mm Brakes
Derailleur	7-speed	Charger	42V 2.0A
Speed	20 MPH	Freewheel	7 Speed
Pedal Assist	Intelligent 3-level Pedal Assist	Shifter	Shimano
Throttle	Half Twist Throttle	Tires	20"x3" CHAOYANG Tires
Charging Time	5~6 Hours	Product Weight	57 lbs
Recommended Rider Heights	5.1" ~ 6.2"	Package Weight	70 lbs
Folded Dimensions	36.6"x14.6"x27.6"	Model Dimensions	65.0"x23.2"x47.2"

Product Structure



① Handle	⑬ Battery
② On/Off	⑭ LED Head Light
③ LCD Display	⑮ Front Fork
④ Shimano Shifter	⑯ Front Brake
⑤ Throttle	⑰ Tire
⑥ Brake Lever	⑱ Pedal
⑦ LED Rear Light	⑲ Controller
⑧ Rear Rack	⑳ Derailleur
⑨ Saddle	㉑ Motor
⑩ Frame	㉒ Rear Brake
⑪ Stem	㉓ Seat Post
⑫ Chain	㉔ Crank set

Assembly Instructions



The following assembly steps are only a general guide to assist in the assembly of your KBO Bike and is not a complete or comprehensive manual of all aspects of assembly, maintenance and repair. We recommend you consult a certified bike mechanic to assist in the assembly, repair and maintenance of your bike. For detailed instructions please view the KBO Flip assembly video found at www.kbobike.com.

Step 1 : Unfold the rear wheel/section and hold your bike upright with the kickstand. Push the latch closed so that it's vertical to the bike's frame then turn the latch lock down towards the latch to lock it in place.



Assembly Instructions

Step 2 : Push the button on the headtube latch to release it and unlock the folding mechanism.



Assembly Instructions

Step 3: Loosen the screws on the stem front cap, put into the handlebar, and adjust the handlebar to the vertical position of tire and tighten the screws.



Step 4 : Open the quick release at the seat tube by swinging the lever open and outward fully.

Step 5 : Move the seat up and down by sliding the seatpost in or out of the seat tube. DO NOT raise the seat post beyond the minimum insertion marking etched into the seatpost tube. Adjust the seat and the head of seat is parallel with the top tube.

Assembly Instructions

Step 6: Check the chain to make sure it is aligned. Rotate the right pedal and crank toward the back of the bike as if you were pedaling backwards. Observe the chain and make sure it runs smoothly through the drivetrain (around the rear cog, chain tensioner and front chain ring).

Remove The Battery

Step 1: Press and rotate the key to unlock the battery icon.

Step 2: Locate the seat quick release lever and turn over the saddle.

Step 3: Lift the battery off the frame and slide it upwards carefully.



Assembly Instructions

Fold The E-bike

Step 1 : Push the button on the head tube latch upward so that release it and unlock the folding mechanism.

Step 2 : Press the button on the middle latch of the frame outward to release it and unlock the folding mechanism.

Step 3 : Fold the handlebar down, and then fold the front wheel towards the rear wheel.

Product Safety Notice

1. Please wear a safety helmet before riding.
2. Keep extra key separate to ensure that the battery lock can be opened when the usual one is lost.
3. Make sure your battery is fully charged.
4. Follow the local laws and regulations.
5. Please don't ride when you are tired or after drinking alcohol.
6. Don't ride your bike in wet conditions, as wet conditions can damage the battery and void the warranty.

Safety Checklist

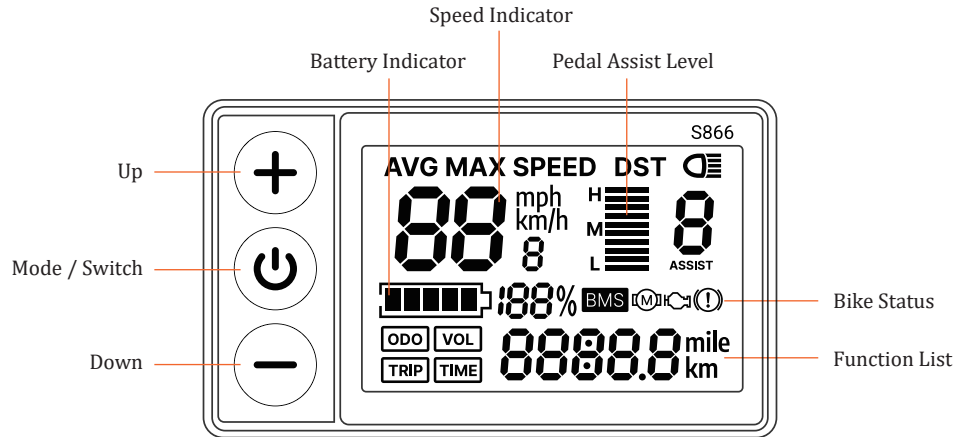
Safety Check	Basic Steps
Chain	<ul style="list-style-type: none">· Ensure the chain is oiled, clean and runs smoothly.· Extra care is required in wet or dusty conditions.
Cranks and Pedals	<ul style="list-style-type: none">· Ensure pedals are securely tightened to the cranks.· Ensure the cranks are securely tightened and are not bent.
Derailleurs	<ul style="list-style-type: none">· Check that the derailleur(s) are adjusted and functioning properly.· Ensure shift and brake levers are attached to the handlebar securely.· Ensure all brake and shift cables are properly lubricated.
Motor Drive Assembly and Throttle	<ul style="list-style-type: none">· Ensure the hub motor is spinning smoothly and the motor bearings are in good working order.· Ensure all power cables running to the hub motor are secured and undamaged.· Make sure the hub motor axle bolts are secured and all torque arms and torque washers are in place.
Battery Pack	<ul style="list-style-type: none">· Ensure battery is charged before use.· Ensure there is no damage to the battery pack.· Lock battery to frame and check to see that it is secured.
Locking clamps	<ul style="list-style-type: none">· Make sure the locking clamps at the handlebar, seat and frame are properly locked








Start-up Procedure

After the bike has been properly assembled according to the assembly video, all components are secured correctly, a certified, reputable mechanic has checked the assembly, and you have read this entire manual, turn on the bike and select a pedal assist level following the steps below:

1. Press the “Ⓞ” (ON/OFF) button to turn the bike on.
2. Press “+” or “-” to select the pedal assist level you want. You can choose between level 0 through 3 on the display remote.
3. Press and hold the “+” key for 3 seconds to turn on the headlight if needed or desired.
4. Begin riding carefully. With the proper safety gear and rider knowledge, you may now operate your bike. On a flat surface, in a low gear(1 or 2), most riders should be able to begin pedaling the bike with pedal assist 0 or 1. You may also use the throttle to accelerate and maintain your desired speed.
5. The throttle is used by slowly and carefully rotating the throttle backward toward the rider. When you push the bike uphill, you can turn the throttle slightly and use the push assist function.

Display Features



-  1
-  2
-  3
-  4
-  5
-  6
-  7

1 Abnormal Motor	2 Brake Indicator	3 Headlight On	4 Odometer
5 Battery Voltage	6 Trip Odometer	7 Riding Time	

Display Features

The display pad is equipped with 3 buttons including “+”, “-” and “⊕”. The “⊕” button is the on/off button.

Press and hold the “⊕” button on the handlebar controls to turn on the display. Now, your e-bike is ready to ride. To turn it off, press and hold the “⊕” button for 3 seconds. Press the UP button for 3 seconds to turn on the light.

The display pad provides you with a variety of displays to meet the demand of your riding. The display contents are:

1. Status Indicator

- ◆ Abnormal Motor
- ◆ Brake Indicator
- ◆ Headlight On

2. Unit of Measure

You can toggle between miles or kilometers based on your location and preference.

3. Odometer/Trip Odometer:

It shows total riding range and single riding range.

4. Speed Indicator

It shows the real-time speed of your e-bike.

5. Battery Level Indicator

The battery level indicator on the display will show the current battery energy remaining.

6. Pedal Assist Level

It shows the pedal assist level and the default range is 0-3 levels. Press the UP or DOWN button to adjust the pas level when the power on.

Routine Operation

General Settings

1. Press the UP and DOWN keys at the same time for 2S to enter the setting interface and then press the ON/OFF key to switch.
2. Press the UP and DOWN keys to select the parameter.
3. Stay for 3 seconds to exit automatically.

Parameter Number	Definition	Specific
P01	Backlight Display	1: Darkest 3: Brightest
P02	Range	0: KM; 1:MILE
P03	Voltage	Default 36V
P04	Sleep Time	0: NEVER Range:0-60 Minutes
P05	Pedal Assist Level	0: 3 levels
P06	Wheel Diameter	
P07	Magnet Number	Range:0~100
P08	Speed Limitation	

Routine Operation

Parameter Number	Definition	Specific
P09	Powered Set-up	0: None; 1:Powered
P16	Reset ODO	Press and hold " ⊕ " for 5s

Error Code

Error Code	Definition	Error Code	Definition
E30	Abnormal Communication	E35	Motor Phase Problem
E33	Abnormal Current	E36	Motor Hall Defect
E34	Throttle Abnormal	E37	Brake Failed or Brake Applied While Turning On

When the error code is displayed, please promptly remove the fault. After the fault occurs, the electric bike will not be able to ride normally.

The range of your KBO Bike is the distance the bike will travel on a single full charge of the onboard battery pack. The range values in this manual are estimates based on expected usage characteristics. Some of the factors which affect the range include changes in elevation, speed, payload, and acceleration, number of starts and stops and ambient air temperatures. Tire pressure and terrain are also important variables to consider.

We suggest that you select a lower pedal assist level when you first get your KBO Bike to get to know your bike and travel routes. Once you become familiar with the range requirements of your travel routes, and the capabilities of your KBO Bike you can then adjust your riding characteristics if you desire.

The following table provides general estimates and outlines various factors' effective range and their combined estimated effects on range. This table is meant to help owners understand the factors that can increase or decrease range, but KBO Bike makes no claims to the range that individual users might obtain.

Best Practices for Extending Range and Battery Life



- ◆ *Do not climb hills steeper than 15% in grade.*
- ◆ *Pedal to assist the motor when climbing hills and accelerating from a stop.*
- ◆ *Avoid sudden starts and stops.*
- ◆ *Accelerate slowly.*

Parking Storage and Transport

Please follow these basic parking, storage and transport tips to ensure your bike is well cared for on and off the road.

- ◆ When pushing the vehicle manually, turn off the power to avoid accidental acceleration from the motor.
- ◆ It is recommended to park indoors.
- ◆ Switch the power off, and any lights to conserve battery. Remove the key from the bike and ensure the battery is locked to the frame or removed and brought with you for security.
- ◆ In public places, your KBO Bike must be parked in accordance with local rules and regulations.
- ◆ If you must park outdoors in rain, or wet conditions you should only leave your KBO Bike outside for a few hours and proceed to park the bike in a dry location afterwards to allow all the systems to dry out. Much like a regular bike, use in wet conditions mandates a more regular maintenance schedule to ensure your bike does not become rusty, corroded and to ensure all systems are always working safely.
- ◆ Do not park, store, or transport your KBO Bike on a rack that is not designed for the size and weight of the bike.
- ◆ Locking up your bike is recommended to ensure your bike is secure and the chance of theft is reduced. KBO Bike makes no claims or recommendations on the proper lock hardware or procedures to secure your bike, but we do recommend you take the appropriate precautions to keep your KBO Bike safe from theft.
- ◆ When storing your bike or carrying your bike on a rack for transport, you can remove the battery pack to reduce the weight of the bike and make lifting and loading easier.

Basic Battery Charging Tips

- ◆ The battery should be recharged after each use. There is no memory effect, so you can charge the battery after short rides without damage.
- ◆ The battery can be recharged on or off the bike.
- ◆ Remove the battery by turning the key and then pulling the battery forward and up until the battery detaches from the mating receptacle.
- ◆ The charger will automatically stop charging when the battery pack is full.
- ◆ Always charge in dry locations and indoors away from direct sunlight, dirt or debris.
- ◆ Do not cover up the charger when plugged in or charging, it air cools and needs to be left in an open space. Do not charge with the charger in the inverted position which can inhibit cooling and reduce the charger's life.
- ◆ Check the charger cables, charger and battery for damage before beginning each charge.
- ◆ The light on the charger will turn green when charge is complete and stay red while the battery charges.

Charging Time

When the input and output plugs of the charger are connected properly, and the battery is not fully charged, the red charging indicator light should illuminate, showing that the battery is charging. The time that the battery takes to fully charge the battery is dependent on various factors including distance traveled, riding characteristics, terrain, payload, and battery age.



NOTICE: *The battery pack can take longer to charge when fully depleted and when the battery is new. As your battery ages you might also experience increased charging times, but this is only expected after 3-5 years of regular use. If your battery does not seem to be charging normally, and taking longer to charge than expected, please discontinue charging and contact KBO Bike immediately.*

To ensure safe riding conditions you must ensure your bike is properly maintained. You should follow these basic guidelines and see your certified bicycle mechanic at regular intervals to ensure your bike is safe for use.

1. Properly maintain batteries by keeping them fully charged when not in use.
2. Never immerse the bike or any components in water as the electrical system may be damaged.
3. Periodically check wiring and connectors to ensure there is no damage and the connectors are secure.
4. To clean, wipe the frame with a damp cloth soaked in a mild non-corrosive detergent mixture. Dry with a cloth.
5. Store under shelter; avoid leaving it in the rain or exposed to corrosive materials. If exposed to rain, dry your bicycle afterwards and apply anti-rust treatment to chain and other unpainted steel surfaces.
6. Riding on the beach or in coastal areas exposes your bicycle to salt which is very corrosive. Wash your bicycle frequently and wipe or spray all unpainted parts with anti-rust treatment. Damage from corrosion is not covered under warranty so special care should be given to extend the life of your bike when used in coastal areas or areas with salty air or water.
7. If the hub and bottom bracket bearings have been submerged in water, they should be taken out and re-greased. This will prevent accelerated bearing deterioration.
8. If the paint has become scratched or chipped in the metal, 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 adjust as required.

Basic Troubleshooting

Safety Check	Basic Steps	Most Common Solutions
It doesn't work	<ol style="list-style-type: none"> 1. Insufficient battery power 2. Faulty connections 3. Battery not fully seated in tray 4. Improper turn on sequence 5. Brakes are applied 	<ol style="list-style-type: none"> 1. Charge the battery pack 2. Clean and repair connectors 3. Install battery correctly 4. Turn on bike with proper sequence 5. Disengage brakes
Irregular acceleration and/or reduced top speed	<ol style="list-style-type: none"> 1. Insufficient battery power 2. Loose or damaged throttle 	<ol style="list-style-type: none"> 1. Charge or replace battery 2. Replace throttle
When powered on the motor does not respond	<ol style="list-style-type: none"> 1. Loose wiring 2. Loose or damaged throttle 3. Loose or damaged motor plug wire 4. Damaged motor 	<ol style="list-style-type: none"> 1. Repair and or reconnect 2. Tighten or replace 3. Secure or replace 4. Repair or replace
Reduced range	<ol style="list-style-type: none"> 1. Low tire pressure 2. Low or faulty battery 3. Driving with too many hills, headwind, braking, and/or excessive load 4. Battery discharged for long period of time without regular charges, aged or damaged 5. Brakes rubbing 	<ol style="list-style-type: none"> 1. Adjust tire pressure 2. Check connections or charge battery 3. Assist with pedals or adjust route 4. Replace the battery
The battery won't charge	<ol style="list-style-type: none"> 1. Charger not well connected 2. Charger damaged 3. Battery damaged 4. Wiring damaged 	<ol style="list-style-type: none"> 1. Adjust the connections 2. Replace 3. Replace 4. Repair or replace
Wheel or motor makes strange noises	<ol style="list-style-type: none"> 1. Damaged motor bearings 2. Damaged wheel spokes or rim 3. Damaged motor wiring 	<ol style="list-style-type: none"> 1. Replace 2. Repair or replace 3. Repair or replace motor

Basic Troubleshooting

All users must read and understand this manual before first use. Additional manuals for components used on your bicycle may also be provided and should be read before use in addition to this manual.

- ◆ Ensure that you comprehend all instruction and safety notes.
- ◆ Ensure the bike fits you properly before first use. You may lose control or fall if your bike is too big or too small.
- ◆ Always wear an approved bicycle helmet whenever using this product and ensure that all helmet manufacturer instructions are used for fit and care of your helmet. Failure to wear a helmet when riding may result in serious injury or death.
- ◆ Ensure correct tightening and setup is performed on your bicycle before first and checked regularly.
- ◆ It is your responsibility to familiarize yourself with the laws and requirements of operation of this product in the area(s) where you ride.
- ◆ Ensure handle bar grips are not damaged and properly installed. Loose or damaged grips can cause you to lose control and fall.
- ◆ Do not use this product with standard bicycle trailers, stands or bicycle racks. Contact KBO Bike to check if your equipment will work with the bicycle.
- ◆ Engaging in extreme riding is extremely dangerous and should be avoided. Although many articles/advertisements/catalogues depict extreme riding this is not recommended nor permitted, and you can be seriously injured or killed if you perform extreme riding.
- ◆ Bicycles and bicycle parts have strength and integrity limitations and extreme riding should not be performed or you risk damaging the components or becoming seriously injured or killed.
- ◆ Failure to confirm proper installation, compatibility, proper operation or maintenance of any component or accessory can result in serious injury or death.
- ◆ You should check the operation of the brake inhibitor switches before each ride. The brake system is equipped with an inhibitor which shuts down the power to the electric motor whenever the brakes are engaged. Check proper operation of brake switches before riding.
- ◆ Failure to properly charge, store or use your battery will void the warranty and may cause a hazardous situation.



As a parent or guardian, you are responsible for the activities and safety of your child. The KBO Flip is not designed for use by children.

Warranty Info

Every bike is covered under a manufacturer's two-year all-inclusive warranty for the original owner against all manufacturing defects. KBO Bike warrants this product, including all individual components against defects in material or workmanship as follows:

KBO Bike LIMITED 2-YEAR WARRANTY

KBO Bike bicycle components including frame, forks, stem, handlebar, headset, seat post, saddle, brakes, lights, bottom bracket, crank set, pedals, rims, spokes, wheel hub, freewheel, cassette, derailleur, shifter, motor, throttle, controller, wiring harness, LCD display, kickstand, reflectors and hardware are warranted to be free from manufacture defects in materials and/or workmanship for a 2-year period from the date of original purchase.

Wear and tear is not covered under warranty. KBO Bike lithium ion batteries are warranted to be free from manufacturing defects in materials and/or workmanship for a 2-year period from the date of original purchase. The battery warranty does not include damage from power surges, use of improper charger, improper maintenance or other such misuse, normal wear or water damage.

The Following are Also Excluded from the Warranty:

- Liability for material defects does not cover normal wear which occurs from the manufacturers intended use of the product. Components such as the battery pack, motor system, braking system, drivetrain system, saddle, grips and pedals are all subject to intended use-related wear and are not covered under the warranty from normal wear.
- Damage arising from the use of the bike in a competition or other applications outside of normal intended use.
- Damage arising by improper tools or inadequate maintenance performed on the bike.
- Damage resulting from adding non-standard equipment, parts or technical modifications.

Additional Warranty Terms

This warranty does not cover any damage or defects resulting from failure to follow instructions in the owner's manual, acts of God, accident, misuse, neglect, abuse, commercial use, alterations, modification, improper assembly, wear and tear, installation of parts or accessories not originally intended or compatible with the bicycle as sold, operator error, water damage, extreme riding, stunt riding, or improper follow-up maintenance. This warranty does not include consumables or normal wear and tear parts (tires, tubes, brake pads, cables and housing, grips). KBO Bike will not be liable and/or responsible for any damage, failure or loss caused by any unauthorized service or use of unauthorized parts. In no event shall KBO Bike be responsible for any direct, indirect or consequential damages, including without limitation, damages for personal injury, property damage, or economic losses, whether based on contract, warranty, negligence, or product liability in connection with their products. All claims to this warranty must be made through KBO Bike. Proof of purchase may be required with any warranty request.

Components of the KBO Flip are subject to higher wear when compared to bicycles without power assistance. This is because the KBO Flip can travel at higher average speeds than regular cycles and has a greater weight. Higher wear is not a defect in the product and is not subject to warranty. Typical components affected are the tires, brake pads, suspension forks, spokes/wheels and battery pack.



When the useful life of a component is surpassed it can cause unexpected loss of function. This can result in serious injuries or even death. Therefore, pay attention to wear characteristics such as cracks, scratches or changes in the color or operation of components which could indicate useful life has been exceeded. Worn components should be immediately replaced.

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