



BLACK ROCK BIKES

**ALOHA
(FOLD N GO)**



Table of Contents

About Manual	1
Basic information	2
Assembly Instructions	4
Operation.....	12
Battery Charging	16
Maintenance.....	19
Troubleshooting.....	22
Warnings and Safety.....	23
Limited Warranty	27

About Manual

This manual contains details of the product and information on its operation and maintenance. Read it carefully and familiarize yourself with the Black Rock Bike before using it to ensure safe use and prevent tragic accidents. Be sure to retain this manual as your convenient Black Rock Bike information source.

This manual contains many Warnings and Cautions concerning the safe operation and consequences if safe setup, operation and maintenance are not performed. All information in this manual should be carefully reviewed and if you have any questions you should contact Black Rock Bikes Dealer immediately. The notes, warnings and cautions contained within the manual and marked by this triangular Caution 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, a long 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. Black Rock Bikes makes every effort to ensure accuracy of its documentation and assumes no responsibility of liability if any errors or inaccuracies appear within.

Basic Information

Motor:	48V 750W Rear brushless
Battery:	48V 13AH Li-ion Battery
Controller:	48V 25A Intelligent brushless
PAS:	1:1 Intelligent pedal assistant system
Range:	22 miles(electric only),35 miles(pedal assistant)
Charging Time:	AC 100V-240V 2A smart charger,5-6 hours
Rear Derailleur:	Shimano front 1 and rear 7 outer
Frame:	6061 Aluminium alloy folding
Pedals:	Foldable Padels
Tyres:	KENDA 20*4.0 tyre
Front Fork:	Hard Fork
Front Brake:	Logan Hydraulic Disc Brake
Rear Brake:	Logan Hydraulic Disc Brake
Stud:	Aluminium alloy
Diaplay:	LCD
Light:	LED headlight & tail light
Chain:	KMC
Chain Wheel:	Aluminium alloy crank

Seat Post:	Aluminium alloy
Colour:	Black,White
Modes:	Pedal mode,power assist mode,full electric mode
Max Speed:	23-28 MPH
Max Load:	300 lbs
Net Weight:	60 lbs
Gross Weight:	80 lbs

Basic Structure



Assembly Instructions



NOTICE: The following assembly steps are only a general guide to assist in the assembly of your Black Rock Bikes and is not a complete or comprehensive manual of all aspects of assembly, maintenance and repair. We recommend you consult a certified bicycle mechanic to assist in the assembly, repair and maintenance of your bicycle.

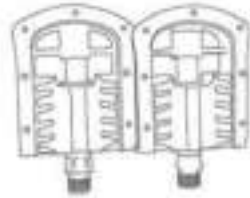
Step 1: Remove bike from carton and carefully set out all contents of the box. Remove packaging material protecting the bicycle frame and components. Ensure the following pieces are included in the package. If there are any missing parts please contact Black Rock Bikes for help replacing missing pieces. Please also ensure you have received the correct frame size before assembling the bike.

Package include: Black Rock Bikes frame, Front Wheel, Front wheel quick release, Pedals (Left and Right), Front headlight, Charger, Keys for battery pack, Assembly tools and manual

1



2



3



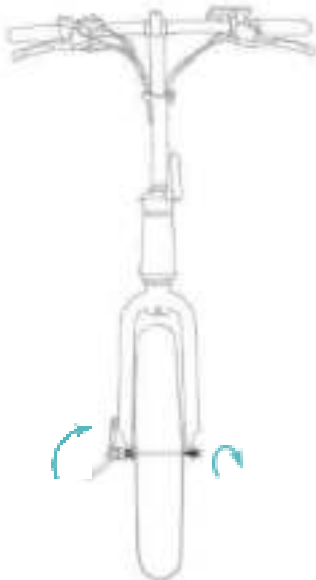
4



5



Step 2 : Open the tool box in the package → twist off the nut → get out a little spring → insert the centre axle → adjust the wheel → lock off the quick release → finish installation



Step 3 : Folding stem assembly schematic



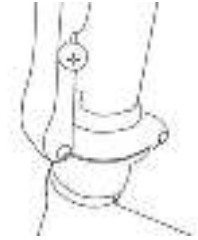
1. Unscrew the sunflower screw.



2. Remove the sunflower screw.



3. Insert the Riser assembly.



4. Insert the riser to complete.



5. Fold the riser down.



6. Fold the riser down to effect.



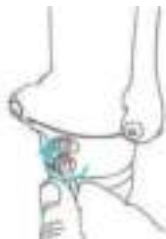
7. Install the sunflower screw.



8. Tighten the sunflower screw.



9. Fold the riser back into position.



10. Tighten the 2 screws on the outside of the riser.

Step 4 : Install the pedals. The left and right pedals are marked on both ends. First, install the right pedal by tightening the pedal in clockwise direction. The left pedal is tightened by turning the pedal in counterclockwise direction.



Step 5: Install the headlight. Mount the headlight on the front fork as picture shows.



Step 6 : Adjust the saddle height. Loosen the seat clamp, insert the seat post into the slot, adjust the saddle height to a suitable height and tighten the adjustment nut. When you feel resistance, close the seat tube clamp fully. Make sure to stay within the marked adjustment range. Do not raise the seat post beyond the minimum insertion marking etched into the seat post tube.

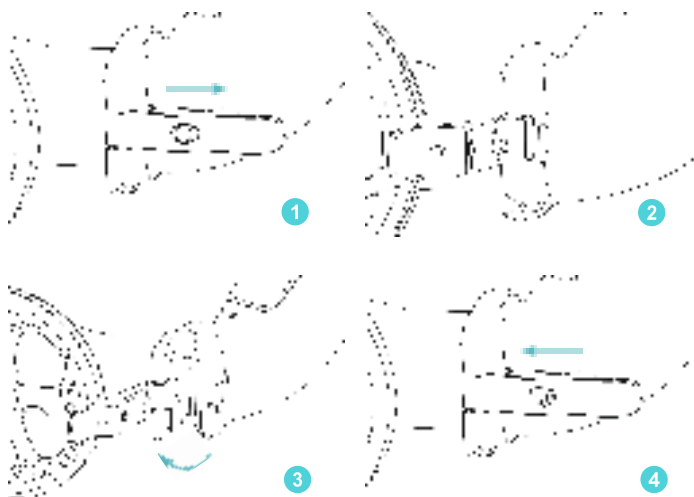


Step 7 : Check the battery pack is locked into the frame of the bike.
 When you want to take off the battery, insert the key and turn to release the battery pack. The battery pack can be removed and charged separately. Align the battery pack to the battery holder carefully and push until when you hear it click into the place.



Step 9: Folding & unfolding the frame

To unfold the frame, unfold the rear wheel/section and keep your bike upright with the kickstand. While holding the latch lock up, push the latch closed. Make sure the hook end of the latch is secure and let the latch lock turn down into the latch to lock everything in place. To fold the frame. While holding the latch lock up, use your other hand to open the latch by pulling it away from the frame.

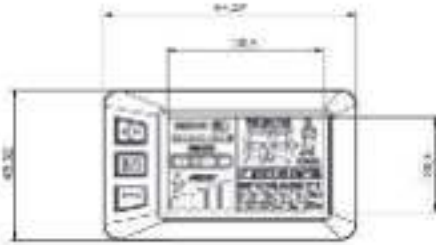


NOTICE: Ensure all hardware is tightened properly and all safety checks in the following sections are performed before first use. Contact Black Rock Bikes if you have any questions regarding the assembly of your bike.

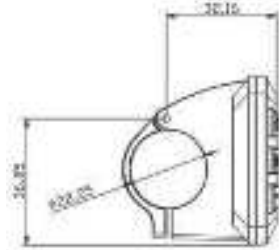
Display Features

1.Shell's Size and Material

The shell's material is ABS. LCD screen is made of imported high hardness acrylic, and the hardness is equal to tempered glass.

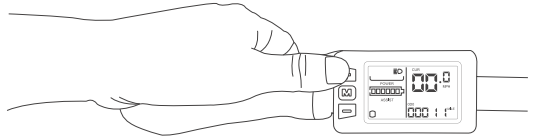
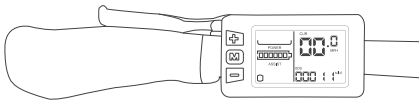


Front View



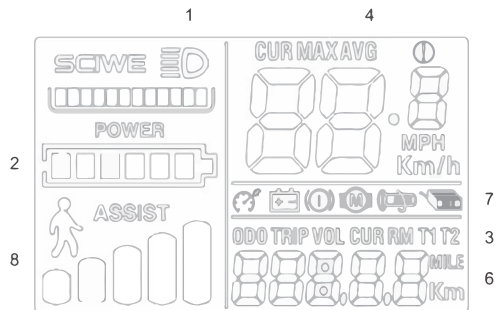
Side View

Long press “+” button to turn ON / OFF the Light.



2.Press:

- 2.1 Headlight
- 2.2 Power status
- 2.3 Multi-functions
 - Total Distance(ODO), Single Trip Distance A/B(TRIP A/TRIP B), Voltage(VOL), Current(CUR), Remaining Miles(RM), Riding time(TM)
- 2.4 E-Bike Mode: Walk Cruise, Auto, Manual(not indicated)
- 2.5 Pedal assist adjust PAS grades: 0-3, 0-5(default) or 0-9 modes



2.6 Speed

Real speed(SPEED), Maximum speed(MAX), Average speed(AVG), MPH, KM/H are both optional.

According to wheel size and signal data, the meter can figure out the real speed.

2.7 Error display Meaning of Error Code:

Error Code	Error Status	Notes
0	Normal Status	
1	Save	
2	Brakes	
3	PAS promble(a riding mark)	not implemented
4	6KM/H cruising	
5	Real-time cruising	
6	Battery is undervoltage	
7	Motor's problem	
8	Throttle's problem	
9	Contrller's problem	
10	Communication Receiving problem	
11	Communicaton Sending problem	
12	BMS Communication problem	
13	Headlight problem	

2.8 PAS grades

PAS Status (0-9 grades), Cruise mark

2.9 Parameters setting

P01 Background luminance: 1 is the darkest, 3 is the brightest.

P02 Unit of the mileage. 0 is KM, 1 is MILE

P03 Voltage grades. 24V, 36V, 48V. The original voltage is 48V.

P04 Sleep time. 0 is without sleep, other numbers stand for the sleep time (1-60 min).

P05 PAS grades. 0-3, 0-5(default) or 0-9 modes for choice

P06 Wheel size. Unit: inch.

Precision:

P07 Speed measuring magnet. Range: 1-255

P08 Speed limit. Range: 0-100km/h, 100 means without limit

No-Communication Status (controlled by the meter):

When the real speed is over the ones we set, the meter would shut off PWM output; when less than the speed weset, the meter would turn on PWM output automatically, the driving speed would be ± 1 km/h (Speed limit is both for PAS and Throttle)

Communication Status(Controlled by the controller):

The driving speed keeps the same with the ones we set. Random error: ± 1 km/h. (Speed limit is for both PAS and Throttle)

Notes: These data are based on KM.When changing KM to Mile, the speed value on the screen would convert to correct Miles automatically, but if you do not change the setting of speed limit from KM to Mile, it would be different from the real speed limit in Mile.

P09 Zero start & Non-zero Start. 0 is Zero Start, 1 is Non-zero Start

P10 Driving mode.

0 is driven by PAS. Throttle is useless at this time.

1 is driven by Throttle. PAS is useless at this time.

2 is driven by PAS & Throttle. Throttle is useless at Zero Start status.

P11 PAS sensitivity. Range: 1-24

P12 PAS start strength. Range: 0-5

P13 PAS magnet type. There are 3 types: 5, 8, and 12.

P14 The Current-limiting of Controller. The original Current is

12A. Range:1-20A

P15 Not implemented now.

P16 Reset ODO. Long press "+" for 5s, ODO could be reset.

3.Button Introductions

3.1 During riding, need change PAS/Speed grades, shortly press "+" "-"

3.2 During riding, need change data in Multi-function Area, shortly press "M"; Long press "M", could switch status between MODE and ON/OFF;

Long press as a compound button, is mainly used for parameter setting, which could reduce misoperation due to complicated operation. (No compound button with short-time press, because it's difficult to operate.)

3.3 Specific operation explanations

3.3.1 Change PAS grade

Suppose it's PAS mode now, shortly press "+", PAS grade +1, shortly press "-", PAS grade-1.

3.3.2 Shift the speed display

Long press "M", "+", to shift the way of speed display

3.3.3 ON/OFF 6KM/H cruising, ON/OFF Headlight, Reset ODO

When e-bike stops, long press "-" to enter 6KM/H cruising mode. Stop pressing to exit the cruise mode; Long press "+" to turn ON/OFF Headlight and Taillight; At P16, long press "-" for 5s to reset ODO.

3.3.4 ON/OFF the screen

Long press "M" to turn ON/OFF the screen.

3.3.5 Change data in multi-function Area.

Shortly press "M" to change data.

3.3.6 Parameters setting

Long press "+", "-" to start setting parameters, such as wheel size (inch), background luminance... (Refer to P01-P16)

On the setting interface, shortly press "+", "-" or to plus/minus value. Parameters would be shining after modifying, choose the ones you prefer,

a. Long press "M" to save the value, the shining would stop.

b. Shortly press "M" to shift to the next parameter, and to save current values at the same time.

c. Press "+", "-" to exit setting parameters and to save values. If not press

these buttons, it would exit and save parameters modified automatically 10s later.

Operation

Start-Up Procedure

After the bike has been properly assembled following the unboxing video and all components are secured correctly, you may now proceed to start up the vehicle and select the power level following the next steps.

1. Press “M” to turn on the display.
2. Select your desired level of pedal assistance between level 0 through 5 using the up and down arrows on the display remote. Level 1 corresponds to the lowest level of pedal assistance, and level 5 corresponds to the highest level of pedal assistance. Level 0 indicates pedal assistance will be inactive.
3. To turn on the headlight once the LCD display are on, long press “+” to turn on the headlight.
4. With the proper safety gear and rider knowledge and understanding you may now proceed to operate your Black Rock Bikes. You can begin by pedaling the bike in the appropriate drive train gear with or without pedal assistance. You may also use the throttle to accelerate and maintain your desired speed.

Driving Range

The range of your Black Rock Bikes 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 effect 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 assistance level when you first get your Black Rock Bikes 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 Black Rock Bikes you can then adjust you riding characteri-stics if you so desire.

The following table provides general estimates and outlines various factors effecting 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 Black Rock Bikes 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.



NOTICE: It is recommended that users pay close attention and ride within the following limitations to ensure the hub motor does not overheat or become damaged from excessive loading

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.

- o When pushing the vehicle manually, turn off the power to avoid accidental acceleration from the motor.
- o It is recommended to park indoors.
- o 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.
- o In public places, your Black Rock Bikes must be parked in accordance with local rules and regulations.
- o If you have to park outdoors in rain, or wet conditions you should only leave your Black Rock Bikes outside for a few hours and proceed to park the bike in a dry location afterwards in order 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.

- o Do not park, store, or transport your Black Rock Bikes on a rack that is not designed for the size and weight of the bike.
- o Wide tires, as used on Black Rock Bikes, cannot fit into all bike racks, please select an appropriate rack for the width of tires used on your bike.
- o Locking up your bike is recommended to ensure your bike is secure and the chance of theft is reduced. Black Rock Bikes 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 bike safe from theft.
- o 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.

Carrying Loads

MAXIMUM PAYLOAD FOR BLACK ROCK BIKES

The total maximum weight limit of the Black Rock Bikes(150 Kilograms) includes the weight of the rider as well as clothing, riding gear, cargo, etc. The kickstand is not designed to be used for loading cargo. You MUST hold onto the bike whenever loading cargo. Do not assume the bike is stable and balanced when using the kickstand, always hold onto the bike when cargo is being loaded or in place. Total maximum payload: 150 Kilograms.

Carrying Cargo

Carrying a cargo load involves additional risks which need to be paid close attention to, users should practice riding on a flat and open area with light cargo before attempting to carry heavier loads. You must become accustomed to the braking, steering, and operational adjustments required to safely operate the Black Rock Bikes with cargo. Braking, acceleration, and balancing are all significantly affected by the addition of cargo loaded on the bike

The following bulleted list provides important tips for the safe operation of the bike when used for carrying cargo.

- Plan your route accordingly as your hill climbing ability, steering and braking are all impacted when cargo is loaded on the bike. Hills that are normally easy to climb and descend without cargo can become challenging and dangerous once cargo is loaded.
- Cargo should be loaded as low as possible to lower the center of gravity and improve stability, but ensure that cargo does not interfere with any moving components or the ground.
- Ensure your loads are properly secured and periodically check that nothing loosens.
- Get a feel for the cargo load in a flat and open area before riding on roads.



Do not use the front brake by itself, always apply the rear brake first followed by the front brake and be sure to use both brakes for all braking operations. Front fork failure or loss of control are plausible when the front brake is operated independently for slowing at high speed with cargo loads. The kickstand is not designed to be used for loading cargo. You MUST hold onto the bike whenever loading cargo. Do not assume the bike is stable and balanced when using the kickstand, always hold onto the bike when cargo is being loaded or in place.

Battery Charging

Charging Procedure

Follow these steps for charging your bike:

1. Turn the battery pack off using the key switch.
2. With the battery on or off the bike, place the charger in a flat, secure place, and connect the DC output plug from the charger (round barrel connector) to the charging port on the side of the battery pack.
3. Then connect the input plug (110/220-volt plug) to the power outlet, charging should initiate and will be indicated by the LCD charge status light on the charger turning red.
4. After charging, indicated by the charging indicator light turning green, unplug the charger from the wall outlet first and proceed to remove the charger output plug from the bike charging port.



Always charge your battery in temperatures between 10 and 26 degrees Celsius and ensure the battery and charger are not damaged before initiating charge. If you notice anything unusual while charging, please discontinue charging and use of the bike and contact Black Rock Bikes for help.

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.

- o The battery can be recharged on or off the bike.
- o Remove the battery by turning the key and then pulling the battery forward and up until the battery lifts off of the mating receptacle.
- o The charger will automatically stop when the battery pack is full
- o Always charge in dry locations and indoors away from direct sunlight, dirt or debris.
- o Do not cover up the charger when plugged in or charging, it air cools and needs to be left in a clear space. Do not charge with the charger in the inverted position which can inhibit cooling and reduce the chargers life.
- o Check the charger cables, charger and battery for damage before beginning each charge.

- o The light on the charger will turn green when charge is complete and stay red while the battery charges
- o Charging normally takes 3-5 hours, however it can take longer when you first receive the bike since the battery pack is balancing.
- o Charge in a clear area away from potential to trip on the charging cords, or damage to occur to the bike, battery or charging equipment while parked.

When the Battery Is Removed

- o Do not touch the “+” and “-“terminal contacts on the bottom of the battery when the battery is removed from the bike.
- o Be careful not to drop or damage the battery pack when loose from the bike.
- o Ensure the battery is turned off whenever it is being removed or off the bike.

When Installing the Battery onto the Bike

- o Ensure the battery is turned off before sliding the battery into the frame mount receptacle.
- o Do not force the battery onto the receptacle, slowly align and push battery down into the receptacle.
- o Ensure the key is in the locked position before riding and check that the battery has been properly secured to the bike before each use by pulling upwards and testing the security of the pack.

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 Black Rock Bikes immediately.

Charger Safety Information

- o Keep charger in a safe place away from children.
- o Fully charge the battery before each use to extend the life of the battery and help to reduce the chance of over discharging the battery pack.
- o Do not charge the battery with any other chargers than what was originally supplied with your Black Rock Bikes or a charger purchased directly from Black Rock Bikes for use with your specific bike serial number, as approved by Black Rock Bikes.
- o The charger works on 110/220 V 50/60 Hz standard home AC power outlets, do not open the charger to select voltage input, the charger automatically detects and accounts for incoming voltage.
- o Avoid charger contact with liquids, dirt/debris or metal objects.
- o Store the charger in a location where it cannot suffer damage from falls/impact.
- o The charger should only be used indoors in a dry ventilated space.
- o If you notice a strange smell or the charger or battery are overheating, please stop charging and contact Black Rock Bikes.
- o Do not yank or pull on the cables of the charger. When unplugging carefully remove both the AC and DC cables by way of pulling on the plastic plugs, not pulling on the cables.



!! Please take special care in charging of your Black Rock Bikes in accordance with the above procedures and safety information. Failure to follow proper charging procedures can result in damage to your Black Rock Bikes, charger, personal property and/or serious injury or death.

Maintenance

Bicycle Care

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 preventative measure.
9. Regularly clean and lubricate all moving parts, tighten components and adjust as required.



Your cables, spokes and chain will stretch after an initial break in period of 80-160 km, while bolted connections can loosen. Therefore, always have a certified bicycle mechanic perform a tune-up on your Black Rock Bikes after your initial break-in period of 80- 60 km (depending on total weight, riding characteristics and terrain). Regular inspections and tune-ups are particularly important for ensuring that your bicycle remains safe and problem-free.

Safety Checklist



NOTICE: Before every ride it is important to carry out the following safety checks.

Safety Check	Basic Steps
Brakes	<ul style="list-style-type: none">o Ensure front and rear brakes work properly.o Ensure brake pads are not over worn and are correctly positioned in relation to the rims.o Ensure brake control cables are lubricated, correctly adjusted and display no obvious wear.o Ensure brake control levers are lubricated and tightly secured to the handlebars
Wheels and Tires	<ul style="list-style-type: none">o Ensure tires are inflated to within the recommended limits displayed on the tire sidewalls.o Ensure tires have tread and have no BULGES OR EXCESSIVE WEAR.o Ensure rims run true and have no obvious wobbles or kinks.o Ensure all wheel spokes are tight and not broken.

Steering	<ul style="list-style-type: none"> o Ensure handlebar and stem are correctly adjusted and tightened, and allow proper steering. o Ensure the handlebar is set correctly in relation to the forks and the direction of travel.
Chain	<ul style="list-style-type: none"> o Ensure the chain is oiled, clean and runs smoothly. o Extra care is required in wet or dusty conditions.
Crank and Pedals	<ul style="list-style-type: none"> o Ensure pedals are securely tightened to the cranks. o Ensure the cranks are securely tightened and are not bent.
Derailleurs	<ul style="list-style-type: none"> o Check that the derailleur(s) are adjusted and functioning properly. o Ensure shift and brake levers are attached to the handlebar securely. o Ensure all brake and shift cables are properly lubricated.
Motor Drive Assembly and Throttle	<ul style="list-style-type: none"> o Ensure hub motor is spinning smoothly and the motor bearings are in good working order. o Ensure all power cables running to hub motor are secured and undamaged. o 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"> o Ensure battery is charged before use. o Ensure there is no damage to battery pack. o Lock battery to frame and check to see that it is secured.

Basic Troubleshooting

Symptoms	Possible Causes	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

Warnings and Safety

General Warnings

Like any sport bicycling involves risk of injury and damage. By choosing to ride a bicycle, you assume the responsibility for that risk, so you need to know, and practice the rules of safe and responsible riding and the proper use and maintenance of this bicycle. Proper use and maintenance of your bicycle reduces risk over injury. Your bicycle is designed for use by person 18 years old and above. Riders must have the physical condition, reaction time and mental capability to ride and manage traffic, road conditions, and sudden situations and also respect the laws governing electric bicycle use where they ride, regardless of age. If you have an impairment or disability such as a visual impairment, hearing impairment, physical impairment, cognitive/ language impairment, or a seizure disorder, consult your physician before riding any bicycle.

A Note for Parents and Guardians

As a parent or guardian, you are responsible for the activities and safety of your child. The bike is not designed for use by children. If you are carrying a passenger in a child safety seat, they must also be wearing a helmet. Additional safety information regarding helmets follows in the Helmet section of this manual.

Safety Notes



The following safety notes provide additional information on the safe operation of your Black Rock Bikes and should be closely reviewed. Failure to review these notes can lead to serious injury or death.

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.

- o Ensure that you comprehend all instruction and safety notes/warnings.
- o Ensure the bike fits you properly before first use. You may lose control or fall if your bike is too big or too small.
- o 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.
- o Ensure correct tightening and setup is performed on your bicycle before first and checked regularly.
- o It is your responsibility to familiarize yourself with the laws and requirements of operation of this product in the area(s) where you ride.
- o Ensure handle bar grips are not damaged and properly installed. Loose or damaged grips can cause you to lose control and fall.
- o Do not use this product with standard bicycle trailers, stands or bicycle racks. Contact Black Rock Bikes to check if your equipment will work with the bicycle.
- o 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.
- o 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.
- o Failure to confirm proper installation, compatibility, proper operation or maintenance of and component or accessory can result in serious injury or death.
- o After any incident you must consider your bike unsafe to ride until you consult with a certified bicycle service provider for a comprehensive inspection.
- o Failure to properly charge, store or use your battery will void the warranty and may cause a hazardous situation.
- o Extreme care should be taken when using the pedal assist sensor and propulsion on this product. Ensure you understand and are prepared for the power assistance to engage as soon as pedaling is underway.

- o 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.
- o User must understand the operation of the twist throttle and pedal assist sensors before using, and take ample care in their usage in respect to traveling at speeds appropriate for usage area and user experience level. Always use the lowest assist level until you are comfortable with the bike and feel confident in controlling the power.

- o Any aftermarket changes to your Black Rock Bikes not expressly approved by Black Rock Bikes could void the warranty and create an unsafe riding experience.
- o Because electric bicycles are heavier and faster than normal bicycles, they require extra caution and care while riding.
- o Take extra care while riding in wet conditions. Feet or hands can slip in wet conditions and lead to death or serious injury from a fall.
- o Do not remove front or rear reflectors, pedal reflectors or bell.

Warranty Info

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

BLACK ROCK BIKES LIMITED 1 YEAR WARRANTY

Black Rock Bike's 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 1-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, drive train 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). Black Rock Bikes 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 Black Rock Bikes 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 Black Rock Bikes. Proof of purchase may be required with any warranty request.

Additional Information on Wear

Components of the Black Rock Bikes are subject to higher wear when compared to bicycles without power assistance. This is because the Black Rock Bikes 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.

Thanks for Riding Black Rock Bikes!



**BLACK ROCK
BIKES**