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**For warranty and
technical service
on this bike please
call toll-free at:
1-866-353-2245
(1-866-ELECBIK)**

A black and white photograph of an electric bicycle, showing the front fork, handlebars, and the motor unit on the frame. The image is slightly blurred and has a soft, hazy atmosphere, suggesting motion or a close-up view. The background is a gradient from light to dark.

FEEL THE POWER OF
THE ELECTRIC BICYCLE

owner's manual

WARNING

- 1. Your Rayos bike is NOT a toy. Always wear a good quality helmet. The Rayos meets the United States (H.R. 727) regulations for an electric bicycle, which classifies this in the same category as a regular bicycle. You should check with the laws and regulations of your city and state to ensure its legality in your particular area.**
- 2. Your Rayos is not intended for, but may be ridden in light rain. The Rayos can be rinsed off with water to clean it, but your Rayos cannot be submerged in water. Keep the bike dry and clean when possible. Wet brakes will take longer to stop the bike.**
- 3. Never use your Rayos for jumping or other stunts. Serious injury or death could result. Any damage caused by improper use will void the warranty.**
- 4. Rayos uses air (pneumatic) tires. Please check tire pressure to ensure that both tires have 40-65 psi in each tire. Pump up tires if necessary before each ride.**
- 5. Always turn off your Rayos (i.e. turn the battery switch to off prior to charging) and plug in charger after each and every ride. The Rayos' battery should be recharged, even if partially discharged, after each ride, to ensure the battery's integrity. The Rayos uses batteries that have no memory so it is very important to recharge the battery frequently.**
- 6. The manufacturer reserves the right to update Rayos in function and technical issues.**
- 7. Maximum load capacity: One person up to 250 pounds.**

Please contact your Rayos dealer for any questions not addressed in this manual.

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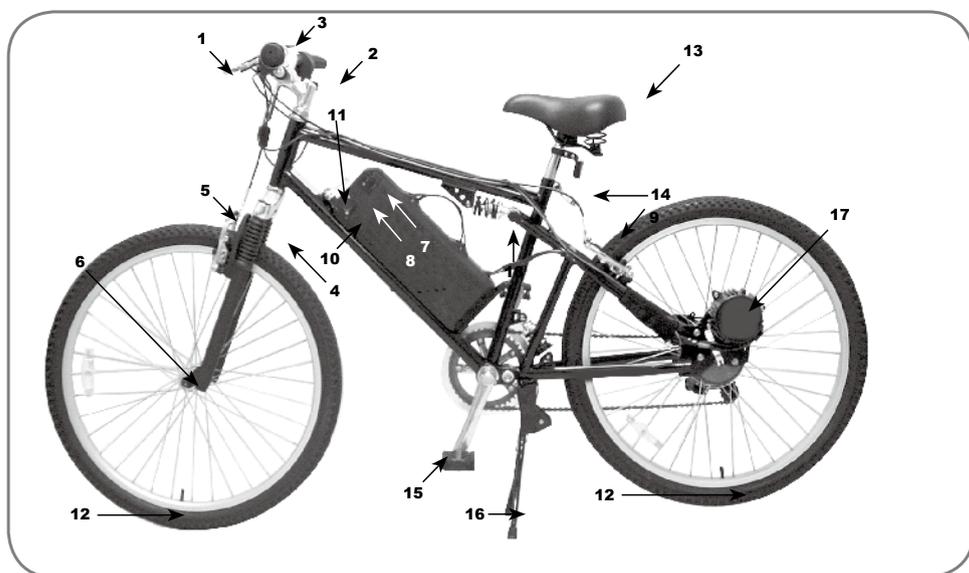
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Parts Checklist

Please check and make sure you have everything as follows:

- ◇ Rayos
- ◇ Owners Manual
- ◇ Allen keys for motor and handlebar
- ◇ Charger
- ◇ Reflectors (front, rear and wheels')
- ◇ Bell
- ◇ Pedals
- ◇ Battery box

Parts Introduction



- | | |
|---------------------------------|--|
| 1. Brake lever | 10. Charger plug |
| 2. Throttle | 11. Quick release for battery |
| 3. Grip Shifter | 12. Wheel valve |
| 4. Suspension fork | 13. Seat |
| 5. V-brake | 14. Quick release for seat post |
| 6. Bolt-on front wheel | 15. Pedal |
| 7. Power switch | 16. Kickstand |
| 8. Power indicator light | 17. Motor |
| 9. V-Brake | 18. Rear Suspension |

Mounting The Front Wheel



1. Place the front wheel in between the dropouts of the front fork.



2. Tighten the nuts on each side of the axle bolt, locking the front wheel in place.



3. Insert the front brake cable and tension properly.

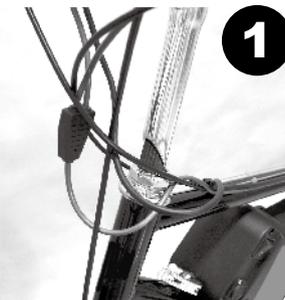
4. Now the front wheel is mounted.



Attention:

- 1. To dismount the front wheel, please follow the steps in reverse order.**
- 2. Never ride the bike when the front wheel is not set up correctly.**

Setting Up The Handlebar And The Seat



1. Insert the head stem of the handlebar into head tube.
2. Make sure the fork is situated properly by having the brake calipers on

the front fork facing forwards. The fork is turned 180 degrees for shipping purpose so it needs to be oriented properly before proceeding to step 3.



3. Align the handlebar with the front wheel and then tighten the head stem bolt to the head tube.



4. Insert the seat post (with the saddle already fixed in place) into the seat tube.

5. Adjust the seat height and lock it in place with the quick release. Be aware of the safety line marked on the seat post. Never leave it out of the seat tube.

5. Adjust the seat height and lock it



Mounting the Motor

The electric motor that comes with your electric bicycle needs to be installed on the bike. This is an easy procedure to perform. We pack the motors in separate boxes to ensure their safety in shipping the electric bike to you.

In order to attach your motor to your electric bike you will require the metric Allen wrench that was included with your accessories. Please perform the following

- tasks:**
- 1) Remove the motor and packaging from the box.
 - 2) Remove the 3 metric Allen screws from the motor propulsion housing (these screws will be used to reattach the motor in step 5 below).
 - 3) Align the D-shaped motor shaft with the D shaped cutout in the planetary gear.
 - 4) Press motor into place and rotate so the 2 wires come out of the bottom of the motor.
 - 5) Attach 3 metric Allen screws removed in step 2 above.
 - 6) Attach throttle wire (3 hole plug) to white plug of motor harness.
 - 7) Attach brake inhibit wire (2 hole plug) to white plug of wiring harness.
 - 8) Attach red/black wire of motor to the battery.
 - 9) Use 3 small pieces of electrical tape to wrap the plug connections.
 - 10) Tuck wires out of the way and cover with neoprene wrap.

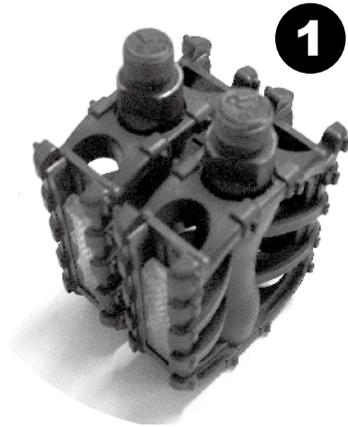
About the Motor:

The Rayos bike uses a brushless motor exclusively made for Rayos, which is free of any maintenance, because no brushes will be worn out. The system works without mechanical friction. High quality ball bearings guarantee high efficiency and long life without maintenance. The chain only needs a few drops of a non-petroleum based lubricant, applied on a regular basis. This type of lubricant is available from your local bike shop.

Attention:

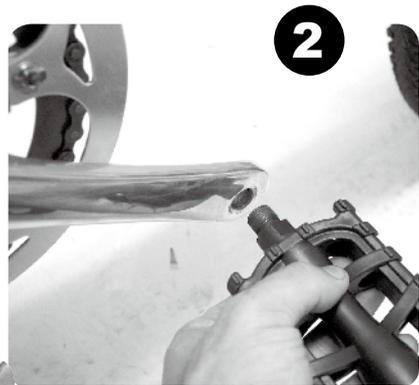
The system is equipped with an "auto-shutdown-system" to protect the motor from overheating. As soon as the motor reaches the temperature of 65°C- 70°C/149°F-158°F, the motor will switch off automatically to protect the system. As soon as the temperature is lower, 65°C/149°F the system will be ready for use automatically.

Assembling The Pedals



1. Identify right and left pedals (identified by R and L at end of bolt on pedal).

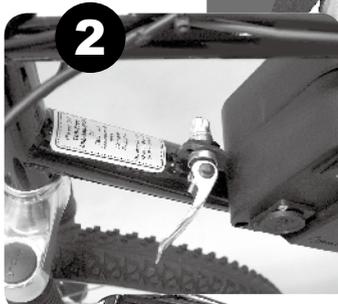
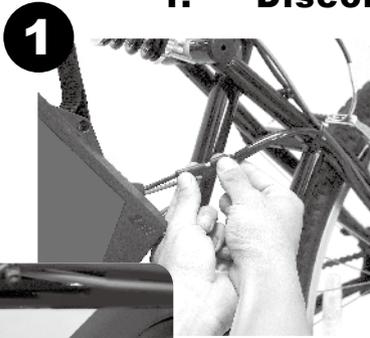
2. Turn the right pedal axle clockwise.



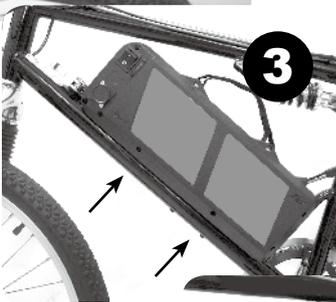
3. Turn the left pedal axle counter-clockwise until tight.

Quick Release for Battery Pack

- 1. Disconnect the battery pack from the Rayos's wiring harness by separating the plug connection at the back of the battery.**



- 2. Release the lever of the quick release and slide it forward.**



- 3. Lift the battery pack.**



- 4. Pull out the battery pack.**

Power Switch

Locate the console on the battery pack

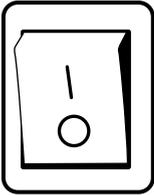


GREEN LIGHT
YELLOW LIGHT
RED LIGHT

Green light-battery fully charged

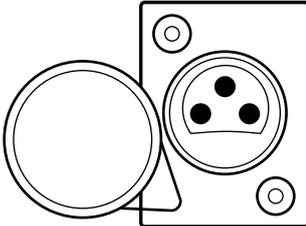
Yellow light-battery about half charged

Red light-low battery



Turn the power switch to position "I", and the battery indicator will show you how much charge is left in the battery. The indicator will show the correct level in the battery when the battery is under load and in use (i.e. bike under way).

If the battery indicator shows a yellow light, you can continue to ride. When the light turns red, the battery has to be charged immediately. Because the battery has



no memory, it should be charged after each and every ride.

Charger Port

Lift and rotate anti-dust cover to plug in charger.

Attention:

Please recharge the battery frequently to maintain its integrity. Always turn off the Rayos after riding.

Throttle - Ready For A Ride!

To start and accelerate your Rayos, simply press the lever of the throttle. As soon as you release the throttle completely, the motor will be disengaged. When the throttle is released, the Rayos will freewheel (i.e. coast like a regular bicycle) and no drag or resistance is felt or placed upon the bicycle or rider. The Rayos uses a clutch mechanism in their propulsion system that allows for this total freewheeling experience. To slow down quickly, please use the rear brake or occasionally both front and rear brakes.



Attention:

The bicycle is equipped with a brake inhibit system. When either the right or left brake lever is engaged the motor will be cut-off, if currently in operation, or prevented from starting if the throttle lever is pressed while the brake levers are engaged

To restart the motor you must do 2 things:

- 1. Release the throttle completely.**
- 2. Release both brake levers.**

Grip Shifter Derailleur Operation

Rayos uses an 8-speed derailleur. Twisting the grip shifter as you pedal the bike controls the selection of gearing during the ride.

Attention:

Please use the grip shifter only during riding. The grip shifter will not function when the Rayos is stationary. Any improper usage will cause the chain to malfunction. Please do not twist the grip shifter for any improper operation.

Charging Battery



Home Charger

Turn your Rayos off. Slide the cover over on the charging port of the battery and plug the 3-pronged plug of the charger into the charging port on the bicycle battery. Plug the power cord of the charger into your home electrical outlet. The charger-LED will be red when the battery is charging. The charger-LED will turn green when the battery is fully charged.

Charging Battery



After reaching full charge, please unplug the charger from the electrical outlet before you unplug the plug from your Rayos. The battery

will be fully charged within 3-7 hours.

If you will not be riding the bike for a long period of time (i.e. several months)- recharge the bike at least once per month.



Attention:

- 1 Make sure the power switch is turned off before charging.**
- 2. Please disconnect the charger within 24 hours after the battery is fully charged.**
- 3. Please contact your local agent for optional accessory purchases.**

Changing The Rear Tire

The following method can be used to remove the rear wheel in the event that the tire or tube needs to be replaced.

1. Release the rear brake caliper by squeezing brakes together and releasing the bayonet mount holding the brake wire.
2. Remove the master link (3 pieces) on the small drive chain. As the pieces to the master link are small be careful not to lose any parts.
3. Remove small drive chain.
4. Loosen 2 large outer nuts on rear wheel,
5. Remove rear wheel and replace required parts (i.e. tire /tube)
6. Reinsert wheel in rear dropouts.
7. Tighten 2 outer nuts on rear wheel.
8. Reattach small drive chain and master link.

Adjusting the chain tension on the drive chain

When the bike is assembled the rear chain tension should be checked to ensure it is properly set. This adjustment will also need to be checked periodically and after any rear tire replacements and adjusted if necessary.

The drive chain on the rear wheel is adjusted by slightly loosening (i.e do not remove) the 3 metric allen screws that hold the motor plate (i.e. not the 3 screws holding the motor) to the rear dropouts of the bike. Grasp the motor with your hand and you will be able to slightly move the motor forwards and backwards. The motor chain is set properly when there is approximately 1/16" to 1/8" of slack in the chain. **(Warning: This chain MUST have the proper amount of slack otherwise damage may occur to the propulsion system)** When this tension is achieved, hold the motor in place with one hand and securely tighten the 3 metric allen screws with the other hand.

Rayos Electric Bicycle Limited Warranty

Terms and Conditions

This Rayos Electric Bicycle comes to the original retail purchaser with a limited 180-day warranty from the date of purchase. This warrants that this Rayos Electric Bicycle will be free from any manufacturing or material defects to the original retail purchaser for 180 days according to the conditions listed below. The Warranty will be valid upon receipt of product registration mailed within 30 days of your date of purchase or entered online at our website at www.Rayosbike.com

This Warranty is non-transferable and is only valid under the following conditions:

1. The set-up instructions were followed;
2. The operational instructions have been followed;
3. The Warnings have been adhered to;
4. Valid proof of purchase (dated receipt) is furnished upon request when claim is filed;
5. Warranty Registration Card is furnished upon request \pm V (if not already on file) or registration was completed online;
6. Please contact your dealer (place of original purchase) for initial contact on any warranty related matters.
7. A Return Authorization number is required prior to shipping any item back. Any item returned without a Return Authorization number may be refused.

Your Warranty will not be extended to any products or components which have been subjected to misuse, accident, used for other than it's intended purpose, or to units which have been repaired or altered outside our factory or authorized dealer service centers. Your electric bicycle is not intended for use in stunt riding, ramp jumping or similar activities and this Warranty shall be declared null and void where such activities have occurred.

Should any warranted part prove defective within the covered warranty period, the customer should call the Service Center for warranty service. All parts, which are supplied as warranty replacements, shall assume the balance of the warranty on the part returned for warranty consideration.

Your Warranty assumes no liability beyond the repair or replacement of the faulty component. Shipping and labor to accomplish any repair or replacement are specifically excluded from this warranty. If a faulty component or bicycle is returned to the Service Center, labor will be provided free of charge but shipping to and from the Service Center are at the expense of the customer. Customer modification of this product shall void this Warranty.

The following items are excluded from this warranty:

1. Tubes and Tires
2. Brake pads
3. Chains
4. Accessories and electrical parts other than original equipment
5. Batteries (after the first 90 days) Batteries are warranted to the original retail purchaser to be free from any manufacturing or material defects for a period of 90 days.

The warranty for the battery does not extend beyond the 90th day. This Limited Warranty constitutes the entire warranty with respect to the product and is in lieu of all others, expressed or implied, including any warranty of merchantability and/or warranty of fitness for a particular purpose. In no event is the manufacturer responsible for any consequential damages of any nature whatsoever.

NOTICE: The user assumes the risk of personal injuries, damage or failure of the bicycle or system and other losses if the bicycle is used in any competitive event, including racing, dirt riding or similar events.

This Warranty gives you specific legal rights and you may also have other rights, which vary from state to state. For Technical or Warranty Assistance please contact: Rayos Service Center Toll-free: (866) 353-2245 (866-ELECBIK)