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Parts description



Daily checks

To ensure your safety, make the following functional checks before driving:

- 1 - Normal operation of the light, brake and power cut systems.
- 2 - Tire pressure (low pressure, will influence both autonomy and speed).
- 3 - Wheel axle tightening.
- 4 - Battery charge level.
- 5 - Braking system adjustment and free operation.



If charging with the battery removed

- 1-Keep the charger in a safe place, away from children.
- 2-Do not use the battery when not fully charged. That will decrease its lifespan.
- 3-Do not charge the battery with other chargers than the original.
- 4-The charger works with 110/220V. Please do not open it without permission.
- 5-Avoid charger contact with liquids and/or metal objects. Always be sure it is safely stored/placed so that it can not suffer damage from a fall/impact.
- 6-When in use, the charger should not be covered, to prevent overheating, damage, or fire.
- 7-The charger is only for indoor use. Please keep it in dry and ventilated place.
- 8-If you notice a strange smell coming from the charger, or it is too hot, please stop charging, and contact Red Power Disks.

Important tips while driving

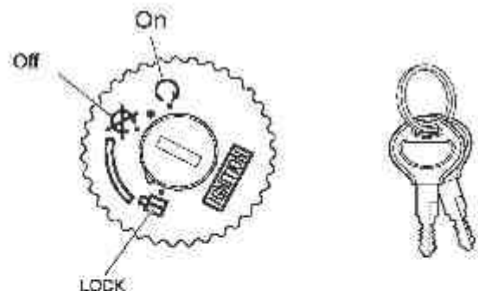
- 1-In order to reduce consumption, increase autonomy, and extend the motor's lifespan, use the pedals during the startups and climbs.
- 2-Do not push the throttle too fast. The vehicle should be accelerated slowly, reducing consumption and risk of damage to the electrical system. It's better to use the pedals to help during startups.
- 3-To increase security and reduce power consumption, it is advised to avoid sudden stops and startups.
- 4-The vehicle controller has a charge overload protection. If on overload, energy will be cut automatically and restored when it returns to normal.
- 5-While driving, avoid using the throttle as you brake, as it may damage the motor.
- 6-The maximum load is 90kgs. Avoid driving with superior weights. Do not drive too fast.

Important tips when parking

- 1-When pushing the vehicle manually, turn off the power, to avoid accidental acceleration and accidents.
- 2-It is recommended to park indoors. Do not forget to switch off the power and remove the key.
- 3-In a public place, the vehicle must be parked in accordance with local traffic rules. Do not forget to switch off the power and remove the key.

How to start up the vehicle

- A.** Insert the key and engage into the ON position. Depress the battery ON/OFF button until the blue LED on the button illuminates.



B.



1. Open red button
2. Mode: control PAS strength
3. Blue button: control front light



Option: Please check the LED display manual for details.

Average distance from one charge: 25-40km(active state)

Conditions of testing: wind speed: level 2-3, normal atmosphere temperature: 25 degrees, load: 90kg, atmospheric pressure: 3.5kg/cm, flat concrete surface; battery: full

Surface \ Range	Range				Driving condition
	10km	20km	30km	40km	
Flat	[Bar chart showing range from ~25km to ~40km]				wind level: 2-3 normal temperature: 25°C normal load
Flat	[Bar chart showing range from ~20km to ~35km]				against wind level: 2-3 normal temperature: 25°C normal load
upslope/downslope	[Bar chart showing range from ~15km to ~30km]				degree of slope ≤ 2 degree wind level: 2-3 normal temperature: 25°C normal load

Max speed (25km/h) miles of journey Economy speed (10km/h) miles of journey

Power consumption of one time charge: ≤ 0.5kw.h rated load: 90kg

Economical speed: 18km/h Dead load: ≤ 30kg

The load haul is related with road, road surface, times of start-up, times of braking, wind direction, atmospheric temperature, air pressure in the tire and correct way of charging, please note this during driving.

To ensure safe riding conditions you must properly maintain your bike. You should follow the basic guidelines below and see your certified local bike shop seasonally to ensure your bike is safe for use.

Regular self-checks.

1. Tightening and correct operation of both wheels, frame and front fork.
2. Tire pressure and conditions.
3. Gearshift correct operation.
4. Bell and reflectors conditions and correct operation.
5. Braking system correct operation.
6. If you do not use the vehicle for long periods of time, charge the battery at least once a month, to avoid reducing its lifespan.

Maintenance and cleaning tips

1. Do not wash with high pressure jets to prevent water infiltration into the electrical system.
2. Dirt on painted surfaces should be removed with a neutral product. Then, wipe with a dry cloth.
3. Lubricate the vehicle with suitable lubricant, after washing.
4. Do not apply lubricant on the brakes, brake levers, rims, tires, battery and controller.

	Symptoms	Possible causes	Most common solutions
1	It doesn't work	(1) Insufficient battery power (2) Faulty connections (3) Key in wrong position	(1) Charge the battery (2) Clean the connections (3) Turn the key into the correct position
2	Irregular acceleration and/or reduced top speed	(1) Insufficient battery power (2) Loose throttle magnet (3) Damaged throttle spring	(1) Charge the battery (2) Weld and adjust (3) Contact an Authorized Service Center
3	When powered on, the motor doesn't respond	(1) Loose wiring (2) Loose throttle magnet (3) Loose or damaged motor wiring plugs	(1) Repair and/or reconnect (2) Weld and adjust (3) Contact an Authorized Service Center
4	Reduced range	(1) Low tire pressure (2) Low or faulty battery charge (3) Driving with too many hills, headwind, braking, departures, and/or excessive load (4) Battery discharged for long period of time, without regular charges, aged or damaged	(1) Adjust the tire pressure (2) Check the connections and/or fully charge the battery (3) Help with the pedals (4) Replace the battery (5) Make a prolonged battery charge
5	The battery won't charge	(1) Charger not well connected (2) Battery cases fuse blown (3) Battery wiring disconnected or with a bad contact	(1) Adjust the connections (2) Replace the fuse (3) Reconnect/repair the wiring
6	Driving wheel makes strange noises	(1) Damaged motor bearing (2) Bent or misaligned rim	(1) Replace the bearing (2) Adjust/replace the rim

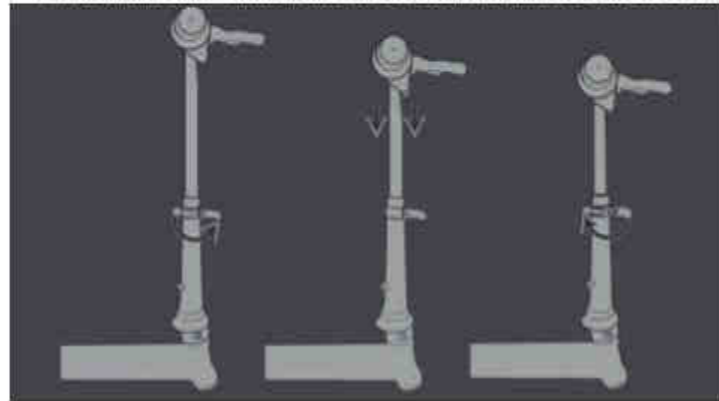
For your safety, do regular maintenance and tightening checks. If you find any abnormality, repair immediately.

Minimum saddle height and the way to measure

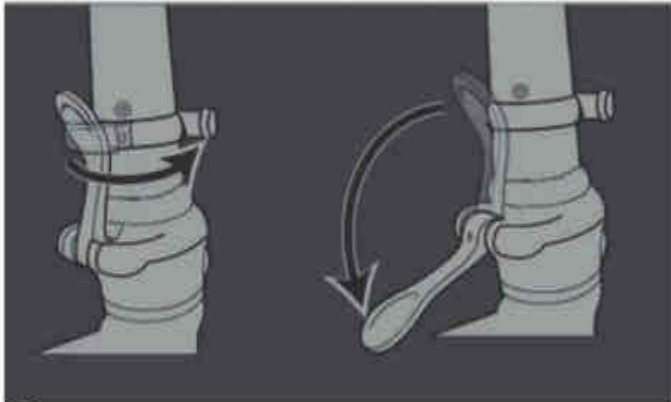
1. Current state of the bicycle, ready to fold.



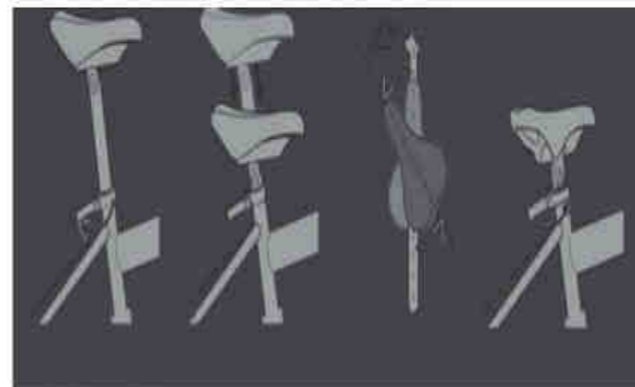
2. Remove the black hold and lower handlebar to be ended.



3. Remove the second fix on the front tube and take off the handlebar to one side.



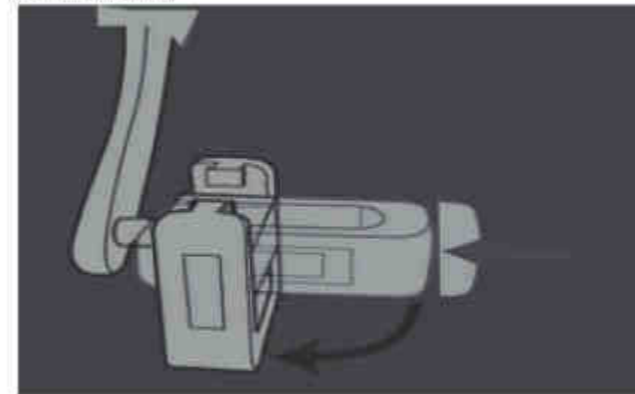
4. Release the lock under the saddle.



5. Place the crank to the correct 45° for Folding Bike



6. Fold pedals

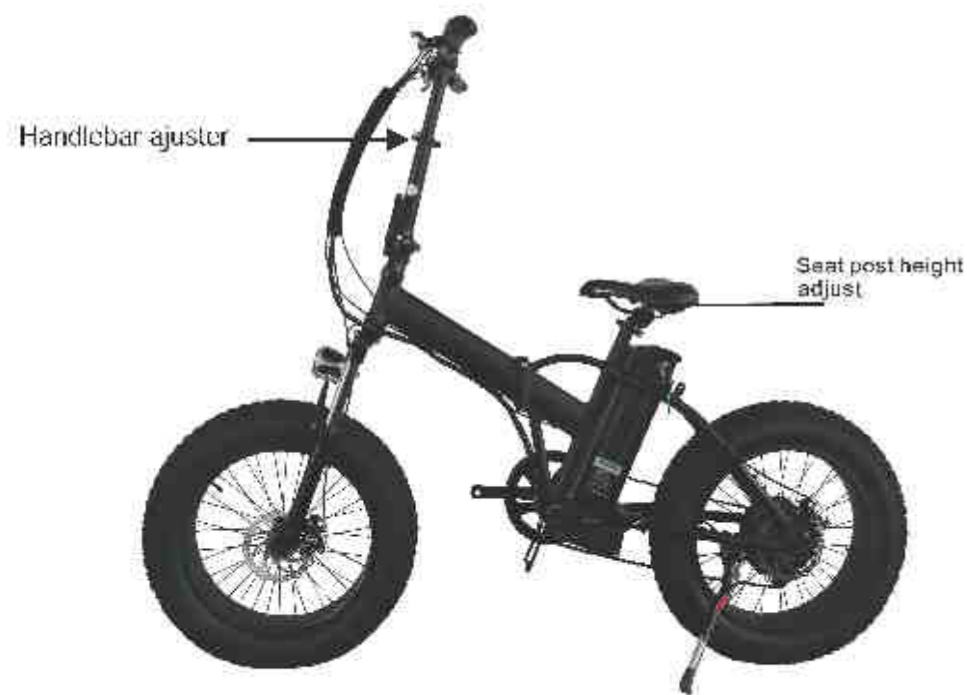


7. Remove fix on the frame and finish folding ebike

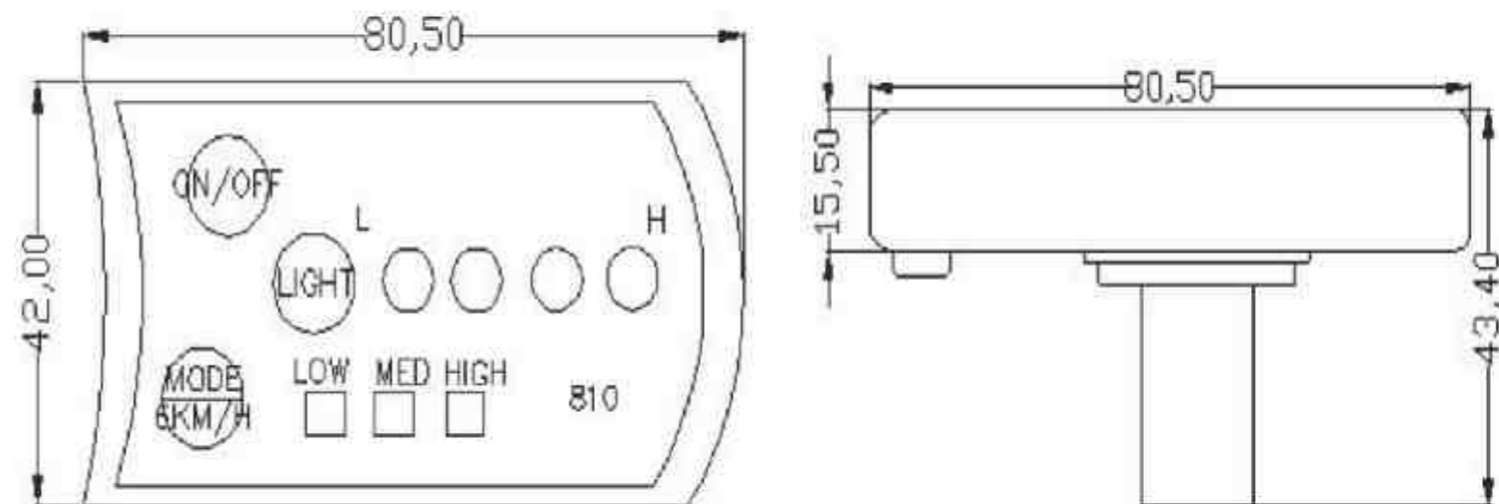


Minimum saddle height and the way to measure

To adjust seat height, use quick release lever to free the seatpost and pull upwards or push downwards to reach desired height.



Wiring diagram with display



Saving battery power and extending your range

Frequent braking and starting, riding uphill, traveling against a strong wind, starting from a standstill and riding on rough or muddy roads, and carrying more than one person, or heavy loads will consume extra battery power and shorten the range.

A few tips to prolong the battery life during these conditions is as follows:

1. Frequent Braking—try to look ahead and coast rather than stop and go frequently.
2. Riding uphill or against a stiff wind—pedal to supplement the battery power.
3. When starting from a standstill—use the pedals to help bring you up to speed.
4. When the battery meter indicates the voltage is low, switch to manual power and avoid using the battery so you don't shorten the battery life.
5. If the battery is being stored, remove the battery from the bicycle and recharge it every month.

Useful tips

- 1) This user manual should be used only to reference the vehicle's use and functions but should not be used as a reference for inspection.
- 2) The images shown may differ from the actual model due to technical improvements.
- 3) We reserve the right to change the model without prior notice due to technical improvements.
- 4) The vehicle has a top speed limiter. For safety purposes, its removal is strictly prohibited.
- 5) Ensure pre-ride checks are performed before each and every ride.
- 6) Only allow others to ride who have already been adequately trained on the use and operation of this product.

General Warning

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 to practice--the rules of safe and responsible riding and of proper use and maintenance. Proper use and maintenance of your bicycle reduces risk of injury.

Your bicycle is designed for use by persons 16 years old and above. Riders must have the physical coordination, reaction time and mental capability to ride and manage traffic, road conditions, sudden situations and also respect the laws governing 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

Note on Helmets,

Make sure that your child always wears an approved bicycle helmet when riding; but also make sure that your child understands that a bicycle helmet is for bicycling only, and must be removed when not riding. A helmet must not be worn while playing, in play areas, on playground equipment, while climbing trees, or at any time while not riding a bicycle. Failure to follow this warning could result in serious injury or death.

Your electric bicycle is for use by persons 16 years old and older, only. Do not let a child younger than 16 years old ride the bicycle.

Additional Noted for parents

As a parent or guardian, you are responsible for the activities and safety of your child, and that included making sure that the bicycle is properly fitted to the child; that it is in good repair and safe operating condition; that you and your child have learned and understand the safe operation of the bicycle; and that you and your child have learned, understand and obey not only the applicable local motor vehicle, bicycle and traffic laws, but also the common sense rules of safe and responsible bicycling. As a parent, you should read this manual, as well as review its warnings and the bicycle's functions and operating procedures with your child, before letting your child ride the bicycle.

Safety notes before first use

- Your bicycle comes with additional documents and manuals from the manufacturers of the system components. These documents must also be read before using this product.
- All users must read this manual before first use.
- Ensure that you comprehend with all instruction and safety notes.
- Ensure the bikes fits you properly before first use. You may loose control or fall if your bike is too big or too small.
- Always wear an approved bicycle helmet while using this product and ensure that the helmet manufacturers instructions for fit and care are followed.
- Ensure correct tightening and setup is performed on your bicycle before first use and checked regularly.
- It is your responsibility to familiarize yourself with laws and requirements for the operation of this product in the ares(s) where you ride.

Additional Safety Notes

- Ensure handle bar grips are not damaged and properly installed. Loose or damaged grips can cause you to lose control and fall.
- Failure to wear a helmet when riding many result in serious injury or death.
- Do not use this product with standard bicycle trallers, stands, or vehicle bicycle racks. Contact Rad Power Bikes to check if your equipment will work with the bicycle.
- Off-road riding requires close attention and specific skills and present variable conditions and hazards which accompany the conditions. Wear appropriate safety gear and do not ride alone in remote areas.
- 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.
- Do not remove front or rear reflectors or the handlebar bell.
- Lights should and must be used in addition to reflectors in most locations.

Additional Safety Notes

-Engaging in extreme riding is extremely dangerous and should be avoided. Although many articles/advertisements/catalogs depict riders in extreme terrain 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, comparability, proper operation, or maintenance of any component or accessory can result in serious injury or death.

-After any incident you must consider your bike unsafe to ride until you consult with a certified bicycle service provider for a comprehensive inspection.

-Failure to properly charge, store, or use your battery will void the warranty and may cause a hazardous situation.

-Extreme care should be taken when using the pedal assistance sensor on this product. Ensure you understand and are prepared for the power assistance to propel you as soon as pedaling is underway.

Additional Safety Notes

-You should check the operation of the brake inhibitor switches before each ride. The brake system is equipped with an inhibitor which shuts down power to the electric motor whenever the brakes are engaged. Check proper operation slowly while in a controlled environment by riding slowly with the motor engaged and applying the brake levers are engaged.

-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.

-Because electric bikes are heavier and faster than normal bicycles, they require extra caution and care while riding.

-To avoid shock never submerge the electrical components in water or subject to salt water environments.