# Carrera Crosscity-E Rear Motor Drive System Owner's Manual

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# Safety information

WARNING There is an increased risk of injury – even fatal – if you do not follow instructions.

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There is a risk of serious injury - even fatal - if you do not follow instructions.

### Managing the battery

• Use only batteries and chargers from Halfords with your bike. Use of other battery packs can cause injury and involve a risk of fire. If you use other battery packs, Halfords will assume no liability or warranties.

- Do not throw the battery pack into a fire.
- The battery must not be exposed to direct sunlight, or charged or stored in the vicinity of high temperatures.
- Do not use the battery for any other purpose.
- Avoid contact with metal objects (paper clips, coins, keys, nails, screws or other small metal objects, as this may cause a short-circuit. Shorts caused in this way will invalidate any warranty claims.
- Do not open the battery pack. This could cause a short circuit. Opening of the battery package will invalidate any warranty claims.
- Do not connect, or disconnect the battery pack / charger with wet hands.

\* Keep the battery / charger out of reach of children/animals.

### How safe riding is ensured

- While riding, do not focus your attention too much on the screen, as this can lead to accidents.
- Ensure that the wheels are securely attached to the bike before you begin your trip. If the wheels are not securely attached, the bike may fall over, causing severe damage.
- When riding a power-assisted bike, be sure that you are completely familiar with the starting characteristics of the bike before riding on multi-lane roads and footpaths. If the bike suddenly switches on, accidents can happen.
- If applicable, check that the bike lights are working before you ride at night.

### How safe maintenance is ensured

- Remove the battery pack from the eBike before you start working on it (e.g., assembly work, maintenance, working on the chain, etc.), before transporting it by car or plane, or before storing it. There is a risk of injury in case of accidental activation of the eBike system.
- Be sure to remove the battery before you perform wiring or installation work on the bike. Otherwise there is a danger of electric shock.
- When you install this product, be sure to follow the instructions given in the user manual. We also recommend that you use only genuine HALFORDS parts. If nuts and bolts are left loose or the product is damaged, the bike may fall over suddenly and cause serious injury.
- After you have carefully read the user manual, store it in a safe place for later reference.
- Ensure that unused connections are provided with caps.
- Contact the retailer for installation and adjustment of the product.
- To allow riding in wet weather, the product is designed to be completely waterproof. Nevertheless, do not expose the product intentionally to water.
- Do not expose the bike to high-pressure cleaning. If water should penetrate into one of the components, operating problems or rust may result.

### Managing the battery

- Do not subject the battery or the charger to physical shocks, e.g., by dropping.
- Fluid that leaks from the battery pack may cause skin irritation or burns. In the event of accidental contact, rinse with water. If fluid gets in your eyes, seek medical advice.
- If you detect a strange odour or smoke, pull the plug.
- Ensure that the power plug is fully inserted into the wall outlet.
- Pull on the plug instead of the cable to unplug the power cord from a wall outlet.
- Do not place anything on the cable. Do not lay anything on the cable.
- Do not bend the cable. The cable must not be rolled up while charging.
- It is dangerous to use a single outlet for multiple devices.
- If the cable or plug is damaged, replace the parts with new ones. Contact your authorized dealer.
- Always keep your charging set away from flammable gases when charging.
- The charger can be hot. Do not cover the charger.
- The charger can be hot. Do not place the charger on floor coverings such as carpets, tatamis, etc.
- The charger can be hot. Avoid long skin contact with the charger.
- Do not immerse the battery or the charger. Do not use in rain.
- Do not charge the battery for more than 24 hours continuously.
- If the battery is not fully charged after six hours, disconnect it immediately from the output to stop the charging process and contact your place of purchase. This can lead to overheating, bursting, or ignition of the battery.



There is a danger of personal injury or property damage

### How safe riding is ensured

Follow the instructions in the user manual of the bike to ensure a safe ride.

### Managing the battery

- The battery comes with a 40% charge. Discharge and charge the battery fully, twice to reach an optimum range.
- Charge the battery before riding.
- The charger can be used with an input voltage in the range of 100V to 240V AC.
- After charging pull the cable from the battery and from the wall outlet.
- Keep the power plug clean and dust free. The charger should be cleaned regularly.
- Do not rotate the pedals while the battery is being charged and the battery is on the battery holder.
- Provide ventilation/venting while the battery is charging in enclosed spaces.
- During storage keep the battery at a charge level of at least 40%.
- Charge the battery at room temperature between 5°C and 35°C (41°F and 95°F).

### Safe use of the product

- Examine the battery charger regularly for damage, especially the cable, plug and housing. If the battery charger is damaged, it must only be used after it has been repaired.
- This product must not be used by persons (including children)□with reduced physical, sensory or mental capabilities, or who lack experience and knowledge, unless they are supervised by a person responsible for their safety, or instructed in the use of the product.
- Do not let children play near the product.

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- Please ensure that all carrier screws are fastened before riding;
- Please note that the maximum load on the carrier is 25 kg, cargo weight must not exceed 25 kg;
- Please do not replace or modify the carrier;
- To prevent an accident, please check and replace the screws of carrier periodically;
- When fitting loads on the carrier, please ensure that the bike is balanced to avoid accidents;
- Do not carry children on the luggage carrier;
- Please note that the carrier is not designed to pull a trailer;
- Please note that the bicycle may have different performance (especially the steering and braking) when the carrier is loaded;
- Do not remove the reflectors;
- The tightening torque of the screws between the carrier and the frame should be 14N.M;
- Please note that carrier is not designed for the attachment of a child-seat;
- Please ensure that all the luggage on the carrier is securely fixed and there are no any loose straps which could get caught in the wheels;
- Please distribute loads evenly on the carrier.

# **Riding the E-Bike**

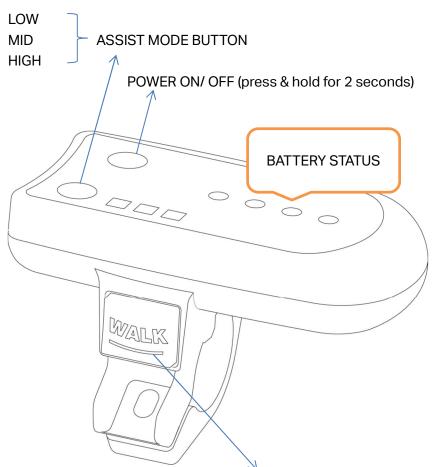


# Product characteristics Battery

# **Product specification**

Operating temperature range during discharge	-20°C to 60°C
Operating temperature range during charge	0°C to 45°C
Storage temperature (battery)	-20°C to 45°C
Humidity (storage)	upto80%
Charging voltage	100V to 240VAC
Charging time	approx. 6 hours
Battery type	Lithium ion battery
Capacity	313Wh
Nominal voltage	36VDC
Motor type	Rear-wheel drive
Motor type	Brushless DC Motor
Nominal motor power	250W
Maximum motor power	400W
Torque	32Nm

# <u>Display</u>



For WALK assistance press and hold the button Assistance will stop as soon as you release the button



Battery level display and on/off 'Power' button



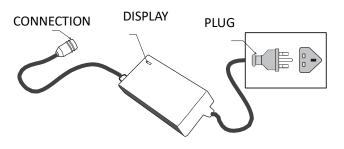
Charging port

Battery release key

Important!
Your bike is supplied with two battery lock keys; please keep
the spare key safely. We can order you a replacement if you
can provide the key number.
Please note your key number here-

- If the E-Bike not in use, remove the battery and store it at a temperature between 0°C and 40°C in a dry environment.
- Do not store the battery with low capacity for a longer period.
- For storage, the battery should have a capacity of at least 40%.
- It is recommended to discharge the battery completely and then fully recharge it.

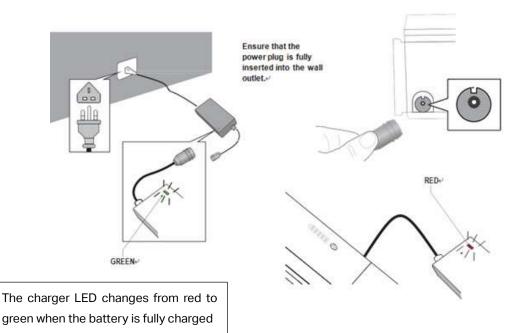
# **Battery charger**



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- Use only batteries and chargers from HALFORDS with your bike. Use of other battery packs could cause injury and involve risk of fire. If you use other battery packs, it will invalidate your warranty
- The battery must not be exposed to direct sunlight, or charged or stored at high temperatures.
- Avoid contact with metal objects (paper clips, coins, keys, nails, screws, or other small metal objects) as these may cause a short-circuit. Short circuits caused in this way will invalidate any warranty claims.
- Donotopenthebatterypack.Thiscouldcauseashortcircuit.
- Opening of the battery package will invalidate any warranty claims.
- Donotconnect, or disconnect the battery pack/charger with wet hands.
- Keepthebattery/chargeroutofreachofchildrenandanimals.

# **Charging the battery**



# WARNING

- Do not subject the battery or the charger to physical shocks, e.g., by dropping. Rinse in the event of accidental contact with water. If fluid gets in your eyes, seek medical advice. Fluid that leaks from the battery pack may cause skin irritation or burns.
- Do not bend the cable. The cable must not coiled up while charging.
- The charger can get warm. Do not wrap or cover the charger or place it on soft floor coverings such as carpets, etc.
- If the battery is not fully charged after six hours, disconnect it immediately from the mains to stop the charging process and contact your place of purchase. This can lead to overheating, bursting, or ignition of the battery.

Note – If you store your e bike in an unheated shed or garage, low temperatures in winter can affect charging efficiency and the range during discharge.

For best charging performance, remove the battery from the bike and bring it indoors to charge. Once charged the electrochemical reactions inside the battery will also be more efficient with the battery at room temperature, so fitting the battery at room temperature will improve the range of the e-bike.

# **Battery power remaining indication**

Press the 'Power' button for 2 seconds; the LED will indicate the amount of charge remaining in the battery

	Remaining total capacity	
LOW MED HIGH 790	< 20%	
INDE LOW MED HIGH 790	>20% & <40%	
LOW MED HIGH 790	>40% & <60%	
LOW MED HIGH 790	>80%	

# Fitting the battery



1. Push the battery into the end of the frame with the charging port on the left side



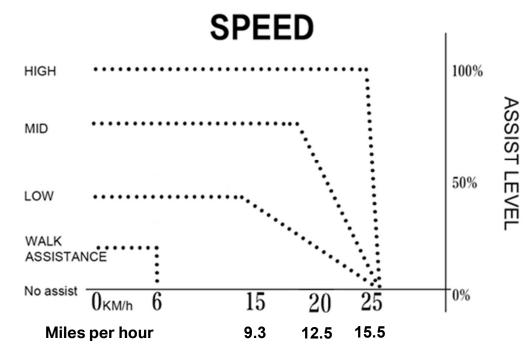
2. Turn the key 180°

# **Removing the battery**

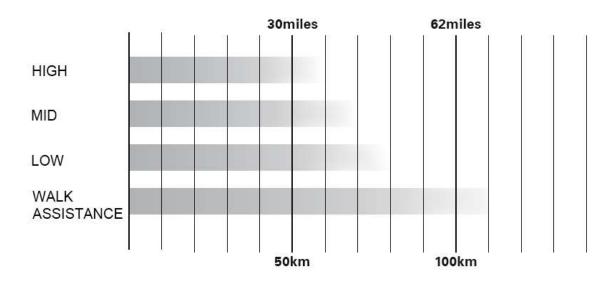


Unlock with the key & slide out the battery

# Assistance levels and speed



# Range



# Factors which affect the range

The above figures are based on a speed of 20 km/h on a level road at 15°C–20°C. The range is influenced by many factors:

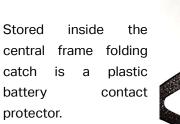
- Weight of the rider
- Weight of the luggage
- Selection of path
- Experience and concentration of the rider
- State of maintenance of the E-Bike

- Type, condition and air pressure in the tires
- Nature of the route
- Speed, average speed and changes in speed
- Traffic flow, for example, stop and go
- Wind direction and wind speed

### **Battery contact protection**

When the Crosscity-e is folded there are two bladed battery contacts exposed at the front of the rear section of the main frame tube.









When the bike is folded always slide this protector over the two bladed contacts.

This will prevent the contact blades getting bent by accidental pressure during transport or storage.



# Removing the rear wheel (to repair a puncture)



- Unplug the two parts of the cable connector. You will need to 'wiggle' these parts to overcome the grip of the waterproof seal of this connector.
- Release the two 'arms' of the rear V brake by pulling on the rear brake cable 'noodle' & releasing it from the 'cage' on the top of the arm













• Remove the rubber caps from both rear wheel nuts & loosen the nuts (19 mm spanner). You may need to remove the nuts to release the wheel.





- Having repaired puncture, refit the rear wheel. Take care to ensure the motor cable is pointing directly downwards to align the anti-rotation toothed washers on the wheel axle with the dropout slots.
- Firmly tighten both wheel nuts to 40 +/-5 Nm



- Push the two parts of the motor cable connector together, making sure that the moulded arrows are aligned
- Replace the rubber wheel nut caps & clip the motor cable back under the chainstay.
- Reconnect the rear V brake.

# **EC Declaration of Conformity**

# The equipment which accompanies this declaration is in conformity with the following EU Directives:-

83/37/EC Machinery Directive 2006/95/EC Low Voltage Directive 2004/108/EEC Electromagnetic Compatibility Directive 2001/95/EC General Product Safety Directive 2012/19/EU Waste Electrical and Electronic Equipment Directive 2006/66/EC Batteries Directive

**Manufacturer:-** TIANJIN FUJI-TA BICYCLE CO.,LTD. Dongjin Road, Junliangcheng Town, Dongli District, Tianjin, China

# Represented in the EU by:- Halfords Plc, Redditch, B98 0DE.

A copy of the Technical file for this equipment is available from:- the EU address above.

# **Description of Equipment**

Battle E-Bike Halfords Carrera Crosscity 250 W Rear Motor Drive System, 8.7Ah Li-Ion Battery & Battery Charger

# The following harmonized standards have been used:-

EN 15194:2009 + A1:2011 Cycles – Electrically power assisted cycles – EPAC Bicycles

EN ISO 4210-2:2014 Safety requirements for bicycles. Requirements for city and trekking, young adult, mountain and racing bicycles

# Other key standards used:-

UN/DOT 38.3 UN Manual of Tests and Criteria Transportation Testing of Lithium Batteries.

## Authorised signatures of manufacturer and EU representative

	Manufacturer	EU representative
Signature:		lan
Name of signatory:	Billd Lee	Chris Hall
Position in company:	QC Manager	Head of Quality
Place and Date:	Tianjin China Dec 2016	Redditch UK Dec 2016

# Halfords e-bike specific warranty conditions

Your Carrera Crosscity e-bike is guaranteed against manufacturing defects arising from faulty workmanship or materials for 2 years from the original date of sale.

Providing that the cycle:

- Has been properly cared for, regularly serviced and maintained.
- Has not been ridden as part of a commercial use (e.g. hire, courier or delivery service, etc.).
- Has only been fitted with parts recommended by Halfords.
- Has not been modified or altered in any way, in particular no modifications to the motor
- Has not been damaged by accident or misuse.

Any failure caused by normal wear and tear or a lack of servicing and maintenance is excluded.

Under the terms of this guarantee Halfords will bear the cost of the replacement parts and labour to carry out the repair.

Important: This guarantee applies only to cycles used under normal riding conditions. This guarantee does not affect your statutory rights.

# Battery pack specific warranty conditions

The battery pack is guaranteed over the warranty period to provide a minimum of 500 charging cycles and to hold at least 60% of its nominal battery capacity.

This is dependent upon the correct use, regular re-charging, correct preparation for storage and storage (as detailed in the HALFORDS Owner's Manual).

Halfords will be able to confirm the exact number of charge cycles and whether the battery has been correctly charged / stored from the information that is recorded in the battery pack monitoring and control electronic circuit.

# Information on Waste Disposal for Consumers of Electrical & Electronic Equipment

This mark on a product and/or accompanying documents indicates that when it is to be disposed of, it must be treated as Waste Electrical & Electronic Equipment (WEEE). Any WEEE marked waste products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used.



For proper treatment, recovery and recycling; please take all WEEE marked waste to your Local Authority Civic waste site, where it will be accepted free of charge.

If all consumers dispose of Waste Electrical & Electronic Equipment correctly, they will be helping to save valuable resources and preventing any potential negative effects upon human health and the environment, of any hazardous materials that the waste may contain.

### Please recycle your spent batteries.

Batteries should not be disposed of in unsorted municipal waste, but separately collected to facilitate the correct treatment and recycling of the substances they contain. The recycling of batteries ensures the recovery of these valuable materials and prevents any potentially harmful effects upon both the environment and human health. Please contribute to battery recycling by segregating all spent batteries and actively participating in their collection and recycling. Various battery collection schemes will be in operation in different areas of the country. However, battery collection bins will be available at retail stores that sell batteries as well as at schools, libraries and other public buildings.

