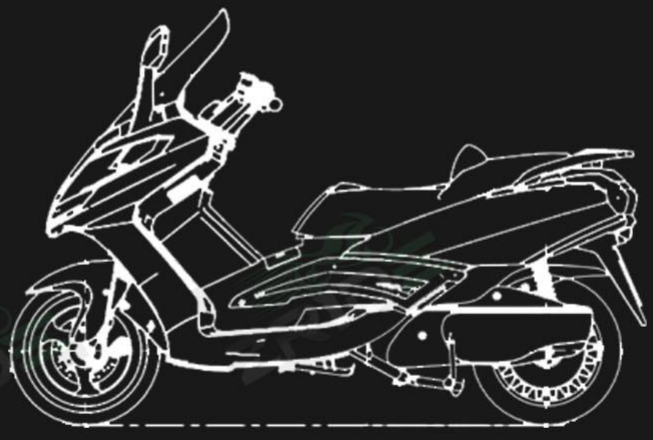
OWNER'S MANUAL

PUMA 100ah



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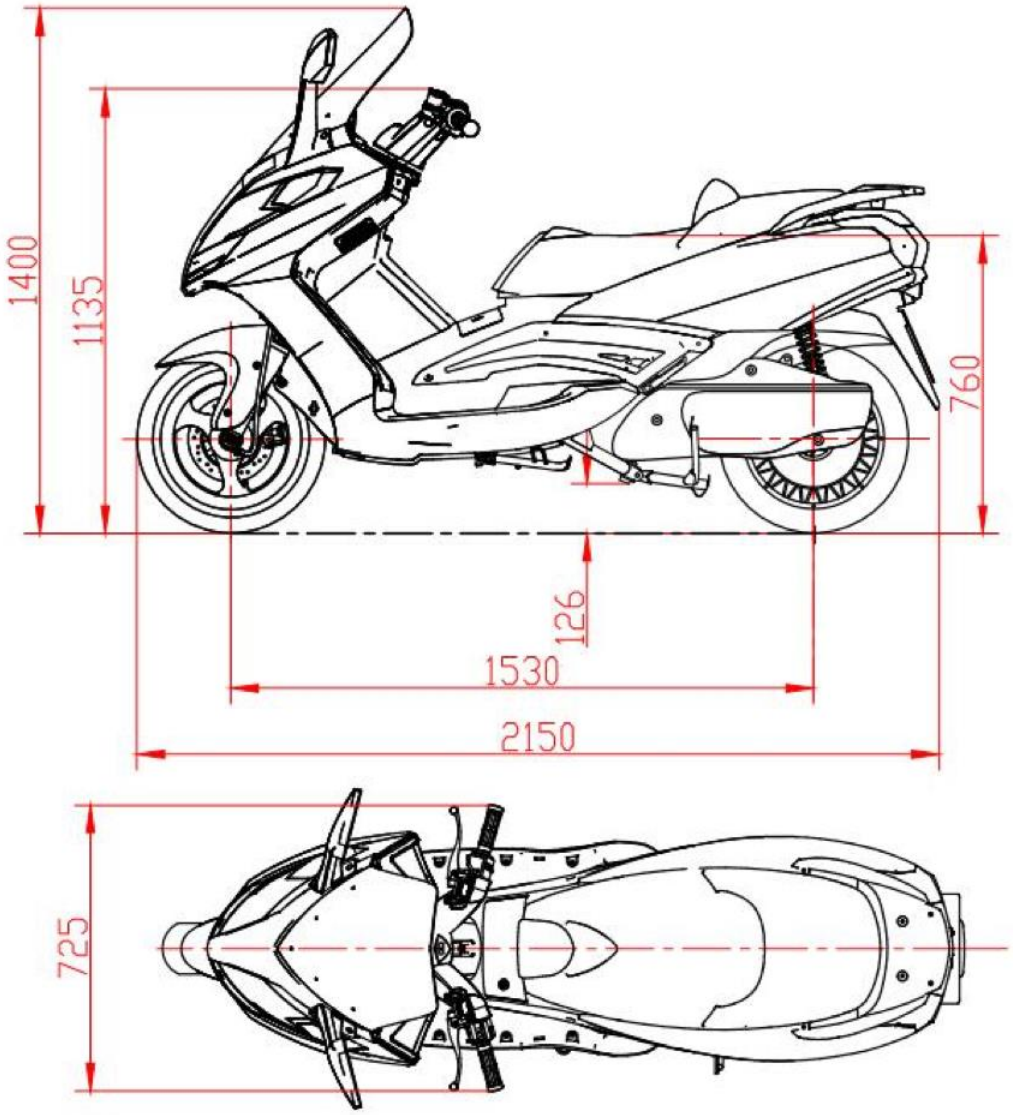

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Table of contents

  VIN No: _____

1) General information

Thank you for your purchase of your new ZRide PUMA Scooter!

We welcome you to the universe of electric vehicle technology, which does not only provide a new experience in driving a two-wheel scooter but also is respectful to the environment and nature.

The ZRide PUMA models are the result of an intense 10 year's effort to develop reliable and powerful ecological scooters.
You will surely appreciate the experience of driving this new quiet like a sailing boat, non-polluting and highly performant machine.

In order to benefit from all the exciting possibilities when driving your ZRide Puma Scooter, you will need to carefully and attentively read this manual. This Owner's Manual not only contains information about how to use the vehicle, but also safety information and information relative to the maintenance of this vehicle, which are all important to read and understand for safety purposes and to avoid accidents.

ZRide wishes you great pleasure and maximum security when driving, both which should be at the heart of every good motorcyclist!

ZRide tries to do its maximum to improve the concept and the quality of these scooter models. As a result of this, it is possible that some parts of this manual may not include recent changes or adaptations of the function of this vehicle which may have been necessary in the meantime to fit new technical or legal requirements.
If you have any questions in relation to your vehicle or the maintenance of your vehicle, please contact us or your local dealer where you purchased your ZRide PUMA.
This Owner's manual is integral part of the scooter and has to be passed on completely to any new owner of this vehicle.

Specification:

Max weight: 2 People max 150kg,
Total max. weight: ZRide PUMA 100ah : 342kg,

Operating temperature: -15°C à +40°C.
Never leave the scooter/batteries exposed to direct sunlight to avoid overheating! Never leave in rain or humid/corrosive environments! Never immerse the scooter in water!
Type of driving license required for the UK: A, A1, A2 & CBT

  VIN No: _____

1.1. Safety Information and precautions before driving the vehicle

This manual contains important safety instructions. Please take the responsibility to review this information and make sure you understand all cautions, warnings and safety topics. Always check and obey laws and regulations that are effective in the locations where the scooter is used. Failure to use common sense and respect safety warnings increases the risk of injury. Use with appropriate caution.

For a good working condition of your vehicle please keep your scooter well maintained and follow the rules and recommendations below:

- You have to carry your driving license and your insurance certificate with you.
- Do not exceed the weight limit.
- Wear approved safety equipment such as safety helmet if legally required by local law. Long-sleeve jacket, long pants, gloves and athletic shoes are recommended.
- Before each departure check the tires (pressure and profile depth), the brakes (brake liquid level, good working order), the lights and the level of charge of the battery.
- Familiarize yourself with all the scooter's features and practice using brakes, lights and horn.
- When driving, obey road traffic rules.
- Do not weave between lanes or change lanes suddenly. When you need to change direction, always check your mirrors, use signals to tell other road users your intentions and then give a quick over the shoulder glance as a final safety check.
- Watch out for potential obstacles that could enter your path and make you lose control over vehicle.
- Never use cell phone or headphones while driving.
- Never drive under the influence of alcohol or medications that affect your driving skills.
- Drive according to weather conditions, take extra care on wet or icy road. Remember that on slippery surface your braking distance increases 4 times.
- Keep comfortable distance from other vehicles and objects.

- At night, make sure that lights are on as per manufacturer set up; wear light reflective clothing.

Secure the scooter:
Choose a place to leave your scooter parked with caution. If you are leaving it at a public place, look for security cameras and leave the scooter in the line of their site or at a well-lit area. Make sure the scooter is locked.

CAUTION: Modification is illegal. A modified vehicle will affect its structure or performance, which will result in shortening the life of the vehicle. Modified vehicles will not be covered by the warranty. It is necessary to buy original spare parts from authorized dealers. No guarantee can be provided either for quality or durability when buying non-original spare parts from the market.

WARNING: Once you have completed the initial charge you are ready to ride. You must be aware of all local laws and ordinances that govern and/or restrict the use of the electric bike. The laws and ordinances vary greatly in different countries. It is your responsibility to know and abide by your local restrictions.

1.2. Vehicle identification number (VIN)

The Vehicle identification number (VIN) can be found on the bottom of the right side of the scooter.

On this label you find the name of the factory, the homologation number and the VIN number which is specific to each scooter (like a serial number).

These numbers are also mentioned on the COC document (EC Certificate of conformity), that has been provided when buying the scooter. The COC is required for the registration of the vehicle.

1.3. General information about this vehicle

1）Windshield
2）Rearview mirror
3）Head light （low beam）
4）Turn light （left direction）
5）Front wheel
6）Front shock absorber
7）Saddle (seat)
8）Side stand
9）Center stand （Kid stand）
10）Swing arm cover
11）Rear wheel with motor
12）Seat lock

  VIN No: _____

10. Square reflector
11. License plate lamp
12. Round reflector
13. Rear shock absorber
14. Rear brake (caliper)
15. Brake disc
16. Rear pedal
17. Rear light assembly
18. Rear carrier

1. Alarm blink unit button
2. Trip and voltage reset button
3. Ignition key
4. Reverse button (Push it when you grip the throttle)
5. Kill switch （regenerative brake & recharging battery when go down slope)
6. Horn
7. Low/high beam switch
8. Throttle
9. VIN number here

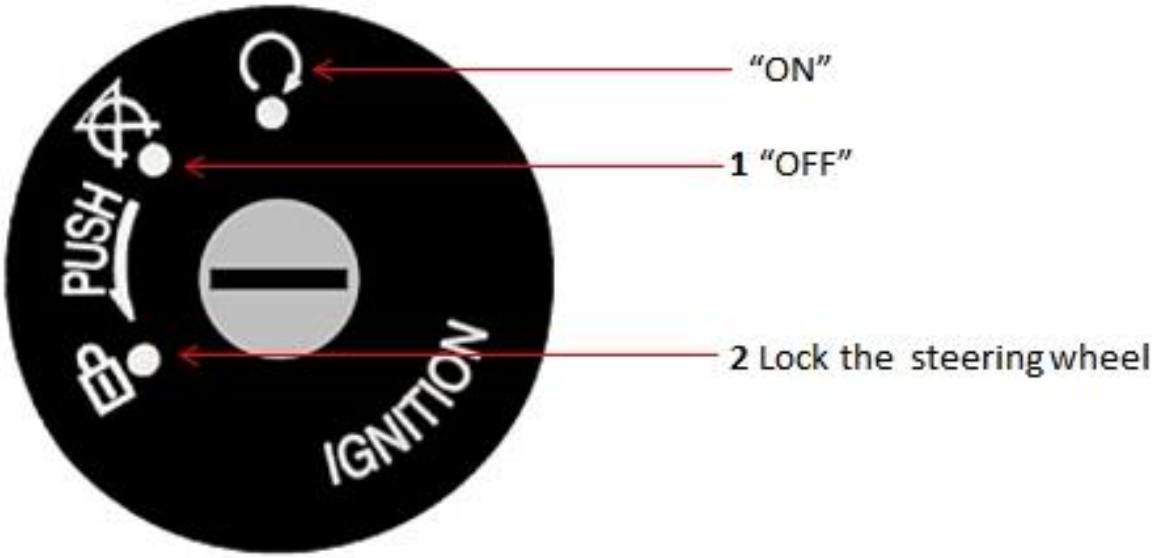
  VIN No: _____

2. Commands and instruments

2.1. 5V USB Port

This scooter has 2 USB ports for Smart Phones.

2.2. Main Switch/Steering lock



Puma is delivered with 2 main keys to start the scooter, but also to open the driver seat.

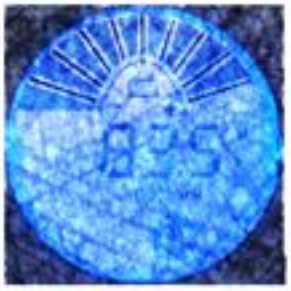
2.3. Multi-function display

The dashboard includes three major controls. On the left side there is the blue screen to show the level of functional independence that is available, the total miles/travelled miles since the last reset and the voltage of the battery. You can navigate between the red and blue signs with the help of buttons.

In the middle speed and the control of beam are shown. On the right side there is the screen indicating if the battery is functional (observing this voltage meter is very important during riding), and if tension is transferred to the engine.

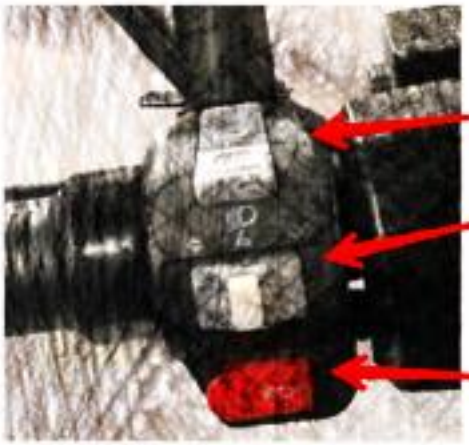
1. Left turn
2. Right turn
3. Speedometer
4. Full beam turned on
5. Battery condition indicator. When ignition is switch to ON, battery indicator will flash once to show that the tension is transmitted to vehicle engine
6. Tension indicator
7. Battery charge level indicator Scale division equals 15-20 km distance available.
8. Distance indicator
9. Powered engine
10. Power disconnected

- Red and blue buttons control what is shown on blue screen
- Push red button and hold to switch from km to miles
- Push red button and release to show distance for current ride
- Push red button twice to show battery charge level
- Push red button 3 times to return to the previous screen
- Push blue button once to reset distance for current ride to 0



2.4. Handlebar switches

Left handlebar



Top grey switch controls the light beam: high beam and low beam.

Indicator switch:

a. Left Turn
b. Right Turn
c. Hazards lights on/off

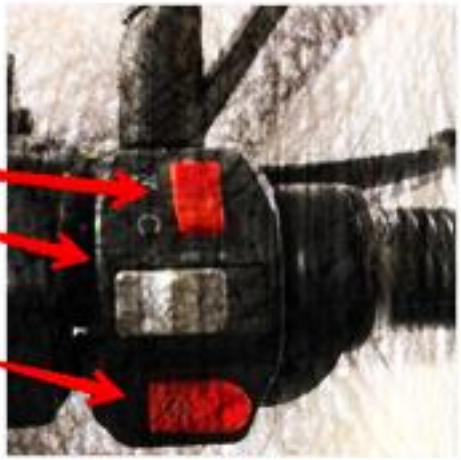
Red Button: Horn

Right handlebar

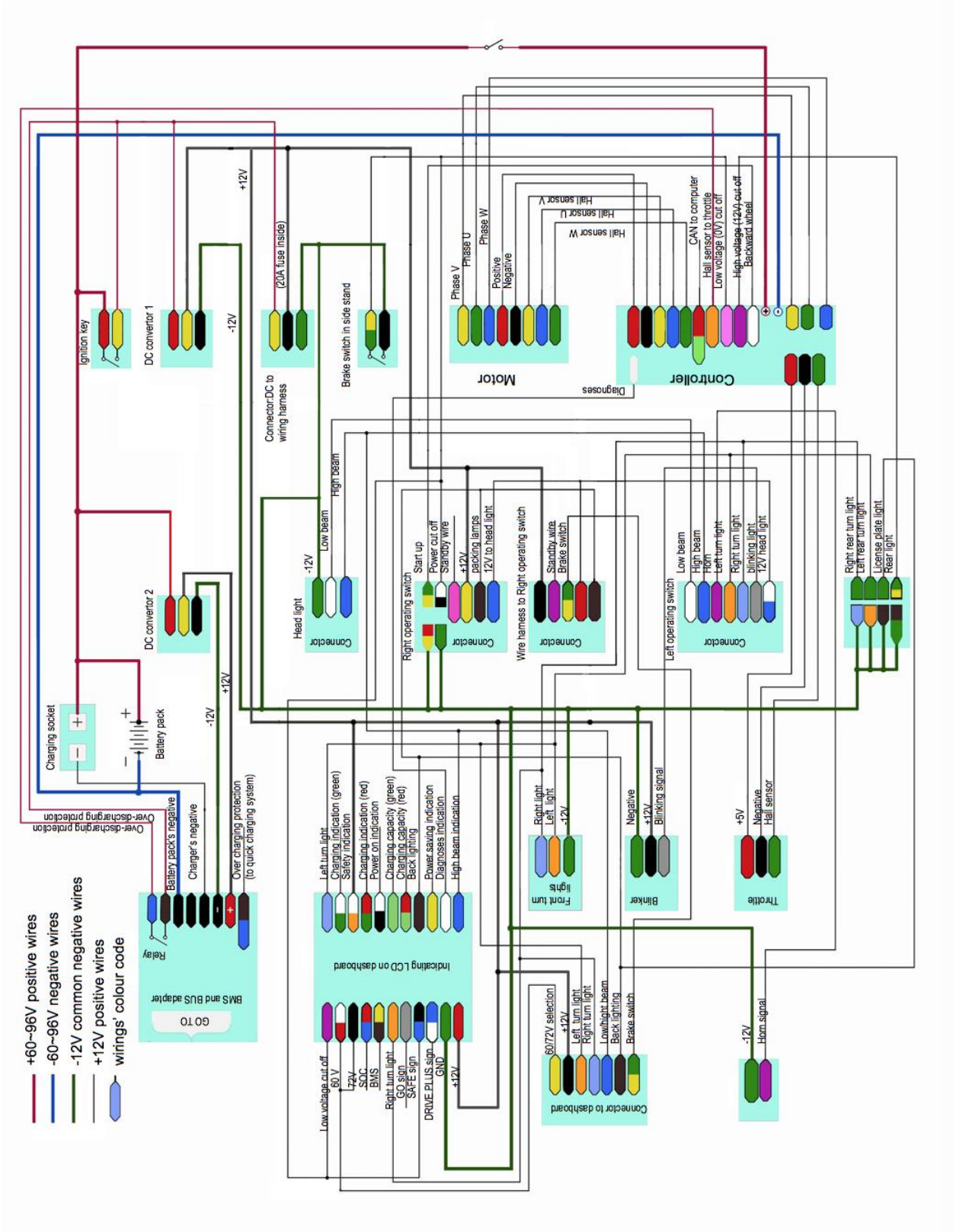
Top red button: Cut off Switch

Lights control switch: By new EEC rules lights will always be on.

Bottom red switch: Reverse switch. To reverse, press red bottom while turning the speed handle (the right handle)



2.5. Electric system and battery



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2.6. Other important components

2.7 Storage Spaces

1 helmet storage: Under the seat space for helmet storage.

3. How to use the vehicle

3.1. Controls to conduct before driving

- Check the tire condition for any worn-out areas or breakage, check tire pressure
- Check the transmission system condition
- Check the bugle and rear reflector condition
- Check all the standard spare parts such as nuts and screws and ensure they are well tightened
- Check if the brake cable lanyard functions in smooth condition
- Charge the battery when the scooter is not driven regularly. To prolong the battery life, charging
  should be carried out 15 days during each summer and 30 days during each winter
- Check all the turning parts frequently such as the handle bar. Add lubricant when needed
- Check the light.

3.2. Maximum loading capacity

This is a 2 rider's vehicle, max 150kgs total weight.

3.3. How to start the vehicle

Fold up the kickstand and hold onto the handle bars with both hands. Assume a well-balanced position on the scooter and push off with your foot. Turn power on (by turning the key from"  "to"  "). Wait for **READY** signal flash. When **Ready** is ON you can grip throttle and start to ride.

3.4. Driving the vehicle

Your right hand will control the accelerator. Twist the accelerator slowly to avoid a sudden rush of speed forward. The speed of the bike will increase as you twist the accelerator further. You will control the speed of the scooter by using both the accelerator and the brakes.

3.5. Brake system and parking the vehicle

Release the accelerator and apply the brakes to stop your scooter. Squeezing the brake handle cuts the power to the accelerator.

3.6. Charging and Maintenance of the battery

Before riding the electric scooter for the first time, you must charge the batteries for 6-9 hours using the supplied charger.
PUMA models have 1800W on board charger, you may charge it at home or any street charger. It could charge in 2 hours 80% "Express charging".

Charger could be left all night, as the charger has a cut off switch when battery reaches 100% full.

IMPORTANT CHARGING INSTRUCTION:

The Power Switch Lock must be in the off position when the electric scooter is being charged.

The scooter uses a 72V lithium battery. You should charge your electric scooter after each ride. You must re-charge your electric scooter if it has not been used for 30 days or more. Recharging time is between 6-9 hours.

A. Locating the Charging Socket: Turn key to “SEAT OPEN” position located under seat, then press and open the seat buck. Remove the charger from inside and connect the plug to the battery charging point carefully, located undewr the seat.

B. Charging the Scooter. Turn the scooter off by pointing the key to  . Insert the output plug in the charging socket of the scooter and connect the input plug 220V/110V to the wall socket (please refer to the illustration on page 7). The battery is fully charged when the charger indicator shows green. We suggest allowing an extra 1-2

hours charging time to achieve better battery condition. When the battery is fully charged, remove the charger input plug followed by the output plug.

Do not place the battery near a heat source or fire. Do not expose the charger to water. Do not cover the charger with anything whilst charging.

Please use the authorized charger to charge the battery otherwise the warranty will become void. Please follow the charging instructions above.
When there are two battery boxes, the battery packs must be charged and discharged at the same time.

Before connecting the battery, raise it approximately 10cm to connect easily.

4. General Maintenance and Cleaning

4.1. Battery:

To prolong battery life, store the scooter indoors or in a garage to prevent low temperatures which affect the battery performance.

1. Do not dismantle or disperse the battery cells.
2. Keep the battery away from children.
3. Do not connect cathode and anode of the charger during charging and discharge process. It is prohibited to use any conductor to connect both cathode and anode. This will cause a short circuit.
4. Do not dip the battery in water.
5. Do not place the battery in a temperature over 60°C or next to a high-temperature heat source.
6. Do not knock on, throw or trample the battery.
7. Do not use edge tools or nails to lacerate or cut through the battery.
8. If a leak occurs and electrolyte comes in contact with the eyes, please do not rub. Wash immediately with plenty of water.
9. If the battery produces smell, heat or smoke, or if it changes color, becomes distorted or shown abnormality, stop using the battery and dispense with it immediately.

4.2. Cleaning:

Never use high water pressure to wash the scooter. Soaked electrical parts and wiring will affect the performance.
Never apply lubricant to the drum brake and the tire.
Only use lubricant to clean the metal parts of the scooter.
Use standard detergent to clean surface of the painted plastic parts and wipe up remainder with cloth.

4.3 Brake Inspection:

Front and Rear Hub Brake Main Checking Points:

Press the lever (1). While holding the lever adjust the nut (3), so that you can achieve a comfortable distance for your grip, normally a 1/3-1/2 of maximum gap. The best distance for brake shoes and hub tray is 1.5mm.

Replace brake shoes when the usage surface has reached 1⁄2.

4.4. Charger Inspection:

Use only the authorized charger. Different countries may use different chargers. Do not mix-up 220V and 110V charger.

The power switch lock must be in position when the electric bike is being charged.

Do not turn the battery box upside down during charging.

Check that the welding work in the charger socket is still in good condition.

4.5. Motor and Controller Maintenance:

During rainy season, do not let the water go over the motor center line. This is to protect the motor from burning or other malfunction.

Do not press both the brake lever and accelerator at the same time when starting the motor to prevent damaging other parts.

Slow down the scooter when the road condition is not good. High vibrations may interrupt the electrical parts connection.

4.5. Troubleshooting, Diagnostics

Problem	Cause	Solution
The power indicator illuminates but scooter still does not work	The accelerator is not operating properly. The single kick stand is not folded up properly.	Replace the accelerator. Call Customer Service to order a new accelerator. Fold up the single kick stand.
The power indicator does not work when power is on.	The fuse or fuse socket has blown. The battery box is not place properly.	Replace the special fuse or fuse socket. Adjust the battery box in the proper way.
Distance per charge is less than normal	Not enough air pressure in the tires. Not enough charging or the battery is defective. Stopping and starting up frequently. Riding uphill or against strong wind.	Inflate the tires. Recharge battery or replace battery. Call Customer Service to order a new battery. Ride on even roads with regular speed and in

		good weather conditions.
Electric scooter is losing speed	Low battery charge. Battery is defective.	Recharge your battery for 6-9 hours. Replace battery. Call Customer Service to order a new battery pack.
Accelerator not working	The brake cables are not in position and are causing circuit cut off.	Adjust and reposition the brake cables.

LED signals

LED flash	Mistakes on scooter	Solution
1 times	Over voltage than controller scope	Put on lighting for hours before voltage drop
2 times	Low voltage than controller setting	Charging scooter
3 times	Over current on Motor	Reset the phase current on controller
4 times	Controller over current	Stop throttle more power
5 times	Hall mistake	Check both throttle hall or Motor hall
6 times	Mosfet mistake	Come back to controller default set
7 times	Motor phase mistake	Check 3 motor phase cable
10 times	Checking mistake	Restart key switch
11 times	Controller overheat	Key off for 10 minutes
12 times	Throttle lose in control	Reset throttle figure
13 times	Motor overheat	Stop throttle more power
14 times	Throttle didn't released	Release the throttle
15 times	Brake mistake	Release brake switch on side stand or kill switch

4.6 During long term of non-usage

For months non-usage, remember to charge battery to 40%-50% and cut off the circuit breaker. Keep checking battery voltage every month.

5. Other important information

5.1 Warranty

3 years' warranty on chassis, motor & controller, 5 years or 50000 kms' warranty on battery pack**.**

5.2. Technical Data sheet

Model	Puma
L*W*H	2150 mm * 725 mm * 1220 mm
Standard Load	75 kg
Battery	100 Ah
Rated Speed	120 km/h
Inflatable Pressure	250 kPa
Wheel base	1530 mm
Braking	Fr: Disc/Rr.: Disc
Battery type	100 Ah 72 V Li
Rating export distance force	140 mm
Charger import	
Range	134 km
Max speed	120 km/h
Net weight	
Tyre (front/rear)	130/60-13
Motor type	
Lack pressure protect	
Charging time	6-8 h

6. Periodic Maintenance guidance

KILOMETERS	400	1,000	2,000	3,000	4,000	5,000	6,000
BATTERY			C				C
CHARGER			C				C
TIRE PRESSURE	C	C	C	C	C	C	C
TIRE WEAR			C		C		C
BRAKE SYSTEM	C		C				C
BRAKE PAD		A		C		A	C
NUTS AND BOLTS	T		T	T	T	T	T

KILOMETERS	7,000	8,000	9,000	10,000	11,000	12,000
BATTERY		C				C
CHARGER		C		C		C
TIRE PRESSURE	C	C	C	C	C	C
TIRE WEAR		C		C		C
BRAKE SYSTEM		C				C
BRAKE PAD		A	A	A	A	A
NUTS AND BOLTS		T	T	T	T	T

A – adjust; C – check, refill, repair, or replace; T – tighten

Do you have any questions? Please contact your local dealer.

ZRide Ltd, London SW7 1LJ,

info@zride.co.uk, www.zride.co