



eBee

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# 1. DESCRIPTION AND PURPOSE OF THE E-BICYCLE

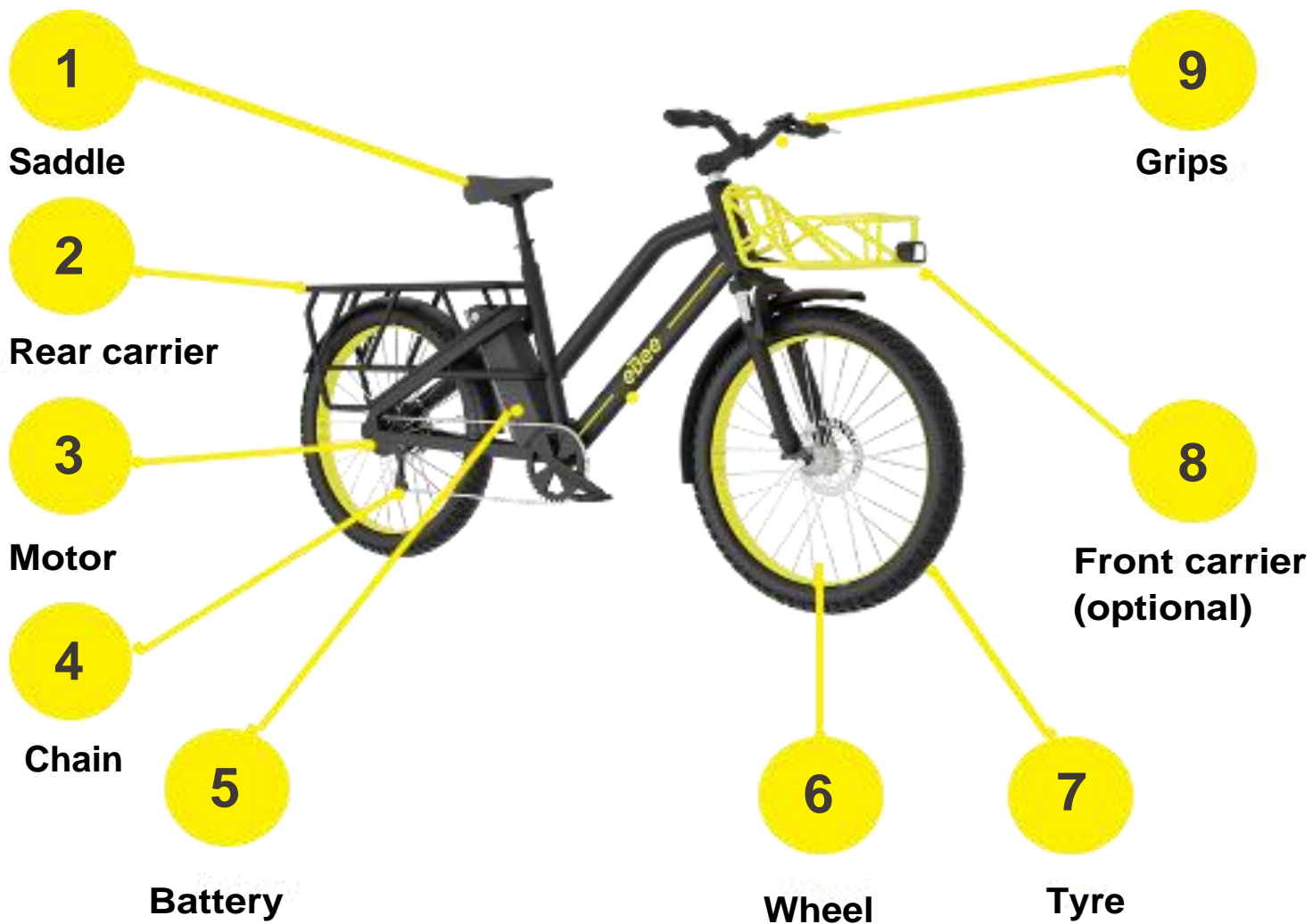
Welcome to your new electric bicycle! This manual will provide you with the information you need to safely and effectively operate your e-bicycle. Please read this manual carefully before using your e-bicycle, and keep it in a safe place for future reference.

There are several advantages of electric bikes, including:

- 1. Increased efficiency:** e-bicycles use a battery-powered electric motor to assist the rider, making it easier to pedal and allowing for longer distances to be covered with less effort.
- 2. Improved accessibility:** e-bicycles can help people who may have difficulty riding a traditional bike due to physical limitations, age, or health conditions.
- 3. Reduced environmental impact:** e-bicycles emit no emissions and require less energy to operate than a car, making them a more environmentally friendly mode of transportation.
- 4. Cost savings:** e-bicycles can be more cost-effective than a car in terms of purchase price, maintenance, and fuel costs.
- 5. Increased versatility:** e-bicycles can be used for a variety of purposes, such as commuting, recreation, and exercise.

The e-bicycles from eBee will give you that extra boost while cycling and the motivation to cover longer distances. It's a bicycle with pedal assistance up to 33 km per hour, suitable for commuters who want to ride the extra mile. The bike is solid because of its minimalism, no hassle just convenience. It's about functionality.

## 2. GET TO KNOW YOUR E-BICYCLES



## 2. GET TO KNOW YOUR E-BICYCLE

**1. Saddle:** Keep your saddle properly adjusted and tight.

**2. Rear carrier:** Your rear tail light must be red. The max weight is 50 KG.

**3. Motor:** The electric motor develops driving force; however, peddling is essential when starting to move from a standstill, especially on an uphill.

**4. Chain:** Keep the chain at the correct tension, clean and well oiled.

**5. Battery:** The battery stores the electrical energy that powers the motor, before using the e-bike, you need to charge the battery.

The range of the Large battery is 40-60 KM.

The range of the battery XL is **70-90 KM.**

**6. Wheel:** Your wheels should rotate smoothly, and you should lubricate bearings, and keep axle nuts tight.

**7. Tyre:** Inflate your tyres to the correct pressure which is shown on the side of the tyre.

**8. Front carrier:** Your front headlight must be a white or yellow light. The max weight is 10 KG.

**9. Grips:** Make sure your handlebars and grips are properly adjusted and tight.

# 3. RIDING THE E-BICYCLE

Riding an electric bike is similar to riding a traditional bike, but with the added assistance of an electric motor. Here are a few tips on how to ride an e-bicycle:

- 1. Familiarize yourself with the controls:** before you start riding, take some time to familiarize yourself with the controls of the e-bicycle, such as the throttle or pedal-assist sensor, the level of assistance, and the display.
- 2. Adjust the seat:** make sure that the seat is adjusted to the proper height for you.
- 3. Check the battery level:** make sure that the battery is charged and that there is enough power for your intended ride.
- 4. Turn on the power:** press the 'on' button, which is placed on top of the display. Make sure that the bike is still in the parking position! Do not place a foot on the pedals when turning the power on, this could result in a system error. The power will not switch on while the bike is charging. Select your preferred support mode with the left switch placed on the left handlebar.
- 5. As soon as you start to turn the pedal with your foot, the bike will start riding under your preferred support mode.**

You can change the support mode according to the riding conditions. Switch the power off when parking the bicycle. Do not place a foot on the pedals when turning the power off, this could result in a system error.

# 4. GENERAL INFORMATION ABOUT THE BATTERY

Your battery will be delivered partially charged. We strongly advise that you give the battery a full charge first before use. This will help maintain the life of the battery. For optimal battery performance, complete three full discharge and three complete recharge cycles. If the e-bike is not to be used for a long period, it is suggested to close the power of battery pack, and charge-discharge the battery once one month.

The battery is turned on by using the switch located on the battery casing. Power indication lights are used in the battery shell, and on the handlebar display. On the battery shell, green LED lights indicate battery life, red lights indicate that the battery is almost empty, and needs charging. The handlebar display generally uses only red LED lights, with a full battery showing all lights lit, and an empty battery showing just one light lit. Please ensure that only the charger supplied is used to charge the battery. To prevent the battery from working loose, ensure that the battery is locked into position with the keys provided. When you operating around the battery, do not insert metal objects (such as lead wire, key etc.) into the charging socket, or put them on the positive and negative contact points of battery cell, as this will cause the battery to short-circuit, or endanger your own personal safety, including risk of fire.

# 4. GENERAL INFORMATION

## BATTERY

### Sleep Mode Function

**Should your battery be fitted with a sleep mode function (check with your dealer), your battery is fitted with a smart Battery Management System (BMS). This allows the battery to hibernate for up to 6 months without charge. We recommend you use this function only if necessary. Please make sure that the battery is stored in dry, room temperature conditions. Make sure your battery is at 50% charge BEFORE letting it hibernate for long periods of time.**



S.NO	PARAMETERS	DESCRIPTION
1	NOMINAL CAPACITY	12.72Ah
2	NOMINAL VOLTAGE	36V
3	MAX VOLTAGE	42V
4	OPERATIONAL VOLTAGE	27.5V-42V
5	CUT OFF VOLTAGE	25.5V
6	CELL	3180 mAh PANASONIC
7	PACK CONFIGURATION	10S 4P
8	PACK DIMENSIONS	AS PER PACK DRAWING 2D & 3D
9	PACK WEIGHT	2.5Kg - 3Kg
10	RESISTANCE	
11	MAXIMUM CHARGING VOLTAGE	42V
12	MAXIMUM CHARGE CURRENT	2A
13	STANDARD DISCHARGE CURRENT	6A
14	MAXIMUM DISCHARGE CURRENT	10A
15	PEAK DISCHARGE CURRENT	15A
16	DISCHARGING CONNECTOR	AVAILABLE WITH CASING
17	FUSE	20A
18	CHARGING CONNECTOR	DC021
19	LIFE CYCLE	75% 800 CYCLES (OR 2 YEAR)
20	COMMUNICATION PROTOCOL	NA
21	OPERATING TEMPERATURE	0-50°C
22	STORAGE TEMPERATURE	10°-25°C
23	SHIPPING CONDITION	33V
24	FUSE HOLDER	AVAILABLE WITH CASING

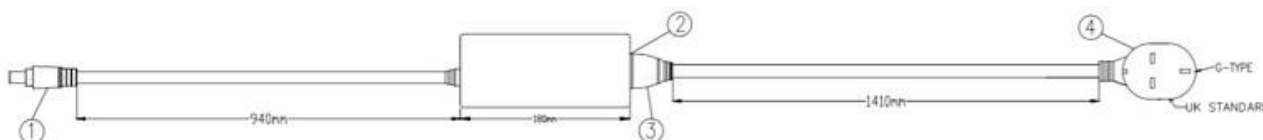


# 5. GENERAL INFORMATION

## CHARGER

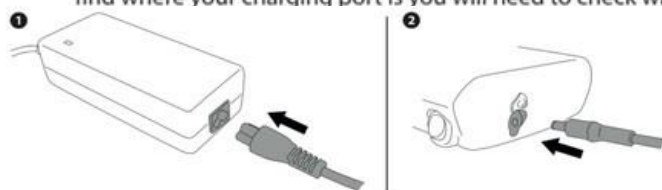
**Develop a habit of charging the battery regularly. When the power of the battery pack shows a red light, please charge to maintain the battery pack to have a longer service. If the e-bicycle is not to be used for a long period, it is suggested to close the power of battery pack, and charge-discharge the battery once one month (unless your battery has sleep mode function, ask your dealer if unsure). Ensure only the charger supplied is used to charge the battery. Make sure battery is set to "off" before charging, and plug the charger into the electric socket first, before connecting to the battery.**

**Do not keep the charger close to open flames, and avoid being near to inflammable, explosive, or corrosive gas. Do not disassemble the charger, or tear up the decal on the charger case, or you will lose your warranty cover. While charging, do not place any objects on the charger, or on the battery case. Make sure the charger is well ventilated whilst charging.**



### Connecting your charger

- 1 Insert the power lead into the charger
- 2 Plug your charger into the plug socket first and then insert the charger into the charging port on the battery. To find where your charging port is you will need to check what type of



OUTPUT VOLTAGE  $-42V \pm 0.3V$   
CURRENT  $-2A$   
MAX TEMPERATURE  $-65^{\circ}C + 5^{\circ}C$

LED STATUS	
DURING POWER ON	GREEN
DURING CHARGING	RED
CHARGING COMPLETE	GREEN
ERROR	RED & GREEN BLINKING

42V/2A,  
I/P=100~240V AC, 50Hz/60Hz  
CHARGER INPUT PORT IS COMPATIBLE WITH  
BATTERY CHARGING CONNECTOR-DC021

# 6. GENERAL INFORMATION DISPLAY

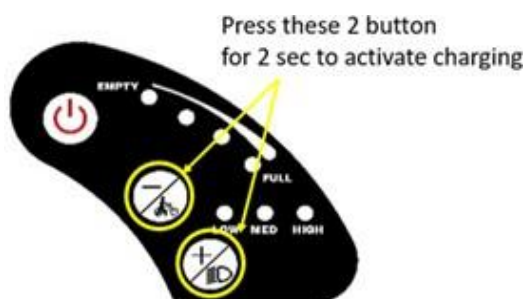
**The LED display is located on the handlebars of the e-bike. To switch the display on, simply press the power button. To switch the display off, press and hold down the power button. To change the level of assistance, you can press either the MODE button, or the +/- buttons, depending on the model of the display.**

**This e-bicycle is also fitted with a "walk assist" function. By depressing (holding down) the "6 km/h" button on the display, the motor will engage at 6 km/h, to help you set off from a standing/sloping start, or even if you just need to help to push the e-bike whilst you are walking. Please note, there is a slight delay from depressing (holding down) the walk assist button, and the motor engaging. This is normal and is there as a safety feature.**

**Regarding KING METER, Charging point, below is revert for supplier. Case 1: when display is powered ON and you connect a phone through USB then it is not charging.**

**You need to press 2-button(- + ) together for 2 seconds to activate the charging function, this is consider for safety.**

**If you need the display start charging when plug in the USB**



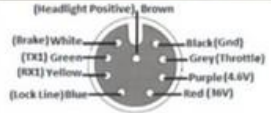


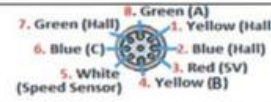
**device, you need to revise the firmware to realize this function, but it means the USB port will always on charging status.**

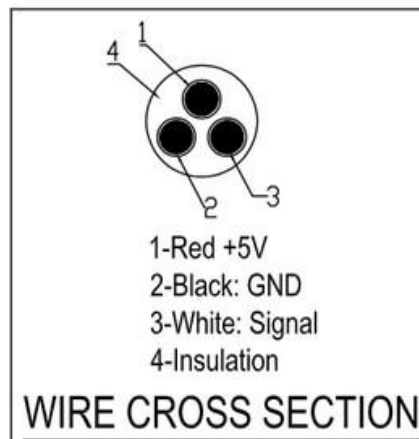
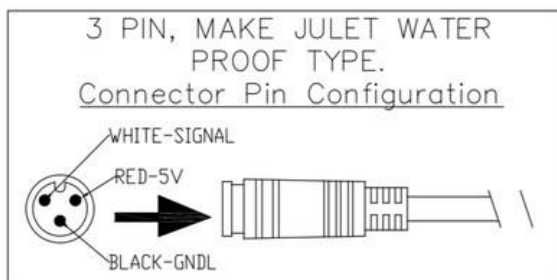
# 6. GENERAL INFORMATION DISPLAY

MODEL	LED DISPLAY S2-U
MAKE	KING METER
CONNECTOR	WATER PROOF (IP 65)
CABLE LENGTH	600mm
CONNECTOR PART NO	JL-F-Z509AG
SCREW	M3X15
USB CHARGER FUNCTION	YES

# 7. GENERAL INFORMATION MOTOR AND SENSOR

SPECIFICATION	
MOTOR TYPE	REAR HUB BLDC,GEAR TYPE
MAKE	SHENGYI
MODEL	DGW07
MOTOR TORQUE	40 Nm
MAX RPM	200
VOLTAGE	36V
POWER	250W

MOTOR CONTROLLER				
Signal Type	Wire Length	Connector	Pins	Pin Configuration
Display, Left Brake , Right Brake , Throttle, Headlight	300 mm	JL-F-Z-911AM	9	
PAS	325 mm	JL-F-Z309AM	3	
Rear lamp	100 mm	JL-F-Z209AG	2	
Motor	300 mm	JL-F-Z910AM	9	



SPECIFICATION AND RELIABILITY

RATED VOLTAGE— 4.5–6V (DC)  
CURRENT WITHOUT BRAKE <5MA  
CURRENT WITH BRAKE <6MA  
CORRESPONDING DISTANCE 3–5mm

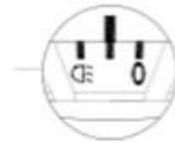
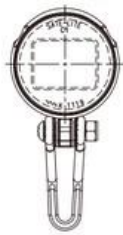
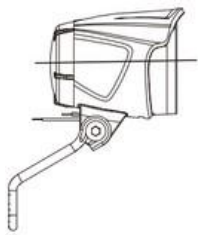
NOTE—

1. DH SENSOR MOUNTED ON BB AXLE.
2. MAGNET RING DIRECTION SHOULD BE ACCORDING THE ARROW WHICH MENTION ON MAGNET RING.

LED FUNCTION

1. LED WILL GLOW, WHEN MAGNET IS IN FRONT OF SENSOR.
2. LED WILL OFF, WHEN MAGNET IS AWAY OF SENSOR.

# 8. GENERAL INFORMATION LIGHTS



☒ = ON

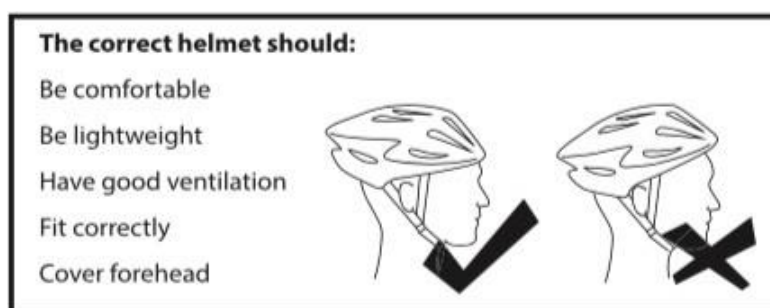
○ = OFF



# 9.1 SAFETY INSTRUCTIONS

**Riding an electric bike can be a fun and convenient way to get around, but it's important to follow safety guidelines to protect yourself and others. Here are some safety instructions for riding an e-bike:**

- **Wear protective gear: Always wear a helmet and other protective gear such as gloves, elbow pads, and knee pads to protect yourself in case of an accident.**
- **Follow traffic laws: E-bikes are considered vehicles, so it is important to follow traffic laws and regulations. Obey traffic signs and signals, use hand signals when turning, and follow the rules of the road.**
- **Check your e-bike before riding: Make sure your e-bike is in good working condition before riding. Check the brakes, tires, lights, and other mechanical parts to ensure they are functioning properly.**
- **Stay visible: Wear bright or reflective clothing, and use lights or reflectors on your e-bike to increase visibility to other road users.**
- **Stay alert: Be aware of your surroundings at all times, and keep both hands on the handlebars while riding. Look before turning and signal in advance.**



# 9.1 SAFETY INSTRUCTIONS

- **Avoid distractions: Avoid using a phone or other electronic devices while riding, as they can be a distraction and increase the risk of an accident. Also headphones hinder your ability to hear traffic.**
- **Watch for hazards: Be aware of road conditions and potential hazards, such as potholes, debris, or uneven pavement.**
- **Avoid overspeeding: Do not exceed the speed limit, as it can be dangerous for yourself and other road users.**
- **Learn how to handle your e-bike: Practice riding your e-bike in a safe area before taking it on the road.**
- **Seek professional help: If you have any doubts about your ability to operate an e-bike safely, seek professional help or training.**

## ACCIDENT

### Causes of crashes

- **Heavy traffic hours; increase visibility and keep buffer distance between you and vehicles**
- **Intersections; make eye contact**
- **Footpath; stop at the end of the footpath not halfway**
- **Vehicles turning; pay attention to gaps**
- **Parked vehicles opening their doors**
- **Reversing vehicles; look for reversing lights**

### What to do in a crash

- 1) **Record details of the crash**
- 2) **Report crash to the police**
- 3) **Report crash to your insurance company**

## 9.2 SAFETY INSTRUCTIONS: REPLACEMENT

**Replacing a tire on your electric bike is a relatively simple process that can be done with a few basic tools. Here is a step-by-step guide on how to replace a tire on your e-bike:**

- 1. Remove the wheel: Begin by flipping your e-bike upside down and removing the wheel that needs a new tire. This may involve releasing a quick-release lever or using a wrench to remove the axle nuts.**
- 2. Remove the inner tube: Once the wheel is off, use a tire lever to gently pry the tire off the wheel. Be careful not to damage the inner tube as you do this.**
- 3. Inspect the inner tube: Check the inner tube for any punctures or damage. If the inner tube is damaged, it will need to be replaced.**
- 4. Install the new tire: Take the new tire and place it onto the wheel, making sure the valve stem is lined up with the valve hole on the wheel.**
- 5. Inflate the tire: Inflate the tire to the recommended pressure using a pump.**
- 6. Replace the wheel: Replace the wheel back onto the e-bike, making sure it's securely fastened.**
- 7. Test ride: Test ride the bike to ensure the tire is properly installed and the bike is running smoothly.**



**Please Note: Never use screwdrivers in place of tyre levers, as sharp edges may damage the rim.**



# 10. ELECTRICAL MAINTENANCE

**Proper maintenance of an electric bike is important to ensure that it continues to operate safely and efficiently. Here are a few key things to keep in mind when maintaining your e-bike:**

- 1. Battery maintenance:** The battery is the most critical component of an e-bike, and it's important to keep it in good condition. This includes keeping the battery clean and dry, avoiding extreme temperatures, and keeping it charged when not in use. When storing the battery please make sure to charge it for 70% once every three months
- 2. Motor maintenance:** The motor of the e-bike should be kept clean and free of debris. It's also important to check the motor's alignment and make sure that it is securely fastened to the bike frame.
- 3. Brake maintenance:** Regularly check the brakes of the e-bike for wear and tear, and make sure that they are properly adjusted.
- 4. Tire maintenance:** Keep the tires of the e-bike properly inflated, and check for wear and tear.
- 5. Electrical connections:** Ensure all electrical connections are clean and tight.
- 6. Regular Service:** A regular service should be done by a professional with knowledge of e-bikes, this service should include a check of the bike's electrical system, battery, and motor. After every 3000 km schedule an appointment for maintenance
- 7. Keep the bike clean, but never use a high-pressure cleaner.** Instead you can use a sponge to clean the bike. Also, it is very important to take off the battery before cleaning and wait until the bike is completely dry before putting the battery back on.
- 8. When a service notification is received on the display please contact eBee**

# 11. FACTORS THAT MAY AFFECT THE RANGE

- 1. The weather: High temperatures (above 30° C) and very low temperatures (over 10° frost) diminish the capacity of the battery. Strong headwinds will reduce the range.**
- 2. Tire pressure: If the tires are inflated too softly, the rolling resistance of your bike will increase. You get less far on a full battery. Therefore, always drive with good tire pressure.**
- 3. Road quality: On a slippery asphalt road, you have little resistance, and your range is therefore higher than on a bumpy cobblestone road.**
- 4. The state of your battery: Over time, your battery capacity decreases. By maintaining the battery as well as possible, you extend the life span.**
- 5. Your weight: The heavier the weight of a person riding the bike, the more energy it takes from the battery and engine, the shorter the range will be. Luggage included.**
- 6. The speed at which you ride: When you go faster, the drag increases. As a result, you use more energy and therefore have a shorter range on a full battery. Especially when you don't peddle faster, you notice that your battery drains quick.**
- 7. How hard you paddle: The latter principle applies to all speeds: the faster you pedal yourself (and the less you use the electric motor), the longer the range of the battery.**

# 12. KEBS DECLARATION OF CONFORMITY

**All electric bicycles delivered and produced by Ebee Mobility Kenya Limited have been tested according to the Kenya Standard 06-895: 1989. Ebee has been audited by the Kenya Bureau of standards and has obtained a KEBS Standardization Mark to show compliance with minimum quality requirements.**

## KS 06-895: 1989

This Kenya Standard is an adoption of the International Standard (ISO) 4210: 1982 Cycles — Safety requirements of bicycles.

This standard lays down the requirements of bicycles on loading, brake and steering performance and tests which can be carried out on sub-assemblies and complete bicycles to ensure safety to the users.

The bicycle is recognized mode of transport in this country and especially in the rural areas where the density of motorized vehicles on the roads is low.

It is hoped that due to the rising cost of petroleum products as well as that of motor vehicles, bicycles will become a popular mode of transport for short distances.



KEBS Standardization Mark (S-Mark) is issued for use on products that comply with the minimum quality requirements prescribed in Kenya standards. It uses standards as a benchmark for quality compliance and aims at giving manufacturers improved market access and also giving consumers an assurance of quality for the products bearing the mark.

# 13. APPENDIX

## A. ADD ONS

### FRONT CARRIER



**The front carrier can keep a total weight of 10 KG**

### REAR CARRIER



**The rear carrier can keep a total weight of 50 KG**

# 13. APPENDIX

## B. DIFFERENT MODELS



**Nyuki**



**eBX**

# 13. APPENDIX

## C. FIRST FREE SERVICE

eBee offers each of our clients one free service within the first two months of purchase. Please find below the guidelines of what is included in the service.

### **Included:**

**Basic Inspection:** A thorough check of the overall condition of the electric bike, including the frame, components, and electronic systems.

**Tightening and Adjustment:** Ensuring that all bolts, nuts, and fasteners are properly tightened and adjusted according to manufacturer specifications.

**Brake Check and Adjustment:** Inspecting brake systems, including pads, cables, and hydraulic lines. Adjusting brakes for optimal performance.

**Gear System Check and Adjustment:** Ensuring smooth shifting by checking and adjusting the gears, derailleurs, and drivetrain components.

**Tire Inspection and Inflation:** Checking tire condition, tread, and air pressure to ensure safety and proper performance.

**Battery Check:** Verifying charging functionality, and connections.

**Motor Performance Check:** Testing the motor's performance, responsiveness, and noise levels.

**Electronic System Test:** Checking the display, lights, and any additional electronic features.

**Basic Cleaning and Lubrication:** Cleaning the bike and applying lubrication to critical components like the chain.

### **Excluded:**

**Replacement Parts:** The first free service covers adjustments and basic maintenance tasks, but it does not include the replacement or repair of any parts that are found to be damaged or worn. If any components need to be replaced or fixed, you need to cover the cost of those parts.

**Misuse or Neglect:** Any issues arising from misuse or neglect are not covered under the first free service. If the bike has been subjected to conditions or usage that are beyond its recommended capabilities, resulting in damage, those repairs might incur additional charges. It's important to follow the manufacturer's guidelines for proper care and usage to avoid extra costs for repairs due to misuse.

**Customizations or Upgrades:** If you want to customize or upgrade your electric bike's components or accessories during the first service, these changes are not covered under the free service package. Customizations could include changes to the handlebars, saddle, pedals, or other components that were not part of the original bike setup.

**Extra Labor:** If the mechanic needs to spend extra time on tasks beyond the standard checks and adjustments, this might not be covered in the free service. For example, if your bike requires extensive cleaning or maintenance due to neglect, it could incur additional labor charges.

**Accessories Installation:** If you want to add accessories to your electric bike during the first service, such as a rear rack, lights, or a phone holder, the installation of these accessories is not included in the free service package.

**Transportation Costs:** If you need to transport your electric bike to and from the service center, any transportation costs are not covered as part of the service.