

# Stardust Instruction manual

Warm reminder: Please read the manual fully before use, do not use the motorized scooter without understanding its performance, and please keep the manual in a safe place. Thank you for choosing "yamasaki" brand Stardust electric motorcycle, Stardust is an electric motorcycle that has passed the EEC

"YAMASAKI Electric" is a high-tech enterprise integrating professional research, development, production and sales of electric electromobiles and supporting core components product development, manufacturing and sales. The company adheres to the development path of independent brand cultivation and independent research and development innovation, and our goal is to provide the best quality products to distributors and customers around the world.

In order to operate your electromobile safely and happily, please make sure to operate according to the guidance and suggestions of this user manual, which contains instructions for the use of operating parts, precautions and partial maintenance, but the instructions for maintenance are detailed in the Stardust maintenance manual.

Due to the continuous improvement of the design and quality of product parts, there may be slight differences between printed manuals and the latest electromobiles. The descriptions and procedures in the instructions are for informational purposes only.

Before each drive, please do some checks, and do regular maintenance. This manual should be treated as a permanent part of the electromobile, even if the electromobile is transferred to another person, it should be transferred with the electromobile to the new owner. The final right of interpretation of this instruction manual is CHANGZHOU YAMASAKI MOTORCYCLE Co., Ltd.

If you want to check the latest news information, new product introduction, latest activities, recruitment information and other details of "YAMASAKI Electric", please visit our official website www.yamasakimotor.com

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### The power battery

The Stardust is equipped with a lithium-ion power battery. Lithium-ion power battery is integrated, and the battery pack has the characteristics of large capacity, high energy, small self-discharge, long service life, safety and reliability.

### **Cruising range**

The electromobile has a different cruising range at different speeds. Under general driving conditions, please use gears and levers reasonably, control the speed of the electromobile, and ensure sufficient cruising range.

The cruising range is closely related to the battery capacity. With the increase of battery use time and electromobile mileage, the battery capacity will gradually decay, and the total cruising range of the electromobile will also gradually decay. Proper use and maintenance of the battery can effectively extend the service life of the battery (see battery maintenance).

Different driving habits and usage environments will also affect the cruising range. Continuous high-speed driving, acceleration, frequent starting/braking, climbing steep slopes, driving against the wind, riding with heavy loads, and installing power-consuming equipment on the electromobile will all lead to a decrease in cruising range;

In a low temperature environment, the battery capacity decreases with the decrease of temperature, and it is normal for the cruising range to decrease.

If the battery is not used and maintained properly, its capacity will accelerate the decay, and the cruising range of the electromobile will be reduced accordingly and rapidly. If the cruising range decays rapidly, please contact the "Keren" authorized after-sales service center in time.

#### The battery smokes, leaks or heats up

The following behaviors may cause the battery to smoke, heat, catch fire or burst:

It is forbidden to immerse the battery in water;

It is forbidden to place the battery near a fire source or heater;

It is forbidden to leave the battery in a high temperature place such as direct sunlight for a long time  $\geq$  60°C);

It is forbidden to hit or apply external forces to cause the battery to crack or deform.

If the battery is found to be smoking, leaking or heating during use, under the premise of ensuring the absolute safety of the person, the external connection power should be cut off in time, the electromobile should be moved to a safe place, and the electromobile/battery should be left standing until the smoke, liquid leakage disappears or stops, and the fire prevention is prepared during the period. And contact the "Keren" authorized after-sales service center in time for recycling and processing.

If the shell is ruptured, the deformed bulging battery should not

continue to be used, otherwise it will bring dangerous situations, please contact the "Keren" authorized after-sales service center in time to recycle the battery.

If the battery catches fire, you can use ABC dry powder fire extinguisher or water to extinguish the open flame in time, during the operation, please be sure to ensure personal safety. If the fire is too large, call the fire center in advance. And contact the "Keren" authorized after-sales service center in time to recycle the battery.

#### **Battery Recycling**

Damaged or used batteries belong to "hazardous waste", private disposal or recycling is prohibited, please contact the "Keren" authorized after-sales service center for recycling processing or contact the relevant departments for recycling.

Replacing the battery must use the "Keren" original battery, if a non-original battery is used, it may cause no start, circuit failure, electrical device damage and so on, and the failure caused by the non-original battery shall be borne by the user.

#### Maintenance of the battery

\*Do not disassemble the battery without permission, and if there is a problem, you need to go to an authorized repair outlet for repair.

The first charge of the battery is recommended to charge to the meter level indicating more than 80% power before use.

When the meter power indicates the remaining 20%, please charge as soon as possible, do not consume the battery to the minimum, which will affect the service life of the battery. When you need to place the electromobile for a long time, you must first fully charge the battery on the electromobile, and replenish the battery once a month, and it is forbidden to store it without power.

Regularly go to the authorized after-sales service center to inspect the battery.

It is forbidden to install any electrical equipment on the electromobile, inferior electrical equipment may cause short circuit of the equipment, causing fire,electric shock and other accidents. The addition of electrical equipment will also affect the electromobile's range,which may reduce the battery life.

Being in a climbing state for a long time or driving at high speed for a long time will cause the battery temperature to be high,which is a normal phenomenon.

It is recommended to go to the "Keren" authorized official dealer every 6 months for battery inspection and maintenance,to confirm whether the relevant connector is loose,whether the battery needs maintenance or maintenance, etc.

It is necessary to use the original charger or designated charging pile for charging,non-original charger or non-designated charging pile may cause failure to charge or cause circuit/battery failure.

#### Charge

Close the electric door lock,open the charging protective cover, check the charging port (if there is water accumulation (the charging port has a waterproof protective pad),if there is clear water accumulation,to prevent short circuit damage to the battery or the whole electromobile), first plug the charger output end into the charging socket,and then connect the input end to the 220V power supply.

1.When the input and output terminals of the charger are turned on,the charger indicator glits red,indicating that the power supply is plugged in and charging.

2.It is recommended that when charging, the charger should be connected to the charging port first, and then connected to the 220V power supply; After charging, cutoff the 220V power supply, and then disconnect the charging port from the charger. Avoid generating electric sparks, causing injury.

3.When charging, it should be placed in a ventilated environment, it is strictly forbidden to charge in oil smoke dust, confined space or

scorching sun and high temperature, rain, humid environment.

4.Please charge as soon as possible when the battery level indication is insufficient,the charger indicator light turns green to indicate that the charge is fully charged,and charging should end.Charging time is more than 12 hours,please unplug the power.

5.In order to ensure battery life,disconnect the external power supply in time after the battery is fully charged,and frequent ultra-long charging should be avoided.Long-term charging will cause the charger to overheat,accelerate aging,and also affect battery life.



external power supply immediately to stop charging. And send to the local dealer or after-sales maintenance or replacement.

## ⚠Note

Do not place the charger in the saddle or tailbox to charge.

Be sure to close the electric door lock when charging, and no other operations can be performed on the electromobile

## \land Warn

There are different warnings, warnings, hazards and other stickers set in the visible position of the electromobile, please do not remove any stickers. Without these stickers, you or others may not be able to recognize the danger, resulting in injury.

## ▲ Dangerous

This product is only suitable for reasonable, prudent driving with a corresponding driver's license in highway traffic. Note the following:

Users should check each part of the electromobile according to the daily safety inspection chapter before driving, if problems are found, repair before driving. Users shall comply with local laws and regulations.

It is forbidden to drive a electromobile under the influence of alcohol or after taking drugs.

Please wear appropriate protective gear such as helmets, boots, gloves, and pants or jackets with protective features during all driving.





## General information Here are some basic things you should pay attention to before driving

1.Any driver and occupant must be very familiar with the particularity of the driving of this electromobile, if the position of the occupant seat is not suitable, causing the center of gravity to deviate too much from the center plane of the electromobile or sudden acceleration during driving may affect the handling and control of the electromobile, the occupants try to keep sitting smoothly in the occupant seat during driving, and cannot affect the handling of the driver and passengers.

2. Animals cannot be electromobileried on board the electromobile.

3.Do not electromobilery overweight or oversized baggage, make sure it will not affect any lighting system,ground clearance, braking performance,handling performance,tire compression travel,fork working travel or other related electromobile driving stability performance.

4.In order to reduce the impact on the center of gravity of the electromobile, all luggage electromobileried on the electromobile must be as low as possible, and the weight of the luggage must also

be evenly distributed on both sides of the electromobile, and the luggage should not extend too long behind the electromobile.

5.Luggage must be securely fastened to the electromobile, please make sure the luggage is securely fastened before driving;When the electromobile feels unstable while driving,the firmness of the luggage should be re-checked and readjusted if necessary.

6.Heavy weight on the grip or fork will affect steering performance and cause unsafe driving

7.Retrofitting or retrofitting shrouds,windshields, backrests and other large components will affect electromobile stability and handling.Not only do they increase weight,their area also reduces dynamic performance when the electromobile is moving;Due to the lack of design verification,the installation of additional parts may cause unsafe factors after installation. This electromobile cannot be converted into a side three-wheeled motorcycle,cannot be used to tow trailer or other electromobiles, if the user has caused any damage or injury caused by the modification of this electromobile,we will not be held responsible.

## **Protective equipment**

Drivers and occupants must always wear appropriate protective gear, including:

- Certified helmets
- 2 Goggles
- 3 Glove
- Long-sleeved shirt or jacket
- Trousers
- 6 Boots over the ankle

Depending on the climate, you may need some extra riding gear. Examples include anti-fog goggles and thermal under wear or face shields for cold weather. It is forbidden to wear any loose clothing that may entangle the electromobile or hang on branches and bushes.



## Helmets and eye protection

A certified helmet can mitigate head and brain injuries, in the event of an accident, using a helmet can greatly reduce the risk of brain injury, please note that even the best quality helmets can not guarantee no injury.

The helmet you choose should meet the standards of your country or region and be the right size. A helmet with face protection is a better choice, as it will simultaneously protect against impacts from the front, including insects, splashing dust, scattered parts etc.

Semi-protective helmets do not provide equal protection for the face and jaw, if you are wearing a semi-protective helmet, you should use a removable face shield and goggles.

Use tinted face shields or goggles only during the day or when the light is strong, never at night or in poor light, they will affect your ability to distinguish colors, if your color discrimination ability is affected in any way, do not use them.

### Glove

Full-finger gloves can effectively protect hands from wind, sun, heat, cold and splashes. Well-fitting gloves help you steer and relieve hand fatigue. Conversely, if the gloves are too bulky, it will be difficult to operate the electromobile.

In the event of an accident or rollover, a pair of firm, reinforced gloves can better protect your hands. In cold areas, hands should be protected by snowmobile gloves, which have sufficient cold protection and can effectively operate the electromobile.

## Jackets, pants and motorcycle suits

Wear a jacket/long-sleeved shirt and long pants or a full motorcycle suit.High-quality protective equipment is more comfortable and has the ability to prevent adverse environmental factors from distracting you.In the event of an accident, high-quality protective equipment made of solid materials can reduce or even prevent injuries.

### Boots

Be sure to wear boots that don't show their toes and go over your ankles,ankle boots that are firm and have non-slip soles provide more protection, allowing you to place your feet correctly on the footpegs.Avoid using long laces to avoid getting involved inside the rear brake pedal. In winter driving conditions, it is best to wear rubber-soled shoes with nylon or leather upper and removable insoles.Avoid wearing rubber boots.Rubber boots will get stuck behind or between pedals, which is not conducive to the normal operation of braking and accelerator pedals.

## Other protective equipment

#### Rain gear

If you have to drive in rainy weather, it is recommended to wear a raincoat or waterproof motorcycle suit. When driving long distances, it is recommended to bring rain proof gear. Motorists will be more comfortable and alert when kept dry.

## **Hearing protection**

During driving, prolonged exposure to wind or other noise can permanently damage hearing, and proper wearing of hearing protection devices such as earplugs can prevent hearing loss. Before using any hearing protection device, check local laws.

## Electromobile identification



1	Electromobile Identification Number (VIN)	2	Electromobile nameplate	3	Motor number
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## Spare Parts Introduction



## Introduction to Vehicle Components

Serial No.	ltem Class- ification	Technical Specification Item	Parameter/Unit	Serial No.	ltem Class- ification	Technical Specification Item	Parameter/Unit
1		Length  imes width  imes height	1770mm×695mm×1080mm	17		Motor operating voltage	60V
2		Wheelbase	1280 mm	18		The rated torque of the motor	36N.m
3		Tread	-	19		net power of the motor	1500W
4		Minimum ground clearance	125mm	20	Electrical	Battery type	Lithium battery
5		Electromobile curb weight	62kg	21	compon- ents	Total battery capacity	30Ah
6	Complete	Rated load capacity	75kg	22		Battery nominal voltage	60V
7	obile	Brake type (front/rear)	Disc/Drum type	23		Overcurrent protection value	30±1A
8		Brake control (front/rear)	Handbrake	24		The charger input supply voltage/frequency	AC 220V/50Hz
9		Rim type (front/rear)	Aluminum/aluminum	25		10min top speed (V10)	45km/h
10		Tire specifications (front/rear)	Front wheel 3.00-10 Rear wheels 3.00-10	26		Maximum speed(Vz00)	45km/h
11		Tire pressure (front/rear)	225/250	27		Mileage	75km
12		Transmission mode	Wheel drive	28	Key per	Climbing ability	12°
13		Electric motor model	YM60V1500W	29	formance indicators	Accelerate performance	-
14	Electrical	Electric motor trademark	QUANSHUN	30		Energy consumption rate	21 Wh/km
15	ents	Motor type	Synchronous	31			
16		Electric motor production unit	Taizhou Quanshun Motor Co., Ltd.				

## YM1500DQT Table of main technical parameters

## **Electrical schematics**



## **Operating components**

## Front and rear hydraulic brake levers

The rear hydraulic brake lever  $\boxed{1}$  is located to the left of the direction handle, and the rear hydraulic brake lever is used to perform the rear brake caliper braking action. The front hydraulic brake lever  $\boxed{2}$  is located to the right of the direction handle, and the front brake lever is used to perform the front brake caliper braking action.



## Electronic handlebar assembly

The electromobile adopts an electronic knob assembly to control the acceleration and deceleration speed of the electromobile.

When the handlebar assembly fails, the motor will stop driving.



Left combination switch

1	Light switch	ΞD	Press the button and toggle between low beam and high beam
Front		$\hat{\Phi}$	Toggle to this position to turn on the right turn signal,and then jog to turn off
Z	light switch	Ŷ	Toggle to this position to turn on the left turn signal,and then jog off
3	Horn switch	Þ	The button horn sounds
4	Light shield switch		A long-press the button to switch on or off the light,short-click to change the colors



## **Right combination switch**

5	Alert button		Jog switch turns on double flash	
6	Lighting switch	-00-	Toggle to this position andlow beam is on	
7	P-gear button / cruise control function	P (~)	Jog switch to release P gear,Long press P gear for 5 seconds,enter the booster mode,the instrument shows the A character;Screw the knob to a certain opening,jog this button,enter cruise control,jog the button again to cancel it	
8	One click shutdown +cushion lock	(?) 2×	Double click the button to open the cushion when the scooter is turned on;when bluetooth is open and close to the scooter,long pressing the button to switch on.	



Speed control handle:Turn the speed control handle (right hand handle)inward counterclockwise,the electromobile starts to start, and the speed control handle rotates from small to large,corresponding to the speed from slow to fast.

## **Operating components**

**Charging port** 

charger for charging.



## <u>/</u>Warn

This electromobile adopts a nominal voltage of 60V power battery, and rated power of the hub motor is 48V, more than 36 V safety voltage, when performing operation on this battery or hub motor, you must read this instruction manual electromobile carefully to avoid the danger.

### Side brace

The side brace is located on the left side of the electromobile and is used to park the electromobile;

When the electromobile is stationary, the side brace is lowered and enters P gear, and the electromobile cannot be driven;

When the electromobile is running, you must lift the side brace and release the P gear before riding.





## Total power cut-off device

The air switch is the total power cut-off device, located at the rear of the seat cushion lock, which is the main switch of the electromobile power supply.

If the cable and wire insulation fails and causes a short circuit, the electromobile' s air switch will be automatically cut off. When encountering other hazards (battery smoke, leakage or heat/fire) or when the air switch needs to be turned off, it is necessary to manually cut off the air switch. Open the cushion lock with the key, then push the air switch to the OFF position.



## Instrumentation

The main interface of the instrument is displayed



Project	Illustrate	Project	Illustrate
1	Mile	11	<b>READY</b> indicator
2	Kilometer	12	Cruise Control
3	Booster mode	13	GPS
4	Time	14	4G
5	Battery power left	15	Turn right signal
6	Turn right signal	16	Total Mileage
7	Side Positioning Light	17	High beam
8	Bluetooth icon	18	Battery power left
9	ECU information	19	Failure icons
10	Handlebar failure	20	Motor failure

lcon	Name	Display Logic
3	Cruise control	Displayed when cruising at a controlled speed
<b>D</b>	High beam	Displayed when the light on
EDDE	Low beam	Displayed when the light on
•	Right turn signal	Turn on the display when turning right,and the lights flash
+	Left turn signal	Turn on the display when turning right, and the lights flash
READY	Ready icon	Displayed when the electromobile in ready

lcon	Name	Display Logic
<b></b>	Battery icon	Displayed the battery power left
ECU	Controller failure	Displayed when the electromobile controller is faulty
M	Motor failure	Displayed when the electromobile motor is faulty
	Low battery icon	Displayed when the electromobile is on low battery
)	Turnaround failure	Displayed when the electromobile handlebar is faulty
	Brake failure	Displayed when the brake is faulty

## Tires

This electromobile only uses tubeless tires, rims and valves, do not install tubes; Recommended tires, rims and valves must be used.

### **Tire specifications**

Tire encelfications	Front wheel	3.00-10
The specifications	Rear wheel	3.00-10
Tire pressure	Front/rear wheels	225 kPa/250 kPa
Minimum service depth of tire surface	Front/rear wheels	0.8mm~1mm/0.8mm~1mm

Improper tire pressure or exceeding the load limit of the tyre may affect handling and electromobile performance and cause loss of control.Use a tire pressure gauge to check tire pressure regularly, and make appropriate adjustments.

Too low tire pressure can cause abnormal wear or overheating of the tire.

Correct tyre pressure ensures optimal comfort and maximum tire life.

#### Note

Check tire pressure when the tire is cold

Tires, pressure is affected by the change of ambient temperature and altitude, and when the ambient temperature and altitude change greatly during driving, the tire pressure must be adjusted and checked accordingly.

Install new rims, check wheel balance when tires.

#### Maintenance and maintenance of tires

1.Regularly maintain the tire every week, and remove sand and other foreign objects from the joints of the tire pattern

2.Try to avoid sun exposure to tires

3. Check the tire pressure weekly and adjust the tire pressure to normal values

## \land Warn

In order to guarantee the safety and stability of operation, only the tires and air pressure we recommend are used. The front and rear wheels use the same manufacturer, tread pattern of the same tires.

The surface of the new tire is smooth and can cause loss of control and injury, and the entire tread of the new tire rubs against the ground at different inclination angles in a moderate driving manner, and the tire surface can form a normal friction surface after the 160km running-in period. Avoid sudden, extremely sharp braking, great acceleration and sharp turns during the run-in period.

#### Tire wear

When the tread wears beyond the service limit, it will be punctured and malfunctioned. Generally,90% of tire failures occur during the last 10% of tire service life, so continued use when the tire surface is worn to a smooth surface will cause unsafe factors.

According to the regular maintenance chart, the specified depth of the tread is measured, and the new tire is replaced before the minimum use limit is worn.

Visually inspect the surface cracks and cuts of the tire, and replace the tire with a new one when it is seriously damaged.As:A localized swelling of the tire indicates that the tire is damaged, tires need to be replaced in time.Remove sand and other foreign objects that have been stuck into the tread.

kly and adjust the tire pressure to normal values

A Warning

When the outdoor ambient temperature is lower than -10°C, if the electromobile needs to be parked for a long time, it is recommended to park indoors

For a long time parking in winter, avoid using side braces, and should use middle supports or parking frames to park, so that the tires are not affected by the gravity of the wheels. Parking in winter, avoid getting the tires stuck in ice/snow for a long time. When parking for a long time in the wild in winter, it is recommended to lay branches under the tires, waste paper, sand and other substances that can keep warm.

### Hub motor

Before traveling, check whether the screws on both sides of the hub motor are loose, check whether the electric power line is loose, whether the appearance is deformed, and whether there is damage.

For rainy days, when passing through deep water (where the water surface exceeds the position of the rear wheel axle), the electric electromobile can wade into the water, but it is not allowed to drive in deep water. Annotation: The motor oil seal is replaced every 2 years.

The hub motor cannot be subjected to violent impact, and it is strictly forbidden to overload the electric electromobile.

If the motor is found to be abnormal, it should stop running immediately and send it to the designated authorized repair shop for repair or replacement.

## Controller

Maintenance of the controller is maintained by an authorized repair shop.

It is forbidden to rinse the hot (working or just finished work) controller with water to avoid the danger of short circuit failure;

Regularly check whether the controller fixing screws and wiring are loose.

It is strictly forbidden to modify the controller line without permission.

## **Braking Systems**

#### **Braking Systems**

In order to ensure the performance of the electromobile and personal safety, regularly check the electromobile braking system to keep the components of the brake system in a good condition. If there is any failure of the braking system, please do not continue riding, contact your dealer to repair it for you.

#### **Brake lever inspection**

Use the side support to support the electromobile, gently pinch the left and right brake levers to check the brake handle, check whether the front brake handle is flexible, whether the braking is effective, if the brake stroke of the brake lever is too large or the brake is blocked, brake abnormal noise, etc., contact the "Keren" authorized after-sales service center to check and repair.



## \land Warn

If the brake lever feels soft during operation, the brake line may contain insufficient air or brake fluid. When the electromobile has such a dangerous condition, it is forbidden to drive the electromobile, and you should immediately contact the "Keren" authorized after-sales service center to check the brakes.

## **Braking Systems**

## **Brake disc inspection**

Check the brake disc regularly, check whether the brake disc is damaged, deformed, cracked or worn, damaged brake disc may cause brake failure, worn brake disc will reduce braking effect. If you find that the brake disc is damaged or exceeds the wear limit, contact your dealer immediately to replace the new brake disc.

The thickness of the front and rear brake discs is detected in multiple positions of the brake disc, and the factory thickness is 4.5mm.

Brake disc wear limit: 3mm

## Brake friction pad inspection

Regularly check the minimum thickness of the brake friction pad, too thin the friction pad will cause the brake friction pad bracket to rub the brake disc, which will seriously reduce the braking effect.

Check the minimum thickness of the brake friction pad, the factory thickness is 5mm, the wear limit friction plate thickness: 2.5mm

If the thickness of the brake friction pad is less than the minimum friction pad thickness, or the brake disc is damaged, immediately contact the dealer to replace the brake friction pad, and the brake friction pad needs to be replaced in pairs.



Wear limit thickness 3mm





## **∆** Warning

- · Low beam and high beam adjustment is subject to local regulations, and the light when the front and rear wheels are on the ground and the driver is sitting in the electromobile is the benchmark.
- ·All lamps are LED, if damaged, the damaged lamp module must be replaced.



## Daily security checks

Check the following before driving every day, and developing this habit will guarantee your safety in driving the electromobile and the reliability of the electromobile. If you find any abnormalities, please refer to the adjustment section or contact your dealer for repair, if you find any abnormalities when you continue to drive, it will cause serious damage to the electromobile or an accident.

Project	
Front wheel	Check the front wheels for excessive wear, cuts, inserted foreign objects or other damage. Check if the front tire pressure is normal.
Rear wheels	Check the rear wheels for excessive wear,cuts,inserted foreign objects or other damage.Check whether the tire pressure is normal after that.
Front brake/rear brake	Check the front wheel braking,the handbrake stroke is appropriate,adjust if necessary.
Front/rear shock	Hold the steering handle, compress the fork to check whether the front reduction work is smooth, press the seat cushion to check whether the reduction work is smooth;
absorbers	Whether there is sticky sediment on the fork pipe of the front/rear shock absorber, if there is sediment sticky and need to be cleaned otherwise it is easy to cause oil seal damage;
Brake oil cup	Check whether the liquid level of the brake oil cup before is suitable
Operating components	Check the direction handle,whether the switch is normal and flexible
Flame-out switch	Check whether the flame-out switch can be used normally.
Instrumentation	Check the meter fault display. Check if the battery storage is sufficient
Lamps	Check whether all the lamps can be lit properly
Rearview mirrors	Check if the rearview mirror angle is appropriate
Side brace/middle brace	Check if the side brace/middle support return spring is loose or broken
Luggage	Check whether the luggage is firmly fixed, whether the height and width of the luggage affect the safe driving

## A Warning

Check the status of the electromobile before each drive of the electromobile. The electromobile must be driven in the presence of a corresponding driver's license. Be aware of local regulations, and not drive in areas where it is not allowed.

## Start the electromobile

Retract the side brace and middle support and sit on the seat cushion of the electormobile. Start the electormobile as described above.For details, please refer to "electormobile Starting Methods".

## A Warning

The whole electromobile is powered on, after the instrument self-test is completed, the instrument lights up, retracts the side brace and the middle support to operate either side of the brake handle once or P gear button, the instrument shows READY, and the electromobile activates into the drivable state

### The electromobile starts

Before starting, both feet must be stable and balanced and cannot leave the ground, hold the grip firmly with both hands, put the right hand on the brake handle, electromobileefully turn the electronic grip after switching to the driving gear, so that the electromobile drives slowly to a stable level.

#### Shift, drive

After driving slowly to a stable level, choose different gears for road conditions, and the gears of the electric motorcycle are only used to distinguish different operating modes and match different maximum speed and torque; Before switching to reverse gear, stop the electromobile completely.

## A Warn

Avoid sudden load changes and strong braking maneuvers, which can cause the electromobile to lose control. Adjust the speed according to the road surface conditions and surrounding conditions. All adjustment work to the electromobile should be electromobileried out while parking.

Make sure the passenger sits in the passenger seat as prescribed, puts their feet on the footrest, wears safety protections such as helmets and holds the driver or grabs the armrests. Please observe the minimum age regulations of your country or region. Please obey the traffic rules, and drive preventively, cautiously to identify the danger as far in advance as possible.

When the tires are in a low temperature state, the grip is reduced, and you must be electromobileeful to drive at moderate speeds for the first few kilometers until the tires reach their operating temperature. Do not exceed the maximum allowable total load, the total load includes:Ready electromobile, driver, passengers as well as

luggage to be electromobileried.

## A Warn

The sliding of luggage items will affect the driving performance, check whether the luggage is firmly fixed to the electromobile, and the width of the luggage electromobileried shall not exceed 0.15m in the direction of the electromobile.

The damage caused to the electromobile by the crash can be more serious than it seems, and the electromobile is thoroughly inspected to ensure safety.

Be sure to give oil according to road surface and weather conditions, especially when cornering, you should not shift gears, and you should give oil electromobileefully.

#### Brake

The electronic grip should be released when braking, and it is recommended to brake first and then brake.Before starting the corner, the brakingprocess should be completed, the speed of the electromobile should be reduced to the appropriate speed, and then slow braking should be electromobile-ried out to avoid locking the rear wheels during the braking process.

During long-distance downhill driving, use the rear wheel braking force reasonably, and try to maintain a constant speed. Avoid using the brake for a long time, and prevent the brake pad from overheating and causing the braking force to drop.

## \land Warn

Moisture and dirt will affect the braking system, and the brake disc should be electromobileefully braked many times when it is wet, so that the brake friction pad and brake disc are dry, and the dust is removed.

When the brake lever and brake pedal feel loose, they cannot continue to drive, and must be trouble-eliminated before they can be used. Long-term use of brakes will cause the brake friction pads to overheat, excessive wear, and affect the service life and safety. When electromobilerying passengers or luggage, the braking distance may increase, please adjust the braking time according to the load of the electromobile.

When full braking and low road adhesion such as sandy, waterlogged or slippery, full (front and rear) braking should be used, and sharp braking should be avoided as much as possible during braking to avoid dangerous situations where the rear wheels lock up.

### Park

Use the brakes to stop the electromobile, turn off the electromobile;

Park the electromobile firmly on the ground;

To electromobilery the electromobile using side brace or middle support (priority use of middle support), briefly press the remote control power button to turn off the electromobile.

## 🕂 Warn

When the motor is running, there must be an adult to supervise the electromobile. Prevent others from operating the electromobile without authorization

Some parts of the electromobile are very hot after operation, do not touch the system, such as the braking system. Do not place the electromobile near flammable and explosive materials, hot electromobile parts may ignite or detonate materials.

Improper operation when parking may cause the electromobile to slide or tip over, resulting in serious injury.

The middle support is only used to electromobilery the electromobile and luggage, when using the middle support to stop, please do not sit on the electromobile, otherwise it may damage the middle support or frame and cause the electromobile to overturn, resulting in personal safety.

#### Safe driving tips

The following are daily driving precautions, which must be carefully read before driving to ensure safe and correct driving. For safety, we strongly recommend wearing goggles and helmets, you must know the traffic laws for driving motorcycles safely, and you must also wear gloves and wear appropriate shoes, socks and other protective gear.

To prevent collisions with electromobiles, you must wear protective clothing when driving, and not wearing protective clothing will not guarantee your personal safety. Before changing lanes, check the electromobiles on your left, right, and behind you to ensure that it is safe to pass. Don't just rely on the rearview mirror, you must judge the distance and speed of other electromobiles, otherwise you are prone to electromobile accidents.

When climbing steep slopes, use sport mode to increase the motor output torque to avoid overloading the motor.

When using brakes, it is recommended to use rear brakes first and then front brakes. If only single-wheel emergency braking is used, it may cause the electromobile to slip sideways (coasting) or lose control.

When driving in wet terrain, try to use the electronic grip to control the speed of the electromobile, reduce the braking force of the front and rear wheels, and the electronic grip must also be controlled appropriately, to avoid allowing the rear wheels to accelerate toofast or decelerate too fast to cause the electromobile to slip.

Driving at a smooth speed and avoiding unnecessary acceleration can not only ensure important personal safety, but also reduce battery consumption, and also extend the service life of the electromobile and battery.

When driving on wet or soft roads, it will reduce the maneuverability of the electromobile. Under these conditions, your entire driving maneuver must be coordinated and flexible, such as sudden acceleration, braking or cornering can cause loss of control.

Practice driving discreetly in open areas, avoiding unnecessary weaves tangling around the driver and electromobile.

## Safe Driving

## Special precautions for high-speed driving

Brake Braking is very important when driving at high speeds, and the braking force cannot be too large. Check and make appropriate adjustments to make proper braking performance.

Manipulate: Loose controls can cause the electromobile to lose control. Checks such as: The direction of the steering should be flexible but not wobbly.

Tires Comprehensively check whether the appearance of the tire is damaged, whether the tire pressure is in line with etc., and ensuring the integrity of the tire when driving at high speed is the key to safe driving.

Battery:Sufficient power is guaranteed when driving at high speeds.

Electrical installations: Make sure all headlights, taillights/brake lights, turn signals, horns and so on can work properly.

Fasteners:Make sure all nuts and bolts are tightened, and all safety-related parts are intact.

## A Dangerous

Please do not exceed the speed limit on the highway, please abide by the relevant regulations, unless you have the permission of the traffic management department, and have the relevant skills and protective conditions, motorcycles are prohibited on highways in some parts of China.

## <u>∧</u> Note

For long-distance driving, you need to pay attention to the cruising range and remaining power, please plan the mileage reasonably.

This chapter lists the maintenance chart, in order to make the electromobile drive in good condition, you must comply with the provisions of the maintenance chart, and do regular maintenance and adjustment work. The first maintenance is also extremely important and cannot be neglected.

By introducing a lot of maintenance matters in this chapter, you should recognize basic maintenance procedures and correct use of tools. If you lack practical experience or doubt your ability, all adjustment, maintenance and repair work must be done by professional technicians. If you have any other questions, please contact your distributor to solve.

#### Notes

▲= Shorten the electromobile maintenance interval by 50% when the electromobile is used badly.

## **First maintenance**

	Project	Hour	Month	km	Remark		
Electrica	Electrical appliances						
	Functional inspection of electrical equipment	-	-	1000	E		
	Fuse or overload protector	-	-	1000	Examine		
Brake							
	Brake discs	-	-	1000			
	Brake friction pads	-	-	1000	Examine		
	Brake fluid level	-	-	1000			
	Brake lines	-	-	1000	Check for damage, sealed		
Wheels	Wheels						
	Brake lines	-	-	1000	Examino		
	Tire pressure	-	-	1000	LXamme		
Suspension							
	Rear shock absorption and front shock absorption	-	-	1000	Detect oil leaks		
Veer							
	Steering bearings	-	-	1000	Detect		
Other							
	Fault memory	-	-	1000	Read using diagnostic tools		
	All moving parts	-	-	1000	Lubricate, check its flexibility		
	Bolts and nuts	-	-	1000	Check that it is secure		

▲= Shorten the electromobile maintenance interval by 50% when the electromobile is used badly.

## **Daily Maintenance**

Project		Maintenance intervals (maintenance of items that come first to the maintenance interval)				
		Hour	Month	km	Remark	
Electrica	Il appliances					
	Electrical equipment functions	-	12M	10000	Examine	
	Fuse or overload protector	-	6M	5000	LXamme	
	Cable	-	12M	10000	Check for damage, bending during laying	
Wheels						
	Tire status	-	12M	10000		
		-	24M	20000		
	Tire pressure	-	12M	10000	Evemine	
		-	24M	20000	Examine	
	Wheel bearings	-	-	10000		
		-	-	30000		

▲= Shorten the electromobile maintenance interval by 50% when the electromobile is used badly.

Project		Maintenance intervals (maintenance of items that come first to the maintenance interval)				
		Hour	Month	km	Remark	
Brake						
	Front/rear braking system	-	12M	10000		
		-	24M	20000		
	Brake discs Brake friction pads	-	12M	10000	Examine	
		-	24M	20000		
		-	12M	10000		
·		-	24M	20000		
	Proko fluid loval	-	12M	10000		
	Diake itula level	-		20000		
	Brake lines	-	24M	20000	Check for damage,	
		-	12M	10000	bending during laying	
	Brake fluid		24M	-	Replacement	

▲= Shorten the electromobile maintenance interval by 50% when the electromobile is used badly.

Project		Maintenance intervals (maintenance of items that come first to the maintenance interval)				
		Hour	Month	km	Remark	
Suspens	sion					
	Suspension system	-	-	5000	Examine	
		-	-	10000		
		-	-	15000		
	Rear shock absorption and front shock absorption	-	12M	10000	Check for oil leaks. (Maintena- nce of the fork and rear shock absorber according to the	
		-	24M	20000	need and purpose of use)	
Frame						
	Frame	-	-	30000	Examine	
Veer						
	Steering bearings	-	12M	10000	Examino	
		-	24M	20000	Examine	

▲= Shorten the electromobile maintenance interval by 50% when the electromobile is used badly.

Project		Maintenance intervals (maintenance of items that come first to the maintenance interval)				
		Hour	Month	km	Remark	
Brake						
	Troubleshooting interface	-	12M	10000	Deed wine die meestie teele	
		-	24M	20000	Read using diagnostic tools	
	All moving parts	-	12M	10000	Lubricate, check its flexibility	
		-	48M	30000		
	Bolts and nuts	-	12M	10000	Check if it is secure	
		-	48M	30000		
	All hoses and sleeves	-	12M	10000	Check whether there are	
		-	48M	30000	cracks, whether they are sealed and arranged correctly	

▲= Shorten the electromobile maintenance interval by 50% when the electromobile is used badly.

Phenomenon	Place	Cause	Dispose
Cannot		The battery is too low	Charge or replace
start	Ignition system	ECU failure; Poor contact or burnout	Check or replace
Start		Faults of each connecting line; Poor contact	Check or adjust
Lack of power	Motor	The motor overheats	Wait for it to cool
Poor headlights	Cable	Poor line connection	Adjust
taillights	Left and right switches	Poor or damaged switch contact	Adjust or replace
taittigints	Headlights	Bulbs, lamp holders are faulty or damaged	Adjust or replace
	DCDC	No electricity	Check or replace
The horn does	Left switch	The horn button is faulty or damaged	Adjust or replace
not sound	Cable	Poor line contact	Adjust or repair
	Horn	The horn is damaged	Adjust or replace

Listed above are the common faults of electromobiles. If your electromobile is out of order, please contact the "Keren Maintenance Station" in time, and check and repair it in time.

## **≜** Dangerous

You can't deal with electromobile breakdowns by yourself, otherwise it is easy to cause potential safety hazards or produce safety accidents. If the user deals with the electromobile failure by himself, the user shall be responsible for the safety accident.

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