

## **Chapter 1 Vehicle characteristics and safe driving rules**

### **Vehicle characteristics**

RIC 3 electric tricycle with a small outside size, Can walk through the narrow road, and parking is very convenient. It is equipped with 60V100W permanent magnet brushless DC motor, small running noise, long service life, and simple maintenance. Transmission by electronic stepless speed, driving operation nimble, simple.

### **Safe driving rules**

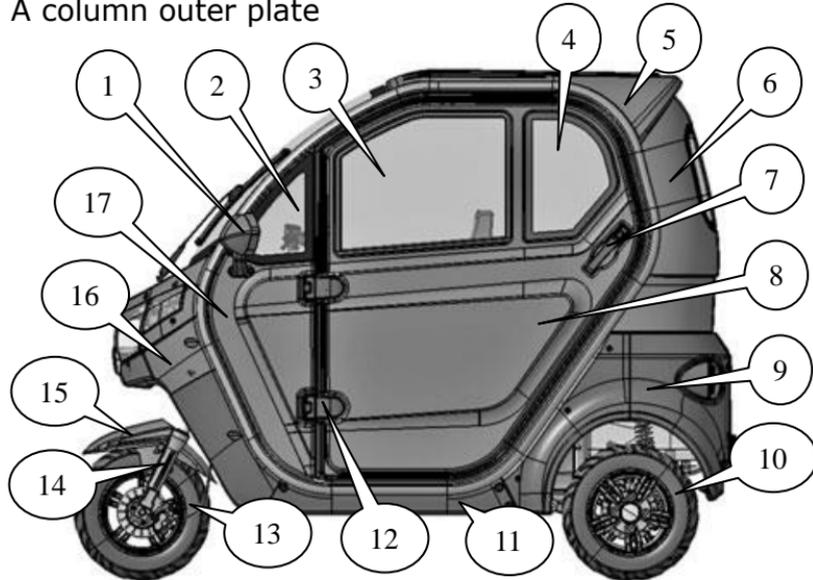
1. RIC 3 are only suitable for people who have a driver's license or who are trained and trained
2. Before driving RIC 3, be sure to do a good job of brake, tire pressure and other inspection work
3. Please adjust the seat to the position where it is easy to drive

4. Adjust the angle of the rearview mirror before driving, so that the rear of the car can be clearly observed
5. No use of a mobile phone or a single hand driving vehicle
6. In the course of driving should not be too close to other motor vehicles, is strictly prohibited to fight the road, strictly abide by the traffic rules
7. Speeding accident prone, should comply with the provisions of the speed, turn the corner to slow down
8. At the intersection of the road, the entrance should be particularly careful driving
9. Avoid driving at night with bright lights, dead eyes and no conditions

## Chapter2 Local vehicle diagram and instructions for use

### Vehicle side

1Rearview mirror,2 Front triangular glass,3 Door glass,4 Rear side window glass  
5 Car roof,6 Back plastic parts ,7 Door handle,8Door,9Rear bumper,10 Rear  
wheel,11 Side bar,12 Door Hinge,13 Front wheel,14 Front shock,15 Fender,16  
Head plastic parts,17 A column outer plate



## **Chapter 3 Inspection before driving**

Before starting to drive every day, the vehicle should be a routine inspection to ensure that the battery tricycle tour car performance and achieve the effect of safe driving

Power: turn on the ignition switch, watch the meter indicating position, when less than two grid should be charged

Wheel pressure: pressure 250 kPa

1 tire cooling can check the tires, should be regularly checked and adjusted

2 should always check whether the tire stabbed, such as leakage phenomenon should be repaired immediately

3 tire wear to the tread wear limit sign, should be replaced with new tires.

Acceleration system: do not turn on the power switch when the rotation speed to turn, no loose card hysteresis phenomenon, can be free to return

Brake system: hold the brake handle, then release should be free to return, no delay.

## **Driving operation**

1 turn on the power switch and ignition switch, the instrument should be normal, no alarm display

2 In accordance with the need to put the gear switch forward or backward gear, slow rotation to speed up the turn, to achieve the speed you want

3 To reduce speed, should first turn off speed, at the same time before and after using the brake handle.

## **Brake operation**

- 1 Reduce the speed, acceleration and turn off, at the same time before and after the use of two brake handle operation, this is very important.
- 2 Be careful when you are driving on wet or soft surfaces or under rain conditions
- 3 In the middle and high speed in the road slippery, curved, should be used before and after the brakes slow down, so as not to cause accidents

## **Parking operation**

- 1 When parking, the vehicle should be parked on a flat hard ground, otherwise it may result in injury or vehicle dumping
- 2 Stop, turn the ignition switch to twist off position, unplug the key, open the brake device.
- 3 Turn off the power switch and lock the door when you leave the vehicle

4 When leaving the vehicle, such as vehicles equipped with anti-theft devices should be enabled in a timely manner

## **Charging operation**

1 The car to the right place to charge, ventilation and heat dissipation should be good, there is no flammable material around the stack or the presence of fire

2 Turn off the ignition switch, unplug the key, open the brake device.

3 Take out the car equipped with a dedicated charger (pay attention to the charger and battery matching), one end inserted in the vehicle charging port, one end of the power plug inserted in the 220V socket

4 Watch the charging instructions on the instrument, can be assured to leave the normal display, the charger can be completed unplug the charger

## **Chapter 4 Vehicle maintenance and repair**

### **Maintenance cycle table**

1 The vehicle shall be repaired in accordance with the prescribed maintenance time:

(C:Clean out R:Replace A:Adjust L:lubricate I:Inspect)

△ The project is maintained by the special maintenance station, the user has a dedicated tool, repair parts or maintenance capabilities, but also self repair

△ △ To ensure safety, the project can only be repaired by the special maintenance station personnel

2 When the charging part is repaired or replaced, the 220V power supply must be disconnected

Times Program		Cycle	Speedometer Km				
			1000K m	4000K m	8000K m	12000K m	
Δ Δ	Motor gear oil		Every 6 months R				
Δ Δ	Rear brake system		C	I	A/L	A/L	
Δ Δ	Brake block		C	I	A	R	
Δ Δ	Front brake system		C	I	A/L	A/L	
Δ	Brake switch	1 month	C	I	A	L/R	
Δ	Front and	1 month	I/A				

	rear lighting						
Δ	Nuts	1 month	I/A				
Δ Δ	Wheels	3 month	C	I	A/L	A/L	
Δ Δ	Steering bearing	6 month	C	I	L	L/R	
Δ Δ	Batteries	12 months or charge-discharge 300 cycles R					

## Battery maintenance

- 1 Maintenance free storage battery electrolyte cover must not be opened
- 2 When the vehicle is not used for a long time, the battery should be removed and stored in a cool, ventilated and dry place
- 3 The use of the battery if the pile head corrosion occurs, you need to take out the battery to remove (with boiling water flushing) and grease

4 Charging frequency should be flexible according to the mileage and frequency of use in order to extend the service life of the battery

5 In the beginning, manned, uphill, try to avoid fierce acceleration, the formation of large current discharge, large current is easy to form sulfuric acid crystallization, thus damaging the physical properties of the battery plate

6 Vehicles are prohibited in the sun exposure, the environment is too high temperature will increase the pressure inside the battery to make the battery water loss, causing the battery activity decreased, accelerate the aging of the plate

7 Under the general situation of the battery charging 6 hours or so, can be completely filled. In the process of charging the battery temperature of more than 65 degrees C, should immediately stop charging, check the battery, the charger failure

## **Simple vehicle troubleshooting**

Fault phenomenon	Analysis of causes	Elimination method
Gearbox noise is too loud or abnormal sound	Lack of oil	Replacement or addition of specified gear oil
	Low viscosity gear oil	Replacement of gear oil
	Tooth surface damage or excessive wear caused by excessive backlash	Change gear sets
	Bearing failure	Replace bearing
	Press box or cover pressure or impact deformation	Change box
	If the turn of the noise increases or abnormal sound, the differential internal gear meshing bad, blocked, wear, lack of oil, etc.	Replace the gear set in the differential
Motor turns the wheel does not	Gear assembly with loose gear	Change gear sets
	The planetary gears in the	Change gear sets

rotate	differential gear are not in good condition (excessive wear) and slip	
	Planetary gear shaft fracture	Replacement of planet gear shaft
Oil or oil leakage	From the end of the oil leakage: 1 oil seal of the spring off the main lip of the 2 oil seal damage or wear	Oil seal replacement
	End face oil leakage between gearbox and box cover: 1Rubber asbestos pad damage (breakage) 2The end surface of the box body or the box cover is not smooth or convex 3Distortion of box or case cover 4Loosening of fastening bolts between the boxes	1 Replace gasket 2 Repair bump and add asbestos pad 3 Change box 4 Tighten the bolt as required
Motor does not turn	Low supply voltage	Check the power supply voltage to meet the

		requirements
	Connection fault	Check the connections to ensure that the connection is correct and reliable
	Controller protection	Reset the system
	Controller damage	Replacement of the same specifications Model Controller
	Position sensor fault	Replacement of the same specifications sensor
	Wiring error	Check the motor and controller wiring to ensure proper and reliable connection
Motor is not running smoothly	Motor phase deviation	Adjust the phase to ensure normal
Motor jitter	The motor sequence is not connected properly	Check the wiring of the motor and controller to ensure the correctness and reliability

## **Chapter 5 Vehicle storage**

1 storage sites should be dry, ventilation, rain, sun, around the inflammable material shall not be stacked and chemical corrosion products

2 for a long time, first to the battery fully charged, disconnect the power supply, moving parts lubricating oil cover, car cover in case of long time caused by the use of component damage or failure. When the vehicle again

3 when in use, if more than for more than 4 months, should replace the rear axle gear oil, and to the battery is fully charged

4 of all check before driving, try riding a tricycle sightseeing car battery for a period of time, in the open space to ensure safety.

## Chapter 6 Guarantees

Accessory	Warranty (Month)	Maintenance and replacement standards
Motor	12	Non overload caused by the coil burned, internal sensor damage
Chassis	12	Fracture, open welding
Controller	12	Performance failure cannot be repaired
Holzer turn	12	Not to return to the people, do not work
Rear suspension	6	Fracture, open welding
Brake assy.	6	Brake failure
Locks	6	Inhuman door lock failure
DC-DC	6	Non contact

Speedometer	6	The table is not allowed or not
Wiper assy.	6	Non functional failure
Front and rear shock absorption	6	Oil cylinder, fracture, joint desoldering
Charger	6	Non-human caused by not charging
Tires	2	Tire drum, sandwich, exposed wire, broken, cracked
Body plastic parts	2	Inhuman cracking
Combination switch	2	Inhuman cracking
Vehicle	2	Short circuit burn out due to quality

harness		
Wheels	2	The deviation caused by the non human, swing, fracture, porosity, deformation
Start switch	2	Switch out of control
Steering column	2	Non induced fracture, open welding, bending deformation
Speaker	2	Failure to repair performance
Flash apparatus	2	No electricity, no flicker

## Chapter 7 Electrical schematic

