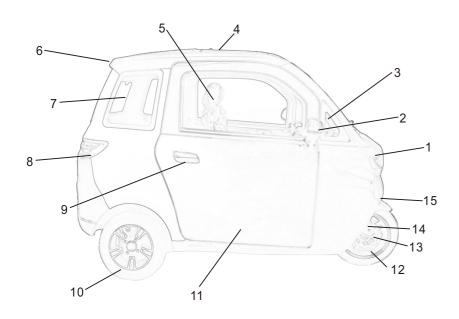
# Green Transporter Q Runner



# ☐ Part of the vehicle map and instructions for use

## 2.1 The body part of an electric positive tricycle

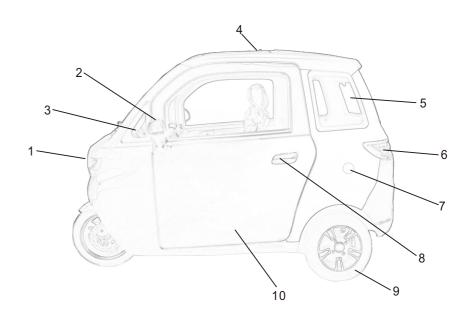


Structural sketch

The picture is for reference only, the concrete item is based on the real thing

number	Component name	number	Component name		
1	Right headlight assembly	9	Right door handle		
2	Right rearview mirror	10	Right rear tire		
3	Right Front window	11	Right door		
4	Ceiling	12	Front tire		
5	Front seat	13	Front disc brake		
6	High Position Lamp	14	Front shock absorption		
7	Right rear window	15	Front fender		
8	Right taillight				

## 2.2 Picture of the vehicle on the right left



#### Structural sketch

The picture is for reference only, the concrete item is based on the real thing

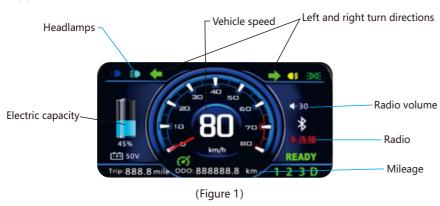
number	Component name	number	Component name
1	Left headlight assembly	6	Left rear taillight
2	Left rearview mirror	7	Charging station
3	Left Front Window	8	Left door handle
4	Ceiling	9	Left rear tire
5	Left rear window	10	Left door

#### 2.3 Gauges and indicator lights

- (1) Left and right turn indicator: the Left and right turn indicator flashes when the turn signal button is pressed.
- (2) High Beam indicator: The Tōmitsu indicator lights up when the dimming switch button is in the" ≣□ " position.
- (3) HEADLAMP indicator: When the headlamp switch button is in the " DOE " position, the headlamp indicator light will beon.
- (4) Electricity meter: when the electric door lock is opened, the battery charge is displayed.
- (5) SPEEDOMETER: When a vehicle is moving, it shows the speed at which the vehicle is moving.
- (6) ODOMETER: a record of the mileage of a vehicle.

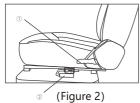
(When the electronic lock is turned on, the "ODO" below the meter is the total mileage, which automatically changes after 30 seconds, and the "TRIP" is the number of miles per TRIP.)

- (7) Radio volume display.
- (8) The radio shows on and off.



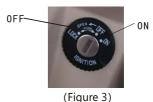
#### 2.4 Adjustable seat cushion

- (1) Push the 1 button up to adjust the seat back position.
- (2) Push the ② button up to adjust the distance between the front and back of the seat.



#### 2.5 Ignition switch

- (1) Off ("OFF")-when the switch is turned to this position, the power will be turned OFF and the car keys can be pulled out.
- (2) Off ("ON")-switch to this position, power ON, instrument ON, instrument display, can start the motor, at this point, car keys can not be pulled out.



#### 2.6 Speed Control Button

(1) The speed of this vehicle can be adjusted by the button (figure 4 the 4) speed.

#### 2.7 A speaker (figure 4 the ⑤)

(1) When you press this " switch button, the horn will make a sound.



#### 2.8 Temporary stop switch (figure 4 the ⑥)

Press" button, rear double flash open, warning to remind the rear of the car.

#### 2.9 Steering Signal Switch (figure 4 the ⑦)

Button to the" \ "mark position, it means to turn left, at this time the left turn signal and left turn indicator light;

Button to the" \( \square\) " mark position, it means to turn right, at this time the right turn light and right turn indicator light;

The button is in the middle"  $\blacksquare$ ", The turn signal goes off when the position is marked.

#### 2.10 A dimming switch (figure 4 the ® 9)

Button in the" **ID** " position, high-beam light; Button in the" **ID** " position, low-light light;

#### 2.11 Parking lock (hydraulic parking)

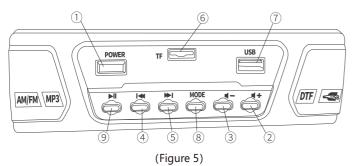
Car Lock: After the switch is closed, hold the front and rear brake handle tightly and press the parking button. At this time, the front and rear wheels are locked and the vehicle can not move. (Figure 7)

#### 2.12 Charging interface

When the meter shows low power, the user needs to charge, the charging port flip open, the external power supply into the charging port for charging.

#### 2.13 Radio

1. Short press to turn on, then short press to turn off again. 2. Volume up 3. Volume Down 4. Radio Short press up search and play, play MP3 short press for the last 5. Radio Short press down to search and play, play MP3 short press for next track 6. TF Card Interface 7. USB Port 8. Function Conversion 9. Pause/play



#### 2.14 Rear fog light switch

Rear fog lamp switch: Press the"  $0 \neq 1$  rear fog lamp to turn on, then press the rear fog lamp to turn off.

#### 2.15 Wiper switch

WIPER SWITCH:Press the " " wiper to work, wiper swing.

WIPER SWITCH:Press the " " wiper wiper wiper wiper swing.

#### 2.16 Safety Lock

Close the door with the key to prevent it from opening from the outside.



(Figure 6)

#### 2.17 Prking parking function

Parking position: When parking, tighten the handle lever, push the parking position handle forward, relax the handle, the parking position is successful.(Figure 7)



(Figure 7)

## 三、Operation Instruction

#### 3.1 Check before driving

Every day before you drive, you should make a routine check to make sure that the car is in good working order and safe to drive.

#### 3.2 Electric capacity

Open the power switch lock and watch the position indicated by the meter. When you reach the marked position, you should charge it.

## 3.3 Brake stroke adjustment

The front and Rear Combined Foot Brake; before the brake starts to play the effect of braking, the measurement of the brake pedal distance (free travel). The free stroke should be between (20-30mm) and the middle of the brake pedal.

#### Check before use

Before using a motorcycle, be sure to check the following items

Table 1

Projects	Check content
Brake	Check operation, status, and free travel. Make adjustments if necessary. Make sure that the performance of the brake is good, can be detected at low speed.
Speed control handle	Check the operation, condition and clearance of the speed control handle and adjust if necessary.
Brake Lever	Check that the operation is flexible and smooth, and lubricate/adjust if necessary.
Tires/wheels	Check tire pressure, wear and damage.
Parts/fasteners	Check all chassis parts and fasteners. Tighten and adjust if necessary.
Lights and signaling devices	Check whether the lights, indicators are correct, whether the horn performance is good.

#### Note

- A pre-service check should be carried out every time the vehicle is used. If the above items are in bad condition, should be in the car before the timely repair, so as to avoid serious damage to the car, or an accident.
- please abide by the traffic rules consciously and strictly prohibit drunk driving.

If can carry on the operation, the maintenance strictly according to the above way, this system life extension, uses in the handy, brings the greater economic benefit for you.



## Security alert

Tires (front tire pressure 35 PSI, rear tire pressure 35PSI)

should be regularly checked and adjusted tire pressure.

- (1) The tire pressure can be checked only when the tire is cooled
- (2) Should always check whether there are puncture holes in the tire, especially if there is a leak in the tire should be repaired immediately.
- (3) Check the tread for cuts, nails or other sharp inserts, indentations, dents or deformations.
- (4) New Tires should be replaced when the tread pattern reaches the tread wear limit mark.

#### Note:

Before driving an electric vehicle, you must be familiar with all the controls and functions of the vehicle. If you are not familiar with the controls and functions, please contact our sales department or our The Adjuster department.

#### 3.4 Driving operation

- 1. before starting the preparation: The car parking lock opened, to ensure that the power switch in the state of the diagram, the key into the ignition switch, rotating to the "ON" position can be; (as shown in the diagram)
- 2. Speed control handle-used to control the vehicle speed. To accelerate, turn the KNOB in your direction and vice versa in the direction you leave.
- 3. Turn on your lights when driving at night.





#### Security alert

Do not quickly rotate the operation of the Speed Control Knob, otherwise, the thunder King Electric car will quickly forward, so that the vehicle may lose control.

#### 3.5 Braking operation

(1) Control the speed control handle

To reduce the speed of the vehicle, it is important to reverse the slow rotation of the speed control Knob and use the brake operation at the same time.



#### Security alert

Avoid rough or emergency braking, otherwise there is the risk of tipping; car turn, must slow down, carefully slow braking, otherwise there will be the risk of bumpy car.



## Security alert

Special Care must be taken when driving on wet or soft roads or in rainy conditions, whether braking, accelerating or turning.

(2) Operation of the brake



#### Pay Attention

When driving down a steep incline, turn it off completely and use the rear brakes to slow down.



## Security alert

In the middle and high-speed driving, especially when the road slip, curve, do not use the brake emergency, should be slow to use the brake, so as not to cause accidents.

#### 3.6 Parking operation

When parking, turn the ignition switch to the "OFF" position, unplug the key, lock the parking lock, hold the brake handle, press the parking button.





## Security alert

- 1. The Q Runner should be parked on a hard, flat road. It should not be parked on soft or sloping ground in case of accidents such as injury, vehicle toppling, rolling and so on.
- 2. After parking, make sure to put the key switch in the OFF position, turn OFF the power switch and pull out the key. Do not leave the key in the car. If the power switch is not turned OFF, the car may be activated accidentally due to some remote control signals, the key is not pulled out may be due to children playing and accidental start, the occurrence of safety accidents.
- 3. After pulling the key out of the car, do not put the key and lock in a place that is easy for children to touch, and remind children not to play or climb near the electric car, to prevent children from accidentally starting a safety accident.

# 四

## 四、Battery Charger

## **Storage Battery**

#### 4.1 Storage Battery

The use and maintenance of batteries should strictly comply with the requirements in the battery manufacturer's manual.

After the end of the battery life, the company shall be responsible for the unified safe disposal of the used battery after recycling, and the user shall not follow the end of the battery life. The company shall be responsible for the unified safe disposal of the used battery after recycling, and the user shall not dispose of the used battery at will, to avoid causing environmental pollution.

#### 4.2 Battery wiring

Be careful not to reverse or short-circuit the positive and negative poles of the battery; do not put metal objects or tools on the battery; before wiring should be all electrical switches off. The utility model can reduce the risk of generating an electric spark when the last connection is made.

As shown in the diagram, the battery packs are connected in series, and after connecting, the protective caps are placed on each terminal post;





#### Security alert

- 1. after each use of the vehicle should be timely charge, once a week for a long time (more than 8 hours) to charge the battery maintenance.
- 2. When the dial indicator needle is in the yellow range, it should be charged in time
- 3.Do not use electric vehicles for a long time should be charged once a month, is strictly prohibited"Loss of electricity" storage.
- 4.Battery shall not contact with power, heat source and alkaline substances, avoid direct sunlight exposure, preferably stored indoors.
- 5. After driving in the summer, because the battery temperature is higher, should not charge immediately.
- 6.It is strictly prohibited to use high-pressure water gun or other means to wash the vehicle and the parts near the battery, in order to prevent the battery and Circuit Water and short circuit.
- 7. If you want to store electric vehicles for a long time, should be fully charged after the power switch off, and then put it in a cool, dry place, after every 1 month, recharge once.
- 8.Batteries release explosive gases and should be kept away from fire sources. When charging or using a battery, keep it well ventilated.

## Charger

When charging, first connect the output plug of the charger with the charging socket of the battery, then connect the input plug of the charger to an AC power supply of 220V. The Red light on the charger indicates normal connection with the power supply.

When the charger is connected to the power supply to charge the battery, the charging indicator shows a red state, indicating that the battery is in a state of constant current charging. When the charger turns to a green state, the battery capacity is basically 100% full, if the battery continues to charge, the charger enters to carry on the micro-current supplement to the battery.

When charging should turn off the vehicle power switch, pull up the parking handle, unplug the car keys, in order to prevent accidental factors make the vehicle suddenly start.

After charging, should first unplug the plug, and then unplug the plug connected to the battery, is strictly prohibited in the case of non-charging, for a long time to connect the charger to the AC power supply.



#### Security alert

1. Chargers should be used and stored to prevent the infiltration of liquid and metal debris into the charger, in order to prevent the charger internal short circuit damage charger.

2. Must use this car equipped with the charger to charge, do not mix the charger and battery must match to use, do not charger wires and other wires winding, mopping, trampling, so as to avoid short-circuit or other accidents.

3. Check whether the charger light will turn "Green" when charging. In case of abnormality, the power should be cut off immediately, and the battery and charger together to repair and check, prohibit private disassembly of the charger for maintenance, to avoid electric shock.

4. When carrying the charger, must not violent bump or collision, otherwise easy to cause damage.

5.It is strictly forbidden to charge the battery at night after rest without anyone looking after it. It is strictly forbidden to be too close to people's living environment when charging, and to place inflammable and explosive materials and gases around it, otherwise it may cause fire and other accidents.

6.must be in a well-ventilated and well-cooled environment charge, do not charge in a narrow, closed space, do not cover the charger, battery box on and around the top of any items.

7.the charger in the process of work will produce a certain amount of heat, the bottom of the charger is prohibited to place flammable and explosive items, such as flammable plastic or foam, etc. . If you smell a strange smell during charging or find that the case of the charger is too hot (the surface temperature of the case is over 65 ° C) , please stop charging immediately and send it to the Maintenance Department for Inspection and disposal.

# 五、Maintenance and repair

#### 5.1 Storage Battery

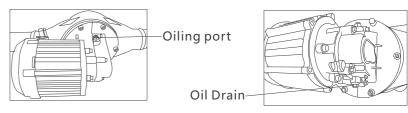
#### 5.1 Upkeep

Maintenance cycle is based on the mileage of the maintenance period, is the implementation of regular maintenance and lubrication of the guiding basis. If the car is being driven at high speed for long periods of time under harsh conditions, it must be serviced more frequently. If the thunderbolt is undergoing major repairs or has had a crash, then must ask the maintenance department personnel to carefully check the thunder King Electric Car's main components repair or replacement has been displaced or damaged parts, to ensure safe driving effect.

(1) The rear axle needs to change gear oil every 2000 km;

(2)Open the bolt to flow out the gear oil and tighten the bolt, open the bolt and pour into the gear oil (85W/90gl-4) about 150 ml, then tighten the bolt after refueling.

(3) Motor should try to avoid contact with water, not in the higher water.



Vehicles should be in accordance with the provisions of maintenance and maintenance, so that you can ensure the safety of driving, but also extend the life of the vehicle. If you need service, please send your vehicle to our special service center.

#### Maintain the maintenance schedule

Projects	The mileage or time of maintenance	Content
Steering bearing	Per 1,000 km	Check and lubricate
Brake gear	Monthly	Check and adjust
Fasteners	Per 1,000 km	Check and tighten
Tires	Per 1,000 km	Check and adjust
Storage Battery	Monthly	Check and clean
Motor	Monthly	Check



#### Pay Attention

In order to ensure the safety and reliability of the thunder King Electric Vehicle, it is not allowed to change the original parts of the company or the same parts of the same quality when the thunder King Electric Vehicle is refitted, repaired or maintained. If the use of other quality parts, will affect the performance and operation of electric vehicles.



## Security alert

To ensure the safety of personnel, no matter what the maintenance operation, must first turn off the power, the car parked on a flat hard ground and fixed.



## Pay Attention

If the car parked in more than a month or during the winter period to stop using, it is necessary to do a good job of maintenance, to prevent the tires, batteries and other deterioration, aging and corrosion.



## Pay Attention

The rear axle differential box of the vehicle should be regularly changed oil maintenance.

(3)Unless you or your vehicle owner have a full set of repair tools and maintenance information and are a qualified mechanic, you should hire a professional to do the repairs.

(4)For the sake of safety, we advocate that these items should be maintained or repaired by maintenance personnel.



## Pay Attention -

1.If driving in a particularly wet or dusty area. It is better to shorten the required maintenance period.

2.Often when driving on the road surface, in order to maintain vehicle performance, please be sure to maintain.

14

## Simple troubleshooting (table 1)

## (—) Power supply and braking

Failure phenomenon	Reason	Processing method
	The key switch is in the "OFF" position or the forward/backward shift is in the middle gear position	Select the key to the "No" position select the shift switch driving direction
	The accumulator has no electricity	Recharge the batteries
The vehicle can	Battery wiring electrode corrosion or loose	Clean the corroded parts and tighten the link nut
	Loose or damaged key switch wire	Connect the wire and repair the key switch
	Accelerator switch damaged	Change the switch
	The power cut-off switch is not on	Inspect faulty parts for repair or replacement
	Drive Motor failure	Inspect faulty parts for repair or replacement
	The parking button is not unlocked	After gripping the brake handle automatically unlocks
The speed of the car is unsteady	Accelerator damaged	Change the accelerator
Abnormal sound	Drive Motor bearing wear	Replacement of bearings
of drive motor	Motor damage	Repair the damaged parts or replace the motor
	Charger damaged	Charger damaged
The battery won't charge	Bad contact with charger	Check charger failure, repair or replace parts
	The accumulator is damaged	Plug the charger properly
	Battery overdischarge	Check or replace the battery

# (二) Suspension and steering system

( Table 1)

Failure phenomenon	Reason	Processing method
Uneven wear of tyres	The tire pressure is too low	Inflate to recommended air pressure
	Direction Column Shaft Lubricant Solidification	Inject the right amount of oil
	The movement of the hinge loss of oil	Add lubricating oil for each moving part
	Steel bowl worn	Replace the Steel Bowl
To Swing (a swing, tremor,	Uneven inflation pressure of the tire	Adjust the inflation pressure of the tire
or vibration) in a direction	Direction Column Lock Nut loose	Tighten the lock nut
	The direction loosens the lock nut	Tighten the lock nut
	The wheels swing	Repair or replace bearings, front axle
	Loose hub nut	Tighten the nut
The brake	The pressure of the tire is uneven	Adjust the inflation pressure of the tire
went off	Uneven wheel braking	Adjust the pump shoe
	The brake shoes are badly worn	Switch brake shoes
Not Enough Brake power	The brake tubing is leaking oil and the brake fluid is not moving	After exhaust, tighten the oil pipe joint and add enough brake fluid
	Grease or water on brake shoes and brake discs	Purging

# (三) Electronic Control System

( Table 1)

Failure phenomenon	Reason	Processing method
	The key switch shorted out	Repair or replacement
Turn on the key switch power	Loose or short circuit connection	Fasten the joint or connect the wire
indicator no display, no contactor	Oxidation of battery joint	Smooth and clean with Gauze
suction"TA-DA" sound	Damage to control circuit or power cut-off switch	Replacement
	The polarity of the battery is reversed	Switch polarity
	The accelerator is not responding	Readjusting
Turn on the key	Forward/backward switch damaged	Check, repair, replace
switch power indicator has a	Accelerator failure	Inspect faulty parts for repair or replacement
display, a contactor suction"TA-DA"	Contactor contact failure	Inspect faulty parts for repair or replacement
sound electric car does not	Speed control failure	Inspect faulty parts for repair or replacement
start	Drive Motor failure	Inspect faulty parts for repair or replacement
	The controller is damp or drenched	Check and dry
Vehicles Stop and go	Circuit overcurrent and overheat protection system not started	Check and rule out whether the parking device has been fully released, whether long-term loading, climbing or replacement of the controller
	The circuit joint is loose	Fasten the connector and connect the wire
The vehicle	Low Battery	Battery charging
starts and stops	Drive Motor failure	Inspection and maintenance

#### 5.3 Battery maintenance

This machine adopts closed type dry storage battery (no water added)



## Pay Attention -

Do not remove the top cover of the sealed storage battery solution.

- (1) when the vehicle is not used for a long time, please remove the battery and store it in a cool, ventilated and dry place after it is fully charged.
- (2) when corrosion occurs at the head of the storage battery pile, please remove the storage battery. Rinse with boiling water



## Pay Attention -

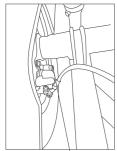
When the battery is removed, the ignition switch should be closed, and then remove the negative pole, install the positive pole and then install the negative pole, do not install the positive and negative pole wrong.

#### 5.4 Hydraulic brake maintenance and maintenance (please send to the designated repair shop maintenance)

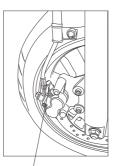
Liquid level: the liquid level is no oil need to refuel.

eflating: as shown, open the lid and tighten the bolt before operating the brake handle (pedal). Discharge air several times.

ighten: after exhaust, hold the brake handle tightly and tighten the bolt cover.



Rear brake exhaust port Front brake exhaust port



# 六、Vehicle storage

#### 6.1 Store up

For long-term storage, such as in winter, a number of steps need to be taken to prevent failure or deterioration due to prolonged absenteeism. In addition, in preparation for storage, also need to carry out some repair work, otherwise, once the use of the Q Runner, often forget to carry out this repair work.

- 1. Replace the rear axle gear oil.
- 2. Cover the Q Runner with a hood.

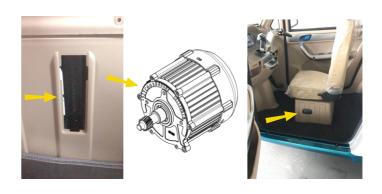
#### 6.2 From time to time

- 1. Remove the hood and wipe the car clean. If the car has been in storage for more than 4 months, replace the axle gear oil.
  - 2. If necessary, charge the battery and install it.
- 3.Do a pre-drive check-up on all items, and test ride the Thunderbolt at low speed for a period of time to ensure safety in areas where traffic is not heavy.

## 七、Vehicle Identification

#### 7.1 Vehicle type and number

- 1. 1. The frame number of the Thunderbolt Emperor Electric Vehicle is located in the center of the front seat toolbox. The frame number can be seen by opening the number cover. Three bags of maintenance and replacement parts, also need to provide the above number.
- 2. The motor number is located on the boss of the inner end face of the motor shell:
  - 3. The vehicle sign is riveted on the lower left side of the front seat.



## 八、Key technical data

	Projects	Specification parameter
Vehicle	Identification Code (VIN first 8 digits)	HW1KCU20
Passeng	ger (including driver) rated person	3
Type of	brake/mode of operation (front/back)	Disc (foot brake)/disc (foot brake)
Tire pre	ssure (front/back) kPa	250/250
	ım speed km/h	54
Energy method	consumption rate (working condition /isokinetic method)	61/52
Remain	ing power warning mileage km	4
Warning	g margin of residual power %	2
	Motor type	142YC6030405NA
	Туре	Permanent Magnet synchronization
	No-load current A	≤9.0
Moto	rated voltage V	60
tor	Rated output power W	1500
	Rated speed r/min	3000
	Rated Torque N.m	4.78
	Rated working current A	31
	Model number	YCK060065A
Controller	Input Voltage (V)	60
rolle	Under voltage protection value (V)	52
	Overcurrent protection value (A)	65
Battery	type	Lead acid battery
_	capacity	6-EVF-58 12V/58Ah (5 in series)
Continu method	ous mileage (condition /constant speed method) km	90/105
Steering	Form	The steering wheel
Type of	charger	External placement

# 九、After-sales service

#### - General Provisions

Thank you for buying our electric motorcycle. In order to protect your legitimate rights and interests, and to facilitate us to fulfill our three-pack obligations and responsibilities, please keep your warranty card properly. With the card and purchase invoices to the car sales unit and our local service station to enjoy three packages of service.

#### 二、The three-pack principle

- 1. When you buy a car, you can ask the sales staff to provide the correct method of use and maintenance matters, to provide a valid invoice and warranty card and warranty unit address, contact telephone, etc.
- 2. The user should follow the instruction manual to use correctly. According to the "Law of the People's Republic of China on the protection of consumer rights and interests" and the state regulation on three packages of products, the company shall fulfill the obligations of three packages if the performance failure occurs due to the product quality.
- 3. "Warranty" service shall be provided for any damage or performance failure of vehicle parts caused by product quality or defects. During the warranty period, no relevant indirect loss or liability shall be borne, regardless of the replacement of any parts, the warranty period on the original accumulated.
- 4. the user please in the second month after the purchase to our professional aftersales service station for the first time maintenance, after every three months to our professional after-sales service station for maintenance.

Free service during the three-package period content:

The whole vehicle warranty period is one year or 6000 kilometers from the date of purchase (according to the invoice), exceeding one of them, three packages shall be invalid; Beyond the three package scope and in the vehicle effective life cycle (10 years or 50,000 km), the company provides original parts, paid services.

Three-pack accessory replacement commitment:

- A) three packages within a three-pack period, committed to provide two hours.
- B) when spare parts are available in stock, 2 hours after the three-pack period. When spare parts are not available, feedback to the back office in time, reply within 2 days, and the spare parts arrive within 5 days.
- C) due to the problems caused by the improper use of users, the company provides paid after-sales service, with preferential prices to provide original accessories, in accordance with Article B.

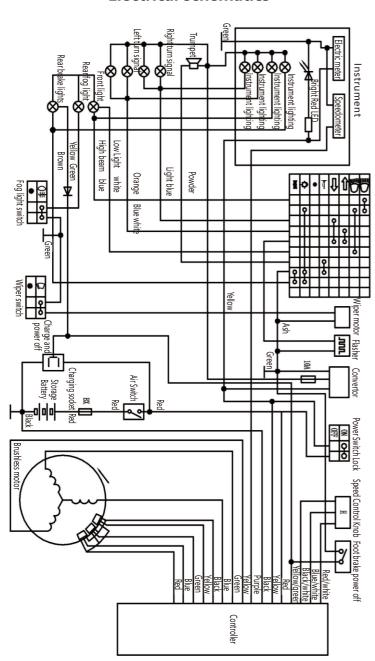
#### ■ Does not fall within the scope and content of the "Three packages"

- 1. Exceeding the time limit and scope of the prescribed"Three packages" from the date of purchase.
- 2.Crash, crash, overload, speeding and other human factors caused by the failure.
- 3.Not according to the user manual requirements of the use, maintenance, custody; no maintenance card, invoice or ticket card is inconsistent.
- 4.The user does not maintain in the designated special service network, self-modification, decomposition, destruction of parts and components state.

#### 四、Procedures and procedures

- 1. Letter from the user, should state the breakdown details and the frame number, motor number, so that I plant after the analysis of the answer and processing.
- 2. All of the warranty, replacement scope of the cost of materials by my plant responsible (excluding transportation costs, telecommunications costs, lost labor costs), who do not belong to the warranty, replacement scope, I plant to provide technical services, but the cost of your responsibility.

# **Electrical schematics**



# Maintenance registration form

Serial	number	1	2	3	4	5	6	7	8	9	10	
7	Date											
Mileage	(KM)											
	Failure phenomenon											
Projects	Analyze the situation											
	Notes											
	Maintenance man											
	Satisfied											
User F	I'm almost satisfied											
User Rating	Not satisfied											
	I'm not satisfied											
User	signature											