

## Contents

General:.....	2
Warning.....	2
Safety Instructions .....	2
Carts Operation process: .....	2
Running-in of new car: .....	2
Tips for better experience.....	3
Rules of safe using/operation: .....	3
Storage Instructions .....	4
Charger using Instructions: .....	4
Vehicle Warranty: .....	5
Warranty Terms and Conditions:.....	5
Warranty period:.....	5
Warranty Coverage .....	5
Warranty Void if:.....	5
Warranty Excludes: .....	5
The vehicle structure and appearance .....	6
1. The Z Series .....	6
2. The WIND S Series.....	7
3. The WIND T Series.....	8
Main technical parameters .....	9
1. The Z series .....	9
2. The WIND S Series.....	10
3. The WIND T Series.....	11
Structure and appearance parameters of the whole vehicle .....	12
1. The Z series .....	12
2. The WIND S Series.....	15
3. The WIND T Series.....	16
Maintenance items and cycle .....	17
1. The Z series .....	17
2. The WIND S series.....	17
3. The WIND T series.....	17

## General:

The Information in this car is to show the best ways to use your carts.

## Warning

- Personnel who do not have the driving qualifications shall not drive the vehicle!
- The accelerator pedal and brake pedal cannot be pressed at the same time, otherwise it will damage the control system, burn the motor, and even a serious accident!
- Electric vehicles are not suitable for work on a long slope of more than 12%, a length of more than 50m a long time, otherwise excessive working current may burn out the motor or controller, seriously affect driving safety!
- WIND electric vehicle appliances are banned from water, especially the controller, users must pay attention to when cleaning the vehicle
- The vehicle charging plug cannot be touched by hand, otherwise the voltage above 48V is enough to hurt people.

## Safety Instructions

- shall read the warning signs carefully and strictly observe the operating instructions
- Please read the use manual carefully before using the electric vehicle and be familiar with the operation of the vehicle
- Carry the number of passengers according to the regulations, strictly prohibited overload will lead to the performance and safety of the vehicle
- Shall not modify the vehicle in any way, changing the weight distribution of the vehicle, reduced stability or increasing factory rated speed. Any modification without the consent of the manufacturer may cause serious personal injury
- vehicles must drive speed limit when used in complex environment
- driver and passenger do not extend any part of the body outside the car, be sure to sit firmly
- do not turn the steering wheel at high speed to avoid rollover
- On the downhill, please control the speed, and do not turn sharply, to prevent danger
- When the terrain conditions are poor, please slow down
- Avoid direct exposure the Golfcart to heat sources during storage or charging.

## Carts Operation process:

1. Position switch (F, N, R) should be on the neutral position (N) before Key is ON
2. Switch on the power key
3. Release the brake pedal for parking
4. Press the forward/backward switch and make sure lock it is in the desired position
5. Accelerator pedal should not be pressed until the dashboard indicators completely ready.
6. Step down on the acceleration pedal smoothly, then the car runs.

## Running-in of new car:



Since some models are equipped with an electronic park brake (EMB), you should pay attention to place Run/Tow switch in two positions before performing any of the following:

- Disconnecting or connecting battery cables
- Towing this vehicle
- Extended storage

## – Servicing the vehicle

The procedure of running-in should be done to the parts of the motor before it works with the maximum load to guarantee the reliability of the cart to extend its life.

The period of running- in is one month and procedure should be undergone as follows:

- Be sure to slow slowly when the vehicle is started
- Cart's batteries must be charged for at least 10 hours upon receipt from the supplier
- If possible, avoid driving on roads in poor condition
- It is not allowed to depress the accelerator hard and frequently
- Check and fasten the fixture parts of each connection
- Tire pressure table;

Model	Recommended (PSI) when cold
WIND – Normal suspension	20-25
WIND – Off Road suspension	20

## Tips for better experience

- Upon receiving a new cart, the battery should discharge and then fully recharge for minimum 5 cycles within first week to get the battery at best performance (capacity and volt)
- Maintaining the usage of the cart at least once a month increases the efficiency of the batteries.
- Electric Cart should be placed in a cool, and dry place after using
- After discharging (Regardless of the driving period and mileage) the cart should be fully recharged on the same day and no later than 24 hours, otherwise the life of the battery will be negatively impacted
- The best storage temperature of lead acid batteries will be 20 °C to 25°C, as the temperature rises, the self-discharge will become more and more serious
- Flooded batteries use an acidic liquid, in the process of maintenance of the battery, you should avoid direct contact with the acidic liquid, or its leakage on the clothes, in case that happens, clean with water immediately
- Check the braking system regularly. If there is any problem, please contact us

## Rules of safe using/operation:

- Do not step-down acceleration pedal while switching on the power key
- Do not keep the motor running idly for long time
- Increasing cart's speed should be gradually by stepped down the acceleration pedal slowly, Depressing the accelerator suddenly hard and frequently, may shorten the life of the motor and the efficiency of the batteries.
- After each charging cycle, periodically check the battery's density and acidic liquid level, and add distilled water as necessary.
- Charge the cart's batteries after using each time for a maximum period of 24 hours
- Do not let the battery charge level falls below 20%
- Do not switch ON your cart during charging to avoid damages of electronic components
- Connection of the batteries must be in a good condition
- Ensure that the cart is switched off after end of using, and remove the starter key from the switch
- Do not permit unqualified people drive the cart
- The cart cannot be over-loaded, otherwise the motor will be damaged
- Carts safety speeds (electronically locked)

	2+2 normal Susp	4+2 normal Susp	2+2 Lifted (Off-Road)	4+2 Lifted (Off-Road)
Optimum safety Speed	28kmh	28kmh	28kmh	28kmh

## Storage Instructions

- Electric cart should be placed in a cool and dry place
- Place blocks behind the tires and disengage the parking brake, this relieves pressure on the brakes while in storage
- Check tire pressure to confirm that they are at the correct tire pressure before storing. This will ensure that the tires maintain their shape
- The best storage temperature of lead acid batteries will be 20 °C to 25°C, as the temperature rises, the self-discharge will become more and more serious
- Fully charging the battery before storage is a must to maintain battery efficiency
- Golfcart's battery are typically recharged while stored to maintain battery health
- During storage or charging in environments above 30°C avoids direct exposure of the battery to heat sources
- During the long storage periods (more than 7 days) the battery level should be monitored every 2-4 weeks, if the battery is stored for a long time without step-up charging it will accelerate the corrosion which reduces the service life of the battery.
- For flooded battery: periodically check the battery acidic liquid level/density; if it is lower than the standard, you should, immediately, add distilled water to it
- For lithium and free-maintenance batteries, periodically check and refill the batteries every 2-4 weeks to prevent excessive discharge.
- Stored Carts must be fully recharged before being reused



As an advanced procedure (*carried out by specialists*), disconnect the batteries cable from the electrical circuit in order to protect batteries from deep self-discharge due to parasitic loads such as lights, radios, cart computer system, motor electronics and ground faults

## Charger using Instructions:

- Connect the charger to the battery first, then connect it to your AC power
- When charging ends, unplug the charger from the AC power first, then unplug the charger from the battery
- It is prohibited to open the housing of the charger
- The charger should be stored in safe and dry room with good ventilation
- The charger should be packed properly if not used for long time
- The charging power supply shall adopt 16A socket, and the charging wire harness shall meet the requirements of 16A current
- Do not disconnect the charging cable from the cart while charging until the charger indicator remains green constantly



- The battery should not be used or charged in the case of insufficient battery fluid (the liquid level must be higher than the plate level by at least 1.5cm); the level and density of the acidic liquid must be adjusted before
- Avoid direct exposure the Golfcart to heat sources during storage or charging.
- charge vehicles away from direct sunlight in environments above 30°C.)
- Wear protective equipment when handling batteries including gloves, eyewear... etc.
- Avoid bringing metal into contact with batteries
- Do not connect the positive pole to the negative one to avoid any short circuits
- The vehicle charging plug cannot be touched by hand, otherwise the voltage above 48V is enough to hurt people.



## Vehicle Warranty:

### Warranty Terms and Conditions:

Raya Auto guarantees the carts against manufacturing defects, during the warranty period indicated in the cart's warranty card.

### Warranty period:

Warranty period starts with purchase date up to the expiry date mentioned in the cart's warranty card.

### Warranty Coverage

Motor, Control unit, Charger and Batteries.

### Warranty Void if:

- Malfunctions that result from misuse, whether the malfunction was a direct or indirect result of misuse
- Not adhering to periodic maintenance
- Failure to follow cart batteries charging instructions
- Improper storage of the cart (poor storage means not following the storage instructions)
- Not charging the cart batteries for more than a month
- Change/Replace/Modify any of wiring system
- 50% of batteries shows dead sign simultaneously, are clear indicator for infrequent charging routine
- Washing the cart improperly, so that the electrical system in it malfunctions
- Unauthorized repair(s)

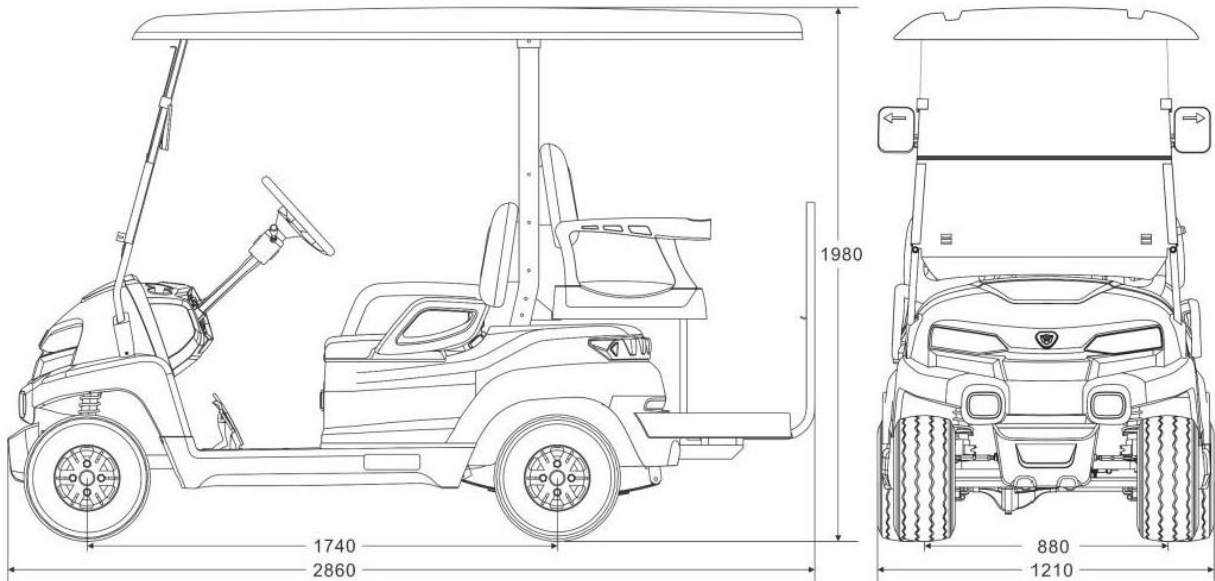
### Warranty Excludes:

Regular maintenance items and consumable parts (brake pads, bulbs.... etc.)-External parts such as "fibers, tires, seats, side mirrors, rubber parts, glass, front/rear lights and side signs... etc.

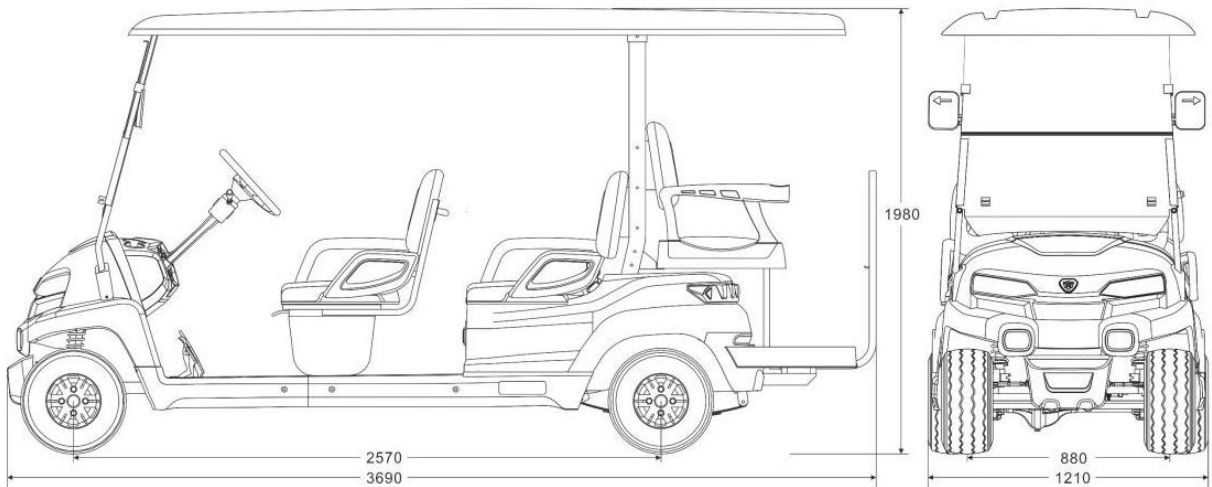
## The vehicle structure and appearance

### 1. The Z Series

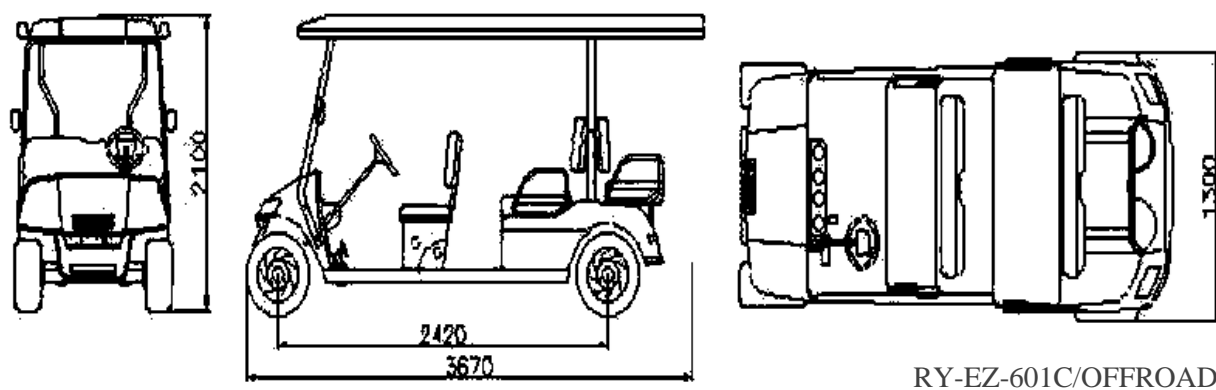
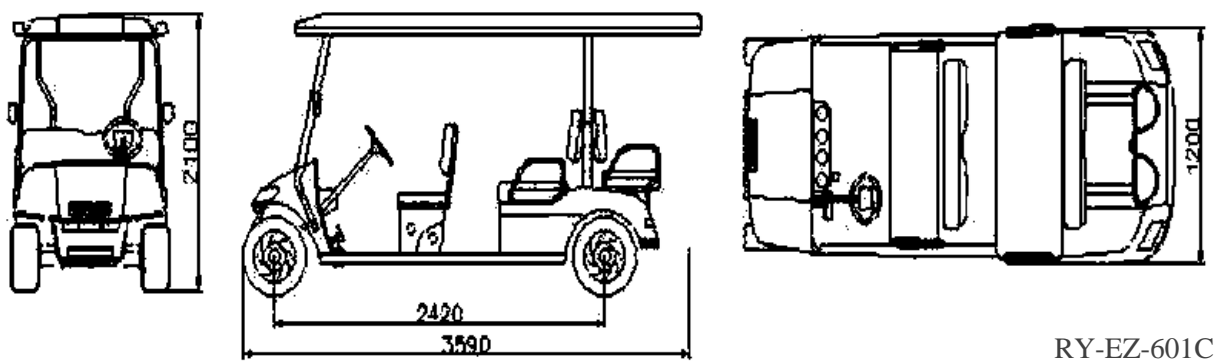
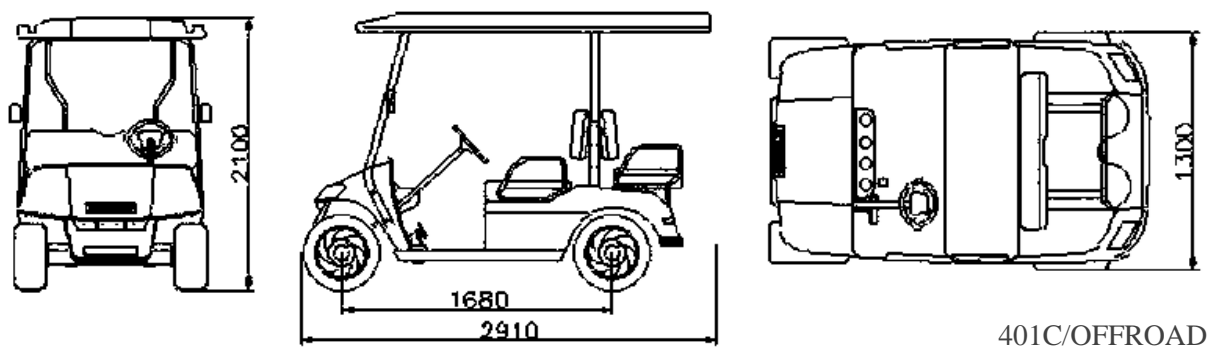
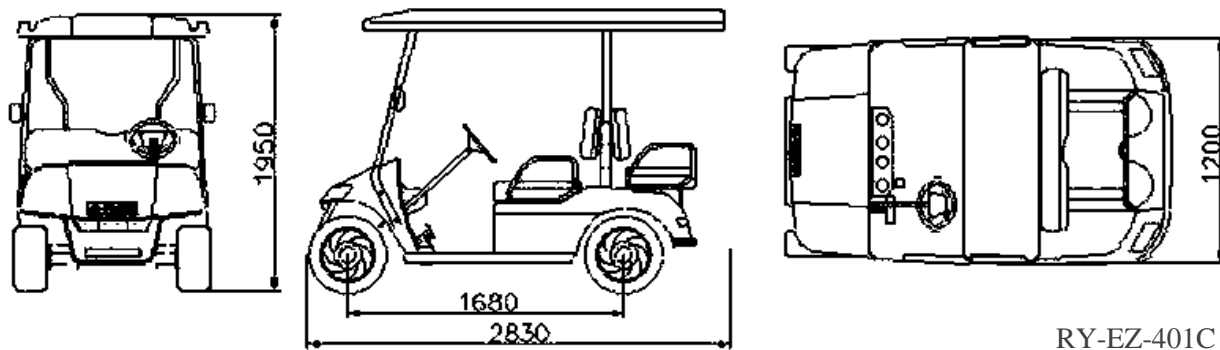
Z2C



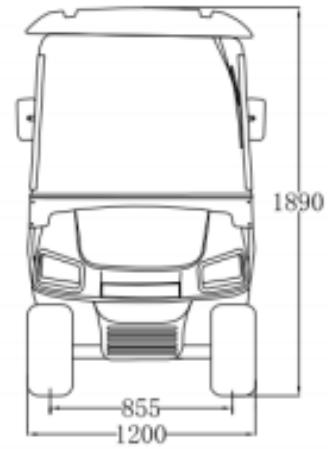
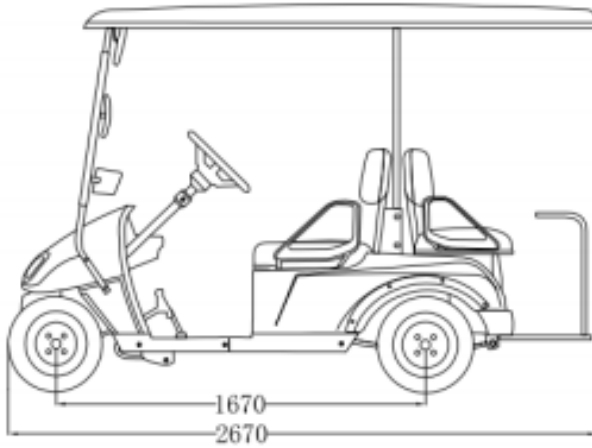
Z4C



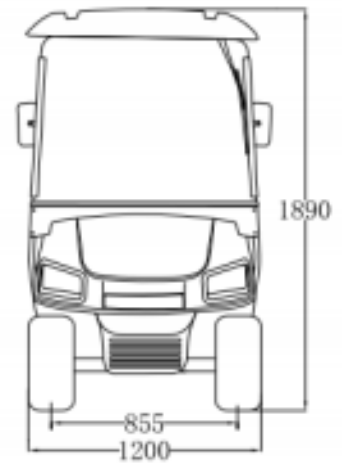
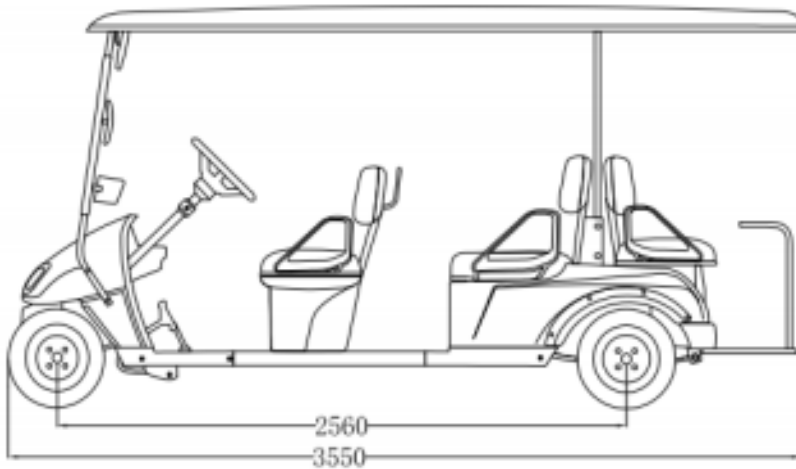
## 2. The WIND S Series



### 3. The WIND T Series



L2A Golf cart2+2



L2A Golf cart4+2



## Main technical parameters

### 1. The Z series

Model	Z2C	Z2CJ	Z4C	Z4CJG
Model Description	WIND, Z series, Golf Cart, 2+2, Normal Suspension	WIND, Z series, Golf Cart, 2+2, Off-road Suspension	WIND, Z series, Golf Cart, 4+2, Normal Suspension	WIND, Z series, Golf Cart, 4+2, Off-road Suspension
Price	XXXXX	XXXXX	XXXXX	XXXXX
Specifications				
Passenger Capacity	4		6	
Controller	Empower® Controller (48V 400A)			
Batteries	Torch brand deep cycle lead-acid battery 6*8V 170AH			
Motor	5KW AC 48V OEM Zhongyi Brand Motor			
Charger	Onboard/ 48V / working current 25A			
Charging Time	8 - 10 Hr			
Range*	60 - 80 km			
Max Speed (set to safety speed**)	35km/h	40km/h	35km/h	40km/h
Braking System	Rear brake drum + composite pedal brake	4-Wheel hydraulic disc brake + electromagnetic park	Rear brake drum + composite pedal brake	4-Wheel hydraulic disc brake + electromagnetic park
Brake Distance	<6 m			
Suspension	Independent front suspension - Leaf springs with hydraulic shock absorbers for rear suspension			
Steering	Self-compensating double reduction helical rack & pinion			
Chassis	GALVANIZED High strength structural steel			
L*W*H	2840×1230×2170mm	2900×1230×2230mm	3720×1230×2170mm	3780×1230×2230mm
Cart's weight(w/batteries)	585kgs	595kgs	635kgs	645kgs
Payload	340kgs	340kgs	510kgs	510kgs
Windshield	Foldable clear Acrylic			
Turning Radius	2.2m		3.5m	
Climbing Capacity	≤25%			
View Mirrors	Right/Left View Mirrors with Led signal			
Lights	Lensed Headlight, High/low beam light, daytime driving lights, Tail light, flowing water turing lights			
Tyre	205/50-10 6PLY	AT20×10-12	205/50-10 6PLY	AT20×10-12
Rim	ATV tyres Aluminum			
Multimedia System	9" multimedia screen with Bluetooth connectivity and 2 speakers			
Bumpers	Non	Front & Rear	Non	Front & Rear
Seats	Luxury seat with safety belt per seat			
Dashboard	New looking like to a luxury automobile dashboard with built-in 9” screen			
Side Ice Box	Options	Included	Options	Included
Golf Cart Cover	Optional			
Warranty Details	18 months			

**\*Note:** Actual vehicle range and power consumption may depend on the individual user, driving style, vehicle speed, environmental conditions, outside temperature, route profile, and other reasons.

**\*\*Note:** Driving at a moderate speed helps to keep the vehicle's components in good condition and its battery efficiency high.

## 2. The WIND S Series

Model	RY-EZ-401C	RY-EZ-401C-Off	RY-EZ-601C	RY-EZ-601C-Off
Model Description	WIND, Golf Cart, 2+2, Normal Suspension	WIND, Golf Cart, 2+2, Off-road Suspension	WIND, Golf Cart, 4+2, Normal Suspension	WIND, Golf Cart, 4+2, Off-road Suspension
Price	XXXXX	XXXXX	XXXXX	XXXXX
Specs				
Passenger Capacity	4		6	
Controller	Toyota AC Controller 48M350-350A (Japan)			
Batteries	Torch brand deep cycle lead-acid battery 6*8V 170AH			
Motor	Toyota 6.7 HP (5KW) AC 48V			
Charger	Onboard/ 48V / working current 25A			
Charging Time	8 - 10 hr			
Range*	60 - 80 km			
Max Speed (set to safety speed**)	35km/h	40km/h	35km/h	40km/h
Braking System	Advanced 4-Wheel Hydraulic dual circuit brake system			
Brake Distance	<6 m			
Suspension	leaf spring with hydraulic damper	Independent suspension, helical spring with hydraulic shock absorber	leaf spring with hydraulic damper	Independent suspension, helical spring with hydraulic shock absorber
Steering	Mechanical Steer on one side	Mechanical Steer on both sides	Mechanical Steer on one side	Mechanical Steer on both sides
Chassis	GALVANIZED High strength structural steel			
L*W*H	2712×1200×1760 mm	2712×1210×1920 mm	3442×1210×1920 mm	3442×1210×1920 mm
Cart's weight(w/batteries)	610kgs	630kgs	690kgs	710kgs
Payload	400kgs	400kgs	600kgs	600kgs
Windshield	Foldable clear Acrylic			
Turning Radius	2.2m		3.5m	
Climbing Capacity	≤25%			
View Mirrors	Right/Left View Mirrors			
Lights	Headlight, Tail light, turing lights			
Tyre	205/50-10 6PLY	23*10.5-12	205/50-10 6PLY	23*10.5-12
Rim	ATV tyres Aluminum			
Multimedia System	9" multimedia screen with Bluetooth connectivity and 2 speakers			
Bumpers	Non	Front & Rear	Non	Front & Rear
Seats	comfortable seat with safety belt per seat with storage compartment under rear seat			
Golf Cart Cover	Optional			
Warranty Details	18 months			

**\*Note:** Actual vehicle range and power consumption may depend on the individual user, driving style, vehicle speed, environmental conditions, outside temperature, route profile, and other reasons.

**\*\*Note:** Driving at a moderate speed helps to keep the vehicle's components in good condition and its battery efficiency high.

### 3. The WIND T Series

Specs/ vehicle	4 Seaters- Normal Suspension	6 Seaters- Normal Suspension
Motor	6.7HP (5KW) AC MAHLE® motor	
Controller	Curtis AC 48V/400A	
Charger	On-board, Input 230V, Output 48V25A	
Dimension	2375*1206*1920mm	
Ground Clearance	105mm	
Battery	6*8V/170AH, flooded batteries	
Wheelbase	front 870mm/ rear 990mm	
Range*	60 - 80 km	
Charging Time	≤8 Hours	
Chaises	High Strength Galvanized Chassis	
Brake	Drum Braking System Rear Wheel	
Suspension	Leaf Spring with Hydraulic Damp	
Steering	Mechanical Steer on one side	
Speed (set to safety speed**)	30 KM/H	
Included Equipment	Colored odometer	
	Premium Seats	
	Foldable windshield	
	Aluminum RIM	
	Bluetooth® connectivity	
	2×Speakers	
	Safety Belts	
	4×USB Charger	
	Rear Cup Holder with Armrest	
	Side Mirrors with Led Turning lights Signals	
	9'' multimedia screen with Rear camera	
	Storage compartment under rear seat	
	Side ice box	

**\*Note:** Actual vehicle range and power consumption may depend on the individual user, driving style, vehicle speed, environmental conditions, outside temperature, route profile, and other reasons.

**\*\*Note:** Driving at a moderate speed helps to keep the vehicle's components in good condition and its battery efficiency high.

## Structure and appearance parameters of the whole vehicle

### 1. The Z series

1. Rear view mirror
2. Folding glass
3. Front bracket
4. Headlight right
5. Tire
6. Front bumper
7. Front mark
8. Daily running light
9. Headlamp left

10. Charging socket
11. Side guard
12. Seat
13. Top Roof
14. Back bracket
15. Ball boy guardrail
16. Ball bag box
17. Refrigerator
18. Ball board



19. Steering wheel
20. Combination switch
21. Cup box
22. Brake pedal assembly
23. Seat armrest
24. Rear tail light left

25. Ball boy armrest
26. Back rest
27. Ball washer
28. Rear taillight right
29. Reflector
30. Station reflector

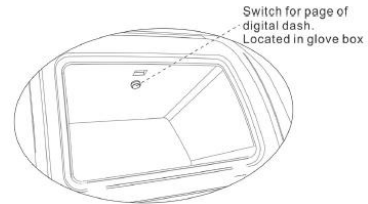
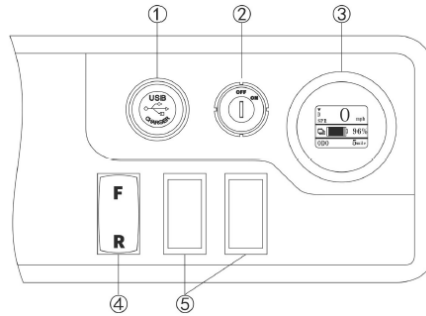


31. Intermediate item box
32. Direction column
33. Front bracket decoration cover
34. car U SB
35. Forward and back switch
36. Ignition
37. Round instrument
38. Storage box



## Dashboard and control operation

### Dashboard

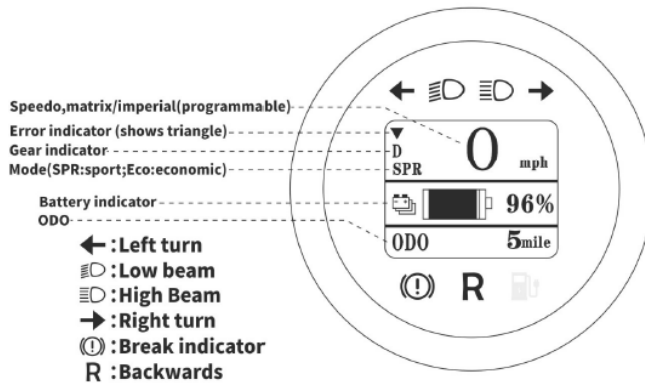


1. vehicle USB
2. ignition switch
3. Round instrument

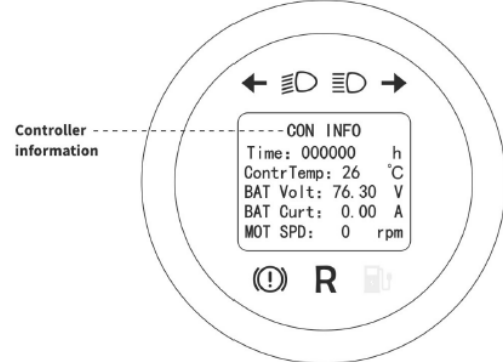
4. Forward and back switch
5. Panel block cover

### Round instrument

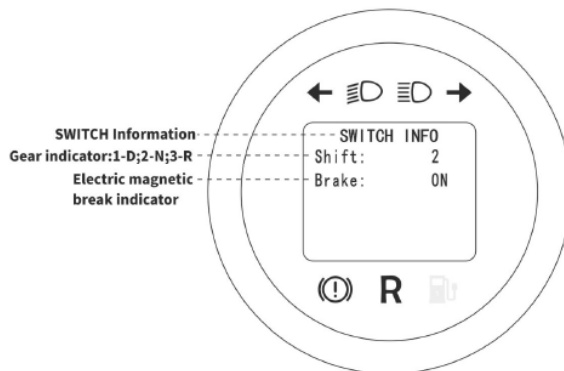
#### Main page



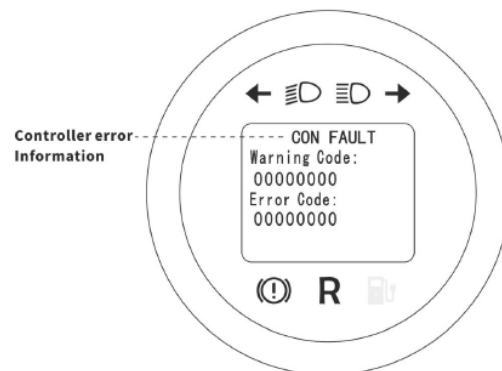
#### Page 1



#### Page 2

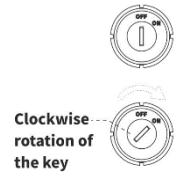


#### Page 3



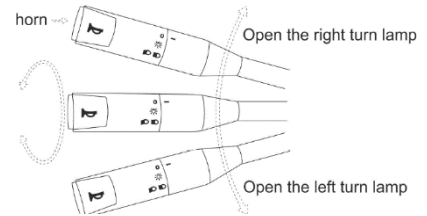
## Keyswitch

Turn off the power supply of the whole vehicle at the OFF position, and the electric vehicle stops working, Turn to ON position to power, the electric vehicle enters working state.

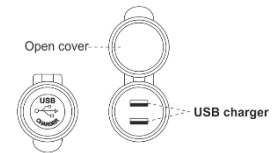


## Headlamp and turn signal switches

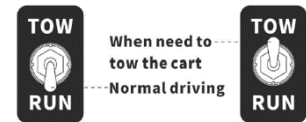
Rotate twice, lift up, and turn on the high beam, rotate twice, turn on the low beam, rotate once, turn on the driving light



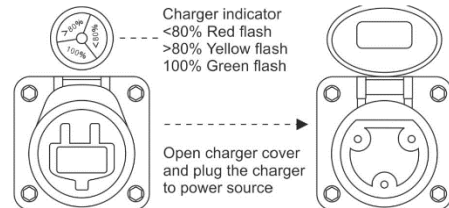
## USB charging port



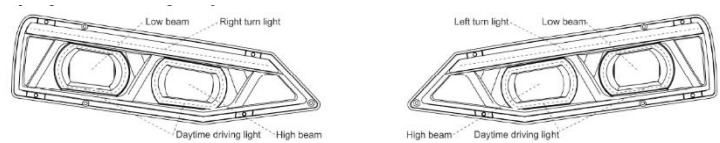
## Tow switch



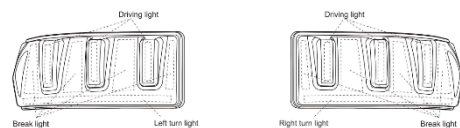
## Charging port and charging indicator lamp



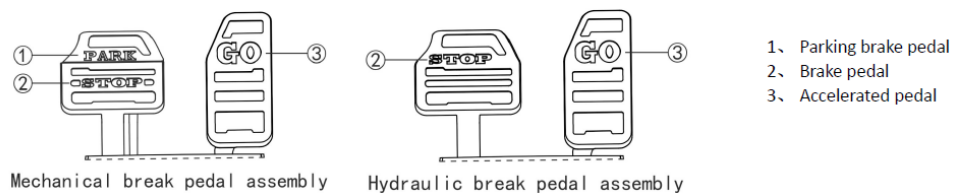
## Headlamp signals and headlight adjustment instructions



## Tail signal



## Parking brake operation





## 2. The WIND S Series

### Interior

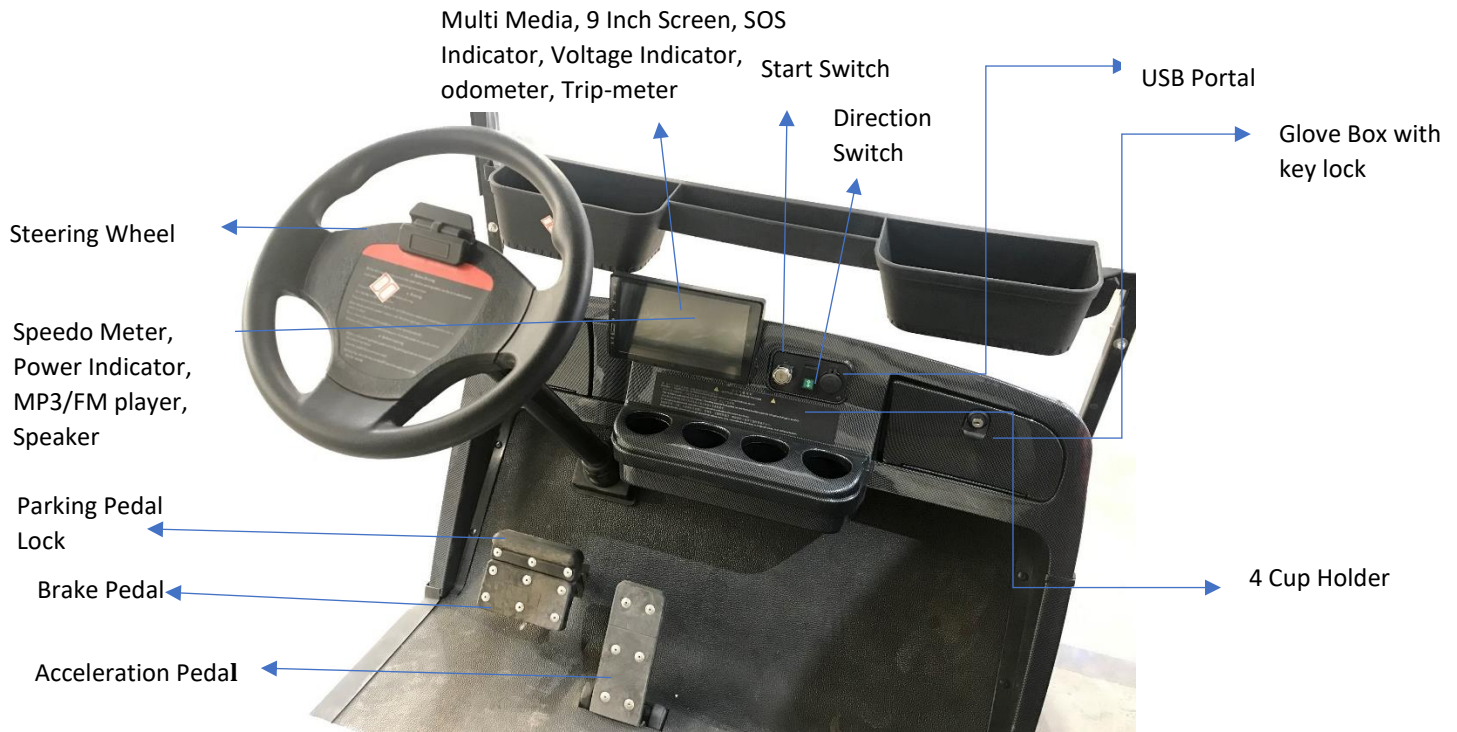


### Exterior



### 3. The WIND T Series

#### *Interior*



#### *Exterior*





## Maintenance items and cycle

1. The Z series
2. The WIND S series
3. The WIND T series

Maintenance items	Weekly	1 month or 1,000 KM	3 months or 3,000 KM	6 months or 6,000 KM	12 months or 12,000 KM
Electrolysis level height	•				
Check and clean-up of oxides of the battery connecting line	•				
Check tire pressure		•			
Check the vehicle lights		•			
Tire transposition			•		
Brake inspection and adjustment (brake pads, brake shoes, brake hoses, and master cylinder).				•	
Brake fluid				•	
Front beam detection and adjustment				•	
Chassis bolt check					•
Rear axle gear oil replacement					•
Charging plug socket replacement					•