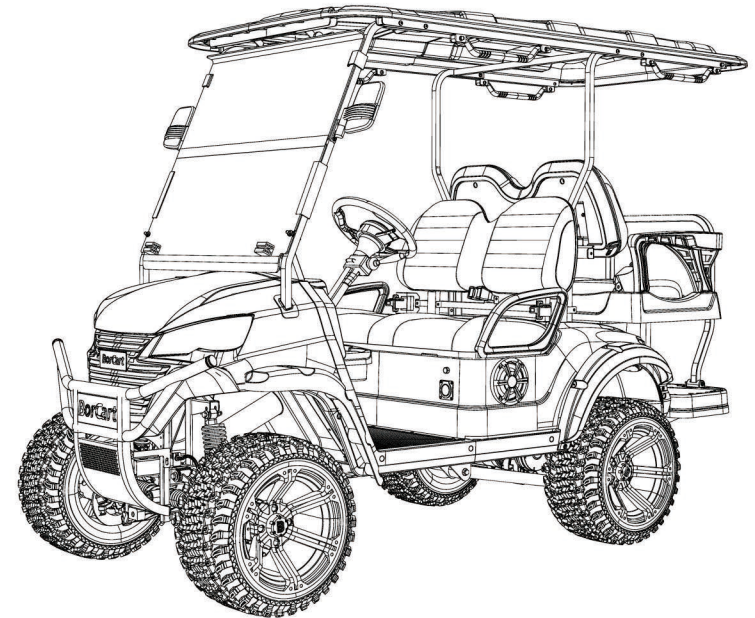


# **BorCart**

**Guangzhou BorCart Electric Vehicle Co., Ltd**



**ET/EC Golf Cart Models**

## **Operation instructions**

**CE certification**

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**Please read and understand the contents of this  
manual carefully before operating the vehicle.**

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## Introduction

Thank you for purchasing BorCart Golf Car. This manual covers the proper operation, maintenance and servicing of the golf cart. Information required. A thorough understanding of these simple instructions will help you get the most great fun. If you have any problems with your new BorCart golf cart or the operation or maintenance is incomplete, please contact your BorCart dealer to learn about the operation or maintenance of your golf cart.

This manual contains important information about comfort and safety of the car. Before operating the golf cart, please read and fully understand this manual.

This manual shall be regarded as a permanent part of the golf cart and shall be kept with the golf cart when it is rented or resold.

This manual also applies to the following models

Series	Note
L-Series	High chassis low-speed vehicle (LSV)
C-Series	Low chassis club car
G-Series	Low chassis golf cart
U-Series	High chassis tool car
V-Series	High chassis container car

**Note:**

- +2 It's a reverse seat kit
- CSA It's the reverse seat pedal (caddy stand)
- GBR It's the ball rack behind the reverse seat

BorCart constantly seeks to improve product design and quality; Therefore, this manual contains the latest product information at the beginning, and there may be slight differences between your golf cart and this manual. If you have any questions about this manual, please consult your BorCart dealer.

## Operational safety

Please read and fully understand this manual before operating the golf cart. Failure to follow the warning instructions may result in serious injury or death to golf cart occupants, bystanders, or personnel inspecting or repairing golf carts.

This manual contains the following important information: safety warning symbols, warnings, cautions and notes.

Before operating the golf cart, please read the following labels carefully and replace the damaged or removed labels in time.

The design and operation of the BorCart golf cart is simple, but please observe the following regulations:

Please read this User's Manual and all safety and instruction labels on the golf cart before operation.

- Only one passenger is allowed in each seat.
- Do not drive the golf cart under the influence of alcohol or drugs; Their effect on vision and judgment makes driving Golf carts become dangerous.
- Do not drive golf cart on public streets, roads or highways unless permitted bylaw or local regulatory authorities.
- Put your whole body in the golf cart, keep sitting, and keep it when the cart is moving.
- Do not start the golf cart until all passengers are seated.
- Put your hands on the steering wheel and keep your eyes on the road ahead.
- Be extra careful in crowded areas or when backing up. Always back up slowly and carefully to avoid sudden start or stop end. Change the speed of the golf cart to adapt to the terrain of the course and avoid excessive turning of the steering wheel at higher speeds.
- Always go straight up or down the slope slowly and do not tilt.
- Do not make any modifications or additions that affect the capacity or safe operation, or do anything that does not conform to the user's manual risk change.

The battery will release explosive gas when charging or discharging. Keep well ventilated. Keep away from sparks, flames and cigarettes. Please protect your eyes when working near the battery.

The BorCart golf cart does not protect passengers from adverse weather. When driving in a rainstorm, Passengers should get off the car and protect themselves in a safe place.

## Safety precautions during maintenance

When carrying out maintenance, follow all safety instructions in the manufacturer's operation and maintenance manual, as well as the following safety procedures:

Park the golf cart correctly.

Before starting maintenance, stand in an appropriate position under the golf cart.

Avoid fire hazards and equip with appropriate fire-fighting equipment.

Before working on the electric golf cart, please disable the electric system of the cart according to the manufacturer's instructions. (Before disconnecting the battery, press the "ON/OFF" button to the "OFF" side. Otherwise, battery explosion and serious danger may occur.)

When working on the electric golf cart or around the battery, only use properly insulated tools. Keep all safety devices (including brake, steering mechanism, warning device and governor) in safe operation state. Do not modify these safety devices provided by the manufacturer.

After each maintenance or repair, the vehicle must be driven by trained, qualified and authorized personnel in an area free from pedestrian traffic to ensure correct operation and adjustment.

Record all maintenance by date, maintenance personnel name and maintenance type in the maintenance record log. Regular inspection and maintenance, make records to ensure that the records are accurate and complete.

Provide operator opinion cards to help determine the need for unscheduled maintenance of a specific golf cart.

Keep all nameplates, warnings and instructions provided by the manufacturer clear and legible. Contact your BorCart Golf Car dealer if new nameplates, warnings or instructions are required.

## Safety precautions

Like all machines, golf carts can cause injury if used or maintained improperly.

This section contains extensive safety practices required for safe golf cart operation.

Before operating the golf cart, golf course staff should establish any other safety procedures that may be required for safe operation.

## Driver qualification

Only authorized personnel are allowed to operate the golf cart. It is recommended that only those with valid motor vehicle driving licenses can drive golf carts.

Place the golf cart manufacturer's recommended operating and safety instructions and golf course safety rules on the golf course a prominent location near the golf car rental area or golf car pick-up area. It is also recommended to post the following in a conspicuous place warning.

## Golf Course Safety Survey

Conduct regular safety surveys to identify hazardous areas where golf carts should not be operated.

The following golf course hazards must be secured:

**Steep slopes.** If steep slopes exist, limit the golf cart to the designated golf lane as much as possible. In addition, identify steep slopes with appropriate warnings as: Warning: Steep slope, slow downhill, foot brake, sharp turn, blind area, bridge approach.

Enclose these potentially hazardous areas with chains or ropes, or mark these areas with appropriate warnings, indicating the nature of the hazards and the appropriate precautions to be taken to avoid them.

**Wet areas.** Wet grass may cause the golf cart to lose traction and may affect stability. Slow down in wet areas or during bad weather.

**Loose terrain.** Soft terrain may cause the golf cart to lose traction and may affect stability. Repair loose terrain, chains or ropes in these areas, or mark loose terrain with appropriate warnings.

**Golf cart and pedestrian interference.** Try to change the route of golf cart traffic or pedestrian traffic in crowded areas to prevent accidents. If it is impractical to change the traffic route, please erect warning signs to warn pedestrians of golf cart traffic, and warn golf drivers to slow down, drive carefully and pay attention to pedestrians.

Ventilation all maintenance and storage areas shall be properly ventilated to avoid fire hazard. During battery charging, ventilation is required to remove hydrogen from the vehicle storage area.

For an electric golf cart, the amount of hydrogen released during charging depends on several factors, such as battery condition, the output Power of the battery charger and the charging time of the battery. Due to the high volatility of hydrogen and its rising and accumulation tendency on the board, it is recommended to have at least 5 air changes per hour. Specific ventilation level requirements and refer to the applicable fire and safety regulations for the use requirements of explosion-proof electrical equipment.

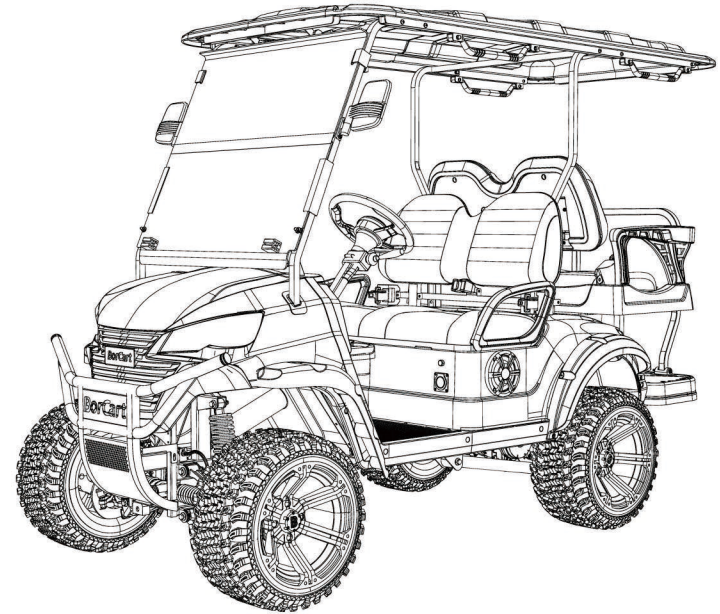
## Maintenance required for golf cart safety

Practicing the following will help ensure the safety of the golf cart operator:

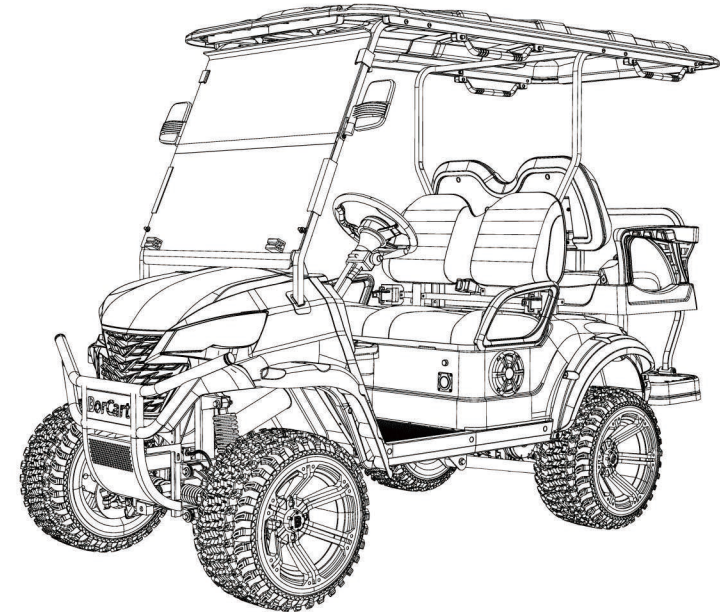
**Preventive maintenance.** Carry out all regular maintenance in accordance with the manufacturer's recommendations to provide golf users with a golf cart that operates safely and normally.

All personnel shall only allow qualified, trained and authorized personnel to inspect, adjust and maintain the golf cart. Parts and materials. Use only replacement parts and materials recommended by the manufacturer.

## Vehicle structure and parameters

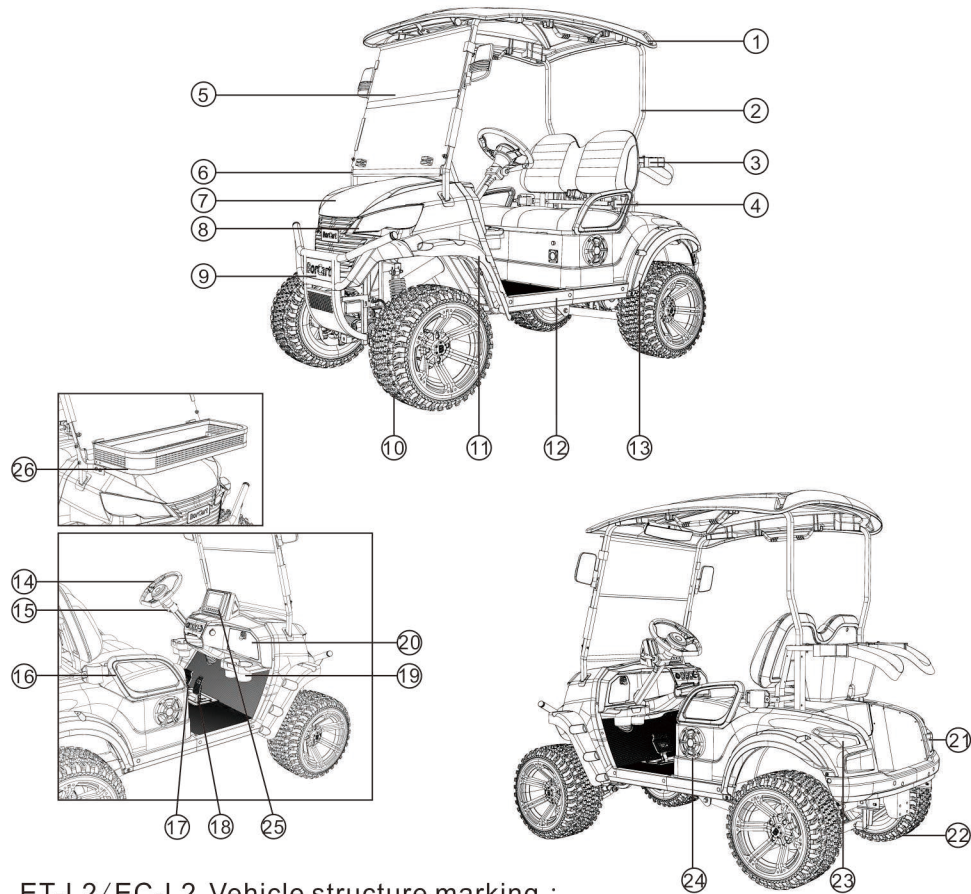


ET Golf Cart Models



EC Golf Cart Models

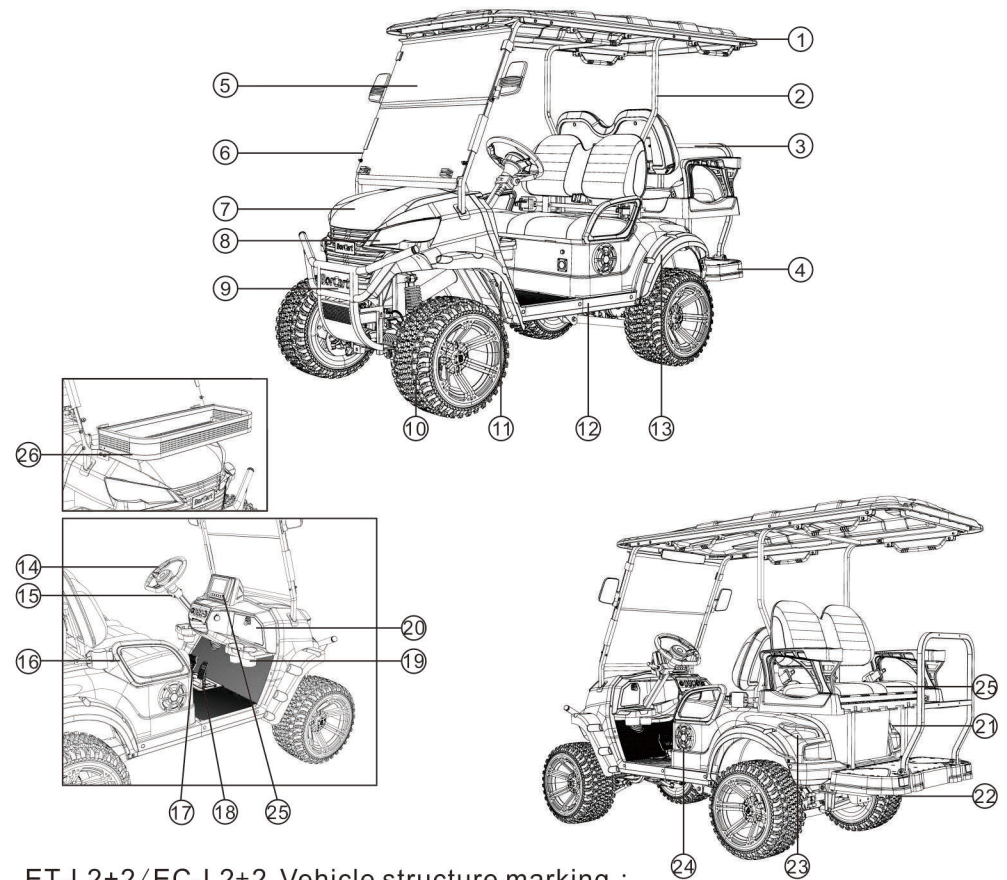
## Vehicle structure and parameters



ET-L2/EC-L2 Vehicle structure marking :

- |   |                       |                        |
|---|-----------------------|------------------------|
| ① Canopy  | ⑨ Front bumper        | ⑰ Brake pedal          |
| ② Rear roof support                                     | ⑩ Front wheel         | ⑱ Accelerator pedal    |
| ③ Ball rack/ Storage basket                             | ⑪ Front wheel eyebrow | ⑲ Cup holder           |
| ④ Seat belts  | ⑫ Side hemming        | ⑳ Storage pocket cover |
| ⑤ Front windshield                                      | ⑬ Rear wheel eyebrow  | ㉑ Rear tail lamp/right |
| ⑥ Windshield bracket                                    | ⑭ Steering wheel      | ㉒ Rear wheel           |
| ⑦ Front cover   | ⑮ Column shift        | ㉓ Rear tail lamp/left  |
| ⑧ Headlights  | ⑯ Handrail            | ㉔ Waterproof horn      |
| ㉕ Ip66 Waterproof LCD multimedia combination instrument | ㉖ Front basket        |                        |

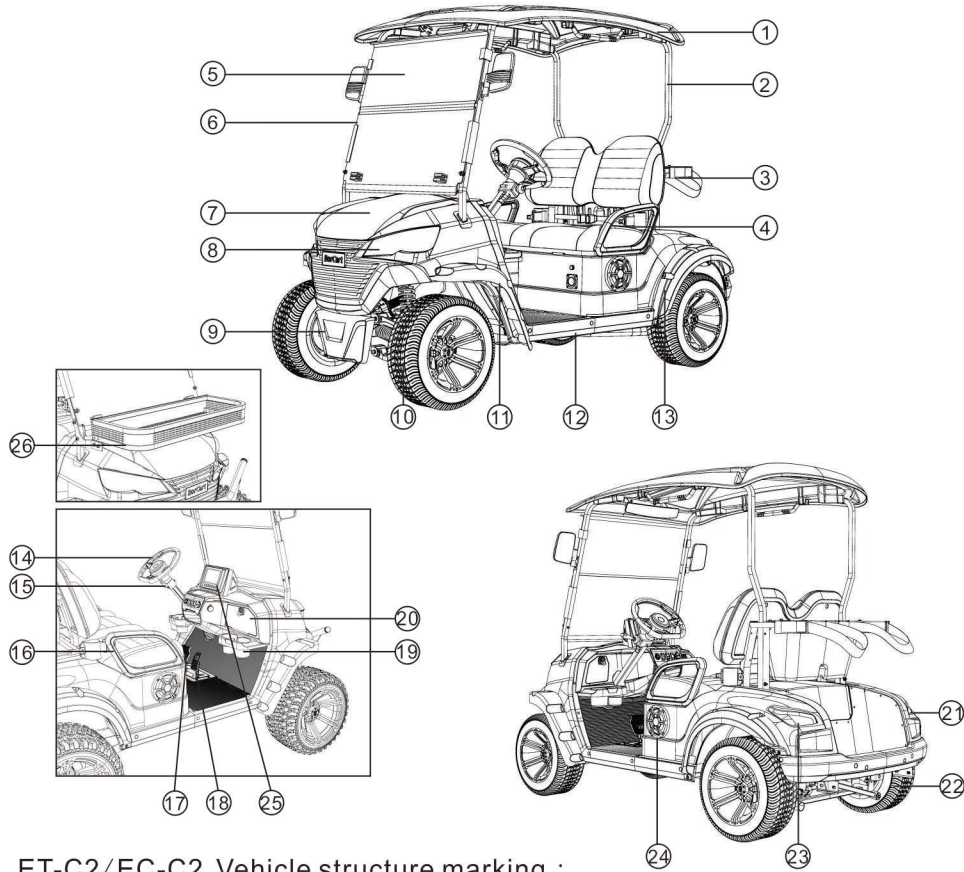
## Vehicle structure and parameters



ET-L2+2/EC-L2+2 Vehicle structure marking :

- |   |                       |                        |
|---|-----------------------|------------------------|
| ① Canopy  | ⑨ Front bumper        | ⑰ Brake pedal          |
| ② Rear roof support                                     | ⑩ Front wheel         | ⑱ Accelerator pedal    |
| ③ Rear armrest with additional seats                    | ⑪ Front wheel eyebrow | ⑲ Cup holder           |
| ④ Caddy pedal   | ⑫ Side hemming        | ⑳ Storage pocket cover |
| ⑤ Front windshield                                      | ⑬ Rear wheel eyebrow  | ㉑ Rear tail lamp/right |
| ⑥ Windshield bracket                                    | ⑭ Steering wheel      | ㉒ Rear wheel           |
| ⑦ Front cover   | ⑮ Column shift        | ㉓ Rear tail lamp/left  |
| ⑧ Headlights  | ⑯ Handrail            | ㉔ Waterproof horn      |
| ㉕ Additional seat cushion                               | ㉖ Front basket        |                        |
| ㉗ Ip66 Waterproof LCD multimedia combination instrument |                       |                        |

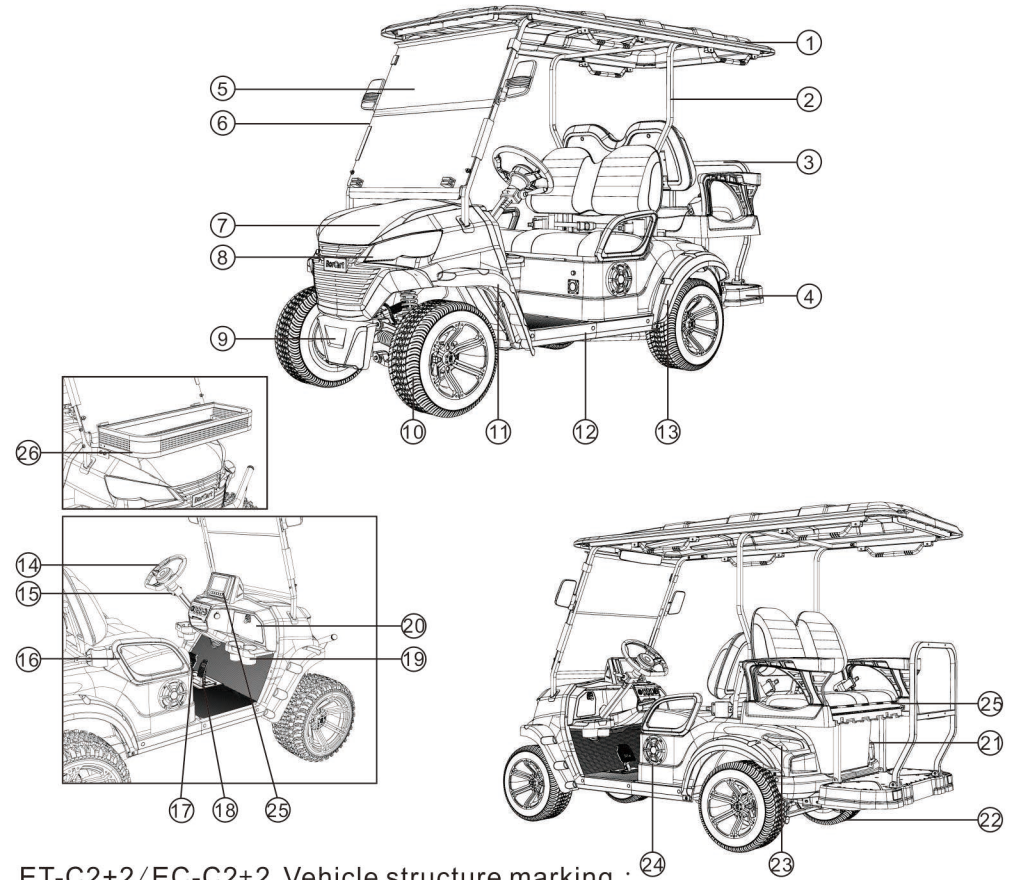
## Vehicle structure and parameters



ET-C2/EC-C2 Vehicle structure marking :

- |   |                       |                        |
|---|-----------------------|------------------------|
| ① Canopy  | ⑨ Front bumper        | ⑰ Brake pedal          |
| ② Rear roof support                                     | ⑩ Front wheel         | ⑱ Accelerator pedal    |
| ③ Ball rack/ Storage basket                             | ⑪ Front wheel eyebrow | ⑲ Cup holder           |
| ④ Seat belts  | ⑫ Side hemming        | ⑳ Storage pocket cover |
| ⑤ Front windshield                                      | ⑬ Rear wheel eyebrow  | ㉑ Rear tail lamp/right |
| ⑥ Windshield bracket                                    | ⑭ Steering wheel      | ㉒ Rear wheel           |
| ⑦ Front cover   | ⑮ Column shift        | ㉓ Rear tail lamp/left  |
| ⑧ Headlights  | ⑯ Handrail            | ㉔ Waterproof horn      |
| ㉕ Ip66 Waterproof LCD multimedia combination instrument | ㉖ Front basket        |                        |

## Vehicle structure and parameters



ET-C2+2/EC-C2+2 Vehicle structure marking :

- |   |                       |                        |
|---|-----------------------|------------------------|
| ① Canopy  | ⑨ Front bumper        | ⑰ Brake pedal          |
| ② Rear roof support                                     | ⑩ Front wheel         | ⑱ Accelerator pedal    |
| ③ Rear armrest with additional seats                    | ⑪ Front wheel eyebrow | ⑲ Cup holder           |
| ④ Caddy pedal   | ⑫ Side hemming        | ⑳ Storage pocket cover |
| ⑤ Front windshield                                      | ⑬ Rear wheel eyebrow  | ㉑ Rear tail lamp/right |
| ⑥ Windshield bracket                                    | ⑭ Steering wheel      | ㉒ Rear wheel           |
| ⑦ Front cover   | ⑮ Column shift        | ㉓ Rear tail lamp/left  |
| ⑧ Headlights  | ⑯ Handrail            | ㉔ Waterproof horn      |
| ㉕ Additional seat cushion                               | ㉖ Front basket        |                        |
| ㉗ Ip66 Waterproof LCD multimedia combination instrument |                       |                        |

## L2 /L2+2 Lifted Model

Electrical System		ET/EC-L2	ET/EC-L2+2		
48V5KW	72V5KW				
Motor: KDS 48V5KW AC motor Electrical System:48V Battery: 6 X 8V150AH Maintenance-free lead-acid batteries Charger: Intelligent Cart Charger 48V/18AH, Charging times:8小时 Controller: 48V/350A With CAN communication DC: High Power Non-Isolated DC-DC 48V/12V-300W		Motor: KDS 72V5KW AC motor Electrical System: 72V Battery: 72V150AH Lithium iron phosphate(LiFePO4), CAN communication function and self-heating function Charger: Intelligent Cart Charger 72V/17AH, Charging times:9小时 Controller: 72V/350A With CAN communication DC: High Power Non-Isolated DC-DC 72V/12V-300W			
Specification					
Size Overall					
		2520*1340*2050mm	2950*1340*2130mm		
Bare Cart (without battery) Net Weight					
		≤395kg	≤465kg		
Rated Passenger					
		2 Passengers	4 Passengers		
		Wheel Dis Front/Rear	Front1005mm/Rear1075mm		
		Front and Rear Wheelbase 1680mm			
Comfortable Performance		Min Ground Clearance	170mm		
*IP66 advanced multimedia instrument, colourful auto-colour change buttons, Bluetooth function, with vehicle detection function *BOSS Original IP66 Full Range Hi-Fi Speaker H065B (Voice-activated Lighting) *USB+Type-c fast charging, USB+AUX audio input *First class seat (integral foam moulded seat cushion + solid colour premium microfibre leather) *High-strength aluminium alloy oxidised non-slip flooring, corrosion and ageing resistant *High-strength aluminium alloy wheels + DOT approved high-performance all-terrain tyres *DOT certified anti-aging premium folding plexiglass; wide-angle centre mirror *Premium car steering wheel + aluminium alloy base *Advanced Automotive Painting Process		Min Turning Radius	3.2m		
		Max Speed	≤25MPH		
		Climbing Ability/Hill-Holding Ability	20% — 45%		
		Safe Climbing Gradient	20%		
		Safe Parking Slope Gradient	20%		
		Endurance	60-80mile (Normal road)		
		Braking Distance	< 3.0m		
		Personalisation:		*Cushion: leather can be colour-coded, embossed (stripes, diamond), logo silkscreen/embroidery *Wheels: black, blue, red, gold *Tyres: 12" & 14" all-terrain tyres *Sound bar: 486 channels with voice-activated ambient light hi-fi sound bar (host with Bluetooth function) *Colour light: chassis & roof can be installed, seven-colour light strip+voice control+remote control *Others: body & front LOGO; body colour; instrument on LOGO animation; hubcap, steering wheel, key can be customized LOGO (from 100 cars)	
		Factory Configuration			
Ceiling	Plastic sprayed black square tube frame + injection moulded one-piece canopy		standard		
Front windscreen and wipers	DOT approved Anti-Aging Premium Folding Plexiglass DOT approved toughened glass + wipers		standard optional		
Seat belts	DOT approved two-point seat belts		standard		
Body of automobile	Front cover, seat bucket, body, rear end injection moulded one-piece body covering parts; plastic sprayed black square tube roof columns		standard		
Floors	Aluminium alloy profile anti-slip flooring, high strength structure, corrosion and ageing resistant		standard		
Dashboard	Injection-moulded dashboard, waterproof two-position electric lock switch, single-arm combination switch, cup holder; USB+Type-c fast charging, USB+AUX audio input		standard		
Display screen	Ip66 advanced multimedia 7-inch instrumentation, colourful ambient auto-colour change buttons, Bluetooth function, with vehicle detection function		standard		
Display screen	Ip66 advanced multimedia 10.1-inch instrumentation, colourful ambient auto-colour change buttons, Bluetooth function, with vehicle detection function		optional		
Sound system	BOSS Original, IP66 Full Range Hi-Fi Speaker H065B (Voice-activated light) 486-channel hi-fi sound bar with voice-activated ambient lighting (main unit with Bluetooth function)		optional		
Seats	First class seat (integral foam moulded seat cushion + solid colour premium microfibre leather) Upgraded colour separation with silkscreen Basketball bag holder; plus 2 models, reverse seat reversible, storage box included		standard optional standard		
Wheel	12" Aluminium High Strength Wheel 529-12INCH(-20) 14" Aluminium High Strength Wheel 529-14INCH(-20)		standard optional		
Tyres	DOT Approved; All Terrain 23*10.5-12 (4 Ply Rated)/tyres; P334 DOT Approved: All Terrain 23*10-14 (4 Ply Rated)/tyres; WG03		standard optional		
Mirrors	One manually adjustable, foldable exterior mirror on each side; wide-angle centre mirror		standard		
Lights and warning signals	LED front combination lights (low beam, high beam, turn signal, daytime running light, position light) LED rear tail light (brake light, position light, turn signal) trombone Reversing buzzer		standard standard standard optional		
Colours & Patterns	Standard colours (Forest Green, Ivory, Jewel Blue, Apple Red, Metallic Black, Crystal Grey) Other colours		standard optional		
Batteries	6X8V150AH Maintenance-free lead-acid batteries 72V150AH Lithium iron phosphate, with battery management system, CAN communication function and self-heating function 48V-134AH Lithium iron phosphate, with battery management system, CAN communication function and self-heating function 48V-100AH Lithium iron phosphate, with battery management system, CAN communication function		standard standard optional optional		

## L4 /L4+2 Lifted Model

Electrical System		ET/EC-L4	ET/EC-L4+2		
48V5KW	72V5KW				
Motor: KDS 48V5KW AC motor Electrical System:48V Battery: 6 X 8V150AH Maintenance-free lead-acid batteries Charger: Intelligent Cart Charger 48V/18AH, Charging times:8小时 Controller: 48V/350A With CAN communication DC: High Power Non-Isolated DC-DC 48V/12V-300W		Motor: KDS 72V5KW AC motor Electrical System: 72V Battery: 72V150AH Lithium iron phosphate(LiFePO4), CAN communication function and self-heating function Charger: Intelligent Cart Charger 72V/17AH, Charging times:9小时 Controller: 72V/350A With CAN communication DC: High Power Non-Isolated DC-DC 72V/12V-300W			
Specification					
Size Overall					
		3265*1340*2130mm	3695*1340*2130mm		
Bare Cart (without battery) Net Weight					
		≤510kg	≤585kg		
Rated Passenger					
		4 Passengers	6 Passengers		
		Wheel Dis Front/Rear	Front1005mm/Rear1075mm		
		Front and Rear Wheelbase 2436mm			
Comfortable Performance		Min Ground Clearance	170mm		
*IP66 advanced multimedia instrument, colourful auto-colour change buttons, Bluetooth function, with vehicle detection function *BOSS Original IP66 Full Range Hi-Fi Speaker H065B (Voice-activated Lighting) *USB+Type-c fast charging, USB+AUX audio input *First class seat (integral foam moulded seat cushion + solid colour premium microfibre leather) *High-strength aluminium alloy oxidised non-slip flooring, corrosion and ageing resistant *High-strength aluminium alloy wheels + DOT approved high-performance all-terrain tyres *DOT certified anti-aging premium folding plexiglass; wide-angle centre mirror *Premium car steering wheel + aluminium alloy base *Advanced Automotive Painting Process		Min Turning Radius	3.5m		
		Max Speed	≤25MPH		
		Climbing Ability/Hill-Holding Ability	20% — 45%		
		Safe Climbing Gradient	20%		
		Safe Parking Slope Gradient	20%		
		Endurance	60-80mile (Normal road)		
		Braking Distance	< 3.5m		
		Personalisation:		*Cushion: leather can be colour-coded, embossed (stripes, diamond), logo silkscreen/embroidery *Wheels: black, blue, red, gold *Tyres: 12" & 14" all-terrain tyres *Sound bar: 486 channels with voice-activated ambient light hi-fi sound bar (host with Bluetooth function) *Colour light: chassis & roof can be installed, seven-colour light strip+voice control+remote control *Others: body & front LOGO; body colour; instrument on LOGO animation; hubcap, steering wheel, key can be customized LOGO (from 100 cars)	
		Factory Configuration			
Ceiling	Plastic sprayed black square tube frame + injection moulded one-piece canopy		standard		
Front windscreen and wipers	DOT approved Anti-Aging Premium Folding Plexiglass DOT approved toughened glass + wipers		standard optional		
Seat belts	DOT approved two-point seat belts		standard		
Body of automobile	Front cover, seat bucket, body, rear end injection moulded one-piece body covering parts; plastic sprayed black square tube roof columns		standard		
Floors	Aluminium alloy profile anti-slip flooring, high strength structure, corrosion and ageing resistant		standard		
Dashboard	Injection-moulded dashboard, waterproof two-position electric lock switch, single-arm combination switch, cup holder; USB+Type-c fast charging, USB+AUX audio input		standard		
Display screen	Ip66 advanced multimedia 7-inch instrumentation, colourful ambient auto-colour change buttons, Bluetooth function, with vehicle detection function		standard		
Display screen	Ip66 advanced multimedia 10.1-inch instrumentation, colourful ambient auto-colour change buttons, Bluetooth function, with vehicle detection function		optional		
Sound system	BOSS Original, IP66 Full Range Hi-Fi Speaker H065B (Voice-activated light) 486-channel hi-fi sound bar with voice-activated ambient lighting (main unit with Bluetooth function)		optional		
Seats	First class seat (integral foam moulded seat cushion + solid colour premium microfibre leather) Upgraded colour separation with silkscreen Basketball bag holder; plus 2 models, reverse seat reversible, storage box included		standard optional standard		
Wheel	12" Aluminium High Strength Wheel 529-12INCH(-20) 14" Aluminium High Strength Wheel 529-14INCH(-20)		standard optional		
Tyres	DOT Approved; All Terrain 23*10.5-12 (4 Ply Rated)/tyres; P334 DOT Approved: All Terrain 23*10-14 (4 Ply Rated)/tyres; WG03		standard optional		
Mirrors	One manually adjustable, foldable exterior mirror on each side; wide-angle centre mirror		standard		
Lights and warning signals	LED front combination lights (low beam, high beam, turn signal, daytime running light, position light) LED rear tail light (brake light, position light, turn signal) trombone Reversing buzzer		standard standard standard optional		
Colours & Patterns	Standard colours (Forest Green, Ivory, Jewel Blue, Apple Red, Metallic Black, Crystal Grey) Other colours		standard optional		
Batteries	6X8V150AH Maintenance-free lead-acid batteries 72V150AH Lithium iron phosphate, with battery management system, CAN communication function and self-heating function 48V-134AH Lithium iron phosphate, with battery management system, CAN communication function and self-heating function 48V-100AH Lithium iron phosphate, with battery management system, CAN communication function		standard standard optional optional		

### C2 /C2+2 Club Car Model

Electrical System		ET/EC-C2	ET/EC-C2+2
48V5KW	72V5KW		
Motor: KDS 48V5KW AC motor Electrical System:48V Battery: 6 X 8V150AH Maintenance-free lead-acid batteries Charger: Intelligent Cart Charger 48V/18AH, Charging times:3小时 Controller: 48V/350A With CAN communication DC: High Power Non-Isolated DC-DC 48V/12V-300W	Motor: KDS 72V5KW AC motor Electrical System: 72V Battery: 72V150AH Lithium iron phosphate(LiFePO4), CAN communication function and self-heating function Charger: Intelligent Cart Charger 72V/17AH, Charging times:9小时 Controller: 72V/350A With CAN communication DC: High Power Non-Isolated DC-DC 72V/12V-300W	Specification	
Size Overall		2520*1340*1895mm      2950*1340*1975mm	
Bare Cart (without battery) Net Weight		≤390kg	≤460kg
Rated Passenger			
2 Passengers		4 Passengers	
Wheel Dis Front/Rear		Front 920mm/Rear 1015mm	
Front and Rear Wheelbase		1662mm	
Min Ground Clearance		100mm	
Min Turning Radius		3.0m	
Max Speed		≤20MPH	
Climbing Ability/Hill-Holding Ability		20% — 45%	
Safe Climbing Gradient		20%	
Safe Parking Slope Gradient		20%	
Endurance		60-80mile (Normal road)	
Braking Distance		< 3.0m	
Confortable Performance		Personalisation:	
<ul style="list-style-type: none"> <li>*IP66 advanced multimedia instrument, colourful auto-colour change buttons, Bluetooth function, with vehicle detection function</li> <li>*BOSS Original IP66 Full Range Hi-Fi Speaker H065B (Voice-activated Lighting)</li> <li>*USB+Type-c fast charging, USB+AUX audio input</li> <li>*First class seat (integral foam moulded seat cushion + solid colour premium microfibre leather)</li> <li>*High-strength aluminium alloy oxidised non-slip flooring, corrosion and ageing resistant</li> <li>*High-strength aluminium alloy wheels + DOT approved high-performance all-terrain tyres</li> <li>*DOT certified anti-aging premium folding plexiglass; wide-angle centre mirror</li> <li>*Premium car steering wheel + aluminium alloy base</li> <li>*Advanced Automotive Painting Process</li> </ul>		<ul style="list-style-type: none"> <li>*Cushion: leather can be colour-coded, embossed (stripes, diamond), logo silkscreen/embroidery</li> <li>*Wheels: black, blue, red, gold</li> <li>*Tyres: 10" &amp; 14" road tyres</li> <li>*Sound bar: 4&amp;6 channels with voice-activated ambient light hi-fi sound bar (host with Bluetooth function)</li> <li>*Colour light: chassis &amp; roof can be installed, seven-colour light strip+voice control+remote control</li> <li>*Others: body &amp; front LOGO; body colour; instrument on LOGO animation; hubcap, steering wheel, key can be customized LOGO (from 100 cars)</li> </ul>	
Factory Configuration			
Ceiling	Plastic sprayed black square tube frame + injection moulded one-piece canopy	standard	
Front windscreen and wipers	DOT approved Anti-Aging Premium Folding Plexiglass DOT approved toughened glass + wipers	standard optional	
Seat belts	DOT approved two-point seat belts	standard	
Body of automobile	Front cover, seat bucket, body, rear end injection moulded one-piece body covering parts; plastic sprayed black square tube roof columns	standard	
Floors	Aluminium alloy profile anti-slip flooring, high strength structure, corrosion and ageing resistant	standard	
Dashboard	Injection-moulded dashboard, waterproof two-position electric lock switch, single-arm combination switch, cup holder; USB+Type-c fast charging, USB+AUX audio input	standard	
Display screen	Ip66 advanced multimedia 5-inch instrumentation, colourful ambient auto-colour change buttons, Bluetooth function, with vehicle detection function	standard	
Display screen	Ip66 advanced multimedia 7-inch instrumentation, colourful ambient auto-colour change buttons, Bluetooth function, with vehicle detection function	optional	
Sound system	BOSS Original, IP66 Full Range Hi-Fi Speaker H065B (Voice-activated light) 4&6-channel hi-fi sound bar with voice-activated ambient lighting (main unit with Bluetooth function)	optional	
Seats	First class seat (integral foam moulded seat cushion + solid colour premium microfibre leather) Upgraded colour separation with silkscreen Basketball bag holder; plus 2 models, reverse seat reversible, storage box included	standard optional standard	
Wheel	10" Aluminium High Strength Wheel 529-10INCH(-15) 14" Aluminium High Strength Wheel 529-14INCH(-20)	standard optional	
Tyres	DOT approved; road tyres 205/50-10 (4 Ply Rated)/tyres; WG02 DOT approved: road tyres 215/35-14 (4 Ply Rated)/tyre; WR028	standard optional	
Mirrors	One manually adjustable, foldable exterior mirror on each side; wide-angle centre mirror	standard	
Lights and warning signals	LED front combination lights (low beam, high beam, turn signal, daytime running light, position light LED rear tail light (brake light, position light, turn signal) trombone Reversing buzzer	standard standard standard optional	
Colours & Patterns	Standard colours (Forest Green, Ivory, Jewel Blue, Apple Red, Metallic Black, Crystal Grey) Other colours	standard optional	
Batteries	6X8V150AHMaintenance-free lead-acid batteries 72V150AH Lithium iron phosphate, with battery management system, CAN communication function and self-heating function 48V-134AH Lithium iron phosphate, with battery management system, CAN communication function and self-heating function 48V-100AH Lithium iron phosphate, with battery management system, CAN communication function	standard standard optional optional	

### C4 /C4+2 Club Car Model

Electrical System		ET/EC-C4	ET/EC-C4+2
48V5KW	72V5KW		
Motor: KDS 48V5KW AC motor Electrical System:48V Battery: 6 X 8V150AH Maintenance-free lead-acid batteries Charger: Intelligent Cart Charger 48V/18AH, Charging times:3小时 Controller: 48V/350A With CAN communication DC: High Power Non-Isolated DC-DC 48V/12V-300W	Motor: KDS 72V5KW AC motor Electrical System: 72V Battery: 72V150AH Lithium iron phosphate(LiFePO4), CAN communication function and self-heating function Charger: Intelligent Cart Charger 72V/17AH, Charging times:9小时 Controller: 72V/350A With CAN communication DC: High Power Non-Isolated DC-DC 72V/12V-300W	Specification	
Size Overall		3265*1340*1975mm      3695*1340*1975mm	
Bare Cart (without battery) Net Weight		≤480kg	≤555kg
Rated Passenger			
4 Passengers		6 Passengers	
Wheel Dis Front/Rear		Front 920mm/Rear 1015mm	
Front and Rear Wheelbase		2418mm	
Min Ground Clearance		100mm	
Min Turning Radius		3.3m	
Max Speed		≤20MPH	
Climbing Ability/Hill-Holding Ability		20% — 45%	
Safe Climbing Gradient		20%	
Safe Parking Slope Gradient		20%	
Endurance		60-80mile (Normal road)	
Braking Distance		< 3.5m	
Confortable Performance		Personalisation:	
<ul style="list-style-type: none"> <li>*IP66 advanced multimedia instrument, colourful auto-colour change buttons, Bluetooth function, with vehicle detection function</li> <li>*BOSS Original IP66 Full Range Hi-Fi Speaker H065B (Voice-activated Lighting)</li> <li>*USB+Type-c fast charging, USB+AUX audio input</li> <li>*First class seat (integral foam moulded seat cushion + solid colour premium microfibre leather)</li> <li>*High-strength aluminium alloy oxidised non-slip flooring, corrosion and ageing resistant</li> <li>*High-strength aluminium alloy wheels + DOT approved high-performance all-terrain tyres</li> <li>*DOT certified anti-aging premium folding plexiglass; wide-angle centre mirror</li> <li>*Premium car steering wheel + aluminium alloy base</li> <li>*Advanced Automotive Painting Process</li> </ul>		<ul style="list-style-type: none"> <li>*Cushion: leather can be colour-coded, embossed (stripes, diamond), logo silkscreen/embroidery</li> <li>*Wheels: black, blue, red, gold</li> <li>*Tyres: 10" &amp; 14" road tyres</li> <li>*Sound bar: 4&amp;6 channels with voice-activated ambient light hi-fi sound bar (host with Bluetooth function)</li> <li>*Colour light: chassis &amp; roof can be installed, seven-colour light strip+voice control+remote control</li> <li>*Others: body &amp; front LOGO; body colour; instrument on LOGO animation; hubcap, steering wheel, key can be customized LOGO (from 100 cars)</li> </ul>	
Factory Configuration			
Ceiling	Plastic sprayed black square tube frame + injection moulded one-piece canopy	standard	
Front windscreen and wipers	DOT approved Anti-Aging Premium Folding Plexiglass DOT approved toughened glass + wipers	standard optional	
Seat belts	DOT approved two-point seat belts	standard	
Body of automobile	Front cover, seat bucket, body, rear end injection moulded one-piece body covering parts; plastic sprayed black square tube roof columns	standard	
Floors	Aluminium alloy profile anti-slip flooring, high strength structure, corrosion and ageing resistant	standard	
Dashboard	Injection-moulded dashboard, waterproof two-position electric lock switch, single-arm combination switch, cup holder; USB+Type-c fast charging, USB+AUX audio input	standard	
Display screen	Ip66 advanced multimedia 5-inch instrumentation, colourful ambient auto-colour change buttons, Bluetooth function, with vehicle detection function	standard	
Display screen	Ip66 advanced multimedia 7-inch instrumentation, colourful ambient auto-colour change buttons, Bluetooth function, with vehicle detection function	optional	
Sound system	BOSS Original, IP66 Full Range Hi-Fi Speaker H065B (Voice-activated light) 4&6-channel hi-fi sound bar with voice-activated ambient lighting (main unit with Bluetooth function)	optional	
Seats	First class seat (integral foam moulded seat cushion + solid colour premium microfibre leather) Upgraded colour separation with silkscreen Basketball bag holder; plus 2 models, reverse seat reversible, storage box included	standard optional standard	
Wheel	10" Aluminium High Strength Wheel 529-10INCH(-15) 14" Aluminium High Strength Wheel 529-14INCH(-20)	standard optional	
Tyres	DOT approved; road tyres 205/50-10 (4 Ply Rated)/tyres; WG02 DOT approved: road tyres 215/35-14 (4 Ply Rated)/tyre; WR028	standard optional	
Mirrors	One manually adjustable, foldable exterior mirror on each side; wide-angle centre mirror	standard	
Lights and warning signals	LED front combination lights (low beam, high beam, turn signal, daytime running light, position light LED rear tail light (brake light, position light, turn signal) trombone Reversing buzzer	standard standard standard optional	
Colours & Patterns	Standard colours (Forest Green, Ivory, Jewel Blue, Apple Red, Metallic Black, Crystal Grey) Other colours	standard optional	
Batteries	6X8V150AHMaintenance-free lead-acid batteries 72V150AH Lithium iron phosphate, with battery management system, CAN communication function and self-heating function 48V-134AH Lithium iron phosphate, with battery management system, CAN communication function and self-heating function 48V-100AH Lithium iron phosphate, with battery management system, CAN communication function	standard standard optional optional	



Factory Configuration		
Other	English front end tow hook	standard
	handheld diagnostic tool	optional
	Front Basket	optional
	built-in basket	optional
	GBR: Rear Bag Holder	optional
	Footrests for L models	optional
	CSA:Caddie stander	optional
	American style tow hook	optional
	Ball washer bracket (driver's side)	optional
	Cooler and bracket (passenger side)	optional
	Sand bottle (driver's side)	optional
	rake	optional
	Severe weather protection	Rain curtain 1.6m
spherical cover (for a ball game)		optional
protective cover		optional

## Operation and control

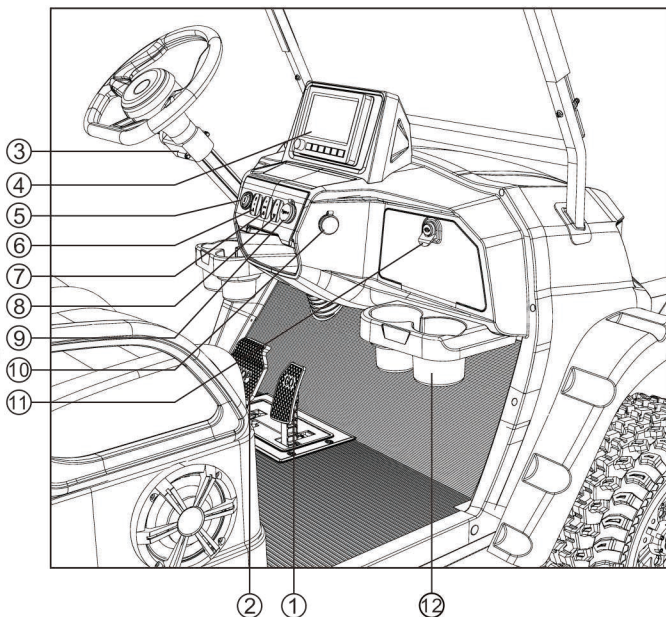
### Warning

If you rent or resell a golf cart, make sure the driver is familiar with all controls and rules. The D/R switch is used to shift the golf cart into forward gear or reverse gear. To avoid injury to passengers and protect the vehicle, please move the lever to the desired position after a complete stop.

After releasing the accelerator pedal, press the brake pedal to stop the golf cart. When parking, press the parking brake pedal (if applicable). The parking brake will automatically release when the accelerator pedal is depressed. If the main switch is in the "ON" position, stepping on the accelerator may suddenly cause the golf cart to move. Therefore, switch the D/R control lever to the "N" position, switch the main switch to the "OFF" position, and take out the key before leaving the vehicle.

### Features:

- ① Accelerator pedal
- ② Brake pedal
- ③ Combination switch
- ④ Ip66 Waterproof LCD multimedia combination instrument
- ⑤ Electric lock switch
- ⑥ Front and rear gear button switch
- ⑦ High and low beam lamps
- ⑧ Warning light
- ⑨ Type-C
- ⑩ Audio frequency input
- ⑪ Cover lock
- ⑫ Cup holder



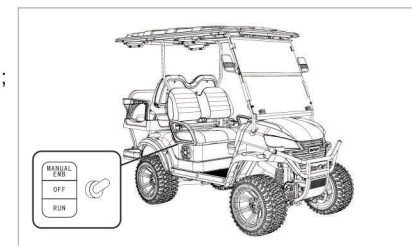
(Figure 1)

### Turn on the power switch

The main switch of the whole vehicle can be seen under the seat bottom

1. Turn the power switch paddle up to the "MANUAL EMB" position to open the electric lock switch to tow the vehicle;
2. Turn the power switch lever to the "OFF" position in the middle to turn off the vehicle control power;
3. Turn down the power switch lever to the "RUN" position to turn on the vehicle control power.

See (Figure 2)



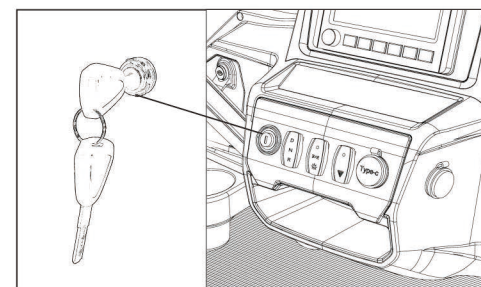
(Figure 2)

### Electric lock switch (1)

The electric lock position is set next to the button switch:

1. Align the electric lock key with the electric lock hole and insert it vertically, then turn the key to the right to start the vehicle (please turn the front and rear gear switches to the middle before opening the electric lock)
2. Turn the electric lock key to the left to stop the vehicle. Only then can the key be removed.

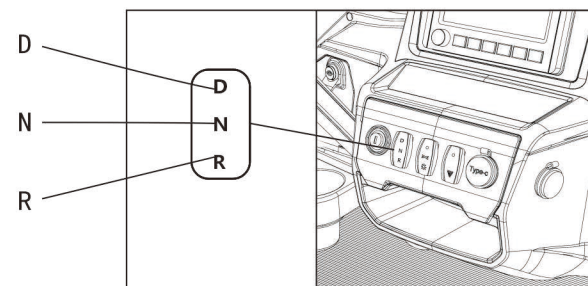
See (Figure 3)



(Figure 3)

### Front and rear gear button switch (1)

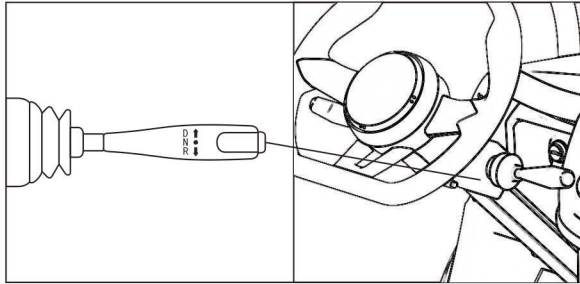
Operate the front and rear gear switches according to the needs of electric vehicle forward or reverse. Press the switch upward for forward gear, press the switch downward for reverse gear, and press the switch in the middle for parking gear; When the reverse gear is selected, the backup buzzer alarm will sound. See (Figure 5).



(Figure 5)

### Front and rear gear paddle switch (2)

Operate the front and rear gear switches according to the needs of electric vehicle forward or reverse. Press the switch upward for forward gear, press the switch downward for reverse gear, and press the switch in the middle for parking gear; When the reverse gear is selected, the backup buzzer alarm will sound. See (Figure 6)



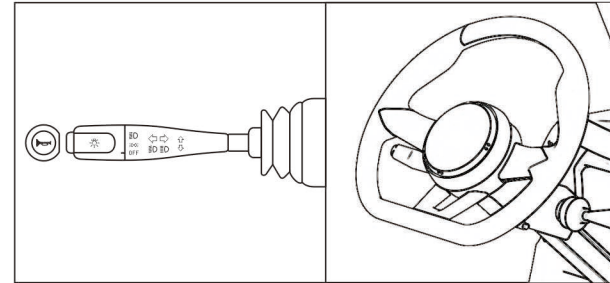
(Figure 6)

Switch position	Car movement
D	Forward
N	Paking
R	Reverse

### Combination switch

1. Turn signal lamp: Pull the operating lever back and the left turn signal lamp will flash. At this time, the left turn signal indicator lamp can be seen on the instrument panel lights up. Pull the operating lever forward to turn on the right turn indicator.
2. Low beam lamp: the front half of the operating lever can be twisted. After the vehicle starts, twist the operating lever forward for two gears, turn on the low beam headlights. Turn the operating lever backward to turn off the light.
3. High beam lamp: lift the operating lever upward (on the steering wheel) to turn on the high beam lamp. Release the operating lever and then the operating lever automatic homing. At this time, the high beam lamp is off. Turn on the low beam lamp first, and then lift the operating lever. At this time, the operating lever will not automatically return to its original position, so that the high beam can be permanently lit.
4. Horn: The head end of the operating lever is a horn button, which can be pressed gently.

See (Figure 7)

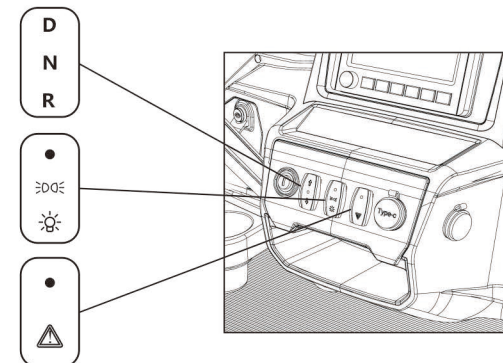


(Figure 7)

### Key switch

1. Front and rear gears: press the switch upward to move forward, press the switch downward to move backward and the middle is parking gear; The backup buzzer alarm will sound When the reverse gear is selected.
2. High and low beam lamps: press the switch upward to turn off the lamp, press the switch downward to turn off the low beam lamp and the middle is the high beam lamp;
3. Warning light: the front lights and rear lights of the vehicle will flash and double flash when pressing down the warning switch; Press the warning switch upward to stop the double flashing.

See (Figure 8)



(Figure 8)

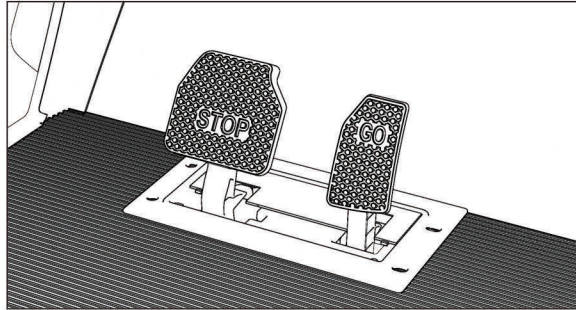
### Brake/accelerator pedal

1. Brake pedal: when the vehicle needs to decelerate during driving, move the right foot to the brake marked with "STOP". Move the pedal and gently step on the brake pedal to slow down the vehicle until it stops.

Attention: Emergency braking should be avoided!

2. Accelerator pedal: open the electric lock to start the vehicle, select the gear, release the brake pedal, and place the right foot on the accelerator pedal marked with "GO", slowly press the accelerator pedal to start the vehicle.

Attention: Do not step on the accelerator pedal! See (Figure 9).

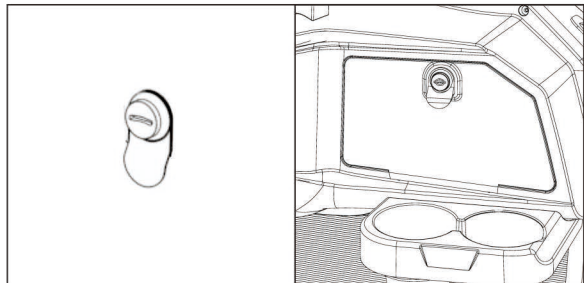


(Figure 9)

### Cover lock

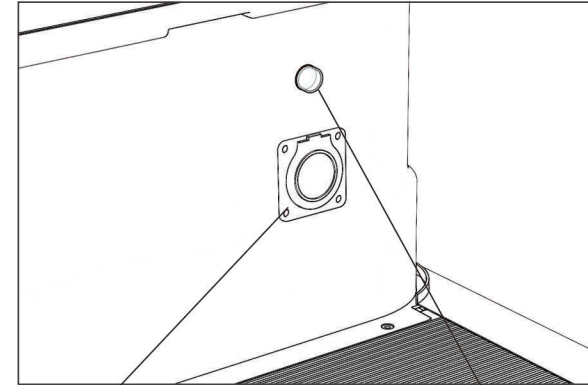
There is a storage pocket on the left and right of the dashboard, which can be used to place objects. When the pocket cover is not locked, press the lock to open the cover. Unlock: Insert the key into the lock, turn it clockwise to unlock, and then extract the key.

Locking: close the pocket cover, insert the key and turn it anticlockwise to lock the pocket cover, and then take out the key. See (Figure 10)



(Figure 10)

### Battery indicator



Charging plug/port

Rechargeable battery indicator

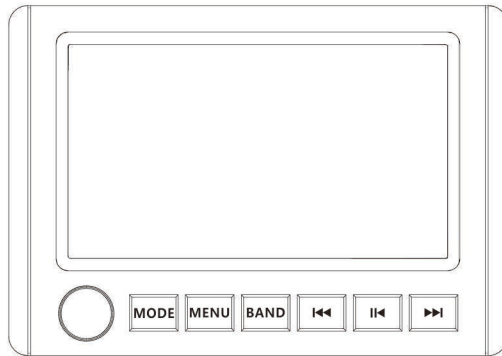
(Figure 11)

The battery indicator shows the battery charging status. See (Figure 11)

## Multimedia combination dashboard description

Ip66 Waterproof LCD multimedia combination instrument panel

Display current vehicle status information, speed, speed, power, mileage, light signal, etc. During driving, you can know whether the operation is correct according to the lighting of the indicator in the instrument cluster. See (Figure 12).

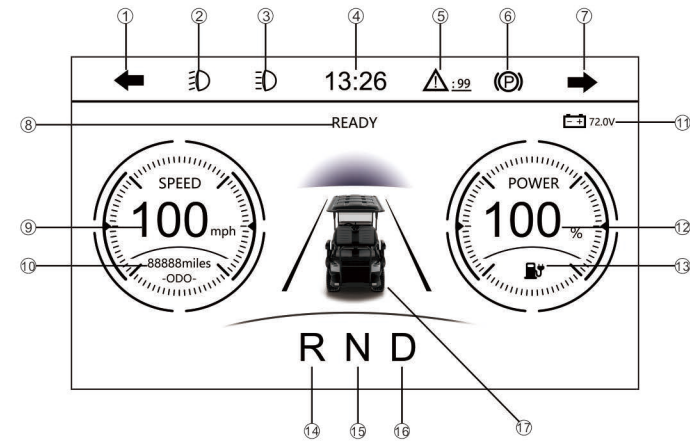


Multimedia dashboard (Figure 12)

Multimedia dashboard function introduction See(Figure 12)

Key definition	Working Status	Operation	Function description
ROTARY KNOB	Shutdown status	Short press	POWER ON
		Long press	POWER OFF
	Power on status	Short press	MUTE
		Turn right	Volume increase
Idle mode	Turn left	Volume decrease	
	Power on status	Short press	Function mode cycle conversion:RADIO-USB-BT-AUX
MODE	RADIO Mode	Short press	Band cycle conversion: FM1-FM2-FM3-AM1-AM2
	USB Mode	Short press	Multimedia Playback Format Conversion
MENU	RADIO Mode	Short press	Return to the main menu
▶▶ (NEXT)	USB/BT Mode	Short press	Play/Pause
		Short press	Auto Scan up to search for radio stations
▶▶ (NEXT)	RADIO Mode	Long press	1.Press and hold to enter MANUAL MODE and display "MANUAL SEEK" (the displayed time is 5s). Release the key and press briefly to adjust the radio station step by step 2.Exit MANUAL MODE after entering MANUAL MODE for about 5s without frequency adjustment
		Bt Mode	Short press
	USB Mode	Short press	Select the next song
		Long press	Fast forward music selection
◀◀ (PRE)	RADIO Mode	Short press	Auto scan down and research for radio station
		Long press	1.Press and hold to enter MANUAL MODE and display "MANUAL SEEK" (the displayed time is 5s). Release the key and press briefly to step out the radio station 2.Exit MANUAL MODE after entering MANUAL MODE for about 5s without frequency adjustment
	Bt Mode	Short press	Select Previous Song
	USB Mode	Short press	Select Previous Song
Long press		Fast rewind music selection	

Main page function introduction:



Illumination diagram of instrument cluster (Figure 13)

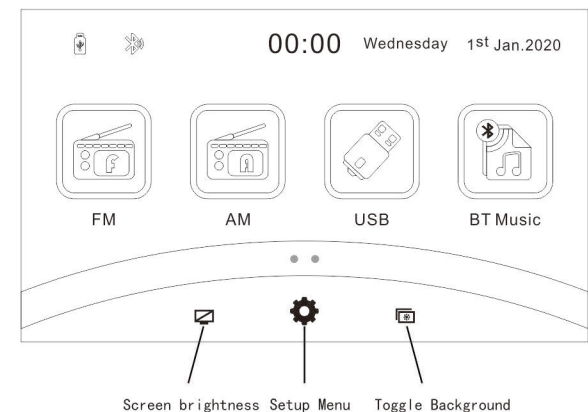
Illumination diagram of instrument cluster See(Figure 13)

- ① Left steering lamp
- ② Dipped headlight
- ③ High beam
- ④ Time display
- ⑤ Vehicle fault information
- ⑥ Electric parking/braking
- ⑦ Right turn signal
- ⑧ Vehicle start
- ⑨ Speed per hour
- ⑩ Total mileage
- ⑪ Battery fault lamp
- ⑫ Power
- ⑬ Charging light
- ⑭ Reverse gear
- ⑮ Parking gear
- ⑯ Forward gears
- ⑰ Multimedia button

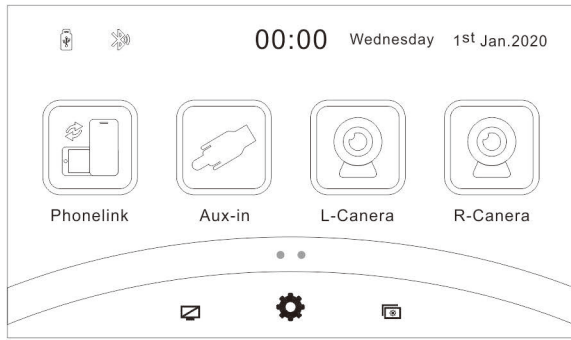
Click the vehicle icon on the screen to enter the secondary page. See(Figure 14)

Function introduction:

- ① FM
- ② AM
- ③ USB
- ④ BT Music
- ⑤ Phonelink
- ⑥ Aux-in
- ⑦ L-Canera
- ⑧ R-Canera



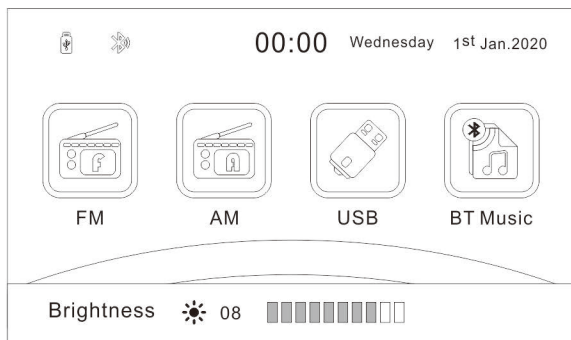
(Figure 14)



(Figure 14)

Click the function icon to enter the third level page

Click the icon to adjust the brightness of the screen as required. See(Figure 15)



(Figure 15)

Click the icon to switch the screen background image directly.

Click the icon to enter the setting menu page.

Introduction to setting menu:

- ① Language selection
  - ② Regional selection
  - ③ Set date
  - ④ set up
  - ⑤ Bluetooth password
  - ⑥ Vehicle system
- See(Figure 16)



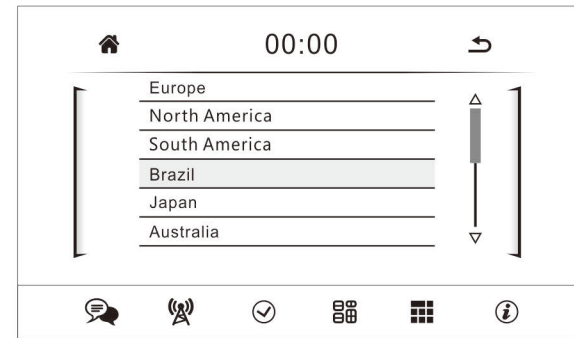
(Figure 16)

Click the icon to enter the language setting page. See(Figure 17)



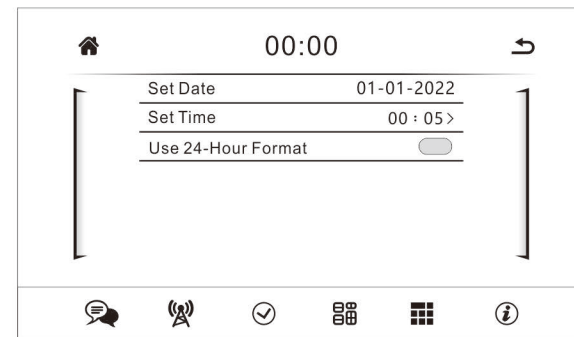
(Figure 17)

Click the icon to enter the region selection page. See(Figure 18)




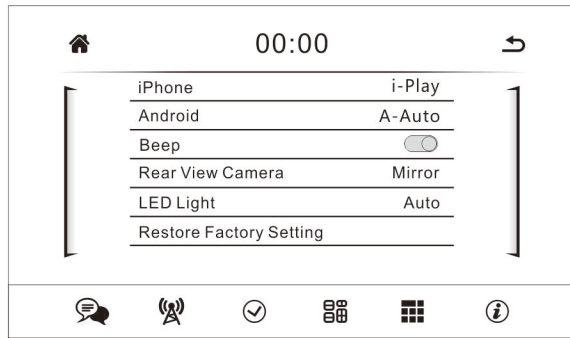
(Figure 18)

Click the icon to enter the date setting page. See(Figure 19)



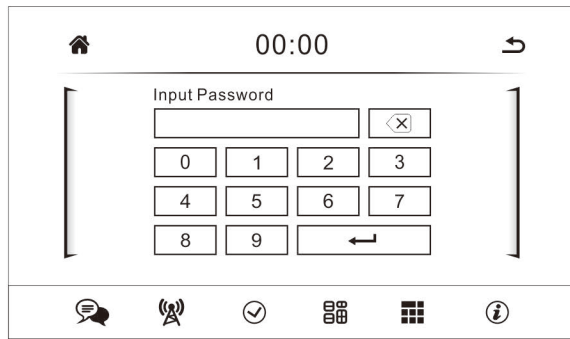
(Figure 19)

Click the  icon to enter the setting page. See(Figure 20)



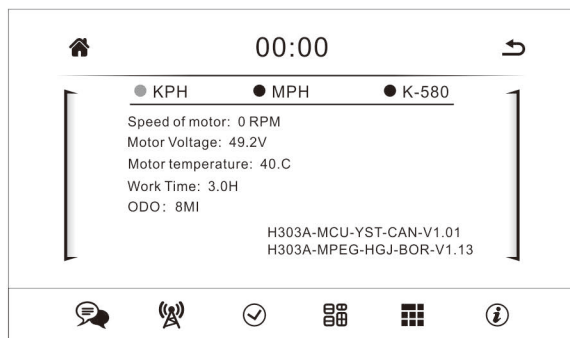
(Figure 20)

Click the  icon to enter the Bluetooth password page. See(Figure 21)



(Figure 21)

Click the  icon to enter the vehicle system page. See(Figure 22)



(Figure 22)

## Common Faults and Handling Methods of ACM Electronic Control

NO. of Fault	The Fault Name in English	The Solution Scene	The Probable Cause	The Level of The Fault	Descriptions	The Type of The Fault
2	Controller short circuit continuous overcurrent	1. Restart the key switch 2. Low battery voltage	1. Restart the key switch. If the fault persists, replace the controller 2. Low battery voltage 3. power u.v.w is loose 4. controller internal wire is loose 5. controller software version	warning	If overcurrent or short circuit fault occurs repeatedly, restart the key	power level
19	Precharge fault	1. wiring harness is broken iron 2. battery low voltage 3. The lithium battery model is connected to the charger to operate the vehicle	1. Whether the wiring harness has broken skin 2. Low battery voltage 3. The lithium battery model is connected to the charger to operate the vehicle	Failure shut-down	The charging time of the controller capacitor times out	battery
30	Motor temperature higher	1. traction motor temperature sensor failure 2. harness failure, Traction motor temperature sensor connection line is broken 3. the motor temperature is too high	1. traction motor temperature sensor failure 2. harness failure, Traction motor temperature sensor connection line is broken 3. the motor temperature is too high	Failure shut-down	The electrical machinery hyperpyrexia	Motor temperature
50	Drive 2 shorted & overcurrent ,warning	1. check the main drive output outlet 2 output cable harness for short circuit 2. drive output outlet 2 coil fault	1. check the main drive output outlet 2 output cable harness for short circuit 2. drive output outlet 2 coil fault	warning	The current exceeds the set value	Driver port output
52	Drive 3 shorted & overcurrent ,cut off	1. check the main drive output outlet 3 output cable harness for short circuit 2. drive output outlet 3 coil fault	1. check the main drive output outlet 3 output cable harness for short circuit 2. drive output outlet 3 coil fault	warning	The outlet overflows	Driver port output
66	CAN communication fault	1. please check whether the CAN line is open, open, short circuit (controller, instrument) 2. check whether the resistance on the CAN is 60 ohms	1. please check whether the CAN line is open, open, short circuit (controller, instrument) 2. check whether the resistance on the CAN is 60 ohms	Failure shut-down	SDO1 timed out	CAN communication
90	12V voltage higher	1. check the motor encoder and temperature sensor harness 2. motor encoder fault 3. motor temperature sensor failure	1. check the motor encoder and temperature sensor harness 2. motor encoder fault 3. motor temperature sensor failure	Failure shut-down	12V Power supply voltage exceeds the range	application
110	Battery SOC Low	1. low battery power, cut off lifting	1. low battery power, cut off lifting	warning	Battery capacity less than 10%, limited power	application
116	BMS CAN failure	1. The BMS communication is faulty	1, the communication line is disconnected 2, the communication line sequence is reversed	warning		BMS
119	CAN line voltage high	1. The BMS communication is faulty	1, please check whether the CAN line is open, open, short circuit (controller, instrument) 2, check whether the resistance on the CAN is 60 ohms	warning		application

## Fault Information (ALM\_INFO) ID: 0x18FFAFF4

The alarm information is sent in an event-triggered manner. When there is an alarm, the BMS sends the message periodically. If there is no alarm information, the message is not sent. When multiple alarms occur at the same time, the instrument interface will display the alarm number circularly, and 4 alarm numbers can be displayed circularly at most. The alarm number display takes the sequence of alarm occurrence as the priority. The detail formats are as followed:

Alarm number	Parameter	initial position	Length	Range	Resolution	Offset	Unit	Remarks
1	Monomer overpressure	0	2	0~3	1	0		Alarm Level
2	Monomer undervoltage	2	2	0~3	1	0		
3	Total voltage overvoltage	4	2	0~3	1	0		
4	Total voltage undervoltage	6	2	0~3	1	0		
5	The monomer pressure large difference	8	2	0~3	1	0		
6	Discharge overcurrent	10	2	0~3	1	0		
7	Charging overcurrent	12	2	0~3	1	0		
8	Temperature is too high	14	2	0~3	1	0		
9	Temperature is too low	16	2	0~3	1	0		
10	The temperature is large difference	18	2	0~3	1	0		
11	SOC is too low	20	2	0~3	1	0		
12	Insulation too low	22	2	0~3	1	0		
13	High voltage interlock fault	24	2	0~3	1	0		
14	External communication failure	26	2	0~3	1	0		
15	Internal communication failure	28	2	0~3	1	0		

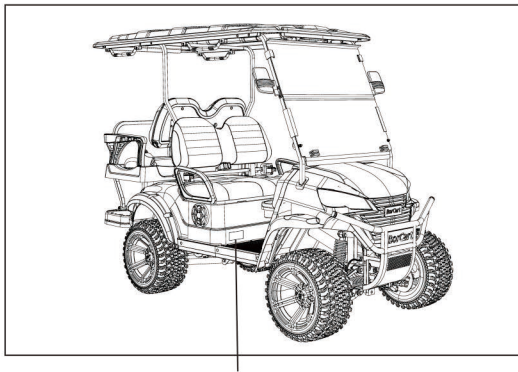
Alarm level: 0 is no alarm, level 1 is serious alarm, level 2 is important alarm, and level 3 is general alarm.

Example 018FFAFF4 43 00 20 00 XX XX XX XX

Indicates: Class 3 alarm for monomer over voltage; Class 1 alarm for total voltage under voltage; Class 2 alarm for SOC too low.

## Important labels

### Golf cart serial number



The golf cart serial number identification plate is located under the passenger seat.

(Figure 23)

### Note

The first four digits of the serial number are used for model identification; Other figures are unit production numbers. When ordering parts to the dealer, please record these numbers for reference.

See(Figure 23)

## Inspection before operation

Each BorCart Golf car has been thoroughly inspected and adjusted. When your new car arrives, please be familiar with the control, indicator and operation of the car, and check all components to ensure that everything is normal.

Please use the checklist as a guide. The preoperation inspection shall be carried out every time the golf cart is used. Make it a second nature to perform the following checks in the same way.

Warning Before carrying out the preoperation inspection, make sure to remove the main switch key to prevent accidental starting, and apply the parking brake to prevent the vehicle from moving.

### Preoperation checklist

Check the following before each use:

**Battery:** check whether the battery is firmly fixed in place to prevent damage due to vibration or shock. Also check that the battery cover is missing to prevent battery acid from spilling from the battery. Check the battery terminals for corrosion.

### Tyre condition

Tyre pressure: Before operating the golf cart, check whether the tyre pressure is correctly inflated.

Check the tire surface for damage, cracks, or embedded objects. When the tire tread is worn to 0.04 inch. (1 mm), replace the tire.

**Vehicle body and chassis:** Before each use, visually inspect the golf body and chassis for damage and/or missing parts. Function inspection: After getting familiar with the control device and reading the manual, you can safely operate the golf cart.

### Daily Checklist

Please use the following checklist as a guide to check daily operation and vehicle.

Drive selector switch (D/R switch)

Check to ensure that it is working properly.

### Pedal operation

Check the following pedal controls for proper operation. If the pedal does not work properly, consult an BorCart dealer. Make sure that the brake pedal feels tight when pressed, and then returns to the original position when released. Step on the brake pedal. The brake pedal should not touch the car floor. The golf cart brake distance should stop within 4.3 meters (14 feet). Otherwise, check whether the brake system is adjusted correctly.

### Parking brake pedal

Make sure that the parking brake pedal is locked in place and released when the accelerator pedal is depressed.

### Spare buzzer

Check the reversing buzzer by moving the drive selection switch to "R" (reverse gear). The buzzer should sound.

### Steering system

Check the steering system for excessive free play by:

1. Move the steering wheel up and down, back and forth.
2. Turn the steering wheel slightly to the right and left.

If you feel that the free stroke is too large or hear an abnormal sound, it may indicate that the steering components are loose, please consult your BorCart dealer.

## Operation

### Understand the function of the control

Make sure that each passenger is seated and safely held.  
 Read the warnings and operating instructions on the indicator board.  
 Make sure the steering wheel is working properly.  
 Make sure the steering wheel is working properly. Turn the master (key) switch to "ON" and check whether your path is consistent with the planned direction. With the parking brake applied, turn the drive selector switch to "D" (forward gear) or "R" (reverse gear).  
 Slowly depress the accelerator pedal, and the locked parking brake will be released automatically. The golf cart will start moving. Press the accelerator plate, and the speed gradually increases to the maximum speed.

### Warning

Control speed when going downhill. When going downhill, the electromagnetic brake can help control the speed. In steep slopes and other situations, you should step on the brake at the same time and move forward slowly.

### Caution

Pay attention to safety In the process of moving, switching the D/R switch to the "N" position will cut off the power supply and stop the vehicle.

### Parking

To stop the golf cart, step on the brake pedal gradually. When the car stops, press the parking brake pedal. Turn the main switch to "OFF". Switch the D/R switch to the "N" position, and take out the key when not in use.

## Storage

When storing golf cart for a long time, please perform the following steps:

1. Turn the main switch key to the "OFF" position, remove the key, and store the key in a safe place.
2. Confirm that the tire pressure is set to 20 psi.
3. Clean the exterior of the golf cart.
4. Cover the golf cart with a breathable cover and store it in a dry, well ventilated area.
5. Lubricate the car every 6 months.
6. Check the battery cable for corrosion and tightness. If necessary, clean the top of the battery with baking soda and water solution to remove corrosion.

## Maintenance

### Periodic Maintenance Form

In order to achieve the best performance and safe operation of your golf cart, regular maintenance is required.

Unless otherwise specified, always turn off the main switch and apply the parking brake when carrying out maintenance. If the owner is not familiar with the maintenance of golf cart, the BorCart dealer or other qualified technicians should carry out this work.

Applicable to all vehicles

C-Check R-Replace L-Lubrication S-Service

CL-Cleaning and lubrication

CA-Check and adjustment service

	Postscript	Daily	20 Round 20 Hour 100 Mile 160 KM (Every months)	125 Round 125 Hour 600 Mile 1000 KM (Every 6 months)	250 Round 250 Hour 1200 Mile 2000 KM (Every year)	500 Round 500 Hour 2500 Mile 4000 KM (Every 2 year)	1000 Round 1000 Hour 5000 Mile 8000 KM (Every 2 year)
prophase	Responsibility	S	S	S	S	S	S
	Clean the top of the battery and check the tightness	S	S	S	S	S	S
Operation	Compression screw and terminal	S	S	S	S	S	S
	Check the free clearance of the brake pedal, adjust if necessary	C	CA	CA	CA	CA	CA
	Check steering operation system	C	C	C	C	C	C
	Check tire pressure, tread depth whether the tire surface is damaged	C	CA	CA	CA	CA	CA
	Check the body and chassis for damage	C	C	C	C	C	C
	Check bolts, nuts, screws and fastening of rivet	C	C	C	C	C	C
Every Months	Check the operation of the reversing buzzer	C	C	C	C	C	C
	Check for line loose or broken connections		C	C	C	C	C
Every 6 Months	Clean/lubricate the pedal control area		CL				
	Check all wires for insulation Cracks and/or wear points			C	C	C	C
	Check the shock absorber for oil leakage and damage			C	C	C	C



Every year	Perform discharge test				S	S	S
	Apply terminal protector				S	S	S
	Check whether the rear axle bearing clearance is rough Or free clearance				C	C	C
	Check the free clearance of the steering knuckle bushing /Adjust wheel alignment				CA	CA	CA
	Check the tightness of wheel nuts and front wheels Bearing clearance				C	C	C
	Check the transaxle oil level and check Leakage				C	C	C
	Check the pedal stop operation and adjust if necessary				CA	CA	CA
Every 4 year	Change the transaxle oil						R
	Check the internal disc brake and replace the brake pads if necessary						CA

### Battery maintenance warning

The electrolyte of the battery is toxic and dangerous, which may cause serious burns, etc. It contains sulfuric acid. Avoid contact with skin, eyes or clothing.

#### Antidote:

Outside, flush with water.

Inside, drink plenty of water or milk. Then add milk magnesia, beaten eggs or vegetable oil. Call your doctor immediately.

Rinse eyes with water for 15 minutes and seek medical advice immediately. Batteries produce explosive gases. Keep away from sparks, flames, cigarettes, etc. Ventilate when charging or using in a confined space. Always cover your eyes when working near the battery.

#### Warning: Keep away from children.

The battery provides power for the electric golf cart. It must be properly maintained and charged to obtain the best performance and service life.

## Battery use and maintenance

### Lead Acid Battery

#### Safe use

#### Discharge

#### Discharge (running) current

Situation	Current (A)	Time
Vehicle starting	$\leq 1.5C$	2-8S
Normal operation	0.3C-0.5C	/
Climbing	$\leq 1C$	$\leq 1C$

Note: The vehicle shall accelerate slowly when starting until it reaches the normal driving speed. It will damage the battery if you step on the accelerator pedal when starting!

Discharge protection (take the rated voltage of a single battery as 8V, and the system voltage as 48V):

Discharge current (A)	System protection voltage (V)	Single protection (V)
$\leq 1.0C$	$\leq 40.8V(1.70V/Monomer)$	$\leq 6V(1.5V/Monomer)$
$> 1.0C$	$\geq 38.4V(1.60V/Monomer)$	$\geq 5.6V(1.40V/Monomer)$
$\leq 0.6C$	Primary protection (alarm reminder)	$\leq 46V(1.92V/Monomer)$ 7V(1.75V/Monomer)
	Secondary protection (out of service)	$\geq 42V(1.75V/Monomer)$ $\leq 6.4V(1.60V/Monomer)$

#### Explain:

- When the system voltage or single voltage reaches the set protection value, it shall enter the protection state.
- In order to obtain the best service life, it is recommended that the battery discharge depth should not exceed 80% of the rated capacity. More than 80% of discharges are deep discharges, The service life of the battery will be shortened, especially the deep discharge exceeding 80% of the rated capacity at -20°C is not allowed.

#### Temperature

The battery can be used in an airtight environment of -20°C~50°C, and the recommended optimal temperature range is 15~35°C. Too high temperature will shorten battery life, and too low temperature will reduce available capacity. All technical data are measured at the rated temperature of 25°C.

#### Charge

The battery shall be charged in an environment with good ventilation and heat dissipation. The ambient temperature shall be 10°C~30°C (the optimal charging temperature is 15°C~25°C). When charging in summer, do not expose to the sun!

## Installation, use and maintenance

**Ventilation and heat dissipation:** The battery shall be installed in an insulated battery box, and shall maintain good ventilation and heat dissipation functions. The battery installation spacing shall be 10mm.

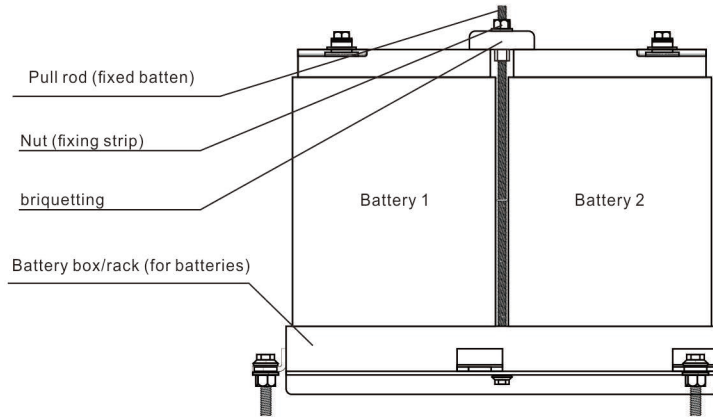
**Battery connecting cable:** the flexible cable with sheath that conforms to the national standard must be used. The installation and use process should prevent the existence of short circuit hazards.

**Polarity:** red is positive, black (or blue) is negative.

**Upright installation and use:** The battery shall be installed and used upright, and it is strictly prohibited to place it sideways or upside down!

**Fixation of the battery (fixed pressure):** If the pressure of the battery fixed pressure bar (batten) on the battery is too high, the battery shell will be fractured and damaged, resulting in battery leakage, electric leakage and even danger!

Therefore, the measures to reduce the pressure should be taken to fix the pressure bar to prevent fracturing cells (for example, add sidebars at both ends of the pressure bar, increase the contact area and decrease the pressure!). The fixing pressure of the pressure bar should be appropriate, and should not exceed 10kgF/cm<sup>2</sup> (equivalent to the pressure bearing capacity of the shell not exceeding 1 MPa). The nuts on both sides of the pressure bar should be tightened evenly to tighten without too much stress on the battery shell.



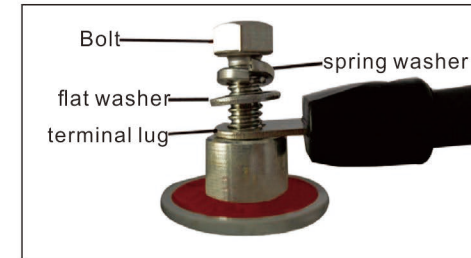
Schematic Diagram of Battery Installation Spacing

## Connect

Before connection, check that all batteries and connectors are free from damage or defects to ensure correct polarity connection; Put the charging equipment in the "power off" state without connecting the load, and connect the battery (group) with the charger according to the correct polarity; Insulating tools shall be used when installing and handling batteries, and insulating gloves, aprons and protective glasses shall be worn; During handling, prevent collision and impact, and do not collide or twist terminals and safety valve covers; It is forbidden to put tools, sundries or other conductive objects on the battery; Dirty terminal blocks or loose connection methods may cause hidden dangers such as battery heating, sparking and micro short circuit. Therefore, keep the terminal blocks clean and tighten the connecting bolts to make the torque reach the required value, but do not create excessive twisting pressure on the terminals.

## Connection mode:

1. The red battery is positive, and the black or blue battery is negative; Each vehicle is equipped with a group of batteries connected in series (positive and negative polarity are connected in sequence), and the connection between the battery and the external line (charging and discharging lines) is the same polarity; It is recommended to use sheathed flexible wire for all connections;
2. Connection between terminals and connecting wires: the bolts, spring washers and flat washers are made of stainless steel, the wire nose is made of red copper, and the installation sequence (from bottom to top, the connection nose is made of one flat washer, one spring washer and one bolt) is shown in the following diagram:



## Factors causing damage during battery use

- Battery fault: single backward, internal short circuit or broken grid;
- Long term undercharge or over discharge causes irreversible sulfation inside, leading to battery failure;
- The charger does not meet the requirements, and the battery is damaged;
- The battery is damaged due to over discharge and unreasonable setting of vehicle low-voltage protection or failure of protection function;
- The running current of the vehicle is too high (due to resistance, fault and other reasons), resulting in the rapid loss of the battery and early scrapping;
- The battery connection is loose or short circuited, causing ignition, heating and burning of the battery;
- Cracking, damage and looseness of battery shell or terminal caused by external force collision and extrusion;
- Bad driving habits: When the vehicle starts, step on the accelerator pedal violently, resulting in excessive transient current of the vehicle, which will cause damage to the battery! The correct approach is to accelerate slowly.

## Lithium battery

### Safe use

#### Discharge

- When discharging the battery, wear rubber or rubber gloves for insulation protection;
- Before operation, check that there are no foreign matters or water stains in the vehicle connector and battery connector to avoid battery damage due to poor contact during discharge;
- Before use, check whether the battery wiring is in good contact, including high voltage and low voltage, and whether the harness is aging and damaged. If so, you should notify the professional for maintenance in time;
- The actual polarity wiring mode of the battery connector varies according to different plug-ins or customer requirements. Please note before use, to confirm whether the polarity of the battery end is consistent with that of the load end, and whether the plug-in model is matched, otherwise, normal use will not be possible; Power off the battery when not in use.

#### Charge

- When the battery power is low, it should be charged in time to avoid long-term low power operation. During charging, a special charger must be used, which must be mixed with the same type of charger. Before connecting the charger to the external power supply, confirm whether the grid voltage and its frequency are consistent with the charging motor matching;
- During charging operation, rubber or rubber gloves shall be worn for insulation protection;
- Before operation, check that there are no foreign matters or water stains in the charger connector and battery connector;
- When the battery is connected to the charger, if it cannot be connected normally, it is required to confirm that the problem is eliminated before operation. Violent connection is strictly prohibited; At the beginning of charging, check to ensure that the battery has been charged normally;
- After the battery is fully charged, the charging shall be stopped in time. It is recommended not to charge the battery for a long time when no one is around.

#### Maintenance

- If there are a lot of dust, metal chips or other sundries on the upper cover and pole of the battery pack, clean them with compressed air in time to avoid using water or water soaked objects for cleaning;
- Estimate the charging time and discharging time of the battery according to the actual use state of the battery or battery pack, and pay attention to observe whether the battery or battery pack is abnormal at the end of charging and discharging, such as the voltage difference of the battery;
- Check whether the power line, low-voltage acquisition terminal and other nodes are loose, fallen, rusted or deformed, and ensure that the series parallel harness used by the battery pack is firm and reliable;
- Check the battery shell for cracks, deformation and other abnormalities;
- Check the insulation resistance between the battery pack and the vehicle body to ensure that there is no leakage of the battery; When carrying out professional maintenance, you can contact the relevant technical department or after-sales service department of the company to obtain professional technical support.
- If the abnormal state cannot be eliminated, please contact the local BorCart dealer in time, and the BorCart dealer will obtain professional technical support from the relevant technical department or after-sales service department of the company.
- If the abnormality is not eliminated, please contact our technicians after-sales.

### Notice

- Before using the battery pack, please read the user manual carefully to understand the use methods and precautions;
- Keep the battery or battery pack away from dangerous goods or materials, such as corrosive chemicals, dangerous mechanical equipment, high temperature environment, etc.;
- Non professionals are not allowed to dismantle the battery without authorization;
- Be sure to use the original charger or the charger agreed by both parties
- It is prohibited to extrude, puncture, use or bake the battery at high temperature to prevent the battery from being subjected to excessive vibration, external force impact, etc.;
- It is prohibited to directly short circuit the positive and negative poles of the battery to avoid any metal or other conductive objects contacting the positive and negative poles of the battery, which may cause personal injury or property loss;
- When the battery pack is empty, please charge it in time. When the battery pack is not in use, please close the power lock to prevent the battery pack from losing power; It is prohibited to use this series of products in series or parallel with other models or types of batteries.

Any damage to the battery pack caused by abnormal use or natural disasters is not covered by the warranty.

### Maintain

- Measure the ambient temperature, battery shell temperature and terminal temperature during battery charging and discharging, and make records;
- Measure the total voltage of the battery pack, the voltage of a single battery, the starting current, the normal working current, the full load current, and the electricity quantity, and make records;
- Check that the battery shell and terminal shall be clean and free of damage and defect;
- Check that the battery box shall have good ventilation, heat dissipation, rainproof and waterproof functions, and there shall be no water in the battery box;
- Other potential safety hazards shall be corrected in time.

### Other precautions

- Prevent the vehicle from being exposed to the sun in summer!
- It is strictly forbidden for organic substances and solvents (including brake fluid, gear oil, engine oil and other vehicle oil liquids, lubricating grease substances, rubber pads containing DOP/DOTP and other plasticizers, plastics, etc.) to contact the battery, so as to prevent damage and leakage hazards caused by corrosion of the shell!
- After the battery shell is accidentally broken, corrosive dilute sulfuric acid liquid may flow out. If it accidentally touches the skin or eyes, immediately wash them with plenty of water and seek medical treatment;
- Children and minors are not allowed to touch the battery!
- Power must be cut off before installing and maintaining the battery (including the power switch of the charger and vehicle system). Please wear insulating gloves and take protective measures;
- Do not disassemble the battery to avoid danger! Waste batteries must be handed over to qualified institutions or units for recycling. It is strictly prohibited to discard them at will to avoid potential harm to the environment!

## About Charging

The following is a summary of the charging steps

Do not attempt to charge the golf cart battery without thoroughly reading and understanding the user manual provided with the charger.

1. Turn the main switch key to the "OFF" position.
2. Connect and ground the charger correctly (see the charger user manual), and plug the DC output plug into the golf cart socket.

### Caution

Use only battery chargers special for use

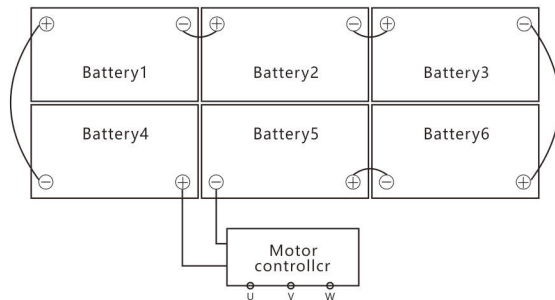
Equipped with 48V for BorCart Golf Cars. Thoroughly read and understand the user manual provided with the 48V charger.

When the charger is turned on, do not disconnect the DC output line from the battery socket, otherwise electric arc may occur, and causing explosion

3. When the battery is fully charged, the charger will automatically turn off
4. After the charger is turned off, grasp the plug body and pull the plug directly out of the socket to disconnect the DC output plug from the golf cart socket.

### Battery installation

When using the battery, do not put a wrench or other metal objects through the battery terminals. The electric arc may cause the battery to explode.



Install the battery hold down plate and tighten to a torque of, as shown.

### Warning

When installing the battery: Carefully place the battery cable and clamping device to ensure that the cable does not pass through the ventilation cap. Be sure to remove the negative (-) cable of the motor controller before installing it.

### Caution

Do not over tighten the battery and hold down nut. Excessive force will damage the battery housing.

Operate the handle of the charging plug instead of the cable of the charging plug.

The above battery wiring diagram is for reference only. The actual vehicle may be different, for example, 48V power supply system, and the battery may be 8V \* 6 or 12V \* 4.

## Service after sale

BorCart warranties for transport and multi-purpose vehicles

### 1. Guarantee:

BorCart hereby warrants to the original retail purchaser that the new transport and multipurpose vehicle purchased from BorCart or an authorized dealer will not have any defects in material and workmanship. Under the condition of normal use and maintenance, our company will provide warranty within the following period according to the provisions, restrictions and exceptions listed in the warranty statement.

One year limited warranty: If the motor, drive axle assembly (electric vehicle), chassis assembly, cargo bucket hydraulic system, cab assembly, and golf driving range protective cover have defective materials and workmanship within 1 year from the date of purchase of operation, they can enjoy parts replacement and maintenance services.

One year limited warranty: All other parts of the vehicle not otherwise stated, portable beverage cabinets and all other items BorCart provides original optional parts and accessories within one year from the date of purchase, excluding wearing parts, such as material and process defects, can enjoy parts replacement and maintenance services.

For those items specifically listed within the specified period, the limited warranty includes material, process and maintenance labor costs. Such repair and maintenance services must be provided by BorCart, an authorized dealer, or a service agency approved by BorCart.

Battery warranty: One year limited warranty for lead-acid batteries; Lithium iron phosphate batteries have a three-year limited warranty. If the warranty registration form is not completed and mailed to BorCart at the time of first purchase, the purchaser must provide the date of purchase and any evidence of warranty application.

### 2. Exclusions:

Common wearing parts: BorCart and its authorized distributors shall not be liable for accidents, changes in use, misuse or negligence caused by improper use, strain, improper installation of parts or accessories, overloading, misoperation or improper use of fuse, bulb, trim piece, seat, charging plug and socket, shell, seat cushion, brake hubs, brake shoes, tires and exposed vulnerable parts. In case of any damage to the above accessories, the authorized dealer shall charge corresponding fees according to the standard. BorCart's warranty also excludes vehicles or components that are damaged intentionally but not negligently (including improper or unintentional twisting or use, improper installation of accessories, failure to install original components or accessories, overloading, accidents, random modification, abuse or negligence). The warranty does not include the shipping cost during warranty service.

### 3. Warranty Failure:

If the vehicle is misused or carelessly used, or the vehicle is modified in any way, including but not limited to modifying the speed limiter, brake system, steering, drive axle or other operating systems of the vehicle to perform operations beyond BorCart specifications, this and any other warranties will be invalid. If the condition of the vehicle indicates that reasonable or necessary maintenance is not carried out according to the time and method specified in the owner's manual and the maintenance and service manual, the warranty is also invalid.

#### **4. The only compensation measure:**

BorCart's liability under this limited warranty or any litigation (whether based on warranty, contract, negligence, strict product liability or other content) is that BorCart decides to repair or replace the damaged vehicle or part in BorCart's opinion. Replacement refers to the provision of new vehicles or factory repaired vehicles or parts (the same or similar to the warranty products or parts) within the applicable limited warranty period, without any charge to the purchaser. Repair refers to the repair of vehicle or component faults within the applicable limited warranty period, and the purchaser shall not pay for it. If BorCart chooses to repair the vehicle, parts or components may be available for factory repair. All parts and components replaced shall belong to BorCart.

#### **5. How to make a warranty claim:**

If you need the warranty service within the scope of this limited warranty, you must provide the vehicle or faulty parts to the BorCart dealer, or send the faulty parts to the Warranty Service Department, Building 16, No. 93, Langqing Road, Dongchong Town, Nansha District, Guangzhou, Guangdong Province, China (freight prepaid), Zip code: 510000, Tel: 0086-20-39005059

#### **6. Disclaimer:**

This limited warranty is exclusive. BorCart makes no other warranties of any kind, express or implied. BorCart rejects that this warranty does not include any implied warranty made by the merchant or any feasible warranty based on a certain purpose (exceeding the liability or time limit stated in this warranty). The Buyer and BorCart expressly agree that the replacement or repair of damaged vehicles or parts is the only compensation to the Buyer. BorCart has not made any other form of representation or warranty, and BorCart's representatives, employees or dealers have no right to make or imply any representation, promise or agreement different from the warranty terms.

If at the time of sale of the vehicle, other printed warranty or certificates (each additional warranty) provided by BorCart are found to be in conflict with the limitations and disclaimers contained herein, the limitations and disclaimers contained herein will continue to apply to this Limited Warranty Statement and the maximum extent permitted by law for each additional warranty.

#### **7. No Consequential Damages**

BorCart shall not be liable for any accident or loss arising therefrom, including but not limited to property loss, vehicle use loss, time loss, inconvenience or any other economic loss.

Some countries express that they do not allow any exclusions or restrictions on the implied warranty period, nor on compensation for incidental or indirect losses. Therefore, the above limitations or exclusions may not apply to you.

This warranty provides you with clear legal rights, and you can also have other rights (depending on the location).

#### **8. Information:**

For more details, please contact Warranty Service Department: Building 16, No. 93, Langqing Road, Dongchong Town, Nansha District, Guangzhou, Guangdong, China, Postal code: 510000, Tel.: 0086-20-39005059.

#### **9. Warning**

Any modification or change to the vehicle beyond the factory regulations, including those that affect the weight distribution, stability or speed of the vehicle may cause serious casualties.