

# EPIC

## CARTS



## OWNER'S MANUAL

Rev 10/1/25

# EPIC User Manual Index

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# WELCOME

Thank you for choosing EPIC Carts and welcome to the EPIC family!

EPIC Carts is a division of the ICON EV, LLC family of brands, a company founded on the principles of bringing cutting edge technology, advanced safety features, high quality, reliability, and affordability together – offering the best golf carts available on the market.

This manual is the user's complete guide to EPIC ownership, including familiarization, maintenance, and safe operation. It is important for each user/operator to read this manual carefully and familiarize themselves with the content contained within to ensure user safety and proper operation of the vehicle. Following the guidelines in this manual will keep your EPIC in top operating condition, achieve optimal performance, and help you to obtain maximum longevity of use. Please pay particular attention to the safety protocols outlined in this manual to protect the safety of drivers, passengers, and other vehicles. Additionally, heed all tips, warnings, and caution notices before, during, and after every use of the vehicle.

The following information is required when contacting your authorized dealer or service center regarding service or parts for your vehicle:

Vehicle Model: \_\_\_\_\_

Frame NO.: \_\_\_\_\_

# WARNING

## Warnings:

- All drivers must be licensed in compliance with state and local laws and regulations!
  - Vehicle modifications are strictly prohibited. Any modifications outside of factory specifications may affect the performance of the vehicle, the service life of the vehicle, the safety of the vehicle, and may even violate laws and regulations. Modifications to the vehicle will immediately void the Manufacturer's Warranty, and damage caused by vehicle modification will not be covered.
1. All drivers must be licensed in compliance with state and local laws and regulations!
  2. Vehicle modifications are strictly prohibited. Any modifications outside of factory specifications may affect the performance of the vehicle, the service life of the vehicle, the safety of the vehicle, and may even violate laws and regulations. Modifications to the vehicle will immediately void the Manufacturer's Warranty, and damage caused by vehicle modification will not be covered.
  3. Unauthorized installation of electrical equipment on the vehicle, such as alarm devices, car phones, etc., may interfere with the electrical signals within the vehicle's control system, and may adversely affect the performance of the vehicle.
  4. Always consult your EPIC dealership and authorized service technician prior to considering installation of additional electrical equipment!
  5. The accelerator pedal and brake pedal must not be pressed at the same time. Doing so will damage the control system and burn out the motor.
  6. Overloading your vehicle is strictly prohibited. Overloading is a safety hazard and may cause damage to the vehicle structure.

## SAFETY INFORMATION

This manual has been designed to assist in maintaining the vehicle in accordance with procedures developed by the manufacturer. Adherence to these procedures and troubleshooting tips will ensure the best possible service from the product. To reduce the chance of personal injury or property damage, the following must be carefully observed:

### GENERAL

Good common sense and prudent driving practices do more to prevent accidents and injury than all of the warnings and instructions combined. The manufacturer strongly suggests that all users and maintenance personnel read this entire manual paying particular attention to the CAUTIONS and WARNINGS contained there in.

EPIC CARTs reserves the right to make design changes without obligation to make these changes on units previously sold and the information contained in this manual is subject to change without notice.

EPIC CARTs is not liable for errors in this manual or for incidental or consequential or consequential damages that result from the use of the material in this manual.

These vehicles are designed and manufactured for off-road use. Some communities may permit these vehicles to be operated on their streets on a limited basis and in accordance with local ordinances.

With electric powered vehicles, be sure that all electrical accessories are grounded directly to the battery (-) post. Never use the chassis or body as a ground connection.

Refer to GENERAL SPECIFICATIONS for vehicle seating capacity.

Never modify the vehicle in any way that will alter the weight distribution of the vehicle, decrease its stability or increase the speed beyond the factory specification. Such modifications can cause serious personal injury or death.

Vehicles that are capable of higher speeds must limit their speed to no more than the speed of other vehicles when used in various environments. Additionally, speed should be further moderated by the environmental conditions, terrain and common sense.

### GENERAL OPERATION

Always:

- ~ Use the vehicle in a responsible manner and maintain the vehicle in safe operating condition.
- ~ Read and observe all warnings and operation instruction labels affixed to the vehicle.
- ~ Follow all safety rules established in the area where the vehicle is being operated.
- ~ Reduce speed to compensate for poor terrain or conditions.
- ~ Apply service brake to control speed on steep grades.

## SAFETY INFORMATION

- ~ Maintain adequate distance between vehicles.
- ~ Reduce speed in wet areas.
- ~ Use extreme caution when approaching sharp or blind turns.
- ~ Use extreme caution when driving over loose terrain.
- ~ Use extreme caution in areas where pedestrians are present.

## MAINTENANCE

### Always:

- ~ Maintain the vehicle in accordance with the manufacturer's periodic serviceschedule.
- ~ Ensure that repairs are performed by those that are trained and qualified to do so.
- ~ Follow the manufacturer's maintenance procedures for the vehicle. Be sure to disable the vehicle before performing any maintenance. Disabling includes removing the key from the key switch and removal of a battery wire.
- ~ Insulate any tools used within the battery area in order to prevent sparks or battery explosion caused by shorting the battery terminals or associated wiring. Remove the batteries or cover exposed terminals with an insulating material.
- ~ Check the polarity of each battery terminal and be sure to rewire the batteries correctly.
- ~ Use specified replacement parts. Never use replacement parts of lesser quality.
- ~ Use recommended tools.
- ~ Determine that tools and procedures not specifically recommended by the manufacturer will not compromise the safety of personnel nor jeopardize the safe operation of the vehicle.
- ~ Support the vehicle using wheel chocks and jack stands. Never get under a vehicle that is supported by a jack. Lift the vehicle in accordance with the manufacturer's instructions.
- ~ Maintain the vehicle in an area away from exposed flame or persons who are smoking.
- ~ Be aware that a vehicle that is not performing as designed is a potential hazard and must not be operated.
- ~ Test drive the vehicle after any repairs or maintenance. All tests must be conducted in a safe area that is free of both vehicular and pedestrian traffic.
- ~ Replace damaged or missing warning, caution or information labels.
- ~ Keep complete records of the maintenance history of the vehicle.
- ~ Every time the vehicle travels 1865 miles, or every 90 days, it is necessary to do front wheel alignment maintenance. This will help with even wear and tear of the tires.
- ~ Use extreme caution. If unsure as to the potential for injury, refer the repair or maintenance to a qualified mechanic.

### FOR THE USER

#### 1.GENERAL SAFETY PRACTICES

##### 1.1 Introduction

Like other machines, EPIC CARTs can cause injury if improperly used or maintained. Part II contains broad safety practices applicable to EPIC CART operations. Before operation, the user shall establish such additional specific safety practices as may reasonably be required for safe operation.

## SAFETY INFORMATION

### 1.2 Nameplates, Markings, Capacity, and Modifications

- 1.2.1 The user shall maintain in a legible condition all nameplates, warnings and instructions that are supplied by the manufacturer.
  - 1.2.2 The user shall not perform any modification or addition which affects capacity or safe operation, or make any change not in accordance with the owner's manual without the manufacturer's prior written authorization. Where authorized modifications have been made, the user shall ensure that capacity, operation, warning and maintenance instruction plates, tags or decals are change accordingly.
- ### 1.3 Changing and Charging Storage Batteries for Electric Personnel and Burden Carriers.
- 1.3.1 The user shall require battery changing and charging facilities and procedures to be in accordance with appropriate paragraphs.
  - 1.3.2 The user shall periodically inspect facilities and review procedures to be certain that appropriate paragraphs, are strictly complied with and shall familiarize carrier operators with it.

## 2. OPERATING SAFETY RULES AND PRACTICES

### 2.1 General

- 2.1.1 Safeguard the pedestrians at all times. Do not drive the EPIC CART in a manner that would endanger anyone.
- 2.1.2 Riding on the EPIC CART by persons other than the operator is authorized ONLY on personal seat provided by the manufacturer.
- 2.1.3 When the EPIC CART is to be left unattended, stop it, apply the parking brake, stop the engine or turn off power, turn off the control or ignition circuit, and remove the key if provided. Block the wheels if machine is on an incline.
- 2.1.4 Use only approved EPIC CARTs in hazardous locations, as defined in the appropriate safety standards.
- 2.1.5 Operators shall not add to, or modify, the EPIC CART.

### 2.2 Driving

- 2.2.1 Observe all traffic regulations, including authorized speed limits. Under normal traffic conditions, keep to the right. Maintain a safe distance, based on speed of travel, from the vehicle ahead, and keep the EPIC CART under control at all times.
- 2.2.2 Do not pass another vehicle traveling in the same direction at intersections, blind spots, or at other dangerous locations.
- 2.2.3 Keep a clear view of the path of travel, observe other traffic and personnel, and maintain a safe clearance.
- 2.2.4 Slow down or stop, as conditions dictate, and activate the sound-producing warning device at cross aisles and when visibility is obstructed at other locations.
- 2.2.5 Ascend or descend grades slowly.
- 2.2.6 Under all driving conditions, the EPIC CART shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
- 2.2.7 Do not indulge in dangerous activities, such as stunt driving or horseplay.
- 2.2.8 Avoid running over loose objects, potholes, and bumps.
- 2.2.9 To negotiate turns, reduce speed to improve stability, then turn hand steering wheel or tiller in a smooth, sweeping motion.
- 2.2.10 It is recommended that the slope of the road does not exceed 25%. The top of the slope and the slope must be smooth and transitioned to prevent the bottom of the vehicle and the pavement collision. When the slope is more than 25%, the signage is recommended. At this point, you must drive the vehicle very carefully.

## SAFETY INFORMATION

### 2.3 Loading

2.3.1 At the beginning of each shift during which the EPIC CART will be used, the operator shall check the EPIC CART condition and inspect the tires, warning devices, lights, battery, speed and directional controllers, brakes, and steering mechanism. If the EPIC CART is found to be in need of repair or in any way unsafe, the matter shall be reported immediately to the designated authority and the EPIC CART shall not be operated until it has been restored to safe operating condition.

2.3.2 Do not make repairs or adjustments unless specifically authorized to do so.

2.3.3 Do not operate the EPIC CART with a leak in the battery.

2.3.4 Do not use open flames for checking electrolyte level in storage battery.

### 3. MAINTENANCE PRACTICES

#### 3.1 Introduction

3.1.1 Carriers may become hazardous if maintenance is neglected. Therefore, maintenance facilities shall be staffed by trained personnel. Such facilities may be on or off the premises.

#### 3.2 Maintenance Procedures

3.2.1 Maintenance and inspection of all EPIC CARTs shall be performed in conformance with the manufacturer's recommendations and the following practices.

(a) A scheduled preventive maintenance, lubrication, and inspection system shall be followed.

(b) Only qualified and authorized personnel shall be permitted to maintain, repair, adjust, and inspect carriers.

(c) Block chassis before working underneath it.

(d) Operation to check performance of the EPIC CART shall be conducted in an authorized area where safe clearance exists.

(e) Before commencing operation of the EPIC CART, follow the manufacturer's instructions and recommended procedures.

(f) Avoid fire hazards and have fire protection equipment present in the work area. Do not use an open flame to check level or leakage of battery electrolyte.

(g) Properly ventilate the work area.

(h) Brakes, steering mechanisms, speed and directional control mechanisms, warning devices, lights, governors, guards, and safety devices shall be inspected regularly and maintained in a safe operating condition.

(i) Special EPIC CARTs or devices designed and approved for hazardous area operation shall be inspected to ensure that maintenance preserves the original approved safe operating features.

(j) Carriers shall be kept in a clean condition to minimize fire hazards and facilitate detection of loose or defective parts.

(k) Modification and additions which affect capacity and safe machine operation shall not be performed by the customer or user without manufacturer's prior written authorization; where authorized modifications have been made, the user shall ensure that capacity, operation, warning, and maintenance instruction plates, tags, or decals are changed accordingly.

(l) Care shall be taken to ensure that all replacement parts are interchangeable with the original parts and of a quality at least equal to that provided in the original equipment.

### MAINTENANCE AND OPERATIONS

#### 1. GENERAL SAFETY PRACTICES

##### 1.1 Introduction

## SAFETY INFORMATION

Like other machines, EPIC CARTs can cause injury if improperly used or maintained. This section contains broad safety practices recommended for safe EPIC CART operations. Before operation, the controlling party should establish such additional specific safety practices as may be reasonably required for safe operations. Experience has shown that EPIC CARTs that comply with the provisions stated in part II of this standard, are safe when properly operated in accordance with the safety and operation recommendations. Operation is enhanced when the EPIC CARTs are operated within a specific set of operation instructions, safety rules and practices established to meet actual operating terrain and conditions. The safety information contained in part II is intended to provide the controlling party with basic safety information and to encourage the controlling party to implement an EPIC CART safety program. It is suggested and recommended that Part II be reprinted in the EPIC CART manufacturer's operation and service manuals to encourage safe operations and practices at the controlling party's facility.

### 1.2 Safety Survey

The controlling party shall perform a safety survey periodically, and as conditions warrant to their premises, to identify areas where the EPIC CART should not be operated and to identify possible hazards.

#### 1.2.1 Wet and Loose Terrain

Wet grassy areas and loose terrain may cause the EPIC CART to lose traction and may affect stability. Wet areas and loose terrain shall be chained or roped off to prevent EPIC CART operations, or shall be identified by a suitable warning not to operate EPIC CARTs in this area due to wet and loose terrain.

#### 1.2.2 Sharp Turns, Blind Corners, Bridge Approaches

Sharp turns, blind spots, bridge approaches and other potentially hazardous areas shall be either chained or roped off to prevent EPIC CART operations, or shall be identified with a suitable warning to the operator of the nature of the hazard, and the proper precautions to be taken to avoid the hazard.

## 2.0 MAINTENANCE

### 2.1 Introduction

2.1.1 EPIC CARTs may become hazardous if maintenance is neglected or improperly performed. Therefore, maintenance facilities, trained personnel and procedures in accordance with the manufacturer's recommendations should be provided by the controlling party.

### 2.2 Preventive Maintenance

A regularly scheduled inspection and preventive maintenance program in accordance with the manufacturer's recommendations should be established.

#### 2.2.1 Personnel

Only qualified, trained and authorized personnel shall be permitted to inspect, adjust and maintain the EPIC CART.

#### 2.2.2 Parts and materials

Only manufacturer's recommended replacement parts and materials shall be used.

#### 2.2.3 Ventilation

Maintenance and storage areas shall be properly ventilated to avoid fire hazards in accordance with applicable fire codes and ordinances.

#### 2.2.4 Maintenance Safety Procedures

All maintenance shall be performed in accordance with the manufacturer's recommended safety procedures as outlined in the manufacturer's operation and service manuals. The following list of recommended safety procedures are general in nature and in no way supersede the manufacturer's specific instructions.

## SAFETY INFORMATION

- 2.2.4.1 Follow manufacturer's instructions for immobilizing an EPIC CART before beginning any maintenance.
  - 2.2.4.2 Block chassis before working underneath an EPIC CART.
  - 2.2.4.3 Before performing any maintenance on an electric EPIC CART, disable the electrical system in accordance with the manufacturer's instructions.
  - 2.2.4.4 Use only properly insulated tools when working on an electrically powered EPIC CART or around batteries.
  - 2.2.4.5 The controlling party shall not perform any modification or addition which affects capacity or safe operation, or make any change not in accordance with owner's manual without the manufacturer's prior written authorization. Where authorized modifications have been made, the controlling party shall ensure that capacity, operation, warning and maintenance instruction plates, tags or decals are changed accordingly.
3. OPERATING SAFETY RULES AND PRACTICES
- 3.1 Operator Qualifications
    - 3.1.1 Only authorized persons shall be allowed to operate an EPIC CART. It is recommended that no persons be allowed to operate an EPIC CART except those persons who possess a valid motor vehicle driver's license.
    - 3.1.2 The controlling party shall display the operation and safety instructions as recommended by the EPIC CART manufacturer and the safety rules in a conspicuous place near the EPIC CART rental area or EPIC CART pick-up area. It is also recommended, as with all motor vehicles, that the warning "Do not operate EPIC CART when under the influence of alcohol or drugs" be posted in a conspicuous location.

# OPERATION INFORMATION

## OPERATION INSTRUCTIONS

Thank you for purchasing this vehicle. Before driving the vehicle, we ask you to spend some time reading this Owner's Manual. This guide contains the information that will assist you in maintaining this highly reliable vehicle.

Read all of manual to become thoroughly familiar with this vehicle. Pay particular attention to all Notes, Cautions and Warnings.

This vehicle has been designed and manufactured as a "World Vehicle". Some countries have individual requirements to comply with their specifications: therefore, some sections may not apply in your country.

Most of the service procedures in this guide can be accomplished using common automotive hand tools.

## BEFORE INITIAL USE

Read, understand and follow the safety label on the dashboard panel. Be sure you understand how to operate the vehicle, its equipment and how to use it safely. Maintaining good performance depends to a large extent on the operator.

Before a new vehicle is put into operation, the items shown in the INITIAL SERVICE CHART must be performed (Ref Fig.1).

Vehicle batteries must be fully charged before initial use. Check for correct tire inflation. See GENERAL SPECIFICATIONS.

Determine and record braking distance required to stop vehicle for future brake performance tests.

Remove the protective clear plastic, which protects the seat bottom and back rest during shipping, before placing the vehicle in service.

| <b>ITEM</b>        | <b>SERVICE OPERATION</b>                |
|--------------------|---|
| Batteries          | Charge batteries                        |
| Seats              | Remove protective plastic covering      |
| Brakes             | Check operation and adjust if necessary |
|                    | Establish acceptable stopping distance  |
| Tires              | Check air pressure (see SPECIFICATIONS) |
| On Board Charger - |   |

Fig.1 Initial Service

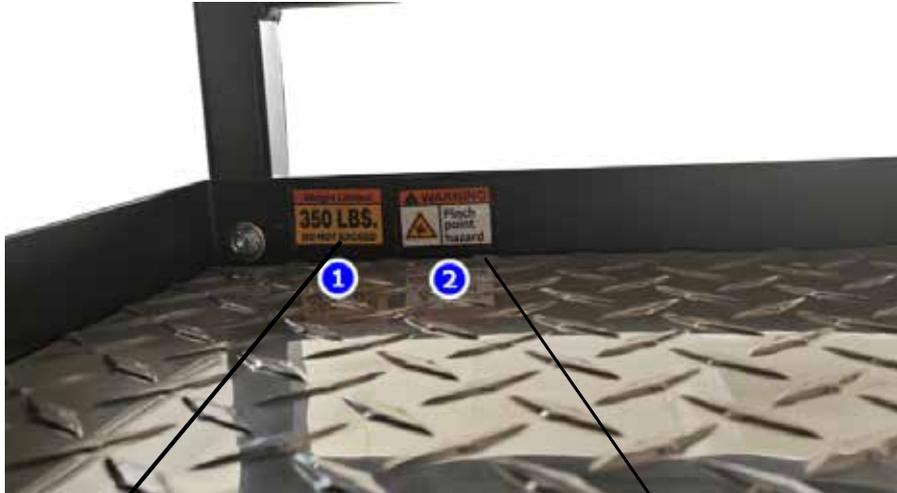
**WARNING** To prevent overheating that may cause serious damage to the charger and create the potential for fire, do not block or obstruct the airways.



Left windshield sign



Right windshield sign



Weight limit label



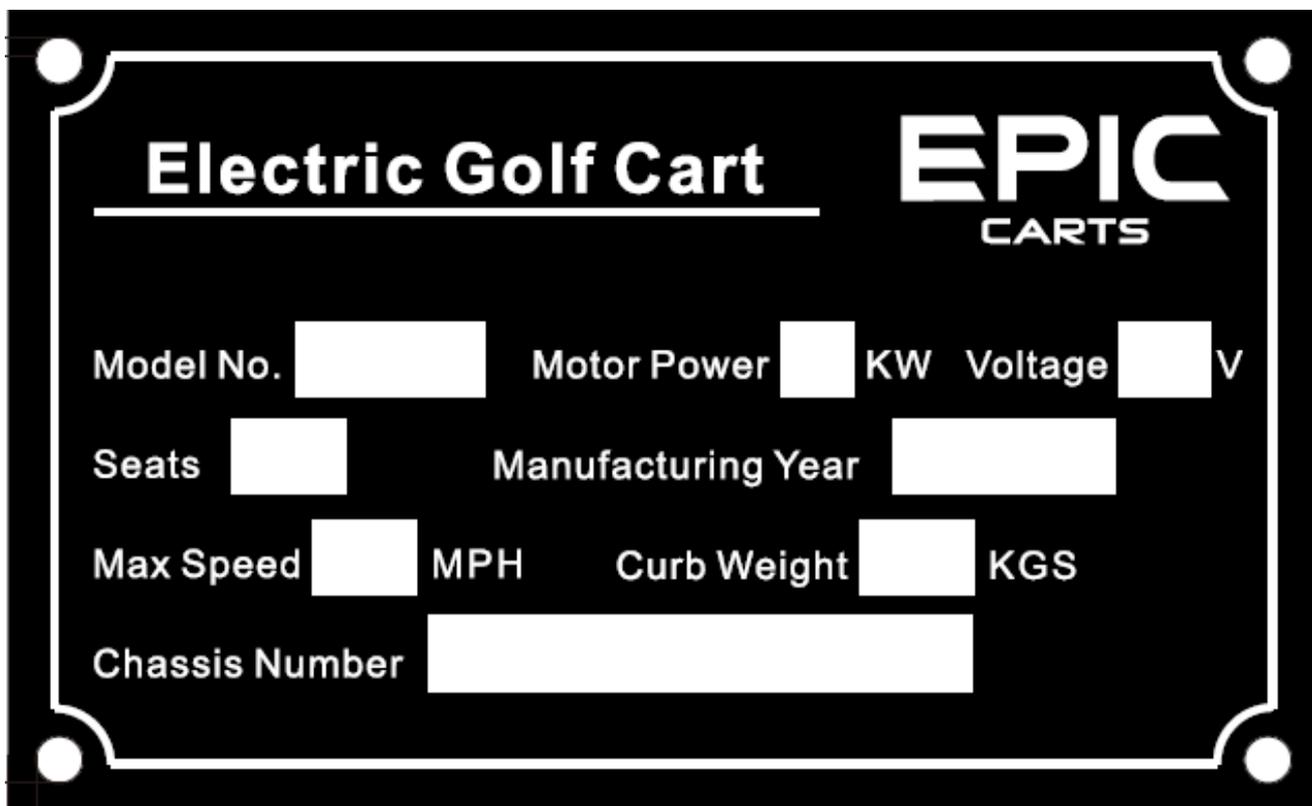
Prevent hand from being hurt label



No pulling forcefully on non-load-bearing labels

**2. Vehicle identification information**

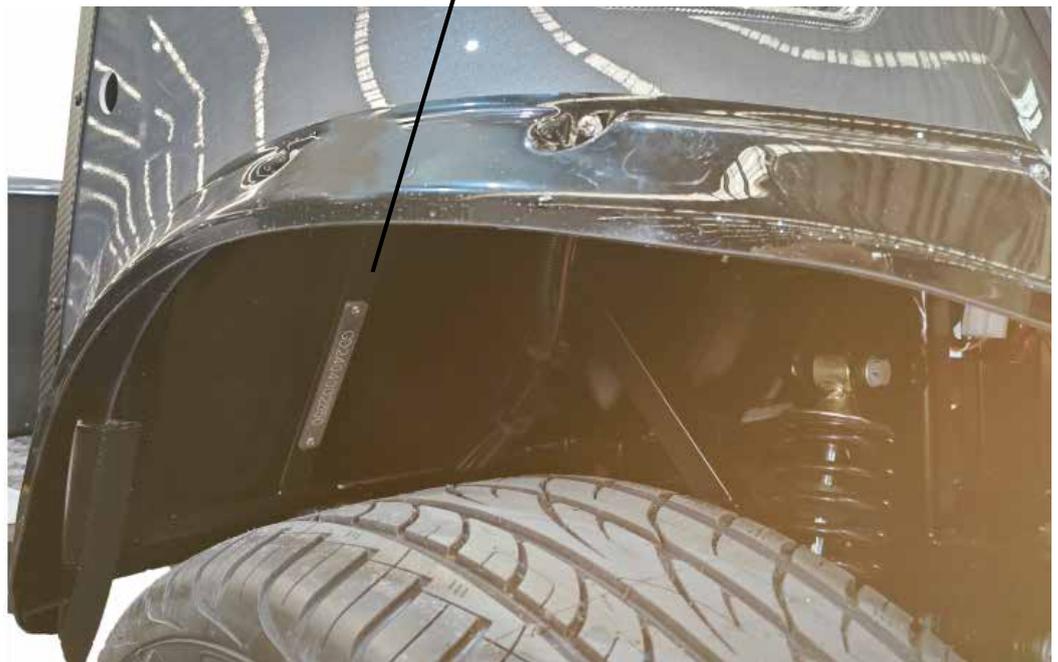
Nameplate



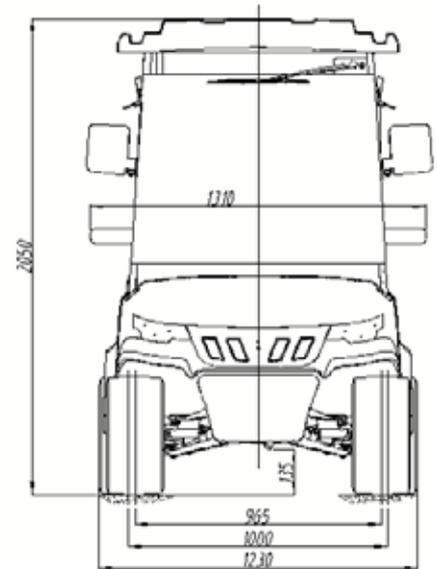
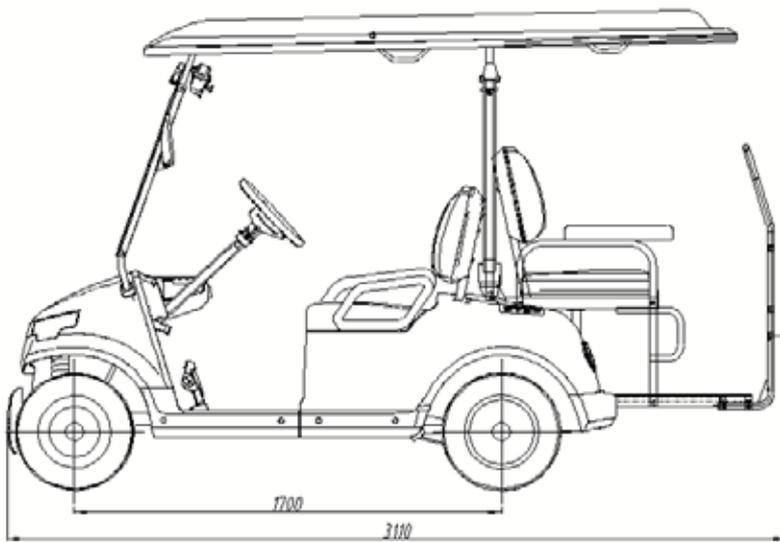
- The configuration of each vehicle may not be the same, so be sure to check the nameplate to confirm its attributes before use.
- Please check and confirm that the weight and the number of passengers must not exceed the rated weight and the rated number of passengers when the vehicle is used to

Frame NO.

- All vehicles have a frame number on the front right side of the frame. The first 4 numbers are the year and month the vehicle was built. The other numbers are the serial number provided by EPIC, and all vehicles are recorded.
- After the vehicle has left the factory, EPIC can track the vehicle using the frame number as an identifier.
- Since design changes occur on a continuous basis, to ensure that you obtain the correct vehicle parts, it is important to provide the correct vehicle frame number.

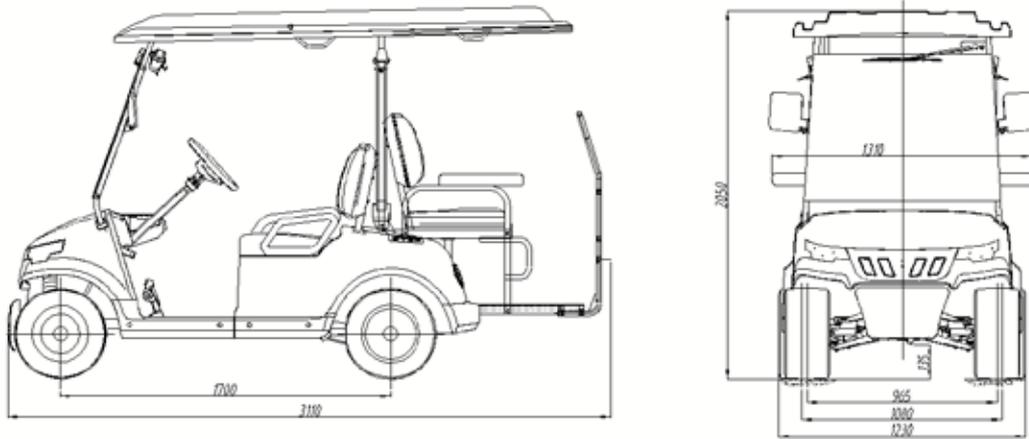


DG-C2+2-8T



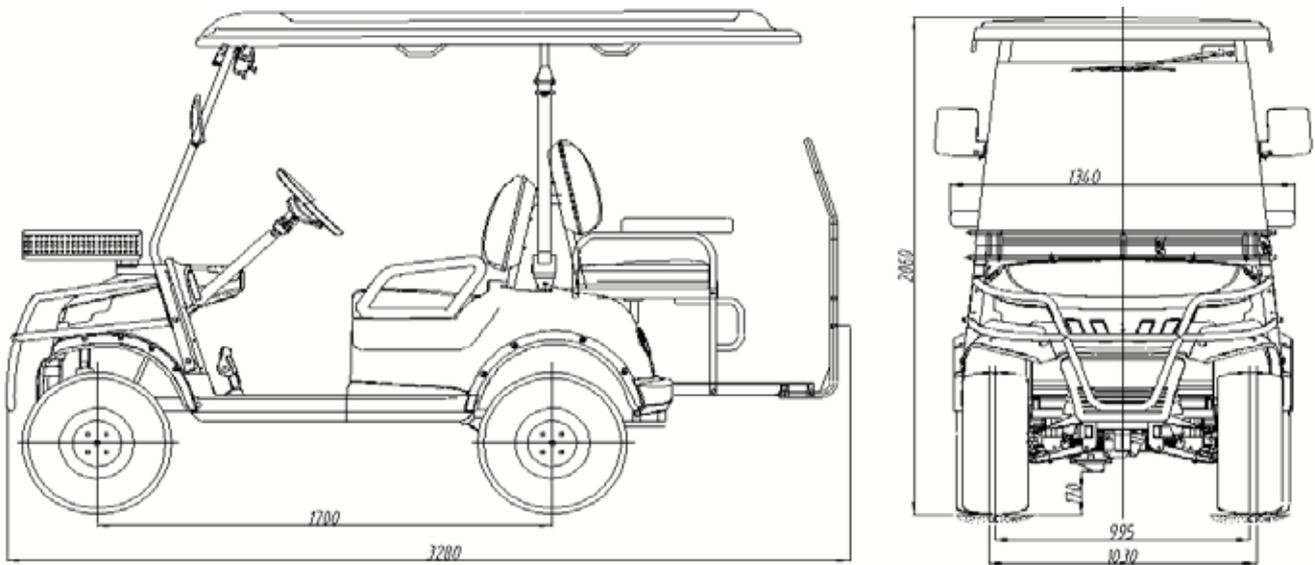
| DG-C2+2-8T Technical Specification |                    |                       |                    |
|------------------------------------|--------------------|-----------------------|--------------------|
| Overall mass                       | 650kg              | Gross Weight          | 360kg              |
| Overall dimensions                 | 3165*1340*2055mm   | Wheel base            | 1700mm             |
| Front wheel Tread                  | 965mm              | Rear wheel Tread      | 1000mm             |
| Min. Ground Clearance              | 135mm              | Min. Turning Radius   | ≤4m                |
| Max. speed                         | 30km/h             | Max. climbing ability | 20% (fully loaded) |
| Mileage                            | 50km(fully loaded) | Brake Distance        | ≤4.5m              |

DG-C2+2-8T



| DG-C2+2-8T Technical  |                    |                       |                    |
|-----------------------|--------------------|-----------------------|--------------------|
| Overall mass          | 650kg              | Gross Weight          | 360kg              |
| Overall dimensions    | 3165*1340*2055mm   | Wheel base            | 1700mm             |
| Front wheel Tread     | 965mm              | Rear wheel Tread      | 1000mm             |
| Min. Ground Clearance | 135mm              | Min. Turning Radius   | ≤4m                |
| Max. speed            | 30km/h             | Max. climbing ability | 20% (fully loaded) |
| Mileage               | 50km(fully loaded) | Brake Distance        | ≤4.5m              |

DH-C2+2-8T



| DH-C2+2-8T Technical Specification |                    |                       |                   |
|------------------------------------|--------------------|-----------------------|-------------------|
| Overall mass                       | 710kg              | Gross Weight          | 360kg             |
| Overall dimensions                 | 3280*1340*2060mm   | Wheel base            | 1700mm            |
| Front wheel Tread                  | 995mm              | Rear wheel Tread      | 1030mm            |
| Min. Ground Clearance              | 170mm              | Min. Turning Radius   | ≤4m               |
| Max. speed                         | 30km/h             | Max. climbing ability | 20%(fully loaded) |
| Mileage                            | 50km(fully loaded) | Brake Distance        | ≤5m               |

### 4.3 Push button switch

Gear switch:

Push the switch to RUN, then vehicle can be normally energized.

Push the switch to MANUAL EMB, then the vehicle is energized but cannot be driven. ( You can only push the vehicle manually.)

Push the switch to OFF. The whole vehicle is powered off, and at the same time, the vehicle is in parking brake and cannot be pushed.

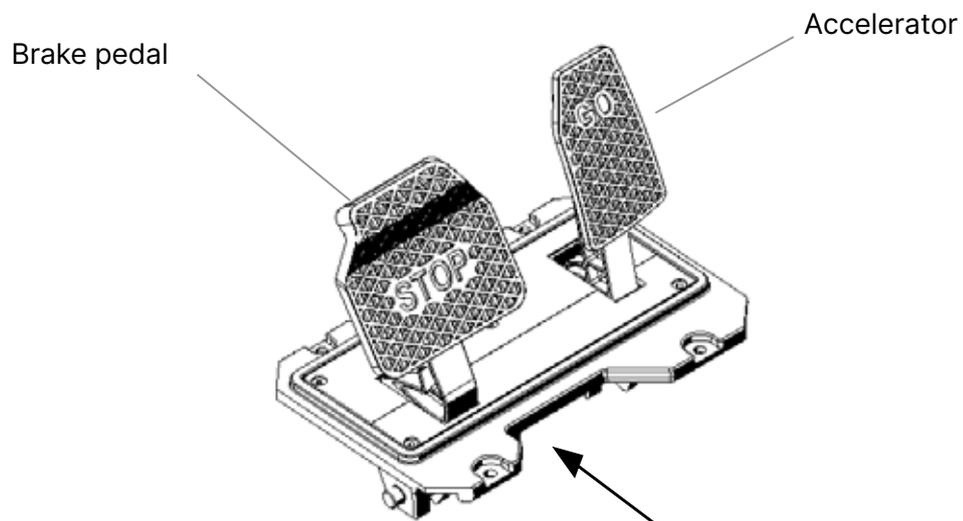
Mute switch:

Push the switch in so the buzzer will not emit sound. 

Push the knob switch in, the buzzer can make sound normally. 



#### 4.4 Accelerator/brake pedal



Press the accelerator pedal to accelerate the vehicle; Press the brake pedal to slow down the vehicle.

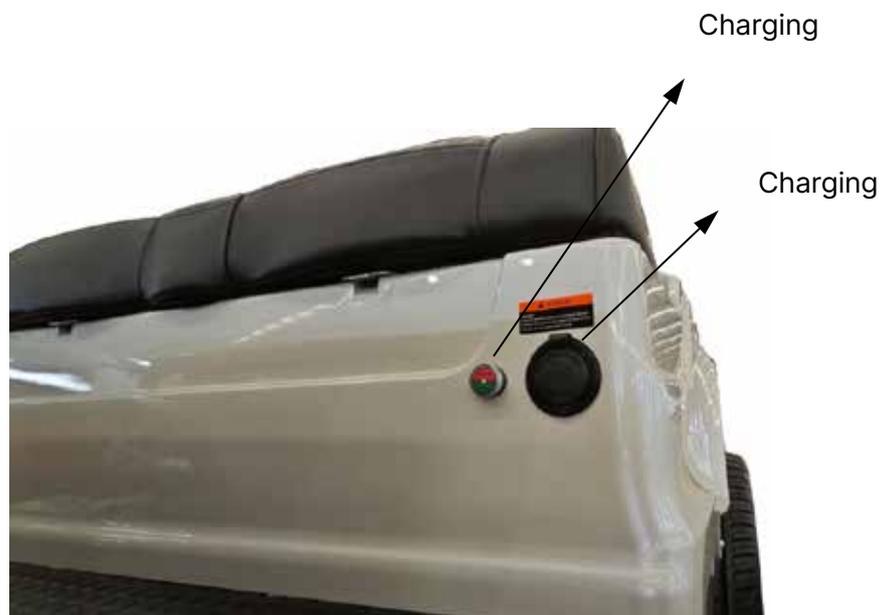
#### 4.5 Oil Reservoir



Fill this spot with brake fluid.

#### 4.6 Charging port

Charging port - Plug in the charging cable from here and the vehicle starts charging automatically. Charging Indicator - Red light flashes when charging, green light remains on when fully charged.



# **EPIC™**

**CARTS**

## **10.1" Multimedia Digital Display**



## **User Manual**

# 10.1" Multimedia Digital Display

---

## Introduction

This product is a 10.1-inch multimedia speedometer for vehicles, which has the functions of dynamic display of data information and multimedia playback

The speedometer uses the CAN bus to directly communicate with the controller and the battery management system BMS. At the same time, it can also collect and control the data of the peripheral equipment, and display it on the screen after comprehensive calculation.

It adopts full-screen touch control, and the left side of the instrument is supplemented by blue backlight buttons for quick operation.

External USB port supports multimedia playback, and audio and video media formats, such as MP3, MP4/MKV/AVI files and so on.

The Bluetooth connection of the mobile phone allows the music playback and answering of the phone.

Integrated FM radio module, using the attached external antenna can automatically search for radio stations and store up to 40 preset radio station.

## Security Information

1. The electrical wiring should strictly follow the wiring diagram, especially pay attention to the direction of positive and negative poles, and to whether the voltage value of the electrical system is correct
2. When the fault alarm indicator light on the speedometer is on, stop and check immediately;
3. Do not turn on the multimedia while driving;
4. Do not work with electricity during the disassembly process, so as not to damage the speedometer and other components.

# 10.1" Multimedia Digital Display

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## Specifications

Product Model: CA-X101

Operating Voltage: DC12V

Operating Temperature: -30°C~70°C

Power Consumption: Standby≤30mA; Working

Current≤10A Screen: TFT 10.1 inches

Communication: CAN

Battery Voltage: 60V

USB Charging: 5V/1A

Built-in Battery: CR2032/3V

Amplifier Power: 25Wx4

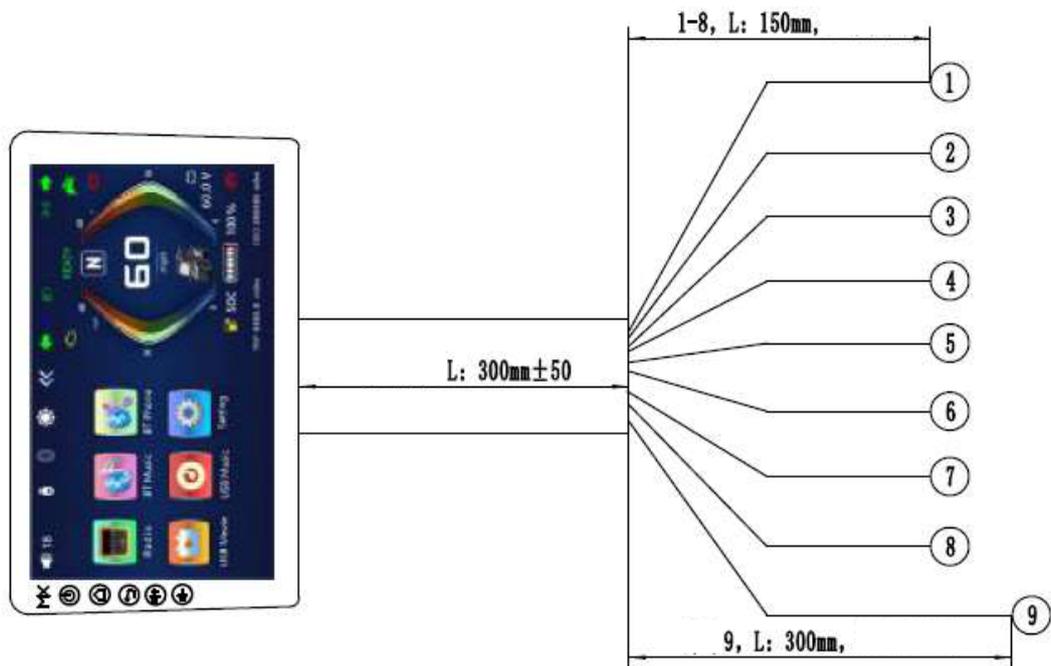
Reversing Camera: 18.5mm opening, waterproof wide-angle HD FM: 87.5Mhz~108Mhz , slightly different due to different regions Size: 253×147×43mm

Meter Fixing Screw: M3×10

# 10.1" Multimedia Digital Display

## Wiring

Function and definition:



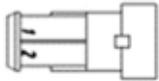
# 10.1" Multimedia Digital Display

① : DJ7091-2.3-11  (along the direction of plugging)

| Pin | Wire Diameter - Thread Color | Function              | Voltage | Comment                                  |
|-----|------------------------------|-----------------------|---------|--|
| 1   | UL1007-20# white             | Small light indicator | 12V+    |  |
| 2   | UL1007-20# purple            | Low beam indicator    | 12V+    |  |
| 3   | UL1007-20# green             | Brake failure         | 12V+    |  |
| 4   | UL1007-18# black             | Negative pole         | GND     | High and low voltage share the same load |
| 5   | UL1007-20# yellow            | Right turn sign       | 12V+    |  |
| 6   | UL1007-20# orange            | Left turn sign        | 12V+    |  |
| 7   | UL1007-20# pink              | Handbrake indicator   | 12V+    |  |
| 8   | UL1007-20# blue              | High beam indicator   | 12V+    |  |
| 9   | UL1007-18# yellow            | Key switch            | 12V+    | Power supply                             |

② : DJ7061-2.3-11  (along the direction of plugging)

| Pin | Wire Diameter - Thread Color | Function             | Voltage | Comment                |
|-----|------------------------------|----------------------|---------|------------------------|
| 1   | UL1007-20# brown-white       | Speed signal         | pulse   |                        |
| 2   | UL1007-20# blue-black        | Reverse image        | 48V+    | Reversing instructions |
| 3   | UL1007-20# orange-white      | Forward instructions | 48V+    |                        |
| 4   | UL1007-20# grey              | Turtle instructions  | 48V+    |                        |
| 5   | N/A                          | N/A                  | N/A     |                        |
| 6   | UL1007-20# red               | Regular power        | 48V+    |                        |

③ : CAN cable DJ7021-1.5-11 

| Pin | Wire Diameter - Thread Color | Function | Comment |
|-----|------------------------------|----------|---------|
| 1   | UL1007-20# purple-red        | CANH     |         |
| 2   | UL1007-20# green-red         | CANL     |         |

# 10.1" Multimedia Digital Display

④ : Speaker interface DJ7021-1.5-21



| Pin | Wire Diameter - Thread Color | Function         | Comment |
|-----|------------------------------|------------------|---------|
| 1   | UL1007-18#blue               | Speaker negative |         |
| 2   | UL1007-18#brown              | Speaker positive |         |

⑤ : Speaker interface DJ7021-1.5-21



| Pin | Wire Diameter - Thread Color | Function         | Comment |
|-----|------------------------------|------------------|---------|
| 1   | UL1007-18#white              | Speaker negative |         |
| 2   | UL1007-18# green             | Speaker positive |         |

⑥ : Reversing image interface, M12-4P



(along the direction of pins)

| Pin | Wire Diameter - Thread Color | Function            | Voltage    | Comment            |
|-----|------------------------------|---------------------|------------|--------------------|
| 1   | 4*0.3mm2multi-core cable     | Image signals       | CVBS input |                    |
| 2   |                              | Camera power supply | 12V+       | Speedometer output |
| 3   |                              | Image ground wire   | OV input   |                    |
| 4   |                              | Camera ground wire  | 12V-       | Speedometer output |

⑦ : Radio antenna interface, R10 female connector

⑧ : AUXaudio interface, 3.5mm female connector



| Pin | Wire Diameter - Thread Color | Function      | Voltage     | Comment |
|-----|------------------------------|---------------|-------------|---------|
| 1   | multi-core cable             | Ground wire   | GND input   |         |
| 2   |                              | Right channel | audio input |         |
| 3   |                              | Left channel  | audio input |         |

# 10.1" Multimedia Digital Display

⑨ : USB port, 6P head  (along the direction of pins)

| Pin | Wire Diameter - Thread Color | Function         | Voltage     | Comment |
|-----|------------------------------|------------------|-------------|---------|
| 1   | multi-core cable             | Speaker positive | Voice input |         |
| 2   |                              | USB power supply | 5V output   |         |
| 3   |                              | Data negative    | data signal |         |
| 4   |                              | Speaker negative | Voice input |         |
| 5   |                              | Data positive    | data signal |         |
| 6   |                              | USB ground wire  | OV input    |         |

## Operating Instructions

### Homepage



# 10.1" Multimedia Digital Display

## Homepage function instructions:



1. 18 Volume icon, showing real-time volume value;
2. U disk display: The U disk icon will not be displayed if the U disk is not inserted, and the U disk icon will be displayed if the U disk is inserted;
3. Bluetooth icon: The icon is gray when not connected and blue when connected;
4. Brightness: switchable to full or half brightness
5. Click this in other interfaces to return gradually until returning to the home page
6. Left turn indication flashes when the left turn signal or hazard warning light is turned on
7. High beam indicator is displayed when the high beam is turned on (optional function, some vehicles do not use this function)
8. Low beam indicator is displayed when the low beam is turned on (optional function, some vehicles do not use this function)
9. Fault indicator. When the vehicle fails, this light comes on; when the light lights up, click the icon to display specific fault information
10. The READY indicator light lights up when there is no fault in the vehicle and goes out when there is a fault in the vehicle or the vehicle speed is greater than 2KM/H

# 10.1" Multimedia Digital Display

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11.  Small light indication is displayed when the small light is turned on (optional function, some vehicles do not use this function)
12.  Right turn indication flashes when the right turn signal or hazard warning light is turned on;
13. High and low speed indication displays when in high gear  displays when in low gear 
14.  Brake failure indication, lights up when the oil tank is out of oil (optional function, some vehicles do not use this function)
15. Gear position indication, displayed in neutral **N** forward gear **D** reverse gear **R** or entering the reversing image interface;
16. Speed dynamic bar, dynamically displayed as the speed changes;
17. Speed value display, showing real-time speed value;
18. Voltage dynamic bar, dynamic display with voltage changes;
19. Voltage value display, showing real-time voltage value;
20. Parking indicator  displayed when parking (optional function, some vehicles do not use this function);
21.  100% The battery indicator turns yellow when the battery level is  $\leq 20\%$ ; it turns red when the battery level is  $\leq 10\%$ ;
22. **120 A** Current indication, showing real-time current value;
23. Charging reminder, it  does not display when the battery level is  $> 20\%$ ; when the battery level is  $\leq 20\%$ , it  lights up; when the battery level is  $\leq 10\%$ , it lights up and flashes, indicating the urgent need for charging;
24. **TRIP 8888.8 miles** Subtotal mileage display;
25. **ODO 888888 miles** Total mileage display

## Button definitions:



# 10.1" Multimedia Digital Display

1. Mute button: Press this button, the mute icon  will be displayed in the volume area. At this time, the speedo is in mute state. Press the increase or decrease volume icon to release the mute mode.
2. Home key: Press this button in other interfaces such as radio, Bluetooth, settings, etc. to directly return to the home page, such as playing radio, music, and
3. Backspace: Press this when in other interfaces, and it will gradually return to the home page.
4. Volume+: Press this to increase the volume. The maximum volume is 30
5. Volume-: Press this to reduce the volume. The minimum volume is 0

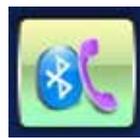
## Multimedia:



FM



BT Music



Telephone



US B Movie



USB Music



Setting

## Radio interface display



# 10.1" Multimedia Digital Display

Station search:

After clicking the search icon  , the speedometer will automatically search for radio stations from 87.5-108.0, and store the radio frequency locally, which is convenient for users to call and manage. Up to 40 stations can be stored and displayed in the station area, each page displays 6 stations

Station selection:



These two buttons can respectively select the previous page/next page of preset stations for page turning

Frequency display: real-time display according to the selected



Bluetooth icon:

It turns blue when connected, and gray when not connected

Pause playback:

Click here to play or pause mobile phone Bluetooth

music Backwards: Click here to play the previous song from your

11 / 17

phone Forwards:

# 10.1" Multimedia Digital Display

Click here to play the next song from your phone

Connected devices:

When the bluetooth is successfully connected to the speedometer, it will display the name of the connected device, such as iPhone, which may be the device model, or the name customized by the mobile phone.

Bluetooth name:

The bluetooth name of the device, the mobile phone or other equipment can search for the bluetooth through this name to connect and pair

This is a very important step connecting the mobile phone to the Bluetooth. Search for the corresponding name according to this name to pair successfully. Different meters have different names.

## Phone interface display



Digital display area:

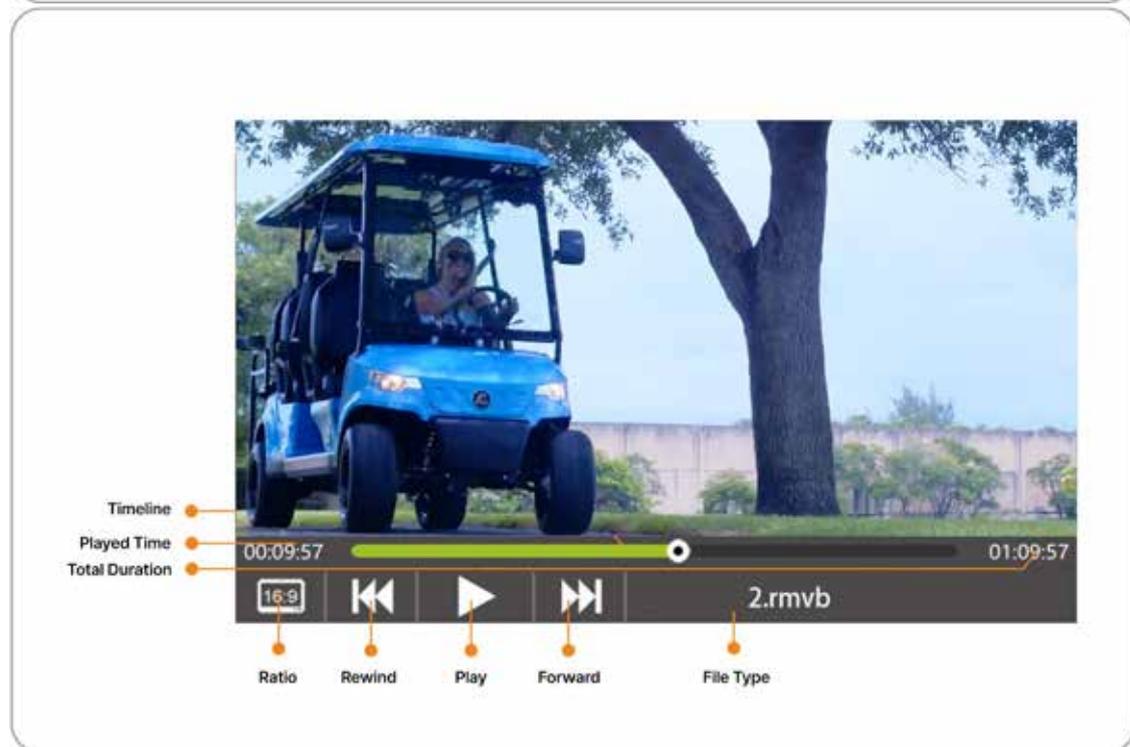
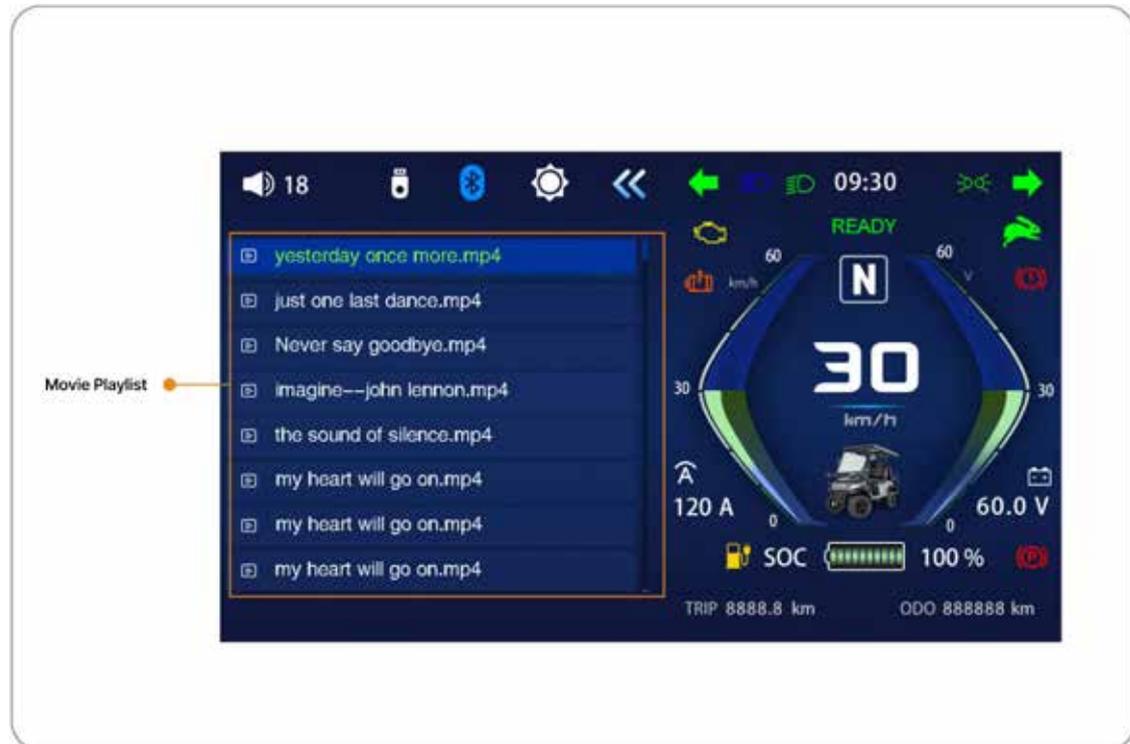
1. When dialing a number, this area will display the number in real time, and the interface will display a dial icon as shown in the figure  : Click this button to make a call, and the interface will display a hang-up icon after making a call.  Click this icon to end the call
2.  Click this button to enter the call recording interface
3.  When you enter a wrong number, you can press the delete button to delete it

# 10.1" Multimedia Digital Display

## Movie interface display

Movie list:

The movies copied from the U disk are displayed in this list, you can slide up and down to select the video, and click to play the movie after selection



# 10.1" Multimedia Digital Display

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## **Played time:**

You can manually adjust the playback progress bar

## **Total time:**

Show the total duration of the movie

## **Scale adjustment:**

AUTO:  standard mode

Full Screen Mode:  Switch to this icon to enter full screen mode

1:1 mode:  switch to this icon to enter 1:1 mode

16:9 mode:  switch to this icon to enter 16:9 mode

**Previous song:** Click this icon to play the previous video

**Next song:** Click this icon to play the next video

**Pause/Play:** Click this icon to play the video or pause it

**Movie Name/Format:** When the video is playing, the current name and format of the video is shown here

# 10.1" Multimedia Digital Display

## Music interface



### Music list:

The music copied from U disk is displayed in the list here, you can slide up and down to select the music, and the music will be played after selection

### Played time:

You can manually adjust the playback progress bar to choose to play

### Total time:

Show the total duration of the music

**Previous song:** Click this icon to play the previous song

**Next song:** Click this icon to play the next song

**Pause/Play:** Click this icon to play music or pause playback

# 10.1" Multimedia Digital Display

## Setting interface



### Basic settings:

Language: English / Chinese

Unit: Miles/Kilometers

**Restore default settings:** Click here to pop up a dialog box

Click OK to restore the machine to its original upgraded state.

For example: setting Chinese, kilometers and miles, volume, etc. will be restored to the original state. Clicking Cancel will give up the recovery.

### Vehicle Information:



# 10.1" Multimedia Digital Display

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**Working time:** the total time the machine is running

**Subtotal mileage:** the mileage of the machine, click here to clear the subtotal

**Motor temperature:** displayed according to the data transmitted by the controller

**Controller temperature:** displayed according to the data transmitted by the controller

**Speed adjustment:** the base value is 100. Increasing the base value can increase the speed. Decreasing the base value can decrease the speed. (This function can only be adjusted when the speed uses a pulse signal. When the speed is transmitted through CAN communication, it can only be adjusted by the controller.)

## About:

Version number display: Display the current version number of the machine, click here 3 times to check the main control version, single-chip version, and Bluetooth version





## E20 Specs

- Weight: 960 lbs
- Capacity: 2 People
- Overall Dimensions LxWxH: 99"x47"x74.5"
- Metallic Colors: Pearl White, Red, Black, Royal Blue, Silver & Charcoal



## Electrical Systems

- Motor: 5kW Motor
- Controller: 400 Amp
- Charger: 48V On-Board Charging System with Body Mounted Charge Indicator
- Battery: 51V /105Ah ECO Lithium

## Body Configuration

- Frame: Powder Coated Steel
- Body Material: Injection Molded PP
- Wheels: 12" Aluminum
- Min Ground Clearance: 6.7"
- Min Turning Radius: 12'
- Max Speed: 25 mph
- Turtle Mode Speed: 15 mph
- Max Climbing Capacity: 20-25%
- Distance Per Charge: (@ Speed 20mph) 25 miles
- Braking Range: (@ Speed 20mph) <20ft
- Braking System: Four Wheel Disc Brakes
- Lighting and Signals: Headlights, Taillights, Brake Lights, Turn Signals, Hazards
- Mirrors: Dual Sided Lit Turn Signals on Fully Adjustable and Foldable Mirrors
- Rear: High-Speed Rear Ends
- Suspension: Adjustable Front Suspension with Adjustable Coil-Over Shocks
- Bumpers: Durable Front and Rear Bumpers
- Roof: Black Plastic Roof
- Seats: Diamond-Stitched High-Back Bolstered Seats
- Seatbelts: 3-Point Restraints
- Standard Features: Backup Camera, Carbon Fiber Dash, Locking Compartments, Folding Windshield, USB Ports & Pre-Wired 12v Switches, EcoXGear Bluetooth Sound Bar, Horn, Digital Gauges, Lit License Plate Bracket and More.





## E40 Specs

- **Weight:** 1,120 lbs
- **Capacity:** 4 People
- **Overall Dimensions LxWxH:** 123"x47"x77"
- **Metallic Colors:** Pearl White, Red, Black, Royal Blue, Silver & Charcoal



## Electrical Systems

- **Motor:** 5kW Motor
- **Controller:** 400 Amp
- **Charger:** 48V On-Board Charging System with Body Mounted Charge Indicator
- **Battery:** 51V /105Ah ECO Lithium

## Body Configuration

- **Frame:** Powder Coated Steel
- **Body Material:** Injection Molded PP
- **Wheels:** 12" Aluminum
- **Min Ground Clearance:** 6.7"
- **Min Turning Radius:** 12'
- **Max Speed:** 25 mph
- **Turtle Mode Speed:** 15 mph
- **Max Climbing Capacity:** 20-25%
- **Distance Per Charge:** (@ Speed 20mph) 25 miles
- **Braking Range:** (@ Speed 20mph) <20ft
- **Braking System:** Four Wheel Disc Brakes
- **Lighting and Signals:** Headlights, Taillights, Brake Lights, Turn Signals, Hazards
- **Mirrors:** Dual Sided Lit Turn Signals on Fully Adjustable and Foldable Mirrors
- **Rear:** High-Speed Rear Ends
- **Suspension:** Adjustable Front Suspension with Adjustable Coil-Over Shocks
- **Bumpers:** Durable Front and Rear Bumpers
- **Roof:** Painted Rooftops
- **Seats:** Diamond-Stitched High-Back Bolstered Seats
- **Seatbelts:** 3-Point Restraints
- **Standard Features:** Backup Camera, Carbon Fiber Dash, Locking Compartments, Glass Windshield with Windshield Wiper, USB Ports & Pre-Wired 12v Switches, EcoXGear Bluetooth Sound Bar, Horn, Digital Gauges, Lit License Plate Bracket and More.





## E40L Specs

- Weight: 1,240 lbs
- Capacity: 4 People
- Overall Dimensions LxWxH: 130" x 50" x 80.75"
- Metallic Colors: Pearl White, Red, Black, Royal Blue, Silver & Charcoal



## Electrical Systems

- Motor: 5kW Motor
- Controller: 400 Amp
- Charger: 48V On-Board Charging System with Body Mounted Charge Indicator
- Battery: 51V /105Ah ECO Lithium

## Body Configuration

- Frame: Powder Coated Steel
- Body Material: Injection Molded PP
- Wheels: 14" Aluminum
- Min Ground Clearance: 6.7"
- Min Turning Radius: 12'
- Max Speed: 25 mph
- Turtle Mode Speed: 15 mph
- Max Climbing Capacity: 20-25%
- Distance Per Charge: (@ Speed 20mph) 25 miles
- Braking Range: (@ Speed 20mph) <20ft
- Braking System: Four Wheel Disc Brakes
- Lighting and Signals: Headlights, Taillights, Brake Lights, Turn Signals, Hazards
- Mirrors: Dual Sided Lit Turn Signals on Fully Adjustable and Foldable Mirrors
- Rear: High-Speed Rear Ends
- Suspension: Adjustable Front Suspension with Adjustable Coil-Over Shocks
- Bumpers: Durable Front and Rear Bumpers
- Roof: Painted Rooftops
- Seats: Diamond-Stitched High-Back Bolstered Seats
- Seatbelts: 3-Point Restraints
- Standard Features: Backup Camera, Carbon Fiber Dash, Locking Compartments, Glass Windshield with Windshield Wiper, USB Ports & Pre-Wired 12v Switches, EcoXGear Bluetooth Sound Bar, Horn, Digital Gauges, Lit License Plate Bracket, Basket and More.





## E60 Specs

- Weight: 1,300 lbs
- Capacity: 6 People
- Overall Dimensions LxWxH: 155" x 47" x 77"
- Metallic Colors: Pearl White, Red, Black, Royal Blue, Silver & Charcoal



## Electrical Systems

- Motor: 5kW Motor
- Controller: 450 Amp
- Charger: 48V On-Board Charging System with Body Mounted Charge Indicator
- Battery: 51V /105Ah ECO Lithium

## Body Configuration

- Frame: Powder Coated Steel
- Body Material: Injection Molded PP
- Wheels: 12" Aluminum
- Min Ground Clearance: 6.7"
- Min Turning Radius: 12'
- Max Speed: 25 mph
- Turtle Mode Speed: 15 mph
- Max Climbing Capacity: 20-25%
- Distance Per Charge: (@ Speed 20mph) 25 miles
- Braking Range: (@ Speed 20mph) <20ft
- Braking System: Four Wheel Disc Brakes
- Lighting and Signals: Headlights, Taillights, Brake Lights, Turn Signals, Hazards
- Mirrors: Dual Sided Lit Turn Signals on Fully Adjustable and Foldable Mirrors
- Rear: High-Speed Rear Ends
- Suspension: Adjustable Front Suspension with Adjustable Coil-Over Shocks
- Bumpers: Durable Front and Rear Bumpers
- Roof: Painted Rooftops
- Seats: Diamond-Stitched High-Back Bolstered Seats
- Seatbelts: 3-Point Restraints
- Standard Features: Backup Camera, Carbon Fiber Dash, Locking Compartments, Glass Windshield with Windshield Wiper, USB Ports & Pre-Wired 12v Switches, EcoXGear Bluetooth Sound Bar, Horn, Digital Gauges, Lit License Plate Bracket and More.





## E60L Specs

- Weight: 1,420 lbs
- Capacity: 6 People
- Overall Dimensions LxWxH: 157"x50"x80.75"
- Metallic Colors: Pearl White, Red, Black, Royal Blue, Silver & Charcoal



## Electrical Systems

- Motor: 5kW Motor
- Controller: 450 Amp
- Charger: 48V On-Board Charging System with Body Mounted Charge Indicator
- Battery: 51V /105Ah ECO Lithium

## Body Configuration

- Frame: Powder Coated Steel
- Body Material: Injection Molded PP
- Wheels: 14" Aluminum
- Min Ground Clearance: 6.7"
- Min Turning Radius: 12'
- Max Speed: 25 mph
- Turtle Mode Speed: 15 mph
- Max Climbing Capacity: 20-25%
- Distance Per Charge: (@ Speed 20mph) 25 miles
- Braking Range: (@ Speed 20mph) <20ft
- Braking System: Four Wheel Disc Brakes
- Lighting and Signals: Headlights, Taillights, Brake Lights, Turn Signals, Hazards
- Mirrors: Dual Sided Lit Turn Signals on Fully Adjustable and Foldable Mirrors
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- Suspension: Adjustable Front Suspension with Adjustable Coil-Over Shocks
- Bumpers: Durable Front and Rear Bumpers
- Roof: Painted Rooftops
- Seats: Diamond-Stitched High-Back Bolstered Seats
- Seatbelts: 3-Point Restraints
- Standard Features: Backup Camera, Carbon Fiber Dash, Locking Compartments, Glass Windshield with Windshield Wiper, USB Ports & Pre-Wired 12v Switches, EcoXGear Bluetooth Sound Bar, Horn, Digital Gauges, Lit License Plate Bracket, Basket and More.



## 5. Operation specification and use

### 5.1 Before 1st use

Read, understand and follow the safety labels on your vehicle to ensure you understand how to safely operate the vehicle and its equipment.

### **WARNING**

- Do not operate this vehicle roughly or recklessly, as this may result in serious injury or death.
- If you do not know the terrain, be sure to take precautions in advance. When the vehicle breaks down or the battery loses power, it may take hours to walk back from an hour's drive.
- Explosive gas hydrogen is produced during battery charging. Do not charge the battery without adequate ventilation.
- To prevent the battery from exploding, keep all flammable materials, open flames and sparks away from the battery.
- Explosive gases are generated during battery charging and good ventilation is necessary. Air circulation must be completed every 12 minutes in order to eliminate explosive gases in enclosed spaces.
- Never charge near flammable materials, open flames or sparks.
- Do not charge near gas, water heaters, and gas stoves.

Before you start using your new vehicle, it needs to be inspected according to the items in the following list.

| Pre-use checklist        |  |
|--------------------------|--|
| Item                     | Inspection content   |
| Battery                  | Before starting to use the vehicle, the battery should be fully charged, and damaged parts should be replaced during inspection.   |
| Brake                    | Check the brake pedal, it should be fixed securely and should be flexible and free of stagnation when pressed; it can be flexibly returned to its original position after being released.  |
| Accelerator pedal        | Check the accelerator pedal, it should return flexibly to its original position .when depressed and released   |
| Wheel                    | Check tire pressure (38-42psi for 20*9-12 tires, 28-32psi for 23*10.5-14 tires). Check the surface of the tires, remove any embedded objects, make sure the tires are not cracked or otherwise damaged, defective tires may cause accidents while driving. |
| Steering device          | Pull the steering wheel up and down to check the tightness of the steering wheel; turn the steering wheel from side to side to make sure that there is no excessive free travel or rattles.  |
| Car reverse warning tone | Set the forward/reverse gear switch to "R" and the vehicle should emit a "ticking" warning sound.  |
| Light                    | Check that signal lights, brake lights and turn signals should be in proper working order.   |
| Seat                     | Remove plastic protectors from seats and backrests.  |
| Routine items            | Check for damaged parts, oil leaks during shipment.  |

## 5.2 New vehicle inspection

To ensure safety and reliability, the user should check the following items after taking delivery of a new vehicle.

- Check the tightness of vehicle components, especially steering, brakes, suspension, wheel nuts, and other safety-related areas.
- Check for leaks in the steering system, braking system and rear suspension.
- Check that the battery is intact and that the terminals are securely installed.
- Whether the tire air pressure is normal or not, there is no abnormal damage to the tire.

The standard air pressure of 20\*9-12 tires is 40psi, and the standard air pressure of 23\*10.5-14 tires is 30psi. Insufficient air pressure will lead to vehicle off tracking, abnormal tire wear, heavy steering, and increased power consumption, etc., so you should maintain the normal air pressure of the tires.

- Check that the wiring harness is well secured, has not fallen out, and does not interfere with other operating parts.

### 5.3 New vehicle run-in

The service life of the vehicle, the reliability of the work and the economy of use, to a large extent, depends on the use of the initial run-in. Run-in mileage of 800 km is required. If the conditions allow, it is best to extend to 1500 km.

New vehicles need to run in through use. The run in should be performed with a lower speed, generally cannot be fully loaded, and absolutely cannot be overloaded during operation. The purpose of run in is to provide the parts and components with a staged break-in period, improve its surface quality and accuracy, and avoid early wear and tear of the vehicle.

The following shall be observed during the run-in period:

- Avoid fast starts, rapid speed increases and unnecessarily tight braking.
- Strictly control the speed of the vehicle within 20Km/h.
- Frequently check whether the battery, electronic control and motor connecting wires are hot and loose.
- Frequently check the temperature of the reducer, rear axle, wheel hub and brake disk. If there is overheating (greater than 60°C), it should be checked and troubleshooting performed.
- When the mileage reaches 500Km, check the tightness of the steering system, front suspension and wheel nuts. Tighten them if necessary, and replace the transmission lubricant and rear axle gear oil after this period.
- The battery must not be deeply discharged during this period of operation. After this period of operation, the battery should not be over-discharged, as over-discharge will quickly damage the battery.
- If the mileage is less than 60% of the rated range when the vehicle is first used, stop using the vehicle and notify EPIC's after-sales department as soon as possible to find out the reason.

#### 5.4 Vehicle operation



Improper use of the vehicle or lack of maintenance may result in damage to the vehicle or reduced performance.

Read the following warnings before operating your vehicle:



To reduce the risk of serious injury or death due to loss of vehicle control, the following warnings must be observed:

- When driving a vehicle, be aware of the terrain, traffic conditions, and environmental conditions that alter the terrain and the ability to control the vehicle. Drive the vehicle in permissible areas and do not drive on steep slopes.
- Speed in reverse must be limited to 10 miles per hour.
- Use the brakes to maintain control and a safe speed when going downhill.
- Using the emergency brake or changing direction while going downhill can result in loss of vehicle control.
- Reduce speed before and during turns.
- Never drive your vehicle up or down a slope that crosses the vehicle's designated travel grade.
- Refer to Vehicle Performance Parameters for vehicle loads and seating capacity.

To reduce the risk of serious injury or death due to improper vehicle operation, the following warnings must be observed:

- Depressing the accelerator pedal causes the vehicle to move. To prevent the vehicle from accidentally moving without someone driving it, please turn the key to the OFF position when the vehicle is parked.
- When you leave the vehicle, please turn the key to the OFF position and remove it from the key switch to prevent accidental operation.
- Switching to the forward/reverse gear switch can only be selected after stopping the vehicle.
- Do not leave the vehicle in neutral while driving (including when there is no power).
- Check the area behind the vehicle before switching to reverse "R".
- All passengers must remain in their seats, keep their entire body inside the vehicle, and hold on while the vehicle is in motion.

Caution:

- Improper and irresponsible operation of the vehicle may create a hazard to the operator, passengers and others.
- Do not allow children or anyone without a license to operate the vehicle. Children may not have the skills and ability to make good decisions or the strength to operate the vehicle.
- Alcohol reduces a driver's ability to operate a vehicle safely and driving a vehicle while intoxicated is prohibited.
- When you drive your vehicle at full speed on dirt roads, loose surfaces or wet grass, the distance required to brake increases. The braking distance required for a fully loaded vehicle is greater than the braking distance required for an unloaded vehicle.
- In wet weather conditions, slight pressure needs to be applied to the brakes to provide enough friction to dry the brakes. Wet brakes will lose most of their effectiveness.
- If you drive on a steep hill and can't get enough traction, please don't try to turn around on the hill. Slowly back the car down the slope and control your speed with the brakes.

### Forward/reverse gear switch operation

#### **WARNING**

- To prevent loss of control, do not switch the forward/reverse button while the vehicle is in motion. If it is switched while in drive, the vehicle's speed will immediately decrease and the alarm device will be activated.
- Switch the forward/reverse gear switch to "D" to move forward. Switch the forward/reverse gear switch to "R" to activate the reverse buzzer and then move backward.
- The position between forward gear "D" and reverse gear "R" is the neutral position.
- When leaving the vehicle, turn the key switch to the "OFF" position and remove the key.

## Accelerator and brake pedal operation

When the forward/reverse gear switch is in the "D" (forward) or "R" (reverse) position, depress the accelerator pedal to start the vehicle and drive in the direction indicated by the gear switch. This vehicle is equipped with a motor brake. When the accelerator pedal is released, the motor stops and causes the vehicle to slow down. To stop the vehicle quickly, depress the brake pedal.

### NOTICE

Before starting the vehicle, make sure that the knob switch is "ON" or the vehicle will not start. If the vehicle is not going to be driven for a long time, turn the switch to "OFF".

## Starting and driving

All vehicles are equipped with the Charge Anti-Walk feature, a feature that disables the controller when the charger is connected, which prevents the vehicle from running or the vehicle from being towed. Unplug the charger and properly store the charging power cord before moving the vehicle.

Operate the vehicle:

- Insert the key into the key switch and turn to the desired position.
- Switch the forward/reverse gear switch to the desired position.
- Slowly depress the accelerator pedal to release the electromagnetic brake and start the motor.
- When the accelerator pedal is released, the motor reduces the speed of the vehicle; however, for a quick stop, the brake pedal needs to be pushed down.

### Parking

The electromagnetic parking brake will be activated automatically when the vehicle is stopping. Press the accelerator pedal to start the vehicle, and the parking brake will be released automatically.

### Sliding

When the accelerator pedal is released, the vehicle coasts and slows down. However, this is not a substitute for braking, and the brake pedal must be used to quickly reduce the vehicle's speed.

### Stickers

Before operating the vehicle, carefully read the stickers attached to the vehicle. These stickers mark the precautions to be taken when using the vehicle.

### 5.5 Vehicle charger

 **DANGER**

Risk of electric shock. Connect the charger power cord to an outlet that is properly installed and has been grounded according to code. The outlet must be grounded to minimize the risk of electric shock. Do not use an adapter or change plugs. Do not touch output connectors or battery terminals that are not protected by insulation.

 **DANGER**

- The AC power plug must be disconnected before disconnecting the charger from the battery. Do not open or disassemble the charger.
- Do not operate the charger if the AC power cord is damaged. Ensure that all servicing of the charger is done by qualified personnel.

 **WARNING**

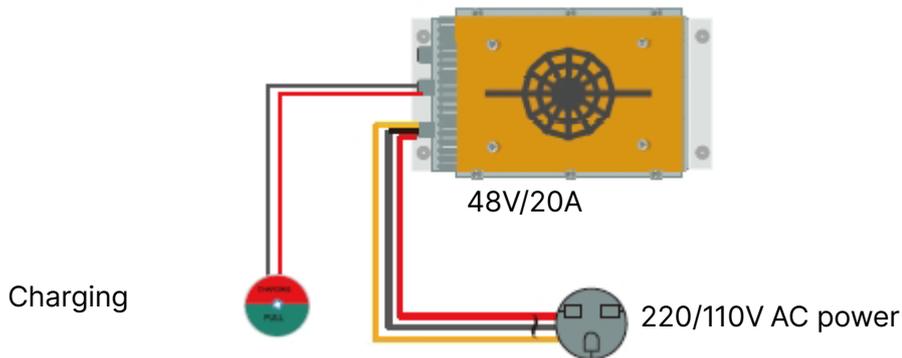
- Children are not allowed to use the charger.
- To prevent possible charger damage and fire due to overheating, keep the charger heat sink clean.
- Lead-acid batteries produce hydrogen, which is an explosive gas, during normal operation. Avoid sparks, flames and flammable materials from coming into contact with the batteries.
- Provide adequate ventilation during the charging cycle.
- Never charge a frozen battery.
- For best performance and shortest charging time, charge in a well-ventilated area.

- If the charger is to be operated outdoors, it must be protected from rain.
- Ensure that the status display on the charger is visible to the user.
- The charger will generate a certain amount of heat during the working process. The charger has a cooling fan; however, the surface of the charger will need to be regularly checked for dust and dirt. Do not block or impede the air path of the cooling holes. Use a dry cloth to clean the surface.
- It is recommended that users dust the charger case at least once every six months.

**NOTICE**

When charging is complete, please put the power cord away. Avoid possible damage to the charging plug or the power cord getting tangled in the car when driving away.

Charger Parameters



- Charger Model-WT4820ZG
- AC input voltage range-85-270VAC-45-65Hz
- Maximum AC input current-11.5A@120VAC-6.1A@220VAC
- Power factor- $\geq 0.99$
- Efficiency- $\geq 95.0\%$
- Noises- $\leq 45\text{dB}$
- Protection class-IP67



## Use of chargers

- To reduce the possibility of electric shock, make sure the charger plug is undamaged and properly connected to a grounded outlet.
  - The power cord has a plug with a grounding post on one end. Do not move, cut, or bend the grounding post. The power cord has a three-hole plug on the other end, which plugs into a receptacle on the vehicle. The vehicle's charging receptacle is located underneath the driver's-side seat of the vehicle (Four-seat models plug underneath the driver's-side seat of the rear seat).
1. Check the charging connection cable, and the charger AC power cable for damage. If it is broken or torn, please replace it immediately.
  2. Tightly connect the AC power cord three-hole plug to the vehicle charging outlet.

### Note:

1. For chargers with communication, the fault for this phenomenon is a "communication fault."
2. The indicator status in the above table is the default status of the factory. If the customer specifies the status of the indicator, the statement of the indicator status label affixed to the body shell of the charger shall prevail.

## 5.6 Canopy & Windshield



1. The canopy does not protect against vehicle rollover or falling objects.
2. The windshield does not protect against tree branches or flying objects.
3. The canopy and windshield offer some protection; however, in heavy rain, they do not completely shield the driver and passengers from getting wet.

## 6. Care & Maintenance

### 6.1 Vehicle washing

 **WARNING**

To reduce the risk of serious injury, read and understand all instructions provided by the pressure washer manufacturer before use.

 **CAUTION**

- When cleaning the exterior of a vehicle with a pressure washer, do not use more than 700 psi.
- Allow a minimum distance of 12 inches from the nozzle to the painted surface, and do not use corrosive solvents to clean plastic parts.
- Ensure proper methods and cleaning materials are used to prevent damage to the vehicle. Use of water pressure in excess of 700 psi may result in injury to personnel in the work area or damage to the vehicle.
- Clean the windshield with water and a rag. Repair small scratches with plastic polish or plastic cleaner.
- Apply soapy water with a sponge or soft brush to clean vinyl seats, plastic or rubber upholstery, then dry with a rag. Use commercially available vinyl or rubber cleaners to remove oil, tar, asphalt, shoe polish, and other stains.
- Wash vehicle with cold water and a mild detergent to protect painted surfaces.
- Apply wax used for automotive clear coats to improve the appearance of painted surfaces after cleaning is complete. Do not apply wax to non-glossy surfaces.
- Non-abrasive cleaning and waxing from time to time can improve the appearance and durability of your vehicle's finish.
- Materials used for protecting dust may collect on the underside of the vehicle. This should be rinsed with water to avoid resulting corrosion of the parts.
- Regularly clean mud or dirt areas to avoid damaging the paint.

## 6.2 Lifting vehicles

During some repair and maintenance operations, it is necessary to lift the front, rear or entire vehicle.

 **WARNING**

- Vehicle is unstable during lifting.
- Ensure that the vehicle is on a level, hard surface.
- Do not go under a vehicle that is only supported by a jack.
- Make sure the vehicle is supported on stable jack stands before operating under the vehicle.
- Place wheel (triangular) wedges under the front and rear sides of the wheels so that they do not move back and forth.
- Do not allow anyone to enter the lifted vehicle.

 **CAUTION**

When you raise the vehicle, the jack shall only be placed in designated areas.

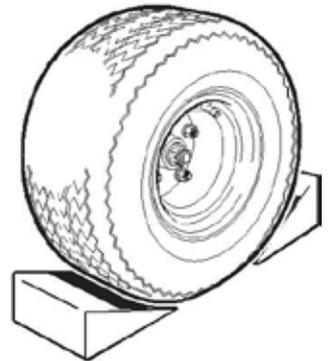
| Tool     | floor jack | Jack stand | Wheel wedge |
|----------|------------|------------|-------------|
| Quantity | 1          | 4          | 4           |

## 6.2 Lifting vehicles cont.

Before lifting, all payloads need to be removed from the vehicle. No person should be left in or on the vehicle while lifting.

How to enhance the entire vehicle:

1. Place wheel wedges in front of and behind each rear wheel.
2. Place the jacks directly under the front end frame transverse support mounts.
3. Jack up the front end of the vehicle to a sufficient height, then place the two jack stands underneath where the main frame beam attaches to the dashboard bracket location.
4. Lower the front end jack and test the vehicle for stability.
5. Place the jack under the frame cross member at the bottom of the rear bumper.
6. Jack up the rear of the vehicle to a sufficient height, then position the two jack stands at the bottom of the frame main beam near the joist mounts;
7. Lower the jacks and test the stability of the vehicle.



How to lift only the rear of the vehicle:

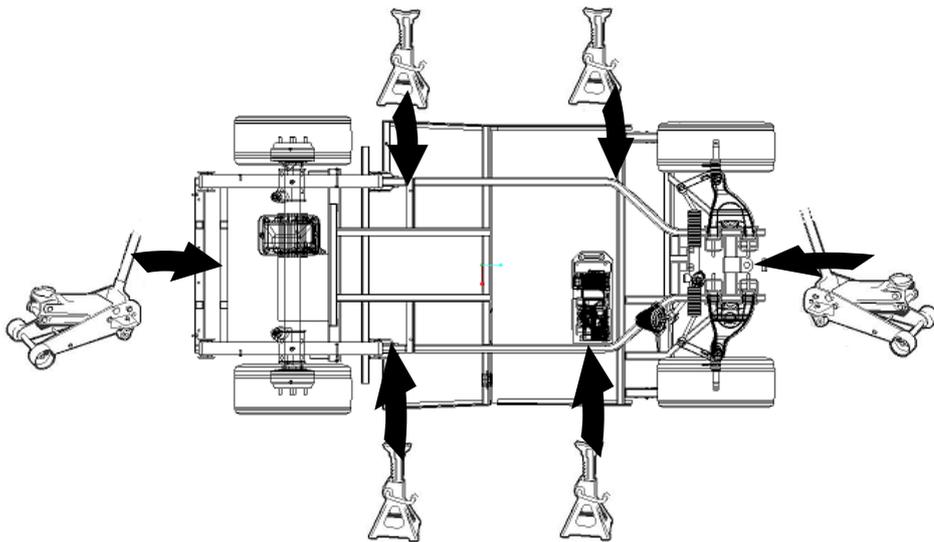
1. Place wheel wedges in front of and behind each front wheel.
2. Place the jack under the frame cross member at the bottom of the rear bumper.
3. Jack up the rear of the vehicle to a sufficient height, then place two jack stands on the bottom of the main frame beam near the joist mounts and the bottom of the main frame cross member near the joist mounts.
4. Lower the jacks and test the stability of the vehicle.

How to lift only the front of the vehicle:

1. Place wheel wedges in front of and behind each rear wheel.
2. Place a jack directly under the front end frame transverse support mounts.
3. Jack up the front of the vehicle to a sufficient height, then place two jack stands underneath where the main frame beam and dashboard connect.
4. Lower the front end jack and test the stability of the vehicle.

Lowering the vehicle:

1. Raise the vehicle high enough to remove the jack stands.
2. Remove the jack stands and carefully lower the vehicle to the ground with the jack.



6.3 Wheel

Recommended Tire Inflation Pressure-20\*9-12 wheel 38-42psi-23\*10.5-14 wheel 28-32psi.



- To reduce the risk of tire explosions, fill the tires with a small amount of air at regular intervals to hold the beads in place.
- Tire explosions can happen in a matter of seconds.
- Do not over-inflate your tires. Excessive pressure can cause the tire to separate from the rim or explode.
- Protect your face and eyes when removing tire valve cores.
- When removing the tire, only use the sleeve with the impact wrench. This will reduce the risk of injury due to sleeve breakage.
- Do not use tires when recommended inflation pressure is lower than the recommended inflation pressure for the tires of this vehicle.

Tire Repair

|            |                   |                    |               |               |
|------------|-------------------|--------------------|---------------|---------------|
| Tool List  | Cross wrench 3/4" | Impact sleeve 3/4" | Impact wrench | Torque wrench |
| Quantities | 1                 | 1                  | 1             | 1             |

- Be careful when inflating tires, as over-inflation can occur within seconds due to the small size of the tire. Over-inflation can cause the tire to separate from the rim or cause the tire to explode.
- Tire inflation pressure generally follows the recommended pressure, but can vary slightly in different terrain conditions.

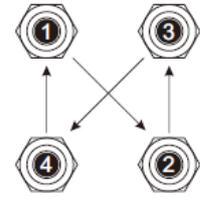
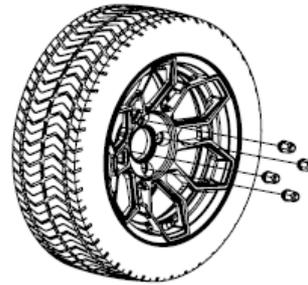
For applications primarily in outdoor grassy areas, consider the following:

- Slightly higher tire inflation applies for hard turf.
- Lower tire pressure reduces the risk of tires sinking into soft turf.
- For hard ground or road surfaces, tire inflation pressure must be within the higher permissible range, but should not exceed the maximum recommended value for the tire sidewall.
- All four tires on the vehicle must be maintained at the same pressure for optimum handling. Replace the valve core caps after checking or inflating the tires.
- This vehicle uses low-pressure tubeless tires and mounted one-piece aluminum rims. Small holes in the tread portion of the tire can be repaired with tire repair adhesive strips. For large holes and cuts, the tire will need to be replaced.
- If a tire is found to be leaking, remove the wheel, inflate the tire to the maximum recommended air pressure, then submerge the tire in water to find the leak. Mark the leak location, and then use tire repair adhesive strips to repair the tire as required.

**⚠ CAUTION**

Wheel Mounting:

To reduce the risk of component damage, do not tighten the nut to a torque above 115Nm.



Crossover sequence

**NOTICE**

- Moderately follow the cross sequence of locking nuts when installing to ensure that the wheel is evenly tightened on the hub.
- With the valve core of the tire facing outwards, mount the wheel on the hub using the wheel nuts.
- Tighten the nuts by hand in the indicated cross sequence, then gradually tighten the nuts to a torque of 70-115Nm by repeating several times with an impact wrench. Tighten again following the cross-above-cross sequence with 20Nm torque increments each time until the correct torque is achieved.

6.4 Brake

**⚠ WARNING**

- Must check the pedal travel before operating the vehicle for braking.
- Please ensure that all braking tests are carried out in a safe location to ensure the safety of all personnel.

**NOTICE**

- Subtle losses in performance can occur over time, making it particularly important to test and document the braking performance of new vehicles.
- Brake performance tests should be carried out at regular intervals during the vehicle's life to assess the performance of the braking system, and are an effective method for identifying loss of performance over time.

## 6.5 Rear suspension

The only maintenance necessary for the first 5 years is checking the rear suspension for gear oil leaks. Unless there is a visible leak, the gear oil should be changed once a year. Refer to the “Service Manual” for gear oil change procedures.

### Check gear oil level

Clean the area around the oil filler bolt and remove the oil filler bolt. The correct gear oil level should be just below the bottom of the threaded hole. If gear oil is insufficient, add as needed. Add gear oil (GL-5 85W-90) slowly until it begins to seep out of the hole, then install the filler bolt. If the gear oil is to be changed, the oil must be completely drained by removing the oil filler bolt and the drain bolt at the bottom.

## 6.6 Routine maintenance



- In order to extend the life of a vehicle used in adverse conditions, it must be serviced more frequently than the recommended service intervals in the regular maintenance schedule. Such conditions include high or low temperatures, high dust and dirt conditions, and high frequency use of maximum loads.
- During normal maintenance on the powertrain, lift or remove the seat and remove the rear service cover. For major repairs, refer to the service manual in the event some maintenance operations need lifting of the vehicle. Refer to this manual for procedures and precautions for lifting the vehicle.

6.7 Regular maintenance schedule

Regular maintenance schedule

• General Maintenance Items

• Advanced Maintenance Items

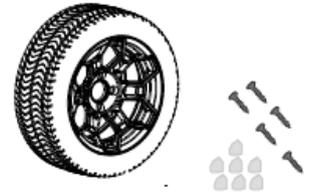
| Details of the user's regular maintenance  |     |      |  |        |      |
|--|-----|------|--|--------|------|
| Maintenance items  | day | week | month                                    | season | year |
| Check for possible damage to the battery surface                                 |     | •    |  |        |      |
| Charge the battery   | •   |      |  |        |      |
| Tighten the nuts on the battery terminals and connecting wires                   |     |      |  |        |      |
| Checking the health of the battery   |     | •    |  |        |      |
| Cleaning the battery surface   |     | •    |  |        |      |
| Observe the charger charging status and check if the charging plug is overheated |     |      |  |        |      |
| Clean the surface of the charger and do not allow water to enter the charger     |     |      |  |        |      |
| Check the working condition of the motor   |     |      | •  |        |      |
| Check that all connectors on the motor and controller are tightened.             |     |      |  |        |      |
| Check the motor for water ingress  | •   |      |  |        |      |
| Check accelerator and brake pedals for proper operation                          |     |      |  |        |      |
| Check tire pressure and tire surface   |     | •    |  |        |      |
| Check for loose wheel nuts   |     | •    |  |        |      |
| Brake and park function and efficiency check                                     |     |      | •  |        |      |
| Check brake shoe abrasion  |     |      |  | •      |      |
| Check the tightness of each tie rod end of the steering wheel                    |     |      |  |        |      |
| Checking the Universal Joint Spline Connection Retaining Nut                     |     |      |  |        |      |
| Check and adjust vehicle camber  |     |      | •  |        |      |
| Check the tightness of the bracket arm U-bolts                                   |     |      |  | •      |      |
| Cleaning the Controller Surface  |     |      |  | •      |      |
| Check brake pad abrasion   |     |      |  | •      |      |
| Check the working condition of the main gearbox and rear axle bearings           |     |      | End of the first month or run-in period. |        |      |
| Check and replace rear axle gear oil   |     |      | End of the first month or run-in period. |        |      |
| Checking the electromagnetic brake   |     |      |  | •      |      |
| Check the fixing bolts of the motor  |     |      |  | •      |      |
| Front wheel hub bearings cleaned and lubricated (with gear oil)                  |     |      |  |        | •    |
| Lubrication of other parts (use of universal lubricants)                         |     |      |  | •      |      |
| Check the brake fluid level in the Oil Reservoir                                 |     |      |  | •      |      |
| Cleaning bodywork and seats  | •   |      |  |        |      |

**NOTICE**

NOTE: Vehicles used under adverse driving conditions must be serviced and repaired more frequently.

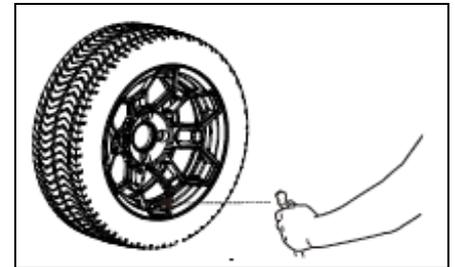
6.8 Chassis maintenance

Inspect the tires each time you use the vehicle and remove embedded objects or metal items from the tire surface. If objects are embedded in the surface of the tires, they can cause excessive noise or air leakage while the tires are being driven.



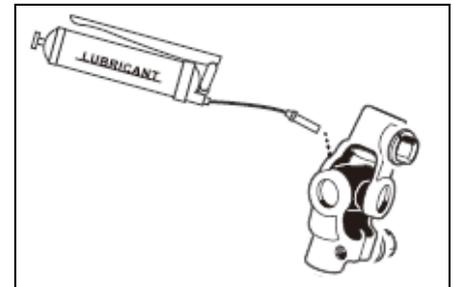
### 6.8 Chassis maintenance cont.

Check your tires every time you use your car to ensure they are inflated at normal pressure levels. Check the tire maintenance section for more details on tire inflation.

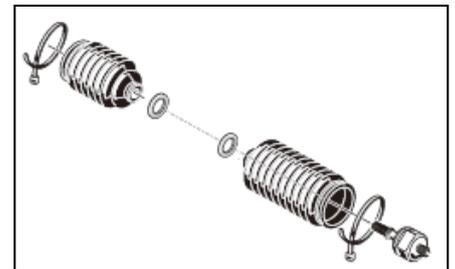


**⚠ DANGER**

A flat tire may cause the vehicle to steer out of control.



Vehicle mechanical joint areas are lubricated to maintain good turning and operating function, and required parts should be regularly lubricated each month.



Check the dust caps on the steering gearbox. Ensure the caps on the tie rod end joints on both sides are tightened. A loose cap can allow water and dirt to get into

6.8 Chassis maintenance cont.

Check the rear axle gear oil capacity.

**⚠ CAUTION**

Lower gear oil capacity may result in rear axle gear damage or excessive noise.

Check the brake shoe wear. If they are worn to the limit (1/3 left), replace them with new ones immediately.

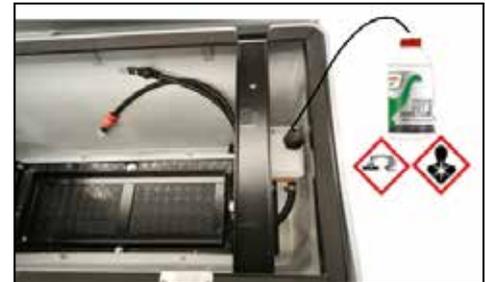
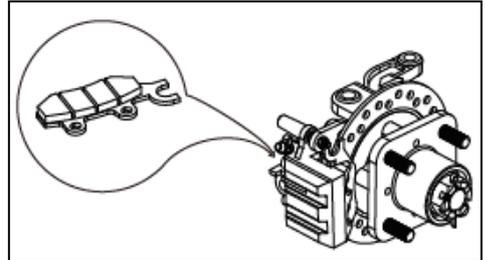
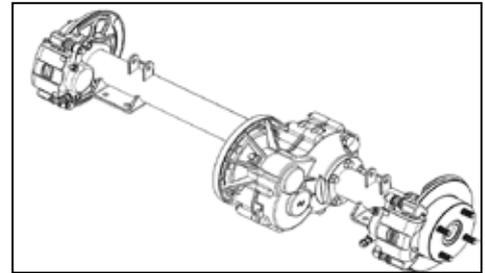
**⚠ DANGER**

Do not drive a vehicle with failing brakes!

Check the brake fluid level (the Oil Reservoir is located in the seat bucket under the driver's seat by lifting the seat cushion) to make sure that there is plenty of brake fluid and that there are no foreign objects mixed in.

**⚠ DANGER**

Do not drive your vehicle with insufficient brake fluid!



6.9 Common Failure Analysis and Troubleshooting

Vehicle repair and troubleshooting qualifications, site requirements and safety precautions are the same as those required for vehicle repair.

| Fault phenomenon  | Possible causes   | Solution  |
|---|---|---|
| No running of vehicle   | Operating error   | Please refer to the operating instructions for correct operation        |
|   | Oxidation (corrosion) of wire harness terminals   | Turn off the power, remove the nut, clean the terminals and reinstall   |
|   | Insufficient battery power  | Charge the battery  |
|   | Forward/reverse gear switch<br>Replace damaged switch   |   |
|   | Gas pedal damage  | Replace pedal   |
|   | Motor damage  | Replace motor   |
|   | Contactor damage  | Replace contactor   |
|   | Loose wire harness socket   | Reinsertion or replacement  |
| Vehicle moves slowly and comes to a complete stop when climbing a hill                            | Vehicle overload leads to controller temperature higher than 75°C, controller shutdown protection | Reduce the vehicle load and let the controller cool down                |
| The vehicle does not slow down when the accelerator pedal is released while the vehicle is moving | Accelerator pedal spring breaks, causing the pedal to not return to its original position         | Turn off the key switch or push the emergency stop button, then contact |
| The entire vehicle's electrical equipment does not operate when the key switch is turned on       | Blown fuse or poor contact  | Replace fuse or service   |
| Turn on switch, speedometer does not display  | Replace blown fuse  | Add lubricant   |
| Tire deflection   | Inconsistent tire pressure  | Inflate to tire pressure is   |
|   | Front or rear wheels not aligned  | Calibrate tire stance   |
| Steering difficulty   | Insufficient tire pressure  | Inflate to recommended tire   |
|   | Lack of lubrication of the steering linkage shaft   | Replace steering pin or tie rod end                                     |
|   | Damaged steering pin or tie rod end   |   |
| Oversteer   | Tie rod end damage  | tie rod end   |
|   | Steering gear is not adjusted or damaged  | Adjust and replace  |