

JINHUA SUNCART VEHICLE CO., LTD.



**ELECTRIC GOLF CART
OPERATIONAL MANUAL
(UTV SERIES)**

Content

Preface	3
Safety Warnings	4
General Information	5
General Operation	6
Maintenance	6
Ventilation	7
Safety Information	7
Vehicle Identification Number Location	10
Content	2
Color Option	11
The Structure and Shape of Vehicle	12
The shape diagram	12
Main Technical Parameters	13
Pre-Operations	15
Dashboard Features	18
Control Layout	18
Combination Instrument	19
Parking brake Operation	21
Other operational features	21
Dashboard Outlook	21
Rear Seat Kit Operation	22
Safe Driving Regulation Driving Regulations	23
Operating Steps	23
Precautions for Driving	23
Vehicle Repair and Maintenance	24
Precautions during vehicle operation	24
Periodical Maintenance	24
Chassis Maintenance	30
Maintenance Project	33
Battery	34
Lithium	34
Lead Acid Maintenance Free	34
Flooded Lead Acid Battery	37
Maintenance for Batteries	39
Battery Charger Manual	41
Charger Types	41
Safety Instructions	42
Common Charger Fault and Solution	44
Storage of Cart	46
Long Term Storage Tips & Operation	47
Return to Service After Long Term Storage	47
Tool Kits	47
Schematic Wiring Diagram	49

Preface

Thank you for your trust and choosing JINHUA SUNCART VEHICLE CO., LTD JINHUA SUNCART VEHICLE CO., LTD located in Jinhua in the Zhejiang Province of China , is a high-tech company capable of conducting independent research and development, manufacturing, sales, on electric golf vehicles. The integrity of our business, professional technology and efficient service has won the praise and support of customers.

Our company specializes in Golf Cart,major model RXV/TXT/UTV/TXV,Solar panel golf cart, Patrol Cart, Mini golf Cart, Customized Cart,Sightseeing Bus,Vintage Cart, etc. We are among the leading manufacturers in the field of electric golf carts,and international market and has a series of patent certificates, meantime ODM and OEM is available.

Electric golf cart compared to traditional gas vehicles enjoy the sparkling points of sufficient loading capacity, climbing ability, environmental friendly, low noise pollution, and low operation cost. In this regards, the electric golf cart have been widely used in many markets,such like NORTH AMERICA, SOUTH AMERICA ,THE MIDDLE EAST, ASIA, EUROPE AND OCEANIA, and electric golf cart also popular for use in many fields, such like airport patrol, railway station patrolling, tourists attractions, inter community transportation, etc. We hereby commit to "meet the requirements of customers" as rule of conduct, to "honesty, quality first, service oriented" as operation philosophy, to "be No.1 in Electric golf cart manufacturing" as the ultimate goal.

We provide not only the service on the product, but also the continuation of our company culture and life through after sales service.

Welcome to choose Sun cart, your reliable friend and a leading manufacturer of electric golf cart

Safety Warnings

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 of the product to reduce the chance of personal injury or property damage, the following must be carefully observed:



CAUTION

Certain replacement parts can be used independently and/or in combination with other accessories to modify an Sun cart vehicle to permit the vehicle to operate at or in excess of 28 mph.

When a Suncart-manufactured vehicle needs to be modified in any way by the Distributor, Dealer or customer to operate at or in excess of 28mph which previously was not, the modified product will be a Low Speed Vehicle (LSV) subject to the structures and requirements of Owner's jurisdiction. In these instances, pursuant to the law the Distributor or Dealers' jurisdiction, MUST equip the product with headlights, rear lights, turn signals, seat belts, top, horn and all other modifications for LSV's mandated by Law and affix a Vehicle Identification Number to the product in accordance with the laws applicable in the places of sale and use of the product, the Distributor, Dealer or customer modifying the vehicle also will be the Final Vehicle Manufacturer for the LSV, and required to title or register the vehicle as mandated

Attention:

1. Our vehicles, are used in factory which with "the Special Equipment Safety Supervision regulation", and the tourist scenic spot, the amusement park and so on the specific region uses the field (factory) the special vehicle;
2. The SUNCART electric vehicle can be only driven by the person who holds the certificate for special equipment ! If you are the first time to operate electric vehicles, you should be trained technicians to prevent accidents!
3. Because of the uncertainty of vehicle's use environment and operators, it is difficult to forecast and early warning of all possible situations, so please master the basic use of common sense and participate in essential driving training.
4. The vehicle may not be modified in any way, due to the modification of the whole vehicle weight distribution changes, the stability of the reduction or factory rated speed increase. Any modification without the consent of the manufacturer may cause serious bodily harm, and the manufacturer shall not be liable for any loss caused by any such alteration or any other serious effect on the safety of the vehicle.
5. When the vehicle is used in complex environment, it must be speed-limited; In addition, depending on the environmental conditions, terrain, according to the requirements and common sense to adjust the speed;
6. When using electric vehicles, please in a highly responsible State, please repair electric vehicles in a safe environment;
7. Carefully read the warning signs, strictly follow the instructions;
8. Before using electric vehicles, please read the manual carefully, and familiar with the operation of the car.

9. Before driving please check whether the car is in normal condition, do not use the vehicle with problems.
10. Strictly abide by the electric Vehicle Activity Area safety regulations, only in the area stipulated in the law can drive the electric vehicle, do not drive the car on the road or highway, this is not allowed by law;
11. Strictly abide by the provisions of the number of passengers;
12. Driving the driver and passengers do not put any part of the body out of the car, be sure to sit firmly hold well;
13. In the driving process should pay attention to all kinds of safety tips in the driving place, pay attention to driving safety;
14. In busy sections or views not open section should be extra cautious;
15. In the reversing process should be doubly careful, travel speed is slow;
16. To avoid sudden acceleration or braking;
17. Do not turn the steering wheel when driving at high speed, so as to avoid side turn;
18. On the downhill, please control the speed, and do not turn sharp, to prevent dangerous occurrence;
19. In the course of use, do not make any changes to the safe operation and carrying capacity of the vehicle;
20. In the course of driving, do not play, lest dangerous;
21. Poor terrain conditions, please slow down;
22. When the steep slope, please properly trample the brake control speed;
23. Please keep safe distance between electric vehicles during driving.
24. The wetland environment please slow down;
25. The soft terrain driving, please be cautious;
26. Pedestrian/street crossing, please be cautious.

General Information

All vehicles can be used for a variety of tasks beyond the original intended use of the vehicle; therefore, it is impossible to anticipate and warn against every possible combination of circumstances that may occur. No warning can take replace good common sense and prudent driving practices.

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

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

SUNCART IS NOT LIABLE FOR ERRORS IN THIS MANUAL. SUNCART IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT RESULT FROM THE USE OF THE MATERIAL IN THIS MANUAL.

This vehicle conforms to the current applicable standard(s) for safety and performance requirements.

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.

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
- leave the vehicle when there is a risk of lightning
- reduce speed to compensate for poor terrain or conditions
- apply service brake to control speed on steep grades
- maintain adequate distance between vehicles
- 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:

- replace damaged or missing warning, caution or information labels
- maintain the vehicle in accordance with the manufacturer's periodic service schedule
- ensure that repairs are performed by trained and qualified personnel
- follow the manufacturer's maintenance procedures
- insulate any tools used within the battery area in order to prevent sparks or battery explosion
- 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 in a safe area that is free of both vehicular and pedestrian traffic
- keep complete records of the maintenance history of the vehicle

The manufacturer cannot anticipate all situations, therefore people attempting to maintain or repair the vehicle must have the skill and experience to recognize and protect themselves from potential situations that could result in severe personal injury or death and damage to the vehicle. Use extreme caution and, if unsure as to the potential for injury, refer the repair or maintenance to a qualified mechanic.

Ventilation

Hydrogen gas is generated in the charging cycle of batteries and is explosive in concentrations as low as 4%. Because hydrogen gas is lighter than air, it will collect in the ceiling of buildings necessitating proper ventilation. Five air exchanges per hour is considered the minimum requirement.

NEVER charge a vehicle in an area that is subject to flame or spark. Pay particular attention to natural gas or propane water heaters and furnaces.

Always use a dedicated circuit for each battery charger. Do not permit other appliances to be plugged into the receptacle when the charger is in operation.

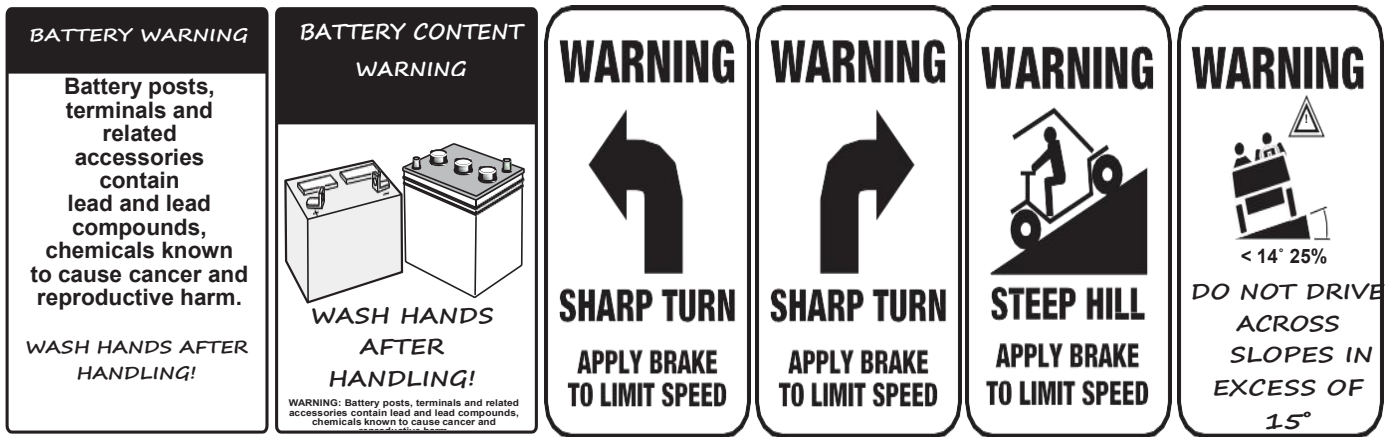
Chargers must be installed and operated in accordance with charger manufacturers recommendations or applicable electrical code (whichever is higher).

Safety Information

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

Do not make any such modifications or changes. Suncart prohibits and disclaims responsibility for all such modifications or and alterations which would adversely affect the safety of the vehicle.

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



WARNINGS, NOTES, CAUTIONS, AND DANGERS

Observe these NOTES, CAUTIONS, WARNINGS and DANGERS; be aware that operating or servicing a vehicle requires mechanical skill and a regard for conditions that could be hazardous. Improper service or repair may damage the vehicle or render it unsafe.

WARNING

Improper tire pressure can cause the vehicle out of control, resulting in serious personal injury or death.

Always keep the tire pressure within the specified range.

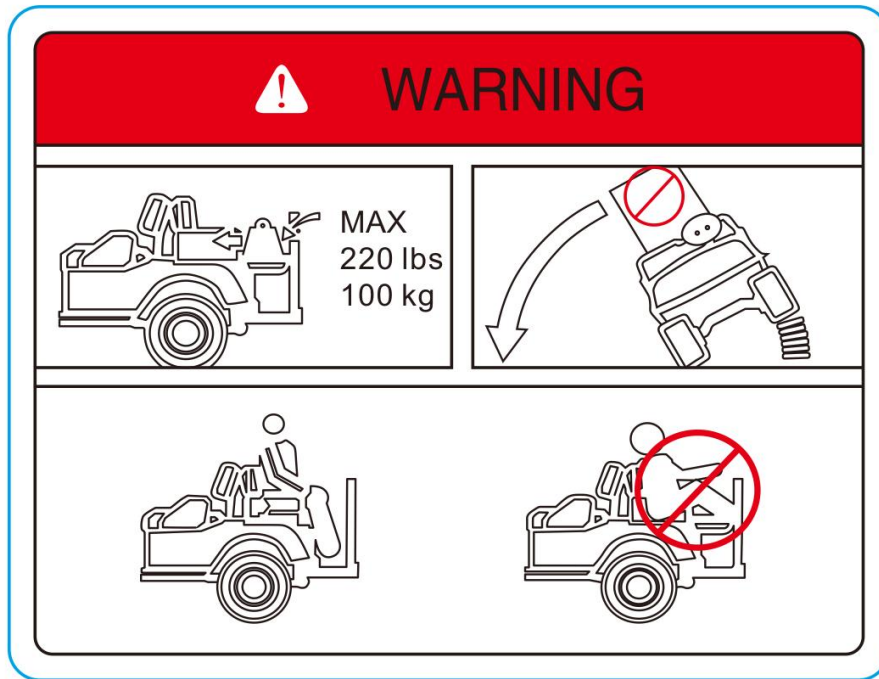
- Tire pressure:

Front wheel: 12psi (87kPa)

Rear wheel : 14psi (93kPa)

WARNING

- Charge the battery every month
- Charge the battery after use
- Stop charging batteries when the charging indication light becomes green
- Charge should not exceed 10 hours



WARNING

Improper use can result in Server INJURY or DEATH

BE PREPARED

- Fasten seat belts.
- Wear an approved helmet and protective gear.
- Each rider must be able to sit with back against seat.

Feet flat on floor [and foot rests], and hands on steering wheel or handhold(s), [where equipped]. Stay completely inside the vehicle.

Drive Responsibly

Avoid loss of control and rollovers:

- Avoid abrupt maneuvers, sideways sliding, skidding, or fishtailing, and never do donuts.
- Slow down before entering a turn.
- Plan for hills, rough terrain, ruts, and other changes in traction and terrain. Avoid paved surfaces.
- Avoid side hilling (ride across slopes).

Be Sure Riders Pay Attention and Plan Ahead
If you think or feel the vehicle may tip or roll, reduce your risk to injury:

- Keep a firm grip on the steering wheel or handholds and brace yourself.
- Do not put any part of your body outside of the vehicle for any reason.

Require Proper Use of Your Vehicle
Do you part to prevent injuries:

- Do not allow careless or reckless driving.
- Make sure operators are 16 or older with a valid driver's license.
- Do not let people drive or ride after using alcohol or drugs.
- Do not allow operation on public roads (unless designated for off-highway vehicle access) --collisions with cars and trucks can occur.
- Do not exceed seating capacity;

[Locate and] Read [Owner's Manual]
Follow All Instruction and Warnings
[Reserved for Reference to Other Sources of Safety Information]

ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR

NEVER USE PUBLIC ROADS OR PAVEMENT

NEVER USE WITH DRUGS OR ALCOHOL

Vehicle Identification Number Location

Location 1

The VIN number, known as Vehicle Identification Number, includes 17 digital alpha-numeric numbers. VIN number is only used for LSV cart (Low speed vehicle). VIN number plate is located on the passenger's side of the chassis frame, above the rear wheel and close to the charger inside the battery compartment, normally on the serial number plate.

SH3***** (Example: SH3TU6BG4PS000027). WMI is first 3 digits SH3, 10th digit "P" is Year

Location 2

The VIN number, known as Vehicle Identification Number, includes 17 digital alpha-numeric numbers. VIN number is only used for LSV cart (Low speed vehicle). VIN number plate is located on the driver side of the chassis frame, behind the driver side of front wheel, normally on the serial number plate.

SH3***** (Example: SH3TU6BG4PS000027). WMI is first 3 digits SH3, 10th digit "P" is Year

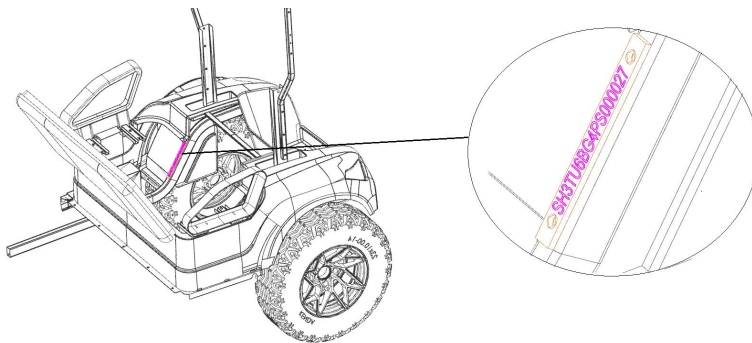


Figure 1

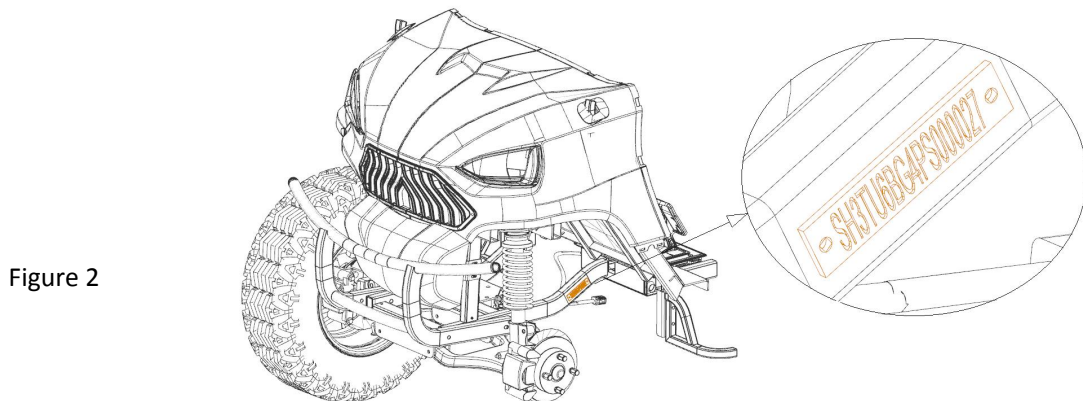


Figure 2

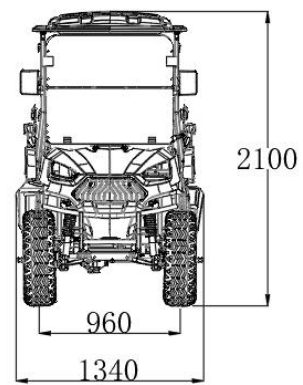
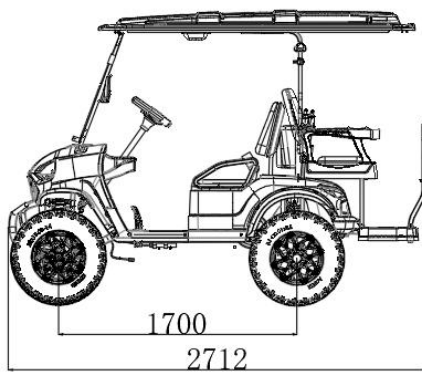
Color Option



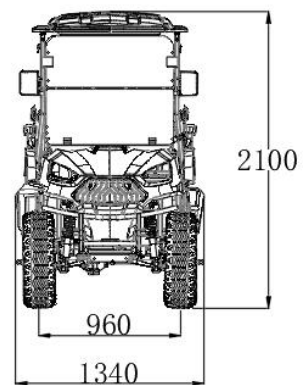
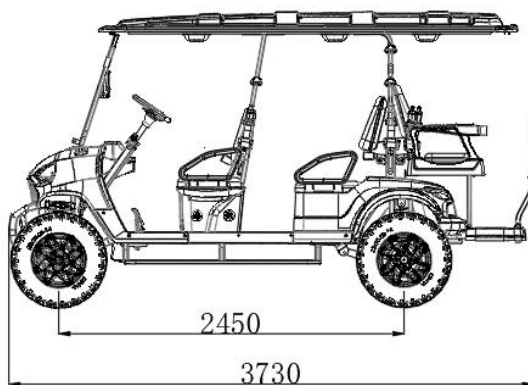
The Structure and Shape of Vehicle

The shape diagram

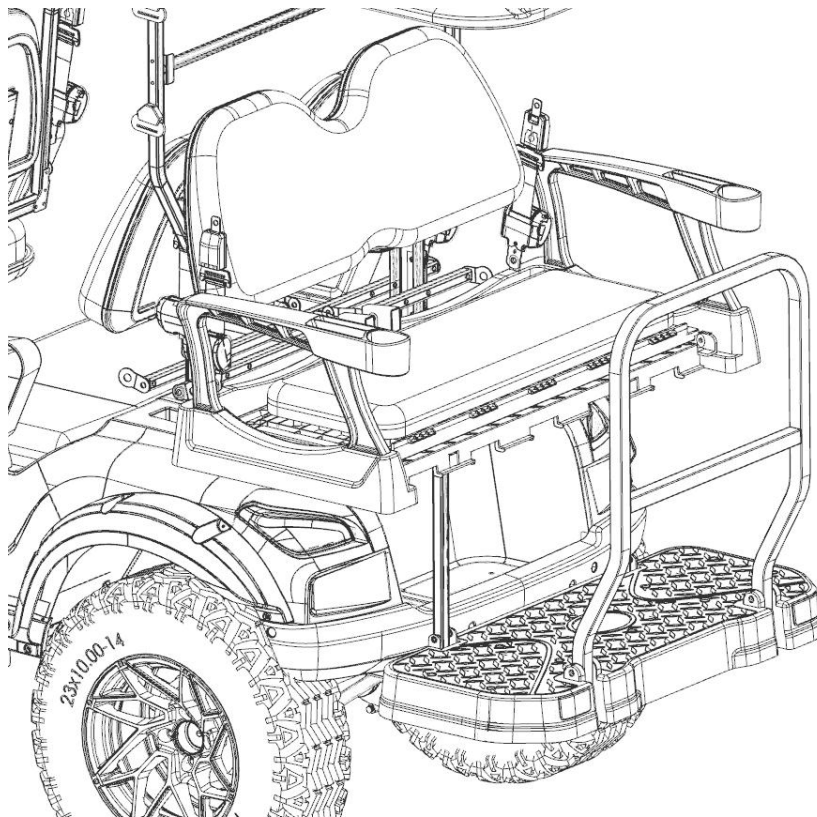
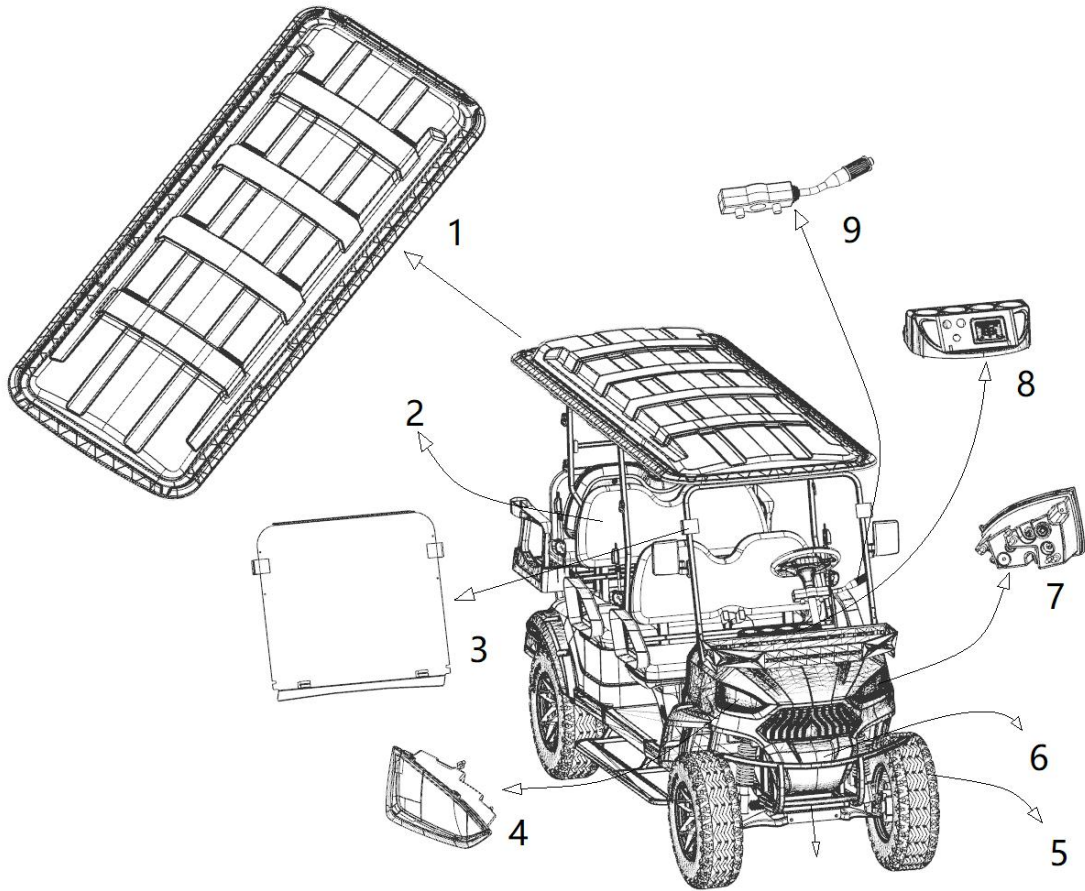
4 Seater (2+2)

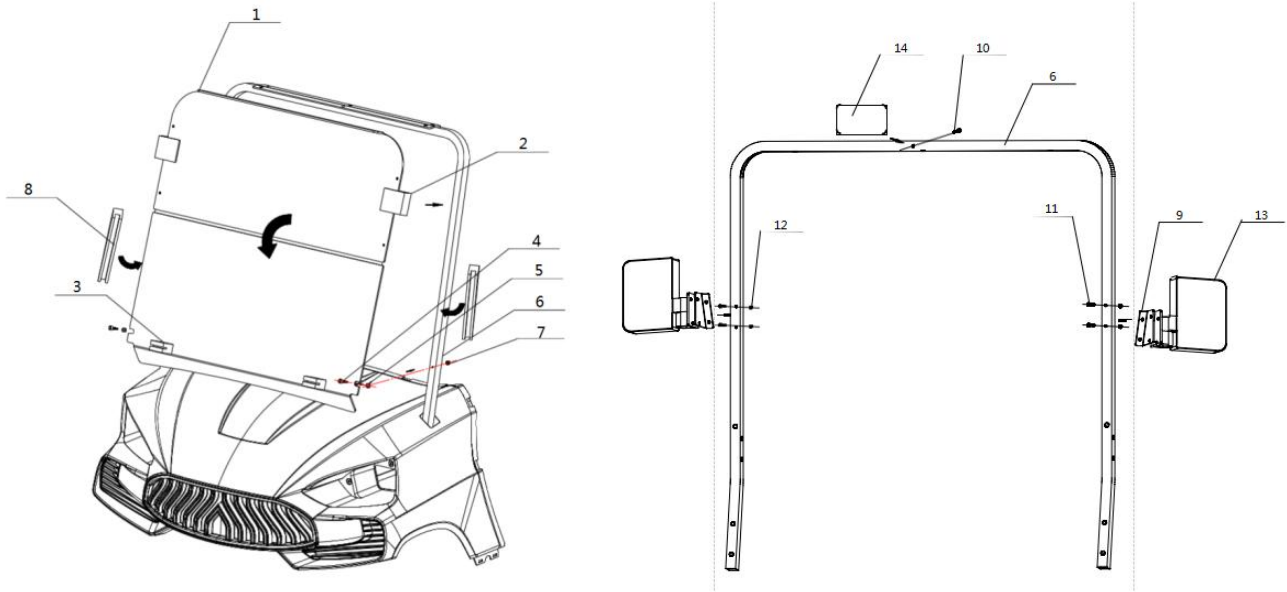


6 Seater (4+2)



Main Technical Parameters





Item	Part No	Description	Qty
1	SC-TXV-FG-01	Folding glass	1
2	SC-TXV-GFCB-01	Glass fixing clamp block	2
3	SC-TXV-GC-01	Glass clamp	2
4	SC-SHCS-M6-50	M6 X5 0 socket head screw	2
5	SC-TXV-RG-01	Ring gasket	1
6	SC-TXV-FRS-01	Front roof support	1
7	SC-NM6	M6Nut	2
8	SC-TXV-GC-02	Sash	2
9	SC-TXV-RMS-02	Reflector mounting sheet	1
10	SC-SHCS-M6-50	M6X50 socket head cap screw	1
11	SC-SHCS-M6-50	M6X50 socket head cap screw	4
12	SC-NM6	M6 nut	4
13	SC-TXV-SVM-02	Side view mirror	2
14	SC-TXV-RM-01	Rear view mirror	1

Pre-Operations

Before using the vehicle, you should make every inspection, to avoid the unusual and protect the driver and the crew safety.

Before you making any check, you should make sure the start key has been removed to avoid accidental activation and make sure the parking brake is locked to avoid any moving.

Check the following items before using each vehicle:

1. Appearance

Please carefully check the appearance of the vehicle before use, whether there is a safety hazard; For example: whether the windshield is clean, whether there are cracks, broken, whether the car shell is damaged, and whether the wheel interference, if so please ensure timely adjustment or replacement, in order to ensure the user's personal safety.

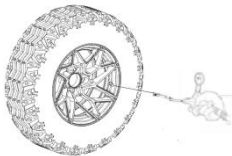
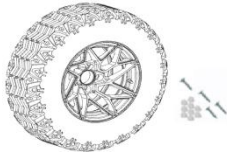
2. Body and chassis

Before every use, carefully check the body and chassis of the connecting parts bolts are loose or missing, to ensure that the connection parts are securely installed;

3. Tires

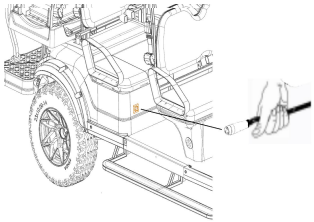
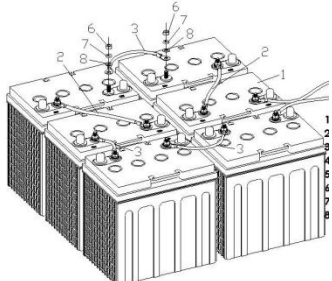
Before each use, check the vehicle tire usage, whether the wear is serious or have the breakage, the crack and has the sharp matter to plunge in; if so, prohibit the use, please adjust or replace the new tires, otherwise, it will damage the life of the vehicle or cause accidents such as the accident which endanger personal safety.

When the tire tread is worn below 1.6mm, please change the tire in time.

	<p>Check the tire pressure is normal, the pressure is too high or too low all have influence on the performance of the tire and the whole vehicle. It should be inflated until the internal pressure shown on the tires.</p>
	<p>Check the tires' surface , remove any embedded objects you can find . Be sure no cracks or other damages to the tires ,defective tires may cause accident while driving</p>


4. Battery

Before using, check whether the battery is stable placed in the battery box or not, battery caps are there or not ,to avoid the battery acidic liquid outflow, check the connection between the battery is fastened, the battery pole is corroded.

	<p>Check Power level of cart before usage.</p>
	<p>Check the tightness of the battery wiring , make sure all the nuts are solidly tight. Loose attached nuts on the battery will cause big spark while operating .</p>

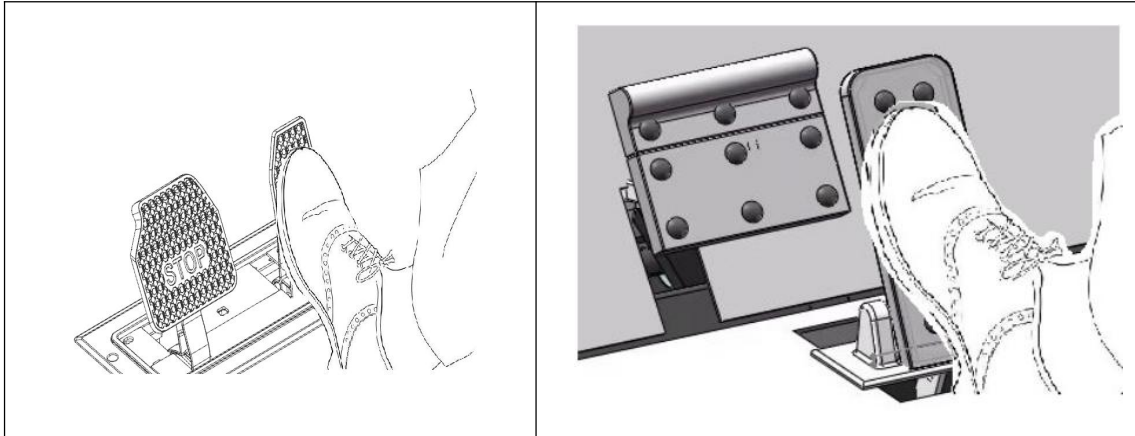
5. Steering system

Check whether the direction system has too much idling before each use or not, move the steering wheel up and down, make sure the steering wheel is fastened, turn the steering wheel around lightly, if you find too much idling, or hear a noise, that means some spare parts have problems, please immediately contact with the after-sales department to repair.

	<p>Pull the steering wheel up and down ,check the tightness of steering wheel. Rotate the steering wheel right and left. Be sure no excessive free play and rattling sound .</p>
---	---

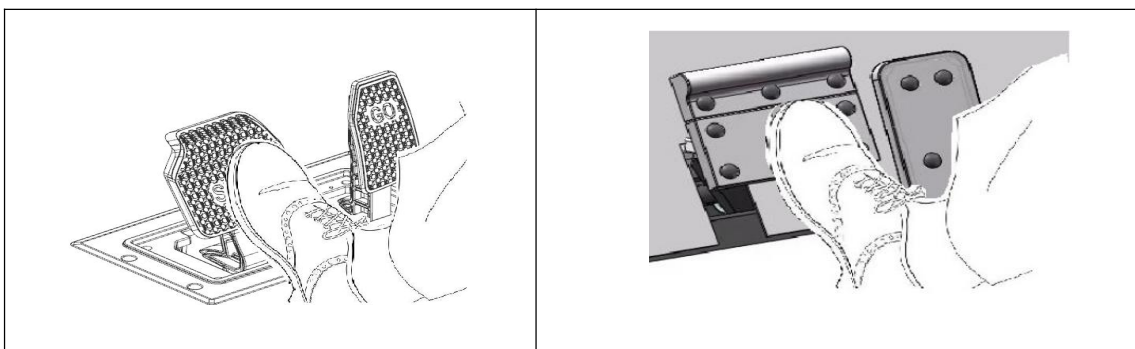
6. Accelerator pedal

Check the accelerator pedal, to ensure that it can work flexibly, if there is a card astringent, not back to the situation, please adjust the troubleshooting timely maintenance, if continued use, there are security risks, may cause serious safety accidents and personal injury.



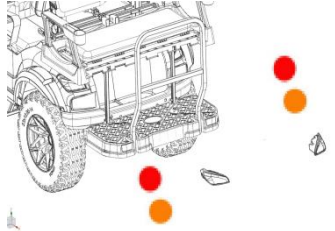
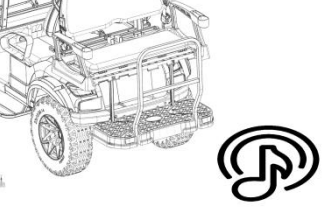
7. Braking system

Check the brake pedal, step down the brake pedal feeling should be quite practical, when loosened to return to the original position; Check the brake function is normal, if the brake is not sensitive or brake invalid, prohibit the use of vehicles, the professional maintenance personnel to adjust maintenance, to avoid causing a safety accident; Check the brake fluid height and quality, if there is any problem, please add or replace in time; check the brake tubing joints, the total braking pump and the brake pump whether there is leakage of oil, such as timely maintenance or replacement Check the handbrake device to ensure the braking effect of the hand brake is good.



8. Alarm Devices and Signals

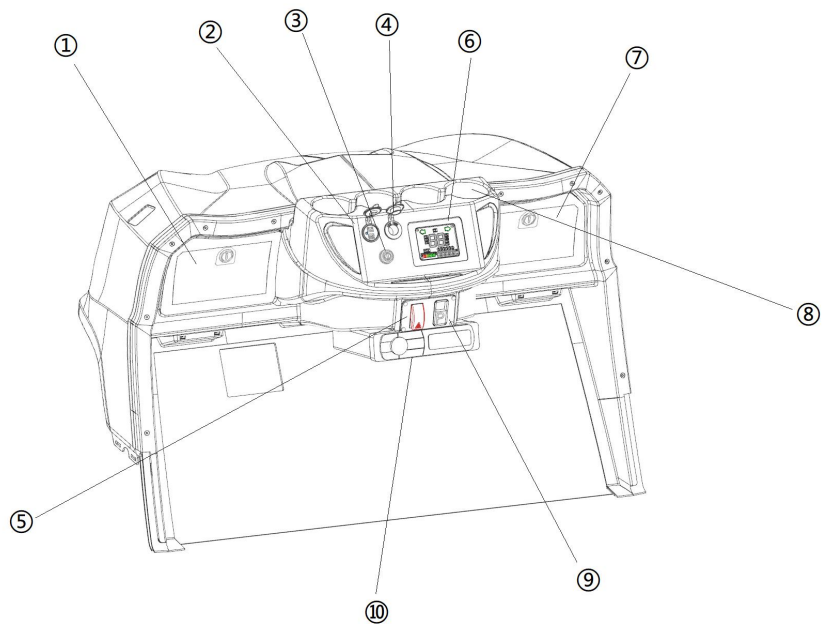
Reversing alarm can effectively alert the surrounding personnel, please test before using to ensure that the reverse alarm is working properly. Check the signal lights , the brake lights and turning lights should be in proper working condition.

	<p>Check the signal lights , the brake lights and turning lights should be in proper working condition.</p>
	<p>Check the reverse beeper ,when the direction selecting switch is set at “REVERSE”, it should beep soundly</p>

Dashboard Features

Control Layout

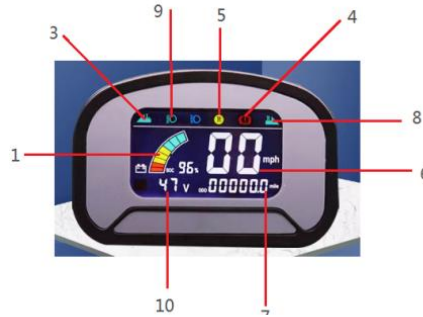
1. Left Glove Lock
2. USB Port
3. Key switch
4. Cigar Lighter
5. Hazard Light Button
6. Odometer
7. Right Glove Lock
8. Cup Holder
9. Electric Parking Brake Button
10. MP3 Player



Combination Instrument

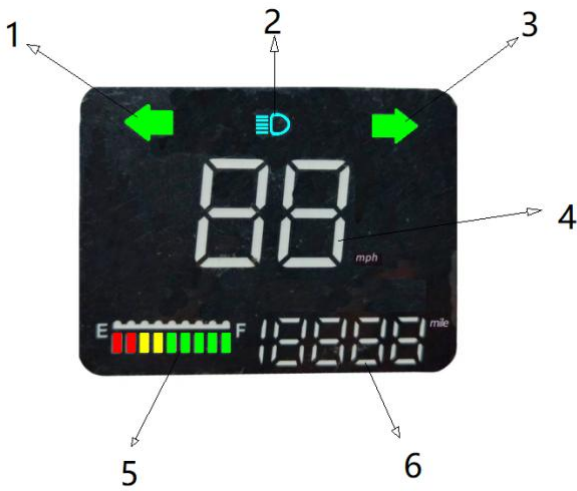
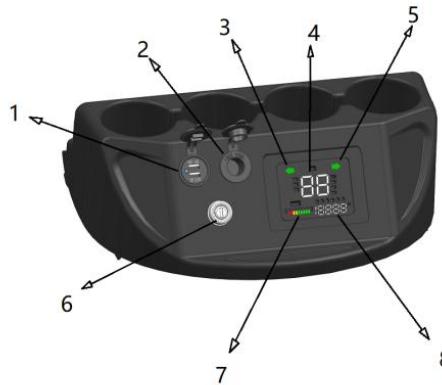
Option 1

1. Power Monitor
2. Running time
3. Left Steering indicator
4. Brake Display
5. Back indicator
6. Speedometer
7. Mileage
8. Right Steering indicator
9. Headlight Indicator
10. Voltage meter



Option 2

1. USB Port
2. Cigarette Lighter
3. Left Steering indicator
4. Speedometer
5. Right Steering indicator
6. Key switch
7. Power Monitor
8. Mileage



Odometer

1. Left Steering indicator
2. Headlight Indicator
3. Right Steering indicator
4. Speedometer(kmh/mph)
5. Power Monitor
6. Mileage



Speedometer/Odometer Board

As above showing, All lights up after charging. The signals will die from up to down. Immediate charging is required if the below 2 red signals up. Otherwise, the lifespan of batteries will be severely shortened.

Control switches for electrical equipment

Key Switch

OFF Power off for whole car.

ON Power on.

Direction Switch

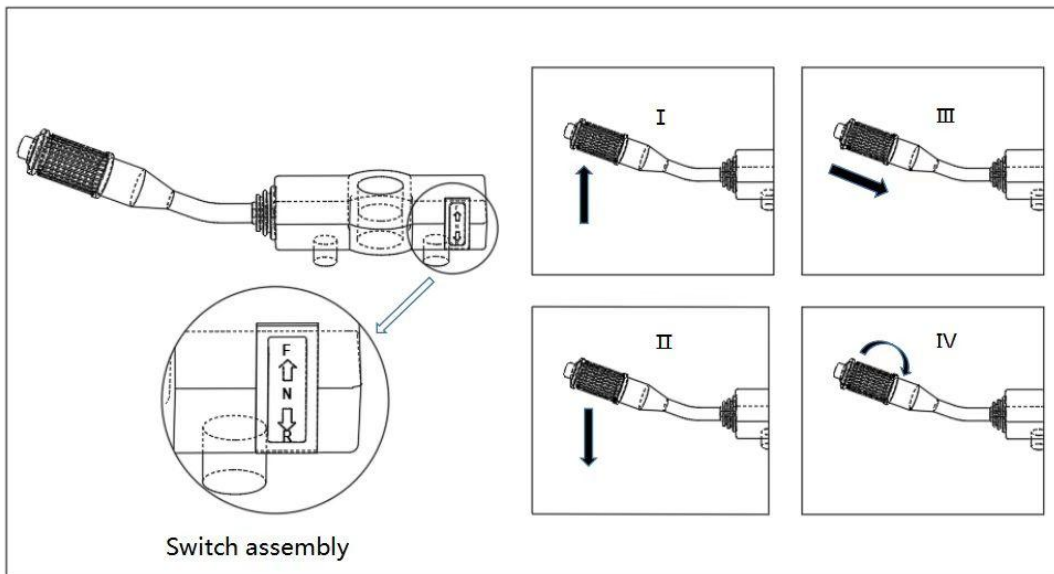
Upper button down for going forward;
 Lower button down for going backward;
 Middle position for parking/Neutral Gear(no forward or reverse movement occurs)



Head Light, Turning Light, Horn, Reverse

Buzzer

- Pull down to open head light
- Press the button to open buzzer
- Open right turning light
- Open left turning light
- Press for the horn
- Hazard Button(Red)
- Electric Parking brake Button

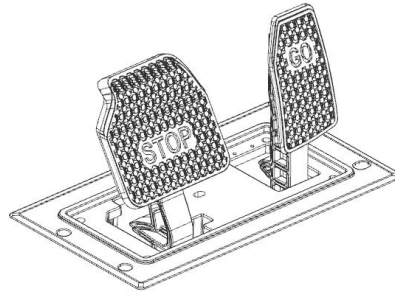


Parking brake Operation

Press the electric parking brake button to effect operation.

Release the parking brake totally when driving, and must be tightened when stopping.

Parking brake is released by pressing the Button when the vehicle is switched on. .



Other operational features

Steering Wheel: to control the direction

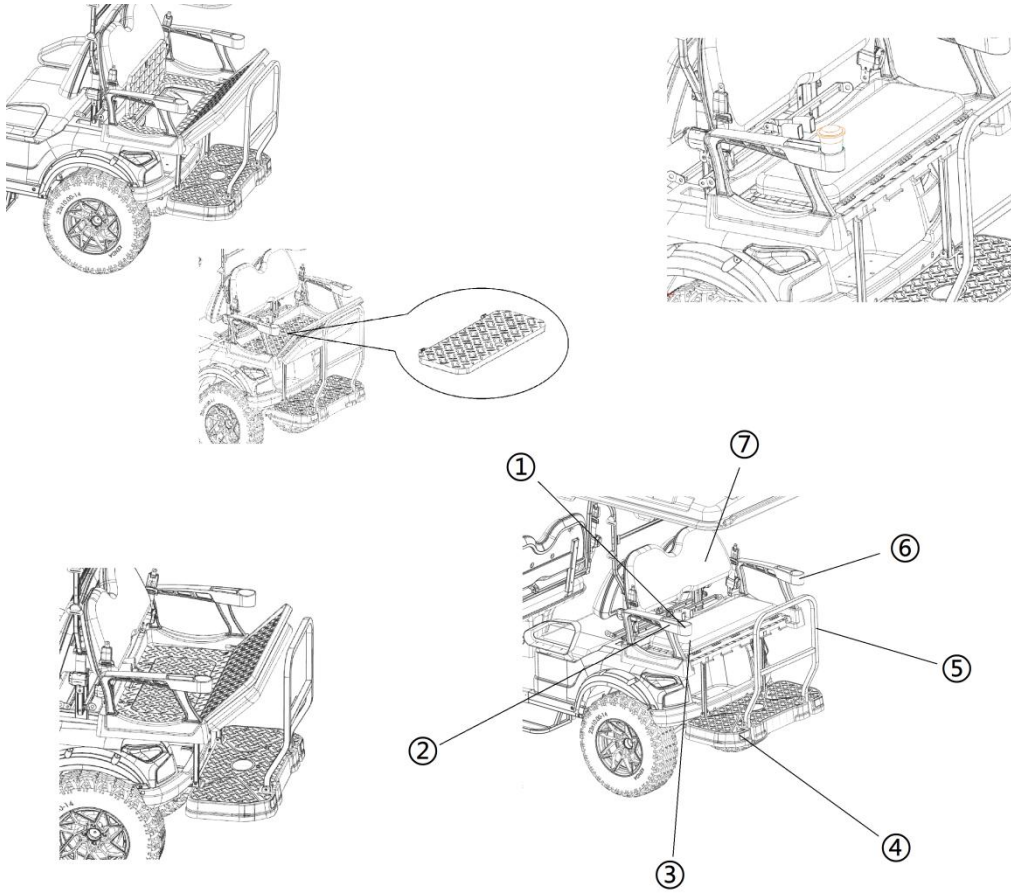
Accelerator Pedal: to control the speed

Service Brake and parking brake: to reduce and control the speed.

Dashboard Outlook



Rear Seat Kit Operation



1. Right Cup Holder
2. Arm Rest
3. Rear seat cushion
4. Rear Standboard
5. Rear Handrail
6. Left Cup Holder
7. Rear Back rest Cushion

Safe Driving Regulation

Attention: If this is the first time for you to drive electric freight car, please be strict with yourself in training. Otherwise, improper driving may lead to serious consequences.

Operating Steps

- 1) Insert the key and turn it to ON.
- 2) Press the forward button and make sure that the road ahead is clear and suitable for driving.
- 3) Release the hand brake and gently step on the accelerate pedal to start the car. Lower the pedal, higher the speed.
- 4) For stoppage, release the accelerate pedal gently and stamp on the brake pedal. Then pull upward the hand brake.
- 5) Turn the key switch to OFF and keep it with care.
- 6) Press the direction switch to middle.

Precautions for Driving

- 1) Only trained driver with license is suitable for driving the vehicle.
- 2) All safely on board before starting. Leaning outside is strictly forbidden during the whole trip.
- 3) Special attention goes to slippery and crowded road condition.
- 4) Special attention goes to turnings and stops to avoid accidents.
- 5) This model is not designed for on-road uses. Keep away from roads and streets.
- 6) No self-modification is allowed. Otherwise the warranty is automatically canceled.
- 7) Overloading is strictly forbidden.
- 8) This model is designed with low ground clearance for golf course uses. Surfaces too rough might damage the chassis.
- 9) Keep the vehicle indoors when parking. Rainy weather might damage key parts and rust the iron parts.

Vehicle Repair and Maintenance

Precautions during vehicle operation

If you can operate as what we suggested at the first 1000 kilometers, you can extend its service life and improve economic efficiency.

- 1) Avoid a sudden acceleration when starting a vehicle
- 2) Avoid stepping on the accelerator pedal frequently
- 3) Avoid to make the acceleration pedal to the lowest
- 4) Check for broken or disconnected wire. Special attention goes to steering system and transmission box. Make sure that the nuts for the brake system, suspension and tires are fastened.
- 5) Check the Electrolyte level and density of battery, eliminate the possibility of leakage (if using flooded type of battery).
- 6) Check for oil leakage of brake system and rear axle.(if this applies to your cart model)
- 7) Keep constant checking for steering system, suspension and tire nuts.

Periodical Maintenance

All models are in need of periodical maintenance to ensure driving safety and stable performance.

Precautions for Maintenance

- 1) The place for maintenance should be clean, safe and equipped with fire protection.
- 2) Power off and pull up the hand brake during maintenance. When check electronics and motor, it's highly recommended that one battery remove to protect the main circuit and prevent short circuit.
- 3) Do not crawl down the vehicle when jacked.
- 4) Take extra cautions when handling batteries, for the contents are highly flammable and poisonous.
- 5) Avoid smoking or fire works near the batteries.

Whole Vehicle Maintenance

Maintenance and adjustments for steering system

Ball joints of the steering system needs monthly maintenance by applying lithium base grease. Every three month, ball nuts shall be inspected Fasten if loosen. Check every dust-cover for tie rods for cracks. Replace a broken cover once noticed. Crashed cover might lead to rusted ball joints and inflexible steering.

Free swing magnitude of steering wheel

Park the car and face the tires to the front and rotate gently the steering Wheel. If the free swing magnitude is larger than normal, adjustment shall be made.

Front wheels toe-in checking:

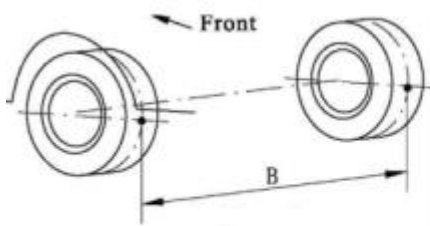
Fix the suspension and make the front wheels travel for about 5 meters. Mark the center of the front tread point and mark the distance between the two wheels as shown in p1.

Push the vehicle forward and make the two marks coincide. See p2.

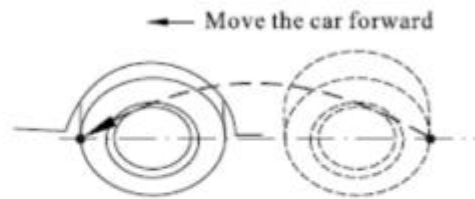
Measure the distance A when they are rotated until they face the front. See p3.

Calculate the toe-in. $\text{Toe-in} = B - A$

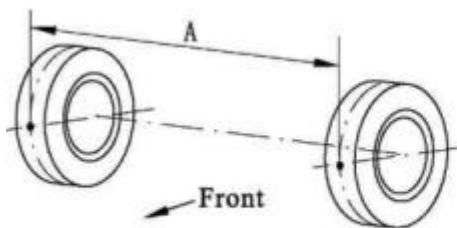
If the toe-in is not included in the standard range, adjust it by repositioning the left and right steering toe-rod.



Graph 1



Graph 2



Graph 3

Front toe-in adjustment

Release the nut at the top of the steering tie-rod.

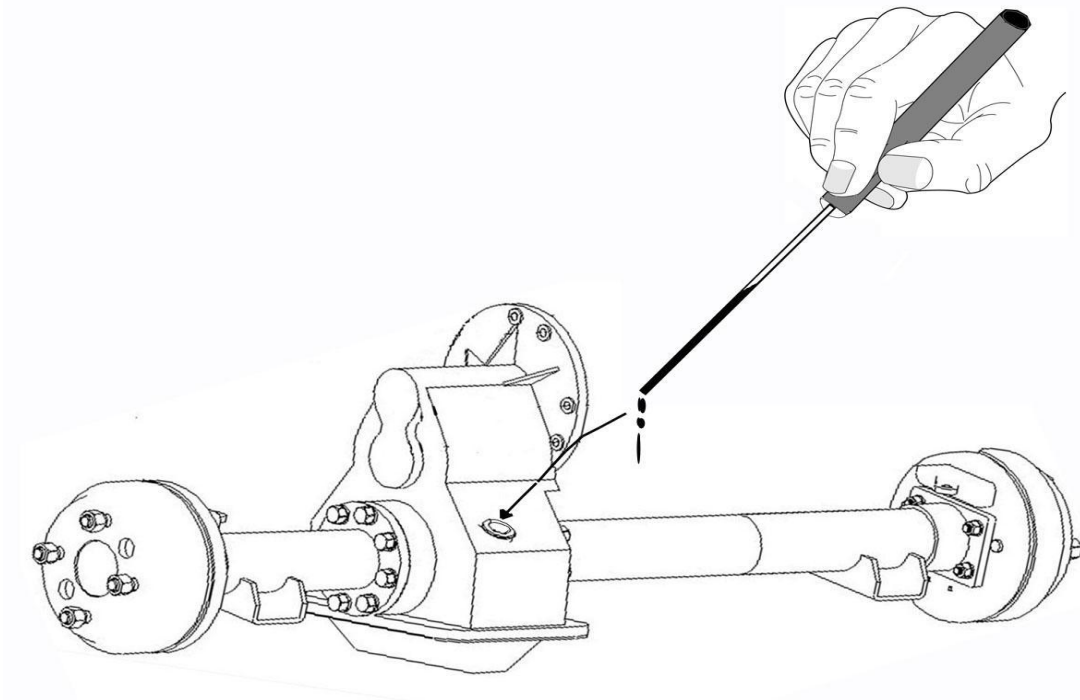
Turn the left and right steering tie-rod. The magnitude of movement shall be the same to conform to standards. Fasten the nut back.

Note: When adjusting the left and right tie-rod, they should be made approximate to each other to minimize the inaccuracy.

Changing lubricating oil for rear axle final reduction drive

The lubricating oil needs to be changed once every half a year and checked constantly to prevent leakage.

- Avoid slops when checking.
- Remove the plug and use your finger to check the oil level.
- The level of oil should not be 5mm higher than oil hole.
- Tighten the oil plug.
- Check if there's any leakage or rear axle damage when re-installing the oil plug.
- Add more lubricating oil which suitable for gear oil and then fasten the bolt.



Maintenance for Suspension

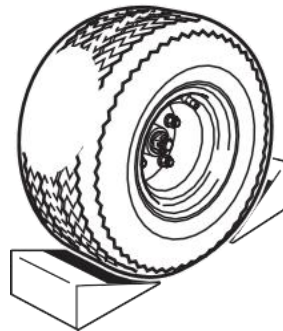
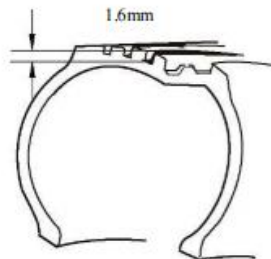
Check once every three month the nuts for suspension and fasten when necessary.

Maintenance for Brake system

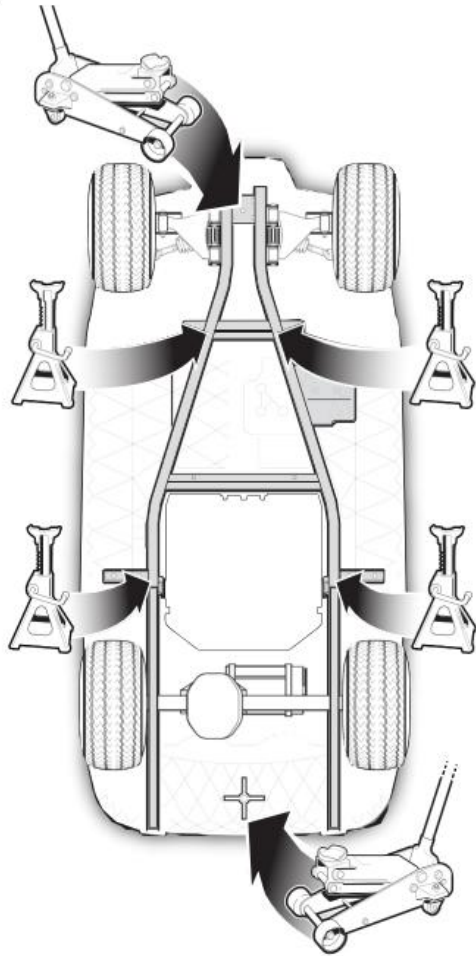
Adjust the brake shoe clearance of rear axle: move the ratchet counter-clockwise to the point that the tire won't move. Then move back the ratchet to 1 or 2 gear and check with your hand to see if the tire can be immediately settled down. Keep constant checking over the brake oil level and add if necessary.

Maintenance for Tires

Tire pressure: the depth of Tire tread groove should be greater than 1.6 mm. Tires should be replaced when the tread wear grooves ≤ 1.6 mm. Check regularly to make sure there are no nails, stones or other similar substances.



⚠ WARNING



A tire explosion can cause severe injury or death. Never exceed the inflation pressure rating on the tire sidewall.

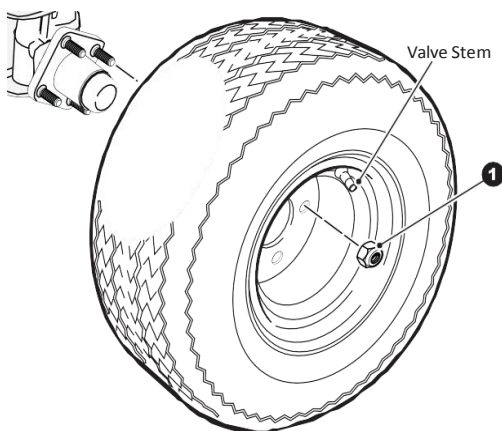
To reduce the possibility of tire explosion, pressurize tire with small amount of air applied intermittently to seat beads. Due to the low volume of the small tires, over inflation can occur in seconds. Never exceed the tire manufacturer's recommendation when seating a bead. Protect face and eyes from escaping air when removing a valve core.

To reduce the possibility of severe injury caused by a broken socket when removing wheels, use only sockets designed for impact wrench use.

Use caution when inflating tires. Over inflation could cause the tire to separate from the wheel or cause the tire to explode, either of which could cause severe injury.

DO NOT use low inflation tires on any the vehicle. DO NOT use any tire which has a recommended inflation pressure less than the inflation pressure recommended in the owner's guide or on the tires mounted on cart.

Use caution when inflating tires. Due to the low volume of the small tires, over inflation can occur in seconds.



Over inflation could cause the tire to separate from the wheel or cause the tire to explode. pressure be higher than recommended on tire sidewall.

All four tires should have the same pressure for optimum handling characteristics. Be sure to install the valve stem dust cap after checking or inflating.

The vehicle is fitted with low pressure tubeless tires mounted on one piece rims; therefore, the most cost effective way to repair a puncture in the tread is to use a commercial tire plug.

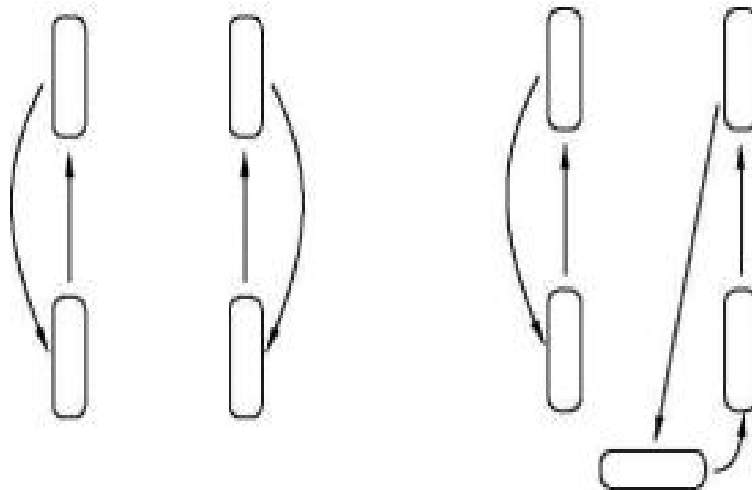
Fasten the nuts

When installing the nuts, first push with hands the tire centralized and check if the nuts can be further fastened. Use a wrench to fasten the nuts in the sequence shown in the right picture.

Use of tires:

In order to make the tires evenly used, the tires of the same size and tire ply should be replaced every six months, extending the service life of the tire and checking the damage degree of the tire surface when replacing the tire. In most cases, severe abnormal wear is caused by abnormal tire pressure, wheel unbalance or the sudden braking force on the tread, before and after tire pressure must conform to the standard value and check the fastening degree of the wheel nut.

The replacement method of tire



Maintenance of Motor

Motor is the only power that drives electric freight cars to move. Therefore, proper usage for motor is the precondition for normal operation of freight cars. Special attention shall be paid for brushes, commutator, the lubrication of axle bearings and the cleanness of the motor. Over moisture and heating might also affect the performance. Follow the steps below when checking for motors:

- Check the tightness of brush and observe its movements within the shelf.
- More than 75% of the area connected to brush and commutator.
- The length of the brush shall exceed half of the new one. Grind the brush on the commutator when changing.
- Brush generally in the vehicle need to be replaced almost 1-1.5 years, the specific time according to the specific conditions of vehicle.

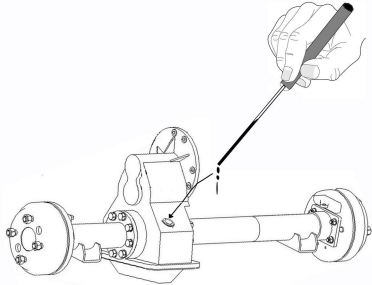

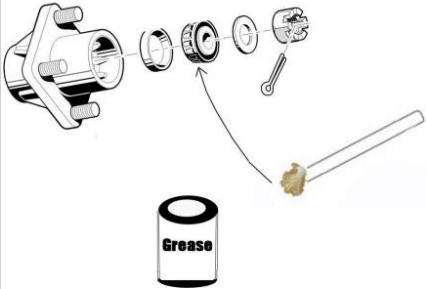
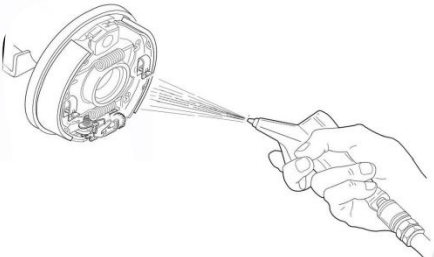
Maintenance for Controller

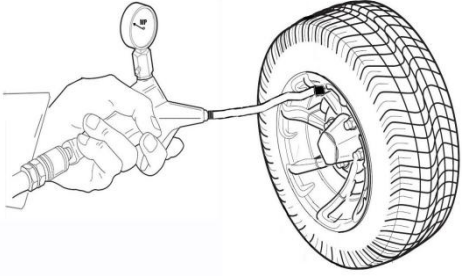
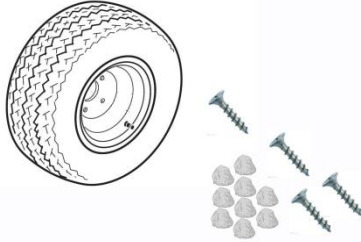
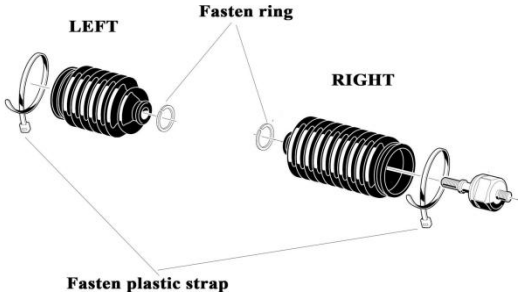

- Power off to avoid accidents during checking.
- No inflammable items shall be placed on the controller, for the heating might cause fire.
- Monthly checking for wire connections and fasten when necessary.
- When changing the controller, make sure that armature and the excitation terminals are properly fastened. Otherwise the controller might be damaged.
- When the batteries are full, the key switch shall be OFF and the key disconnected to make sure that both charging circuit and motor controlling system is powered off.
- Avoid sudden and constant stamping over the accelerate pedal for longer service life of the acceleration system.

Car Wash


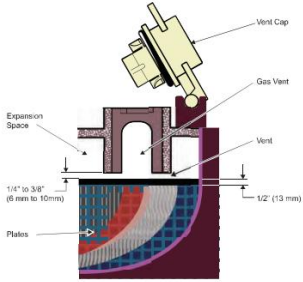
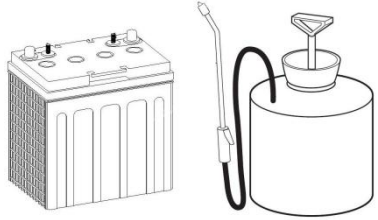
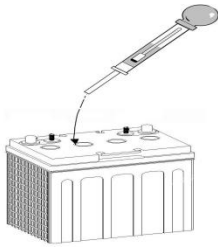
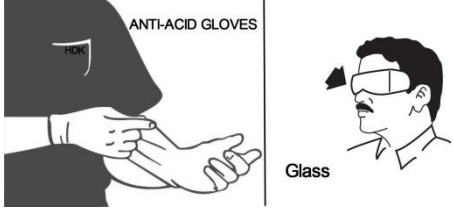

- Decorations indoor can be cleaned with neutral detergent and low density soap water and dusted off with sponge or soft cloth.
- Avoid sharp articles when washing outdoors to protect the painting.
- Never let water in all electrical parts especially the motor, battery and the controller.

Chassis Maintenance

	<p>Check the lubricant capacity of rear axle . Low lubricant capacity may cause damages to rear axle cams or excessive noises</p>
	<p>Check the brake shoes worn out conditions , if it is extremely worn out(1/3 left) ,then the brake shoes need to be replaced with a new one. DO NOT DRIVE THE VEHICLE</p>
	<p>Check the bearings inside of front hub , the hubs should have enough lubricated grease.</p>
	<p>Clear the brake shoes surface , all the brake shoes shred dust should be cleaned out in periodic time. Shred dust may cause mechanical malfunctions of brake. Use a compressed air to blow the dust out.</p>

<p>Check the tires every time use the vehicle . The tires should be inflated with enough air . The air pressure should with normal level . Check the tire chapter for more specific information of tire inflation .</p>	
<p>Check the tires every time use the vehicle , remove embedded objects or metal items away from tire surface. If the tire have embedded objects on surface, it will lead to excessive noises from tire while driving or tire internal air leaking .</p>	
<p>Check the dust-proof caps on steering gear box, the caps are supposed to be tight on the two terminal ends . Loose caps will let water and dust into the gear box ,cause the gears rusting .</p>	
<p>Add lubricant to mechanical joint parts , the vehicle should be kept in good turning and operating functions. To attach that one should add lubricant to needed parts every one month .</p>	

Electrical Appliances Maintenance

	<p>Keep the controller from water , water may cause circuitry short circuit. If water enter into controller , the vehicle may run unintentionally after turn on the power switch.</p>
<p>Check fluid level before and after charging , electrolyte should be at least 1/2”(13mm)above the plates and 1/4” tp3/8” (6 to 10mm) below bottom of the vent . DO NOT CHARGE BATTERY WITH LITTLE ELECTROLYTE , IT MAY CAUSE OVERHEATING OR AN EXPLOSION</p>	
	<p>Use a injection faucet to inject distilled water into the battery when the battery don't have enough capacity of battery fluid .</p>
<p>Use a hydrometer to check the specific gravity of the battery fluid in each cell . Fluid density ranges from different values in different period of battery using Maintenance period :One time per 10 months</p>	
	<p>Always remember to take precautions while conduct any operations on batteries or handle battery . Wear gloves to protect person form acid corrosion and splash</p>
<p>Check the head and taillights back rubber caps , the caps should always be kept on tightly. Otherwise water or dust may enter into the headlight chambers . Cause halogen bulbs burn down easily and vague vision of headlights .</p>	

Maintenance Project

Maintenance Project	Every week	Once a month or 2000km	Once three months or 5000km	Once six month or 10000km	Once a year or 20000km
The level height of electrolyte liquid	•				
Clean and inspection the connection of battery cable oxide	•				
Check pressure of tire		•			
Check all the lights		•			
Transposition of tire			•		
Maintenance of directional machine			•		
Maintenance of central rocker			•		
Inspection and adjustment of the brake				•	
Detection and adjustment of front beam				•	
Chassis bolts checking				•	
Gear oil replacement for rear axle					•
Replacement of brake oil					•
Inspection of all-vehicle wire					•
Full vehicle brake tubing interference wear checking					•
Replacement of charging plug socket					•

Battery

Lithium

We have different capacity of lithium Batteries

Model Number	Capacity (A)	Voltage
SCRN48108L	108	48
SCRN48130L	130	48
SCRN48150L	150	48
SCRN48186L	186	48
SCRN48200L	200	48
SCRN72110L	110	72
SCRN72150L	150	72
SCRN72200L	200	72



Instructions for use of the battery:

- 1• Only use the lithium-ion battery charger for charging
- 2• It is forbidden to heat or throw the lithium-ion battery pack into the water
- 3• It is forbidden to reverse the positive and negative polarity of the lithium-ion battery pack when connecting to the device
- 4• It is forbidden to be placed in a temperature environment exceeding 55°C
- 5• It is forbidden to short-circuit the positive and negative terminals of lithium-ion battery packs with metal conductors
- 6• Prohibition of water entering the battery (Once the water enters it is not within the scope of warranty)

CHILDREN
KEEP OUT!
Construction sites
and equipment

DANGER
Do not touch
with flame,
or smoking

DANGER
High
Voltage
KEEP OUT

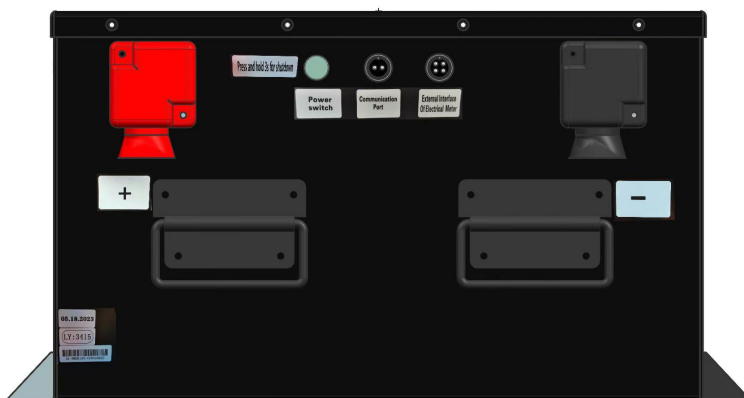
AUTHORIZED PERSONNEL ONLY

WARNING

IF LEAVING 5 DAYS OR LONGER, BATTERY MUST BE SHUT OFF .
The battery may shut down immediately due to over-temperature, over-current, under-voltage, and external short-circuit. Once the under-voltage alarm occurs, stop driving immediately and charge the battery as soon as possible.

Li-ion Battery For Golf Cart
Item NO. SCRN48150L
Battery Capacity : 51V150AH , 7.6KWh
Weight : 165 LBS (75KGS)
Production Date (mm/dd/yy):05.20.2023

JINHUA SUNCART VEHICLE FACTORY



Charging Lithium Battery

Battery should be charged with appropriate charger.

Forbidden to use modified or damaged charger.

Forbidden to charge over 24 hours for battery.

Charge current: cannot surpass the biggest charge current specified by battery specification.(80A)

Charge voltage: cannot surpass the highest charge voltage specified by battery specification.(58V)

Charge temperature: The battery should be charged within proper temperature range specified in specification.(0~45°C)

Forbidden of reverse charge: The battery should be connected correctly, the polarity has to be confirmed before wiring in case of the battery is connected improperly, the battery cannot be charged.

Simultaneously, the reverse charge may cause damaging to the battery which may lead to degradation of battery performance and damage the battery safety, and could cause heat generation or leakage.

Discharge

Discharge current: cannot surpass the biggest discharge current specified by battery specification.(150AH)

Discharge temperature: The battery should be discharged within proper temperature range specified by specification(-10~60°C)

Over-discharge: it should be noted that the battery would be at over-discharged state by its self-self-discharge characteristics in case the battery is not used for long time. To prevent over-discharge, the battery shall be charged periodically to maintain between 48V and 51V.

Disposal

The disposal of battery should meet the local law.

Lead Acid Maintenance Free

Suncart uses Chilwee battery for all dealers and customers who want to use Gel batteries for carts. We provide Chargers configured to the battery specifications. Chilwee EVF Series VRLA Gel Battery is specially designed for electric vehicles, golf cart, low speed electric cart, etc. and other devices require DC power source. The EVF Series adopts international leading technologies to ensure the batteries with features of long cycle life, large current discharge capability, high reliability and safety, and environmental-friendly



SPECIFICATION		
Nominal Voltage (V)		8V
Open Circuit Voltage (V/Block)		8.53V - 8.93V
Number of Cells (Per Block)		4Cells
Rated Capacity (Ah, 25°C)	2h rate (to 1.75V/Cell)	135Ah
	3h rate (to 1.75V/Cell)	150Ah
	5h rate (to 1.80V/Cell)	160Ah
	10h rate (to 1.85V/Cell)	180Ah
	20h rate (to 1.85V/Cell)	200Ah
Nominal Weight (Kgs)		Approx. 33.5Kgs
Dimension (L X W X H, Total Height. mm)		(260mm±3) X (180mm±3) X (280mm±3), (280mm±3)
Container Material		Enhanced ABS
Charge Voltage	Float (V/Block)	9.2V
	Cycle (V/Block)	9.77V - 9.84V
Maximum Discharge Current (A)		750A (5s)
Maximum Charge Current (A)		25A

DIMENSION

Trojan T875-AGM



DATA SHEET

MOTIVE T875-AGM

MODEL T875-AGM
VOLTAGE 8
CAPACITY 160Ah @ 20Hr
MATERIAL Polypropylene
BATTERY VRLA AGM / Non-Spillable / Maintenance-Free
COLOR Maroon
WATERING No Watering Required



8 VOLT

PHYSICAL SPECIFICATIONS

BCI	MODEL NAME	TERMINAL TYPE ^a	DIMENSIONS ^c INCHES (mm)			WEIGHT ¹ LBS. (kg)	HANDLES	INSTALLATION ORIENTATION
			LENGTH	WIDTH	HEIGHT ^f			
GC8	T875-AGM	M8/AP/LT	10.47 (266)	7.08 (180)	10.73 (273)	73.63 (33.4)	Embedded	Horizontal and Vertical

ELECTRICAL SPECIFICATIONS

VOLTAGE	Cranking Performance		Capacity ^a Minutes		CAPACITY ^a AMP-HOURS (Ah)				ENERGY (kWh)	INTERNAL RESISTANCE (mΩ)	SHORT CIRCUIT CURRENT (amps)
	C.C.A. ³ @0°F	C.A. ³ @32°F	@ 25 Amps	@ 56 Amps	5-Hr	10-Hr	20-Hr	100-Hr			
8	-	-	320	118	130	142	160	170	1.36	2.05	2780

CHARGING INSTRUCTIONS

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)			
SYSTEM VOLTAGE	8V	24V	48V
Maximum Charge Current (A)	20% of C ₂₀		
Absorption Voltage (2.40 V/cell)	9.60	28.80	57.60
Float Voltage (2.25 V/cell)	9.00	27.00	54.00

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.

CHARGING TEMPERATURE COMPENSATION

ADD	SUBTRACT
0.005 volt per cell for every 1°C below 25°C 0.0028 volt per cell for every 1°F below 77°F	0.005 volt per cell for every 1°C above 25°C 0.0028 volt per cell for every 1°F above 77°F

OPERATIONAL DATA

OPERATING TEMPERATURE	SELF DISCHARGE
-4°F to 122°F (-20°C to +50°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.	Less than 3% per month depending on storage temperature conditions

RECYCLE RESPONSIBLY



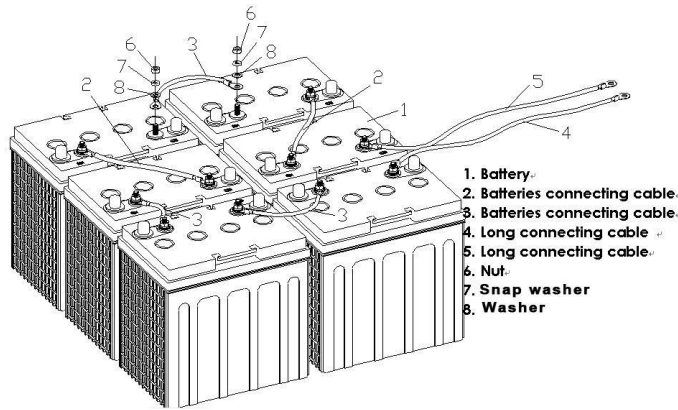
STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

PERCENTAGE CHARGE	CELL	8 VOLT
100	2.14	8.56
75	2.09	8.36
50	2.04	8.16
25	1.99	7.96
0	1.94	7.76

Flooded Lead Acid Battery

Trojan T875

Suncart recommends Trojan T875 battery for all dealers and customers who want to use Flooded batteries for carts. We provide Trojan T875 Chargers for carts also and batteries fixed on the carts must be configured to the battery specifications.



8 VOLT

PHYSICAL SPECIFICATIONS

BCI	MODEL NAME	VOLTAGE	CELL(S)	TERMINAL TYPE ⁶	DIMENSIONS ⁶ INCHES (mm)			WEIGHT ⁶ LBS. (kg)
					LENGTH	WIDTH	HEIGHT ⁷	
GC8	T-875	8	4	1, 2	10.24 (260)	7.10 (180)	11.13 (283)	63 (29)

ELECTRICAL SPECIFICATIONS

CRANKING PERFORMANCE		CAPACITY ⁸ MINUTES		CAPACITY ⁸ AMP-HOURS (Ah)				ENERGY (kWh)	INTERNAL RESISTANCE (mΩ)	SHORT CIRCUIT CURRENT (amps)
C.C.A. ⁹ @ 0°F (-18°C)	C.A. ⁹ @ 32°F (0°C)	@ 25 Amps	@ 56 Amps	5-Hr	10-Hr	20-Hr	100-Hr			
—	—	295	117	145	155	170	189	1.51	—	—

CHARGING INSTRUCTIONS

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)			
SYSTEM VOLTAGE	8V	24V	48V
Bulk Charge	9.88	29.64	59.28
Float Charge	9.00	27.00	54.00
Equalize Charge	10.80	32.40	64.80

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.

CHARGING TEMPERATURE COMPENSATION

ADD	SUBTRACT
0.005 volt per cell for every 1°C below 25°C 0.0028 volt per cell for every 1°F below 77°F	0.005 volt per cell for every 1°C above 25°C 0.0028 volt per cell for every 1°F above 77°F

OPERATIONAL DATA

OPERATING TEMPERATURE	SELF DISCHARGE
-4°F to 113°F (-20°C to +45°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.	5 – 15% per month depending on storage temperature conditions.

Maintenance for Batteries

Security rules

- Wear goggles, masks and gloves that meet safety standards
- **Attention:** No sparks, open flames, no smoking near the battery
- Make sure the work area is well-ventilated
- the battery cannot be tilted When the battery is boosted, charged, and tested
- **Attention:** Please be careful when you use metal tools or conductors, to prevent short circuit and sparks
- To prevent short circuit, please do not put the object above the battery
- The electrolyte is a mixed solution of acid and water, so avoid to contact the skin
- If the acid is in contact with the skin or eyes, rinse immediately with plenty of water
- Do not add acid to battery

Examination

- a. Check the appearance of the battery, keep the top and terminal connection of the battery clean and dry
- b. Check the battery cable a, replace the damaged cable, tighten the torque according to the corresponding terminal tighten any loose connection;

Clean

- a. Check all the ventilation caps, make sure they are properly seated on the battery
- b. Clean the top, terminal and connecting parts with a cloth or a brush and a mixture of small soda and water

Attention: Never let detergent or something else into the battery

- c. Rinse with water and wipe clean with cloth
- d. Keep the battery dry and clean.

Water adding

The frequency of the water adding depends on the battery's usage and operating temperature. Check the battery every week to confirm the water frequency of the battery. Usually the longer the battery is used, the water more frequently is added.

- ❖ Charge the battery before watering. If the battery plate is exposed, please add only the discharged or partially charged battery to the water that just missed the plate, then recharge the battery and continue with the following water steps.
- ❖ Open the ventilation cap, do not let dust into the battery, and check the electrolyte liquid level. If the liquid surface's height of the electrolyte is much higher than that of the plate, it means no further water.
- ❖ If the electrolyte has not missed the plate, please add distilled water or ionized water
- ❖ After adding water, please fasten the ventilation cap on the battery

charging

- ❖ This charge is automatic and requires no extra care. After 10 hours of charging, the power is automatically cut off.
- ❖ Battery should be charged after every time of use: it does not require full discharge before recharging;

Attention !

- ❖ Only charge in the ventilated area, avoid hydrogen accumulation cause explosion; The charger should be placed in a safe working environment, no 36 dust, no corrosive gas, no rain;
- ❖ Check the electrolyte level to ensure that the plate has not been charged before it is charged
- ❖ Before charging, check that all the breather caps are properly fixed on the battery

Attention !

- ❖ Avoid charging at temperatures above 40 degrees Celsius
- ❖ The frozen battery cannot be charged and must be restored to a temperature above 5 degrees to recharge the battery
- ❖ Press the plug of the charger and the battery pack according to the polarity, then connect the charger's input power to recharge the battery
- ❖ Charger requirements for input power:

Input power: Voltage: AC 220V /110v Power plug: 25A

Cross-sectional area of conductor: $\geq 2.5\text{mm}^2$

Storage

- Please charge the battery in full before storage
- Disconnect device connections to eliminate potential loads that could cause battery leakage.
- Store the battery in a cool, dry place
- **Attention!**The battery will slowly discharge itself during storage, monitoring the specific gravity or voltage every 2-4 weeks, and charging less than 70% should be charged.
- Long time storage batteries will accelerate the corrosion of the grid and reduce the service life of the batteries if they are not charged.
- Storage batteries should be recharged before reuse.
- In an environment higher than 30 degrees, it is necessary to avoid exposing the battery to the heat source directly during storage, and the rate of self discharge of the battery will be accelerated in a high temperature environment.
- **Attention!** In an environment less than 0 degrees Celsius, the battery shall be kept as far as possible in the place where the temperature is expected to reach the freezing point of the electrolyte during storage. The electrolyte of the discharged battery will freeze when the temperature is lower than -7 degrees Celsius.

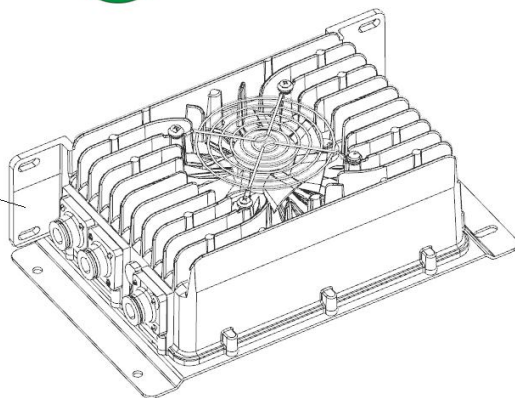
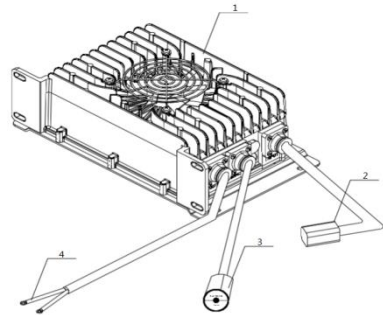
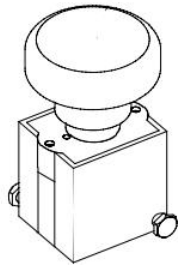
Battery Charger Manual

- Please read this manual carefully before using it.
- The right of interpretation of this manual will be reserved by our company.
- The exterior of the product is subject to material object.
- Additional notice will not be informed if there is technical or software upgrade.

Charger Types

Suncart Chargers are according to the battery fixed in the cart: Most of our carts are equipped with onboard chargers.

1. Charger
2. Battery Charging Socket
3. Power Meter
4. Battery Connection Cables
5. Run Tow Switch



Safety Instructions

1 Notice for AC input, charging output and connecting wires .

1) The specification in line with safety standards of three-hole socket should be selected as Charger AC input socket. Choose the larger size fire retardant wire in line fitting safety standards and rules based on the overall line length.

2) The connecting wire from the battery to the charging socket should meet the safety requirements of the charger output current. The nominal diameter of the copper wire should be $\geq (\text{input current}/5) \text{ mm}^2$, otherwise they will affect the charging performance because of the line drop, or even fires can originate due to overheat.

3) AC plug, socket and DC charging plug, socket should be checked at any time whether they contact well or are damaged. If yes, they should be replaced in time, otherwise it may cause the charger to work abnormally, and even fire.

4) AC wire and DC charging cable should be always checked whether they are aging or damaged. They should be replaced if found, otherwise it easily leads to electric shock, fire or other accidents.

5) If the power wire, plug or socket etc have any damaged. To avoid any incident, It must be changed by manufacturers or the maintenance personnel who is approved.

2 The charger as well as all cables, plugs and sockets must be far away from flammable items like clothing, paper, sofa, gasoline and explosive gas, otherwise it may cause fire due to overheat because plugs, sockets, or circuit is aging or contact poorly.

3 Without our permission, it is strictly prohibited for users to change the wiring, function, etc.

4 The input of charger power must be installed over current thermistor. Do not replace any non professional personnel.

5 Do not detach the charger. There is high voltage inside the charger. Non-professionals do not open the shell!

6 Users should remove the dust of the charger shell at least half a year.

Instruction

1) Match for charger with AC power grid and the battery pack

Match for chargers and AC power grid: Before using the charger, please make sure AC power grid voltage and its frequency are in the range specified.

Match for the charger and battery pack: There is applied battery specification in "Basic Parameters" label on the charger side. Please confirm whether battery type (flooded lead-acid batteries, sealed maintenance-free batteries, lithium batteries, nickel metal hydride batteries, nickel-cadmium battery, etc.), the battery capacity (AH) and battery pack rated voltage (V) match those on the "Basic Parameters" label. If they do not match, it is likely to cause less charge or over charge and even cause permanent damage to the battery pack, bringing serious economic losses.

2) AC power wire, DC charging cable polarity and precautions

AC input wire is at the rear of the charger. L, N and Earth are marked on input line plug. Please distinguish correctly. L, N, Earth on AC plug should correspond with those of socket outlet. The Earth wire of AC input socket should be connected firmly to the ground, otherwise the shell leaks electricity or electrostatic and easily causes injury.

Charging output line is in front of the charger. You can distinguish the positive and negative of the output line by colors. Red or brown line is to connect battery "+" and blue or black to battery "-" (except special requirements of customers). Special connection of charging polarity

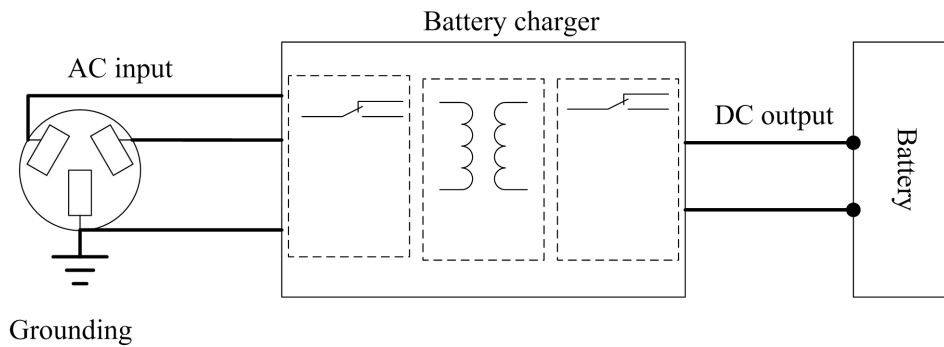
with batteries polarity depends on special charging plugs, sockets and user special requirements. The polarity of charging socket should be consistent with polarity of charging plug polarity, otherwise it can not charge. Please check before using.

3) Instruction

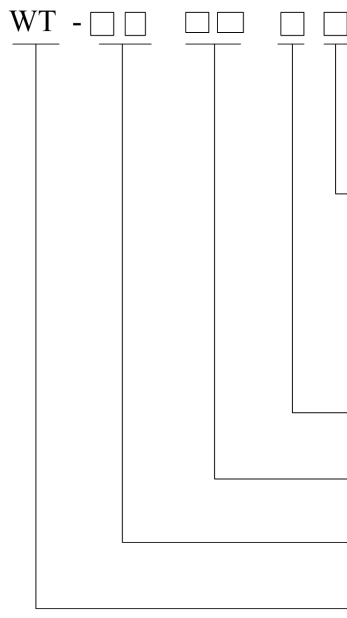
First, please firmly connect charger output plug with battery pack and then firmly connect the AC plug with AC outlet. After the correct connection, Current will be output from the charger, At the same time, charger red light begin to glimmers. The green light turns on after finishing the charging. At this time, please disconnect the plug between the charger and alternating current.

Specifications and data

■ **Schematic diagram of electrical principle**



■ **Product series**



- Product series:
- BB: 3.3kw B series with die-casting case ;
 - B: 3.3kw series with die-casting case ;
 - LD: 2.0kw D series with die-casting case ;
 - LC: 2.0kw C series with die-casting case ;
 - SC: 1.5kw C series with die-casting case ;
 - MB: 1.35kw B series with die-casting case ;
 - M: 0.75kw series with die-casting case ;

Charger type:Z means on-board charger;P:means portable model compatible miniwatt model;

Nominal current (Unit:A)

Nominal voltage (Unit:V)



Company name code

Example: WT6018ZMB means 60V, 18A die-casting case of 1.35kw B series charger;

WT2430ZLC means 24V, 30A die-casting case of 2.0kw C series charger;

Troubleshooting

LED Indicator Status

Indicator label		
Battery Indicator	Red light flashes every one seconds.Battery level <80%; Yellow light flashes every one seconds.Battery level >80%; Green light flashes every one seconds.Battery level 100%	Charging : Red light flicker; Full : Green light is glowing;
Empty load	Green and red light will be alternately flashes	
Fault indication (“-”: pause 1s)	Over voltage,Over current: Red Green Red - - -	
	Ambient temperature is too high or too low [*] :Red Green Red Green - -	
	Charger overheating: Green Red - - - -	
	Output Under- Voltage: Red Green - - - -	
	Input AC anomaly: Red Green Red Green Red -	
Full	Green light was glowing	

Notes:1."*":The fault of the charger with communication is "communication failure".

2. The status of the indicator in the upper table is the default status of our factory.If the customer specifies the indicator status, the declaration that the indicator status is pasted on the shell of the charger body shall prevail.

Common Charger Fault and Solution

Indicator State “-”show pause	Fault indication	Solution
Red Green	Without load	Check if these happen:the connection of battery and charger is loose, the battery reversed, or the battery voltage is too low.
Red-Green-Red - - -	Over voltage or over current	If the error opens again after restart ,return it to factory repair.
Red Green Red Green - -	The ambient temperature is too high or too low [*]	Please check if the ambient temperature is too high and if ventilation is good and the position of battery temperature sensor.
Green Red - - - -	Charger overheating	Please check whether ambient temperature is too high and if ventilation is good.
Red Green - - - -	Output Under- Voltage	Please return it to the factory.
Red Green Red Green Red -	Input AC abnormality	Please check the input voltage and the plug poor contact.
Green Red Green- - -	Anyone of the above-mentioned faults repeats five times, then it appears.	Re-up electricity, match the indicator state to the above-mentioned faults then get the corresponding solution.

Notes:The charger product with communication needs to check the communication connection line.

Warranty Description

Dear Users:

Our company will provide you with quality service based on relevant regulations.

Following situations are within the warranty period: Within the warranty period, the damage caused by transportation or product quality. Within the warranty period, in the course of normal use, the damages not caused by misuse or vandalism.

Following situations are out of warranty range: Input wire, output wire or plug is damaged; Input wire or output wire is artificially cut; Open or take apart the charger without permission; The shell or the circuit board is damaged by users; The faulty charger is out of the warranty period.

User Notice

■ Tips

The relevant provisions in this manual must be followed throughout the entire process of operation, maintenance, and the repair of this product. The manufacturer stated that they are not responsible for the results of the operation when the user is in violation of such requirements.

■ Safety Utilization of Electric Power

Our charger belongs to Class I electrical appliance, please beware of safety issues while using it!

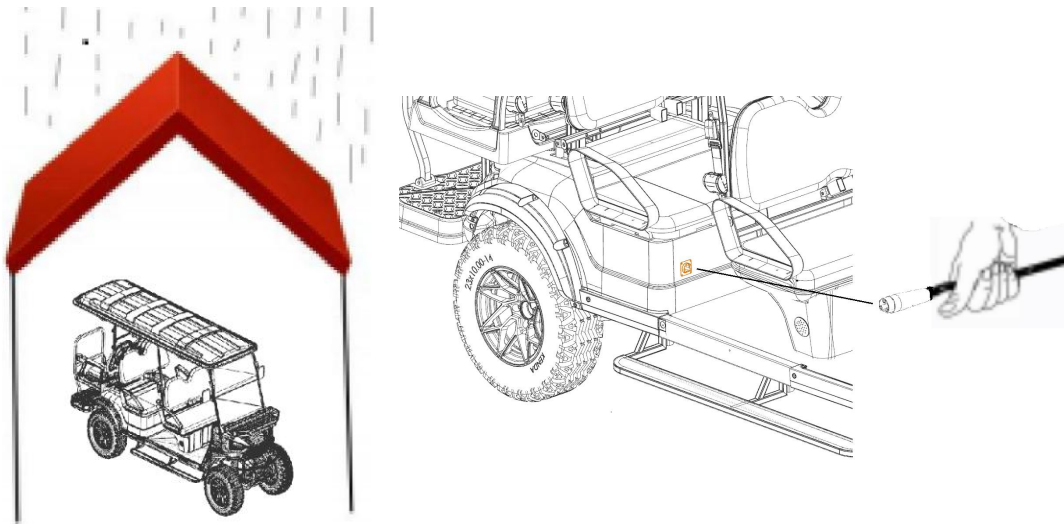
A reliable grounded power supply must be applied; the ground wire of the power supply should be buried in the ground, and it should not be connected to utilities such as water pipes; the ground and neutral wires of the power supply should be separated, and the two wires cannot be connected together.

Separate outlets must be applied and the outlets are qualified certified products.

For the safety of you and your family, please improve as soon as possible, if there is a place in your home that does not meet the above requirements.

Storage of Cart

If the vehicle is put away for storage for long time, certain things need to be done to prevent vehicle from malfunctions or other lose. The recommended extended storage temperature range is from 14°F and 95°F (-10°C and 35°C)



- Keep vehicle in dry and ventilated place, keep it from rain.
- Remember to charge the batteries fully before put away vehicle.
- Run tow switch or Lithium Battery Power Switch should be shut off if cart is going to be left more than 5 days without usage for battery safety and storage.



CAUTION

IMPRPER STORAGE CAN CAUSE BATTERY DAMAGE, PERMANENT LOSS OF BATTERY CAPACITY, OR CAUSE THE BATTERY TO BE UNSERVICEABLE. A FULLY DISCHARGED BATTERY PUT IN STORAGE WILL MAKE THE BATTERY PERMANENTLY UNSERVICEABLE. PUT THE BATTERY ON CHARGE DURING EXTENDED STORAGE. DO NOT EXCEED THE STORAGE TEMPERATURE LIMITS. DO NOT PUT A FULLY DISCHARGED BATTERY IN STORAGE. INCORRECT STORAGE WILL VOID THE BATTERY WARRANTY.

Long Term Storage Tips & Operation

- Turn off all electronic accessories.
- Set the Forward / Neutral / Reverse control to Neutral.
- If equipped, Set the Run/Tow switch to Tow
- Turn the key to OFF. Remove the key from the cart.
- Put chocks against the wheels.
- Remove all cargo and personal items.
- Keep the vehicle in a cool and dry area.
- Clean the vehicle.
- Connect the battery charger and charge fully.

Return to Service After Long Term Storage

- 1. Unplug the charger cord, wait 15 min at least, then re-plug.
- 2. Fully charge the battery.
- 3. Adjust the pressure in each tire to the recommended tire pressure.
- 4. Have a trained technician lubricate the vehicle.
- 5. Do a daily pre-operation safety checklist.
- 6. Do a vehicle performance inspection

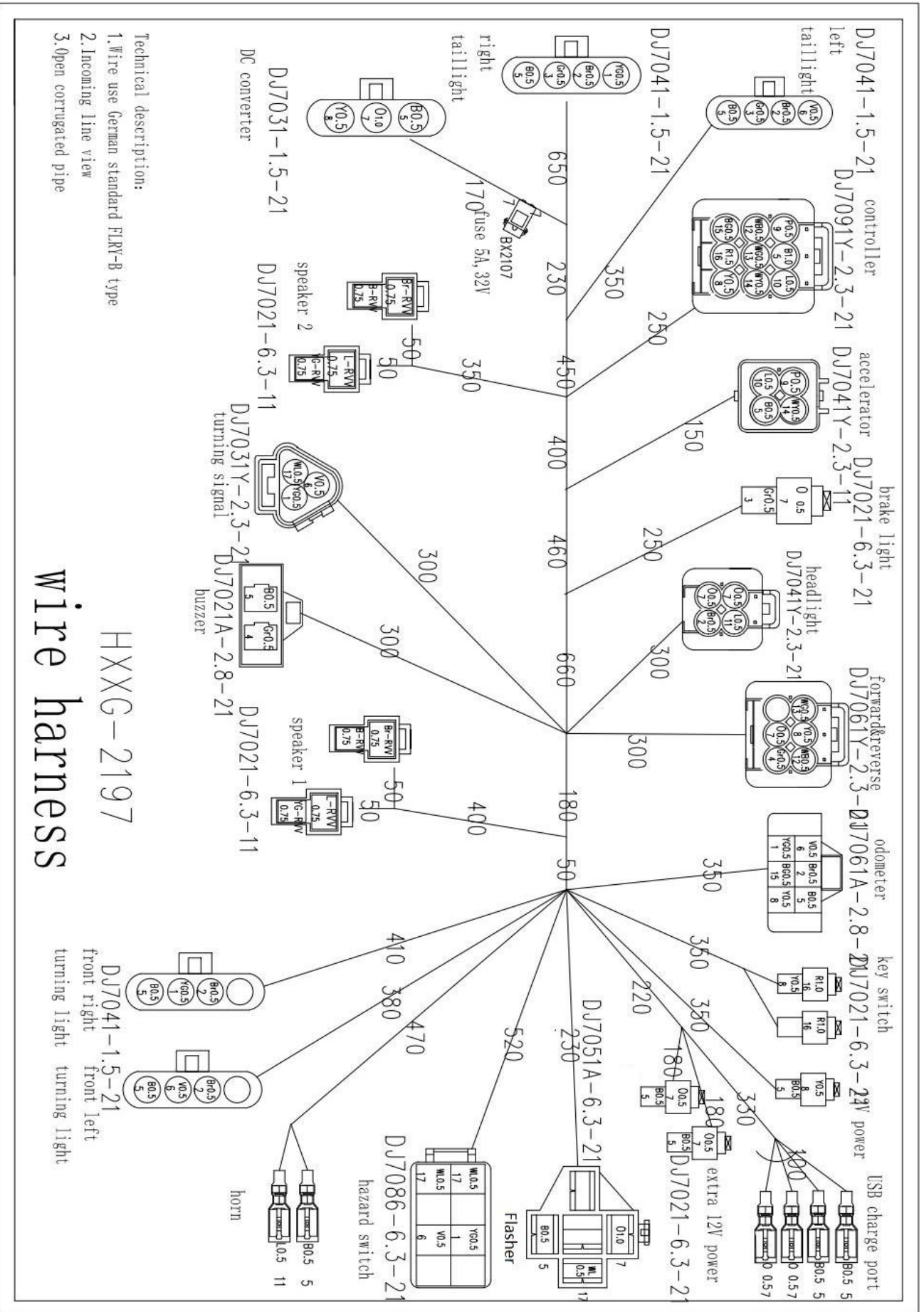
Cart Information Plate Sample

SUNCART GOLF CART			
Model No.	<input style="width: 80px;" type="text"/>	Motor Power	<input style="width: 40px;" type="text"/> KW Voltage <input style="width: 40px;" type="text"/> V
Number of Seats	<input style="width: 80px;" type="text"/>	Battery Capacity	<input style="width: 80px;" type="text"/> AH
Max Speed	<input style="width: 80px;" type="text"/> MP/H	Gross Weight	<input style="width: 80px;" type="text"/> KG
Manufacturing Licence No.	<input style="width: 300px;" type="text"/>		
Production Date	<input style="width: 40px;" type="text"/> D	<input style="width: 40px;" type="text"/> M	<input style="width: 40px;" type="text"/> Y
VIN	<input style="width: 300px;" type="text"/>		

Tool Kits

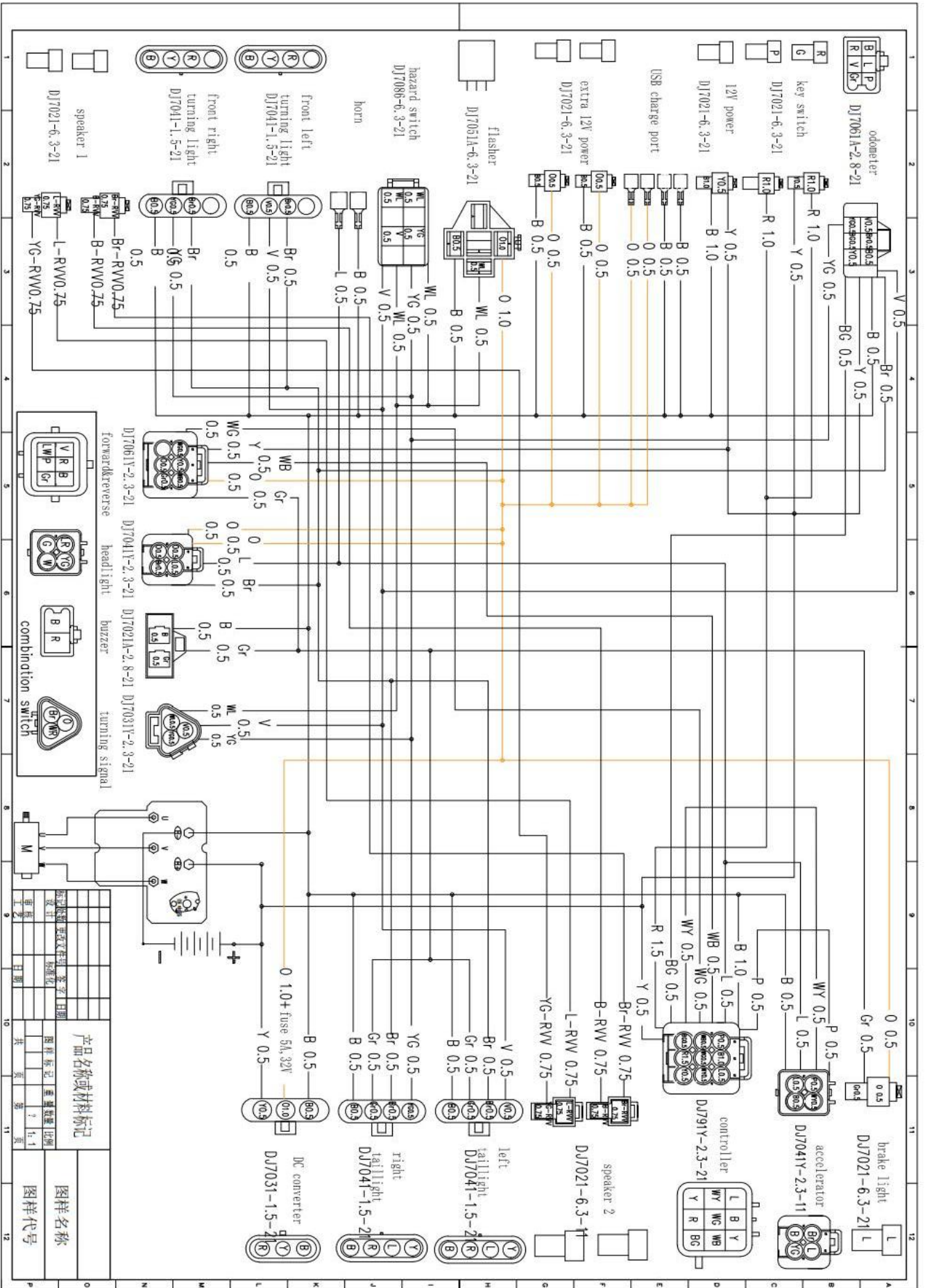
Programming Devices

To be purchased if needed for Programming of Cart	
	
JC Controller Handheld Programmer	Curtis Controller Handheld Programmer
Tool Kit Accessories(A tool bag for each cart)	
	
Size: 19,17,16,14,13,12,10,8	2-Inner Hexagon Key Spanner
	
Plier	L-Shape Sleeve Wrench: 21mm,19mm and Plier



Schematic Wiring Diagram

V1. for normal odometer



Schematic Wiring Diagram

V1. for normal odometer

产品名称或材料标记	图样名称
图样标记	图样代号
比例	
数量	
日期	
共 页	
第 页	