

# OWNER'S MANUAL



# Preface

Thank you for purchasing our pastoral management transporter series products and becoming a member of our pastoral management transporter users. Our company is a professional manufacturer engaged in functional and entertainment vehicles, with years of manufacturing experience and technical accumulation. We have been committed to updating and iterating our products and technologies, hoping to provide you with more satisfactory products.

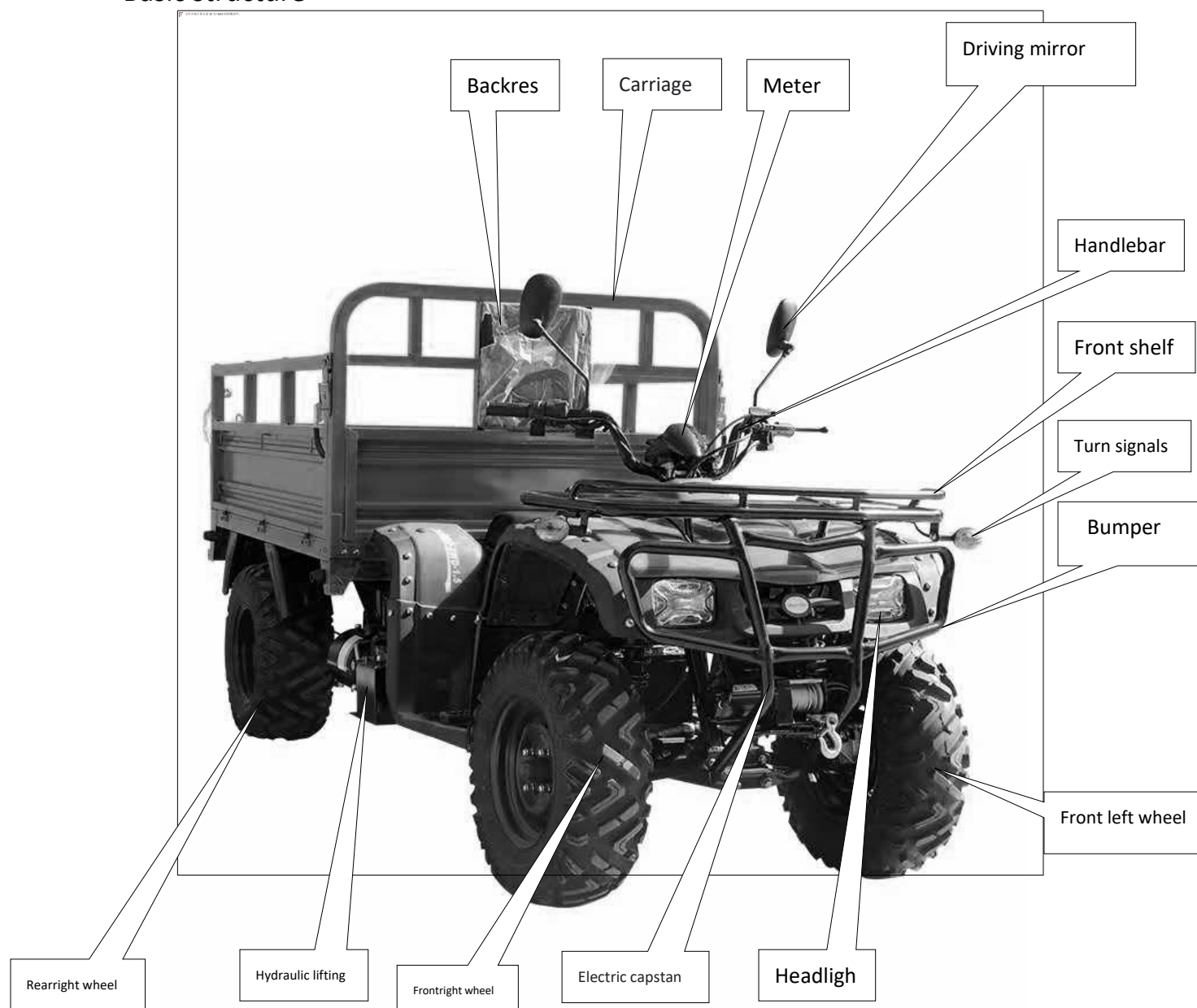
In order to ensure your safety while enjoying the joy of driving, please read this manual carefully and follow it. The content of this manual includes the main parameters, basic structure, main operating procedures, safe driving knowledge, and debugging and maintenance guidelines of this rural management transport machine. Through this manual, you will learn the necessary skills to drive the rural management transporter. Through this manual, you can find the parts you need to purchase based on the explosion diagram we provide and the corresponding component names and codes. Due to the constant updating of our products, the pastoral management transporter you purchased may differ from the description in this manual. Please refer to the actual product for any differences.

Dealers are the ones who best understand the locomotives you purchased, and we are also happy to collect product feedback information from all users through distributors. Regardless of whether it is within the warranty period or not, you can provide quality information to the dealer.

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## Basic structure



### Basic characteristics

The speed range of electric field management vehicles is adjustable from 0-40km/h.

The power supply adopts maintenance free high-performance batteries, and the new car can ride for 30 kilometers per charge.

This car adopts a drive motor, which has the characteristics of high efficiency, low noise, no pollution, maintenance free, and long service life.

The left and right handlebars of this bike have the brake power-off function, which can automatically cut off the power supply when braking, thus ensuring the reliability of braking and the safety of riding.

5、When you need to sound the horn, you can press the horn switch on the left handle.

6、This car is equipped with night lighting devices. When driving at night, simply turn on the headlight switch.

7、This vehicle has an under-voltage warning protection function. When the voltage is lower than the under-voltage protection value of 55V+1V, the protection device will automatically cut off the power supply to protect the battery.

8、This car has over-current protection function. When the slope is too large, driving against the wind, or the load is overweight, the current will be amplified. When the electrical flow exceeds the specified value, the protection device will automatically cut off the power supply, thereby achieving the purpose of protecting the motor and electrical appliances. If we encounter this situation, the power key can be turned off first, and normal cycling can be resumed by turning the key to the bottom right.

9、The electric field management vehicle adopts a Hall type speed control knob. When riding, simply turn on the power and gently rotate the angle of the speed control knob to achieve stepless speed change. The vehicle also has functions such as microcomputer control, brake power outage, over-current protection, under-voltage protection, etc.

### Main Technical Data

#### DL50DU-2WD-1. 2 Main Technical

Vehicle parameters		Electrical component parameters (lead-acid battery)			
Length x width x height (mm)	( 2700×1200×1400 ) ±50	Battery capacity	83Ah	Batteryvoltage	72V
Wheelbase (mm)	1650±50	Motor type	Three-phase asynchronous	Controller	72V/150A
Minimum turning radius (mm)	≤3000	Motor rated power	5kw	Rated speed	3000rpm
Minimum ground clearance (mm)	≥160	Maximum output power	11kw	Charging voltage	220VAc
Maximum speed (km/h)	≥30	Driving range	80	Chargingtime (h)	5
Vehicle curb weight (kg)	Lead acid 490 ± 10, lithium 370 ± 10	Motor rated power and corresponding speed		5KW/3000rpm	
Rated load capacity (kg)	250	Motor peak power and corresponding speed		11KW/6000rpm	
Minimum ground clearance (mm)	≥160	Maximum required torque and corresponding speed		70N.m/6000rpm	
Climbing ability (°)	≥20	Electrical component parameters (ternary lithium battery)			
Carriage size (mm)	1200*1200	Battery capacity	100Ah	Battery voltage	72V
Drive mode	Two wheel drive, rear wheel drive	Motor type	Permanent magnet motor	Controller	72V/150A
Brake type	Front drum brake; rear drum brake	Motor rated power	7.5Kw	Rated speed	2390rpm

Seat height (mm)	800	Maximum output power	15kw	Charging voltage	220VAc
Braking method (front/rear)	Front: Hand control Rear: Foot control	Driving range	100	Charging time (h)	6
Parking brake type	Hand brake parking	Motor rated power and corresponding speed:	7.5KW/2390rpm		
Tire specifications (front/rear) front	Front: 22 * 8.0-10 rear: 22 * 10.0-10	Motor peak power and corresponding speed	15KW/6000rpm		
Rim type (front/rear)	Iron wheel hub, front 5.5 * 10, rear 8.0 * 10,	Maximum torque and corresponding speed	90N.m/6000rpm		

### DL50DU-2WD-1. 6 Main Technical Data

Vehicle parameters		Electrical component parameters (lead-acid battery)			
Length x width x height (mm)	( 3130×1280×1450 ) ±50	Battery capacity	83Ah	Batteryvoltage	72V
Wheelbase (mm)	1950±50	Motor type	Three-phase asynchronous	Controller	72V/150A
Minimum turning radius (mm)	≤4000	Motor rated power	5kw	Rated speed	3000rpm
Minimum ground clearance (mm)	≥160	Maximum output power	11kw	Charging voltage	220VAc
Maximum speed (km/h)	≥30	Driving range	80	Chargingtime (h)	5
Vehicle curb weight (kg)	Lead acid 540 ± 10, lithium 420 ± 10	Motor rated power and corresponding speed		5KW/3000rpm	
Rated load capacity (kg)	350	Motor peak power and corresponding speed		11KW/6000rpm	
Minimum ground clearance (mm)	≥160	Maximum required torque and corresponding speed		70N.m/6000rpm	
Climbing ability (°)	≥20	Electrical component parameters (ternary lithium battery)			
Carriage size (mm)	1200*1600	Battery capacity	100Ah	Battery voltage	72V
Drive mode	Two wheel drive, rear wheel drive	Motor type	Permanent magnet motor	Controller	72V/150A
Brake type	Front drum brake; rear drum brake	Motor rated power	7.5kw	Rated speed	2390rpm
Seat height (mm)	800	Maximum outputpower	15kw	Charging voltage	220VAc
Braking method (front/rear)	Front: Hand control Rear: Foot control	Driving range	100	Charging time (h)	6
Parking brake type	Hand brake parking	Motor rated power and corresponding speed:		7.5Kw/2390rpm	
Tire specifications (front/rear) front	Front: 22 * 8.0-10 Rear: 22 * 10.0-10	Motor peak power and corresponding speed		15Kw/6000rpm	
Rim type (front/rear)	Iron wheel hub, front 5.5 * 10, rear 8.0 * 10.	Maximum torque and corresponding speed		90N.m/6000rpm	

### DL50DU-2WD-1. 8Main Technical Data

Vehicle parameters		Electrical component parameters (lead-acid battery)			
Length x width x height (mm)	(3330×1280×1450) ±50	Battery capacity	83Ah	Battery voltage	72V
Wheelbase (mm)	2260±50	Motor type	Three-phase asynchronous	Controller	72V/150A
Minimum turning radius (mm)	≤5000	Motor rated power	5kw	Rated speed	3000rpm
Minimum ground clearance (mm)	≥160	Maximum output power	11kw	Charging voltage	220VAc
Maximum speed (km/h)	≥30	Driving range	80	Charging time (h)	5
Vehicle curb weight (kg)	Lead acid 590 ± 10, lithium 470 ± 10	Motor rated power and corresponding speed	5KW/3000rpm		

Rated load capacity (kg)	450	Motor peak power and corresponding speed		11KW/6000rpm	
Minimum ground clearance (mm)	≥160	Maximum required torque and corresponding speed		70N.m/6000rpm	
Climbing ability (°)	≥20	Electrical component parameters (ternary lithium battery)			
Carriage size (mm)	1200*1800	Battery capacity	100Ah	Battery voltage	72V
Drive mode	Two wheel drive, rear wheel drive	Motor type	Permanent magnet motor	Controller	72V/150A
Brake type	Front drum brake; rear drum brake	Motor rated power	7.5kw	Rated speed	2390rpm
Seat height (mm)	800	Maximum outputpower	15kw	Charging voltage	220VAc
Braking method (front/rear)	Front: Hand control Rear: Foot control	Driving range	100	Charging time (h)	6
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Rim type (front/rear)	Iron wheel hub, front 5.5 * 10, rear 8.0 * 10.	Maximum torque and corresponding speed		90N.m/6000rpm	

## II Technical parameters of the main electrical components

### Main technical parameters of battery

Battery type	Battery size(mm)	Battery weight kg	Rated voltageV	Battery capacityAh	Charging voltageV	Notes
Lead acid battery	260×168×210	26	72	83	220 AC	6/Set
lithium battery	580*270*190	53	72	100	220 AC	1/Set

### Main technical parameters of electric motor

Motor type	rated voltage	rated power	peak power	Rated speed	peak speed	MAXIMUM TORQUE
Three phase asynchronous Motor	72V DC	5KW	11KW	3000rpm	6000rpm	70N.m
Permanent magnet motor	72V DC	7.5KW	15KW	2390rpm	6000rpm	90N.m

### Main technical parameters of the controller

Electrical component name	Input voltage	Rated output current	Maximum output current	Starting voltage	Under-voltage protection	Over-voltage protection
Controller	AC:50~96V	AC: 120A	AC: 340A	DC: 45V	62V	90V

## III Guidelines on safety-related knowledge

### Predriving inspection

- ※ Vehicle appearance, front windshield and seat cleanliness.
- ※ Tire pressure and wear; whether the front and rear axle screws are locked.
- ※ Whether the battery box is locked; whether the saddle of the handlebar is properly adjusted;
- ※ The angle position of the rear-view mirror; the working condition of the electric door lock;
- ※ Whether the instrument indication is normal; whether the battery is fully charged;
- ※ Whether the speed control handle is flexible and reliable;
- ※ Whether the brake system is reliable; whether the sound of the motor running is normal;

### Introduction to Safety Related Knowledge

**Warning labels:** The warning labels pasted on the car can prevent you from accidental injury when using the product, please read carefully and follow them. When the warning content described in the manual is inconsistent with the warning label on the vehicle body, please follow the content displayed on the vehicle.

If the body warning sticker is blurred or peeled off, ask your dealer for a new sticker and replace it.

**Safe driving equipment:** Please wear driving equipment. It is necessary to wear special protective equipment when driving a farm handling machine. Appropriate driving equipment can enhance your driving experience and protect you from accidental injuries.

**Helmet:** Please wear a helmet, which is the most important protective equipment for safe driving. Can prevent head injuries.

Please choose a helmet product that meets the national standard and has CCC certification.

**Eye protection equipment:** Please wear eye protection equipment. Please choose goggles with clear windows, shatterproof function, and CCC certification or a helmet with goggles as eye protection equipment. Do not use sunglasses as eye protection equipment.

**Gloves:** Choose protective gloves with knuckle pads.

**Shoes:** Choose hard, calf-length, heeled boots, or protective motocross boots.

**Clothes:** Please choose protective clothing with long sleeves and trousers with knee pads and shoulder pads.



#### **Warning**

Failure to follow the manual may result in accidental injury or death.

Before driving, it is necessary to familiarize yourself with the user manual.

Please drive the pastoral management transporter carefully. Rural management transporters are not toys, they are more difficult to control than cars and motorcycles. When turning, driving on mountain roads, or bypassing obstacles, if the operation is incorrect, it may lead to a collision or rollover.

Driving age limit: 16 years old and 65 years old and below.

#### **Safety hazard notification**

**Hazard:** Failure to follow instructions

**Danger:** If the driver does not know how to operate correctly in different environments and on different roads, it will increase the probability of accidents.

**How to avoid:** Beginners or inexperienced individuals should receive course training provided by distributors and strengthen their practice.

**Hidden danger:** driving by people of the wrong age

**Danger:** Driving with inappropriate age may lead to accidental injury or death. Drivers within the allowed age range may also cause accidents if they do not have the corresponding operating skills, abilities, or judgment.

**How to avoid:** People under 16 years old and over 65 years old are prohibited from operating.

**Hidden danger:** manned

**Danger:** Carrying a person can seriously affect the driver's balance, and passengers without safety protection devices may cause harm to the driver or passengers.

**How to avoid:** It is prohibited to carry people. The carriage is used to carry objects and install other specialized equipment, and cannot carry people.

**Hidden danger:** driving on highways

**Danger:** Driving on the highway may collide with other vehicles.



How to avoid: It is prohibited to drive on highways, please comply with local laws and regulations.

Hidden danger: Not wearing appropriate protective equipment

Danger: When an accident occurs, it increases the chance of accidental injury and death.

How to avoid: Wear appropriate protective equipment.

Hidden danger: driving under the influence of alcohol or medication

Danger: Drinking alcohol and taking medication can affect the driver's judgment, reflexes, balance, and perception abilities, which may lead to injury or death.

How to avoid: Prohibition of driving after drinking alcohol and taking medication.

Hidden danger: speeding

Danger: Increasing the risk of losing control, leading to accidents

How to avoid: Control the speed based on the road surface, visibility, external environment, and your experience.

Hidden danger: No inspection or maintenance before driving

Danger: May cause accidents and equipment damage

How to avoid: Before driving, it is necessary to promptly inspect and repair the conveyor according to the manual requirements to ensure safety.

Hidden danger: leaving the handle or foot off the pedal during operation

Danger: It may cause the driver to lose balance or fail to brake in a sudden situation.

How to avoid: During driving, keep your hands on the handlebars and your feet on the pedals.

Hidden danger: driving on unfamiliar roads

Danger: The unfamiliar road conditions and complex environment may cause loss of control or rollover.

How to avoid: Drive slowly and be vigilant.

Hidden danger: incorrect turning

Danger: Loss of control may occur, causing a collision or rollover.

How to avoid: Follow the manual, practice turning techniques more, and pay attention to slowing down when turning.

How to avoid: follow this manual, practice more turning skills, and slow down when turning.

Hidden danger: Drive on steep hillside

Danger: may rollover

How to avoid: Do not drive on too steep hillside or a slope greater than 20 degrees until you are not skilled in operation.

Hidden danger: Incorrect uphill

Danger: may lose control or rollover

How to avoid: Try to drive at a constant speed and avoid parking. In the event of stalling, sideways and backwards skidding, please follow braking instructions in the manual and get out of the car on the safe side to avoid dangerous situations before driving away.

Hidden danger: Incorrect downhill

Danger: may lose control or rollover

How to avoid: With your body weight back, slow down and drive vertically down the slope.

Hidden danger: Incorrect driving around the mountain or turning on the slope

Danger: may lose control or rollover

How to avoid: Do not drive on mountain roads or steep slopes until you master your driving skills.

Hidden danger: Getting out of the car incorrectly when it stops or rolls backwards during an uphill climb

Danger: may rollover

How to avoid: Please follow the braking instructions in the manual and get out of the car on the safe side to avoid dangerous situations before driving away.

Hidden danger: Improper operation when crossing obstacles

Danger: may lose control or rollover

How to avoid: When driving on an unfamiliar road, check the road conditions in advance and avoid driving on surfaces with obstacles, such as rocks, fallen trees, etc. Special attention shall be paid and the manual shall be followed.

Hidden danger: skid

Danger: may lose control, and the vehicle may roll over if power is restarted after skidding.

How to avoid: Be careful, drive carefully, and pass at low speeds.

Hidden danger: Improper operation when reversing

Danger: May collide with obstacles, people and cause injuries.

How to avoid: Check that no one or obstacles are behind you before reversing. After confirming that, slowly reverse.

Hidden danger: Wading or driving in rapid streams

Danger: Affected by buoyancy, the tire will lose control due to loss of traction, resulting in accidents.

How to avoid: Try to avoid driving in deep water or rapids. If it is unavoidable to drive into the areas exceeding the permissible depth of water, please reduce speed, maintain balance, pass slowly, avoid turning, sudden refuelling or stopping. And apply the brakes several times after leaving the wading area to dry the brake friction pads and restore braking function.

Hidden danger: Use unqualified tire or the tire pressure is unqualified.

Danger: may lose control and cause accidents.

How to avoid: Maintain the specified air pressure with the specified size and type.

Hidden danger: Convert this vehicle

Danger: may add security concerns.

How to avoid: Please do not add vehicle accessories without checking the function and safety. All added parts or accessories must be our original products or designed for this vehicle. The installation and use process must be performed in accordance with the specified instructions. For more information, please consult your local dealer.

Hidden danger: Overload the goods

Danger: Overload the goods can affect their driving, balancing and braking performance, leading to lose control and accidents.

How to avoid: Do not overload, pay attention to control the speed, and keep a safe braking distance.

Hidden danger: driving on the ice.

Danger: Serious injury or death from a vehicle or human fall.

How to avoid: Do not drive on the ice.

#### Attention

The temperature of parts of the exhaust system is very high when the loader is in use or just after use. Please avoid contact to prevent scald.

#### Warning

After driving, please pull out the key and remove it, otherwise it may be a safety hazard due to theft by others.

▲ In case of any rollover or accident, please have the whole checked by qualified local dealer, including (but not limited to) brakes, throttle and steering system.

▲ People with physical or mental abnormalities and people who are not proficient in driving skills should not drive this vehicle, otherwise it may lead to accidental injury or death.

## IV Vehicle system description

### Starting

AIR CIRCUIT BREAKER - Located in the position shown, when switch (1) is in the OFF position, the vehicle is de-energised and will not be started; when this switch is in the ON position, the vehicle is energised, can be started by turning the key on the power control switch (2) and the instrumentation will be high lit at this time.

Power control switch - the whole machine total circuit control switch, when the power control switch (2) key is turned counterclockwise, the whole machine circuit system is energised, and all control buttons are in the ready-to-work state; when the switch (2) key is turned clockwise, the whole vehicle circuit system is cut off, and all control buttons are invalid.



### Right handlebar switch

NOTE: ⚙️ Light fully on      Parking lights      ● All lights off

GEAR SELECTION DEVICE - The vehicle's gears are controlled by switching gears with the right handlebar button (3). The gear selection device is located as shown below: switch forward gear to D: switch neutral gear to N; reverse gear to R.

Speed Control Handle - The driver controls the speed of the motor and the speed at which the movement speed by control handle (2). The speed control handle can be automatically returned to the position, release the speed control handle, the motor returns to the stop state.



Left handlebar switch

HORN SWITCH-alarm the passer-by.

Emergency switch-When the vehicle has a fault or other circumstances need to turn on the emergency, you can press this switch for double flash signal

Turn signal switch-When the vehicle needs to turn, the left turn signal is on when the paddle is turned to the left. When the paddle is pushed to the right, the turn signal light is on, when the switch is pushed down, the turn signal light is off.

Flashing light switch - press this switch once to flash the headlights once light.

Lighting distance adjustment - Toggle the switch forward or backward to adjust the distance of the headlights.



## Meter

The instrument panel is the driver's information center. After the power switch is turned on, the power inside the instrument will be connected, and the instrument will start working. The instrument panel contains the following information and functions:

- ① Motor tachometer: display the speed of the motor in real time
- ② Power display: battery capacity display
- ③ Reverse gear indicator: illuminated when put into reverse gear
- ④ Turn signal indicator: illuminated when the turn signal is switched on.
- ⑤ High beam indicator: illuminated when the high beam is switched on
- ⑥ Neutral gear indicator: illuminated when engaging neutral gear
- ⑦ Speed display: Speed display km/h
- ⑧ mileage display: real-time display of mileage and total mileage



## Warnings

▲ Do not knock or scratch the surface of the meter with hard objects, as this will damage it. Do not attempt to modify or repair it, and contact your local dealer in case of malfunction.

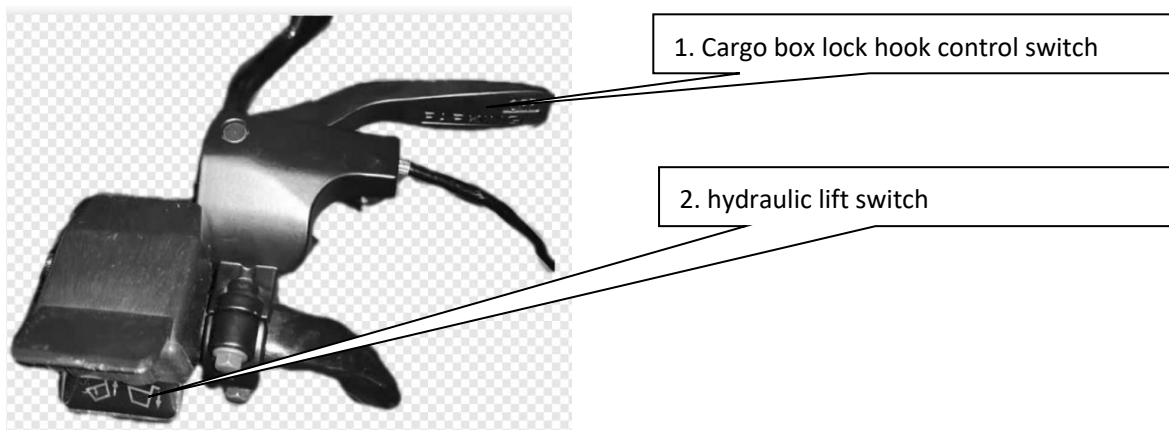
▲ To prevent damage, when cleaning the meter, wash it by hand with mild soapy water or rinse it with a hose. Do not use alcohol to clean it.

## Hydraulic lifting control system

1. Cargo lock hook control switch (1)----When the handle of the cargo box lock hook control switch is on the right side, the hydraulic lifting system will not work. When the cargo box lock hook control switch handle is turned to When left, the hydraulic lifting system can work.

2. Hydraulic lifting switch (2)---When the container locking hook control switch (1) is on the right side, press the hydraulic lifting switch (2) to the lifting position, and the hydraulic pump drives the hydraulic cylinder to lift the

container to the top. When the hydraulic lifting switch (2) is pressed down, the solenoid valve on the hydraulic pump will open and the container will fall.



### **Important Safety Measures**

1. If the handling machine is placed for a long time, the parking brake may become loose. Lock the parking handle with the parking lock catch and use a Barriers block the tires to prevent sliding.
2. When the forklift is parked on a slope, please lock the parking handle with the parking lock and block the tires with reliable obstacles to prevent slide.

### **warn**

- ▲ The rear brake is forced to be used when the forklift is backing down from the hillside, which may cause a backturn, resulting in accidental casualties.
- ▲ Please use the rear brake pedal and front brake handle carefully. When driving at high speed, unreasonable use may cause the lifter to slip or lose control, resulting in accidental casualties.
- ▲ Slippage occurs when braking after use, you can repeatedly step on and release the pedal to brake.

### **electric winch**

The electric winch is driven by electric power to drive the motor to drive the noose. It is driven by 72V voltage. It can help the vehicle get out of trouble and pull other vehicles. The maximum traction force is 3000LB

### **winch installation**

Using the winch, of course, starts with the installation. This step is not complicated, but it is the most important step, because it is directly related to the subsequent steps and the use effect of the winch. The most important thing here is to pay attention to the condition of the noose drum, to ensure that the noose is evenly wound before starting and throughout use. The specific installation process is as follows:

1. Insert the remote control. Plug the end of the remote control cable into the winch.
2. Don't let the remote control cable hang down. If you are a driver and operate the remote control from the driver's seat, it will be much more convenient to work by winding the extra wires around the side mirrors.
3. Pull the noose, use the remote control to release the noose a little and then open the noose hook installed on the side of the winch.
4. Open the clutch. Note that the clutch must be opened after opening the hook.

5. Hold the noose hook with your hand. Hold the hook with one hand as you pull the noose off the drum so that no matter how far you stretch the noose, you will never miss the hook.
6. After pulling the noose to the fulcrum, lock the clutch.  
So far the winch is ready.

### Winch use

The specific steps for towing with a winch are as follows:

1. Check the drum first. Before starting, make sure the noose is neatly wound around the drum.
2. If the noose comes out, it should be prevented from swinging back and forth. If the noose snaps, the swinging rope can be very dangerous. However, this danger can be avoided by placing a pad on the taut noose.
3. Start towing. If you are pulling your own car with a noose, and you are driving in the car, it is best to have someone outside the car to help you. In this way, the driver can operate the winch on the car according to the instructions of the commander outside the car.
4. If the noose is twisted together, it must be pulled apart. It is easy for the noose to cross or become uneven on one side as it is wound onto the drum. Therefore, pay close attention to its status.
5. When the car can walk freely, the dragging is completed. Once back on level ground, check the condition of the vehicle and lines. If the car can be driven without external force, the process of using the winch to tow is over.
6. Roll up the noose. Tighten the noose and send it back carefully. If the noose is crossed or twisted on the drum, it must be fully unwound and then rewound.
7. Finally put the hook. When the noose is down to the last bit, tie the hook to the side of the winch. Then wind up the little bit of noose that is left, and hold down the hook.
8. Remove the remote control.

### Cushions and Cushions for Support Personnel

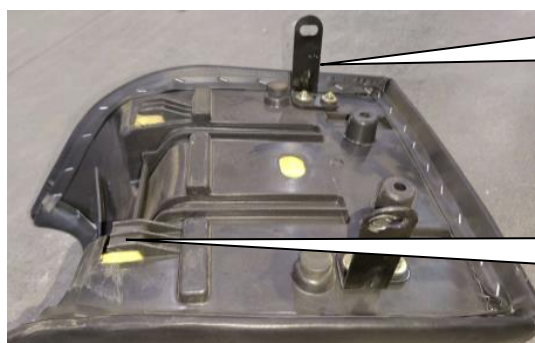
The seat cushion adopts the structure of leather + foam + plastic bottom plate, the front fixed point is stuck on the frame beam, and the rear end is fixed on the frame with two M8 screws (when repairing the vehicle and replacing the seat cushion, first remove the M8 screw with a sleeve, and then pull the seat back until the block is disengaged from the frame, then the seat can be removed. The steps for installing the seat are reversed)

Notice:

1. Before driving, be sure to check whether the seat cushion is fixed firmly and whether it is damaged.
2. During the driving process, make sure that the body cannot leave the seat cushion.
3. It is strictly forbidden to stand and drive a vehicle.

The seat cushion is disassembled and assembled as shown in the picture:

(1) The fixed position of the seat cushion is shown in the figure.



Mounting position behind the seat cushion (threaded fastening)

Fixing position in front of the seat cushion (card block)

(2) The seat cushion is installed before it is installed and stuck on the frame.

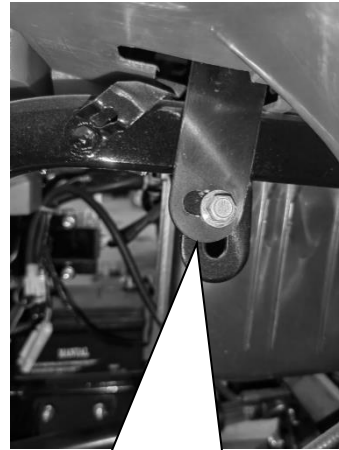


Front fixed position of seat cushion (both blocks are stuck on the frame)

(3) After the seat cushion is installed, fasten it to the frame connection block with 2 M8 threads



The clamp block is connected to the frame with M8 bolts



The clamp block is connected to the frame with M8 bolts

Note:

1. When installing the seat cushion, the front clamp block of the seat cushion must ensure that it is stuck in the relevant position of the frame, and the two M8 threads behind must be fastened in place.

2. The tightening of M8 bolts must be made before each drive

## Awning

The awning is made of plastic and is installed on the vehicle to protect the driver and passengers from the sun and rain. It is mounted on the steel pipe of the rollover protection frame by means of four M8 screws





**Note:**

1. Prevent heavy objects from falling on the awning, causing safety risks to drivers and passengers.
2. Prevent the vehicle awning from scratching and damaging the awning by objects, branches, etc. that cannot pass.
3. Check daily whether the connecting bolt between the canopy rod and the roof is off or loose.

**Rollover protection frame**

The rollover protection frame on this vehicle can be installed with a sunshade, and it can also form a certain protection for the driver after the rollover. However, when rolling, no equipment can really guarantee the safety of the people on board, and all safe driving habits outlined in this manual must be followed to avoid overturning.

Warn! Rollovers can lead to serious injuries or injuries, always avoid driving styles that can lead to rollovers.

Windshields, wipers, and wiper motors

The windshield of this vehicle is made of organic glass, which is prone to breakage. Special attention should be paid during cycling and vehicle management; The wipers are driven by a 12V motor and are only suitable for wiping and cleaning small amounts of rainwater, dew, and fog. Vehicles and wipers are prohibited from being used in moderate and heavy rain.



**Note:**

1. During the driving and management of the vehicle, prevent heavy objects, branches, etc. from breaking and scratching the windshield and wipers.
2. Before each use of the vehicle, check the installation and fastening of the windshield, wiper and wiper motor.
3. Before each use, be sure to use your hands or wipe a cloth to remove weeds, leaves and other large debris from the windshield.

**Assistive seat and pedals**

Auxiliary seats and pedals are only occasionally used for transporting auxiliary personnel, and when using them, be careful not to overload the vehicle. The auxiliary seat and pedals are of a retractable structure. When



passing through a narrow area, the auxiliary personnel should get off the vehicle and retract the auxiliary seat and pedals.

Note:

1. The use of auxiliary seats and pedals is limited to flat roads and when the vehicle is driving at low speed (speed less than or equal to 10Km/h), the auxiliary personnel must grasp the handrail and cannot interfere with the main driver.
2. Before daily use, it is necessary to check whether the fastening bolts and springs of the auxiliary seat and pedals have fallen off.



(1) Start and drive: confirm that the vehicle is empty (the empty is in the position shown in Figure 1), sit in the driver's seat, insert the vehicle start key, turn the key right to the bottom position, at this time the instrument will be bright and there will be relevant parameters displayed, hold the direction, the right hand inward smoothly rotate the speed control handle, slow acceleration, the more the speed of the speed control knob rotates inward, the higher the speed, can be adjusted arbitrarily between 0-40km/h (please do not accelerate sharply instantly, otherwise it will not only waste electric energy, but even damage the battery and electrical accessories).

(2) Deceleration and stop: release the speed control handle to automatically return to the position, the vehicle will begin to slow down and slide, and then hold the brake handle to stop or press the brake (foot brake pedal).

(3) Signal and lighting: there are reverse function switches, horn switches, night running lights and turn switch lights on both handlebars.

(4) Parking: After reaching the destination, rotate the key left to the bottom position, accept the key, turn off all function switches, use the handbrake, and lock the car (tips: park the car steadily, put it in a flat place that is not easy to bump, avoid exposure to the sun or rain, to ensure the safety of the vehicle). Note: When the vehicle is loaded, be sure to ensure that the brakes are normal to ensure safety.

## V. Electrical system description

### Storage battery

The battery is an important part to ensure the good performance of this car, please use it correctly and protect it properly, please develop a good habit of charging in time to maintain and extend the life, and

maximize the use of electrical energy efficiency.

The efficiency of almost all types of batteries is affected by the ambient temperature; When the ambient temperature is high, the discharge (vehicle operating capacity) performance of the battery is better: When the ambient temperature is below 0 °C, the battery discharge (vehicle operating capacity) performance may decrease with the decrease in temperature, so in winter or cold areas, it is normal to reduce the subsequent journey of charging. When the temperature rises above 20°C, its normal function will naturally recover.

All batteries (even if not used) will be discharged naturally, and when the battery power is low (power loss) storage, the battery life will be affected; If the battery is deactivated for a long time, be sure to store it with sufficient charge and charge it every 20-30 days (recharge).

#### Charging methods and precautions:

The battery should be charged using the charger provided by the car, and do not use other charging equipment to avoid damage to the battery.

The output plug of the charger must be connected to the battery charging jack first, and then the input plug of the charger must be connected to the 220V AC power supply, if the voltage is unstable, it is recommended to use a power regulator. At this time, if the power indicator on the charger, the charging indicator (red) lights up, indicating that the power is turned on and charging has started. The indicator light (green) is solid to indicate that charging is complete.








Under normal conditions (when the power is undervoltage), it takes about 4-8 hours to charge at a time: the first charge time of a new battery is slightly longer. When the indicator light (green) is solid or flashing, it indicates that the battery power is basically sufficient, but the continuous charging time should not exceed 12 hours to avoid excessive charging, affecting the service life of the battery or other adverse events.

After charging, unplug the AC power supply first, and then unplug the connection point to the battery compartment.

If the red light does not go out after 10 hours of the charger charging process, it should be sent to the dealer for repair or replacement in time.

There is high voltage inside the charger, and you will bear all the consequences of opening it for research or maintenance without authorization.

**Note the following when using the charger (as shown in the figure below):**

<p>The company should use the car with us Equipped with dedicated electronic intelligence Charger charging.</p> 		<p>Charging should be carried out in a dry and ventilated environment, avoiding moisture and keeping away from flammable materials.</p> 		
<p>c. The special charger is forbidden to be disassembled and disassembled without authorization.</p> 	<p>d. Charging places should be kept away from children.</p> 	<p>e. Plug and unplug the power supply, hands must be kept dry.</p> 	<p>f. Neither the charger nor the battery should cover anything.</p> 	<p>g. The charging place should be kept away from the fire source.</p> 

※The charger can be directly connected to the car to charge (the power switch must be turned off), or the

battery can be removed to charge.

※Do not use other chargers that are not your own, or lend the charger to others to avoid damage to the battery or charger.

※Do not use other chargers that are not your own, or lend the charger to others to avoid damage to the battery or charger.

※Do not carry the charger with the car to avoid damage.

### **Drive motor**

The drive motor is the unit that provides electric vehicles and is a key component of the whole vehicle. This model adopts a three-phase asynchronous motor, which has the advantages of long life, maintenance-free and high reliability;

Due to the importance of the drive motor, it is necessary to clean it regularly and check the operation of the motor to maintain its good performance effect.

### **Electrical systems**

The electrical system consists of controllers, instruments, speed control knobs, and brake knobs. It has functions such as infinitely variable speed, brake power outage protection, undervoltage protection, and overcurrent protection.

The operating current of the controller is large, and a certain amount of heat will be emitted, so it is necessary to ventilate the radiator as well as possible and avoid long-term high-speed or climbing operation with heavy loads.

When using the speed control handle, it is necessary to rotate gently, and should not rotate vigorously

When using the brake, the controller will automatically power off to ensure safety.

When the electric vehicle is parked, avoid sun exposure, rain, etc., which will cause the controller and other electrical devices to fail.

## **Safe Operation Guidelines**

### **Vehicle start**

1. Select gear: Place the gear in neutral (N gear).
2. The air circuit breaker switch is in the ON position.
3. Sitting in the car, turn the key switch counterclockwise until the instrument panel lights up
4. Place the gear in the driving gear (D or R).
5. The parking handbrake is in a released state.
6. Gently rotate the speed control lever to allow the vehicle to move.

#### **Heavy duty driving**

1. Cargo box assembly: The cargo box of this transport machine is a detachable unloading compartment, consisting of a bottom plate, front backrest, left and right side doors, and tailgate. During assembly, use the M12 bolts and nuts in the accessory package to connect the base plate to the frame. Then fix the front backrest and bottom plate with bolts, and then use pin shafts and split pins to connect the left and right door, tailgate hinges, and bottom plate hinges. Then buckle the left and right side doors with the front backrest locks, and the tailgate with the side door. Then adjust and fasten the bolts between the side door, tailgate and bottom plate.

2. This multi-functional vehicle can carry goods weighing 400kg, please do not overload. The goods should be evenly stacked from front to back. When driving on roads with poor road conditions, please slow down and reduce the weight of the goods to maintain the stability of the transport machine.

3. This functional vehicle can have an automatic unloading function, which is achieved by a hydraulic lifting cylinder. Before lifting the hydraulic cylinder, it is necessary to open the cargo box

locking hook control switch (see the hydraulic lifting control system (applicable to machines with hydraulic lifting cargo boxes).

NOTE:

(1) When operating the automatic unloading of cargo boxes, the vehicle should be in a stopped state, and there should be no people behind or on both sides of the vehicle.

(2) Before each driving, check the hydraulic oil pipe joint, hydraulic cylinder (4), hydraulic oil tank (5), and oil pipe for oil leakage.

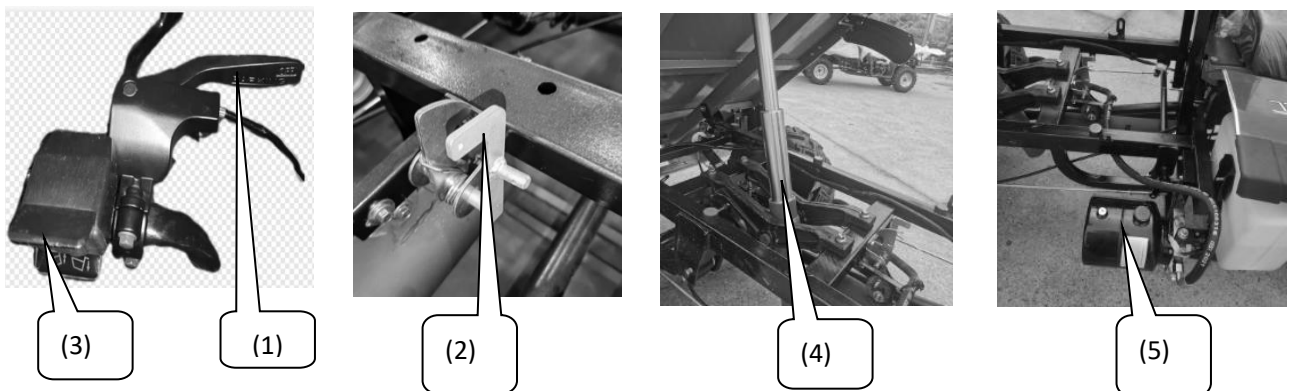
(3) Check if the hydraulic and electric unit wiring harness is loose before driving each time.

(4) During operation and driving, be careful not to scratch, damage hydraulic components, or touch the wiring harness.

4. The automatic unloading operation is as follows:

A. Container lock hook control switch (1) - When the handle of the container lock hook control switch is on the right, the container lock hook (2) will not open and the hydraulic lifting system will not work. When the handle of the container lock hook control switch is turned to the left, the container lock hook (2) will open and the hydraulic lifting system can only work.

B. Hydraulic lifting switch (3) - When the cargo box locking hook control switch (1) is on the right, press the hydraulic lifting switch (2) towards the lifting gear, and the hydraulic pump drives the hydraulic cylinder to lift the cargo box; When the hydraulic lifting switch (2) is pressed down to downshift, the solenoid valve on the hydraulic pump opens and the cargo box falls.



5. To avoid turning and overturning accidents under poor road conditions, it is necessary to pay attention to the height and center of gravity of the cargo during loading to avoid the risk of overturning.

NOTE: Cargo should not extend beyond the side rails of the cargo box when loading.



### **Safe Driving Technique Instruction**

1. Sit up straight, put your feet on the pedals, and hold the handlebar tubes with both hands.
2. Switch gears and turn the speed control handle.
3. Check your surroundings and choose your route.
4. Release the parking brake.
5. Slowly turn the speed control handle with your right hand to start.

After starting successfully, turn the gear knob and accelerate slowly.

### **Safe Turning**

When turning, keep your eyes on the direction of the turn, lean your upper body toward the inside of the turn, and support your body weight on the outside footrest. Do the same when turning in reverse.

Note: Do not make fast or sharp turns. Turning sharply or rapidly may cause the vehicle to roll over, resulting in injury or death.

### **Safe Driving on Wet Roads**

The following matters should be noted when driving on slippery surfaces:

1. Slow down before entering the slippery area.
2. Stay alert, watch the road, pass smoothly and slowly, and do not turn sharply.

### **WARNING**

▲ Drive carefully on slippery surfaces, otherwise accidental injury or death due to loss of control of the vehicle may happen.

▲ Do not brake sharply when skidding occurs. Do not exceed the speed limit.

### **Riding safely uphill**

When riding uphill, pay attention to the following:

1. Go up straight uphill, do not steer hard.
2. Keep your feet on the pedals.
3. Shift your body weight forward.
4. Stabilize control of speed and throttle.
5. Stay alert for emergencies.

### **WARNING**

▲ When riding in the mountains, the brakes and maneuverability of the mover are greatly affected. Improper handling may result in loss of control, which could lead to serious injury or death.

▲ Avoid climbing steep slopes (no more than 25 degrees maximum).

▲ Drive carefully when riding in the mountains and follow the safe driving practices strictly in the owner's manual.

### **Safe lateral riding on slopes**

Improper lateral riding or turning on a hill can cause a loss of control or a rollover, which could result in serious injury or death. Please refer to the Owner's Manual and try not to ride sideways on slopes.

When it is unavoidable to ride sideways on a hill, the following precautions must be taken:

1. Drive slowly.
2. Tilt your center of gravity to the side of the hill and place your feet on the footrests.
3. Keep your eyes slightly angled toward the uphill side to keep the car-oriented.

#### CAUTION

If the vehicle starts to tip over, quickly jump off it in the opposite direction if possible.

### Safe Downhill Riding

When going downhill, pay attention to the following:

1. travel downhill straight.
2. Lean your body weight back.
3. Slow down.
4. apply the brakes lightly to help slow down.

**WARNING:** Speeding may cause the mover to go out of control and result in accidental injury or death.

### Safe operation of turning on slopes

1. Climbing up a slope under abnormal operating procedures may result in loss of vehicle control or rollover and cause serious injury or death.

It is not allowed to travel up slopes of more than 25 degrees.

2. When climbing slopes, please strictly follow the requirements of the user manual and follow the climbing operation requirements on the user manual.

3. If the vehicle stops operating while climbing a slope, do not back the vehicle down the slope.

When you must make a "K" turn while climbing a slope, there is a maneuver you can use.

1. Stop and engage the parking lock, keeping the center up.
2. If the vehicle is facing uphill, exit the vehicle from the front or left side of it.
3. Keep the vehicle in an uphill position and turn the handlebar to the far left.
4. While holding the handbrake, slowly release the parking lock until it travels over the slope or slowly and gently drive down.
5. Lock the brake and re-engage the vehicle in an uphill direction, keeping your center of gravity up.
6. Slowly release the brake and use the brake to control speed until the vehicle reaches flatter ground.

### Safe driving over water

The vehicle can be driven normally in water up to the height of the footrests to the ground. When driving through water, please follow the rules below:

1. Detect the depth of the water and the rapidity of the current before wading into the water.
2. Choose a place where there is a gradual slope on both sides of the river.
3. Pass slowly and avoid rocks and obstacles as much as possible.
4. After crossing the water, hold or step on the brake lightly until the brake operates normally.
5. After driving through the water, please refer to the vehicle maintenance table to maintain the conveyor.

#### WARNING

▲ If the vehicle is not thoroughly inspected after driving through water, it can cause damage to the motor and battery. Follow the steps in the maintenance sheet to tune up your vehicle.

▲ If your vehicle has been submerged or driven beyond the water level of the pedals, take the vehicle to the dealership for maintenance before starting.

▲ Do not drive in deep water or fast-flowing water. If you cannot avoid driving in roads where the water level

exceeds the maximum, drive slowly, keep the machine steady, avoid sudden turns, accelerations or stops, and proceed at an even speed.

### Safe driving over obstacles

Observe the road ahead of time, stay alert and pass slowly at a constant speed.

Be alert to people, animals or obstacles that may suddenly appear.

#### **WARNING**

Not all obstacles can be detected in time, please drive with caution on unfamiliar terrain.

### Safe driving in reverse gear

When driving in reverse gear, follow these warnings:

1. Avoid backing downhill.
2. Reverse slowly.
3. Apply the brakes when traveling in reverse gear.
4. Avoid backing up steep slopes.

#### **WARNING**

▲ Failure to follow the manual for reverse operation may result in serious injury or death. Before shifting to reverse gear, check in advance if there are any obstacles or people behind the handler. When it is safe to do so, back up slowly.

▲ Avoid backing up on slopes and avoid turning on steep slopes.

Parking safely on slopes

Avoid parking on slopes as much as possible. If it is unavoidable, follow the measures below:

1. Turn off the motor
2. Do not put the motor in neutral.
3. Set the braking brake.
4. Follow the instructions in the owner's manual and place bricks, stones, etc. under the rear wheels to prevent them from slipping back.

## VII. Handling of emergencies

1) Brake failure state processing: when a brake suddenly fails, do not panic, in the grasp of the direction at the same time, calmly, make full use of another brake, to achieve safe braking. Remember: before riding must check the brake performance, such as abnormalities must be immediately adjusted to repair normally to ensure safe riding.

(2) Straight through the flying car state processing: when the controller is damaged resulting in straight through, and the brake can not power off, the rider should immediately use the following emergency measures.

A: Close the power lock and cut off the main power.

B: Force the brake to brake, increase the load to make the fuse overload blow, and cut off the main power supply.

Note that the driver should keep calm and maintain body balance to ensure that the above two means work to achieve riding safety.

## VIII. Vehicle-related maintenance



## Knowledge of Periodic Maintenance

Careful periodic inspections can help keep your handling vehicle in the safest and most reliable condition. You can see the maintenance intervals and operating methods for all periodic maintenance items on the machine's periodic maintenance chart. Please check, maintain, clean, adjust, and replace the accessories according to the vehicle maintenance schedule when necessary. Please obtain genuine parts from the seller for maintenance.

### Attention

- Maintenance and servicing are selectively adjusted according to your vehicle conditions, if you are not familiar with the working conditions of your mover, please contact an authorized dealer to complete the operation.
- The maintenance intervals in the following table are based on average driving conditions (20km/h). When the vehicle is used more frequently or for non-routine use, the maintenance intervals should be shortened accordingly.

### Definition of unconventional use

1. Submerged in mud, water, and sand.
2. prolonged low-speed, heavy-duty driving.
3. short trips in cold weather.

Please keep an eye on the remaining battery power, the battery power in cold weather will produce a transitional drain. If the battery capacity drops to 20% or less, please charge the battery immediately. If the charger is unable to charge the battery, please contact the authorized distributor for a solution.

### WARNING

Incorrect operation of these procedures (those marked with ■) can cause the parts to operate defectively and result in serious injury or death. Therefore, you must master these operations through instruction and training by an authorized dealer.

### Daily inspection

※After driving a new vehicle for 500 kilometers, the vehicle should be thoroughly inspected, adjusted, and maintained so that the fasteners and fastening bolts can be effectively locked, and appropriate amounts of lubricant should be added to the rotating and transmission parts that need to be lubricated, as well as to the brakes and steering column pads.

※ should always check the whole car wire plug contact is good, there is no broken skin line, or broken circuit phenomenon, and each part of the situation is normal, to ensure riding safety. The electric car should be kept dry and clean to avoid rusting and avoid wading in water to prevent the failure of electrical parts.

※ Front and rear wheel adjustment, front, and rear wheels have been fully adjusted before leaving the factory. If the wheels are disassembled, check whether the status of the left and right gaps, directions, safety locking plates, etc. is normal. The tightening torque of the front axle nut should not be less than 37Nm and the rear wheel should be tightened with an axle distance of not less than 48Nm.

## Brake System Adjustment

### Front Brake Adjustment:

Adjust using the adjusting nuts at both ends of the front brake line. The free travel of the brake handle end should be 6~10mm. Holding to 2/3 of the full travel should be able to realize effective braking. The adjusting nut is locked and twisted clockwise so that the free travel decreases, otherwise, it increases, and the curved groove of the adjusting nut at the bottom end coincides with the cylindrical pin. After adjustment, the front brake should be used when the front wheels are suspended and rotating, and the front wheels can stop rotating quickly. And when the front brake is released, the front wheel will rotate a small amount again.

### Rear Brake Adjustment:



Turn the adjusting nut on the brake adjusting lever for brake pedal-free travel adjustment. The effective travel should be 20mm to 30mm. If the amount of adjustment is large, you can also adjust the rear axle ends of the brake arm on the adjusting nut, so that it meets the requirements, and so that the adjusting nut arc groove and the cylindrical pin match. Carry out the rear wheel brake test to see if the brake effect is good and whether the two rear wheels rotate flexibly when the brake is released.

#### **Rear brake light switch Adjustment**

Before adjusting the rear brake switch, the free travel of the brake pedal should be adjusted, and the steps for adjusting the rear brake switch are as follows;

- (1) Turn the power switch to the ON position (when the power switch is turned left to bottom).
- (2) Turn the adjusting nut, and when the rear brake pedal is depressed, the brake light comes on, and when it is released, the brake light goes out. Adjust the spring wire length if necessary.

#### **Lubrication and maintenance**

Add lubricating grease "sH/T0386" at least once a year to the front shock absorber, rear axle, etc. Pay attention to the rear axle every 1000 kilometers to prevent dry wear damage. If necessary, maintenance personnel should disassemble it for inspection and add lubricant. Hub bearings and steering column bearings are lubricated with AN46 and GB443 lubricant once a month.

#### **Tire Care and Maintenance**

The correct tire pressure will maintain optimal driving stability, provide maximum traction, and increase ride comfort and tire lifespan.

Before driving, the tire pressure should be checked when the tire is in a "cold" state. Check for cuts, nails, or other sharp objects embedded in the tire, and check for dents or deformations in the wheel hub. If any damage is found, please go to the repair station for repair or replacement.

If the tire pressure is too low, it will increase the rolling resistance of the electric vehicle, increase energy consumption, and in severe cases, cause local delamination of the tire body, resulting in tire explosion. Excessive tire pressure can cause premature tire fatigue damage, reduce riding comfort, and accelerate component wear. If the tire pressure is too high or too low, it will reduce the service life of the tire.

Using excessively worn tires can affect traction and handling stability, making it very dangerous.

The tire has a tread wear mark "△" or "T.W. I" set along the circumference. When the tire reaches the tread wear mark, it should not be used anymore and must be replaced with a new tire.

ATV must be fitted with an off-road marking AT sign, and factors such as air pressure must be weighed in accordance with the relevant regulations for tires and rims. The vehicle is specially designed for ATV with NHSmarked and off-road tires, and we recommend a pressure of less than 69 kPa.

1. Shift the mover into neutral and lock the parking brake.
2. Use a jack to lift up the axle to be installed.
3. Attach the ready-to-install tire to the brake, and keep the direction of the rotating arrow on the inside edge of the tire in the same direction as the forward direction, with the tire air nozzle facing the outside of the handler.
4. Install the tire nuts and tighten them.
5. Lower the jack and let the loader fall back to the ground.
6. Tighten the tire nuts to the required torque according to the instruction manual.

#### **WARNING**

Incorrectly mounted tires can cause abnormal tire wear and pose a safety hazard. Follow the tire torque instructions to tighten the tires. Do not replace tires equipped with cotter pins; if replacement is necessary, contact your dealer.

Tires with tread wear marks "△" or "T.W.I." along the circumference should not be used when they reach the tread wear mark and must be replaced with new tires.



### Tire nut torque instructions

Regularly check the torque of the tire nuts and perform maintenance if they are loose.

Category	Instruction
Front wheel nuts	37 N. m
Rear wheel nut (right positive, left negative)	48 N. m

### Lamp maintenance and installation

When maintaining the lamps, wear gloves immediately. Avoid contact with oil stains of the lamp, cause hot spots, and reduce the life of the lamp.

#### Replacement of lamps

1. Remove the fastening bolts of the headlight.
  2. Use a Phillips screwdriver to remove the screw from the lower part of the brim and gently remove the brim.
  3. Remove the waterproof rubber cover and lamp groove from the lamp groove.
  4. Press down and unscrew the bulb counterclockwise.
- Apply medium oil to the lamp groove and then install a new bulb.

#### Warning

- ▲ During driving, poor light quality may cause safety accidents.
- ▲ Please regularly clean the dust layer on the headlights and taillights.
- ▲ Please perform maintenance after the lamp has cooled down to avoid accidental burns.

### High beam adjustment

The beam of the headlight can be adjusted downward and upward, please adjust according to the following steps:

1. Place the vehicle on a level ground with the headlights approximately 10 meters away from the wall.
2. Measure the distance between the floor and the center of the front headlights and mark it on the wall.
3. Turn on the power control switch of the entire machine, turn on the headlight switch, and adjust to high beam.
4. Observe the light points on the wall, and the strongest point of the light should be 8cm lower than the mark on the wall.
5. Loosen the fastening bolts and adjust the beam to the specified position before tightening.

### Notice

When debugging, a heavy object equal to the weight of the driver must be attached to the seat cushion, otherwise it may cause inaccurate light position for debugging.

### Tail light assembly replacement

1. Remove the cable connector (1) from the rear of the lamp assembly.
2. Use a Phillips screwdriver to counterclockwise remove the tail lamp assembly (2), replace it and reinstall it.
3. Test whether the brake/reverse/steering function of the tail light position is normal.



### Cleaning and maintenance

Regular cleaning of the mover not only maintains the appearance of the vehicle, but also prolongs the life of the various components.

### Cleaning and handling machine

Wear professional cleaning gloves and use non-corrosive soapy water for cleaning. First wash the upper part of the whole machine, then wash the lower part, then rinse with clean water, and finally dry it with oil-tanned leather.

### Notice

- If the warning and safety signs are damaged during cleaning, they can be replaced at the dealer.
- It is not recommended to use high-pressure cleaning equipment to clean the handling machine.  
If you want to use it, please operate carefully to avoid damage to the handling machine bearings, electrical systems, body coverings, brake systems and warning signs.
- Apply lubricating oil to each rotating position immediately after cleaning, and then start the transfer machine.

### Handling machine waxing

Please use non-abrasive car wax to wax the mover, and please do not use rough cleaners to avoid scratching the car body.

### Warning

Chemical products such as insecticides can damage vehicle surfaces. Be careful when using these products near your vehicle.

### Maintenance of chrome wheels (if the wheels are chrome)

Proper maintenance will keep your wheels free from corrosion, prolong their life and keep them

looking like new:

- 1、 Use a non-abrasive cleaner to remove dust and mud on the rim, and regularly use a car polish to polish the clean rim. After sanding is complete, apply waterproof wax to each wheel.
- 2、 Please choose a waterproof wax suitable for chrome plating.
- 3、 Wheels are exposed to road salt (or salt in the air in coastal areas), which can lead to corrosion if left untreated. If your wheels are frequently exposed to high salt levels, wash them frequently.

### **Handler storage**

Before you prepare for long-term storage, please do the following:

1. Check if the bolts and nuts are loose and tighten them if necessary.
2. Apply anti rust oil or grease to areas of the vehicle that are prone to rusting.
3. Inflate the tires slightly higher than the daily air pressure.
4. Run the engine and allow the oil to circulate inside the engine for 5 minutes.
5. Apply lubricating grease to all exposed parts of the random tools.
6. Remove the battery and store it according to the battery storage requirements.
7. Place the conveyor in a dry and ventilated area and avoid covering it.
8. Place wooden boards under the tires to avoid moisture and direct sunlight exposure.

### **IX、 Disclaimer for safe use of vehicles**

Before riding, please read the "Instruction Manual" carefully, and carefully check whether all parts are in good condition to ensure safe driving. If you find a problem, please contact the dealer in time.

#### **Vehicle Safety Use Regulations**

This product has a basic waterproof function. Sometimes some exposed circuits may have minor faults due to rainwater problems. After drying, it will not affect the use, but it cannot be waded. When the water level reaches the motor, battery and other electrical components, it will cause damage to the interior of the vehicle. Please pay attention to the short circuit of the circuit and damage the electrical appliances.

Do not disassemble and disassemble parts by yourself. If you need to replace them, please purchase standard parts from local authorized dealers or professional repair stations.

When riding on slippery roads in rainy and snowy weather, you should slow down and use the brakes with caution.

Unauthorized disassembly and modification of the company's products is prohibited. The company will not bear all the losses caused by this, and may cause you to lose the warranty commitment. If there is an internal failure, you should contact the local dealer or the designated repair station.

Please do not dismantle the speed limiting device by yourself, which will cause the danger of speeding and personal and property accidents! (Note: The accident caused by this will be borne by the violator)

When riding, if the speed is out of control, please turn off the power and brake immediately, and send it to the dealer or service station for repair as soon as possible.

Driving without a helmet is prohibited. Please wear goggles, protective clothing, and protective boots while driving.

Do not drive while under the influence of alcohol or drugs.

Speeding is prohibited, please control the speed reasonably according to road conditions, visibility, external environment and driving experience.

Check the condition of the whole machine before driving. Please follow the inspection and maintenance procedures in the manual for troubleshooting.

When driving, the hands cannot leave the handlebars, and the feet cannot leave the pedals.

When driving on unfamiliar roads, please control the speed of the vehicle and be vigilant, paying attention to changes in road conditions.

It is forbidden to drive on soft roads with unknown road conditions.

When turning, follow the instructions on the turning process in the manual, please reduce the speed and keep your body balanced.

In the event of a mover accident, be sure to have it fully inspected by an authorized dealer.

Follow the correct operation steps, check the road conditions before driving, and evaluate whether you can drive. Do not drive on slippery or hilly slopes. When driving, the center of gravity of the body is forward, and do not release the accelerator or change gears suddenly.

When going downhill and braking on a slope, you must follow the instructions in the user manual. Before going downhill, check the road conditions. The center of gravity of the body is backward, and the back is attached to the backrest.

Do not go downhill fast or in neutral.

When going downhill, please drive along the descending direction of the slope, and do not drive at an incline, which may cause the whole machine to roll over.

When driving on mountain roads, please follow the driving requirements, observe the road conditions in advance, and do not drive on soft, slippery or rocky roads.

Do not attempt to drive on mountain roads without proficient driving skills.

Try to keep driving at a constant speed on mountain roads and avoid parking. In case of stalling, skidding or back skidding, please follow the brake operation specifications in the manual, get off from the safe side, and drive away after avoiding dangerous situations.

Please check the road surface before driving in an unfamiliar area, and do not attempt to climb over larger obstacles, such as large rocks or fallen trees.

Please be vigilant when driving on wet and slippery roads, pay attention to observe the surrounding conditions, and drive at a reduced speed.

Avoid driving in deep water or rapids. When it is unavoidable, please keep the body balanced and drive slowly. Do not move suddenly, turn, brake suddenly and change gears.

Wet brake pads may reduce braking performance. Check the brakes after you are out of the water and use them as often as possible to dry the brake pads.

Pay attention to your surroundings and the environment behind you when reversing. When there are no obstacles, reverse slowly and avoid sharp turns.

Use tires of the specified size to maintain correct tire pressure.

It is forbidden to modify the vehicle by using incorrect installation methods or adding accessories at will.

Do not overload, and the goods should be stacked from front to back, distributed evenly and fixed. Slow down when carrying or dragging objects, and keep a safe braking distance.

Minors under the age of 16 are prohibited from driving.

Do not allow anyone to operate your pastoral mover without reading the operator's manual and all decals and completing a safety course

#### Battery Instructions and Safety Regulations

The battery box used in this car is a safe battery, but the two contacts at the box end cannot be touched by hand at the same time, let alone contact with metal at the same time (including the two polarity lines of the

three inserts at the inner and outer charging ports) ) Otherwise, a large short-circuit current will be generated and cause an accident, so please pay attention.

- ❖ Please use the battery in normal environment.
- ❖ This battery can only be charged with a dedicated battery charger
- ❖ Do not charge for a long time, the charger should be cut off immediately after charging
- ❖ Do not short-circuit the positive and negative poles of the battery, and do not modify the battery yourself
- ❖ When it will not start for a long time, please close the circuit breaker, and protect the positive and negative poles of the battery with non-conductive materials.
- ❖ Please dispose of waste batteries safely and properly, do not throw them into water or fire
- ❖ It is forbidden to refit the battery and make the battery short circuit.
- ❖ It is forbidden to heat and incinerate the battery
- ❖ It is forbidden to wet the battery, and it is forbidden to damage the battery.
- ❖ It is forbidden to charge near fire sources or under high-intensity direct sunlight.
- ❖ It is forbidden to directly perform welding and other work on the battery
- ❖ It is forbidden to connect the battery directly to the power supply for charging
- ❖ It is forbidden to use the battery in other equipment or mix it with other types of batteries.
- ❖ It is forbidden to directly touch the leaking or other faulty batteries
- ❖ It is strictly forbidden for children to approach the battery for playing and other actions
- ❖ Avoid driving the vehicle in a sun-exposed environment for a long time
- ❖ Avoid driving in places prone to static electricity
- ❖ Charging temperature range: 0~50°
- ❖ Please use a dedicated charger to charge at the recommended ambient temperature
- ❖ Avoid children close to the charger or the battery when charging
- ❖ Avoid battery leakage contacting skin or clothing
- ❖ Please rinse with clean water after contact with the forehead leakage to avoid skin discomfort
- ❖ If the battery produces abnormal phenomena such as odor, do not continue to use the battery and contact the dealer.

#### Motor Instructions and Safety Regulations

- ❖ Before using the vehicle, please read the instruction manual and motor-related matters carefully
- ❖ Working environment temperature: -20~55℃
- ❖ The motor must be used within the fixed current and voltage range on the nameplate
- ❖ Continuously working motors are not allowed to be overloaded
- ❖ There should be no covering and soil on the surface of the motor to prevent the motor from entering water
- ❖ The motor cannot be started frequently
- ❖ Operating relative humidity: 5%~95%, allowing condensation and safe work
- ❖ When the vehicle is running, keep the motor away from the fire source, and the driving road will not hit the motor
- ❖ Allowable storage environment temperature: -40~85℃
- ❖ Storage and transportation environment: ventilated and dry environment
- ❖ It is forbidden to collide and hit the motor
- ❖ Severe vibration and reverse discharge are prohibited
- ❖ It is forbidden to damage the motor
- ❖ It is forbidden to modify the motor wiring line without authorization
- ❖ It is forbidden to drive the vehicle motor higher than 4000m above sea level

- ❖ It is forbidden to remove the motor and use it for other equipment
  - ❖ Ensure that the motor is in a power-off state when the vehicle is charging
  - ❖ Before starting the vehicle, check whether the motor is connected to the rear axle firmly
  - ❖ Avoid metal conductors touching the motor terminals
  - ❖ When the vehicle does not start the motor for a long time, the air switch is disconnected
- Controller Instructions and Safety Specifications
- ❖ Before using the vehicle, please read the instruction manual and controller-related matters carefully
  - ❖ Working environment temperature:  $-30\sim 55^{\circ}\text{C}$
  - ❖ The controller is not used for replacement. Storage temperature:  $-40\sim 70^{\circ}\text{C}$
  - ❖ Rated output current: 120A
  - ❖ The starting voltage of the controller is 45V
  - ❖ Storage temperature:  $-40\sim 70^{\circ}\text{C}$
  - ❖ Controller protection temperature:  $85^{\circ}$
  - ❖ It is forbidden to modify the controller without permission
  - ❖ It is forbidden to short-circuit the controller
  - ❖ It is strictly forbidden to heat and incinerate the controller
  - ❖ It is forbidden to reconnect the controller circuit
  - ❖ It is forbidden to use metal tools or other methods to damage the controller
  - ❖ It is forbidden to carry out work such as welding on the top of the controller that may easily cause metal sparks, etc.
  - ❖ It is forbidden to use the controller for other devices
  - ❖ Avoid using the controller in a short-circuit state
  - ❖ Avoid washing the controller with water
  - ❖ Avoid metal conductors touching the controller terminal
  - ❖ Keep children away from touching the controller
  - ❖ The fault of the controller will make a sound, please judge and feedback to the dealer according to the following code

**Remarks: The company is not responsible for any accidents and losses caused by the above reasons!**



## X、Common Faults and Troubleshooting

No.	Symptoms	Cause of issue	Method of exclusion
1	Defective governor handle or low top speed	(1) The power supply voltage is too low; (2) The wire in the speed control handle is loose; (3) The spring in the speed control handle is stuck or fails.	(1) Fully charge the battery; (2) re-welding; (3) Clean or replace the governor handle.
2	Turn on the power, the motor does not work	(1) The battery voltage is too low; (2) The wire in the speed control handle is loose; (3) The plug of the motor connecting wire is loose or damaged.	(1) Fully charge the battery; (2) Clamping after heavy welding; (3) Find a professional or a repair station for repair.
3	Insufficient mileage on a single charge	(1) Insufficient tire pressure; (2) Insufficient charging or charger failure; (3) The battery is aging or damaged.	(1) Sufficient gas; (2) Fully charge or check whether the charger plug is in poor contact; (3) Replace the battery.
4	charger not charging	(1) The socket of the charger falls off or the connection between the plug and the socket is loose; (2) The battery box or charger fuse is blown; (3) The wiring of the battery pack is disconnected.	(1) Fasten sockets and contacts; (2) Replace the fuse, (charger 2A, battery insurance 20A); (3) Welding cable.
5	Riding hard and slow	(1) Check whether the brake is locked; (2) Whether the tire pressure is sufficient; (3) The battery voltage is too low; (4) The front and rear wheel shaft gears lose oil, or the shaft gears are too tight to rotate flexibly.	(1) Adjust the brake; (2) Sufficient gas; (3) fully charged; (4) Cleaning and adjustment.
6	Hydraulic can not lift	(1) Fasteners such as bolts and nuts in various parts are loose; (2) circuit system failure; (3) Insufficient hydraulic oil; (4) Oil spill	(1) Tighten loose screws and nuts (2) Check the circuit; (3) Add hydraulic oil; (4) Check whether the pipeline and sealing ring are damaged;
7	Cargo fall back exception	(1) The falling speed of the container is slow or does not fall; (2) The lifting or falling of the container is too fast or too slow;	(1) The running-in of the new machine is not sufficient, and the resistance is large, and it usually returns to normal after repeated use; (2) Check whether the battery valve is damaged, or artificially adjust the battery valve, and send it to the dealer for repair;
8	Abnormal noise while riding	(1) When you encounter a fault that cannot be eliminated by yourself under the above guidance or a fault that cannot be determined. (2) When the motor, controller, charger, and	Please find the supplier or repair station for repair, and do not open the above parts without authorization,



