



Ming Ao Technology

for your independence

MA-RL-H

Separate hydraulic lifting and rotating seat



Instructions for use



欧盟CE认证



专利产品



EMC认证



ISO认证

catalog

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Company Profile

First of all, thank you for choosing our products produced by Shandong Mingao Automobile Technology Co., Ltd. In the daily life daily life travel, we Hope that the company's products will bring you extraordinary freedom, comfort and ease!

The company was established in 2015 and has passed the EU CE quality system certification. It won the Excellent Modification Scheme Award in the Grand Prix Competition in 2020, won the Most Influential Channel Brand of Yasen Exhibition in 2021, and won the eighth in June 2021. Honorary certificate of the Golden Horse Award, won the utility model patent certificate in August 2021, won the AAA level of EU credibility in December 2021, became a member of the Automobile Dealers Chamber of Commerce of the All-China Federation of Industry and Commerce in January 2022, and was elected in June 2022 It is an excellent supplier for government procurement and a leader in China's automotive barrier-free products. It can provide customers with product research and development, production, system debugging and on-site services.

The company has hundreds of barrier-free products serving the 2021 Xi'an Games. During this period, it was recognized by the industry and received unanimous praise.

Main products: lift swivel seats, Wheelchair lifts, passenger seat lift-up model, wheelchair boarding guides, swivel seats, separate electric wheelchairs, assisted driving devices for disabled people, wheelchair fixing devices, seat quick release & fixing devices, wheelchair storage devices, etc. Use accessible products.

Product exports: Italy, Russia, the United States, Turkey, Saudi Arabia, India, Malaysia, Indonesia, Japan, South Korea, Thailand, Vietnam, South Africa and more than 10 countries and regions.

This manual can guide you how to install and debug the product. During your installation, if you have any questions, please contact us, we will provide you with timely and satisfactory solutions.

The description in this manual is for reference only. If there is any discrepancy with the product status, please refer to the actual product. If you have any questions about the manual or would like a copy, please contact our company.

Thank you again for choosing us and wish you a happy life!

Version number of this manual: V2.0.

Shandong Mingao Automobile Technology Co., Ltd.

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Address: Zhuoda Industrial Park, Changjiang East Road, Development Zone, Heze City, Shandong Province

1、 product statement

Mingao Technology guarantees to the original purchaser of the product that it will repair or replace any faulty parts due to material defects or process problems free of charge during the product warranty period, as follows:

1.1 warranty period

- Warranty period: 36 months from the date of delivery by the supplier;
- Repair or replace any faulty parts due to defects in materials or process problem during the warranty period;
- The parts that need to be replaced can be obtained by contacting our company;

1.2 After-sales service

- If there is a problem with the product, please contact our company in time (after-sales phone: 18364060737, 15701182765). Our company will analyze the cause of the problem within 24 hours and provide a solution. If the problem is caused by material defects or workmanship, our company will Free parts replacement;
- If you need to repair product parts, please notify in advance and give a reasonable repair time. The cost of returning the product must be bear by the customer, Mingao Technology does not accept cash on delivery. Mingao Technology will bear the transportation costs of new maintenance parts or products;
- This warranty does not apply to the following situations: failure damage of product parts due to accident, misuse, lack of proper maintenance, negligence, wrong adjustment, alteration, modification of vehicle mechanical condition, road hazard, overloading, failure to follow operating instructions or natural causes (such as weather, lightning, flood);
- The responsibility of Mingao Technology's guarantee is limited to the repair and replacement of faulty parts during the guarantee period:
- Mingao Technology shall not be responsible for the accompanying or consequential expenses or losses.

1.3 Precautions

- Mingao Technology recommends that the product be inspected at least once every six months, and necessary maintenance should be done. For detailed maintenance steps, please refer to the maintenance instructions;
- There are strict specifications for product design and manufacture. Modifications to any aspect of the product are dangerous;
- The warranty will be void if: any changes are made to the original design of the product without the written authorization of Mingao Welfare Technology;
- Mingao Technology is not responsible for any personal injury or property loss caused by the use of modified Mingao Technology products. Without the written authorization of Mingao Technology, no individual or company can change the design of the product.

Notice

Please do not change the design of the product without authorization, otherwise it will directly affect your enjoyment of after-sales service!

2、Product Introduction

2.1. Manual Separate Hydraulic Lifting and Rotating Seat(MA-SRLH-WM)



Manual model with leg rest

- Leather material: brushed nappa leather
- Wheelchair weight: 48KG
- Wheelchair size: 95cm*65cm*108cm
- Armrests/headrests can be adjusted up and down manually
- Backrest can be adjusted 180° for sleeping
- Foot pedals are designed with stainless steel for easy disassembly
- Honeycomb rubber shock-absorbing tires
- Disc brakes have the advantages of strong braking ability and stable braking
- Leg rests can be upgraded to manual or electric leg rests (optional)

2.2. Electric split hydraulic Lifting and Rotating Seat(MA-SRLH-WE)



Electric model with leg rest

- Leather material: brushed nappa leather
- Wheelchair weight: 48KG
- Wheelchair size: 95cm*65cm*108cm
- PG Joystick controller
- Wheelchair power: 320W
- Speed: 5km/h
- Charging time: 5h
- Flashlights can be converted to each other
- Battery capacity is 20Ah lithium battery, with a range of 10 kilometers
- Headrest/armrest can be adjusted up and down manually
- Backrest can be adjusted 165°
- Stainless steel foot pedal is easy to disassemble
- Honeycomb rubber shock-absorbing tire
- Leg rest can be upgraded to manual or electric leg rest (optional)

2.3. Hydraulic lifting device



- Size: 85cm*59cm*86cm
- Weight of the mechanism: 96KG
- Maximum load: 150KG
- Automatic detection system: detects whether the wheelchair is locked
- With manual emergency function, when the mechanism rotates to the outside of the car and the battery is found to be dead or faulty, it can be manually retracted into the car
- Two control methods, one is wireless remote control and the other is wired remote control
- Limit sensor automatically detects the descending height of the wheelchair
- The hydraulic system is very stable in lifting Up and down

3、Accessory details



①



②



③



④



⑤



⑥



⑦

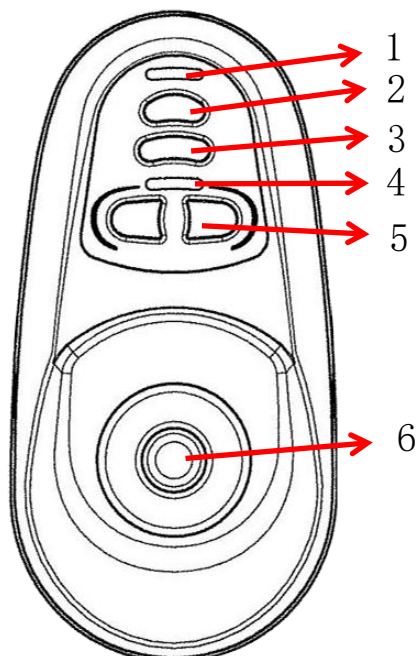


⑧

serial number	Name	Describe
1	Wired remote control	Operate the seat mechanism to rotate and lift (DOWN key to lower, UP key to raise)
2	Wireless remote control	Operate the seat mechanism to rotate and lift (A key to raise, B key to lower)
3	Open-end wrench 13mm	Used to remove the mounting screws (emergency tool)
4	Hex wrench 8mm	Used to remove the mounting screws (emergency tool)
5	Phillips screwdriver	Used to remove the mounting screws (emergency tool)
6	Wheelchair charger	Connect the charging cable to the handle controller for charging (only for electric seats)
7/8	Fuse (30A/5A)	Installed on the power line of the device to prevent circuit overvoltage protection

4、Accessory Guide

4.1. Handle Controller (Electric)



serial number	Name
1	Battery Current Charge Indicator
2	Switch Button
3	Horn button
4	Speed gear indicator light
5	Speed adjustment button
6	Directional control joystick



4.2. How to charge an electric wheelchair (electric model)

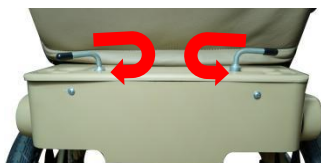


Connect the adapter to the 220V power output terminal and connect the other end to the charging port below the handle controller

Charger indicator light display:

- Red indicator light: indicates the power cord is connected
- Orange indicator light: indicates charging is in progress
- Green indicator light: indicates the battery is fully charged

4.3. Electric and manual switching (electric model)



Unlock and use the manual function of the wheelchair



locked and use the electric function of the wheelchair

5、Wheelchair Operation

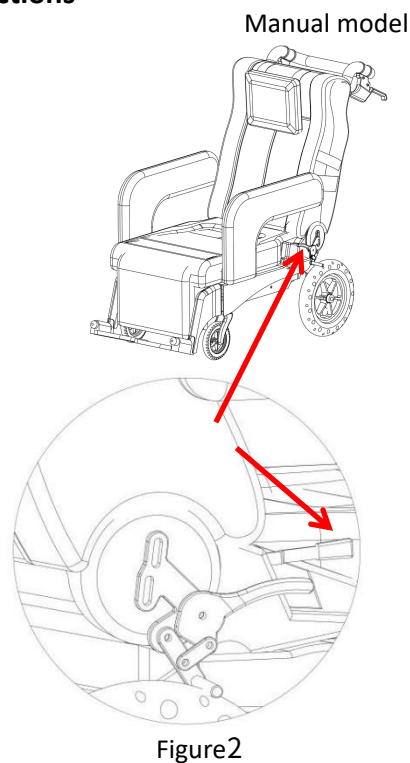
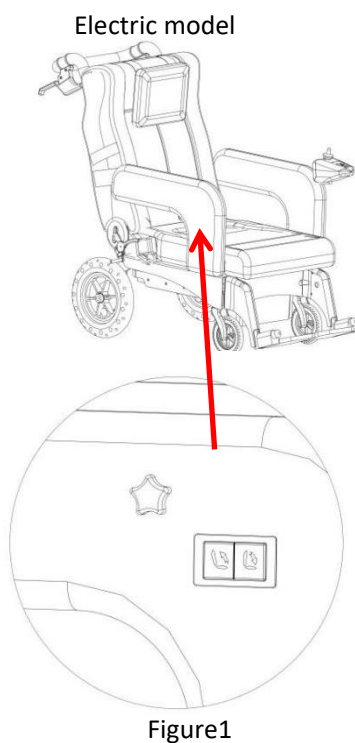
5.1. Wheelchair Descending Operation

- Before descending, please park the vehicle in an open and flat place
- Slide the middle sliding door to fully open
- Adjust the backrest to an appropriate angle to prevent the head from hitting the top of the door when the wheelchair is lowering.
- Use a wired or wireless remote control to press and hold the B or DOWN button to lower the wheelchair. (Note: When the wheelchair is lowered, clear the surrounding obstacles).
- After the wheelchair is lowered into place, the limit sensor will start to buzzer "beep", which means that the wheelchair has been lowered into place, and the wheelchair and the mechanism are automatically separated, and it can be used as a separate wheelchair. (Note: The wheelchair can only be moved after the "beep" buzzer is ring)

5.2. Wheelchair Ascending operation

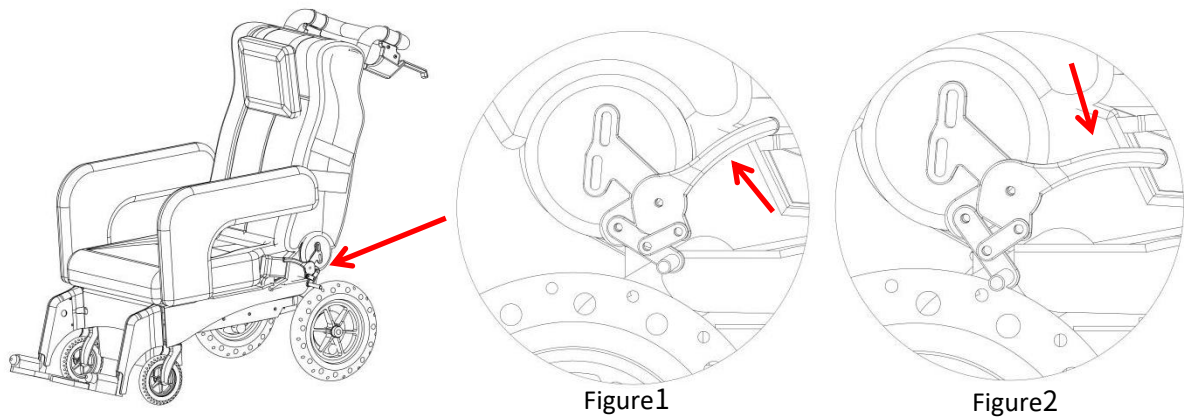
- Push the wheelchair onto the wheelchair fixing tray.
- Make the rear wheels of the wheelchair close to the mechanism arm before it can rise normally.
- After the wheelchair is in place, press and hold the A key or the UP button until the wheelchair system rises.
- If the wheelchair is not locked in place successfully, the system will stop during the ascent and ring two beeps and stop ascending.
- When rotating the wheelchair, please pay attention to the extended position of the footrest. When rotating back to the original position, be careful not to collide with the footrest and the vehicle.
- After the wheelchair is returned to the original position, the limit sensor automatically detects and Start to beep to indicate that the wheelchair has returned to the original position successfully.

5.3. Wheelchair backrest adjustment instructions



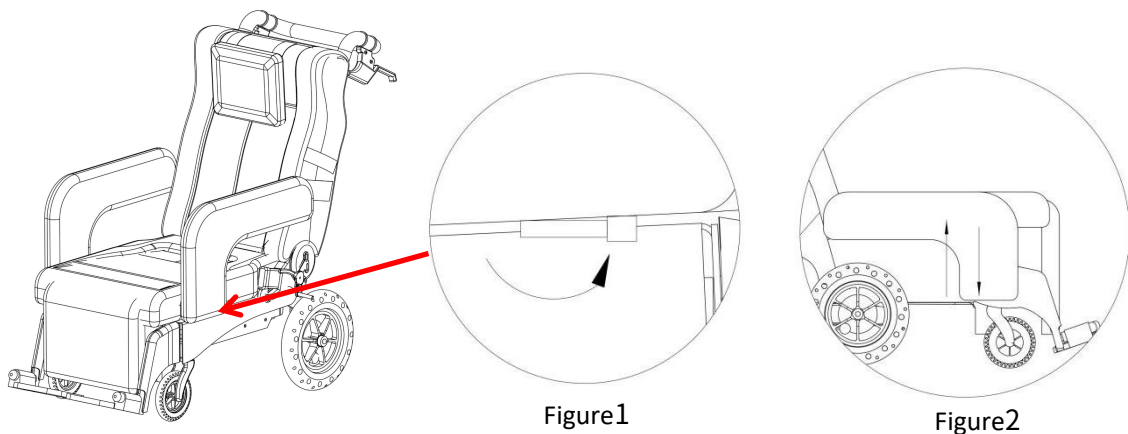
- The electric wheelchair has an electric backrest adjustment button on the side of the armrest, which can be used to adjust the electric backrest forward and backward. (Figure 1)
- For manual wheelchairs, you can manually pull the backrest adjuster to adjust the backrest to the desired angle. (Figure 2)
- The backrest angle adjustment range of manual wheelchairs is 70° to 180° , and the backrest angle adjustment range of electric wheelchairs is 70° to 165°

5.4. Manual wheelchair locking function debugging method



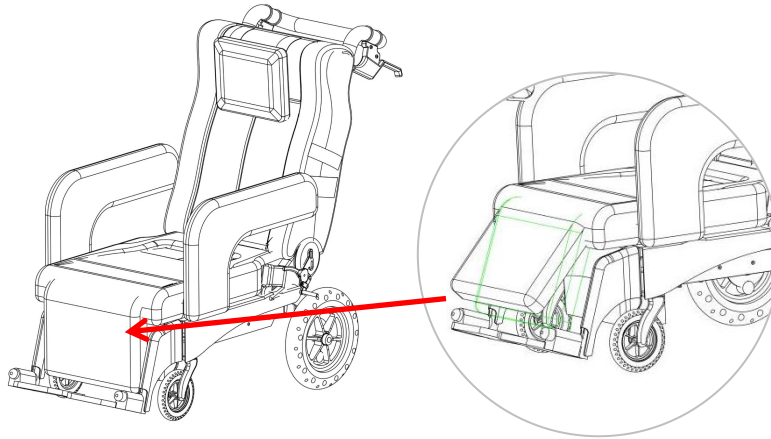
- To unlock the wheel, pull the lock upward to the resting position. (Figure 1)
- To lock the wheel, pull the lock downward to the resting position. (Figure 2)

5.5. Wheelchair armrest adjustment and use



- The armrest lock is located under the armrest. (Figure 1)
- To adjust the position, pull the lock outward and slide the armrest up and down to adjust the position. (Figure 2)
- It is convenient for users to move from one carrier to this wheelchair

5.6. How to adjust the wheelchair leg rest



- Upward adjustment: The leg rest has 4 upward positions. Gently lift the leg rest to adjust the upward angle adaptively.
- Downward adjustment: The leg rest has 4 downward positions. First push the leg rest to the top and then press it down to adjust the downward angle adaptively.

5.7. Removal and installation of wheelchair footrest

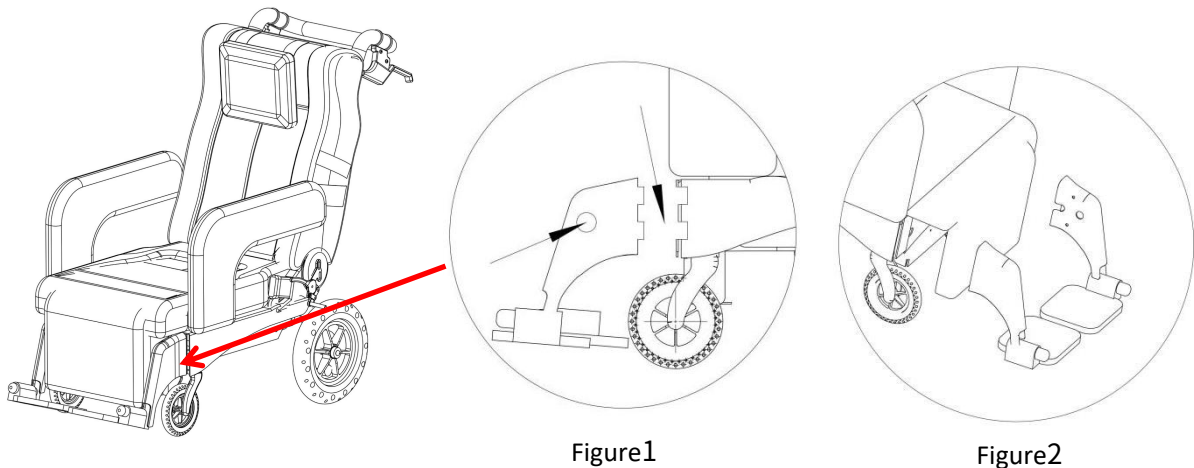


Figure1

Figure2

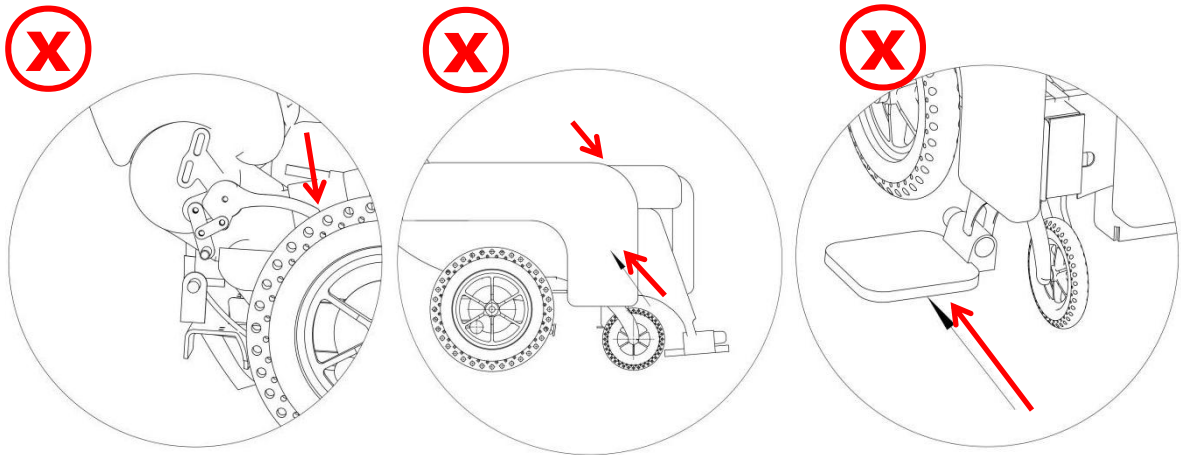
- Press and hold the round button on the outside of the footrest, adjust the footrest to one side, and then lift the leg rest upward to disassemble it. (See Figures 1 and 2)
- When installing, align the docking shaft with the shaft hole and install it downward, rotate it inward, and it will be in place when you hear a "click sound".

6、 Operation precautions*

6.1. Wheelchair operation precautions

- ⚠ Pay attention to the door height when ascending and descending the wheelchair, and adjust the backrest
- ⚠ When rotating a wheelchair, please pay attention to the extended position of the footrest to avoid collision between the footrest and the B-pillar.
- ⚠ When getting on and off the electric wheelchair, you must switch the electric mode to manual mode before getting on the vehicle.

6.2. Precautions before lifting the wheelchair



➤ Do not lock the wheels

➤ Do not slide the armrests down

➤ Do not adjust the footrest to one side

Notice

After the wheelchair is lifted and descended, the detection switch will detect and sound a whistle. Please wait until you hear the whistle before taking the next step.

7、 Fault diagnosis and troubleshooting

7.1. If the wheelchair does not work (no voltage), check the fuse first.



Figure1



Figure2

- Check the fuse 5A at the position (as shown in Figure 1).
- Check the fuse 30A at the car battery (as shown in Figure 2).



- Status: Fuse is not disconnected, can be used normally



- Status: Fuse is disconnected and damaged, do not use.



Notice

After replacing the fuse, operate again. If both fuses are normal, please operate normally until the wheelchair is in normal state.

7.2. Wheelchair failure, normal voltage, rotation does not work, possible reasons

- short circuit.
- Controller damaged.

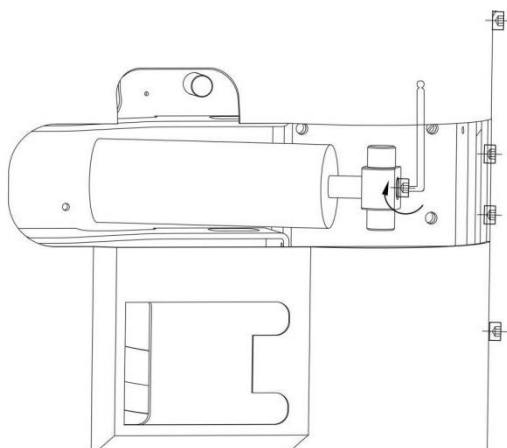
7.3. Wheelchair failure, normal voltage, up and down not working, possible reasons

- Check whether the 60A/80A relay is damaged
- Check whether the wiring harness is short-circuited.

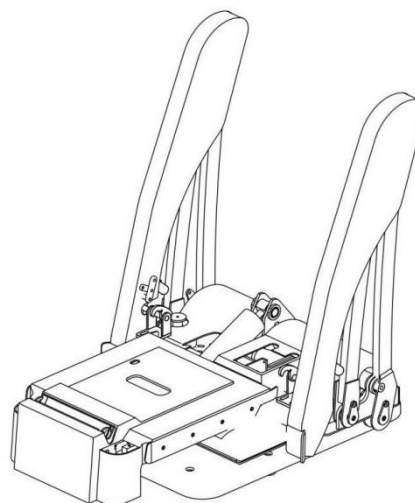
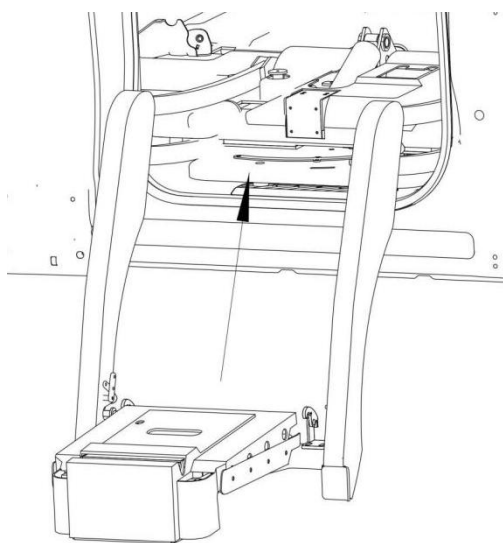
7.4. Possible causes of oil leakage in the mechanism

- Oil leakage in the hydraulic cylinder or power unit
- If the oil pipe of the mechanism is damaged, you can contact our company to get the parts that need to be replaced. (Contact information can be found on page 2 for after-sales department).

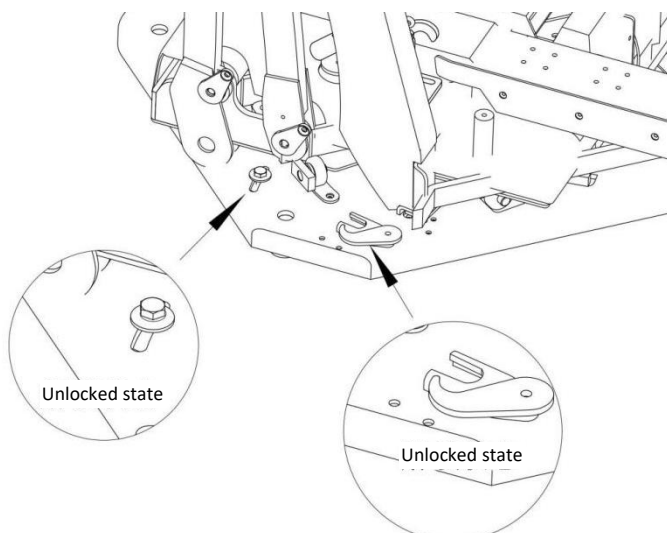
7.5. Wheelchair failure, manual emergency operation steps



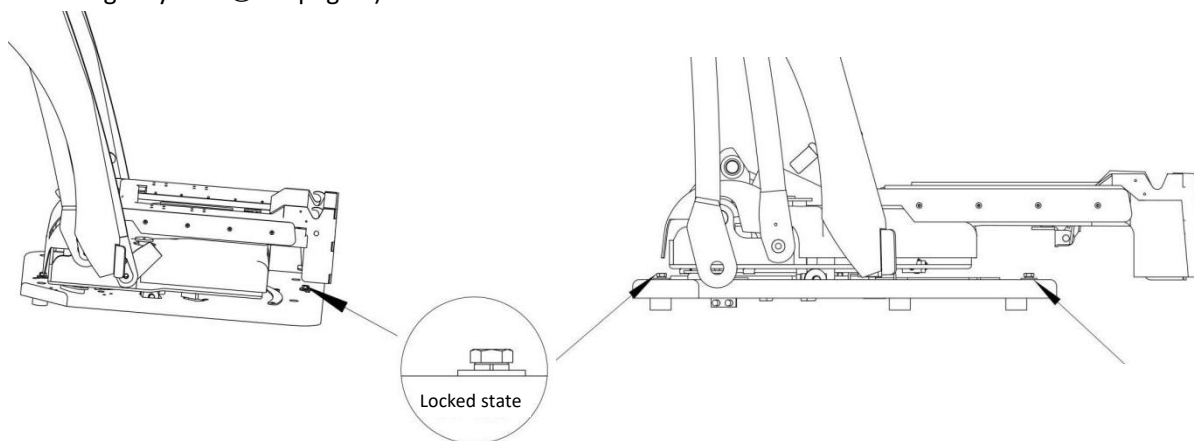
- Remove the hydraulic cylinder screws (counterclockwise) using an 8mm hexagonal wrench (see emergency tools ④ on page 5)



- Lift the mechanism manually and retract it into the car.



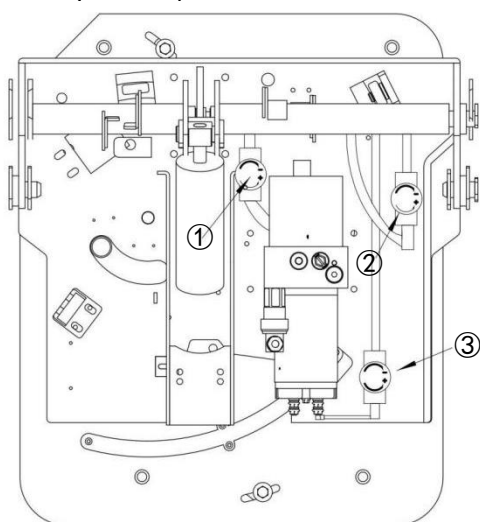
- Use a 13MN open-end wrench to loosen the screw and slide the screw to unlock position (see emergency tool ③ on page 5)



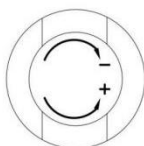
- Rotate the mechanism into place and lock the screws.

7.6. Steps for adjusting the speed of the wheelchair's ascend and descend

- Adjust the oil volume. "+" increases the oil volume to speed up, "-" decreases the oil volume to slow down.
- This product is a hydraulic product. The viscosity of the hydraulic oil will affect the speed of the product's ascend and descend. Due to different climate conditions and temperatures in different places, the amount of oil should be fine-tuned before use (you can contact our company's technicians before adjustment).



- ① Adjust and control the rising speed
- ② Adjust and control the pressure relief of the mechanism
- ③ Adjust and control the descending speed



attachment: After-sales service card

Customer Profile			
Client's name		Client address	
Phone number		Fax	
Zip code		E-mail	
product data			
Purchased product		Purchased model	
Quantity		Product serial	
Place of purchase		Purchase time	

Client Signature:

Note:

- All customers must fill the above information according to the requirements after purchasing the company's products. After completing the "After-sales Service Card", hand it over to the dealer or send it directly to the company;
- After the company or designated dealer receives the "After-sales Service Card" filled out by the customer, it will be responsible for tracking and investigating the use of the company's products purchased by the customer and provide after sales services to the customer;
- After the customer purchases the company's products and he failed to fill the "After-sales Service Card" and submit it to Mingao Technology or the designated dealer. Mingao Technology cannot provide services in timely manner and causes unnecessary losses to customers. Mingao Technology shall not be responsible;
- If you want to know more about Mingao Technology's products, please scan the QR code below.



Scan to see more details