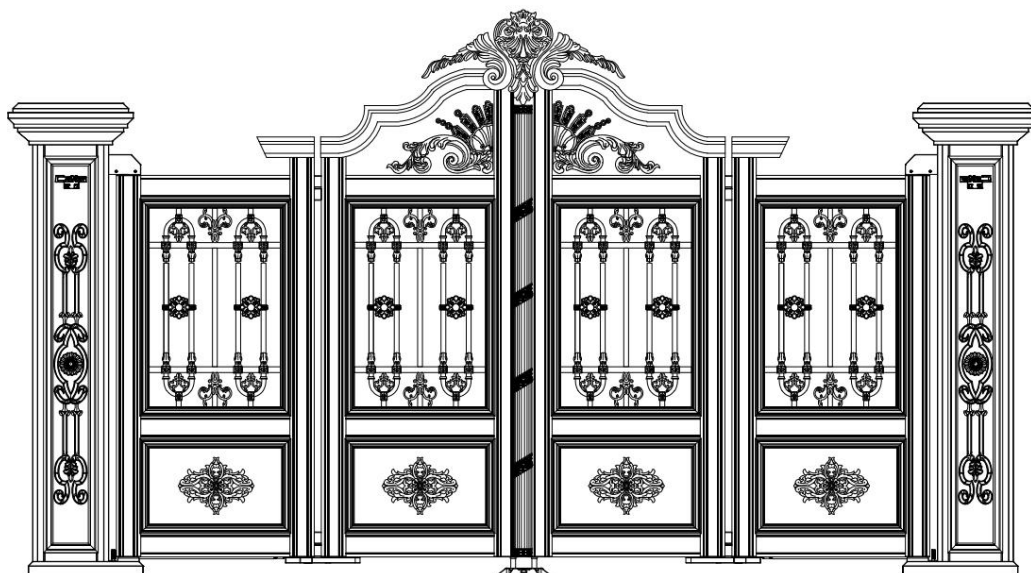


Collapsible Gate Installation Manul

CMZD-X1



Contents

1. Introduction to collapsible gate products.
2. Installation methods.
3. Component names of collapsible gate structures.
4. Precautions for collapsible gate installation.



Preface

1. Please read the instructions carefully before installation.
2. Installation must be carried out strictly in accordance with the instructions. Incorrect installation and operation may cause personal injury or property damage.
3. All operations during installation must comply with the instructions manual and relevant national safety regulations.
4. The application functions specified in the product manual have been carefully designed and manufactured. Any application beyond the specified functions may cause damage or pose other risks.
5. The company shall not be held responsible for any damage caused by improper use of this product.
6. This product must not be installed in places where flammable or explosive materials are present.
7. Before installing, inspecting or repairing this product, the power supply must be cut off first.
8. This product must be equipped with an independent switch and a 6A circuit breaker for protection.
9. Check whether the grounding system of the product is normal.
10. The safety devices of the electrical system must safeguard the safe operation of the moving mechanical system and prevent it from being crushed or cut.
11. If a safety protection switch other than our company's is used in the product (such as infrared protector, ground sensor, radar, etc.), our company is not responsible for the safety and normal operation of the product.
12. Please use the parts provided by our company during maintenance.
13. For any problems that occur in the operation of the enclosed power components due to disassembly or assembly without following the correct procedures, our company will be responsible.
14. Children or non-staff members are not allowed in the vicinity when the product is being installed and debugged.
15. The installer must inform the user of the method for manual operation in case of an emergency.
16. Inform users that they must not repair or adjust the system without authorization. Please contact the relevant personnel when necessary.
17. After installation and commissioning are completed, please hand over this manual to the user for safekeeping, for reference during future maintenance.

CMZD-1901



CMZD-1902



CMZD-X8



CMZD-1801



CMZD-1802



CMZD-X2



CMZD-1803



CMZD-1805



CMZD-1817



CMZD-1806



CMZD-1807



CMZD-X5



CMZD-1811



CMZD-1812



CMZD-1813



CMZD-1815



1. Product introduction and tools required for installation

I. Product Overview

1. Full Suspension Operation Design

- Completely independent of ground constraints, no need for pre-embedded tracks or foundations.
- Unaffected by rain, snow, standing water, or other harsh weather conditions, ensuring strong adaptability.

II. Material & Appearance

1. High-Quality Steel Structure

- Gate columns, fasteners, and structural components are made of high-strength steel for enhanced durability.
- Fluorocarbon powder coating surface treatment provides superior rust resistance, available in multiple customizable colors to suit various architectural styles.

III. Structure & Operation Mechanism

1. Intelligent Folding Design

- Utilizes reverse-rotation folding technology for synchronized gate leaf movement and precise trajectory control.
- Equipped with a linkage rotation mechanism for reliable motion, accurate positioning, and minimal space occupation when folded.
- Programmed buffer control ensures smooth operation and reduces mechanical impact.

2. High-Efficiency Drive System

- Powered by a crank-arm motor for robust performance and frequent start-stop capability.
- Short operating travel with adjustable opening/closing speed and timing.

IV. Smart Control & Automation

1. Adaptive Learning Function

- Built-in computerized memory module that autonomously learns door movement patterns to adapt to different operational modes.
- Supports customizable parameter settings (e.g., speed, timing).

V. Safety Protection

1. Multi-Layered Safety Features

- Quad Infrared Protection: Real-time obstacle detection for anti-collision and anti-pinch functionality.
- Pressure Wave Protection Device**: Mitigates sudden external force impacts to safeguard structural integrity.
- Magnetic Lock System: Capable of withstanding up to 500kg thrust for secure closure.

VI. Environmental Adaptability

1. Extreme Weather & Complex Scenario Compatibility

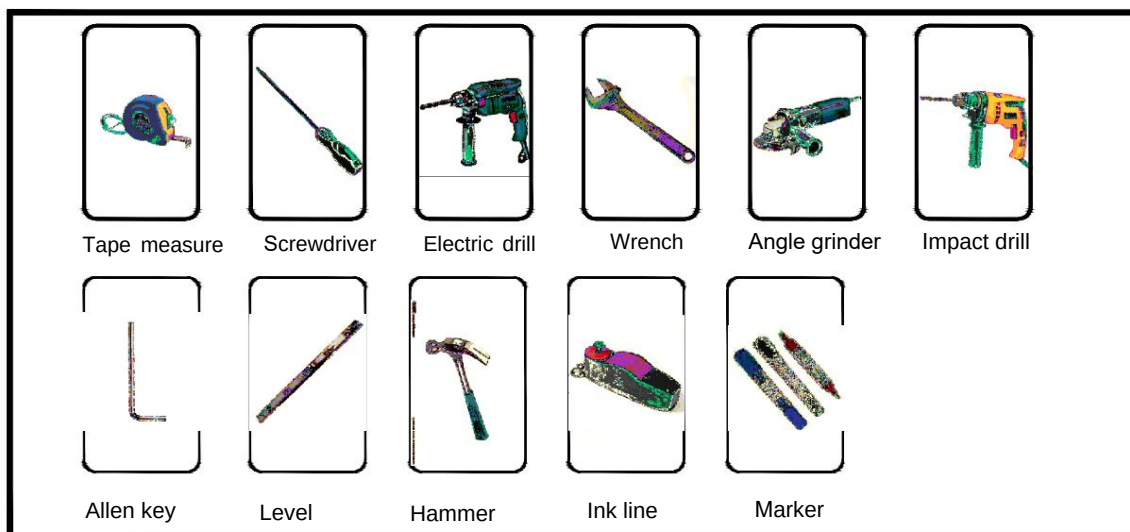
- Temperature Range: Operates reliably from -20°C to +70°C, suitable for both frigid and high-temperature regions.
- Wind Resistance: Stable operation under wind forces of levels 6 to 8.
- Application Scenarios: Slopes, areas above railways/tracks, and environments with heavy rain, snow, or wind.

VII. Installation & Maintenance

1. Modular Assembly Design

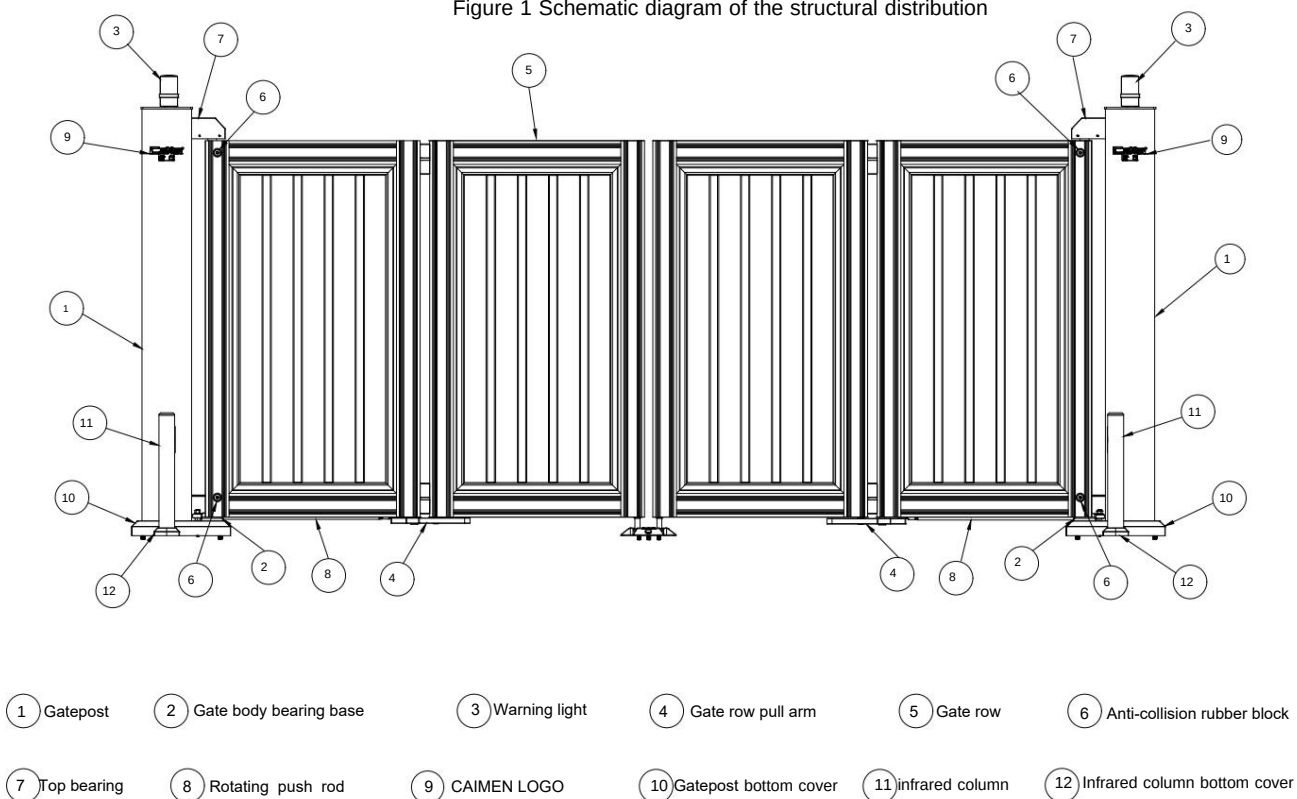
- Fully modular structure for quick installation without complex construction.
- Low maintenance costs with replaceable individual components.

2. Install the required tools:



2. Overall installation standard layout of the product:

Figure 1 Schematic diagram of the structural distribution

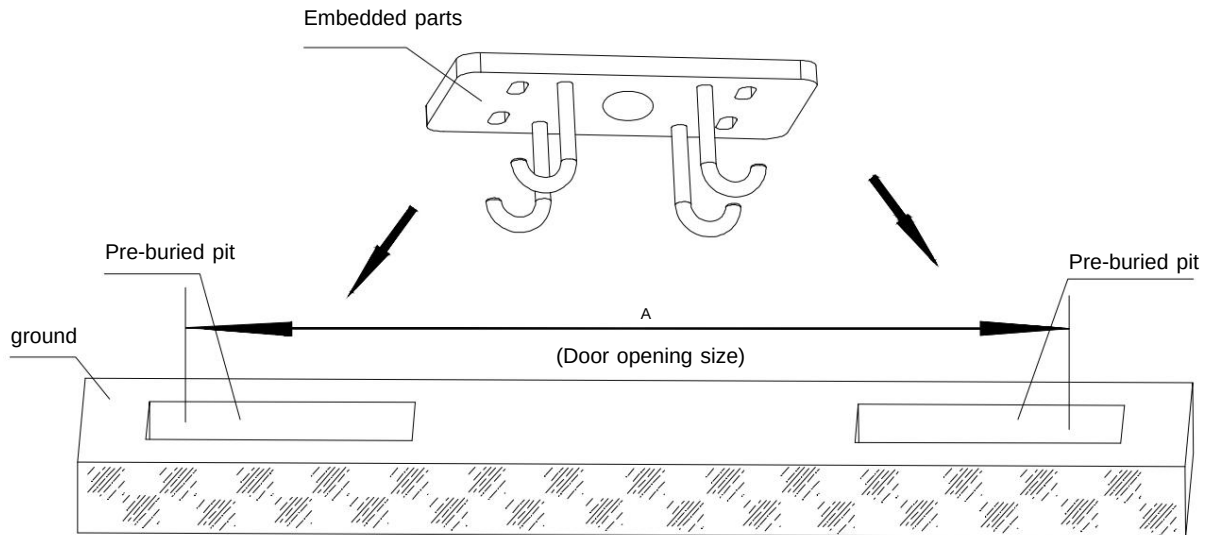


CAIMEN 财门科技

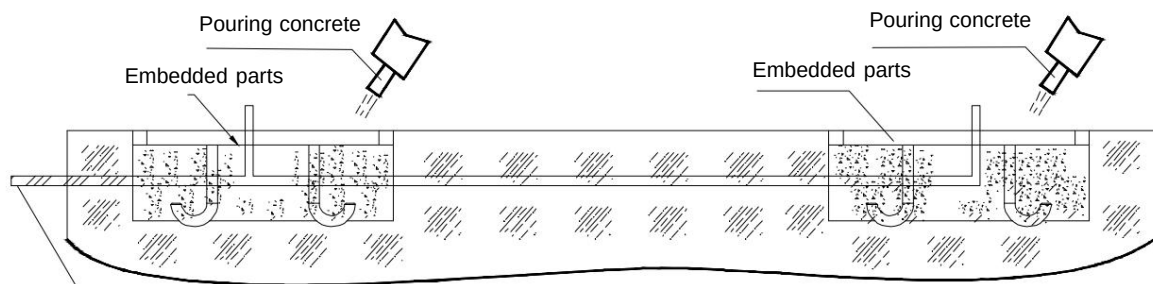
3. Installation of collapsible gate:

Step 1:

Reference size: A is the length of the gate opening



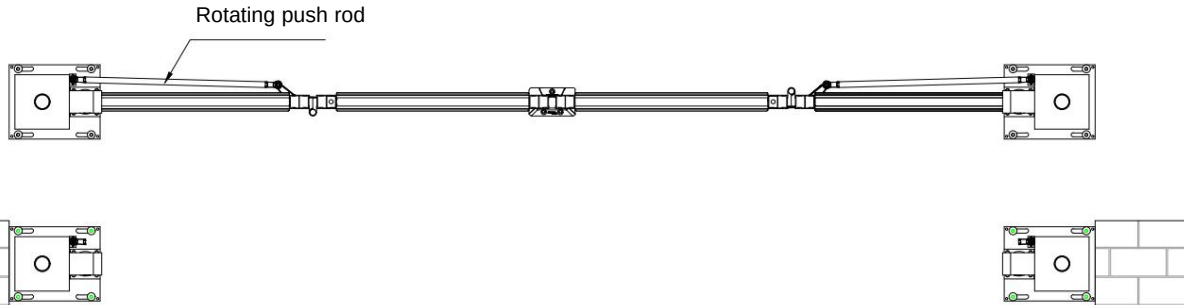
Step 2:



Use a DN20 insulating hose to waterproof, thread the power cord, put 1.0*6-core cables on both sides of the doorpost, and the two embedded plates 1.5 meters above the ground must be kept in the same vertical and horizontal line!

4. Threaded rod installation:

Step 1:



1. Drill with an M18 drill bit
2. Use a brush and air blower, and repeat. Clean the hole twice to make it clean
3. Inject the anchor glue into the hole 1/2-2/3 full
4. Slowly screw the thread rod into the hole and do not move it during the curing time.
5. Depending on the substrate temperature, wait for enough time for the colloid to solidify
6. After curing is completed, you can continue to install

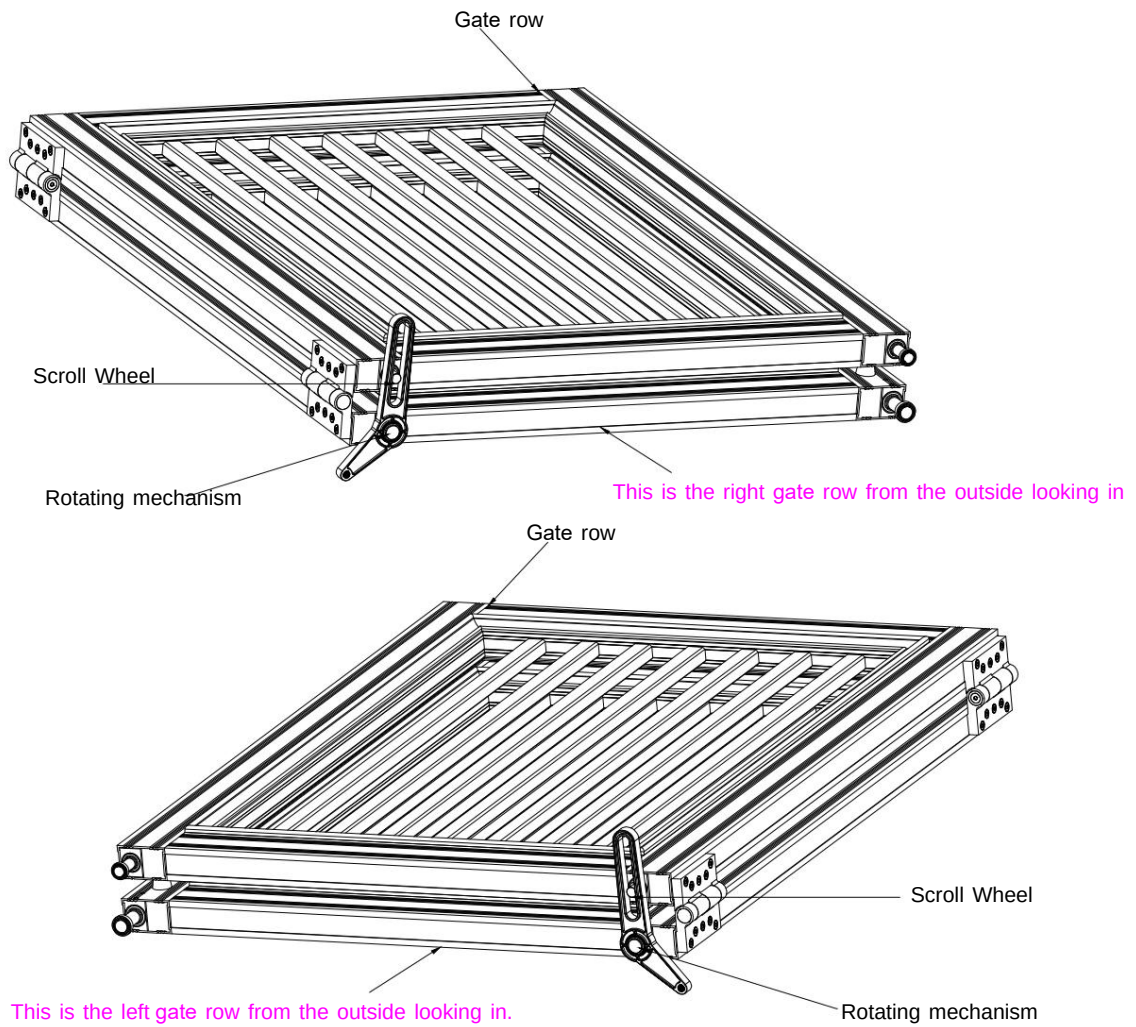
Rebar glue curing schedule:

Ambient temperature	Initial curing time	Full curing time
-5°C	4h	48h
0°C	3h	24h
10°C	2h	8h
20°C	1.5h	6h
≥20°C	1h	5h

Note:

1. Make sure the size of the gate opening meets the installation requirements.
2. First confirm the location of the folding door mortor, the appropriate distance, and handle the placement of each wiring.
3. Use a marker to mark each hole, and then move the folding door mortor away.
4. Then use an M18 impact drill to drill holes, clean the holes, inject one-third of the rebar glue into the holes, and then put the M16 screw into the holes, leaving 5cm space on the surface, and wait for the curing time.
5. Use a DN20 pipe to pull the auxiliary motor line, warning light line, and infrared line from the auxiliary mortor to the main mortor. Pull from the guard room or the nearest power supply to the main mortor, and use a DN20 pipe to cover the 3*2.5 square wire to the mortor. Cover and lay it with cement.
6. After the mortor screws are cured, install the mortor, adjust the horizontal and vertical, and tighten the nuts.

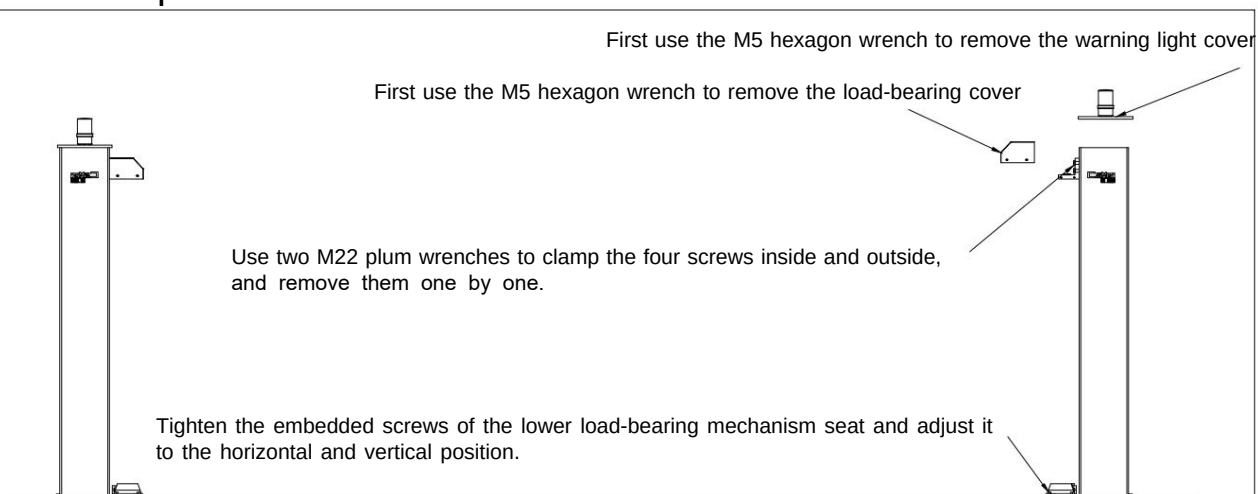
Step 2:



Note:

1. Put the rotating mechanism on the gate into the roller, tighten the screws, and check whether it is loose.

Step 3:

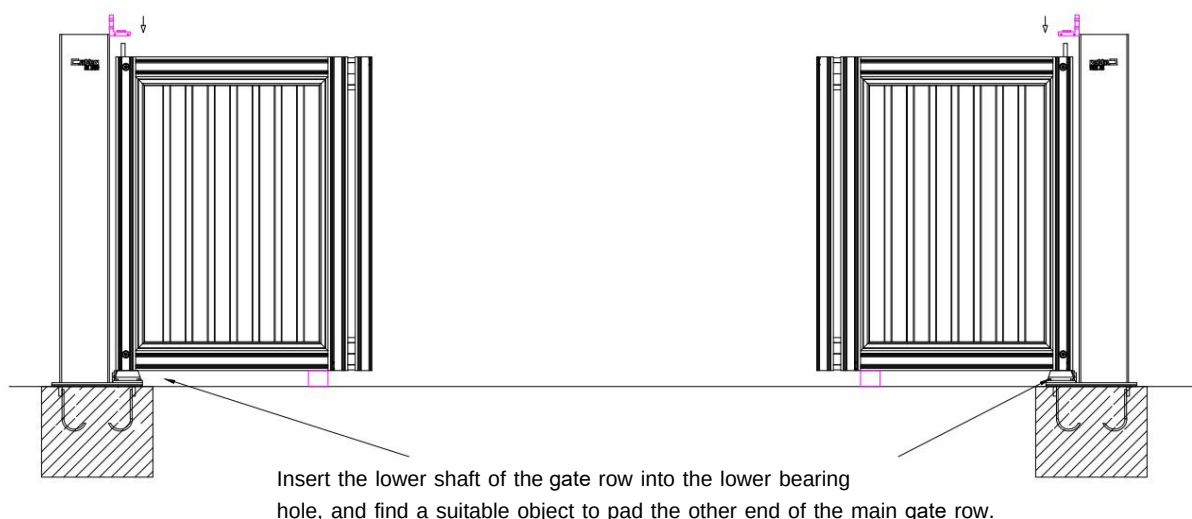


Note:

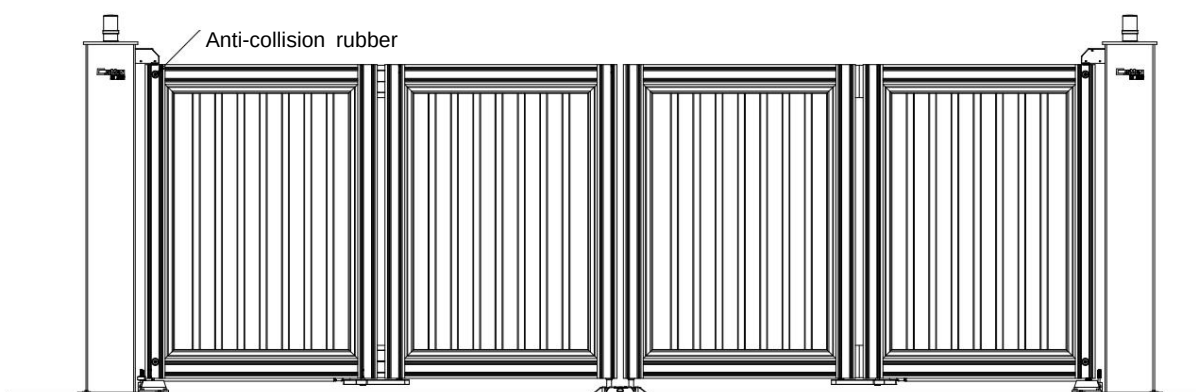
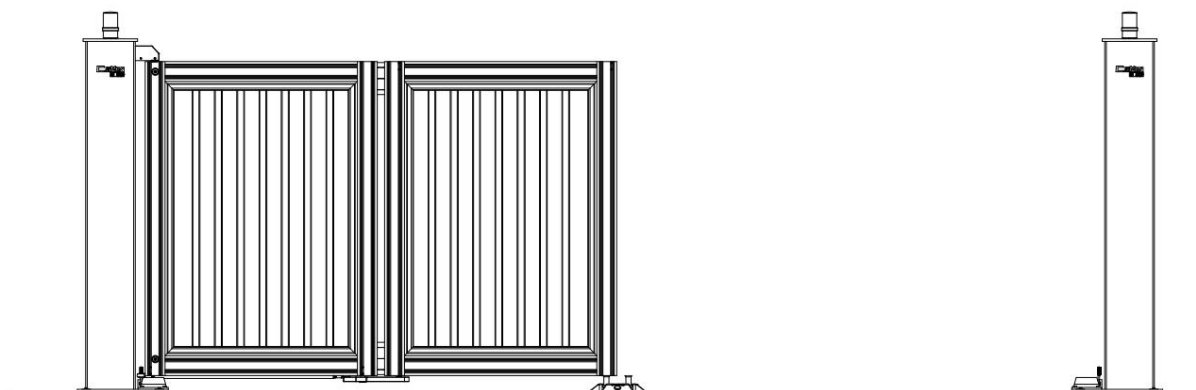
1. Tighten the screws of the lower bearing base. Remove the screws on the upper rotating mechanism seat, remove the exterior cover and fixing plate.

Step 4:

First, align the upper bearing plate with the gate shaft and put it in with the M14 screws. Then put the nuts into the mortor, align them with the screws, and tighten them with the M22 wrench.



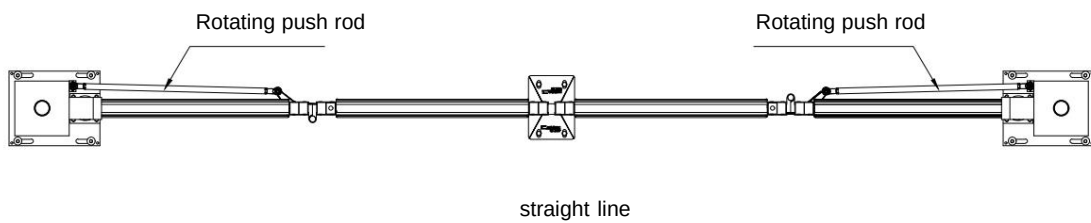
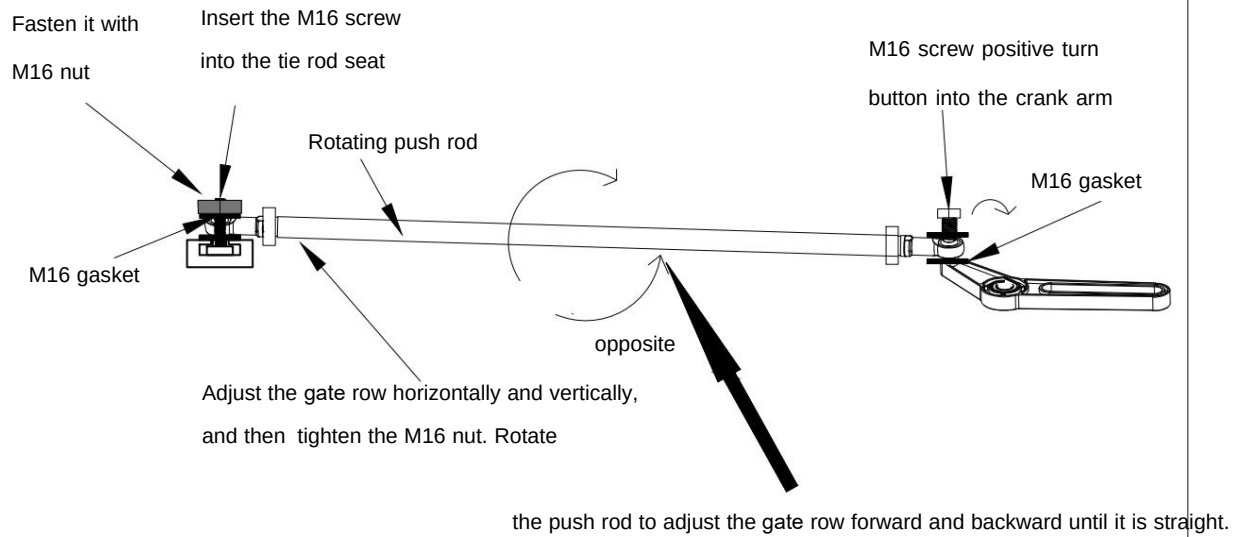
Step 5:



Note:

1. Install the gate row according to the steps, the black anti-collision is the front
2. Install the rotary push rod

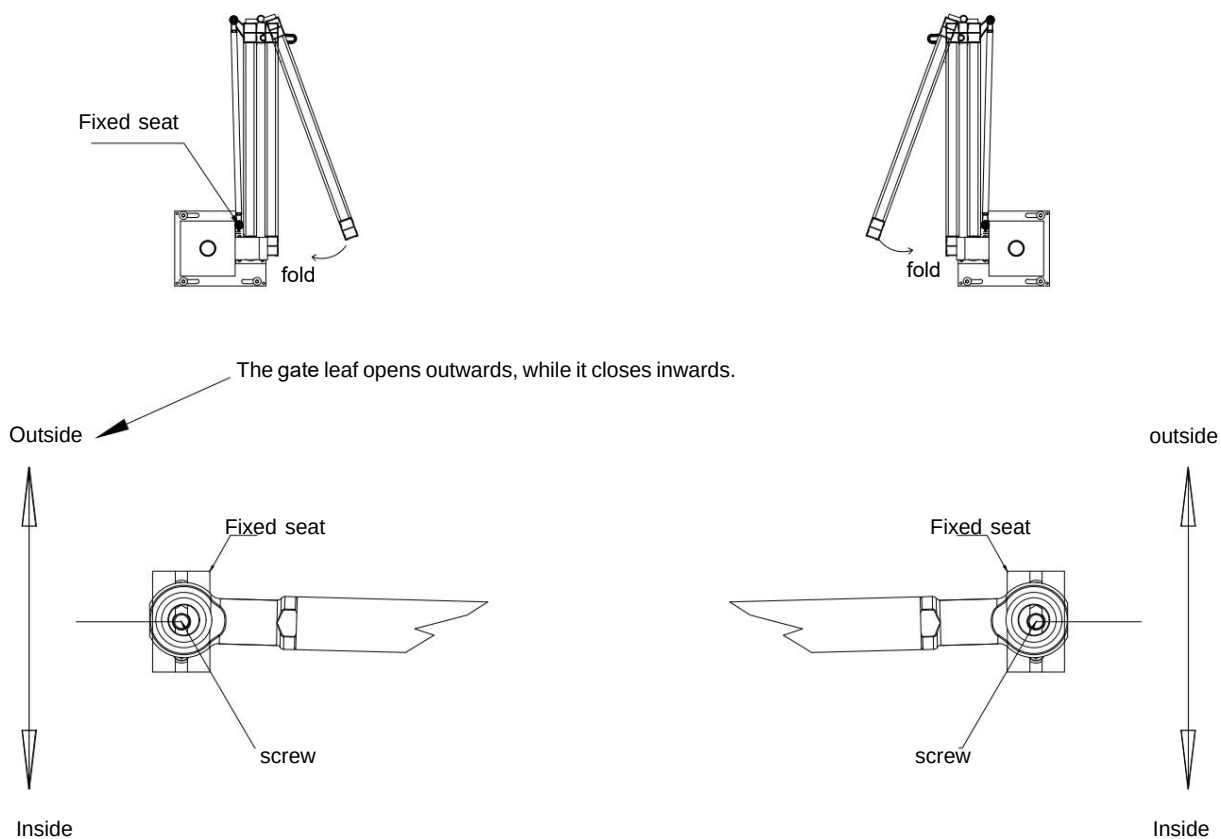
Step 6:



Note:

First manually close the gate, and then use the pull rod to rotate and straighten it. (As shown in the picture)

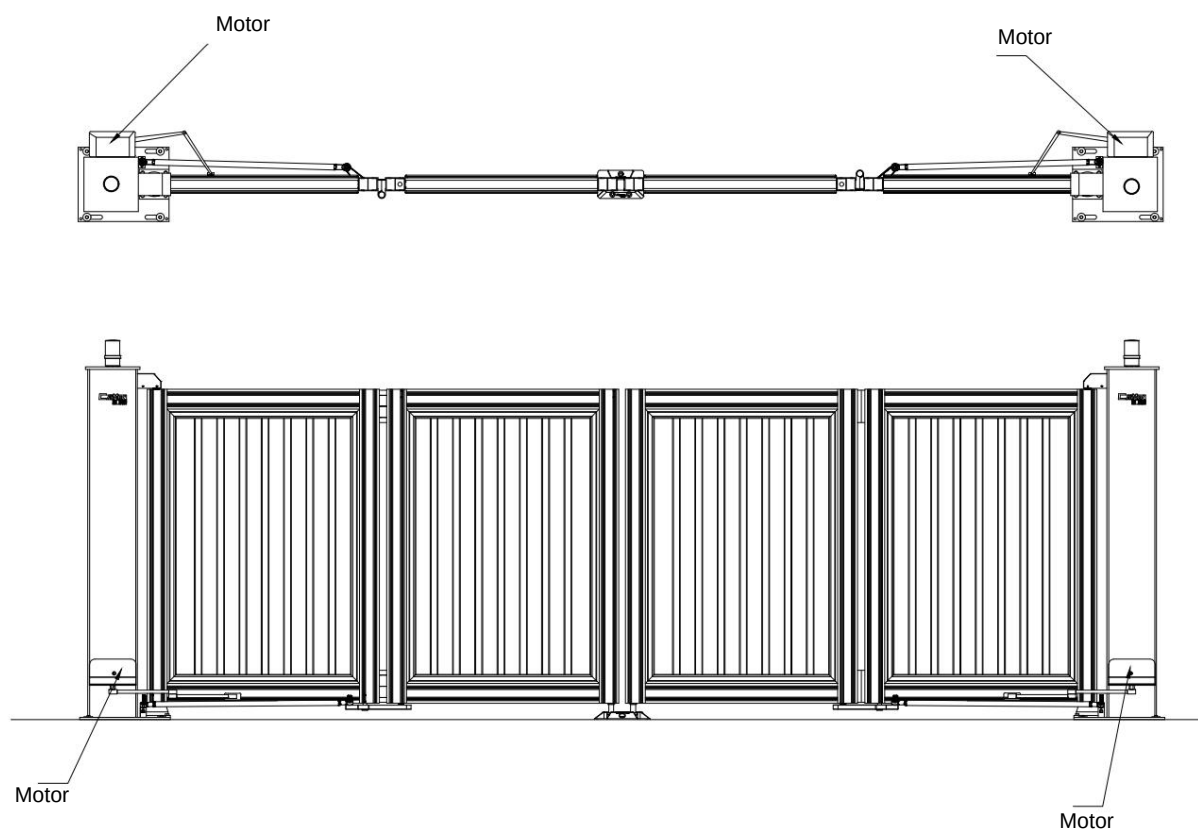
Step7:



Note: Open the gate manually and check whether it is opened to 90°.

Check whether the second gate is closed. If not, adjust the pull rod to fix the base.

Step 8:

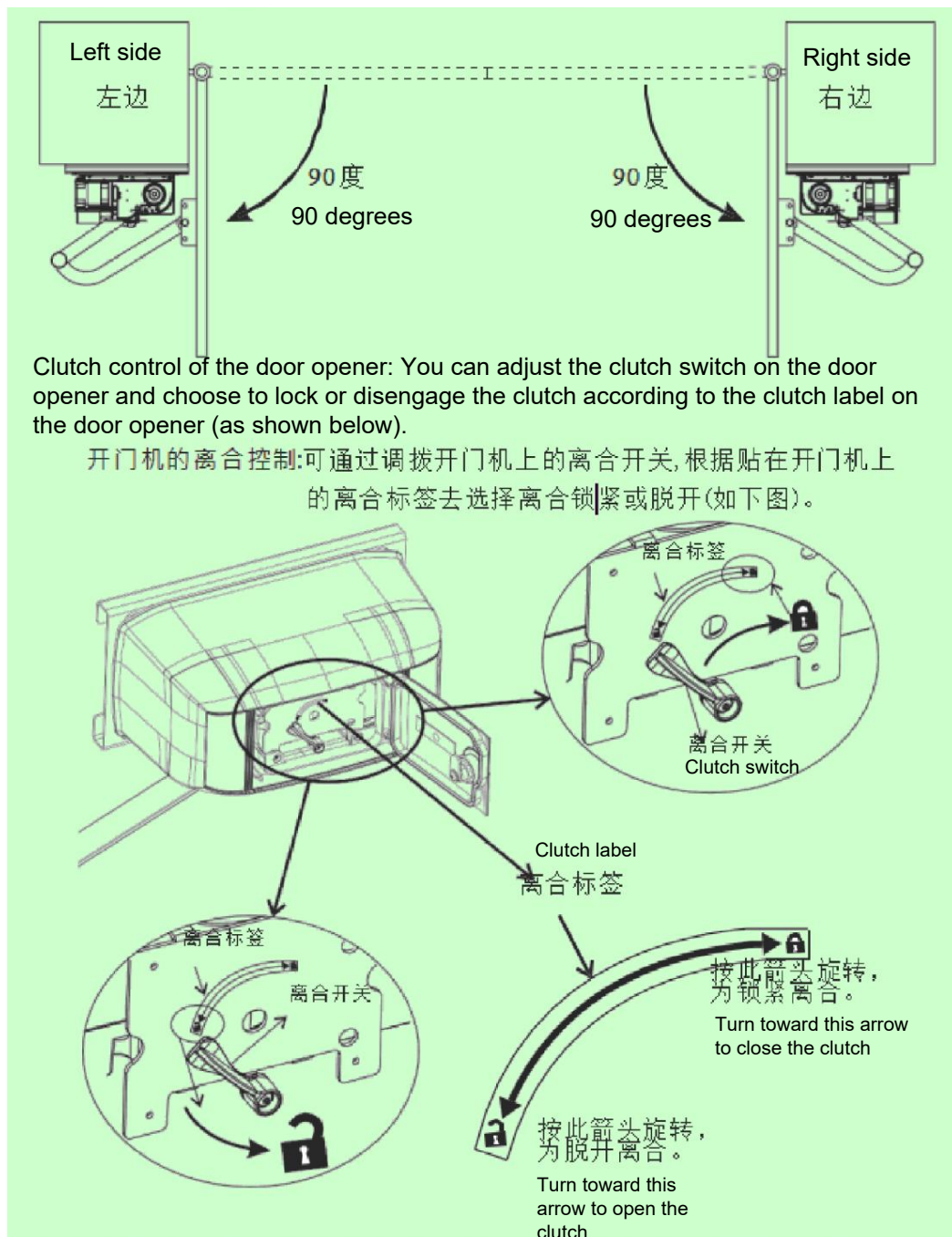


Note: Please refer to the controller manual for installing the motor and adjusting the controller!

Step 9:

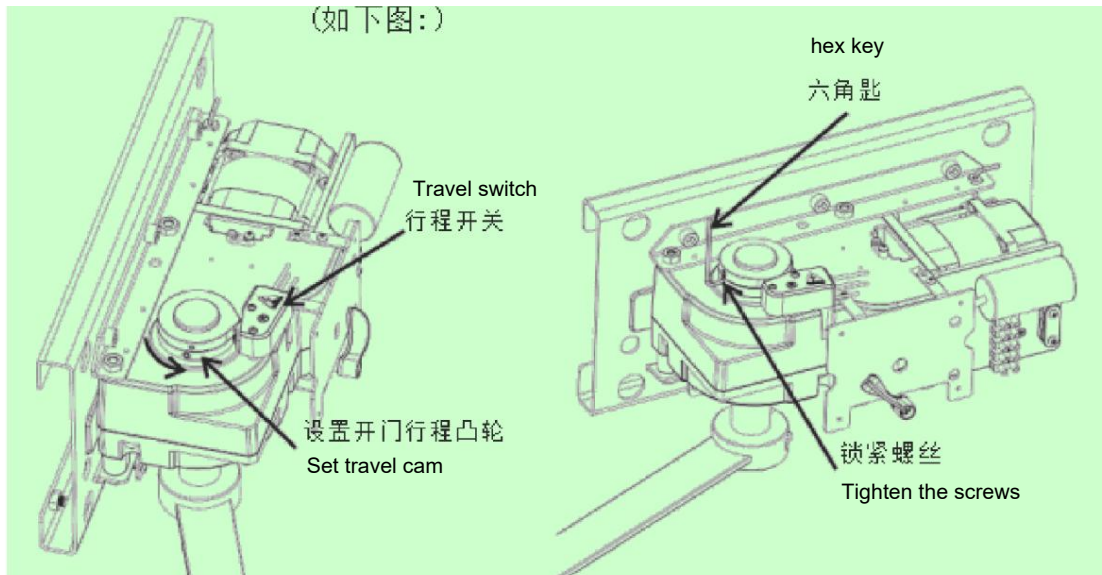
Setting the motor travel:

Open the clutch first, then manually open the door to 90 degrees (as shown below)

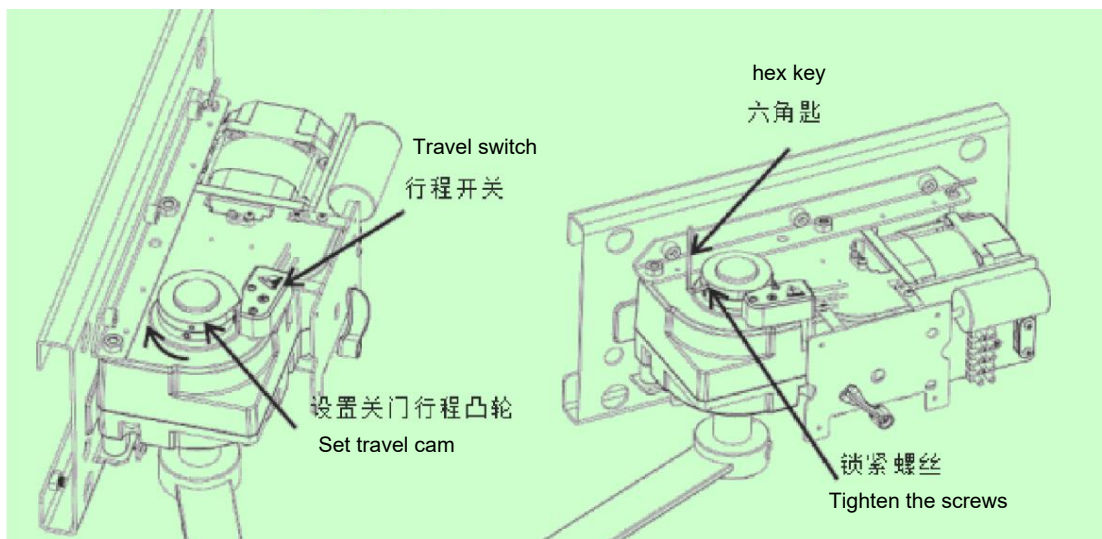


Step 10:

Set the door opening travel on the right: rotate the door opening travel cam counterclockwise to make it touch the travel switch, then insert the hexagonal key into the locking screw hole and tighten it to complete the door opening travel setting (as shown below:)



Set the door closing travel on the right: rotate the door closing travel cam clockwise to make it touch the travel switch, then insert the hexagonal key into the locking screw hole and tighten it to complete the door opening travel setting (as shown below:)



The steps for setting the door opening/closing travel on the left are the same as those on the right, but the direction of adjusting the door opening/closing cam is opposite to that on the right; the door opening knob on the left should be rotated clockwise, and the door closing knob on the left should be rotated counterclockwise. Note that the clutch should be locked immediately after completing the travel setting.

Fault analysis and troubleshooting

Troubleshooting methods

Fault phenomenon	Cause	troubleshooting
The power indicator light is off	1. The power supply is not connected 2. The fuse is blown 3. There is a problem with the power supply 4. There is a problem with the line 5. The fuse is blown 6. The tail leakage switch is not reset 7. The emergency switch is not reset	1. Connect the power supply 2. Replace the fuse 3. Check the power supply 4. Check the strong and weak current lines 5. Replace the fuse 6. Press the leakage switch reset button 7. Turn the emergency switch to the right to reset
The power indicator is on, but the buttons are unresponsive	1. The limit line is short-circuited 2. The limit switch is short-circuited 3. The receiver is not plugged in properly 4. The infrared beam cannot reach the sensor	1. Check the limit line 2. Replace the fuse 3. Plug the receiver in 4. Adjust the infrared to the corresponding position
The power indicator is on, the door switch indicator is normal, and the motor does not run	1. The motor line is open or connected incorrectly 2. The motor clutch is not closed 3. The capacitor is broken 4. Overload 5. The thermal protection device is activated 6. The reed switch is damaged	1. Connect the motor cable 2. Close the clutch 3. Replace the capacitor 4. Check if there are any obstacles on the door track 5. Wait 20 minutes and restart 6. Replace the reed switch
Open and close gate limit function is invalid	1. The limit switch is too high from the magnet 2. The limit magnet is not installed correctly 3. The limit switch is broken 4. The limit switch wire is damaged	1. Adjust the limit switch height 2. Reinstall the magnet 3. Replace the limit switch 4. Check the limit line and connect it
Remote control unresponsive	1. The remote control battery is low 2. The remote control is broken 3. The receiver is not plugged in properly	1. Replace the battery 2. Replace the handle 3. Plug the receiver in
There is sound when the door row is running	1. The installation level of the gate is uneven. 2. There is abnormal noise in the gate row	1. Adjust the navigation card 2. Adjust the wire bracket
The drive wheel slips during operation	1. The machine head is too light 2. The installation level is not level	1. Head counterweight
The alarm does not sound	1. The infrared head is loose 2. The infrared beam is not aligned 3. Anti-climbing infrared beam	1. The infrared head is loose 2. The infrared beam is not aligned 3. Anti-climbing infrared beam
The display does not light up	1. Power failure 2. Display LED is broken	1. Check the circuit 2. Repair LED display.
Immediately reverse when closing the door	1. There is an obstacle in front of the gate 2. The infrared beam is damaged	1. Remove obstacles in front of the gate 2. Replace the infrared beam

Product Warranty Card

Product model: _____

Customer Name: _____

Contact Number: _____

Shipping address: _____

Purchase date: _____

Terms and Conditions of This Card Service

- I. This product is covered by a one-year warranty, starting from the date of purchase. Free warranty service is provided during the warranty period.
- II. The following situations are not covered by the warranty:
- Quality problems caused by failure to install or use the product in accordance with the product manual or similar factors.
2. Damages caused by unstable power supply, voltage exceeding the product's specified range, or non-compliance with national safety electricity standards.
 3. Damages caused by irresistible factors such as natural disasters.
 4. Damages caused by users' random disassembly, repair or modification.
 5. Beyond the warranty period.

When the product is under warranty, this card or the invoice should be presented for after-sales service.

The interpretation right of the terms and conditions of this card service belongs to Shenzhen Caimen Intelligent Technology Co., Ltd.

Product warranty record

Maintenance date	Repair content	Whether it is under warranty	Repairman

Shenzhen Caimen Intelligent Technology Co., Ltd.

Support@caimenint.com

Product Inspection Certificate of Conformity

Dear User,

Thank you for choosing the Caimen Technology brand and for your support and trust in our company. We adhere to the service tenet of "customer first" and will always be ready to listen to your valuable opinions.

Product model:

Product Specifications:

Production number



Packer:

Inspector:

Shenzhen Caimen Intelligent Technology Co., Ltd.

Support@caimenint.com

