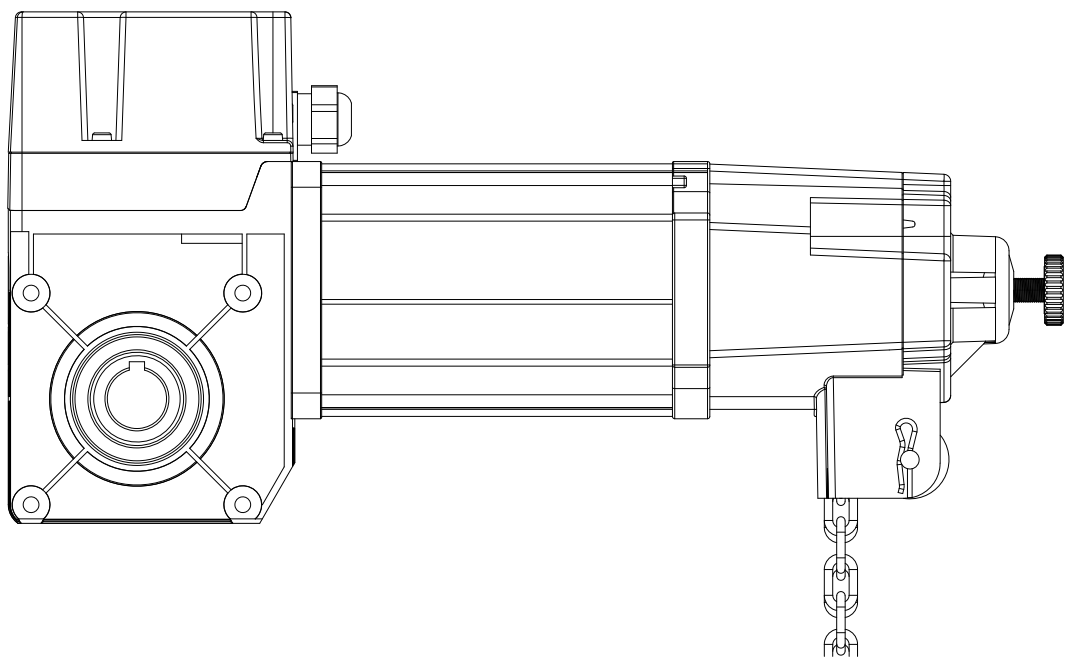


AC Industrial Door Drive

Mechanical Installation and User Guide



AC90

AC140

S/N



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**WARNING**

- GENERAL HAZARD

The symbol indicates a hazard to the user/installer, pay attention to the title's content.

**WARNING**

- ELECTRICAL HAZARD

The symbol indicates a specific hazard related to electricity.

**Precautions - Important**

★ The schematic diagram is based on the product example, and the delivered product may deviate.

1.General Safety Information

1.Normal Use

Industrial door openers are suitable for fully balanced industrial sliding doors.

Follow the steps in the manual for safe operation. The industrial door opener is rain-proof and moisture-proof, and can be used in generally harsh environmental conditions. Our company is not liable for any damages caused by other applications or failure to comply with the operation in the manual.

Modifications are only permitted with the consent of our company. Otherwise, the manufacturer's declaration shall be invalid.

2.Safety Information

Installation and initial operating tasks are only performed by trained skilled fitters. Only trained electricians should work on electrical equipment. They can follow instructions correctly, identify potentially hazardous areas and take appropriate safety measures.

Installation can only be done with the power turned off.

Comply with applicable codes and standards during installation.

3.Safety Protection

Please wear the corresponding protective cover and safety device during installation, otherwise do not operate.

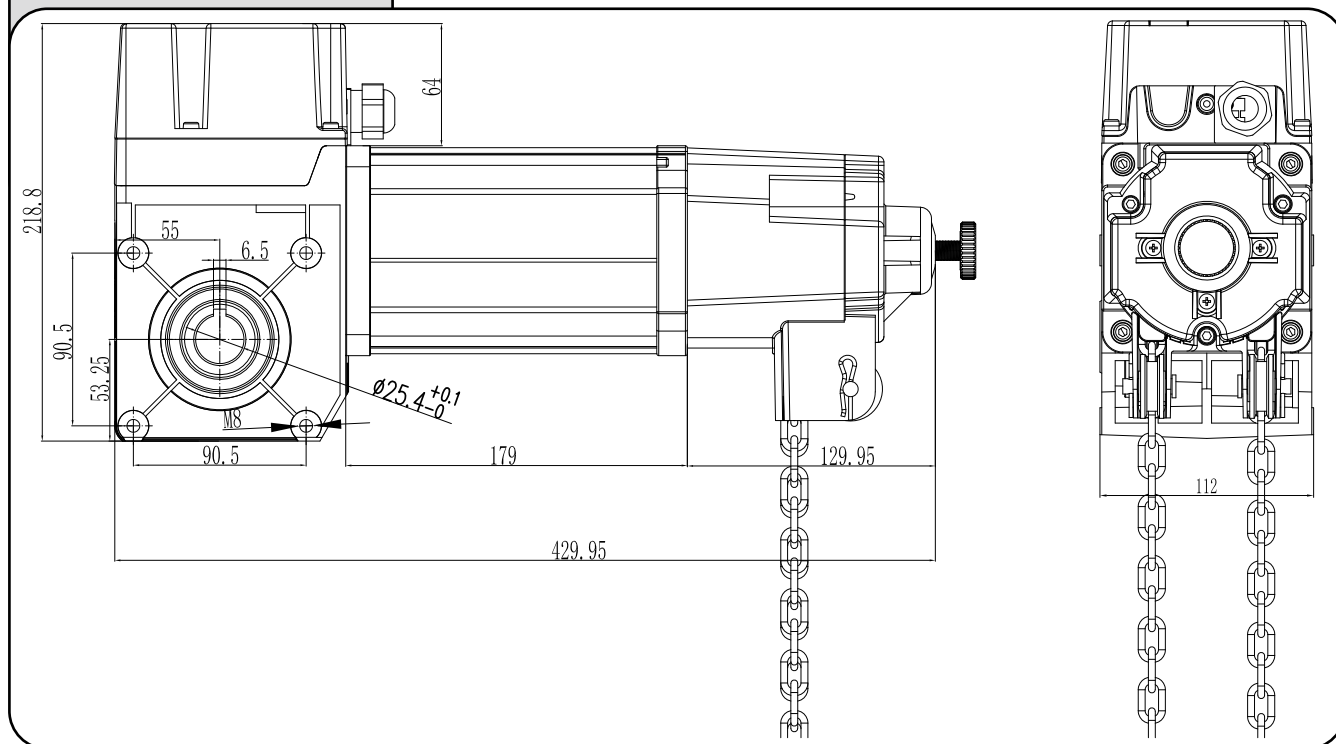
Make sure the power terminals are correctly positioned and the cable glands and watertight connectors are correctly tightened.

4.Spare Parts

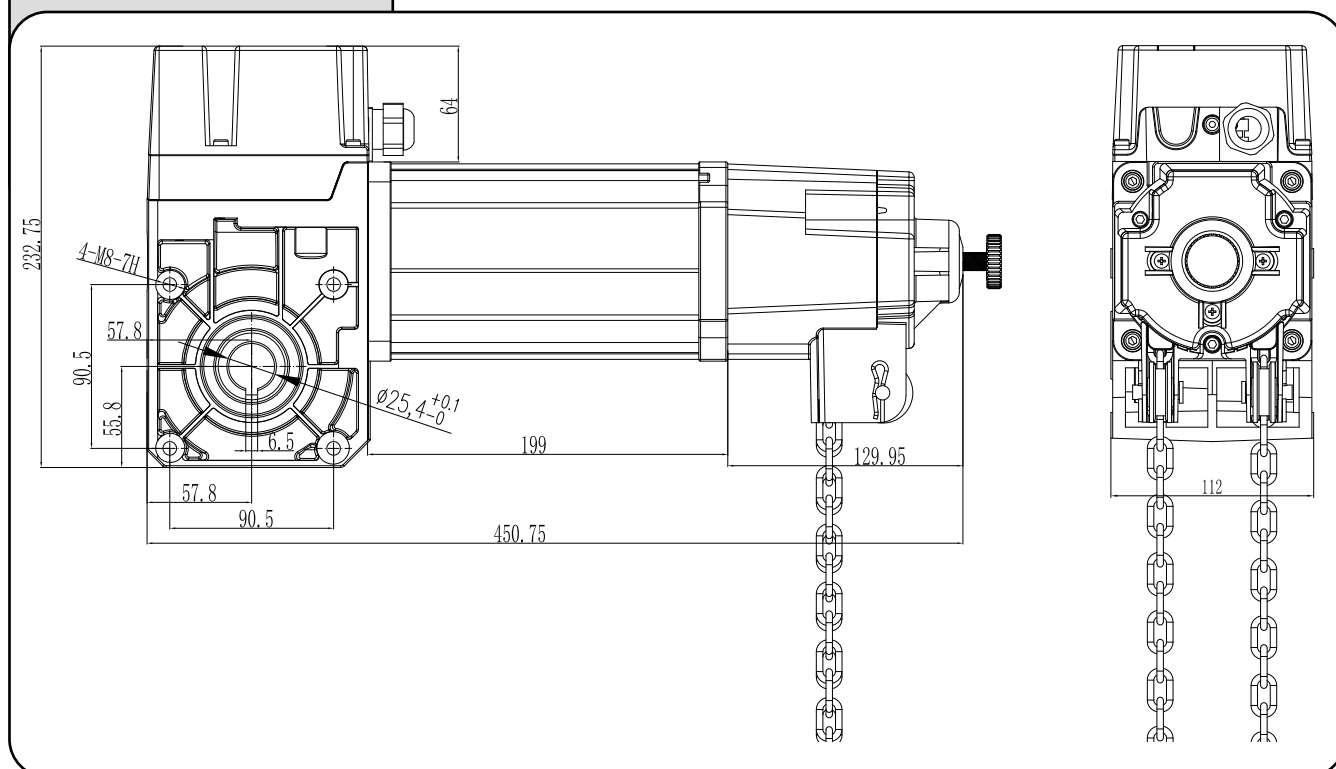
Only use original spare parts from our company.

2. Product Size

90NM



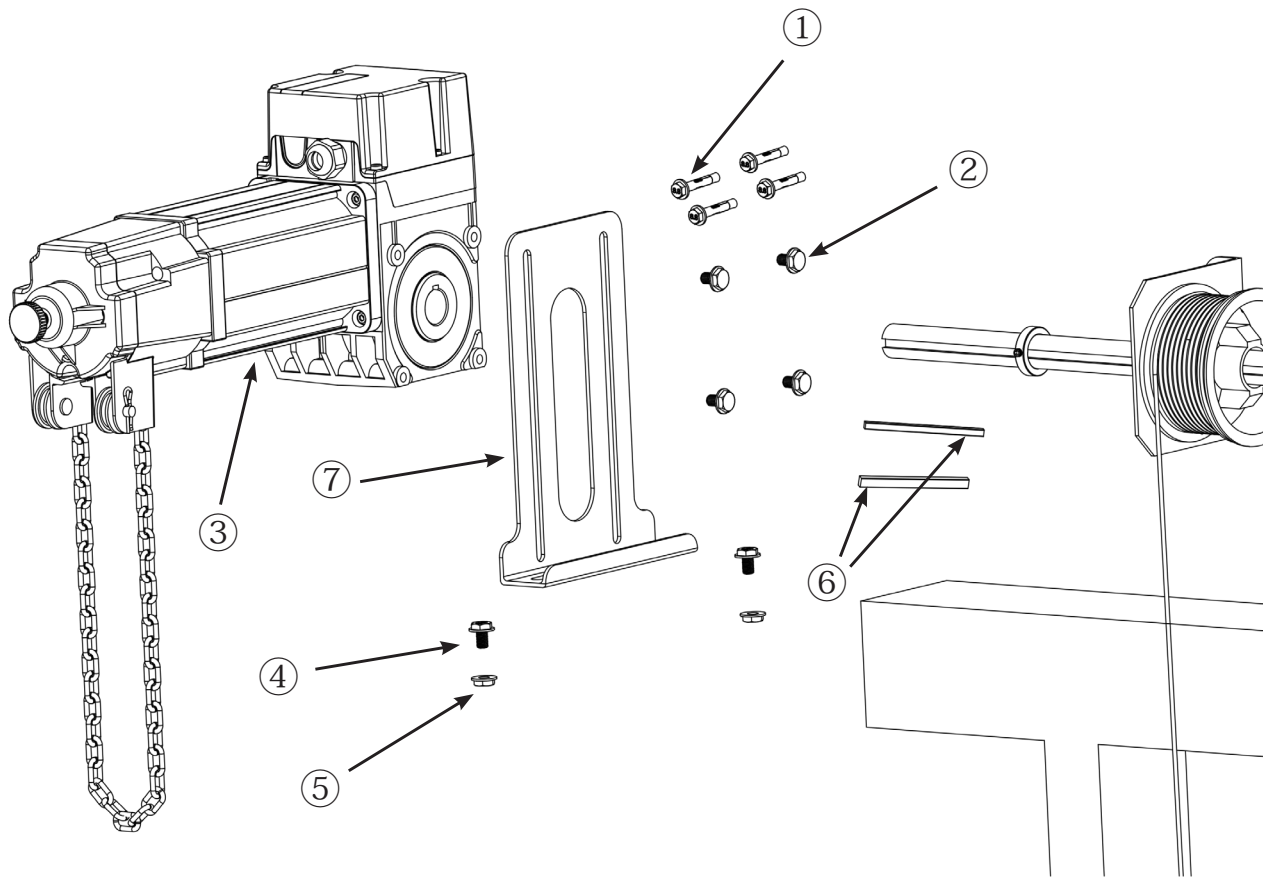
140NM



3. Technical Specifications

Series	AC90 (220V)	AC90 (400V)	AC140 (400V)
Max. output torque (N.m)	100N.m	100N.m	150N.m
Rated output torque (N.m)	90N.m	90N.m	140N.m
Output speed (rpm) f= (20-83Hz)	24rpm (50Hz)	24rpm (50Hz)	24rpm (50Hz)
Output shaft/hollow shaft (mm)	φ25.4/31.8mm	φ25.4/31.8mm	φ25.4/31.8mm
Static holding torque (N.m)	400N.m	400N.m	400N.m
Door area (m ²)	30 m ²	30 m ²	40 m ²
Input voltage (V)	220V(1+10%), 50Hz	400V(1+10%), 50Hz	400V(1+10%), 50Hz
Motor power (KW)	0.7KW	0.7KW	0.85KW
Thermal protection temperature (°C)	120°C	120°C	120°C
Max. cycles per hour (Cycle)	20 cycles	20 cycles	20 cycles
Duty rating	S3=40%ED	S3=40%ED	S3=40%ED
Class of protection	IP54	IP54	IP54
Limit switch range (maximum revolutions of output shaft /hollow)	15turns	15turns	15turns
Temperature range (°C)	-20°C~ +60°C	-20°C~ +60°C	-20°C~ +60°C

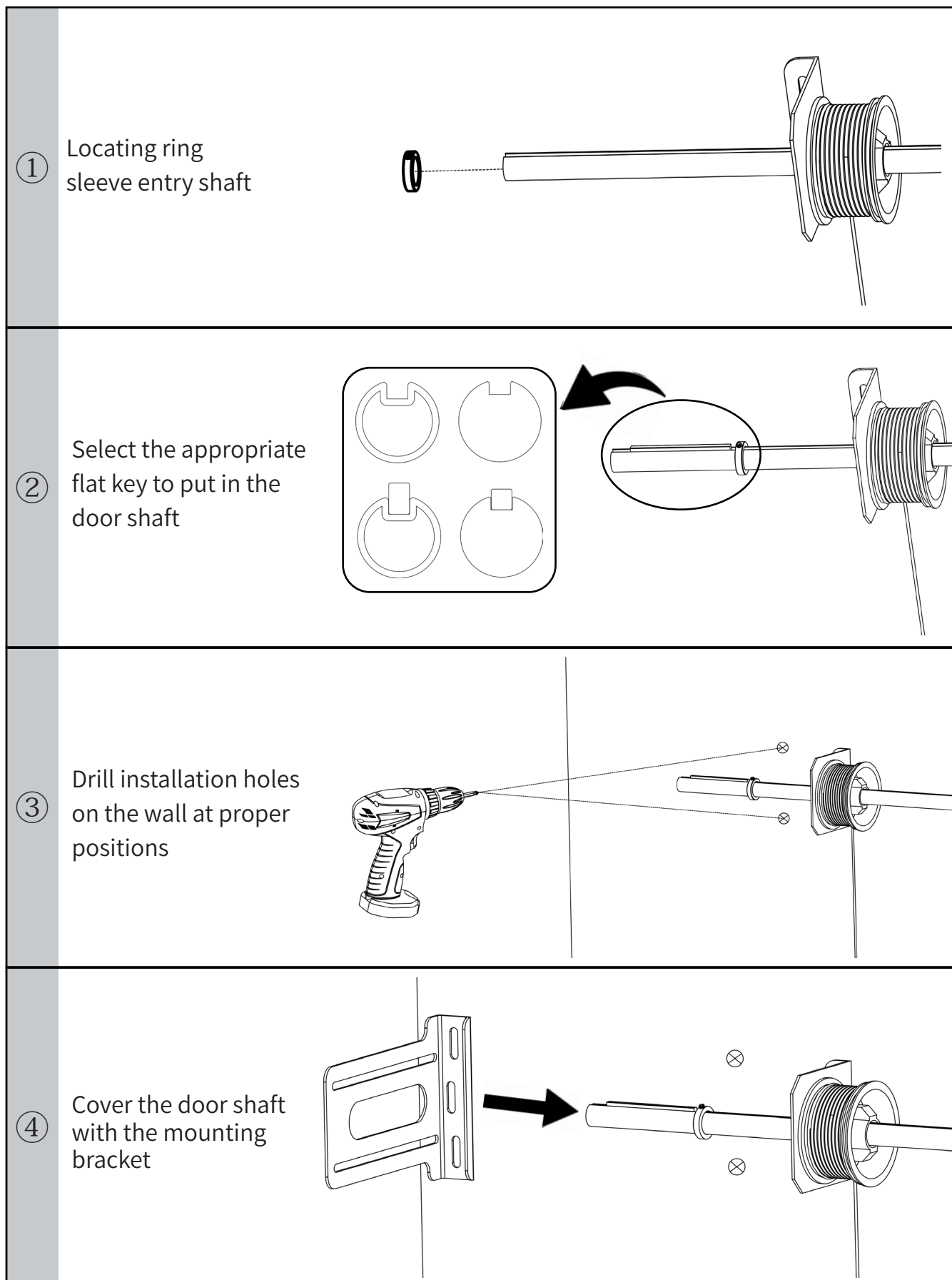
4.Product Packing List



Number	Part Name	Quantity
①	Metal Expansion Bolt	4
②	Hexagon Flange Bolts 8*12mm	4
③	Motor	1
④	Hex Bolts 8*20mm	2
⑤	Hex Flange Nuts	2
⑥	Thick Flat Key Thin Flat Key	2
⑦	Heavy Duty Mounting Bracket	1

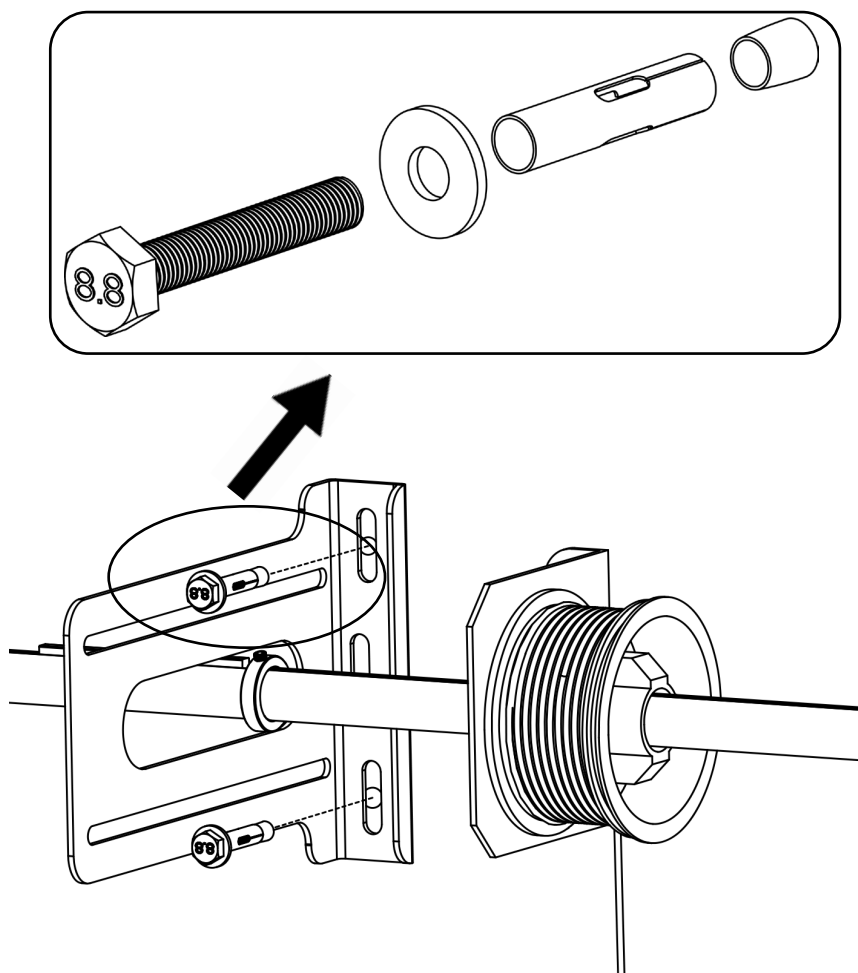
5.Mechanical Installation

1.Mounting Bracket and Wall Fixing Method



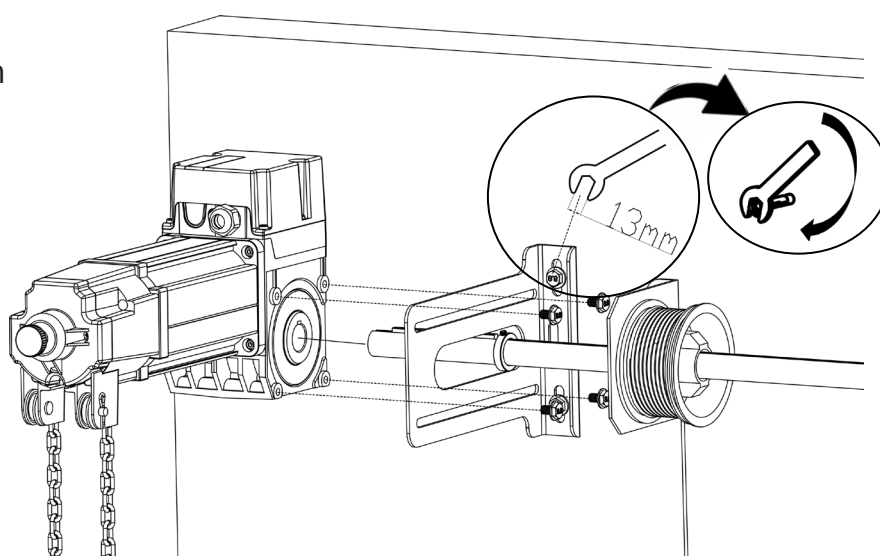
⑤

Align and install
the bracket into the
expansion bolt

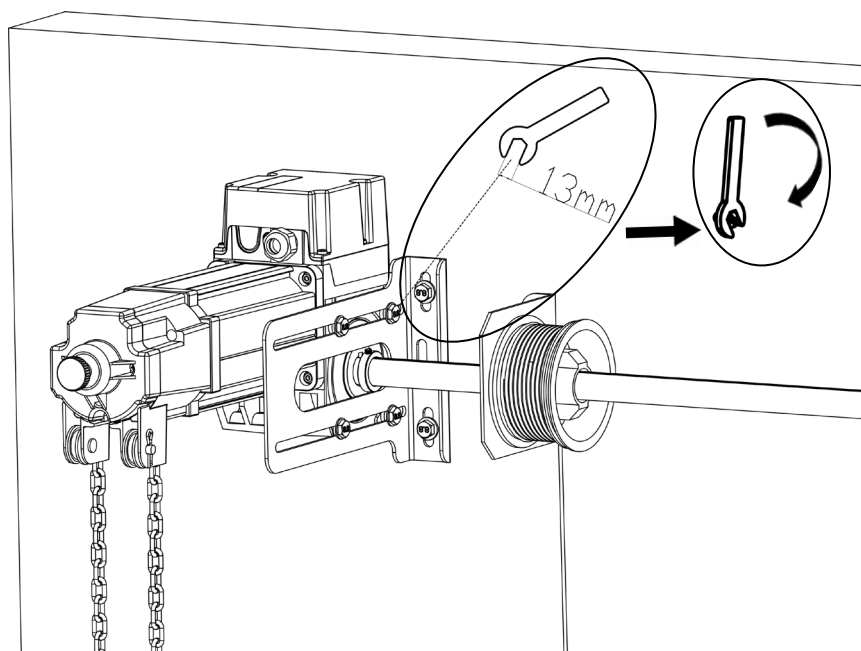


⑥

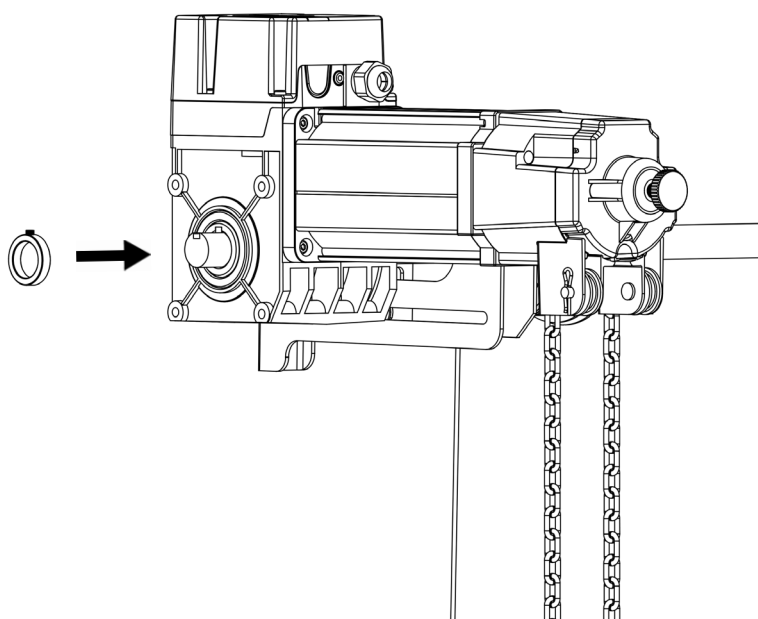
Use a 13mm locking tool
on the opposite
side to lock the bolt and
the bracket (torque:
25Nm), put the motor on
the door shaft and
prepare 4 pieces of
M8*12mm flange bolts



- ⑦ Tighten the bolts with a 13mm locking tool

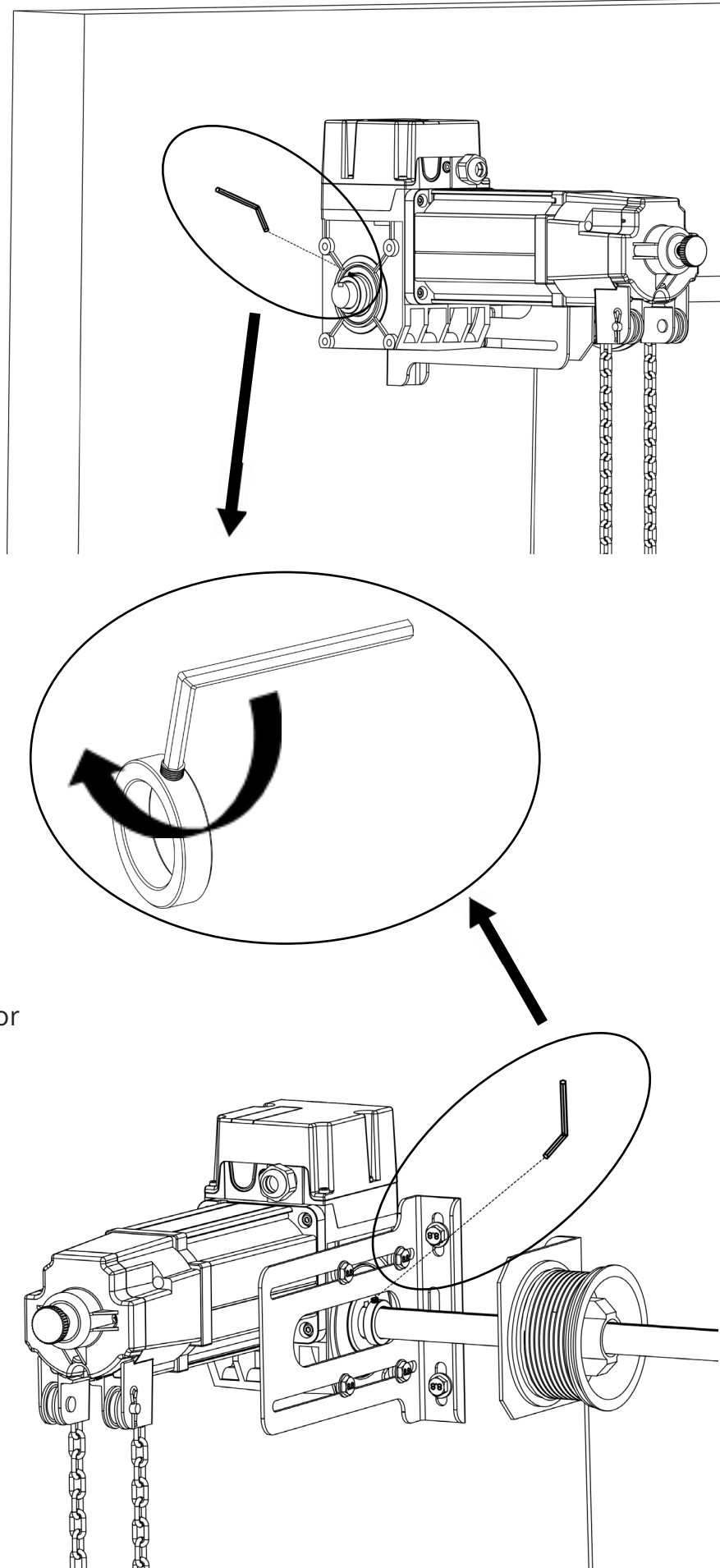


- ⑧ Set into the positioning ring



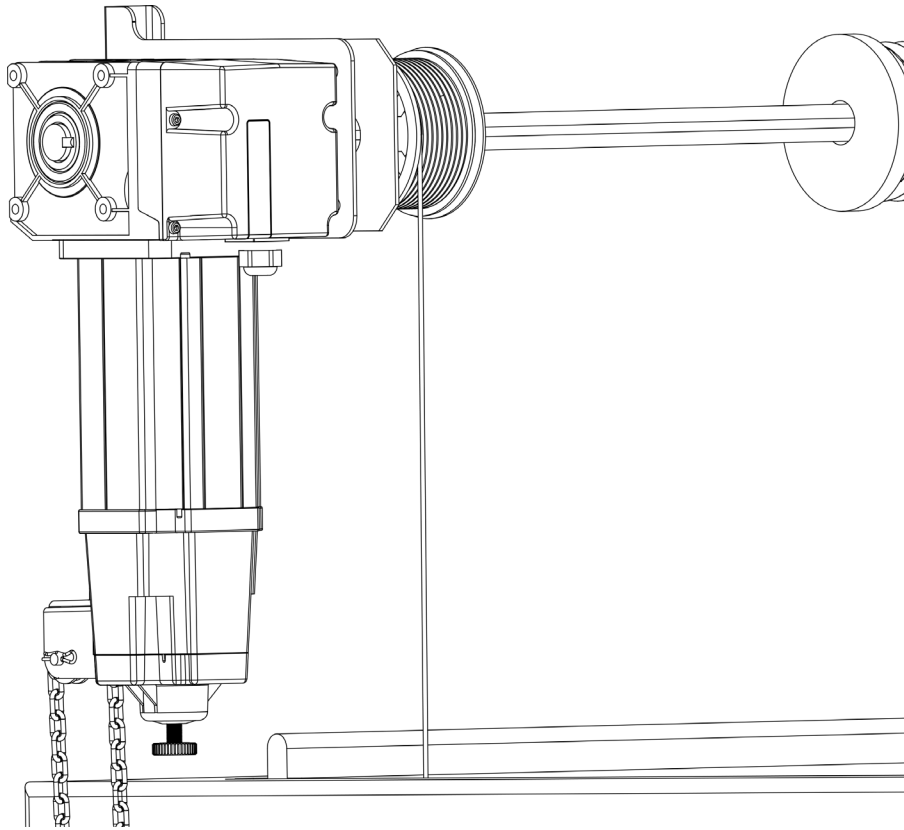
9

Use a 4 mm hexagonal tool on opposite sides to lock the retaining rings on both sides of the motor

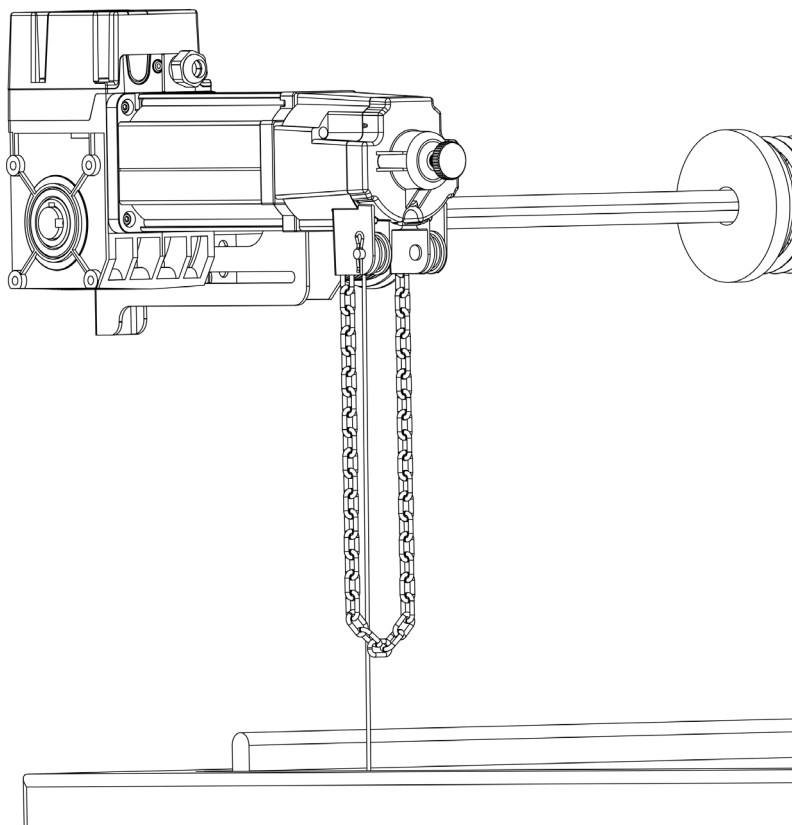


2.Motor Allowed Installation Location

Vertical



Horizontal



6. Emergency Manual Operation (Rapid Hand Chain Operator)

Emergency manual operation to open or close the door without power. Immediately after activation, the control power supply is interrupted, and electrical operation will not be possible.



WARNING: **Improper operation will cause injury!**

- Off voltage
- Choose a safe location
- For industrial door openers with brakes, emergency manual operation must first close the brakes



WARNING: Risk of falling door!

If you need to apply a force exceeding the permitted 390N (according to EN 12604/EN 12453) to move the door via emergency manual operation, this is an indication that the industrial door opener or the door has stalled and loosening the stop may cause the door to fall.

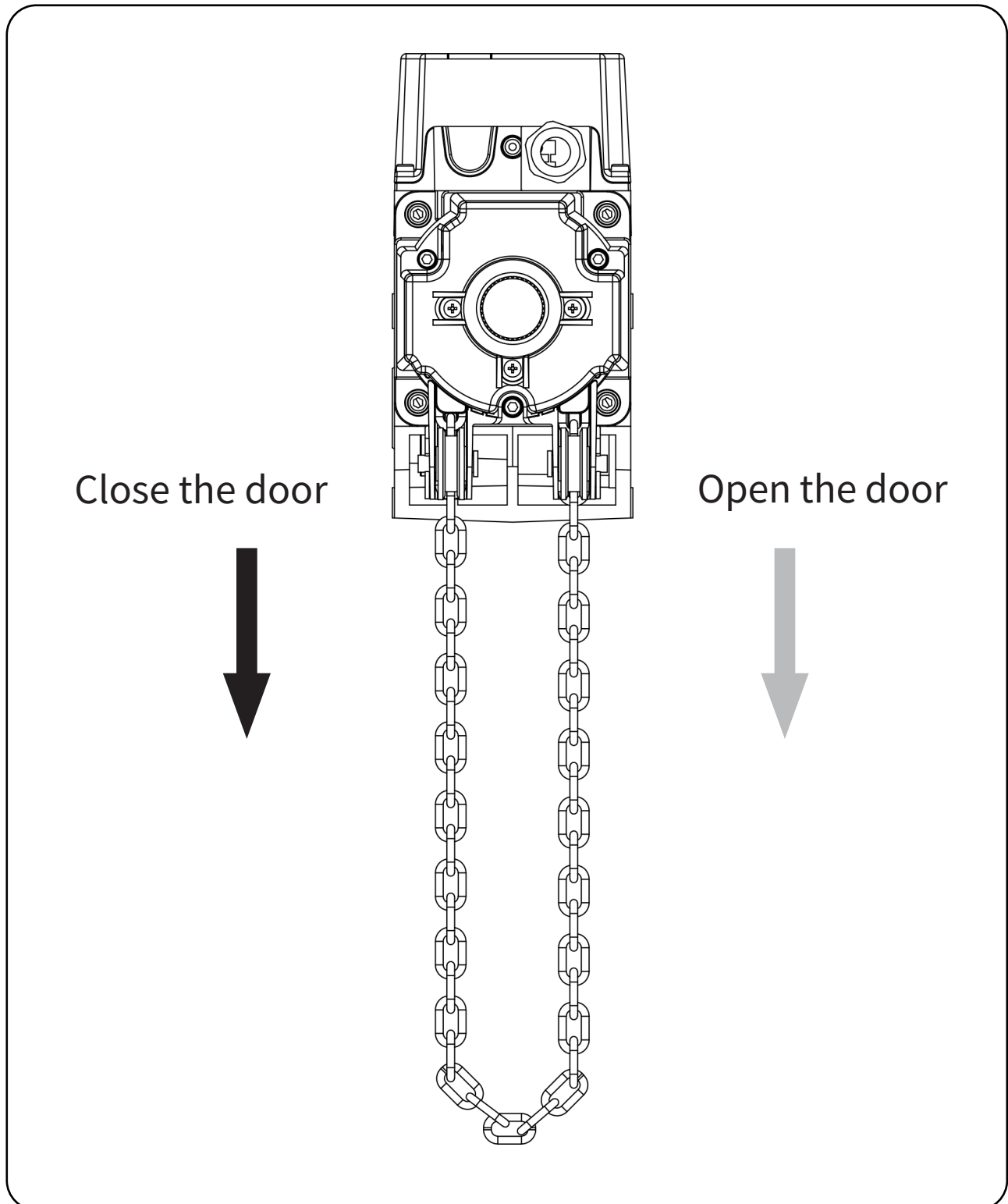
- Choose a safe location
- For industrial door openers with brakes, emergency manual operation must first close the brakes



WARNING - PARTS DAMAGED!

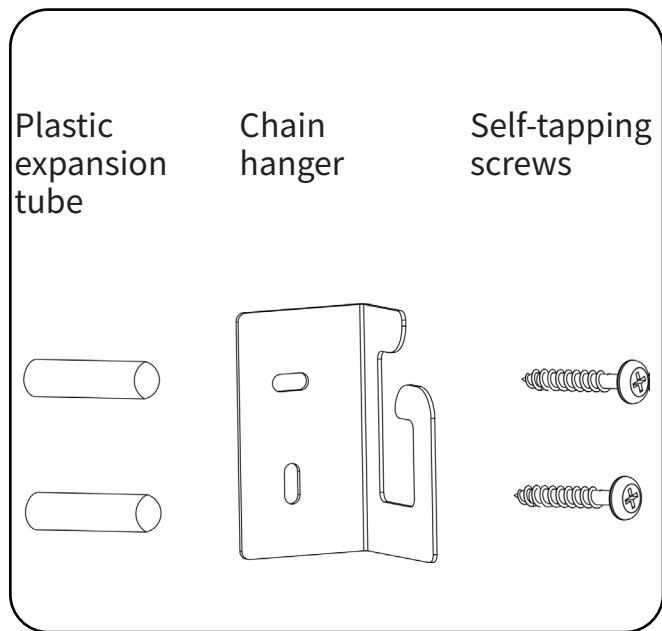
- Do not move the door beyond the final limit position.

- Pull either end or bottom of the chain, then the motor stops working.
- At this point, if you trigger the motor, the digital display will show 
- Pull the chain on the left and the door will close.
- Pull the chain on the right and the door will open.
- Loosen the chain, the motor returns to normal, and the control box can control the motor.

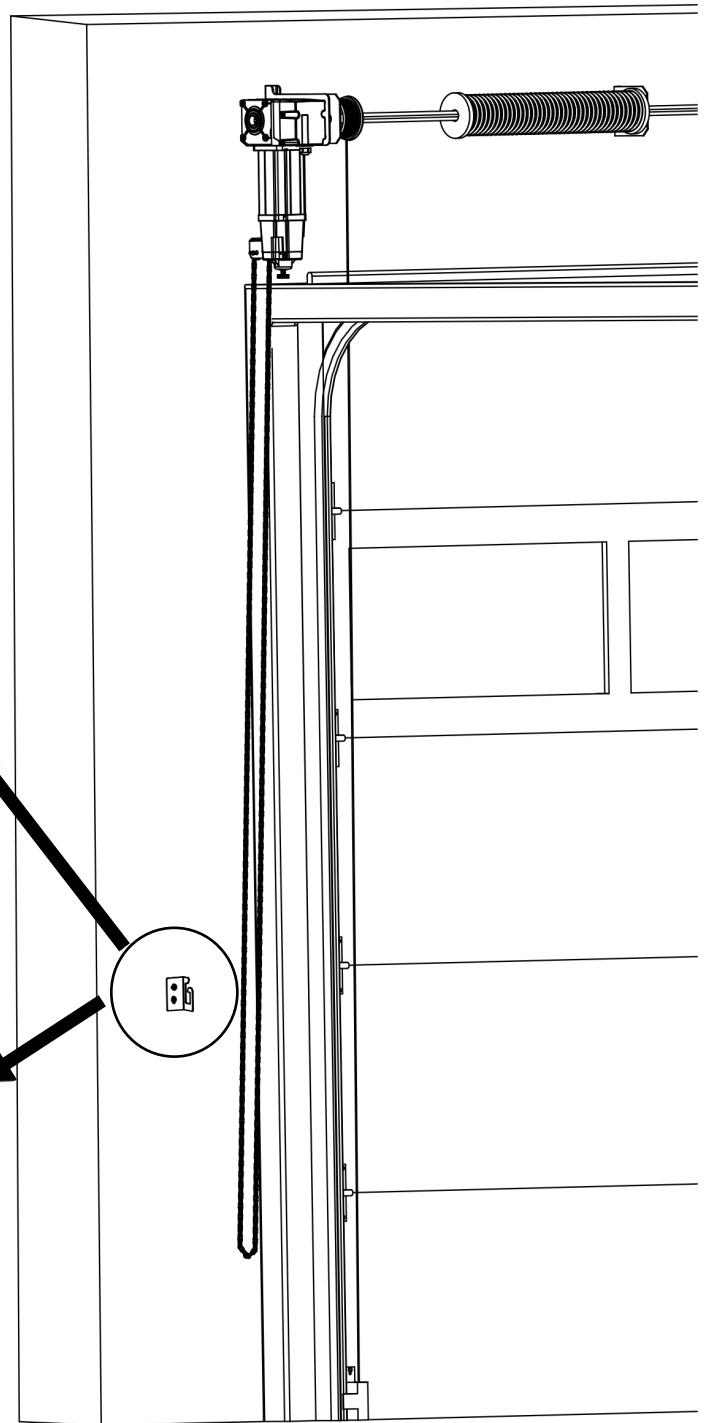
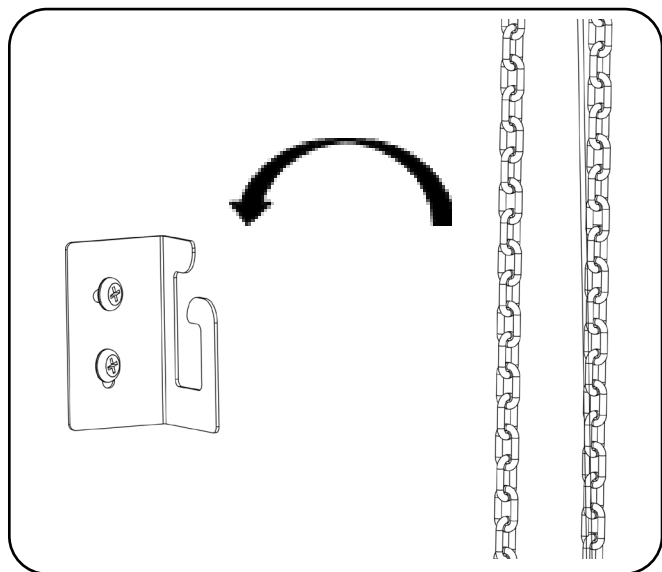


7.Chain Hanger

Chain hanger installation: Drill installation holes on the wall, put the expansion tube in, and fix the chain hanger to the wall with two 5*25mm self-tapping screws.



When the chain is not used daily, hang the chain in the chain hanger.



8. Complete Commissioning/Inspection

Check the following parts, then install all enclosures.

Gearbox

Check the industrial door opener for oil leaks (a few drops are negligible). The output shaft is protected against corrosion.

Connectors, Fasteners

Check that all connections and fasteners (motor, mounting brackets, bolts, retaining rings, etc.) are correctly installed and in the correct position.

Electric Wire

Check the connection and power cords for damage or crushing. Check that the connector and power plug connections are installed correctly.

Emergency Manual Operation

In the case of power failure, check the function, and the door body cannot exceed the set open and close limit range.

Limit Switch

Check the set limit position by fully opening and closing.
It cannot exceed the limit range of the door body, and cannot exceed the maximum limit circle of the product.

Industrial Door Opener

In the case of power failure, check the function, and the door body cannot exceed the set open and close limit range.

! Notice

Have a qualified engineer inspect the drives annually, applying shorter inspection intervals to frequently operated doors.