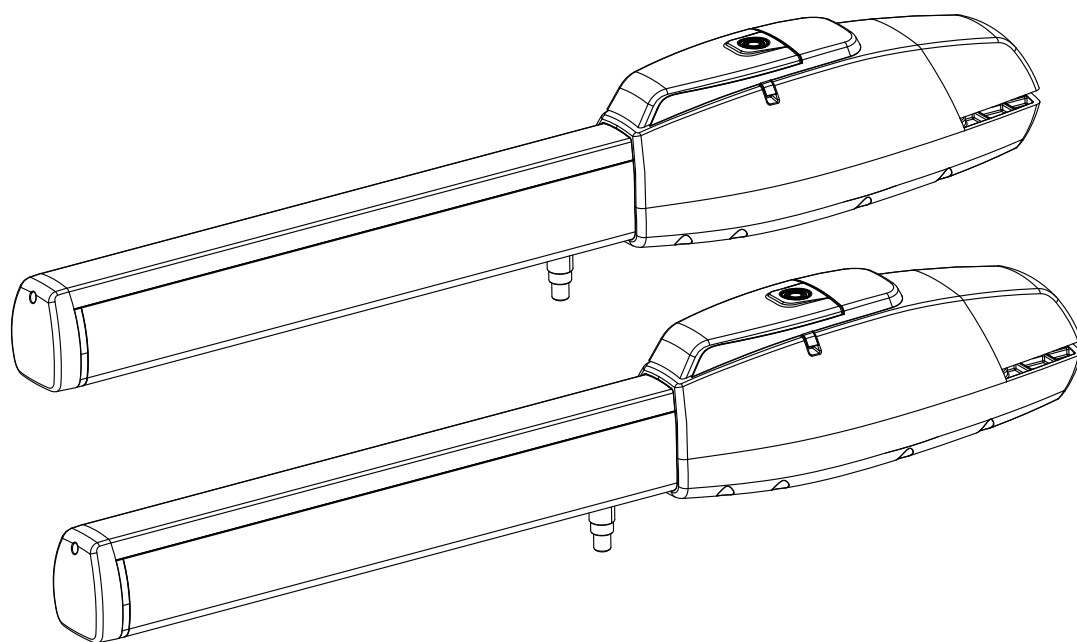


MASTIFF300L

SWING GATE OPENER

USER MANUAL



Reuse
Reduce
Recycle



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1.1 GENERAL PRECAUTION:

WARNING :

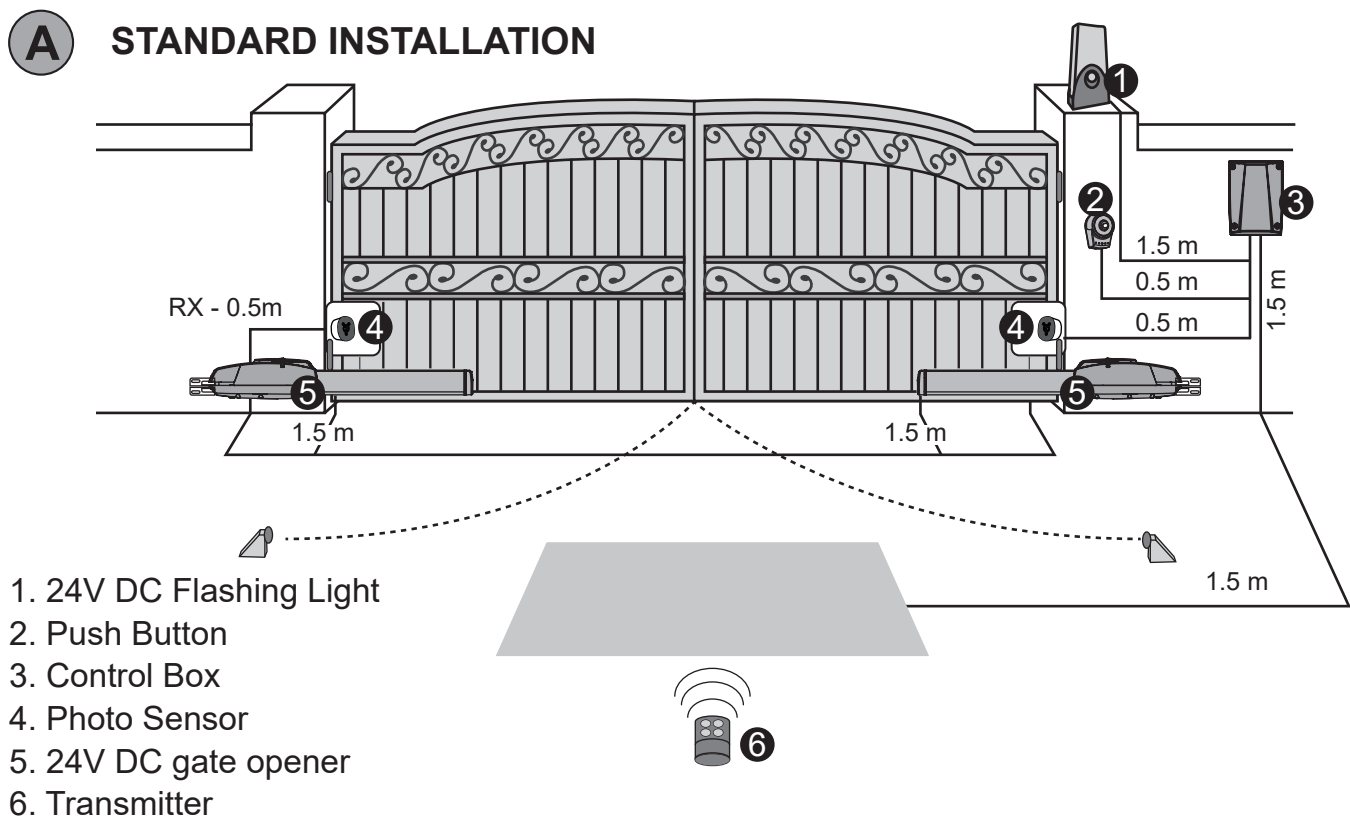
This user manual is only for qualified technicians who is specialized in installations and automations.

- (1) All installations, electrical connections, adjustments and testing must be performed only after reading and understanding of all instructions carefully.
- (2) Before carrying out any installation or maintenance operation, disconnect the electrical power supply by turning off the magneto thermic switch connected upstream and apply the hazard area notice required by applicable regulations
- (3) Make sure the existing structure is up to standard in terms of strength and stability
- (4) When necessary, connect the motorized gate to reliable earth system during electricity connection phase.
- (5) Installation requires qualified personnel with mechanical and electrical skills.
- (6) Keep the automatic controls (remote, push bottom, key selectors...etc) being placed properly and away from children.
- (7) For replace or repair of the motorized system, only original parts must be applied. Any damage caused by inadequate parts and methods will not be claimed to motor manufacturer.
- (8) Never operate the drive if you have any suspect with what it might be faulty or damage to the system.
- (9) The motors are exclusively designed for the gate opening and closing application, any other usage is deemed inappropriate. The manufacture should not be liable for any damage resulting from the improper use. Improper usage should void all warranty, and the user accepts sole responsibility for any risks thereby may accrue.
- (10) The system may only be operated in proper working order. Always follow the standard procedures by following the instructions in this installation and operating manual.
- (11) Only command the remote when you have a full view of the gate.

TMT AUTOMATION INC. shall not be liable for any injury, damage, or any claim to any person or property which may result from improper use or installation of this system.

Please keep this installation manual for future reference.

1.2 STANDARD INSTALLATION



B DIMENSION CHART

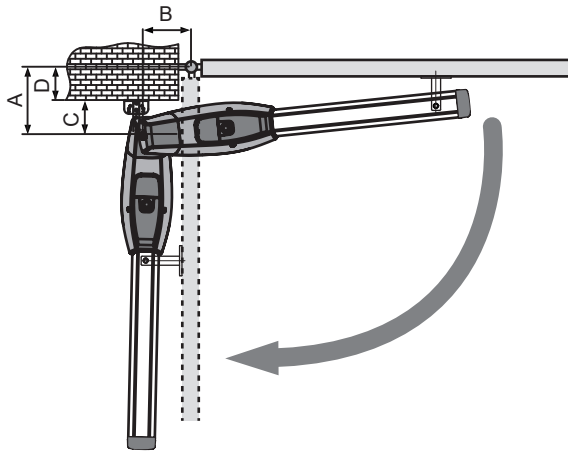
Comply with the measures shown on the chart for proper installation. Adjust the gate structure to fit it for best automation, if necessary.

Before preceding the installation, be sure that gate moves freely and that:

- 1) Hinges are properly positioned and greased.
- 2) No obstacles in the moving area.
- 3) No frictions between two gate leafs or with the ground while moving
- 4). "C" value is 139mm.
- 5). "D" can be measured from the gate easily.
- 6). "A" = "C" + "D"
- 7). The value of "B" can be calculated from the value of "A" and the leaves opening angle.

Ex. If "A"=160mm with the leaves opening angle of 100 degrees, then the value of "B" is approximate 190mm.

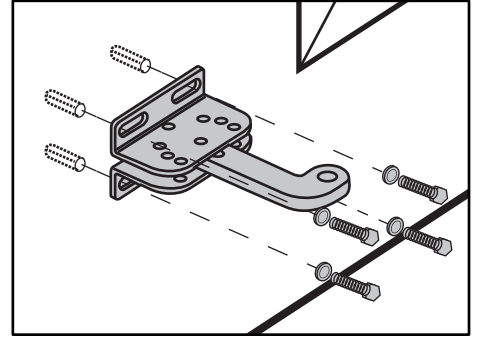
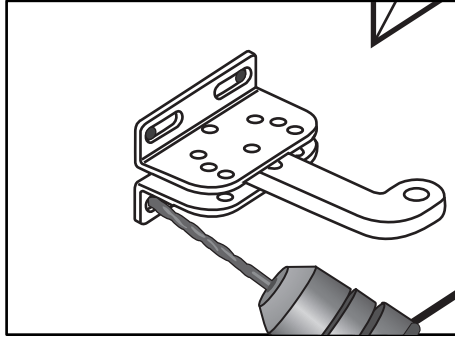
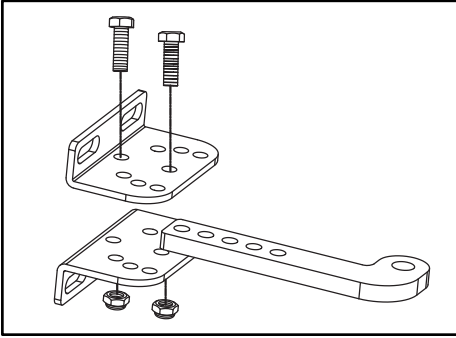
**Please make sure "B" and "A" are similar or the same in value that the leaves can be operated smoothly, also to reduce the burden of the motor.



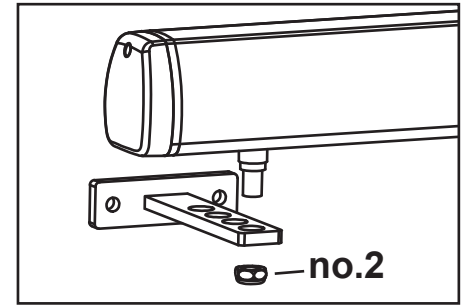
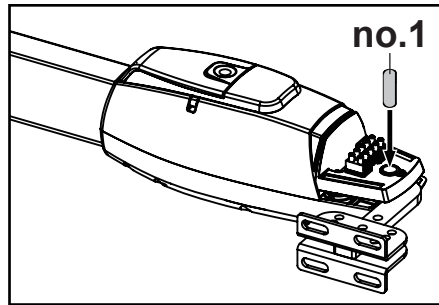
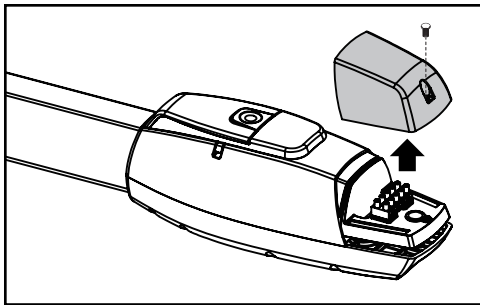
A \ B	140	150	160	170	180	190	200	210
140								
150								
160								
170								
180								
190								
200								
210								

C MOTOR FIXING

Assemble the rear bracket and fix it on the pillar.



Remove the wire cover and fix the rear bracket with the pin. Release the gate opener and place the pin into the fitting position no.1 and no. 2

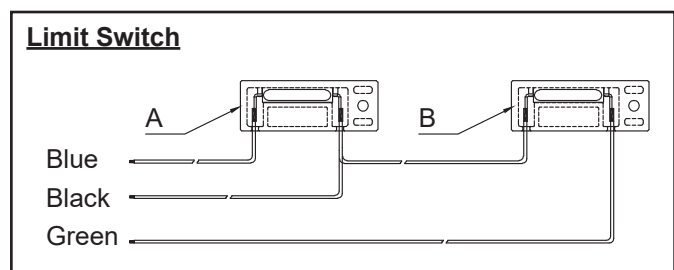
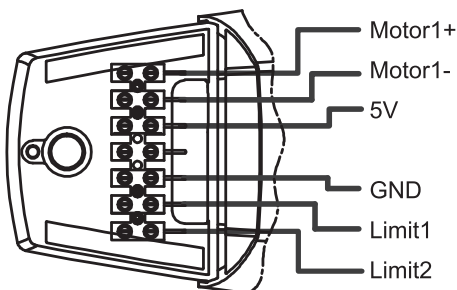


Make sure the gate openers are mounted in horizontal position especially in those positions.

- 1) Gate in "CLOSE" position
- 2) Gate in "OPEN" position
- 3) Gate at "45 ° angle" position

Prior to weld the bracket on the gate leaf(if necessary), cover the gate opener to prevent damages from sparks.

D WIRE CONNECTION



- (1) Avoid tension in the cable during open and close phase.
- (2) Always connect the grounding wire(GND)

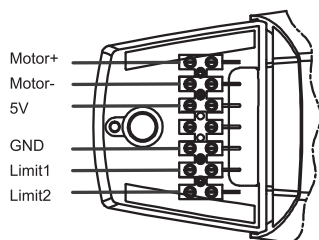
- (1) Avoid tension in the cable during open and close phase.
- (2) Always connect the grounding wire(GND)

E

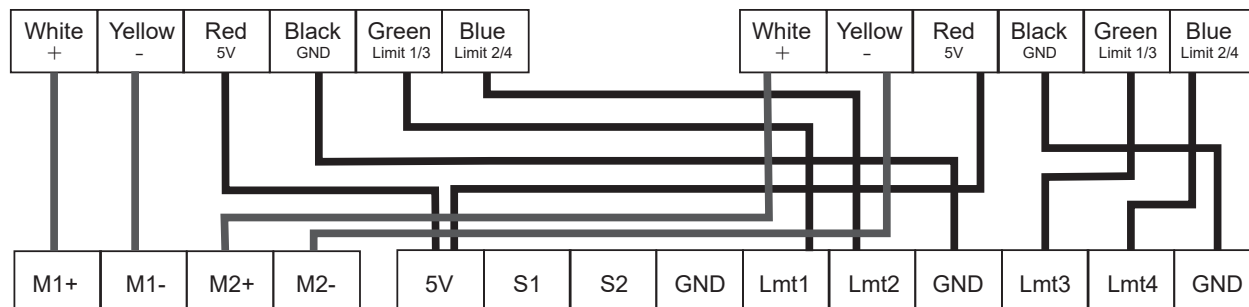
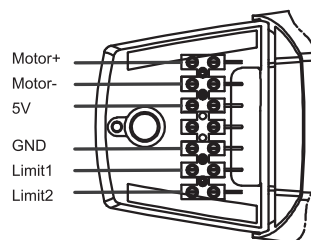
LED INDICATOR REACTION

Wire connection_Open inward

Left Motor



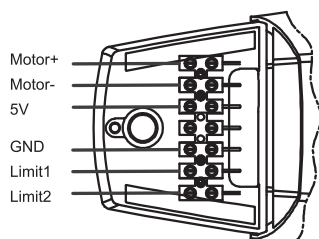
Right Motor



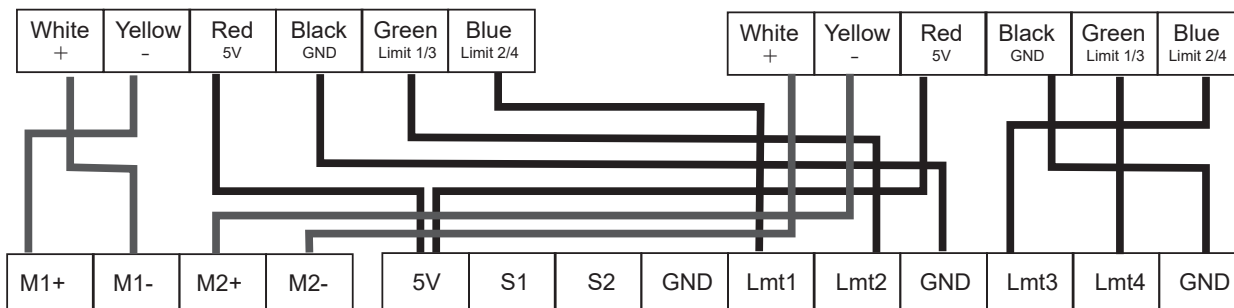
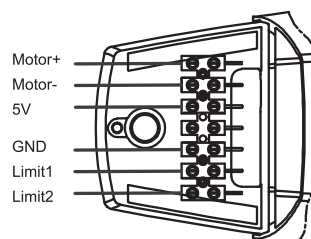
Terminals of the CB19 control panel

Wire connection_Open Outward

Left Motor



Right Motor



Terminals of the CB19 control panel

F EMERGENCY RELEASE

In case of power failure, push the lid of release chamber and move forward. Insert the key and turn clockwise to unlock, then turn around the knob to release. To restore the automation, simply reverse the above procedures.

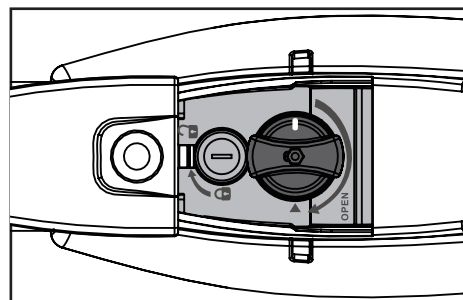
Step1. Push the lid of release chamber and move forward

Step2. Insert the key and turn clockwise to the unlock position

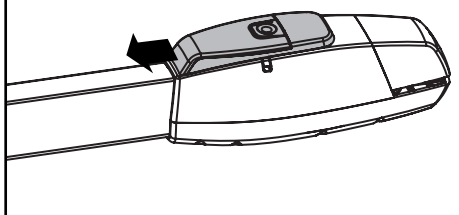
Step3. then turn clockwise the knob to release the motor.

Make sure the White bar on the knob is on the position opposite to the triangle indication.

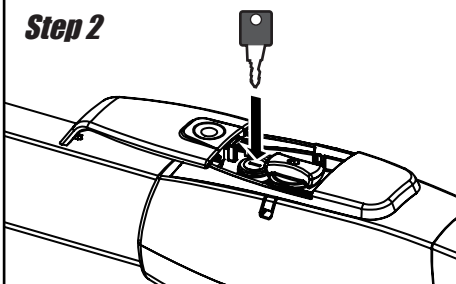
To restore the automation, simply reverse the above procedure.



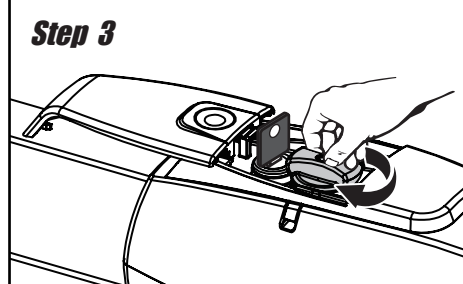
Step 1



Step 2



Step 3

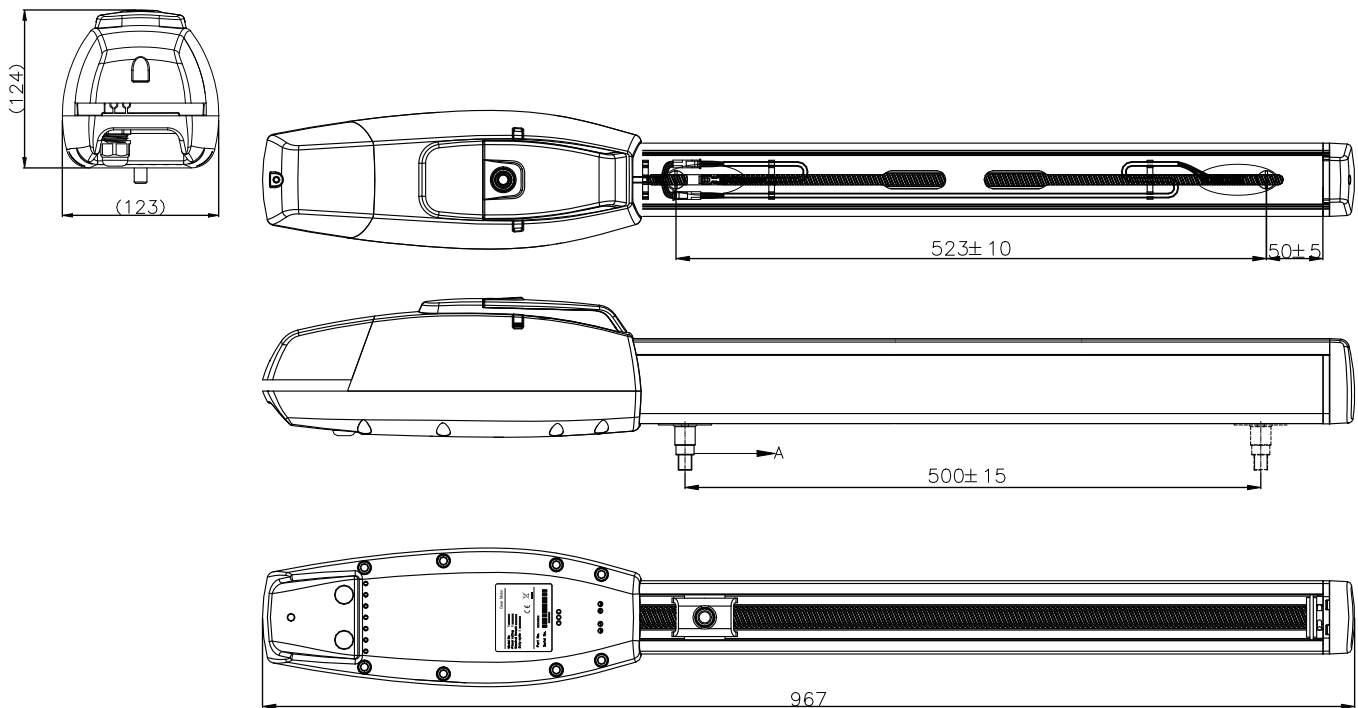


1.3 TECHNICAL FEATURES :

A. Technical Feature:

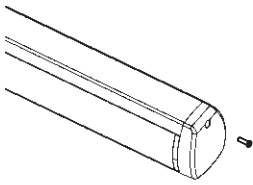
Motor	24Vdc motor with mechanical release
Gear Type	Worm gear
Max Absorbed Power	144W
Peak Thrust	3000N
Nominal Thrust	3000N
Stroke Length	540mm
Power Supply	24Vdc
Nominal Input Power	2A
Maximum Operating Current	5.5A for maximum 10 seconds.
Maximum Gate Weight	500 kg per leaf
Maximum Gate Length	5 meters
Duty Cycle	20%
Operating Temperature	-20°C ~+50°C
Dimension	967mm * 123mm * 124mm
Weight	6.8kg

B. Dimension:

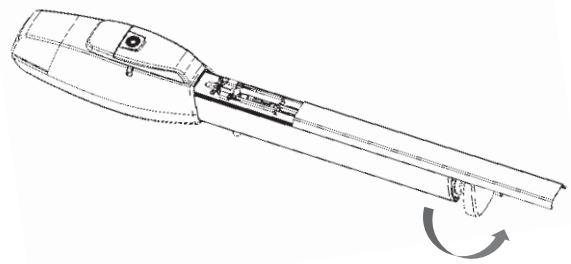


1.4 LIMIT SWITCH ADJUSTMENT

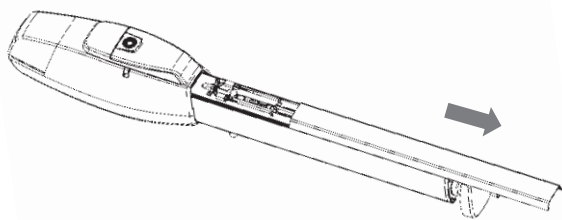
1. Remove the screw on the anti-shaking ring



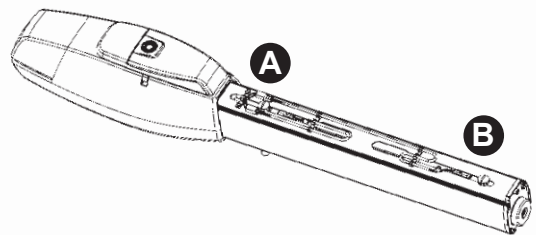
2. Turn the anti-shaking ring



3. Remove the upper-cover of the outer tube and reveal two Knobs of the front and rear limit switch



4. Adjust two Knobs to set the open and close position

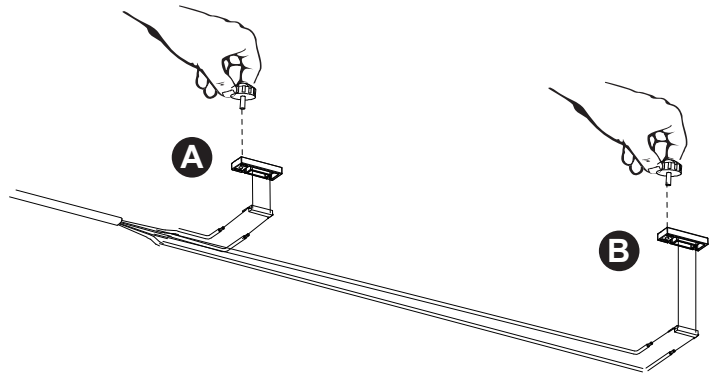


Opening position:

1. Loosen the screw of limit switch A by hands.
2. Slide the switch to the right position.
3. Tighten up the screw.

Closing position:

1. Loosen the screw of limit switch B by hands.
2. Slide the switch to the right position.
3. Tighten up the screw.



1.5 MAINTENANCE

Conduct the following operations at least every 6 months. If in high intensity of use, shorten the period in between.

Disconnect the power supply:

- (1) Clean and lubricate the screws, the pins, and the hinge with grease.
- (2) Check the fastening points are properly tightened.
- (3) Make the wire connection are in good condition.

Connect the power supply:

- (1) Check the power adjustments.
- (2) Check the function of the manual release.
- (3) Check the function of photocells or other safety device.

