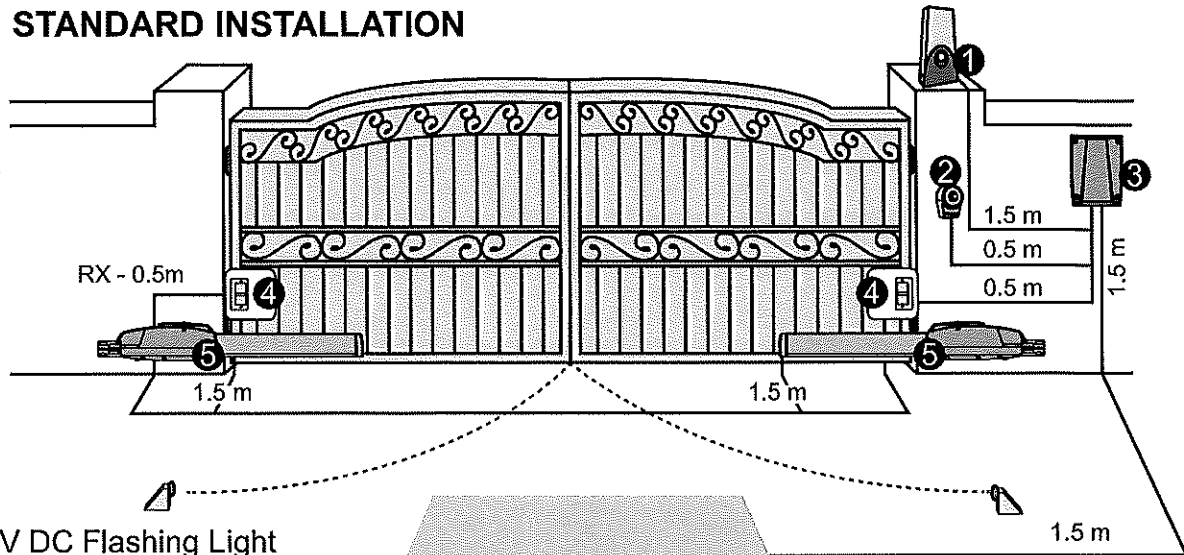


1.2 STANDARD INSTALLATION

MASTIFF 300

A STANDARD INSTALLATION



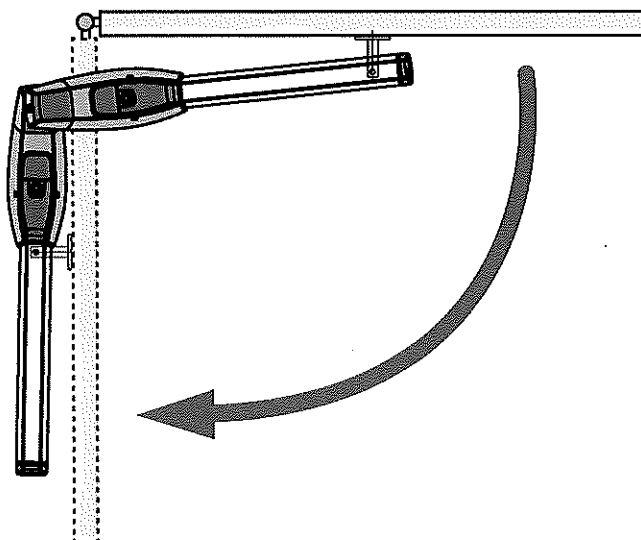
1. 24V DC Flashing Light
2. Push Button
3. Control Box
4. Photo Sensor
5. 24V DC gate opener
6. Transmitter

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 leaves or with the ground while moving



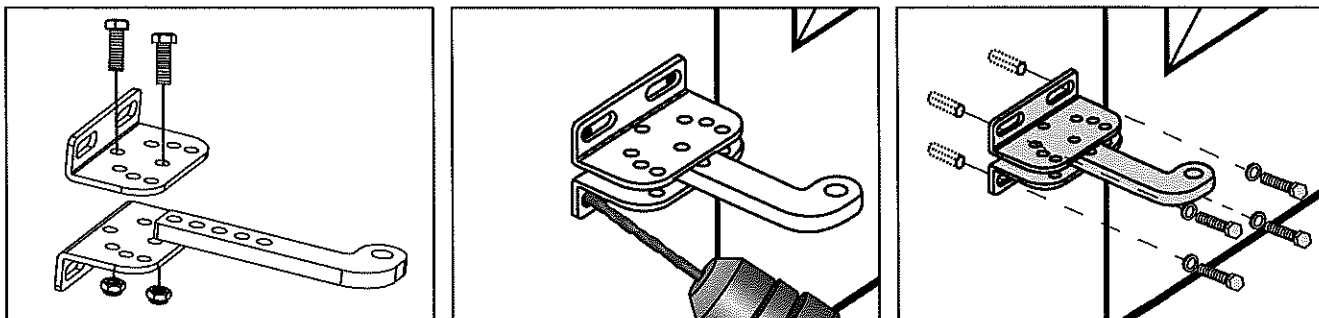
A \ B	140	150	160	170	180	190	200	210
140								
150								
160								
170								
180								
190								
200								
210								

Diagram showing the relationship between gate height (A) and gate width (B) for proper installation. The chart is a grid with A on the vertical axis (140 to 210) and B on the horizontal axis (140 to 210). The chart is divided into regions based on the angle of the gate leaf:

- >120° (top-left region, dotted)
- 110°~120° (middle-left region, cross-hatched)
- 100°~110° (bottom-left region, diagonal lines)
- 90°~100° (bottom-right region, diagonal lines)

C MOTOR FIXING

Assemble the rear bracket and fix it on the pillar.

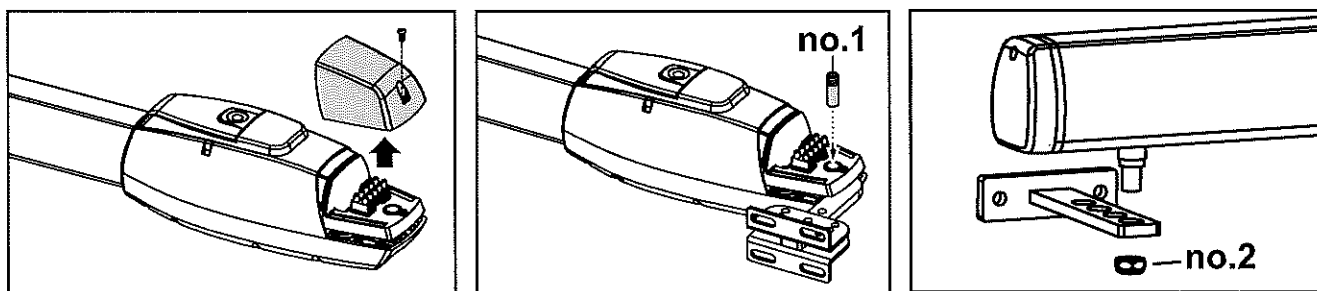


Remove the wire cover and fix the rear bracket with the pin. Release the gate opener and place the pin into the fitting position no.1 and no. 2

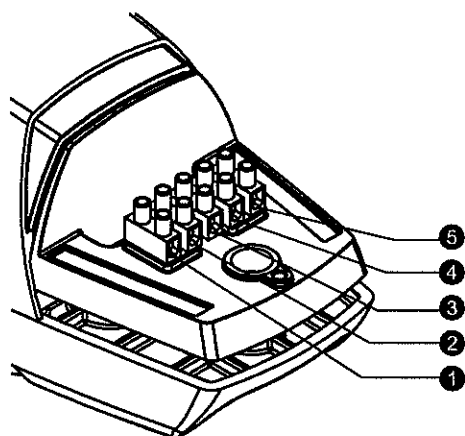
Make sure the gate openers are mounted in horizontal position especially in those positions.

- 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:



TO CONNECT MASTIFF WITH CONTROL UNIT

	Standard/MS Motor		With Hall Sensor
①	White	Motor (+)	Motor (+)
②	Yellow	Motor (-)	Motor (-)
③	Red	-	Hall Sensor (5V)
④	Green	-	Hall Sensor (Signal)
⑤	Black	-	Hall Sensor (GND)

CORRESPONDING CONTROL SYSTEM

Standard/MS Motor	With Hall Sensor
CB16, CB17, CB30	CB20

* MS: Mechanical Stopper

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

E 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.

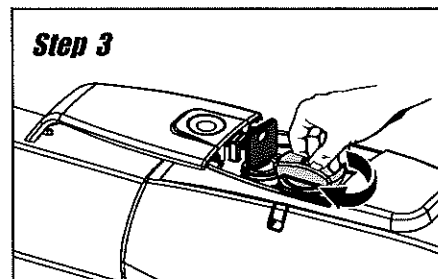
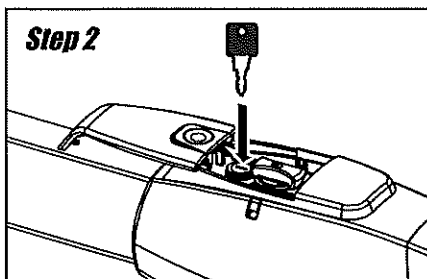
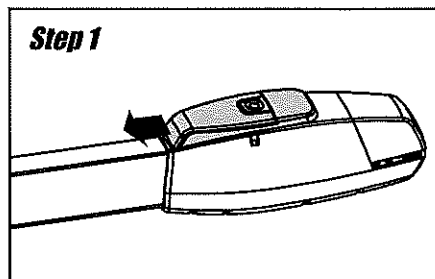
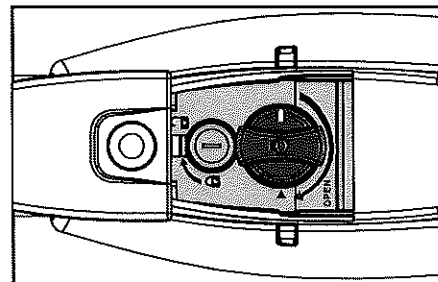
Step1. Push the lid of release chamber and move forward

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.



F MECHANICAL STOPPER ADJUSTMENT

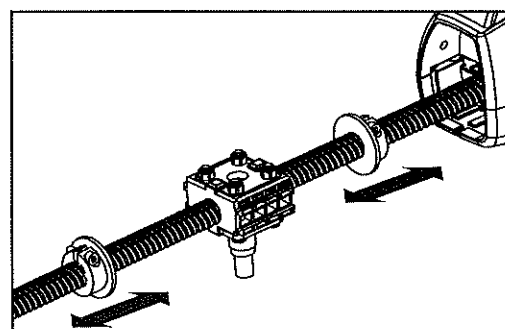
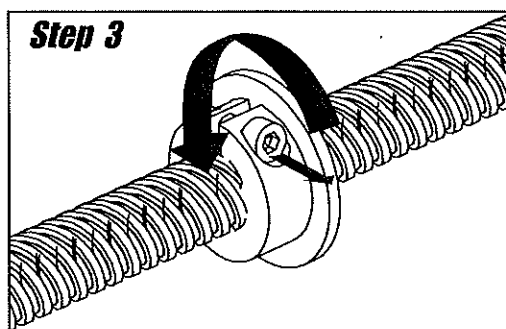
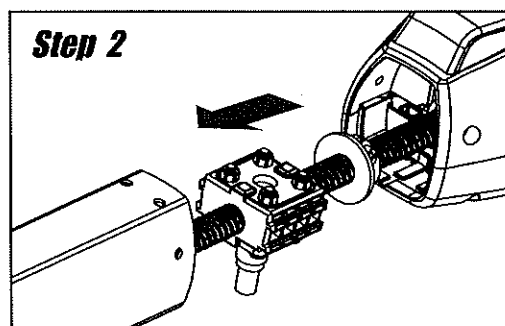
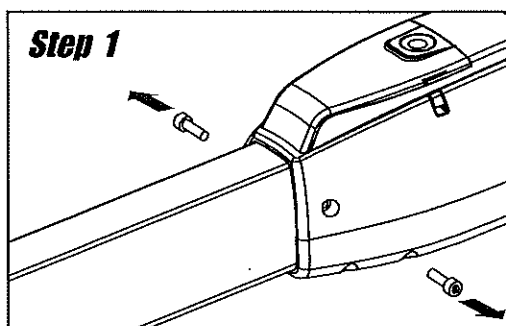
Adjust for the mechanical stopper, follow the below steps:

Step1. Remove the screws on both side of the motor cover

Step2. Push the front external tube forward separate from the motor base

Step3. Release the screw on the mechanical stopper to change the position

* The position of the front and rear mechanical stopper indicates the Open/Close position of the gate

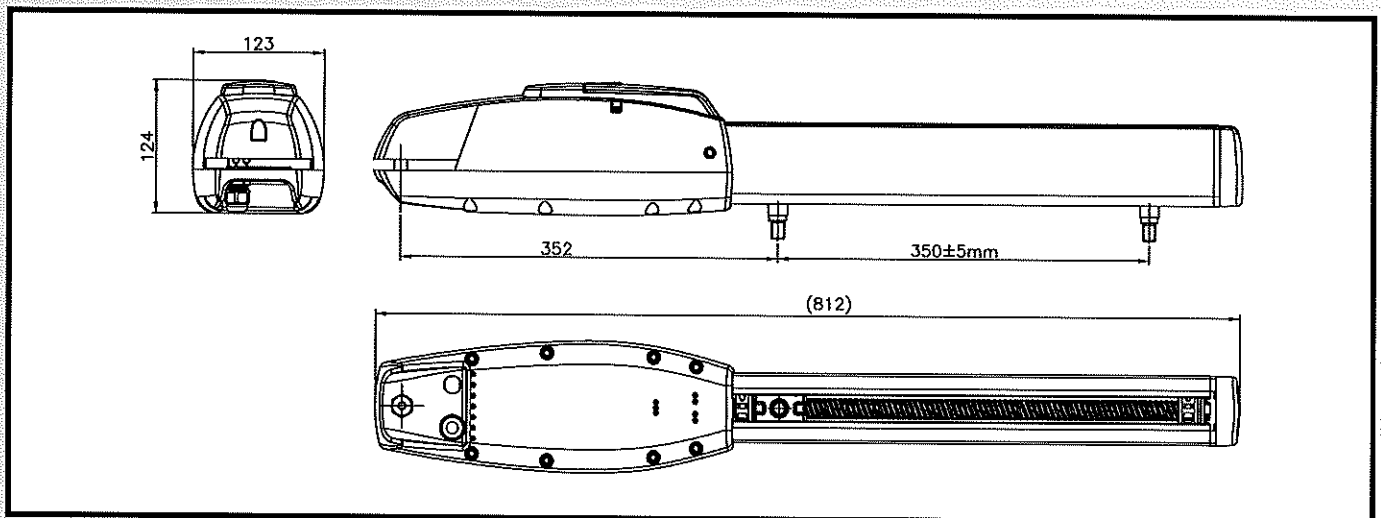


1.3 TECHNICAL FEATURES :

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	350mm
Power Supply	24Vdc
Nominal Input Power	2A
Maximum Operating Current	5.5A for maximum 10 seconds.
Maximum Gate Weight	300 kg per leaf
Maximum Gate Length	3 meters
Duty Cycle	20%
Operating Temperature	-20°C~+50°C
Dimension	837mm * 123mm * 124mm
Weight	6.6kg

B. Dimension:



1.4 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 devise.