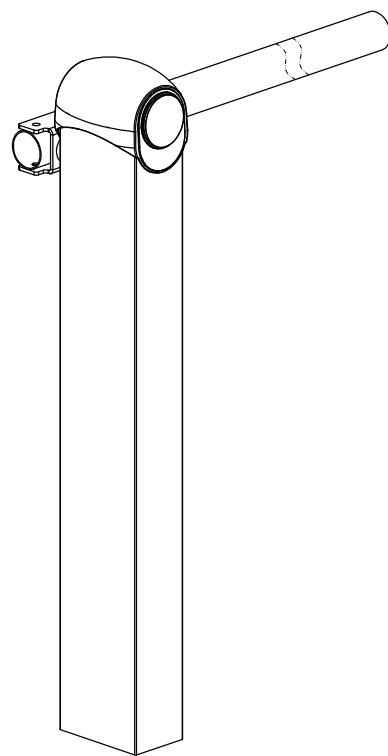


USER MANUAL

Boom Barrier BG-CM-300



WARNING

 **AUTOMATIC BARRIERS ARE NOT FOR PEDESTRIAN!**

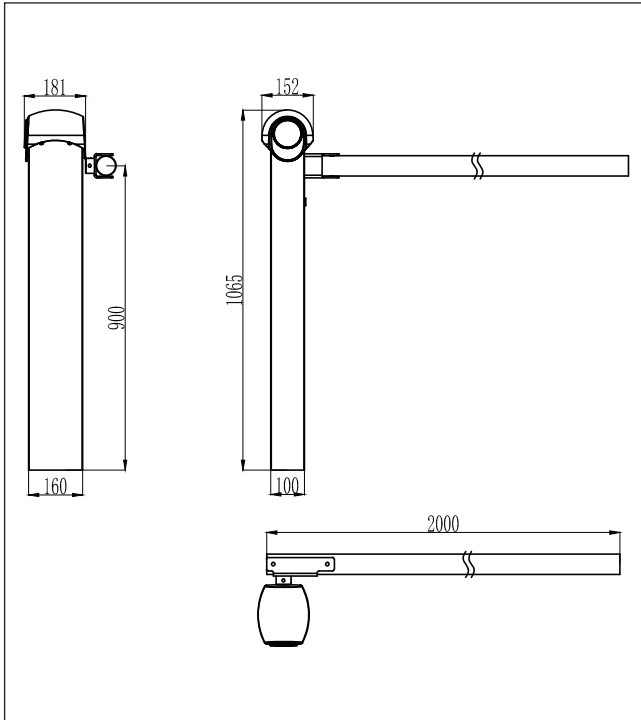
To reduce the risk of INJURY or DEATH, read and follow all instructions.

- NEVER let children operate or play with barrier control. Controller MUST be installed at least 1.5m above the ground.
- PEDESTRIANS SHOULD NOT CROSS THE PATH OF THE MOVING BARRIER.
- Automatic boom barrier is designed for vehicles ONLY. Pedestrians MUST use separate entrance.
- Installation and maintenance MUST be executed by qualified service person. Keep boom barriers properly maintained.
- Ground wire and current breaker MUST be connected.
- Power MUST be cut off when performing installation or maintenance.
- When power outage, power MUST be cut off before using the manual release under the motor to open the barrier.
- ONLY operate when the boom barrier is in sight.
- NEVER perform operating or setting without the boom installed. This WILL result in severe injury.
- NEVER dismount the boom when barrier is at close status with spring attached. This WILL result in severe injury, even death.
- DO NOT replace the original wire.

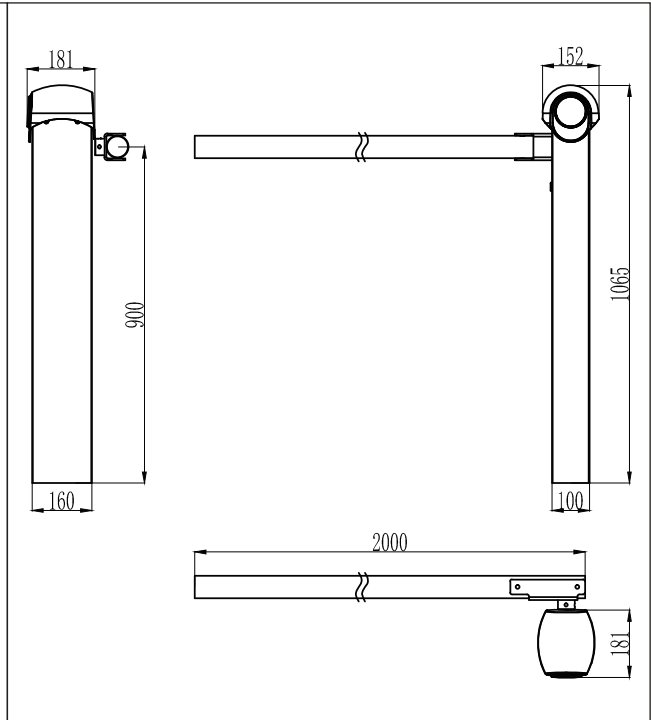
● **SAVE THESE INSTRUCTIONS.**

1. Direction Definition and Main Components of the Machine

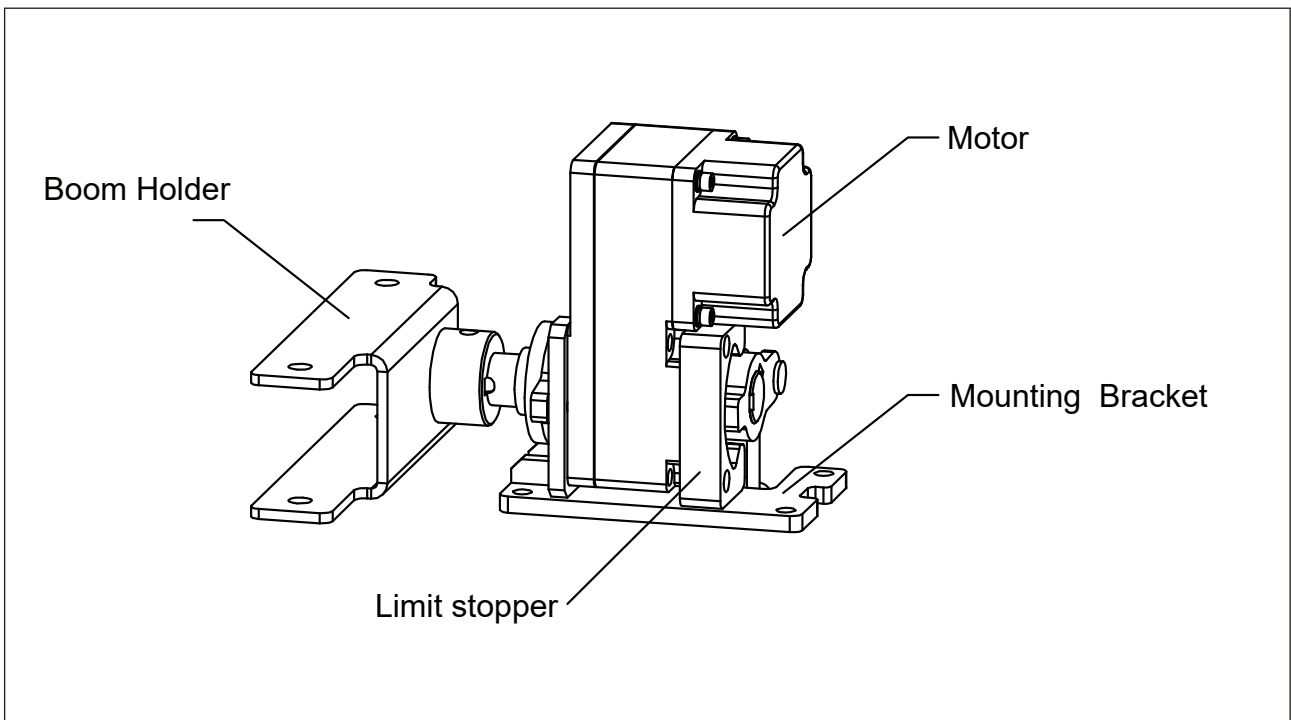
A. Close to Right



B. Close to Left



C. Main Components of the Motor



2. Features

- A. Remote control is allowed.
- B. During power outage, product can be manual operated.
- C. Control board contains various ports for parking lot management system, infrared sensor, radar, etc.
- D. Product contains multiple limit protection functions to keep a long life time.

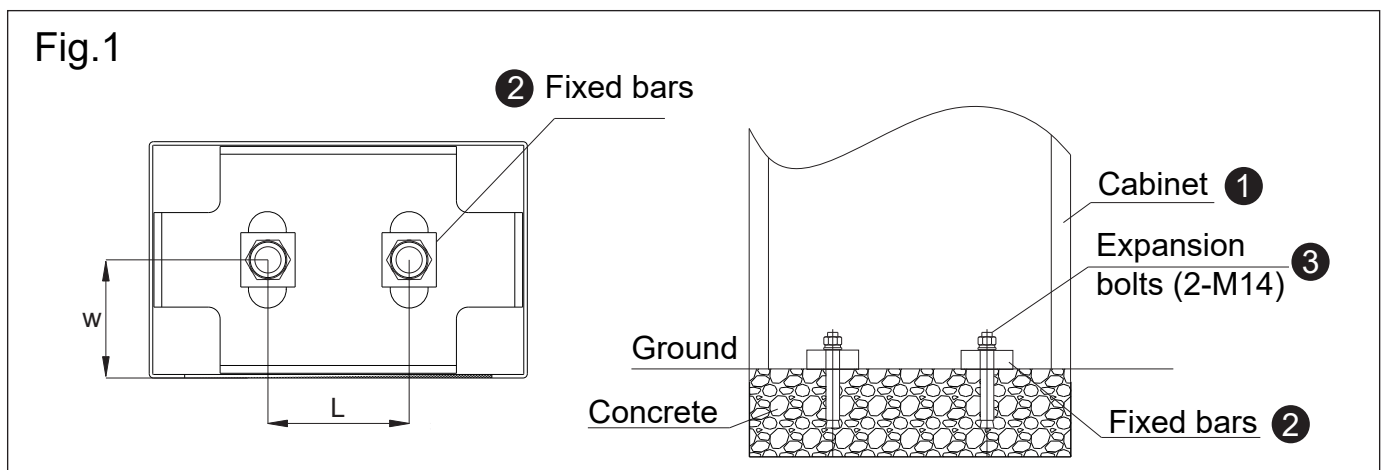
3. Specification

Rated Power	24VDC Brushless 240W
Power Supply	220V±10% 50/60Hz
	110V±10% 50/60Hz
Working Temperature	-40℃ ~+60℃
Max. Boom Length	2M
Operating Speed	1~6s adjustable

4. Installation

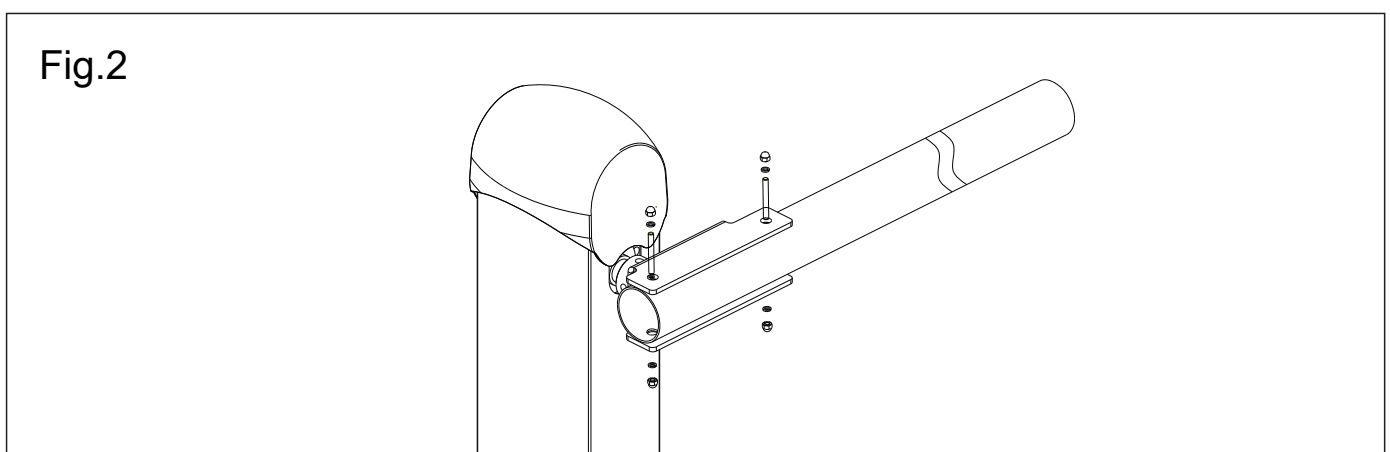
4.1 Cabinet Installation

- Open the Cabinet door and take out the attachment pack.
- Place the ① Cabinet at desired position.
- Place ② Fixed Bars on the bottom of the Cabinet inside.
- Mark out the boreholes for ③ Expansion Bolts (Fig. 3: L and W) according to the Fixed Bars.
- Move away the cabinet.
- Use an electric drill with 21mm to drill the boreholes. The depth of the boreholes should be 110 ~ 120mm. Place the Expansion Bolts.
- Move the cabinet back to the desired position and place the Fixed Bars on the bottom of the cabinet inside.
- Tighten the Expansion Bolts.



4.2 Boom Installation

4.2.1 Install the boom according to Fig2:



5. Setting Springs' Balance with Boom Weight

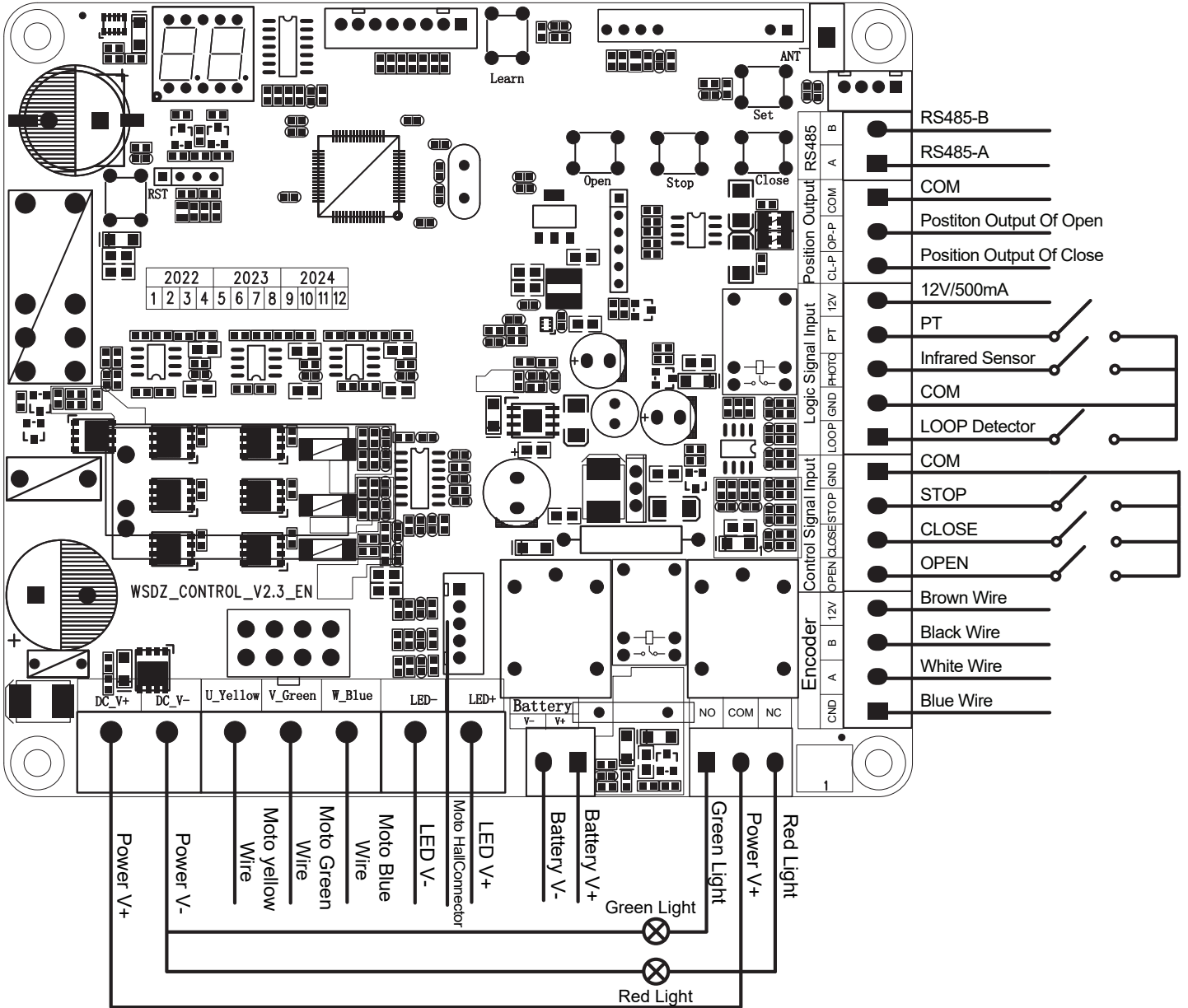
Attention: The springs are set to be balanced in factory. DO NOT change the boom length or weight if it is not necessary. If the boom length or weight must be changed (e.g.: adding a Stop Sign on the boom), the balance must be adjusted by a qualified service person.

5.1 Spring Quantity and Size

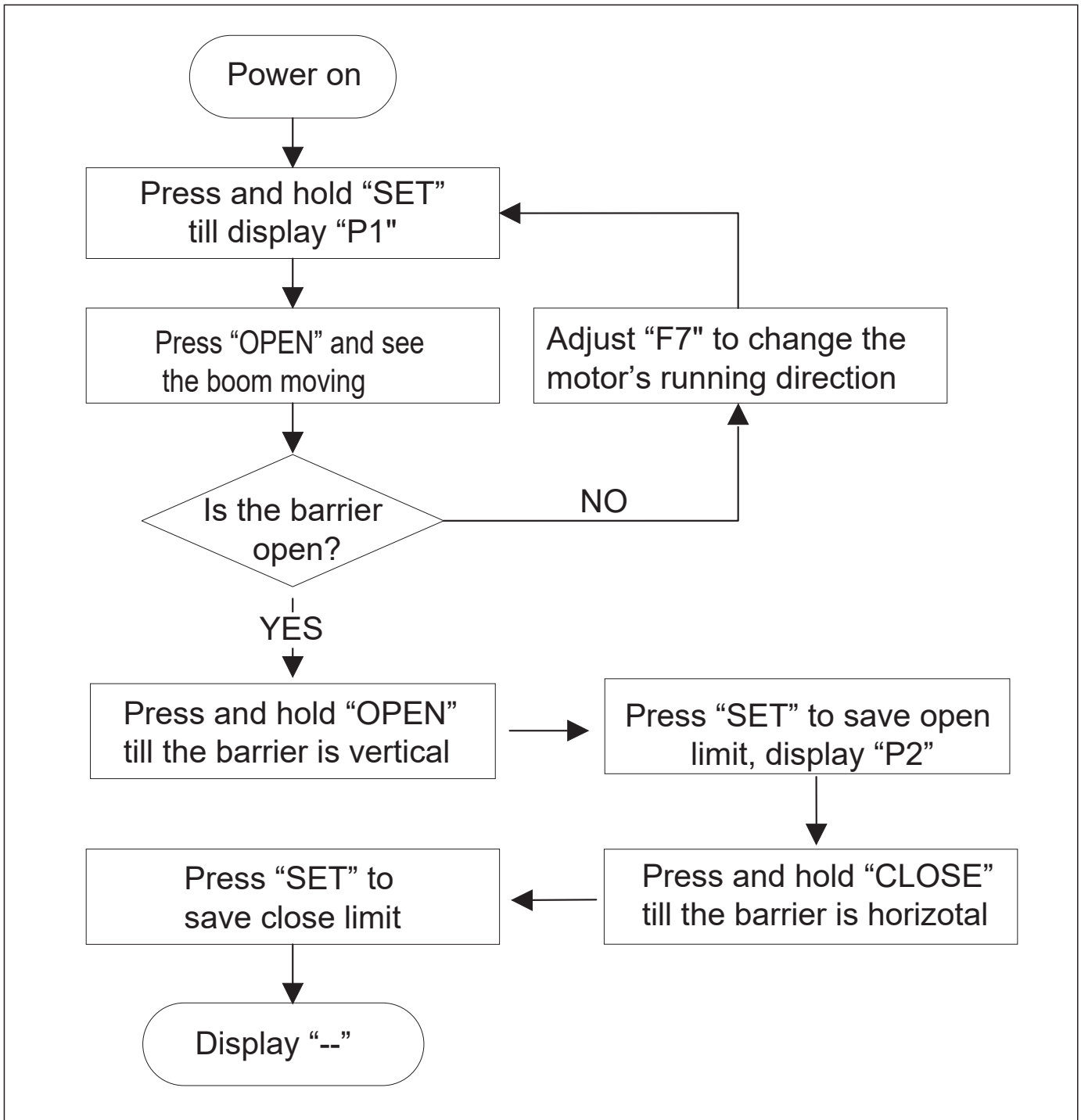
Boom Length	Quantity of spring	Spring Size
$x \leq 2\text{m}$	1	$\Phi 3$

6. Control Board Diagram

6.1 Electrical connections



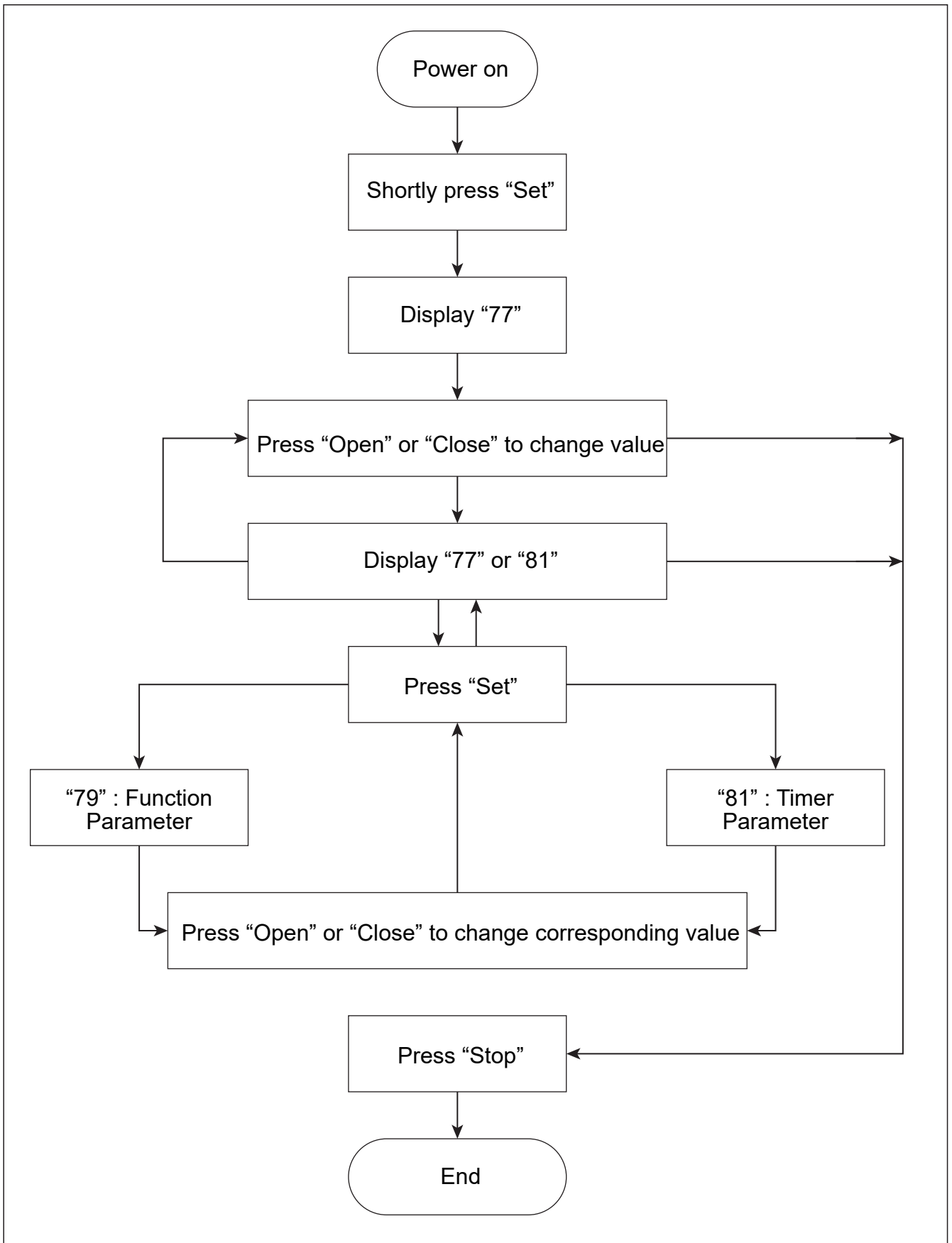
6.2 Limits Setting



Attention: Limits are set well in factory any change made on length, or maintain and change controller. Please follow steps below.

Before power on, manually adjust boom to middle position <math>45^{\circ}> .

6.3 Function Parameter setting



6.3.1 Function Parameters

F0	Reset (Caution)
F1	Open speed grade
F2	Open speed grade
F3	Auto-close timer (s)
F4	Count mode 0:Normal mode (default)
F5	05 default
F6	For back up
F7	Motor running direction 0:default,1:reverse
F8	Open/close state Voltage Current Speed Hull value Travel Save log
F9	Default 0 Hull limit
A0	Year
A1	Month
A2	Day
A3	Hour
A4	Minute
A5	Second
A6	Light-on Hour. Default: 18
A7	Light-on Minute. Default: 00
A8	Light-out Hour. Default: 06
A9	Light-out Minute. Default: 00

7. Transmitter (Remote control) setting

7.1 Transmitter's code setting

Press "LEARN BUTTON", the "LEARN LED" light on, then, press and hold the button which you choose on the transmitter till the "LEARN LED" flashes and goes out, now, the transmitter is code. Other transmitter can be coded as this way.

7.2 Erasing the transmitter's code

Press "LEARN BUTTON" and hold on to make the "LEARN LED" light on and till go out. Now, all codes of transmitters which had been learnt are cleared.

7.3 Error Codes

Code	Meaning	Solution
E2	Motor Nonstop Running Over Limits	1.Check the Optical Counter Limits Connecting 2.Check the Mechanical System
E3	Motor Locked Rotor	1.Check the Mechanical System 2.Check Motor Wires Connectors
E5	Obnormal hull	Check the hull connection
E7	Photocell is Triggered	Remove the Object that Blocks the Photo Beam
E8	Air Wave Sensor Triggered	Remove the Object that Block the Air Wave

8. Maintain

1. Frequently clean the surface of barrier and boom.
2. Tighten the fasteners once a month.
3. Inject lubricating oil every three month.
4. Adjust balance each 30,000 times working.
5. Check and replace wearing part parts every six month.
6. Battery No. of remote is CR3216, replace the battery when battery runs out.

9. Packing list

No	Name	Quantity	Mark
1	Barrier	1set	
2	Boom	1pcs	
4	Double end bolt	2pcs	
5	Cap nut	4pcs	M10
6	Flat washer	4pcs	Φ10
7	Spring washer	4pcs	Φ10
8	Gasket	2pcs	
9	Anchoring	2pcs	M14*140
10	Key	2pcs	
11	Control unit	1pcs	Inciuding 2pcs remotes
12	Manual	1pcs	

