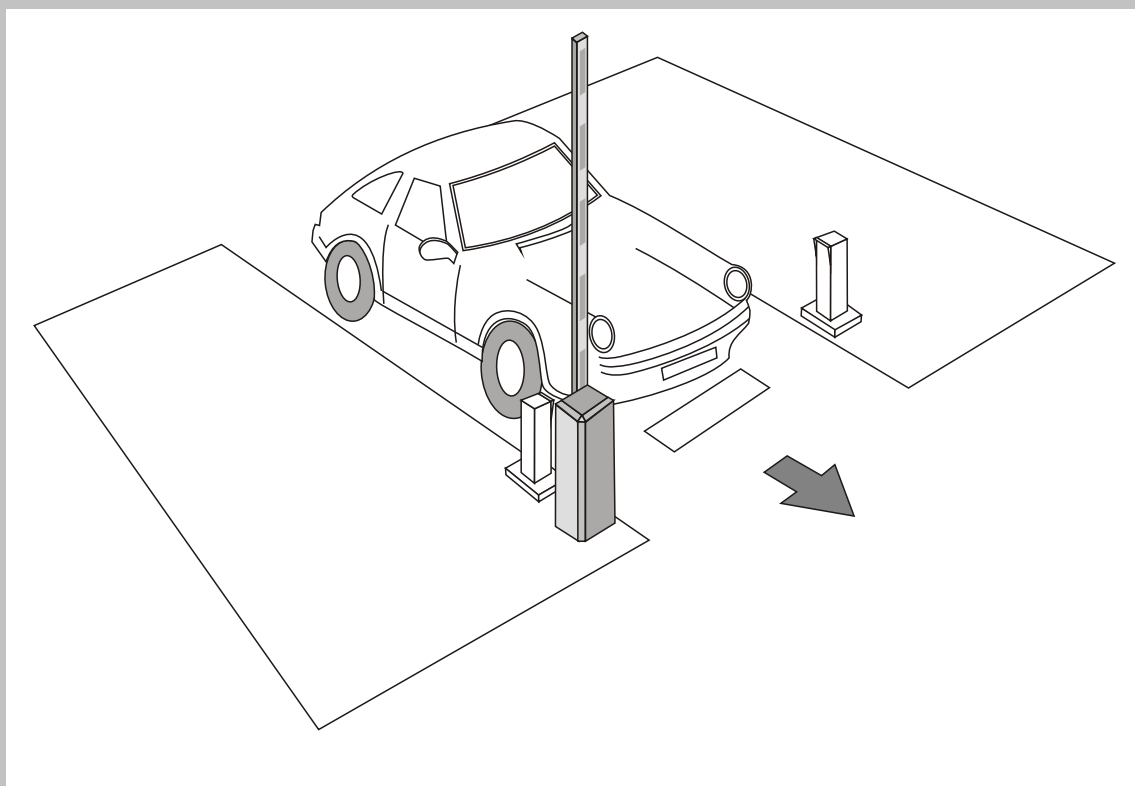


# Automated Vehicular Boom Gate System



**Installer and User's Manual**



Automatic Boom Gates are not for Pedestrians!

Automatic gate openers are designed for vehicular traffic. They are powerful and can cause serious bodily injury or death. Accordingly, direct all pedestrian traffic to a separate walk-through gate.

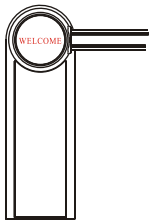
1. Before starting installation and operation or maintenance, cut off power supply.
2. The product must be earthed, and an earth leakage breaker is necessary on the power supply.
3. As for electric cable type and section, we suggest to use the cable type of <HAR> with minimum section of 2.0mm<sup>2</sup>
4. Do not change the original inside wiring.
5. If power failure, please switch off the power supply first, then open the door and rotate the handle on the motor manually to open the boom completely.
6. Keep the automatic control (push-button, remote control, etc) out of the reach of children. The control system must be installed at a minimum height of 1.5m from the ground surface.
7. Use transmitters or button only where you can see the gate clearly.
8. Never open the door or the cover of the cabinet when the machine is working.
9. Do not permit children to play on or around a gate.



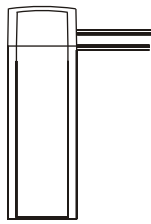
**Automatic Gates are  
Not for Pedestrians!**

**Automatic gate openers are designed for vehicular traffic. They are powerful. Accordingly, direct all pedestrian traffic to a separate walk-through gate.**

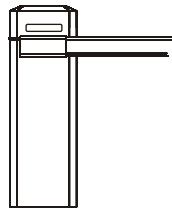
## A. Technical specifications



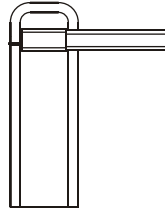
BS-106



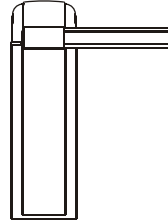
BS-206



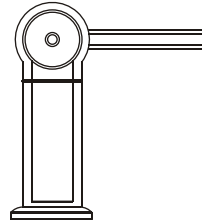
BS-306



BS-606



BS-806



BS-906

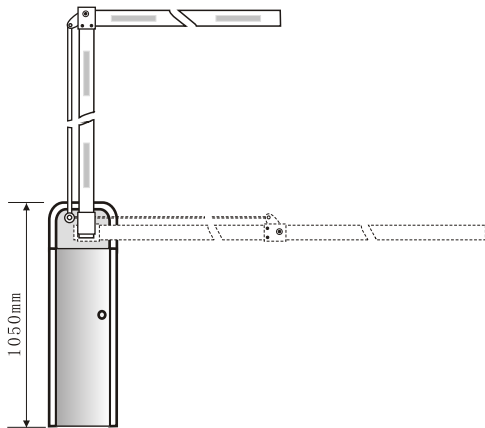
### AC series

Power supply: 220V 50Hz  
 Motor's power: 90W/220VAC  
 Motor's rotation: 2800r/min  
 Running time: 3~6S  
 Max Boom's length: 6M

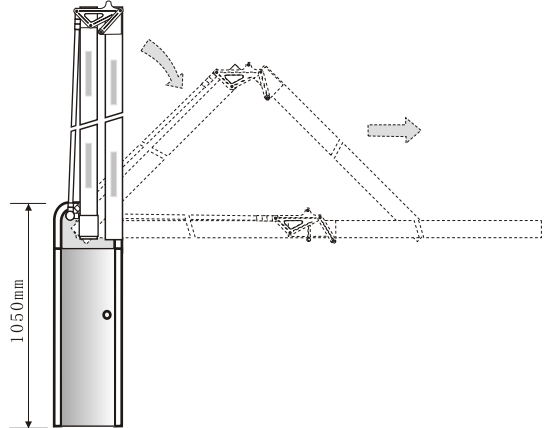
### DC series

Power supply: 220V 50Hz  
 Motor's power: 80W/24VDC  
 Motor's rotation: 1400r/min  
 Running time: 3~6S  
 Max Boom's length: 6M

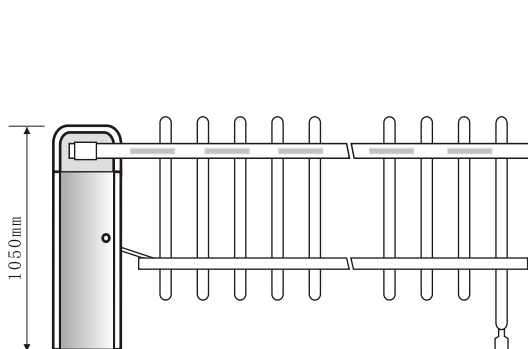
BS-TI



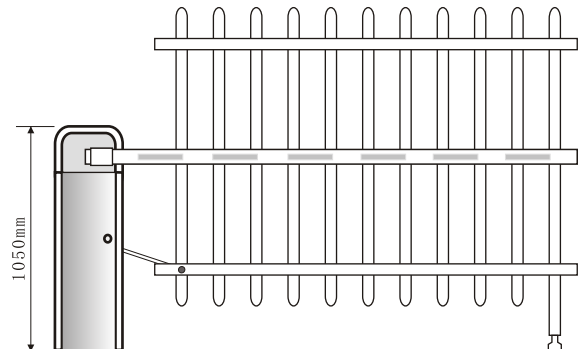
BS-TII



BS-TIII(A)



BS-TIII(B)



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## B. Installing and adjusting

### 1. Install the machine on the ground

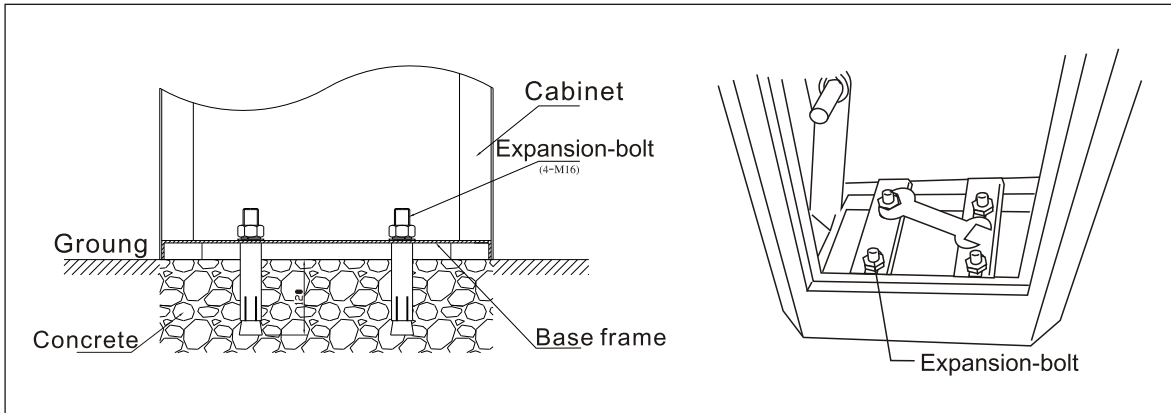


Fig.1

### 2. Install boom(Fig.2)

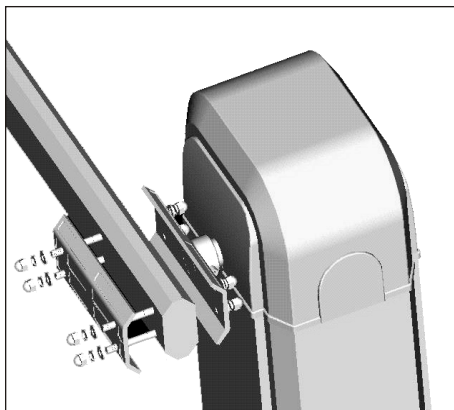
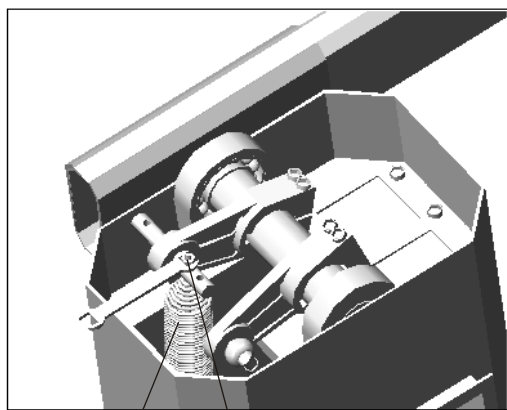


Fig.2



Spring Adjust nut Fig.3

### 3. Adjust the limit position

BARRIER is supplied to you with the magnet limit switch and the mechanical limit switch that are already set to allow optimum boom movement.  
Do not change the limit position.

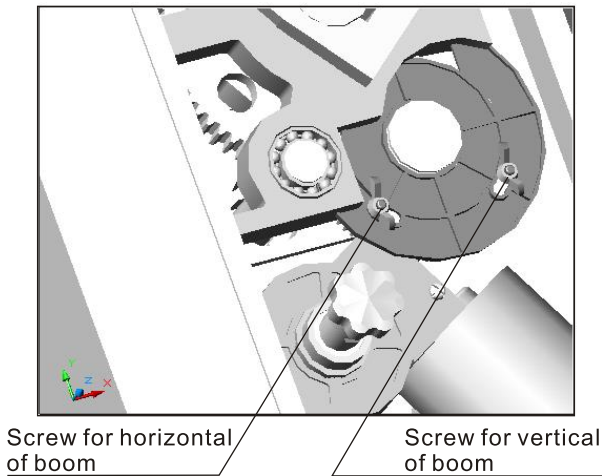


Fig.4

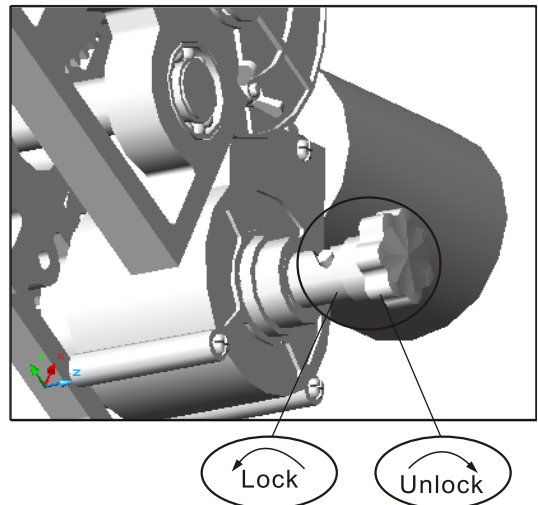
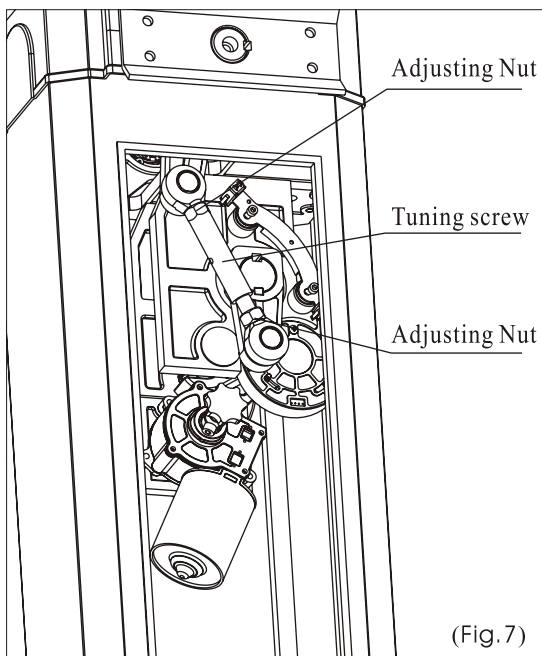


Fig.5

### C. Quick release function(Fig.5)

### D. Adjust the vertical and horizontal line of the Boom.



1. Loosen the Adjusting Nuts.
2. Adjust the Tuning Screw and see the Boom, if the Boom is parallel to the ground when it is closed, tighten the Adjusting Nuts.



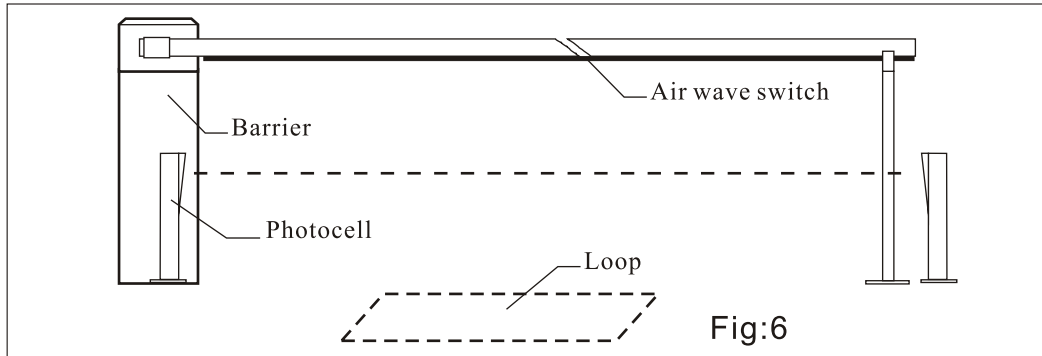
### **Adjust the balance of the spring with boom.**

The springs have been already adjusted to balance with the boom. If the length of boom need to be changed, the springs should be re-adjusted.

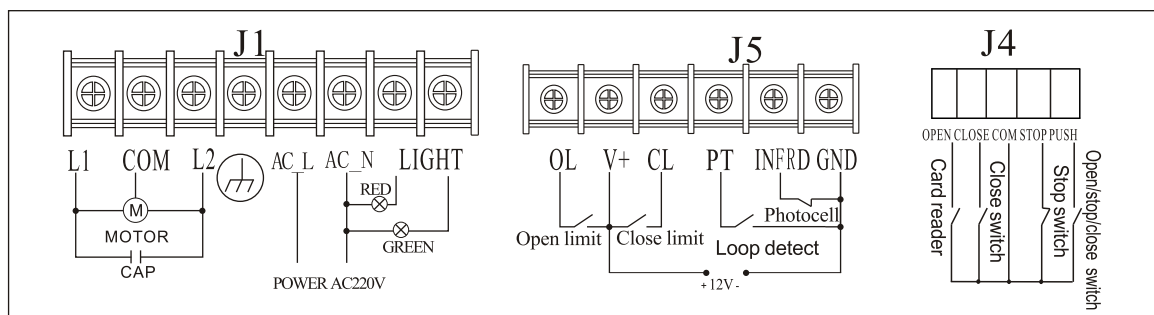
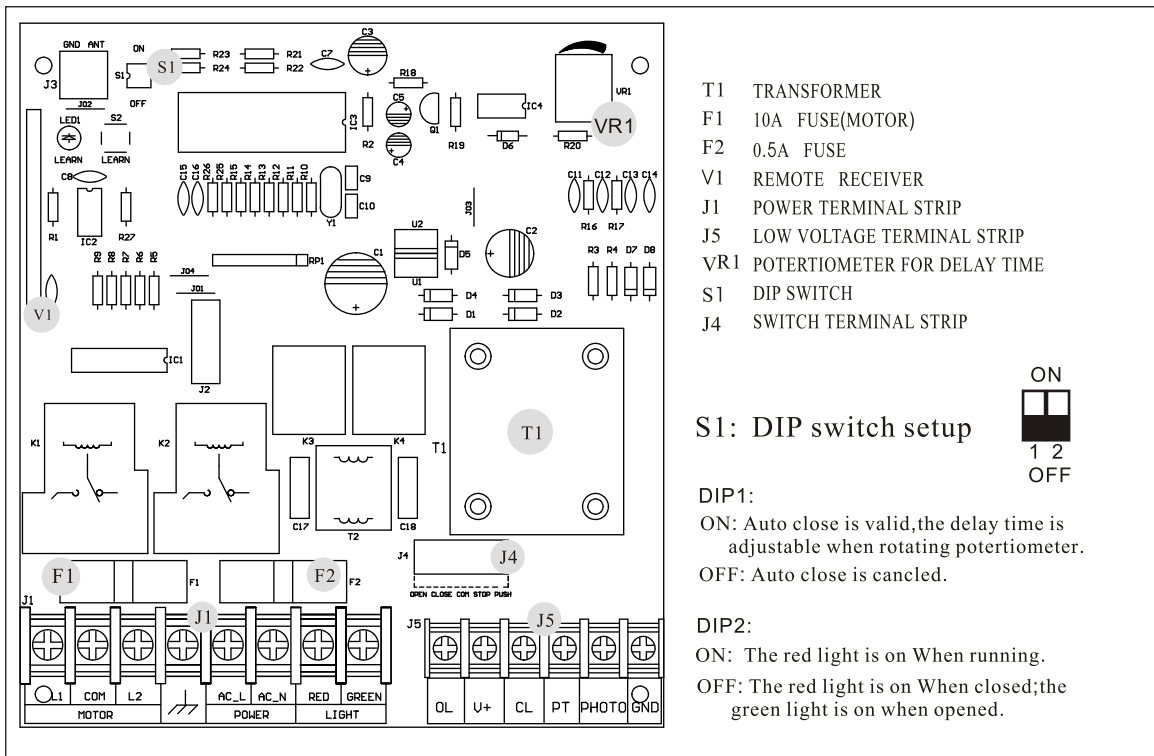
**See the Appendix**

## E. Electrical safety devices(Fig.6)

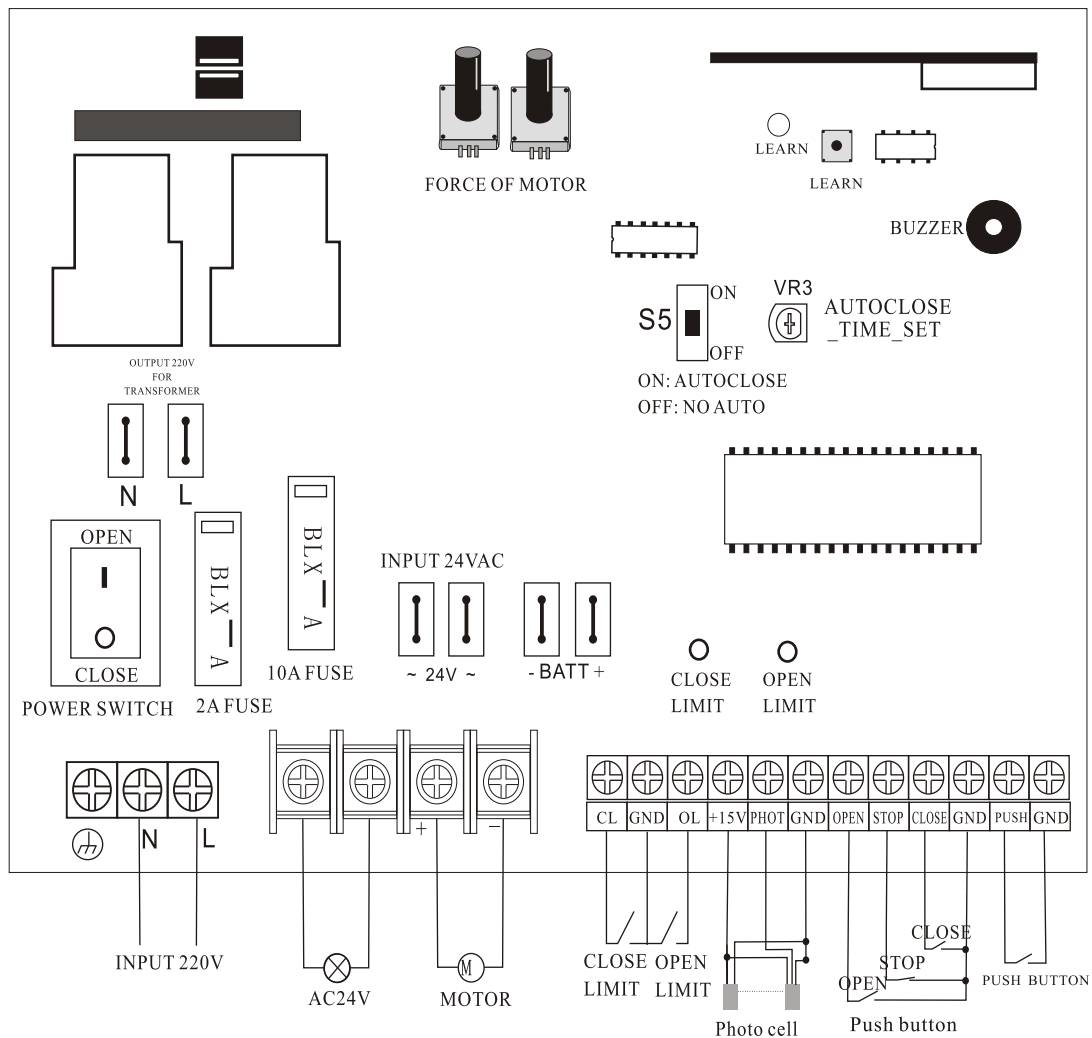
- The BARRIERS limit switches, motor and control unit are already connected up.
- Only the photo cells, the loop detector and the supply voltage have to be connected up in installation.



### Wiring diagram



## Connecting diagram (DC Motor):



- ① S5: "ON" The function of auto-closing boom is enabled.  
"OFF" The function of auto-closing boom is unable.
- ② AUTOCLOSE-TIME-SET: If selecting "ON" (auto-closing boom function), the delay time of auto-closing can be adjusted by this regulation-resistance. Clockwise is more, Anticlockwise is less.

### Transmitter's code setting:

Press "LEARN BUTTON", the "LEARN LED" light, then, press the button which you choose on the transmitter till the "LEARN LED" flash and go out, Now, the transmitter is coded. Other transmitters can be coded as this way.

### Transmitter's code erasing:

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

## Appendix

Reference Table of Spring's Number and Boom Length Spring's Size

Model	Boom Length	Number of Spring	Spring's size
BS-106 BS-206 BS-806 BS-906	≤3-4M	1	φ5×440mm
	≤4-5M	2	φ5×440mm
	≤5-6M	2	φ5/φ6×440mm
	≤3-4M	1	φ5×440mm
BS-I/II-206 BS-I/II-806 BS-I/II-906	≤4-4.5M	2	φ5/φ6×440mm
	≤4.5-5M	2	φ5×440mm
	≤3-4M	2	φ5×440mm
BST-III(A)-106 BST-III(A)-206 BST-III(A)-806 BST-III(A)-906	≤4-4.5M	2	φ5/φ6×440mm
	≤4.5-5M	2	φ6/φ6.5×440mm
	≤3-4M	2	φ5×440mm
BST-III(B)-106 BST-III(B)-206 BST-III(B)-806 BST-III(B)-906	≤3-4M	2	φ6×440mm
	≤3-4M	2	φ6.5×440mm
	≤3-4M	2	φ5×440mm
BS-306	≤3-4M	1	φ5×440mm
	≤4-5M	2	φ5×440mm
	≤5-6M	3	φ5×440mm
	≤6-7M	4	φ5×440mm
BST-I/II-306	≤3-4M	2	φ5×440mm
	≤4-4.5M	2	φ5/φ6×440mm
	≤4.5-5M	3	φ5×440mm×2 φ6×440mm
	≤5-6M	4	φ5×440mm
BST-III(A)-306	≤3-4M	2	φ5×440mm
	≤4-4.5M	2	φ5/φ6×440mm
	≤4.5-5M	4	φ5×440mm×3 φ6×440mm
	≤5-6M	4	φ5×440mm φ6×440mm×3
BST-III(B)-306	≤3-4M	2	φ5×440mm
	≤4-4.5M	3	φ5×440mm×2 φ6×440mm
	≤4.5-5M	4	φ5×440mm×3 φ6×440mm
BS-606	≤3-4M	1	φ5×440mm
	≤4-5M	2	φ5×440mm
	≤5-6M	3	φ5×440mm
BST-I/II-606	≤3-4M	1	φ5×440mm
	≤4-4.5M	2	φ5/φ6×440mm
	≤4.5-5M	3	φ5×440mm×2 φ6×440mm
	≤5-6M	3	φ5×440mm φ6×440mm×2
BST-III(A)-606	≤3-4M	2	φ5×440mm
	≤4-4.5M	2	φ5×440mm φ6×440mm
	≤4.5-5M	3	φ5×440mm×2 φ6×440mm
	≤5-6M	3	φ5×440mm φ6×440mm×2
BST-III(B)-606	≤3-4M	2	φ5×440mm
	≤4-4.5M	3	φ5×440mm×2 φ6×440mm
	≤4.5-5M	3	φ5×440mm φ6×440mm×2