



SLiding Gate Opener User's Manual

Model: SFG-18/21/22

www.WholesaleGateOpener.com

ATTENTION

. PLEASE START WITH READING THESE IMPORTANT SAFETY RULES

1. Installation and wiring must be in compliance with your local building and electrical installation codes. Power cables must only be connected to a properly earthed supply.
2. It is important to make sure that the gate always runs smoothly. Gate which stick or jam must be repaired immediately. Employ a qualified technician to repair the gate, never attempt to repair it yourself.
3. Keep additional accessories away from children. Do NOT allow children to play with pushbutton or remote controls. A gate can cause serious injuries as it closes.
4. Disconnect electric power to the system before making repairs or removing covers. A disconnecting device must be provided in the permanently- wired installation to guarantee all-pole disconnection by means of a switch (at least 3mm contact gap) or by a separate fuse.
5. Make sure that people who install, maintain or operate the gate operator follow these instructions. Keep these instructions in a safe place so that you can refer to them quickly when you need.
6. After the installation a final test of the full function of the system and the full function of the safety devices must be done.

. Main specifications and technical parameters

ITEM NO.	18	21	22	35	38	45
Power supply	AC230 /120V	AC230 /120V	AC230 /120V	AC230 /120V	AC 380V	AC230 /120V
Motor speed	1400 RPM	1400 RPM	1400 RPM	1400 RPM	1400 RPM	1400 RPM
Output Torque	22Nm	27Nm	27Nm	35Nm	38Nm	45Nm
Gate speed	12 m/min	12 m/min	12 m/min	12 m/min	12 m/min	12 m/min
Max gate weight	700 KG	1 TON	1 TON	1.2 TON	1.5 TON	2 TON
Working temperature	-45 - +65	-45 - +65	-45 - +65	-45 - +65	-45 - +65	-45 - +65
Noise	56dB	56dB	56dB	56dB	56dB	56dB
Protection class:	IP44	IP44	IP44	IP44	IP44	IP44
Certificate	CCC CE	CCC CE	CCC CE	CCC CE	CCC CE	CCC CE

. Mechanical Installation

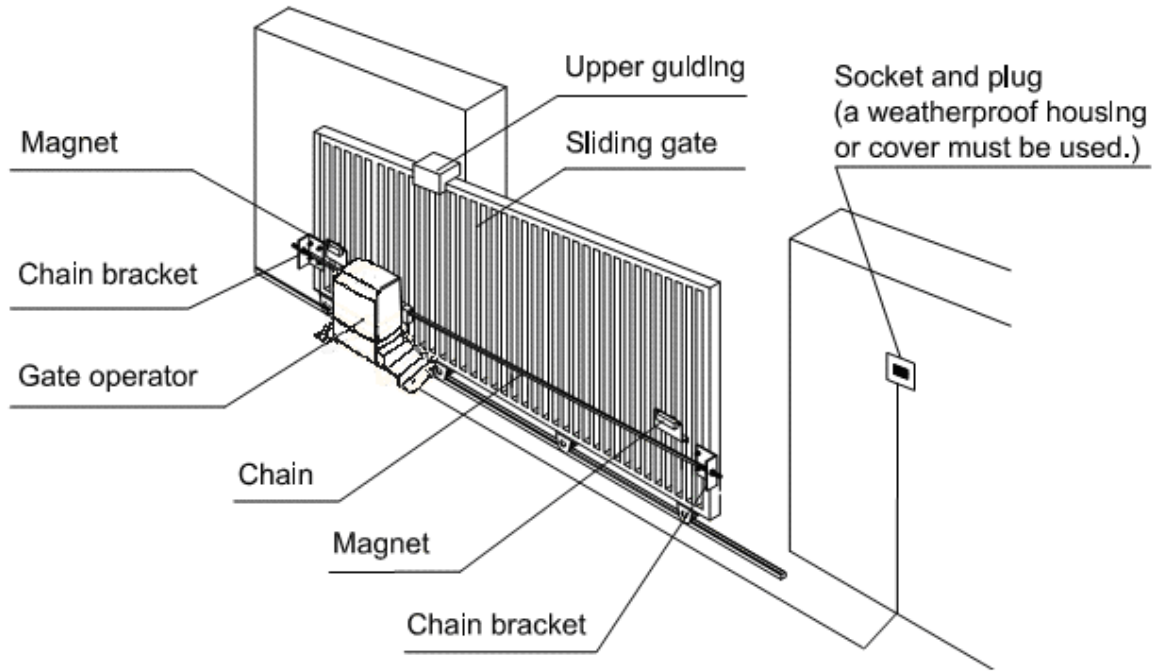


Fig.1

Installation and Adjustment

The Chain-driven Gate Operator operates by forcing a straight piece of chain through its chain box. This length of chain is extended between two chain brackets located at opposite ends of the gate. The entire configuration is shown in the diagram above.

Concrete Pad

The base unit of the gate operator requires a concrete pad in order to maintain proper stability. Once the gate is mounted adequately, electrical power is available, and the concrete pad is poured, you are ready to proceed.

Anchors

You can use the anchors that are provided with the operator. These anchors must be set into the concrete when it is poured, or you can use wedge anchors.

Operator Base

Mount the gate operator base to the concrete pad. Verify that the operator is leveled properly.

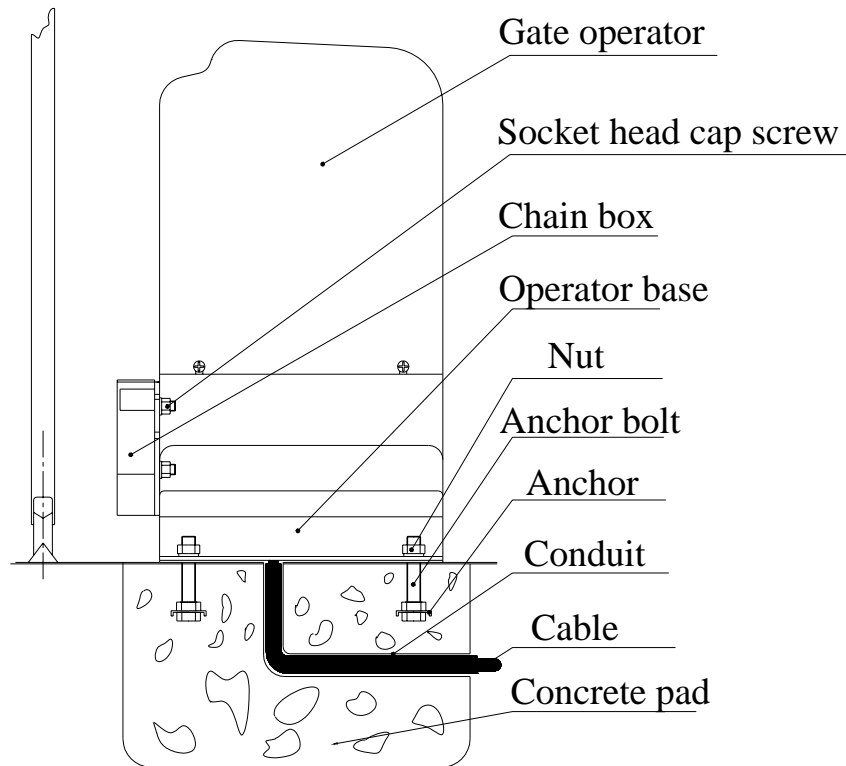


Fig.2

Chain Box

Make sure the ends of the guide chain are out of the chain holes on both sides of the chain box. Remove the cover and insert the manual release key and turn counter-clockwise to disengage the clutch. Remove the elastic band from the shaft and line up the key on the shaft with the sprocket at the chain box. Insert the sprocket from the chain box into the operator shaft. Place the operator on top of the base and use socket head cap screws to mount the chain box in to the base.

Operator

Mount the gate operator to the base using bolts and washers. Check the operator and make sure it is lined up with the gate.

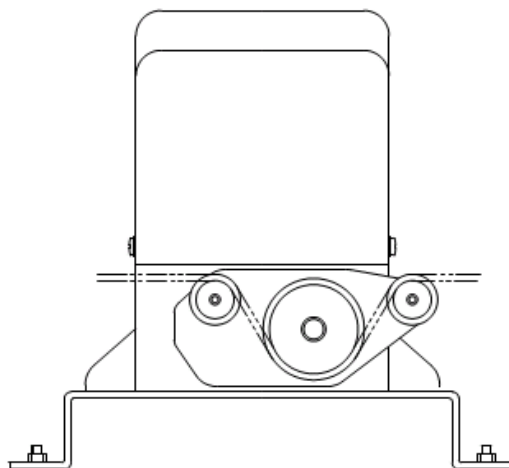


Fig.3

Chain Brackets

Use the appropriate bolts to attach the chain bracket to the frame of the gate. If the gate is of square frame style, use the square bolts shown.

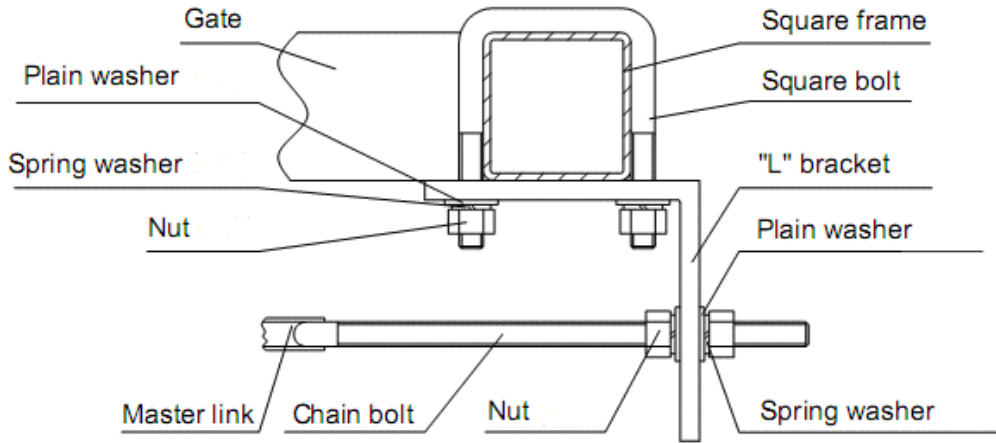


Fig.4

If the gate is of round frame style, use the round bolts shown.

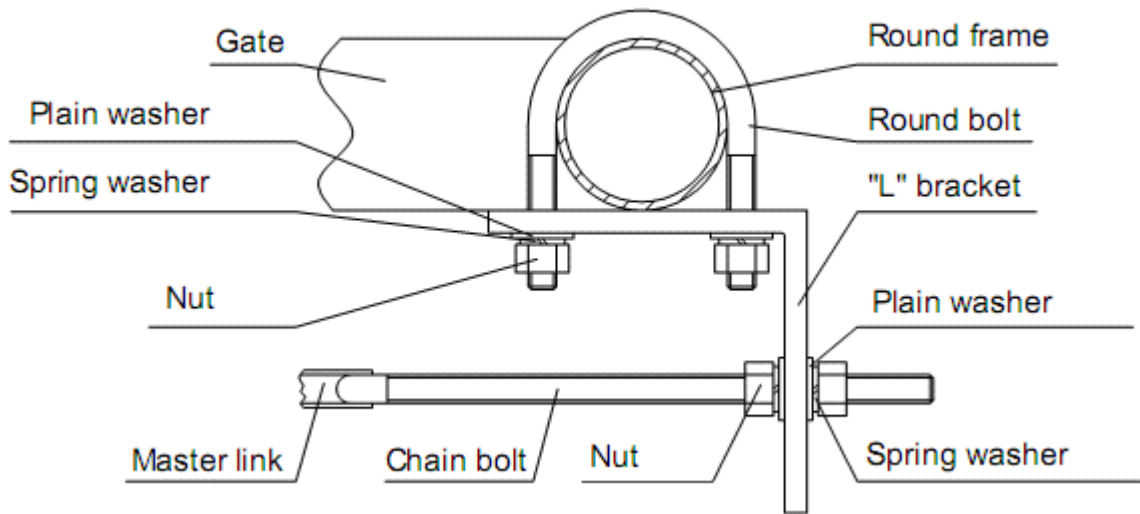


Fig.5

Chain

Close the gate and attach a chain bolt to the piece of chain that comes with the chain box using enclosure master links. Tighten the chain bolt to the bracket with washers and nuts. Pull the chain through the chain wheel box to the other chain bracket at the opposite end of the gate. Connect the other end of the chain and the chain bolt, and then tighten the chain bolt to the chain bracket. Thread up the chain by adjusting the chain bolt. Cut the chain to length if necessary. Make sure that the chain is perfectly aligned with the chain holes on the chain box. Tighten the chain by tightening the chain bolts at either end. See illustration below.

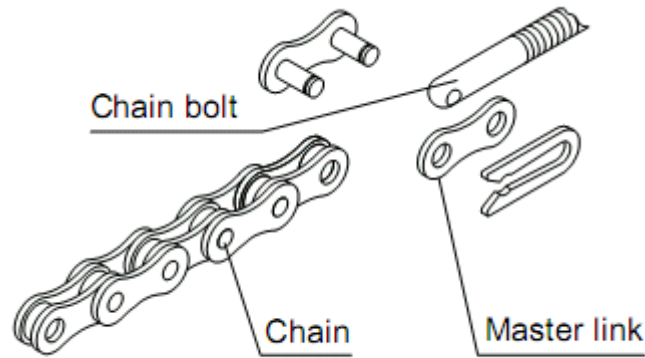


Fig.6

Magnets for Limit Switch

Install the magnet and magnetic limit switch as shown in Fig.7. The magnet and limit switch are used to control the position of the gate. When the magnet is installed, release the gear clutch and push the sliding gate manually to pre-determine the position. Fit the magnet bracket to the gate and then tighten the gear clutch. The lower bracket is for open position and higher bracket is for close position. Finally adjust the magnet to the proper position by moving the gate with the motor. Adjust the position of the magnetic limit switch until the positions of the opening and closing meet the requirement. Important Note: Please note the two magnet brackets (fixed plate) are different: one is higher and another is lower. Verify and if necessary exchange the two brackets position. Also if necessary exchange the limit switch wires CL (close) and OP (open).

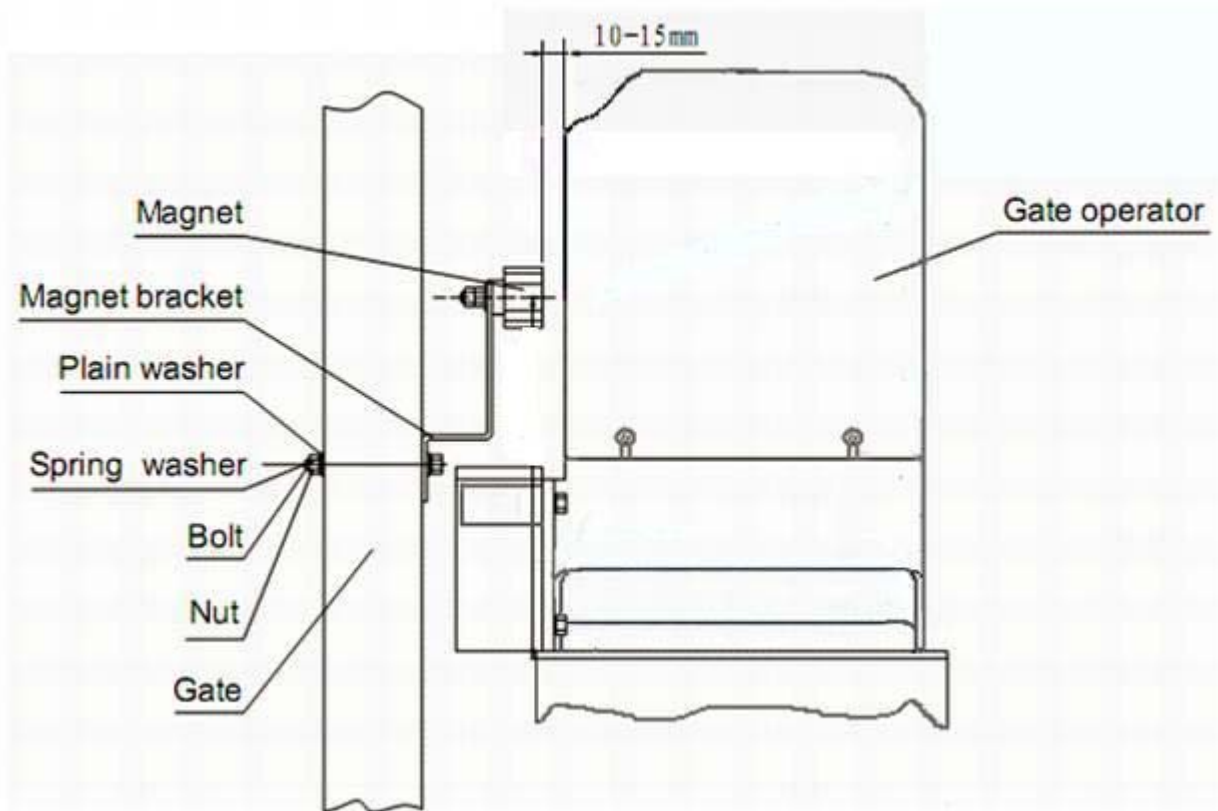


Fig.7

.Motor wire connection(see Fig.8):

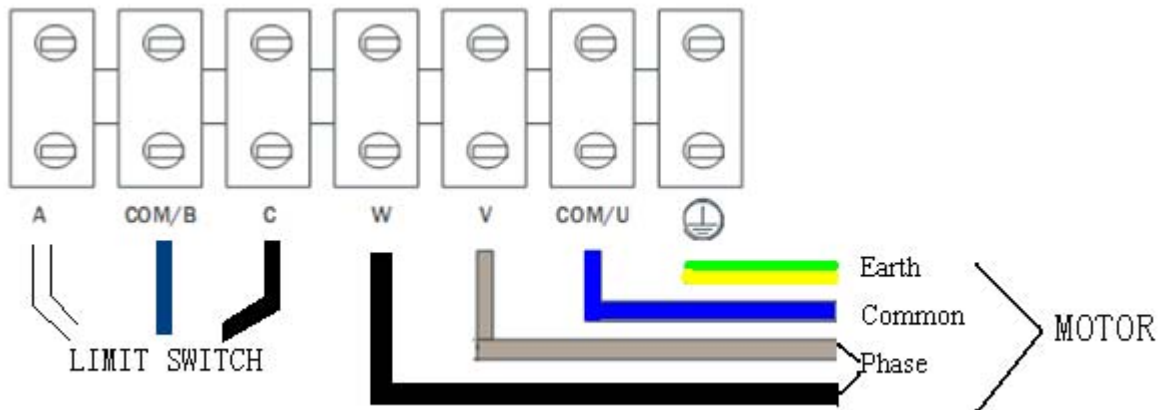


Fig.8

. How to set the control board please see the manuals of control board

CONTROL BOARD INSTALLATION INSTRUCTIONS

IMPORTANT!

PLEASE READ ALL INSTRUCTIONS BEFORE BEGINNING ANY CONNECTONS.

MAKE SURE AC POWER SOURCE IS DISCONNECTED,

BREAKER IS OFF AND NO ONE IS GOING TO BE WORKING

ON THE POWER SUPPLY!

Electrical Connections:

The Hot Line from source attaches to the L (22) tab on the board

The Neutral Line from source attaches to the N (21) tab on the board

The Earth wire from source attaches top the chassis on the unit

The common wire from motor should be connected to the COM (19) tab on the board

The clockwise rotation wire from motor should be connected to the R (18) tab on the board

The counter clockwise rotation wire from motor should be connected to the F (17) tab on the board

The lamp wire should be connected to the LAMP (20) tab on the board

Other Electrical Connections:

Connector (CON3) has been provided for connecting all the individual devices to the main computer on the board all signal inputs are connected here to the main processing unit with a signal wire and ground. More information will be provided later on.

Connector (CON7) has been made available for 24VAC auxiliary outputs. You may use these for your other devices power needs, such as the sensors used in your particular installation.

Connector (CON6) has been provided 12VDC for additional needs.

Connector (YX1) for remote receiver

Overload Detection:

The Control Board is equipped with an overload detection circuit, which will detect some obstruction in the gates path.. The sensitivity is adjustable with the potentiometer labeled (VR1) for open and labeled (VR2) for close.

The Overload must be adjusted to the most sensitive setting possible without causing self-tripping due to the gates inherent friction. Try re-adjusting the potentiometer several times by small increments testing the gate in both directions of travel until you are satisfied. Clockwise rotate decrease the force. Counter clockwise rotate increase the force.

Remote Push Button Select:

To select push button you must flip the rocker arm (position 1) to the ON position in the switch (SW1).

To select push button you must flip the rocker arm (position 2) to the ON position in the switch (SW1).

To select push button you must flip the rocker arm (position 3) to the ON position in the switch (SW1).

To select Lock push button you must flip the rocker arm (position 4) to the ON position in the switch (SW1).

Left/right Hand Selector:

The position 2 in the switch (SW2) is L/R hand selector

Left hand place, you must flip the rocker arm (position 2) to the OFF position in the switch (SW2)

Right hand place, you must flip the rocker arm (position 2) to the ON position in the switch (SW2)

Auto Close Timer:

(position 1) in the switch (SW2) is use for auto close timer

To enable the auto close timer, you must flip the rocker arm (position 1) to the OFF position in the (SW2). Auto close time is adjustable with the potentiometer labeled VR3. Counter clockwise rotate increase the time (7s-70s).

To disable the auto close timer, you must flip the rocker arm (position 1) to the ON position in the (SW2)

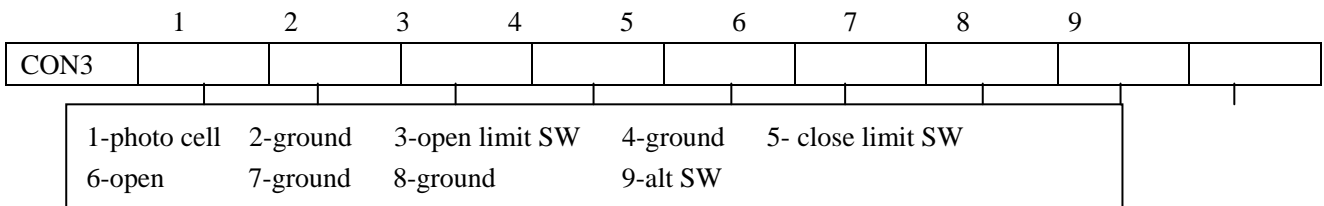
Learn The Remote:

Press the learn button on the receiver for 1 second, release the learn button, then press the transmitter for 1 second and release. The remote has been learned.

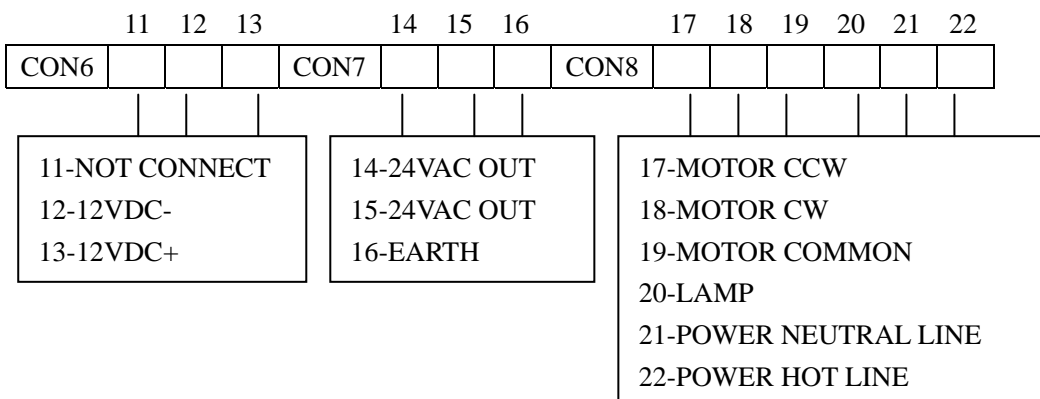
Erase The Remote:

Keep pressing the learn button on the receiver for 20 second, release the learn button. All remote has been erased.

TERMINAL BLOCK CONNECTIONS



INPUT	FUNCTION	TYPICAL DEVICES
3-4 (N.O.) open limit SW	1-Stop when completely open	Limit switch
4-5 (N.O.) close limit SW	1-Stop when completely closed	Limit switch
1-2 (N.O.) photo cell	1-Reverse if closing 2-Reset Timer (if used) 3-Disables closing	Safe edge Safety photo beam Safety loop
6-7 (N.O.) open	1-Open 2-Reverse if closing 3-Reset timer (if used)	Open push button Card reader Key pad
8-9 (N.O.) alt SW	1-Open 2-Close from full open 3-Stop from opening	Radio control Single push button Single key switch





LockMaster™
16915 SE 272nd Street, Suite 100-105
Covington WA 98042 USA
sales@WholesaleGateOpener.com
www.WholesaleGateOpener.com
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