



# Instruction Manual

# **ROBO SLIDE**

## Residential Gate Operator

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Installation instructions and manual book for  
architects, general contractors and dealers

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Click on the desired topic in the “Bookmarks” column or “Table of Contents” to select page.

# TABLE OF CONTENTS

<b>Important Notice</b>	2
<b>Safely Operating Gate</b>	3
<b>Configuration and Specifications</b>	4
<b>Warnings and Precautions</b>	5
<b>Step 1: Getting Started</b>	5
<b>Step 2: Mounting Operator</b>	6
<b>Step 3: Chain Installation</b>	6
<b>Step 4: Gate Movement Direction</b>	7
<b>Step 5: DC Power Supply Connection</b>	8
<b>Step 6: "Optional" Solar Panel</b>	9
<b>Step 7: Terminal Connections</b>	10
<b>Step 8: Adjusting Gate Travel Distance</b>	11
<b>Step 9: Timer</b>	11
<b>Step 10: 2-Way Adjustable Reversing Sensor</b>	12
<b>"Optional" Input Board</b>	13
<b>Master and Slave Operators with Timer</b>	14
<b>Master and Slave Operators without Timer</b>	15
<b>Control Board Functions</b>	16
<b>LED Descriptions</b>	17-18
<b>Troubleshooting</b>	
How to Reset Breaker Switch	19
How to Check Fuses	19
Gate will not close!	20
Gate will not open!	20
If you hear a "BEEP" sound	21
<b>Robo Slide Parts List</b>	21
<b>Robo Slide Parts</b>	22

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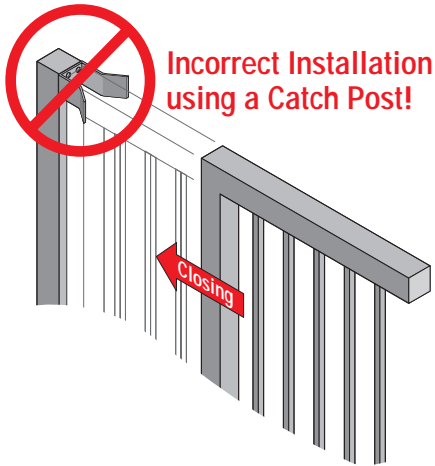


Release 6  
5/01

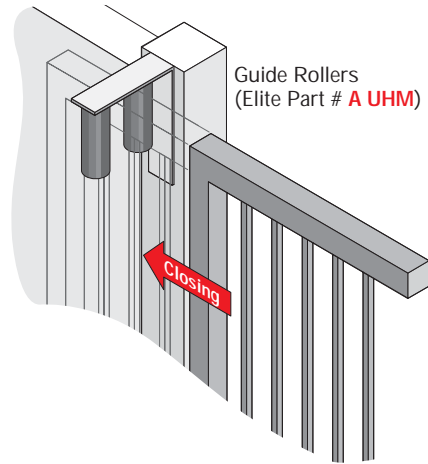
**PLEASE DO NOT TOUCH ME!...UNLESS YOU ARE AN AUTHORIZED SERVICE TECHNICIAN!** 1

## IMPORTANT NOTICE

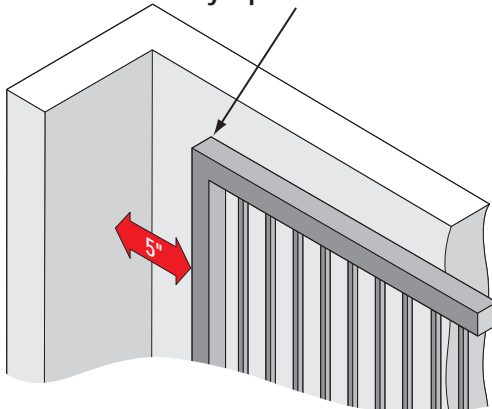
**IMPORTANT!** Because gate coasting distance varies with temperature, Elite **DOES NOT** recommend the installation of a catch post. This could cause the gate to collide with the post.



### Correct Installation with Catch Rollers

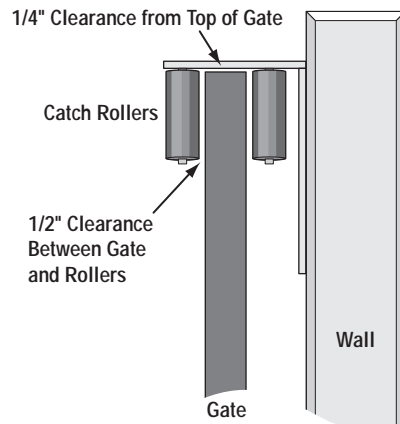


### Gate in Fully Opened Position



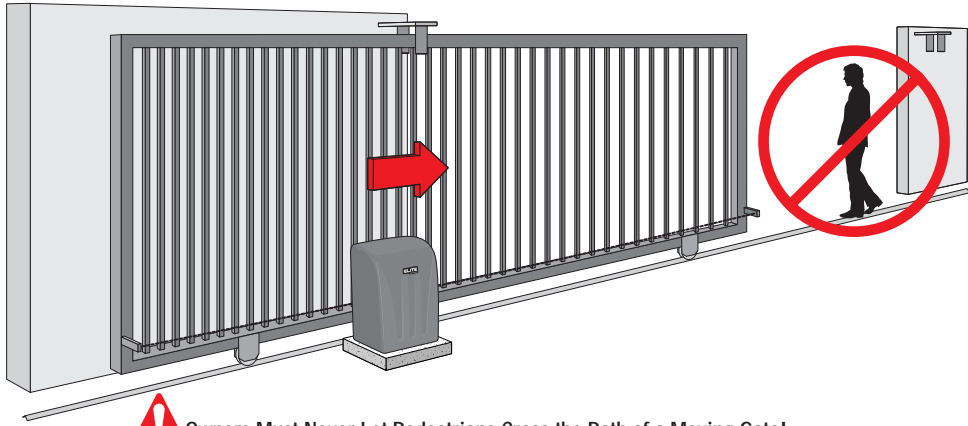
Minimum Clearance of 5" Between Back of Gate and Wall or Other Objects in Gate's Path

### Gate Clearances



A physical stop **MUST** be installed on the gate prior to installation of the gate operator. This will assure that the gate does not derail while in motion.

# SAFELY OPERATING GATE



Owners Must Never Let Pedestrians Cross the Path of a Moving Gate!



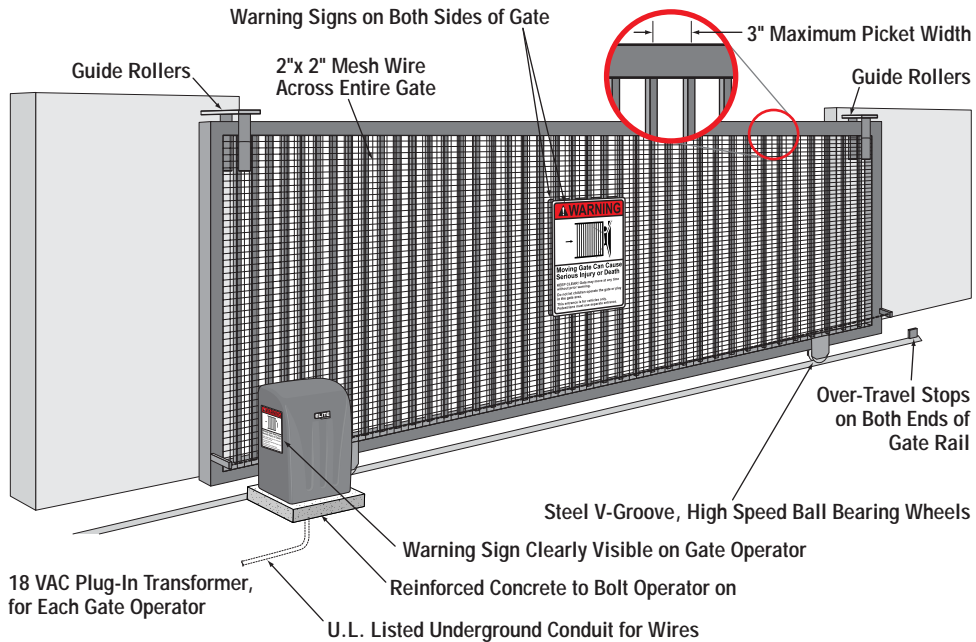
Owners Must Never Mount Any Gate Operating Devices Accessible In Between the Gate and the Wall!



Owners Must Never Mount Any Gate Operating Devices Accessible Through the Gate!

# CONFIGURATION AND SPECIFICATIONS

## Elite's Recommended Gate Setup Configuration



## Robo Slide Specifications:

**Gate Speed** – 11 inch per second

**Maximum Gate Length** – 20 feet

**Maximum Gate Weight** – 800 pounds

**Maximum Cycles** – 70 cycles per day with Elite's Plug-In Transformer.

– Solar power cycles per day varies, Contact Elite for more Information

– Battery back-up cycles (50 cycles total)

**AC Power Supply** – 18 VAC 2.0 Amp Plug-In Transformer (Elite Part # **A POW-1**)

**AC Power Supply Wire** – 14 gauge or greater landscape lighting cable rated for direct burial and 300 watts at maximum length of 1000 ft

**DC Power Supply** – Built-in, back-up for AC or Solar power failure only

**Solar Power** – Optional (Elite Part # **SOLAR 3**)



Be sure to read and follow all Elite's instructions before installing and operating any Elite product. Always disconnect the gate operator's power source before repairs are attempted. Elite Access Systems, Inc. is not responsible for improper installation or failure to comply with local building codes.

## READ ENTIRE OWNERS MANUAL BEFORE INSTALLATION

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Model:

# Robo Slide

For Single Home Applications.

**DO NOT** Use for Apartment or Condominium Applications.



**PLEASE DO NOT REPAIR ME!...UNLESS YOU ARE AN AUTHORIZED SERVICE TECHNICIAN!**

### Warnings and Precautions



1. Do not tighten chain too tight
2. Use proper type of wheels - only 4" steel wheels with high speed ball bearings
3. Do not use a 12V transformer - use only 18 VAC 2.0 Amp
4. Do not install as a rear-mount installation
5. Use only 14 gauge or greater landscape lighting cable rated for direct burial and 300 watts

### STEP 1: Getting Started

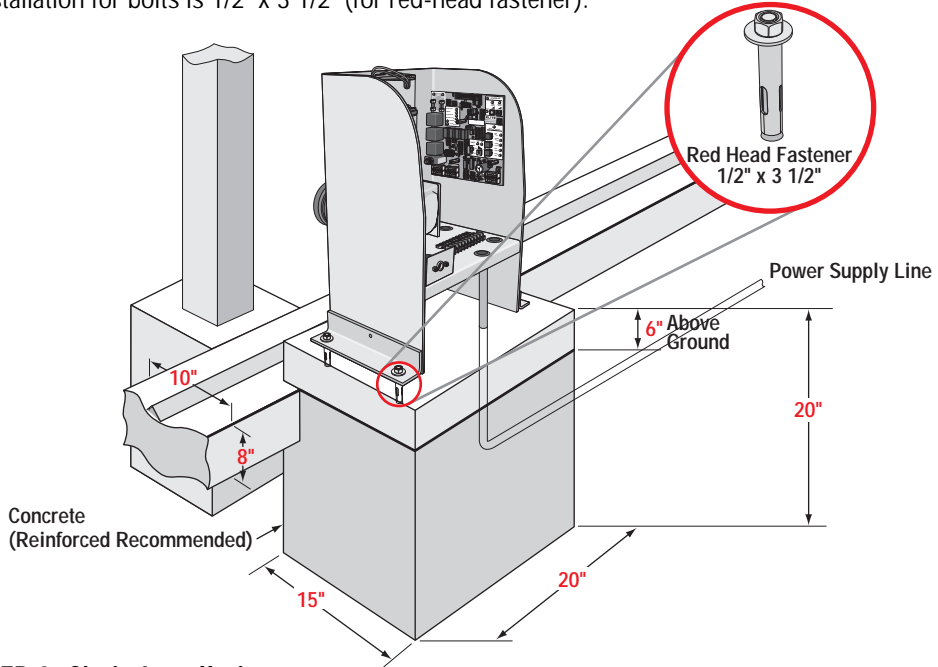
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This gate operator is designed for single home application, or for limited commercial applications. An example of a commercial application would be a factory facility with limited cycles per day, using a plug in transformer or solar panel.

# STEP BY STEP INSTALLATION

## STEP 2: Mounting Operator

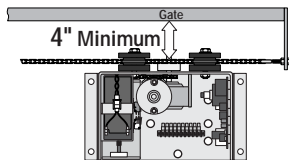
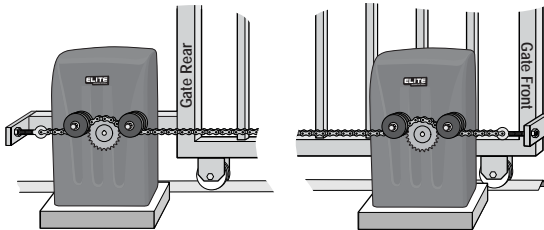
Pour concrete bed for Robo Slide. Minimum size of bed is 20" x 15" x 20"d. Suggested installation for bolts is 1/2" x 3 1/2" (for red-head fastener).



## STEP 3: Chain Installation

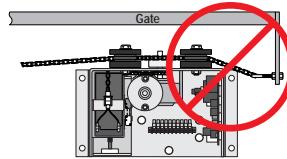
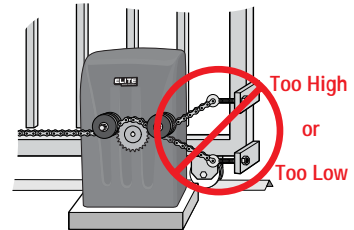
Minimum space between gate and output sprocket must be 4". After you position the gate operator, bolt-down the operator to the concrete bed. Make certain that the concrete bed is solid.

### Correct Chain Installation



Correct Chain Spacing

### Incorrect Chain Installation

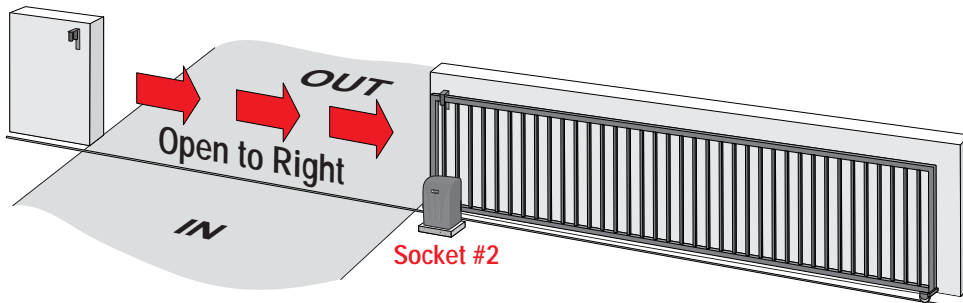
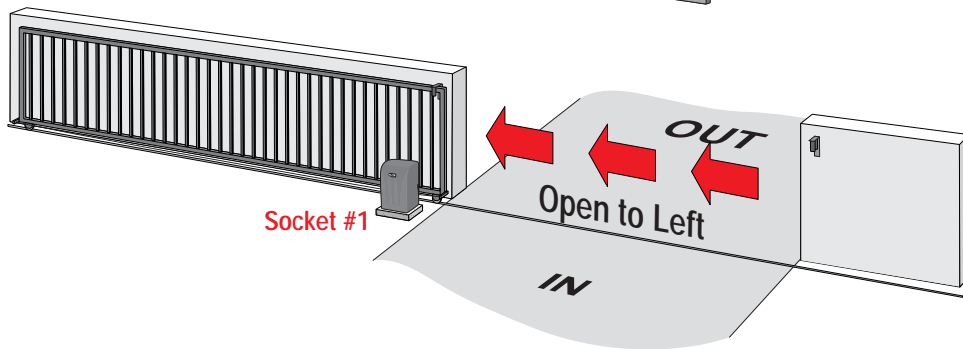
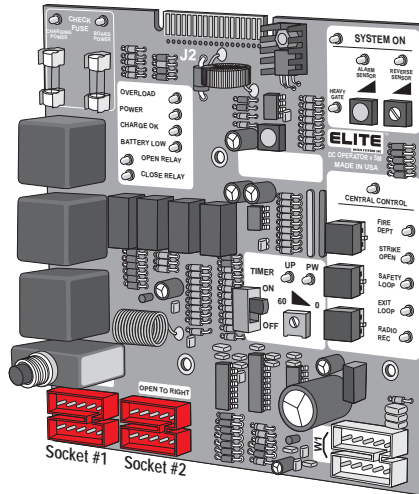


Incorrect Chain Spacing

# STEP BY STEP INSTALLATION

## STEP 4: Gate Movement Direction

Plug in the limit/motor harness wires to the left socket (#1) if your gate, from the inside of the property, opens to the left and closes to the right. Plug into the right socket (#2) if the gate opens to the right and closes to the left from the inside of the property.





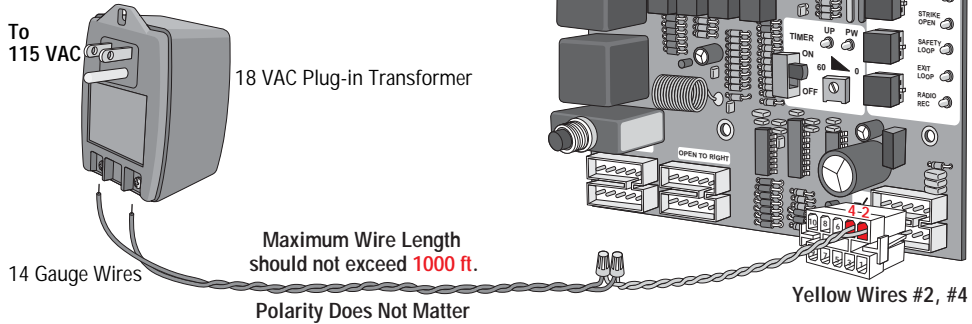
# STEP BY STEP INSTALLATION

## STEP 5: DC Power Supply Connection

Use Elite's optional 18 VAC plug-in transformer (Elite Part # **A POW-1**). Hook up the transformer to 115 VAC. Use two, low voltage, 14 gauge / 300watt direct burial, landscape lighting cables. Hook these wires to the two yellow wires from the control board to the plug-in transformer.

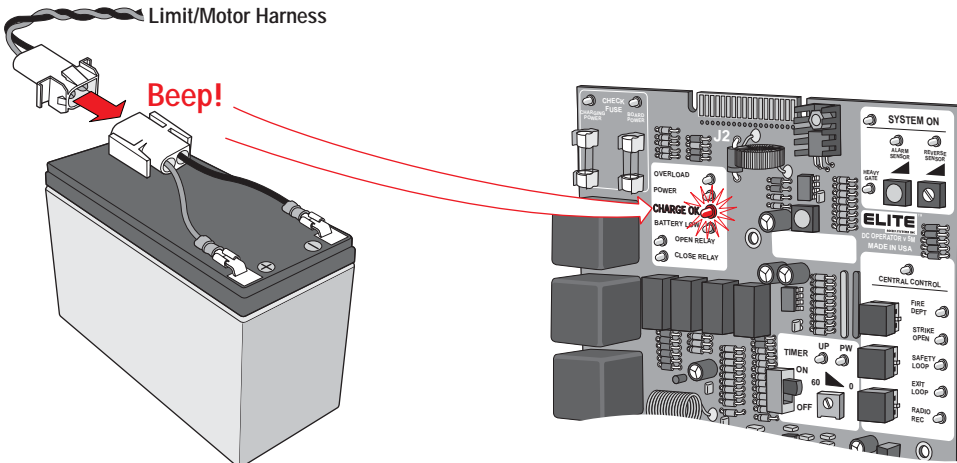


**Do Not** use solar panel and plug-in transformer at the same time.



After the plug-in transformer has been connected to the power source, connect the battery cable plug to the limit/motor harness plug. You will immediately hear a beep for a few seconds. After the beep, check the "Charge OK" LED.....

.....it must be "ON".



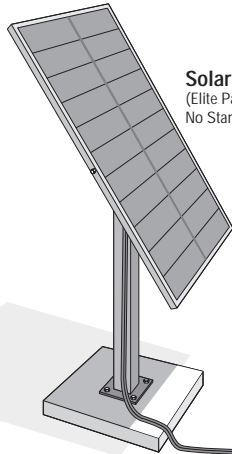
# STEP BY STEP INSTALLATION

## STEP 6: Optional Solar Panel Connection

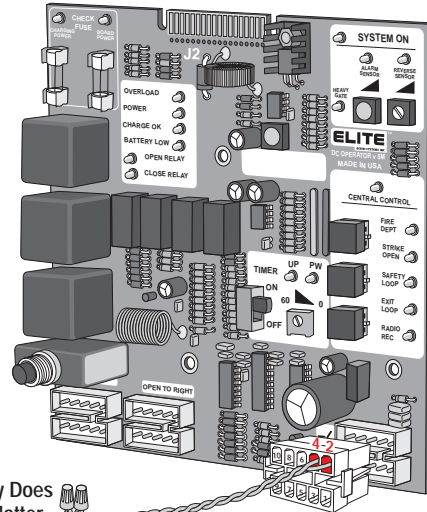
If you use Elite's optional solar panel (Elite Part # **Solar 3**). Connect the two wires from the solar panel to the two yellow wires on the control board. Sunlight will energize the batteries through the solar panel. This solar panel will charge up to 2800 Mamp/Hr in optimum conditions & 500 Mamp/Hr in light overcast conditions. For detailed specifications consult the Solar 3 Installation sheet.



**Do Not** use solar panel and plug-in transformer at the same time.



Solar Panel  
(Elite Part # **SOLAR 3**)  
No Stand



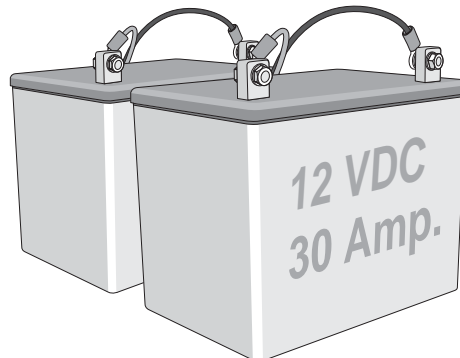
Polarity Does  
Not Matter

Yellow Wires #2, #4

Energizing Robo Slide with solar power only needs the radio receiver to operate the gate. The only recommended external devices other than radio receivers are dry-contact command devices which do not consume any current like key switches. **Using other devices that consume high current such as telephone access, magnetic locks or loop detectors will cause excess drainage of the battery and eventually completely drain the battery .**



Elite recommends using 1 or 2 larger batteries (12 VDC, 30 Amp) (Elite Part # **A 12330** or **A 12330 PACK**) in Robo Slide when using the optional solar panel.

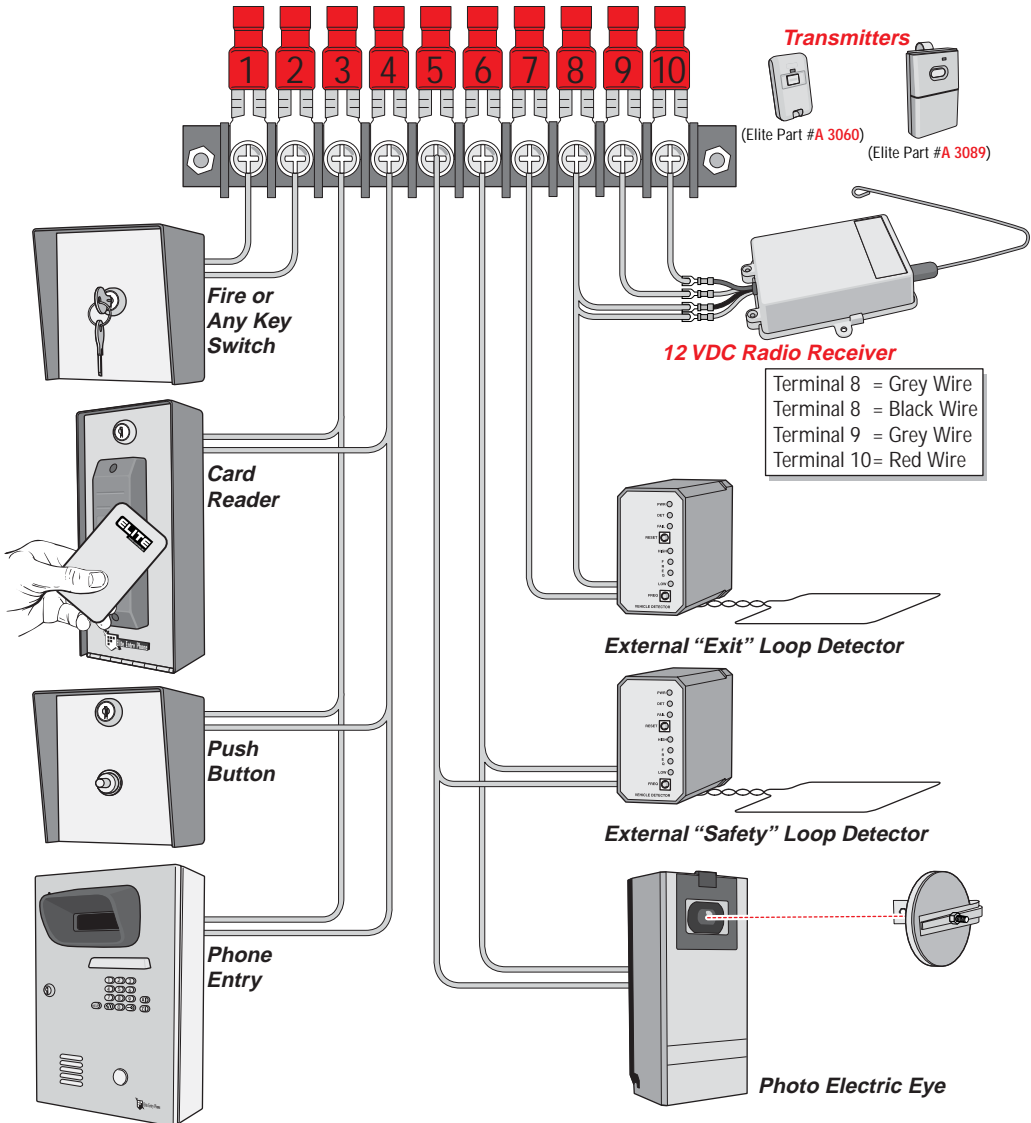


**For More Details,**  
contact your **Local Dealer**

# STEP BY STEP INSTALLATION

## STEP 7: Terminal Connections

The radio receiver **must be 12 VDC only** (Elite Part # **A 1099-12V**). If you want to use safety or exit loops, you **must use 12 VDC loop detectors only** (Elite Part # **A 23**). The hook-ups for the radio receiver are as follows: Strike open wires go to **8** and **9** on terminal. Power supply goes to terminal **10** (**positive +**) and terminal **8** (**negative -**). Connections for other devices are shown below.





# STEP BY STEP INSTALLATION

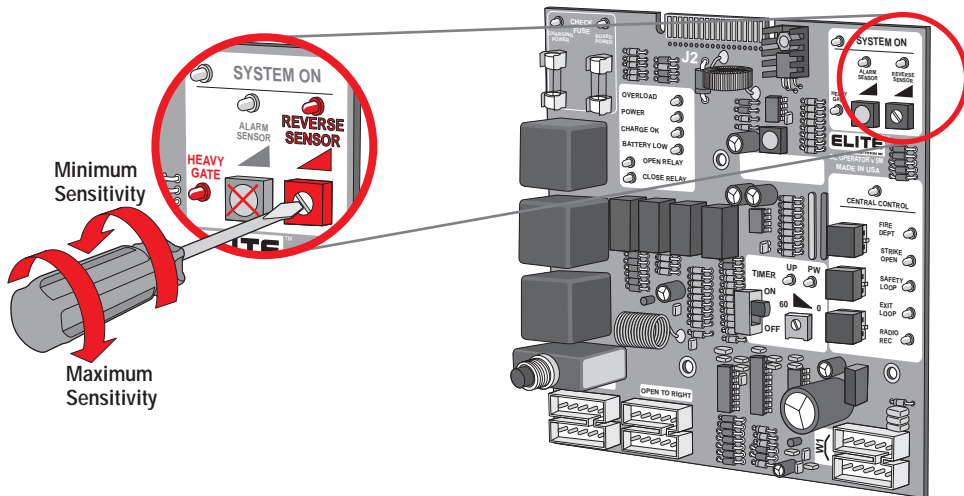
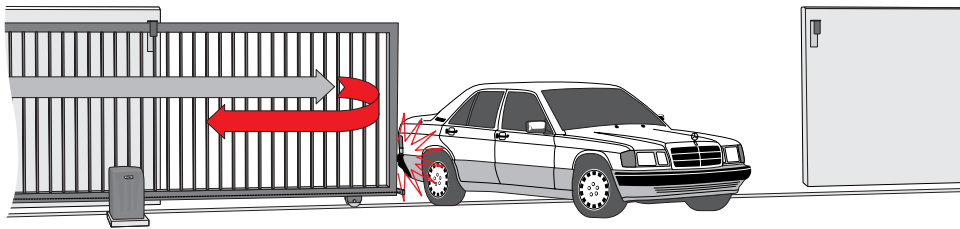
## STEP 10: Two-Way Adjustable Reversing Sensor

There is a blue pot with a white screw adjustment on the upper portion of the control board marked "**REVERSE SENSOR**". Do Not Touch Alarm Sensor blue pot.

The level of sensitivity has to do with the weight of the gate and the condition of installation.

**Too sensitive** = if the gate stops or reverses by itself.

**Not sensitive enough** = if the gate hits an object and does not stop or reverse.

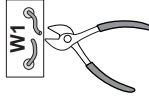


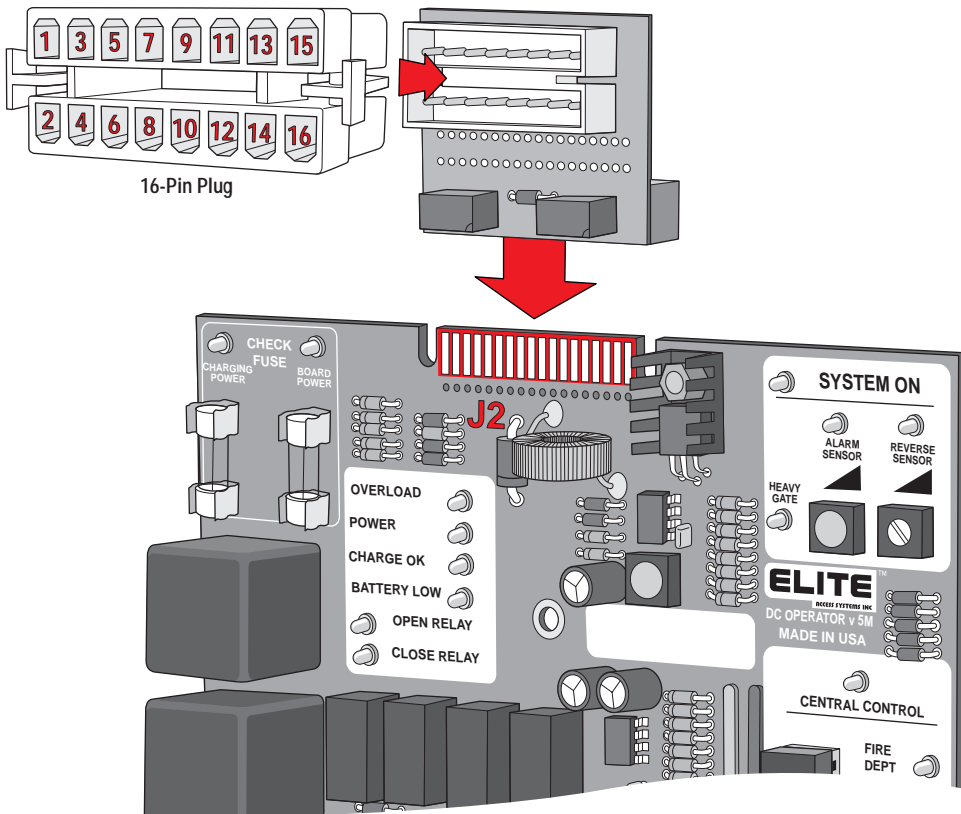
There is an LED "**HEAVY GATE**" which will light up when the gate is heavier than normal for the operator. The operator will still function properly.

**NOW YOUR INSTALLATION IS COMPLETE**

## "OPTIONAL" INPUT BOARD

The optional board allows extra control of the gate, is available only from Elite Access Systems. Installation is simple; just clip the optional board to the J2 slot on the top of the control board. Below lists the function of each pin.

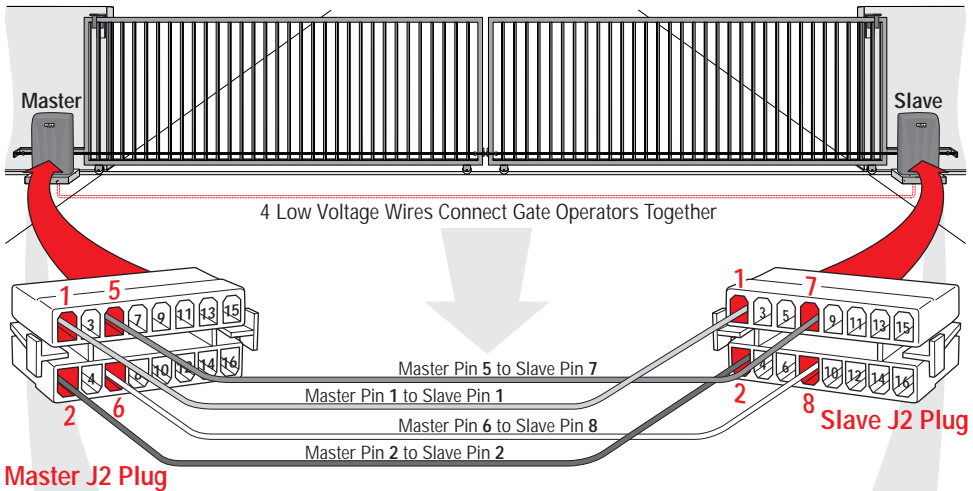
- 1 & 2** Open Switch
- 3 & 4** Stop Switch (Cut **W1** Jumper at Bottom of Board)  Use a Normally Closed Contact
- 5 & 6** Timer Close Output from Master to Slave
- 7 & 8** Timer Input from Slave to Master (Close Command)
- 9 & 10** Vandalism Alarm Output (Not Burglar Alarm) - 12 VDC
- 11 & 4** Emergency Open (Direct Command from Battery to Motor)
- 12 & 7** Emergency Close (Direct Command from Battery to Motor)
- 13 & 14** Magnetic Lock - Dry Contact Relay (Com NC)
- 15 & 16** Center Loop Option (For Swing Gate Operators Only)



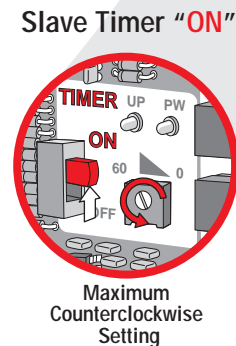
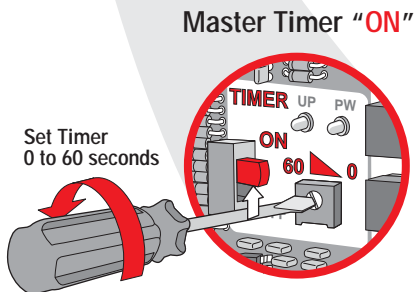
# MASTER AND SLAVE WITH TIMER

To use the master/slave option with Robo Slide, you must purchase the **Optional Input Board** (Elite Part # **Q203**) and connect it to the **J2** slot. *Refer to Optional Input Board*

**Caution:** 18 VAC plug-in transformer, per gate operator required



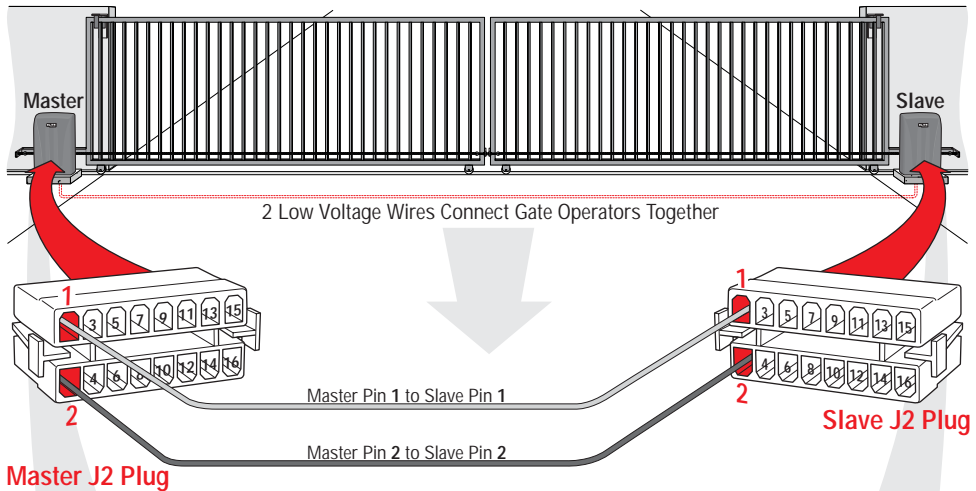
1. Make master/slave J2 plug connections as shown above
2. Turn timers on **BOTH** control boards to the “**ON**” position
3. Use **MASTER** timer **ONLY** for the auto close time adjustment (0 to 60 sec)
4. Turn the **SLAVE** timer adjustment all the way Counterclockwise



# MASTER AND SLAVE WITHOUT TIMER

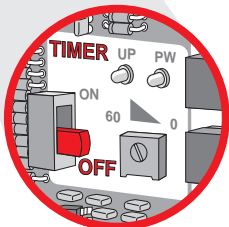
To use the master/slave option with Robo Slide, you must purchase the **Optional Input Board** (Elite Part # **Q203**) and connect it to the **J2** slot. *Refer to [Optional Input Board](#)*

**Caution:** 18 VAC plug-in transformer, per gate operator required

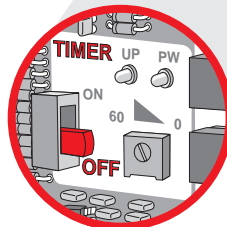


1. Make master/slave J2 plug connections as shown above
2. Turn timers on **BOTH** control boards to the **"OFF"** position

Master Timer **"OFF"**



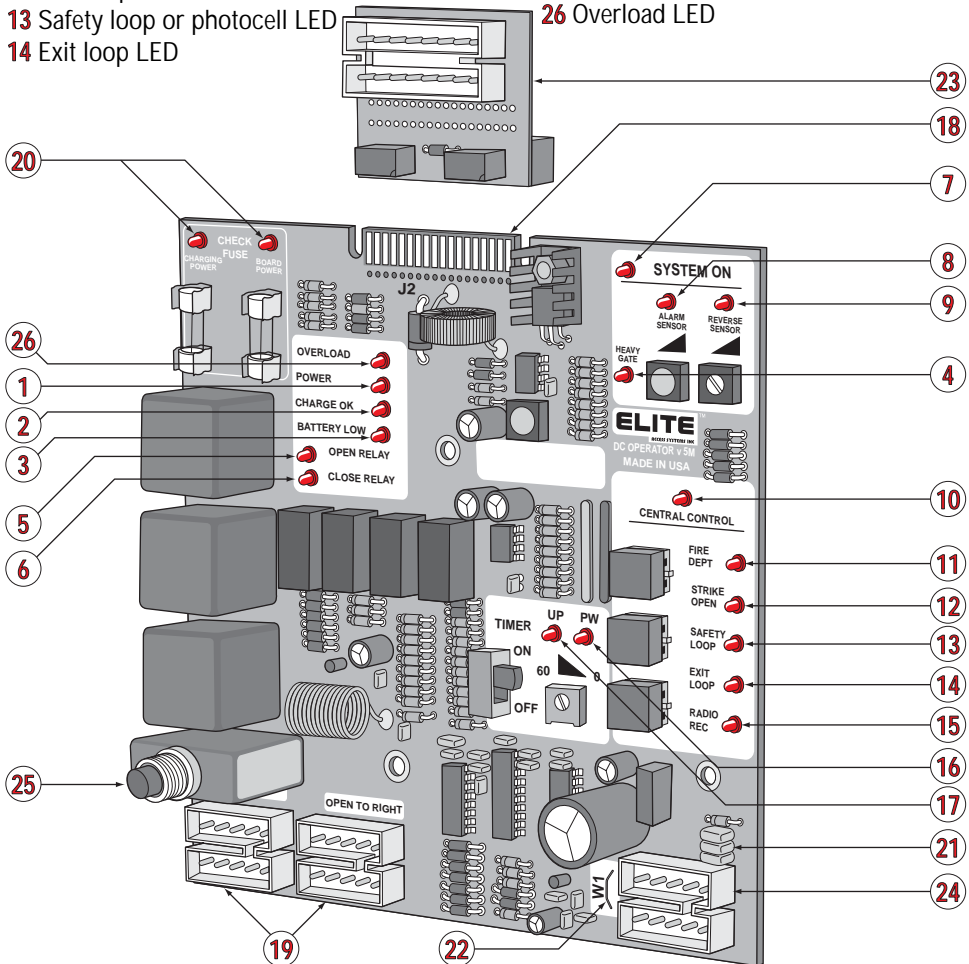
Slave Timer **"OFF"**







# CONTROL BOARD FUNCTIONS

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1 Power on LED</li> <li>2 Charge on LED</li> <li>3 Low battery indicator LED</li> <li>4 Heavy gate indicator LED</li> <li>5 Open Relay LED</li> <li>6 Close Relay LED</li> <li>7 System on, Reversing sensor and Alarm sensor</li> <li>8 Alarm sensor LED</li> <li>9 Reversing sensor LED (Rebounder)</li> <li>10 Central control LED</li> <li>11 Fire department or key switch LED</li> <li>12 Strike open LED</li> <li>13 Safety loop or photocell LED</li> <li>14 Exit loop LED</li> </ul> | <ul style="list-style-type: none"> <li>15 Radio receiver LED</li> <li>16 Timer power LED</li> <li>17 Timer-Up indicator</li> <li>18 J2 alternate optional output</li> <li>19 Movement direction sockets</li> <li>20 Replace fuse indicator</li> <li>21 Spike suppressor</li> <li>22 Jumper for stop button</li> <li>23 Optional Input board</li> <li>24 Plug in power - 18 VAC or solar panel and terminal block connector</li> <li>25 Breaker reset</li> <li>26 Overload LED</li> </ul> |
|--|--|





## LED DESCRIPTION

<i>LED Description</i>	 <b>LED On</b>	 <b>LED Off</b>
<p><b>① Power</b> at all times when there is one or more power sources ie: Battery, 18 VAC or solar</p>	Power source OK and board power fuse OK	<p>1. No power source at all</p> <p><i>If dimmed down</i></p> <p>1. Bad board power fuse</p>
<p><b>② Charger OK</b> on when there is any charging power ie: 18 VAC - solar</p>	Transformer or solar OK and charging power fuse OK	<p>1. No Transformer or Solar</p> <p><i>If dimmed down</i></p> <p>1. Bad Charging power fuse</p>
<p><b>③ Battery Low</b> normally off - it will indicate low battery</p>	<p><i>Flashing LED - Battery is less than required limit needs to be recharged</i></p> <ol style="list-style-type: none"> <li>1. Excess usage</li> <li>2. Bad charging system</li> <li>3. Under rate solar panel</li> <li>4. Bad battery</li> <li>5. Bad battery connection</li> </ol>	<p>Battery OK Battery voltage is over minimum required limit</p>
<p><b>④ Heavy Gate</b> will work only when the gate is in motion</p>	<ol style="list-style-type: none"> <li>1. Gate is too heavy</li> <li>2. Bad wheels</li> <li>3. Bad rollers</li> <li>4. Chain is too tight</li> <li>5. Steep slope on open or close cycle</li> <li>6. Low battery</li> </ol>	<p>Gate weight and condition are OK</p>
<p><b>⑤ Open Relay</b></p>	Open relay is energized	Open relay is not energized
<p><b>⑥ Close Relay</b></p>	Close relay is energized	Close relay is not energized
<p><b>⑦ System On</b> will work only when the gate is in motion</p>	Detecting motor current	<ol style="list-style-type: none"> <li>1. Motor stop</li> <li>2. No motor current detected</li> </ol>
<p><b>⑧ Alarm Sensor</b> when LED goes on you will hear a beep sound for about 20 seconds</p>	<ol style="list-style-type: none"> <li>1. Hearing beep sound means overload</li> <li>2. Gate is too heavy</li> <li>3. Broken wheel</li> <li>4. Gate off track</li> <li>5. Unwanted object has physically stopped gate</li> </ol>	<p>System is OK</p>

**Note:** Circled red numbers indicates location on control board. [Refer to Control Board Functions](#)

## LED DESCRIPTION - CONTINUED

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<i>LED Description</i>	 <b>LED On</b>	 <b>LED Off</b>
<b>⑨</b> Reversing Sensor	Sensor is detecting obstruction	No obstruction is detected
<b>⑩</b> Central Control	<p>Acknowledgement of receiving open command from one of the terminals</p> <ul style="list-style-type: none"> <li>• Fire Department 1 &amp; 2</li> <li>• Strike Open 3 &amp; 4</li> <li>• Safety Loop 5 &amp; 6</li> <li>• Exit Loop 7 &amp; 8</li> <li>• Radio Receiver 8 &amp; 9</li> </ul>	Not receiving any command
<b>⑪</b> Fire Dept	Receiving signal at terminal block 1 & 2	Not receiving signal at terminal block 1 & 2
<b>⑫</b> Strike Open	Receiving signal at terminal block 3 & 4	Not receiving signal at terminal block 3 & 4
<b>⑬</b> Safety Loop	Receiving signal at terminal block 5 & 6	Not receiving signal at terminal block 5 & 6
<b>⑭</b> Exit Loop	Receiving signal at terminal block 7 & 8	Not receiving signal at terminal block 7 & 8
<b>⑮</b> Radio Rec	Receiving signal at terminal block 8 & 9	Not receiving signal at terminal block 8 & 9
<b>⑯</b> Timer PW	Timer power is on	Timer is not on
<b>⑰</b> Timer UP	Output signal to close relay	Not receiving signal to close relay

**Note:** Circled red numbers indicates location on control board. [Refer to Control Board Functions](#)

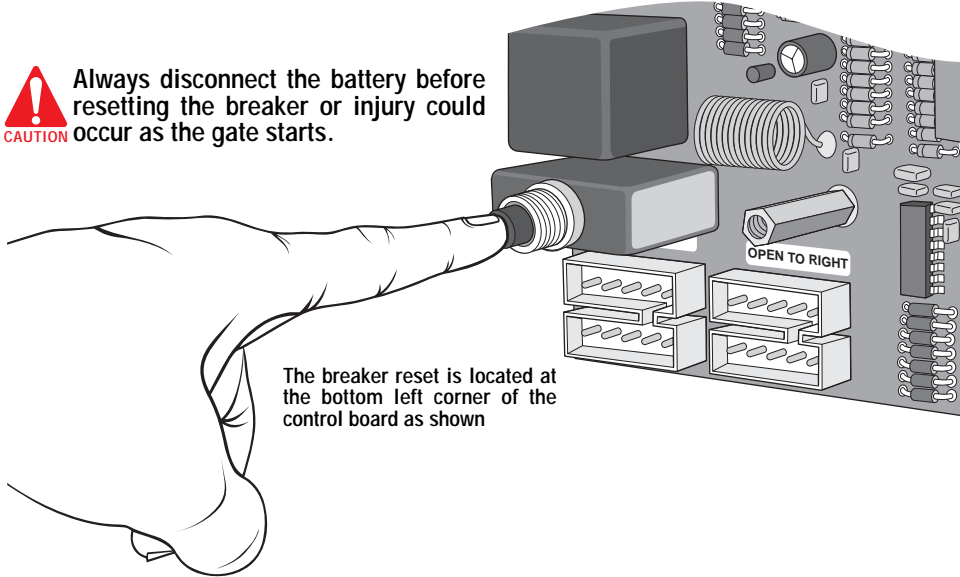
# TROUBLESHOOTING

## How to Reset the Breaker

If all electronic sensors fail or are not adjusted properly due to heavy gates, off-track gate, or obstructed gate path, the breaker will kick-out. Reset the breaker by pressing the reset button located on the bottom left corner of the control board.



Always disconnect the battery before resetting the breaker or injury could occur as the gate starts.



## How to Check the Fuses

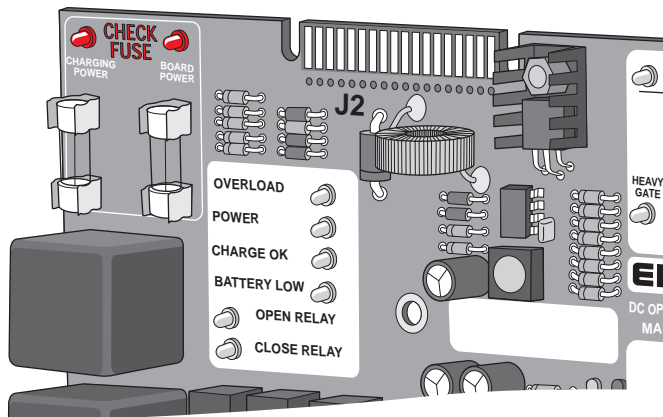
If the gate is not moving in any direction be sure to check all of the LED displays on the control board. If the board power or charging power LEDs are "ON", change the corresponding fuse on the top left corner of the board.



Replace fuse with 1.5A - 250V fuse

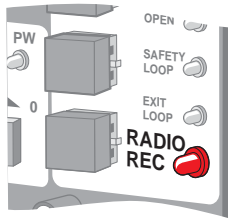
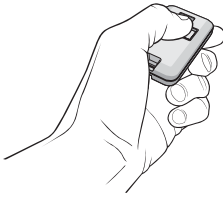
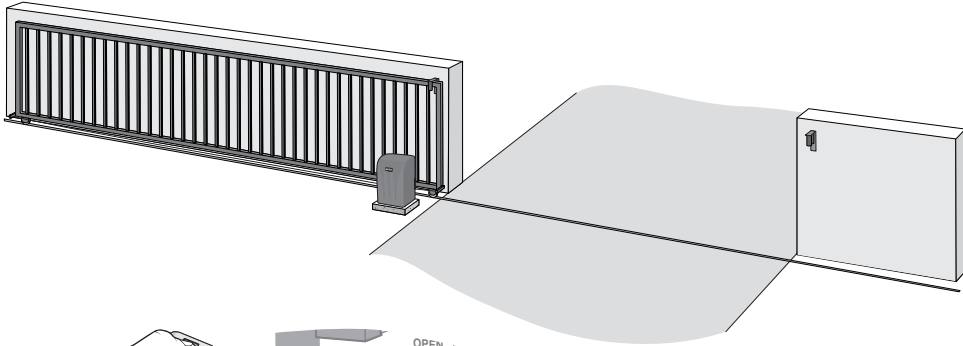


Robo Fuse  
(Elite Part # Q162)



# TROUBLESHOOTING

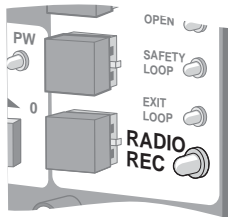
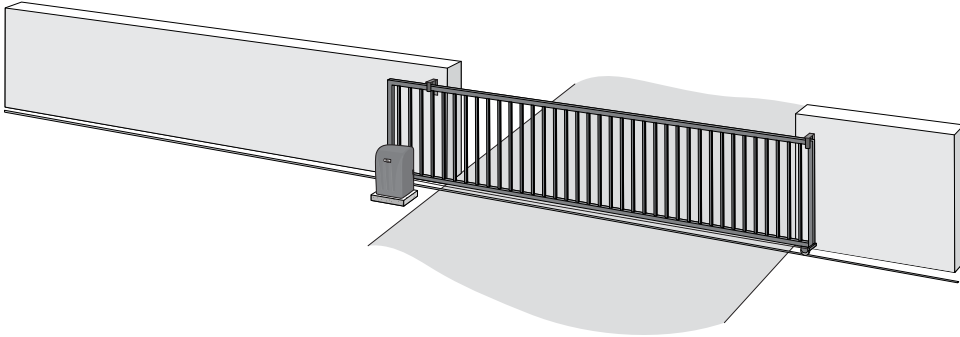
## The Gate Will Not Close!



**Symptom:** The radio receiver LED on the control board remains "ON" when using the remote control.

**Possible Solutions:** Stuck remote control button. The radio receiver has malfunctioned in the "ON" position.

## The Gate Will Not Open!



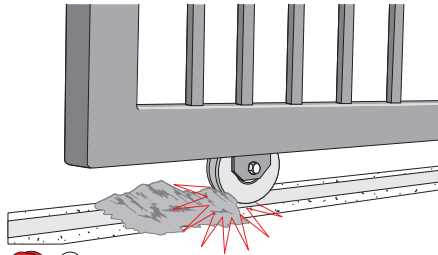
**Symptom:** The radio receiver LED on the control board remains "OFF" when using the remote control.

**Possible Solutions:** Dead battery in the remote control. Remote control code switches are different from radio receiver code switches. The radio receiver has malfunctioned in the "OFF" position.

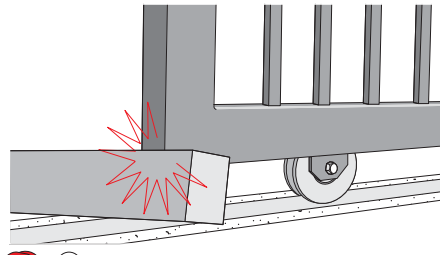
For further information, contact your local dealer.

# TROUBLESHOOTING and PARTS LIST

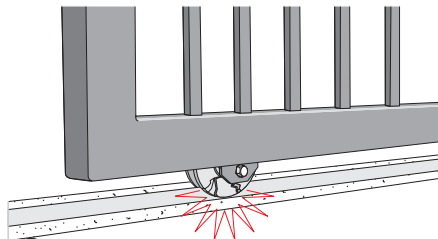
If you hear a “BEEP” sound, the gate is too heavy. If not check below.



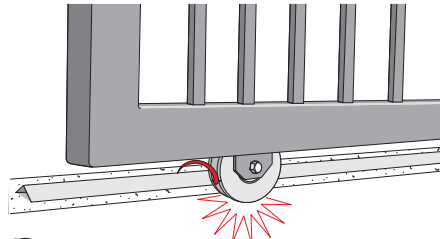
1 Debris is on the gate's track such as mud, rocks dirt, etc.



2 The gate is hitting a wall or a car.



3 The gate has one or more broken wheels.



4 A car has hit the gate and the gate is off the track.

After fixing the problem, the Robo Slide will automatically reset itself.

## Robo Slide Parts List

### *Robo Slide Conversion Kit*

Q204

- Q211 - Limit/Motor Harness
- Q218 - Terminal Harness
- Q206 - Control Board
- Battery Harness

- A BT 12 - 12 VDC, 7 amp. Battery with Harness
- A H-110 - Gate Chain #41 (10 ft) (20 ft included)
- A H-111 - Gate Chain #40 (10 ft) Optional
- A H-113 - Master Link
- A H-125 - Master Link
- Q003 - Chain Bolt
- Q004 - Chain Bracket
- Q006 - PC Board Nuts (1 Set)
- Q029 - Limit Switch
- Q032 - Limit Switch Adjustment Nut
- Q101 - Limit Switch Bearing Holder
- Q123 - Motor - DC - 12V

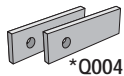
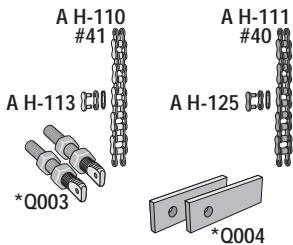
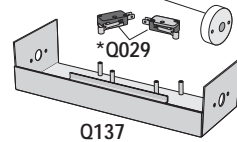
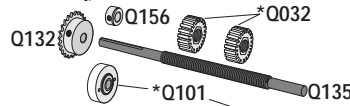
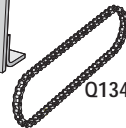
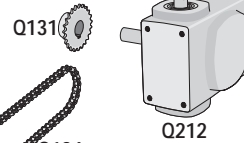
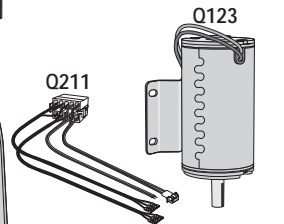
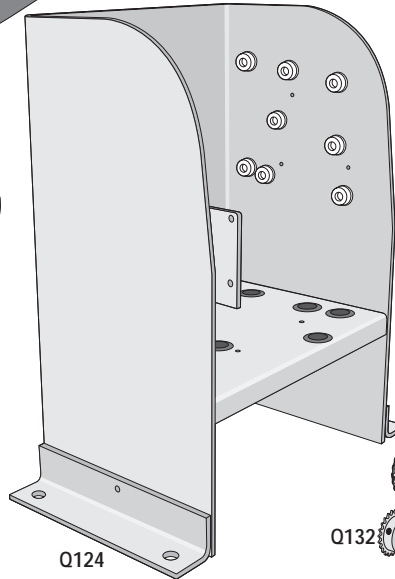
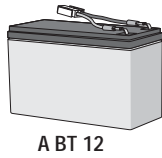
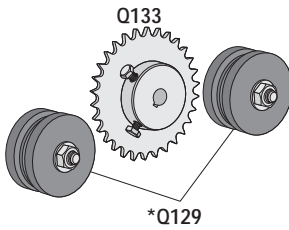
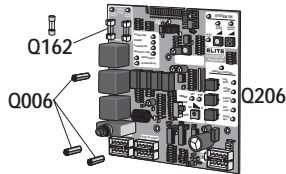
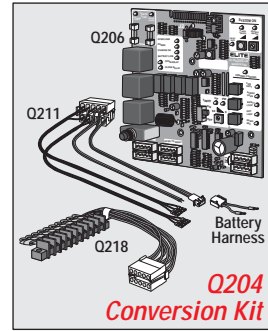
- Q124 - Chassis
- Q129 - Idler Sprocket with Bolt/Nut
- Q131 - Limit Switch Drive Sprocket
- Q132 - Limit Switch Sprocket
- Q133 - Drive Sprocket
- Q135 - Limit Switch Bolt (Shaft)
- Q137 - Limit Switch Box
- Q156 - 1/2 Inch Collar
- Q162 - Fuse
- Q180 - 1 inch Diameter Coupling
- Q203 - Option Board with Harness
- Q206 - Control Board
- Q211 - Limit/Motor Harness
- Q212 - Gear Reducer 40 - 30:1
- Q218 - Terminal Harness
- Q241 - Cover, Polyethylene Plastic

Multiple Parts "Q" Number

# ROBO SLIDE PARTS



Q241



Note: \*Sold Individually, 2 Shown.  
*For part names, refer to parts list*