CHAMBERLAIN®

ELITE™

INSTRUCTION MANUAL

THE ROBO SLIDE

RESIDENTIAL SLIDE GATE OPERATOR

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

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CAUTION

When you see these Safety Symbols and Signal Words on the following pages, they will alert you to the possibility of serious injury or death if you do not comply with the warnings that accompany them. The hazard may come from something mechanical or from electric shock. Read the warnings carefully.

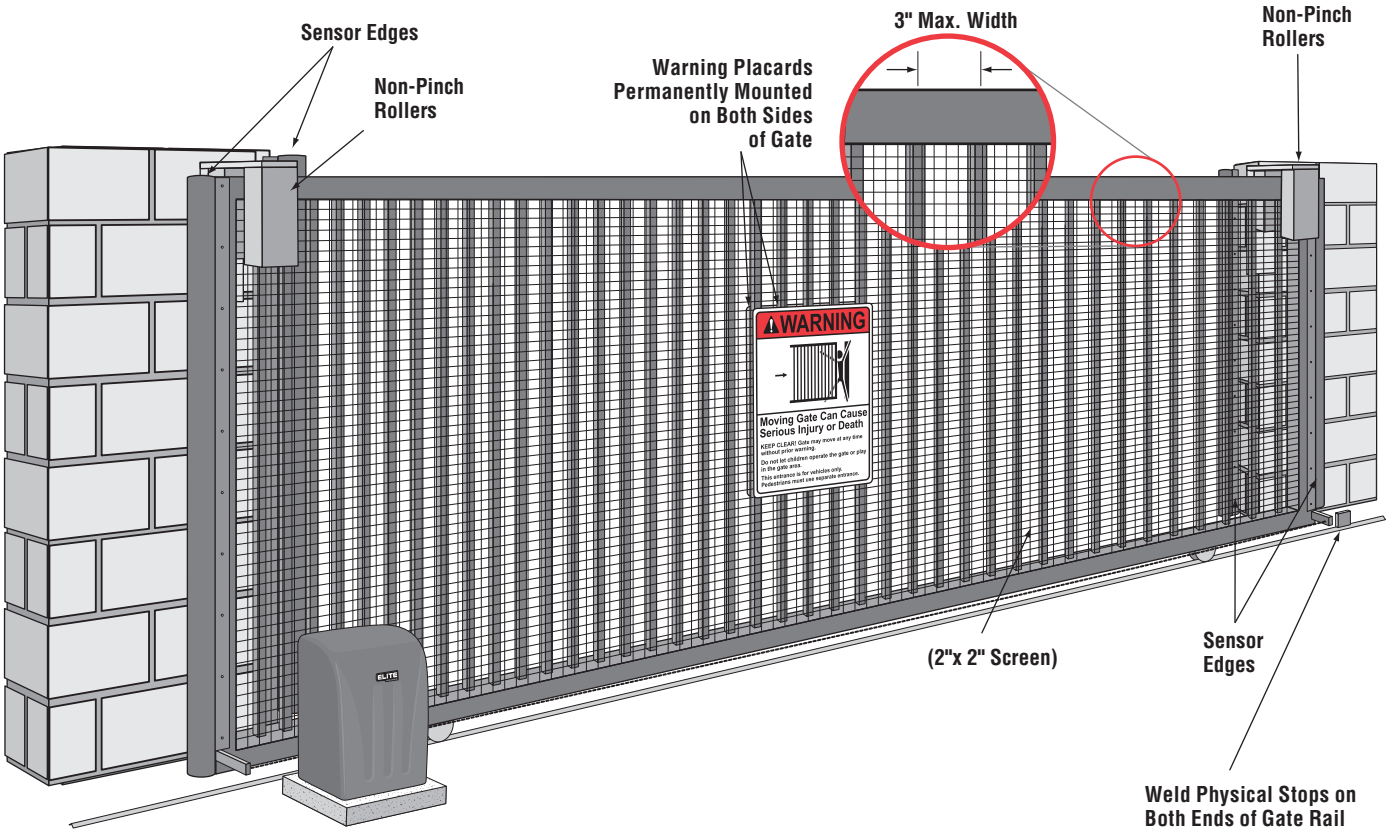
When you see this Signal Word on the following pages, it will alert you to the possibility of damage to your gate and/or the gate operator if you do not comply with the cautionary statements that accompany it. Read them carefully.

IMPORTANT NOTE

- BEFORE attempting to install, operate or maintain the operator, you must read and fully understand this manual and follow all safety instructions.
- DO NOT attempt repair or service of your residential gate operator unless you are an Authorized Service Technician.

SPECIFICATIONS AND WARNINGS

All "Pinch Points" MUST have protective safety devices.



Recommended Gate Setup Configuration

SPECIFICATIONS

Gate Speed	– 11 inch per second
Maximum Gate Length	– 20 feet
Maximum Gate Weight	– 800 pounds
Maximum Cycles	– 70 cycles per day with Chamberlain Elite's Plug-In Transformer. – Solar power cycles per day varies, Contact Chamberlain for more Information – Battery back-up cycles (50 cycles total)
AC Power Supply	– 25 VDC 1.6 Amp Plug-In Transformer (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 (Part # SOLAR 3)

SAFETY INSTALLATION INFORMATION

1. *Install the gate operator only when:*
   - ***a.*** The operator is appropriate for the construction and the usage class of the gate.
   - ***b.*** All openings of a horizontal swing gate are guarded or screened from the bottom of the gate to a minimum of 4' (1.2 m) above the ground to prevent a 2-1/4" (6 cm) diameter sphere from passing through the openings anywhere in the gate, and in that portion of the adjacent fence that the gate covers in the open position.
   - ***c.*** All exposed pinch points are eliminated or guarded, and guarding is supplied for exposed rollers.

2. *The operator is intended for installation only on gates used for vehicles. Pedestrians must be supplied with a separate access opening.*

3. *The gate must be installed in a location so that enough clearance is supplied between the gate and adjacent structures when opening and closing to reduce the risk of entrapment. Swinging gates shall not open into public access areas.*

4. *The gate must be properly installed and work freely in both directions prior to the installation of the gate operator.*

5. *Controls must be far enough from the gate so that the user is prevented from coming in contact with the gate while operating the controls.*

6. *Controls intended to be used to reset an operator after 2 sequential activations of the entrapment protection device or devices must be located in the line of sight of the gate, or easily accessible controls shall have a security feature to prevent unauthorized use.*

7. *All warning signs must be installed where visible, on each side of the gate.*

8. *For a gate operator utilizing a non-contact sensor:*
   - ***a.*** Reference owner's manual regarding placement of non-contact sensor for each type of application.
   - ***b.*** Care shall be exercised to reduce the risk of nuisance tripping, such as when a vehicle trips the sensor while the gate is still moving.
   - ***c.*** One or more non-contact sensors shall be located where the risk of entrapment or obstruction exists, such as the perimeter reachable by a moving gate or barrier.

9. *For a gate operator utilizing a contact sensor such as an edge sensor:*
   - ***a.*** A hard wired contact sensor shall be located and its wiring arranged so the communication between the sensor and the gate operator is not subject to mechanical damage.
   - ***b.*** A wireless contact sensor such as the one that transmits radio frequency (RF) signals to the gate operator for entrapment protection functions shall be located where the transmission of the signals are not obstructed or impeded by building structures, natural landscaping or similar obstruction. A wireless contact sensor shall function under the intended end-use conditions.
   - ***c.*** One or more contact sensors shall be located at the leading edge, trailing edge and post mounted both inside and outside of a vehicular horizontal slide gate.
   - ***d.*** One or more contact sensors shall be located at the bottom edge of a vehicular vertical lift gate.
   - ***e.*** One or more contact sensors shall be located on the inside and outside leading edge of a swing gate. Additionally, if the bottom edge of a swing gate is greater than 6" (15 cm) above the ground at any point in its arc of travel, one or more contact sensors shall be located on the bottom edge.

SUGGESTED ENTRAPMENT PROTECTION DEVICE LOCATIONS

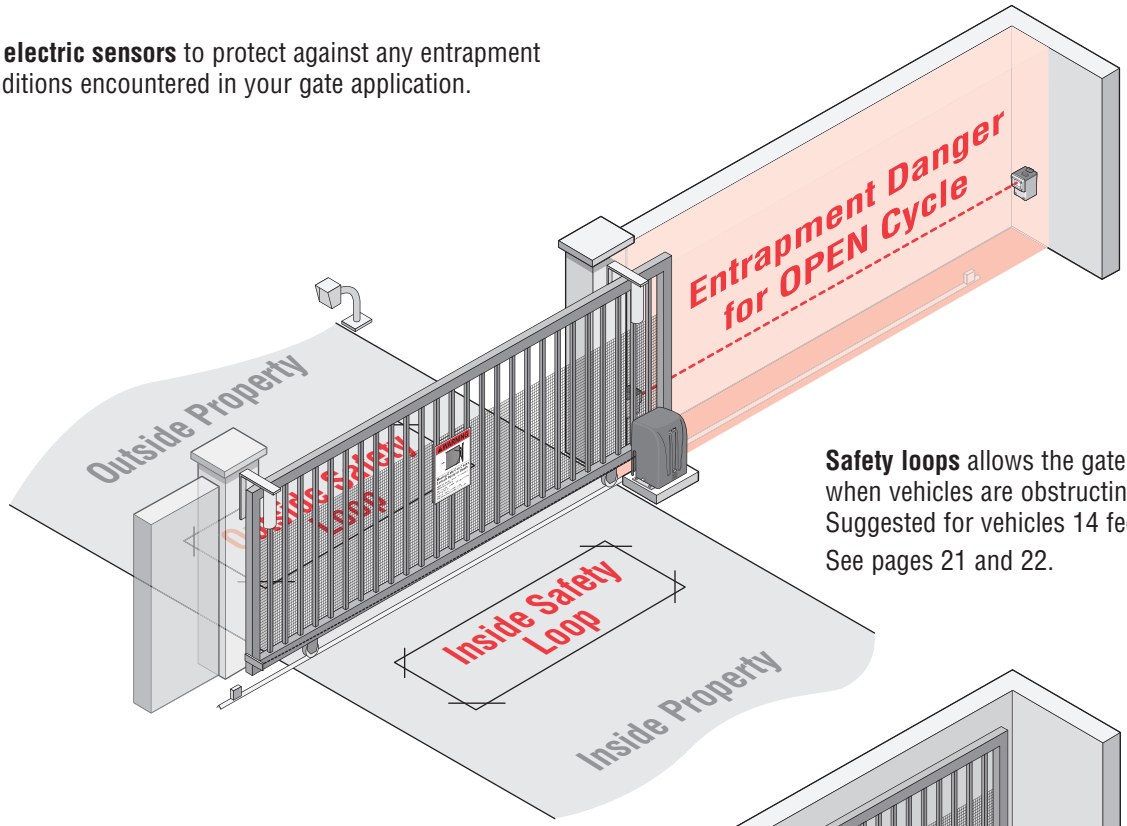
⚠WARNING

To prevent SERIOUS INJURY or DEATH from a moving gate:
- Entrapment protection devices MUST be installed to protect anyone who may come near a moving gate.
- Locate entrapment protection devices to protect in BOTH the open and close gate cycles.
- Locate entrapment protection devices to protect between moving gate and RIGID objects, such as posts or walls.

Non-Contact Sensors (Photo Electric Sensors)

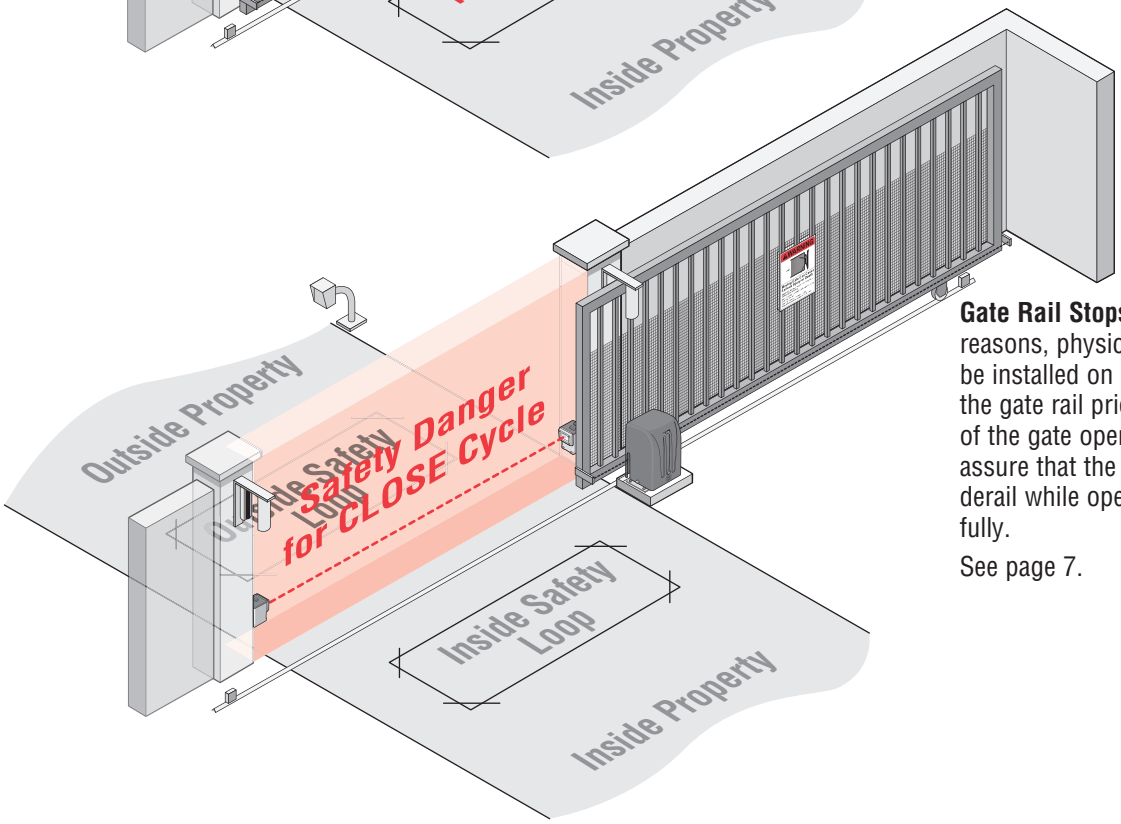
Install **photo electric sensors** to protect against any entrapment or safety conditions encountered in your gate application.

See page 17.



Safety loops allows the gate to stay open when vehicles are obstructing the gate path. Suggested for vehicles 14 feet or longer.

See pages 21 and 22.



Gate Rail Stops For safety reasons, physical stops MUST be installed on both ends of the gate rail prior to installation of the gate operator. This will assure that the gate does not derail while opening or closing fully.

See page 7.

SUGGESTED ENTRAPMENT PROTECTION DEVICE LOCATIONS

⚠WARNING

To prevent SERIOUS INJURY or DEATH from a moving gate:
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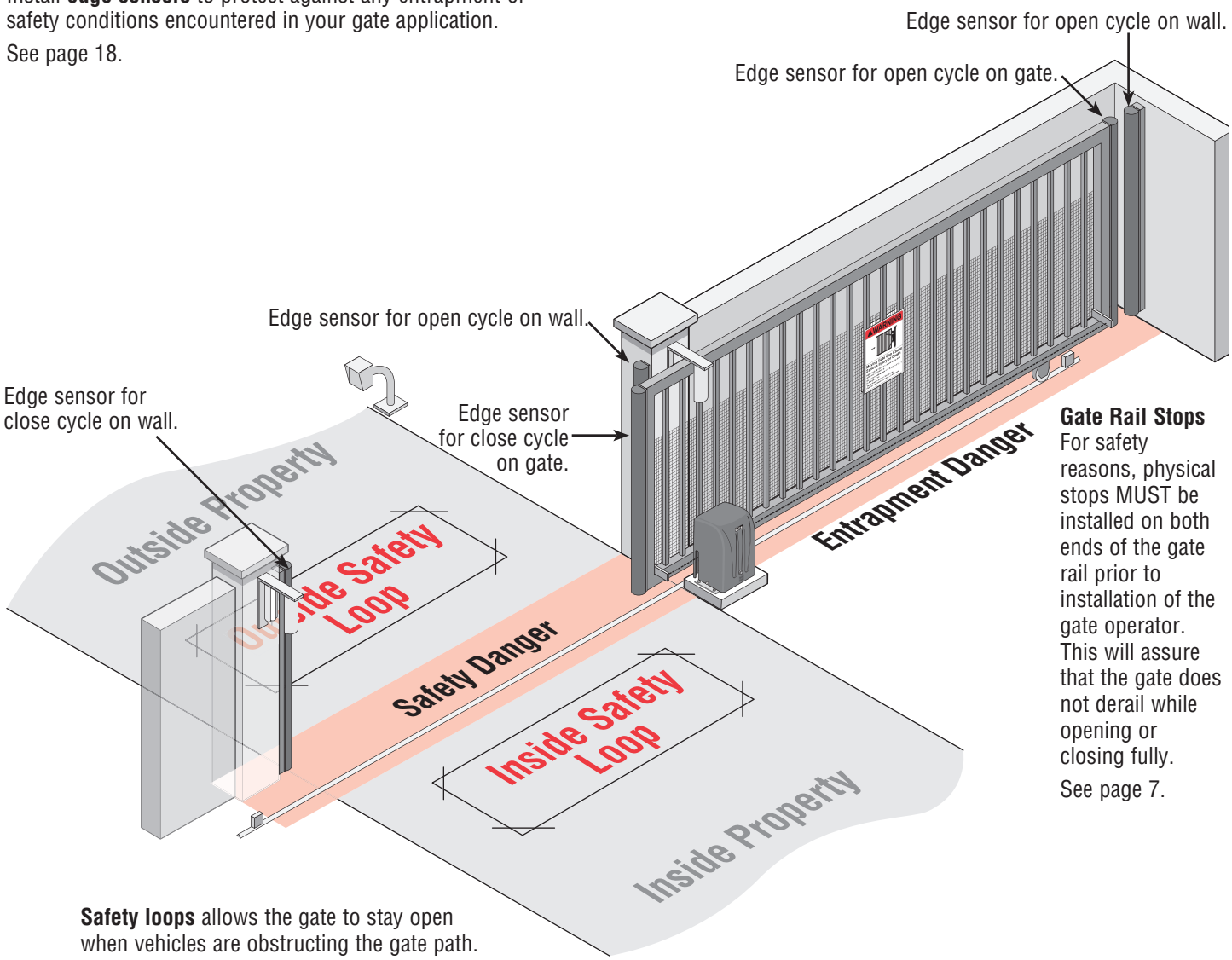
- Locate entrapment protection devices to protect in BOTH the open and close gate cycles.
- Locate entrapment protection devices to protect between moving gate and RIGID objects, such as posts or walls.

Contact Sensors (Edge Sensors)

Install **edge sensors** to protect against any entrapment or safety conditions encountered in your gate application.

See page 18.



Gate Rail Stops
For safety reasons, physical stops MUST be installed on both ends of the gate rail prior to installation of the gate operator. This will assure that the gate does not derail while opening or closing fully.

See page 7.

Safety loops allows the gate to stay open when vehicles are obstructing the gate path. Suggested for vehicles 14 feet or longer.

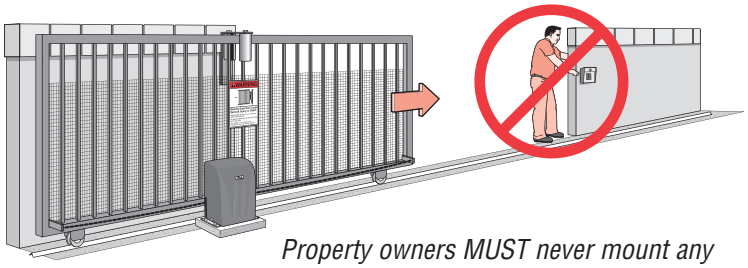
See pages 21 and 22.

SAFETY PRECAUTIONS

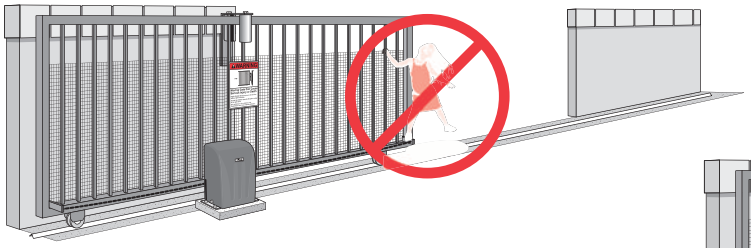
THE ROBO SLIDE IS FOR USE ON VEHICULAR PASSAGE GATES ONLY AND NOT INTENDED FOR USE ON PEDESTRIAN PASSAGE GATES.

⚠WARNING

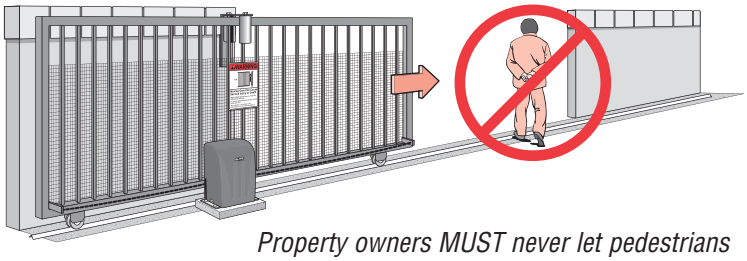
To prevent SERIOUS INJURY or DEATH from a moving gate:
- Entrapment protection devices MUST be installed to protect anyone who may come near a moving gate.
- Locate entrapment protection devices to protect in BOTH the open and close gate cycles.
- Locate entrapment protection devices to protect between moving gate and RIGID objects, such as posts or walls.



Property owners MUST never mount any gate operating device near the gate's path!

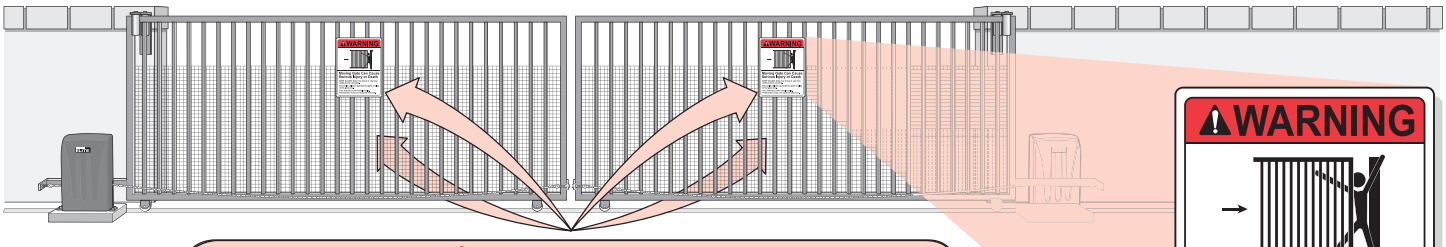


Property owners MUST never allow anyone to hang or ride on the gate!



Property owners MUST never let pedestrians cross the path of a moving gate!

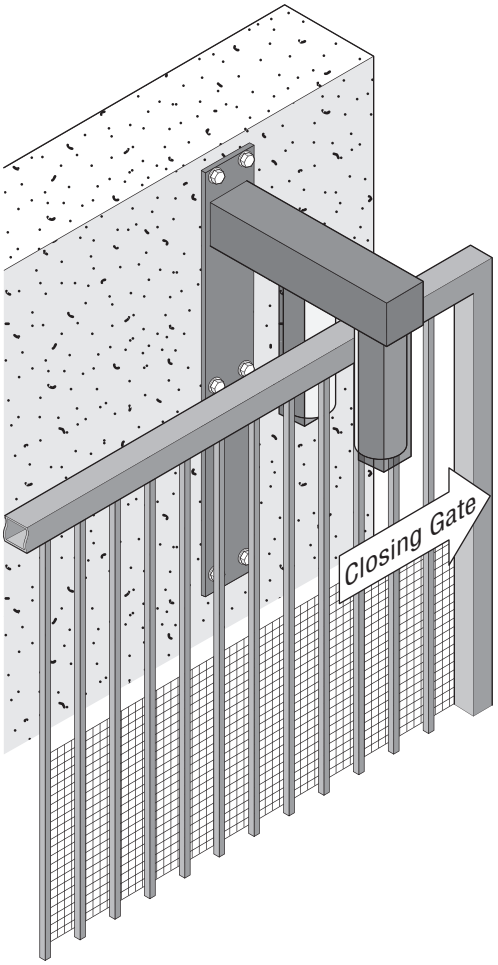
WARNING SIGN PLACEMENT



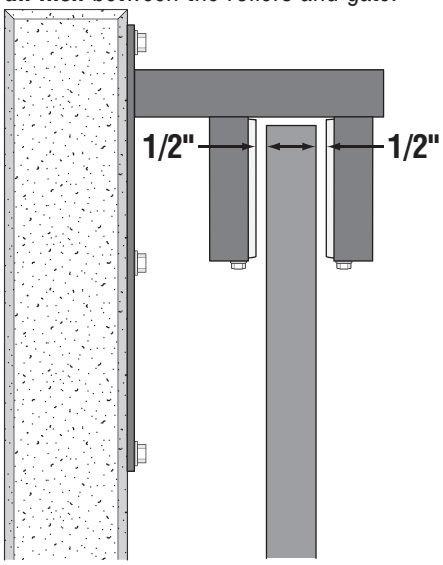
⚠WARNING

To prevent SERIOUS INJURY or DEATH from a moving gate:
Install Warning signs on BOTH sides of EACH gate in PLAIN VIEW.

SAFETY CATCH ROLLERS AND GATE RAIL STOPS



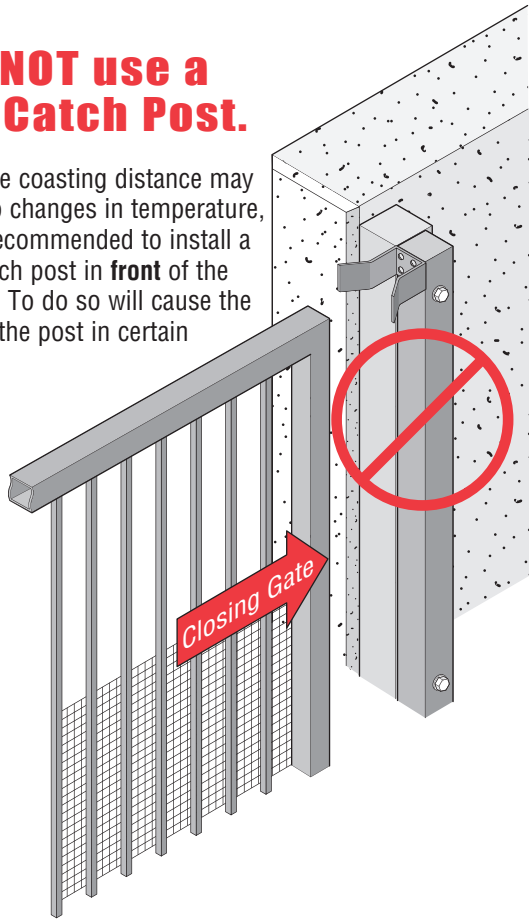
It is only recommended to install **catch rollers with safety covers** on the side of a post or wall with a minimal distance of **half an inch** between the rollers and gate.



End View of Gate and Wall

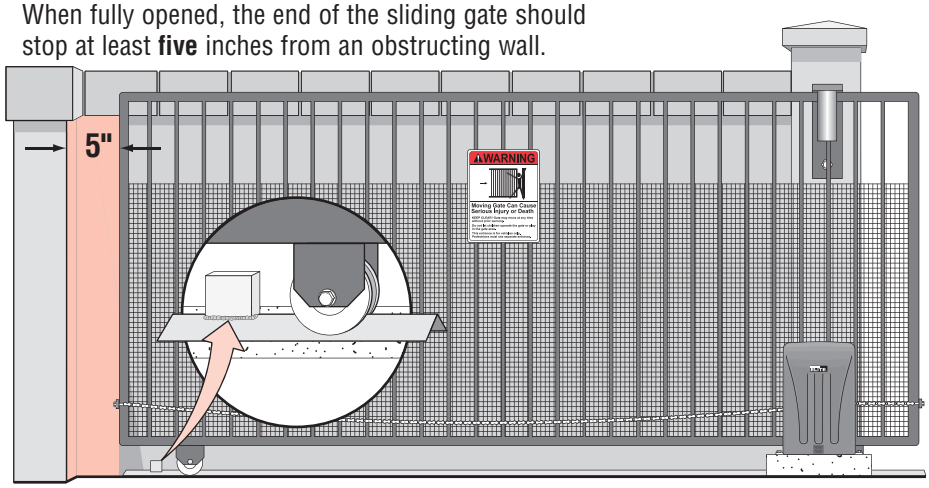
DO NOT use a Gate Catch Post.

Because the coasting distance may vary due to changes in temperature, it is **NOT** recommended to install a stop or catch post in **front** of the gates path. To do so will cause the gate to hit the post in certain instances.



Gate Rail Stop

When fully opened, the end of the sliding gate should stop at least **five** inches from an obstructing wall.



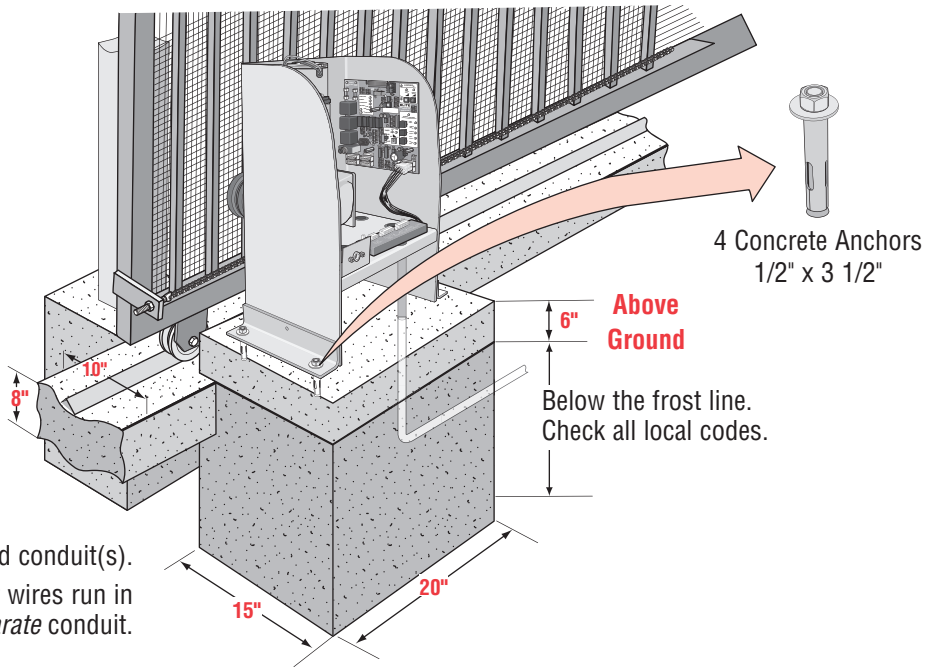
NOTE: *For safety reasons, physical stops MUST be installed on both ends of the gate rail prior to installation of the gate operator. This will assure that the gate does not derail while opening or closing fully.*

Installation

GETTING STARTED

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.

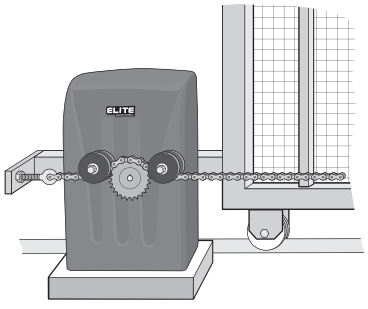
MOUNTING OPERATOR



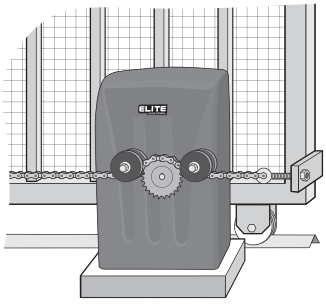
CHAIN INSTALLATION

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

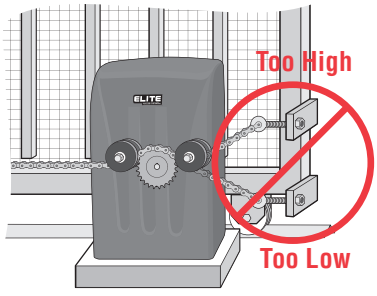


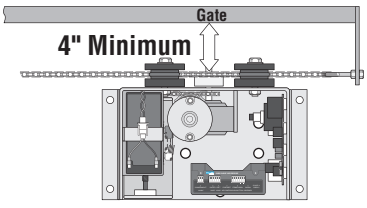
Back of Gate



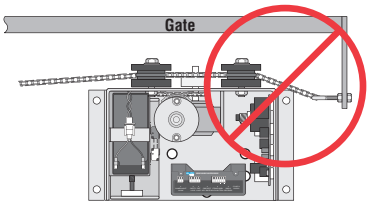
Front of Gate

Incorrect Chain Installation





Correct Chain Spacing



Incorrect Chain Spacing

Wiring

WARNING

To reduce the risk of SEVERE INJURY or DEATH:

- ANY maintenance to the operator or in the area near the operator MUST not be performed until disconnecting the electrical power and locking-out the power via the operator power switch. Upon completion of maintenance the area MUST be cleared and secured, at that time the unit may be returned to service.
- Disconnect battery and 25 Vdc transformer or solar panel BEFORE proceeding. Operator MUST be properly grounded and connected in accordance with local electrical codes. ***NOTE:*** *The operator should be on a separate fused line of adequate capacity.*
- ALL electrical connections MUST be made by a qualified individual.
- DO NOT install any wiring or attempt to run the operator without consulting the wiring diagram. We recommend that you install an optional reversing edge BEFORE proceeding with the control station installation.
- ALL power wiring should be on a dedicated circuit and well protected. The location of the power disconnect should be visible and clearly labeled.
- ALL power and control wiring MUST be run in separate conduit.
- BEFORE installing power wiring or control stations be sure to follow all specifications and warnings described below. Failure to do so may result in SEVERE INJURY to persons and/or damage to operator.

All power wiring should be on a dedicated circuit and well protected.

NOTE: *Calculated using NEC guidelines. Local codes and conditions must be reviewed for suitability of wire installation.*

CAUTION

To AVOID damaging 25 Vdc plug-in transformer, it MUST be enclosed in a suitable weatherproof enclosure and provided with proper weatherproof fixtures.

Use 14 gauge / 300 watt direct burial, landscape lighting wire NOT to exceed 1000 ft. for transformer.

WARNING

To prevent SERIOUS INJURY or DEATH from a moving gate: DO NOT disconnect the built-in audio alarm or reset switch.

EARTH GROUND ROD INSTALLATION

Proper grounding gives an electrical charge, such as from an electrical static discharge or a near lightning strike, a path from which to dissipate its energy safely into the earth.

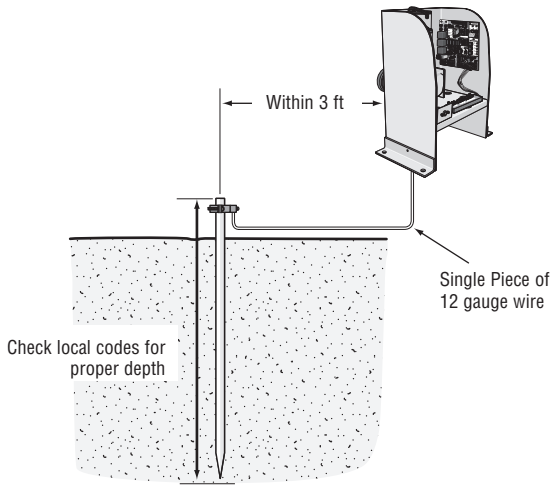
Without this path, the intense energy generated by lightning could be directed towards the Elite gate operator. Although nothing can absorb the tremendous power of a direct lightning strike, proper grounding can protect the gate operator in most cases.

The earth ground rod must be located within 3 feet from the Elite gate operator. Use the proper type earth ground rod for your local area.

The ground wire must be a single, whole piece of wire. Never splice two wires for the ground wire. If you should cut the ground wire too short, break it, or destroy its integrity, replace it with a single wire length.

CAUTION

To AVOID damaging gas, power, or other underground utility lines, contact underground utility locating companies BEFORE digging more than 18" (46 cm) deep.



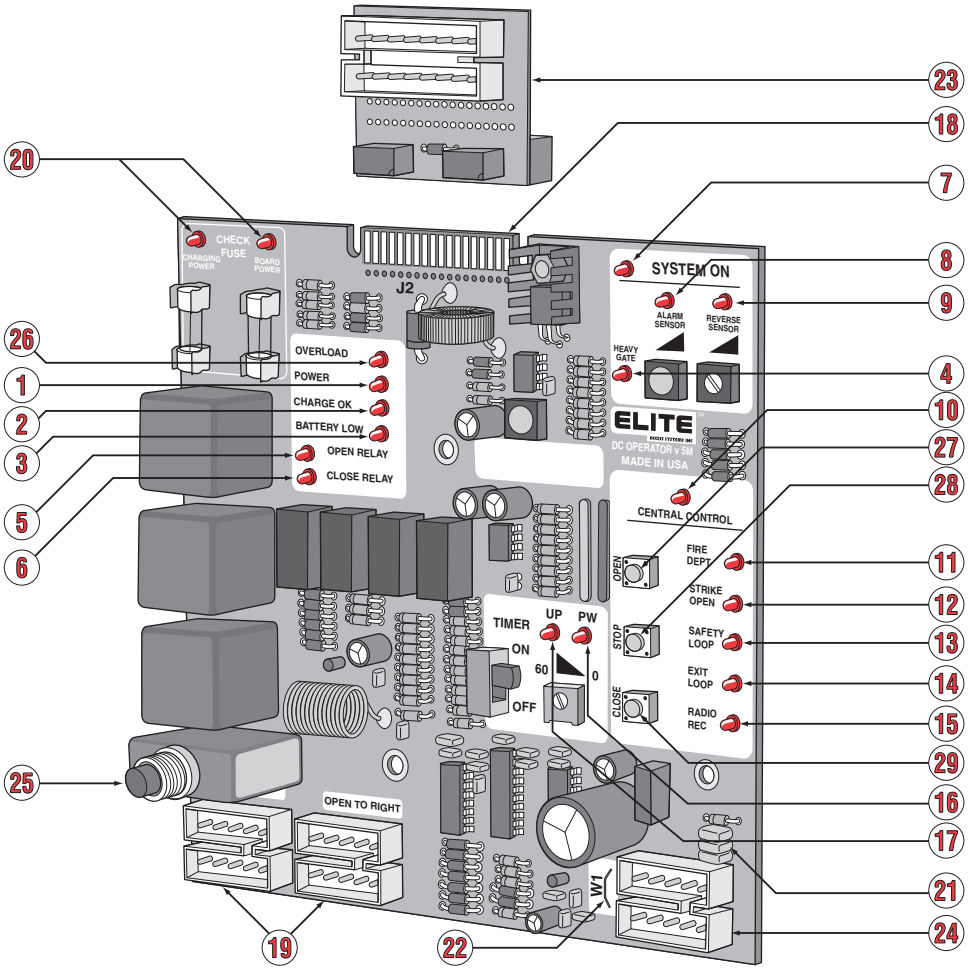
CONTROL BOARD FUNCTIONS

CAUTION

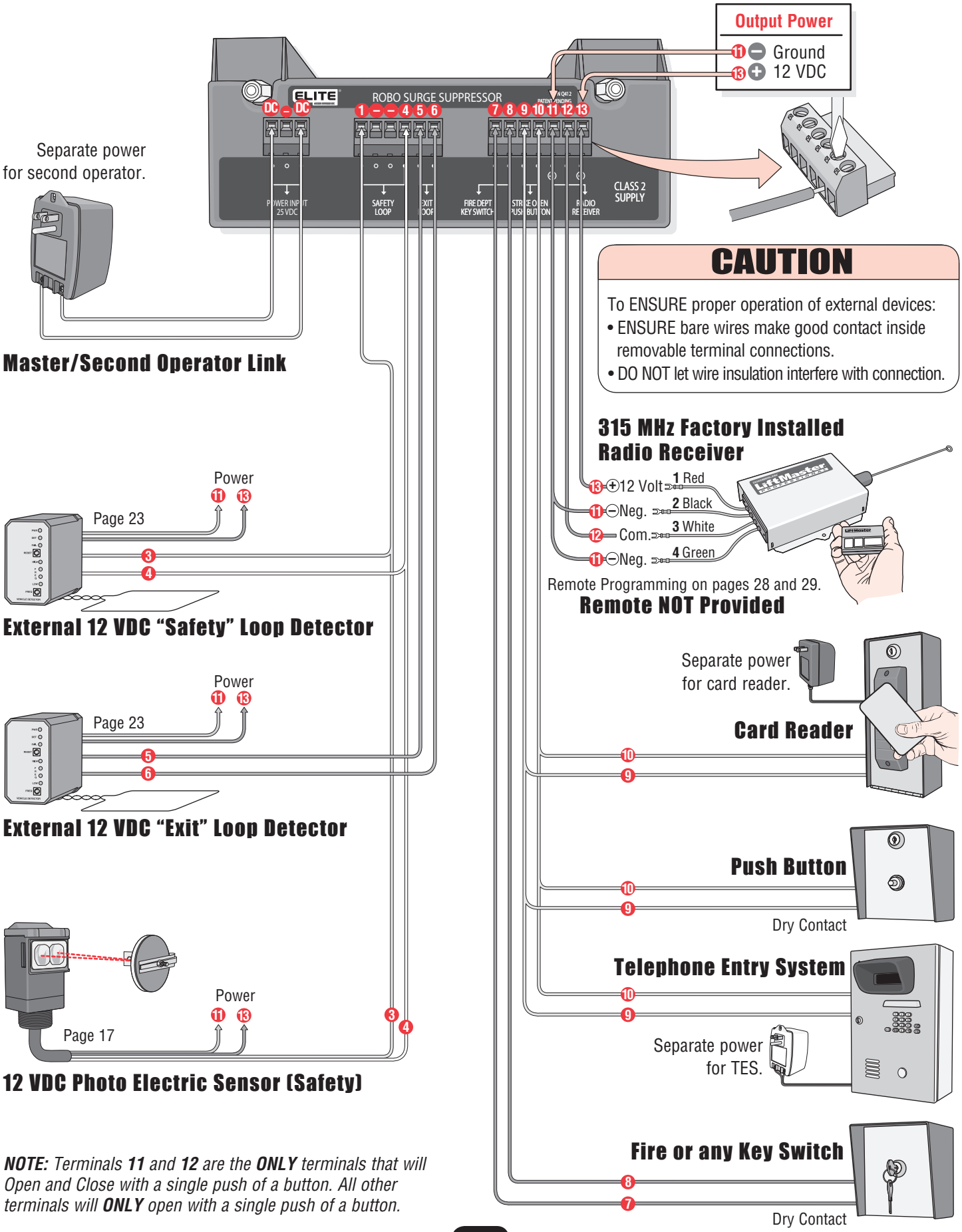
To AVOID damaging the control board, replace fuses ONLY with same type and rating specified above.

3 Low Battery Indicator LED
4 Heavy Gate Indicator LED
5 Open Relay LED
6 Close Relay LED
7 System on, Reversing Sensor and Alarm Sensor
8 Alarm Sensor LED
9 Reversing Sensor LED (Rebounder)
10 Central Control LED
11 Fire Department or Key Switch LED
12 Strike Open LED
13 Safety Loop or Photocell LED
14 Exit Loop LED
15 Radio Receiver LED

18 J2 Alternate Optional Output
19 Movement Direction Sockets
20 Replace Fuse Indicator
21 Spike Suppressor
22 Jumper for Stop Button
23 Optional Input Board
24 Surge Suppressor Connector
25 Breaker Reset
26 Overload LED
27 On Board Open Button
28 On Board Stop Button
29 On Board Close Button



SURGE SUPPRESSOR TERMINAL CONNECTIONS



NOTE: *Terminals **11** and **12** are the **ONLY** terminals that will Open and Close with a single push of a button. All other terminals will **ONLY** open with a single push of a button.*

DC POWER CONNECTION

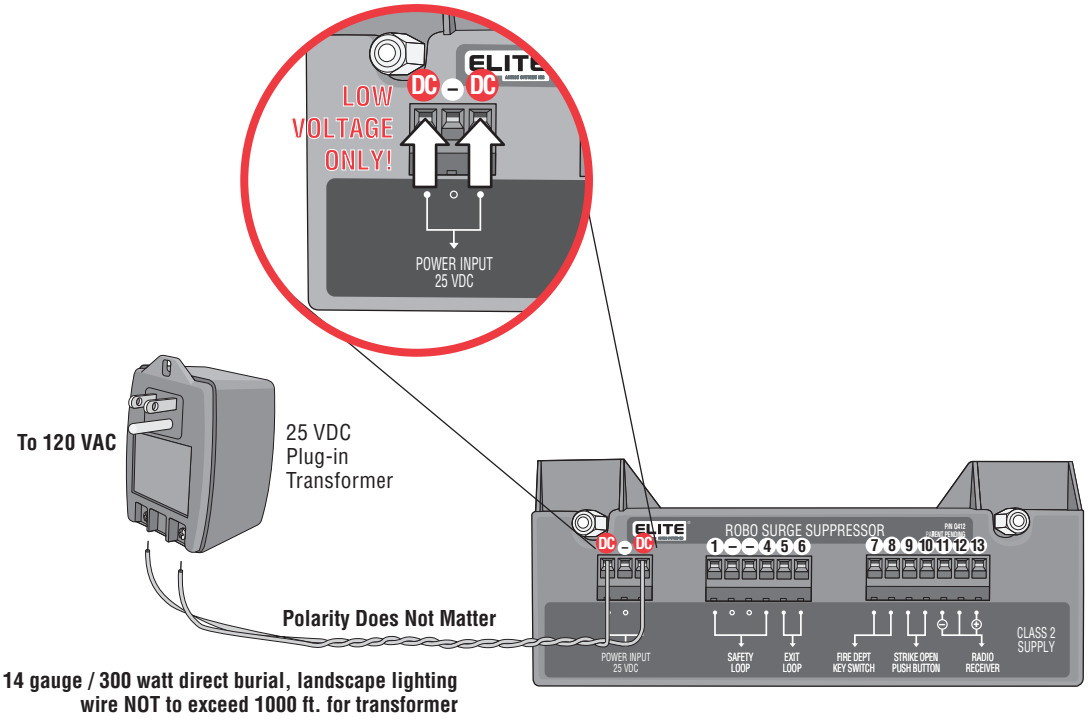
Do not use solar panel and plug-in transformer at the same time. Use Chamberlain Elite's optional 25 VDC plug-in transformer (**APOW1**). Hook up the transformer to 120 VAC. Use two, low voltage, 14 gauge / 300watt direct burial, landscape lighting cables. Hook these wires to the plug-in transformer and to the power input connection on the surge suppressor. Polarity does not matter.

Earth Ground Rod Highly Recommended!

CAUTION

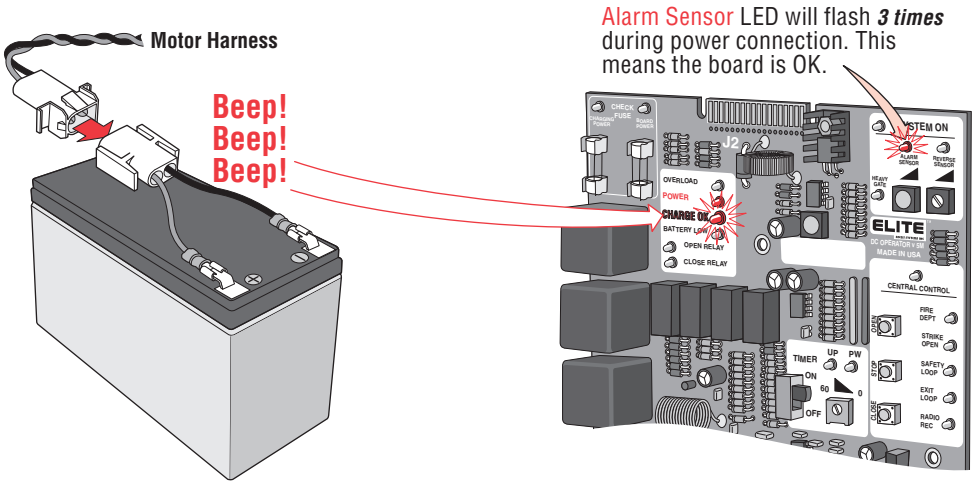
To AVOID damaging 25 Vdc plug-in transformer, it MUST be enclosed in a suitable weatherproof enclosure and provided with proper weatherproof fixtures.

To AVOID damaging control board, DO NOT use the solar panel and the plug-in transformer at the same time.



Use 14 gauge / 300 watt direct burial, landscape lighting wire NOT to exceed 1000 ft. for transformer

When the plug-in transformer has been connected to the power source, connect the battery cable plug to the motor harness plug. You will hear 3 beeps. After the beeps, check the "**Charge OK**" LED...it must be "**ON**".



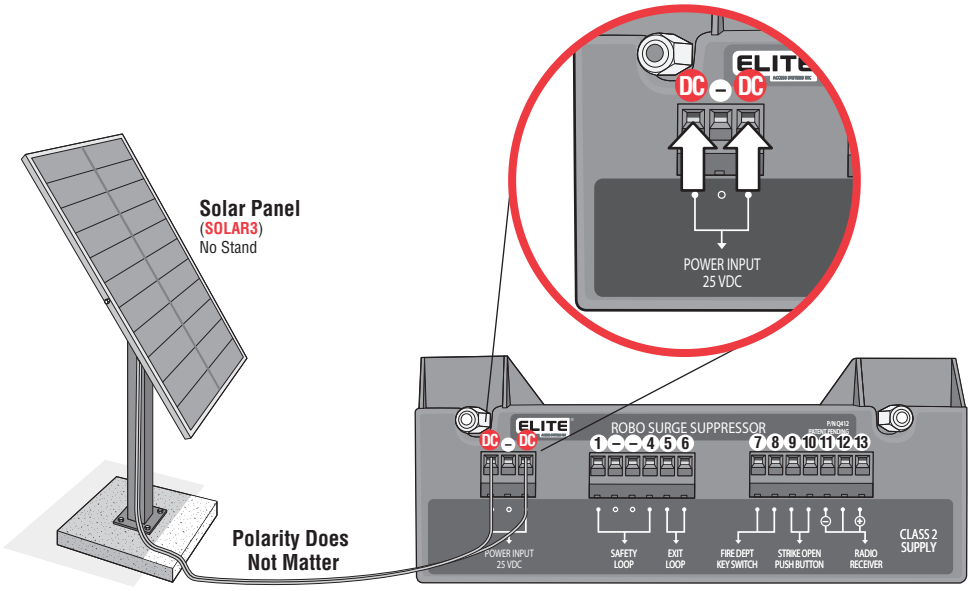
OPTIONAL SOLAR PANEL CONNECTION

If you use Chamberlain Elite's optional solar panel (Solar3). Connect the two wires from the solar panel to the power input connection on the surge suppressor (Polarity does not matter). Sunlight will energize the batteries through the solar panel. This solar panel will charge up to 1000 Mamp/Hr in optimum conditions & 300 Mamp/Hr in light overcast conditions. For further details about Chamberlain Elite's solar panel, consult the "Solar 3" Installation sheet that is included with the solar panel. Do not use solar panel and plug-in transformer at the same time.

CAUTION

To AVOID damaging 25 Vdc plug-in transformer, it MUST be enclosed in a suitable weatherproof enclosure and provided with proper weatherproof fixtures.

To AVOID damaging control board, DO NOT use the solar panel and the plug-in transformer at the same time.

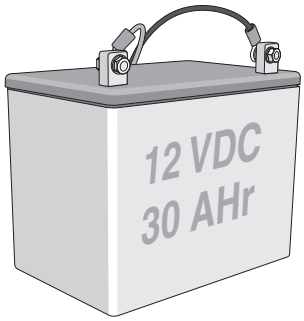


Energizing this operator with solar power only needs the radio receiver to operate the gate. The only recommended external devices other than radio receivers are dry-contact command devices which do not consume any current like key switches. Using other devices that consume high current such as telephone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

For more details, contact your local dealer.

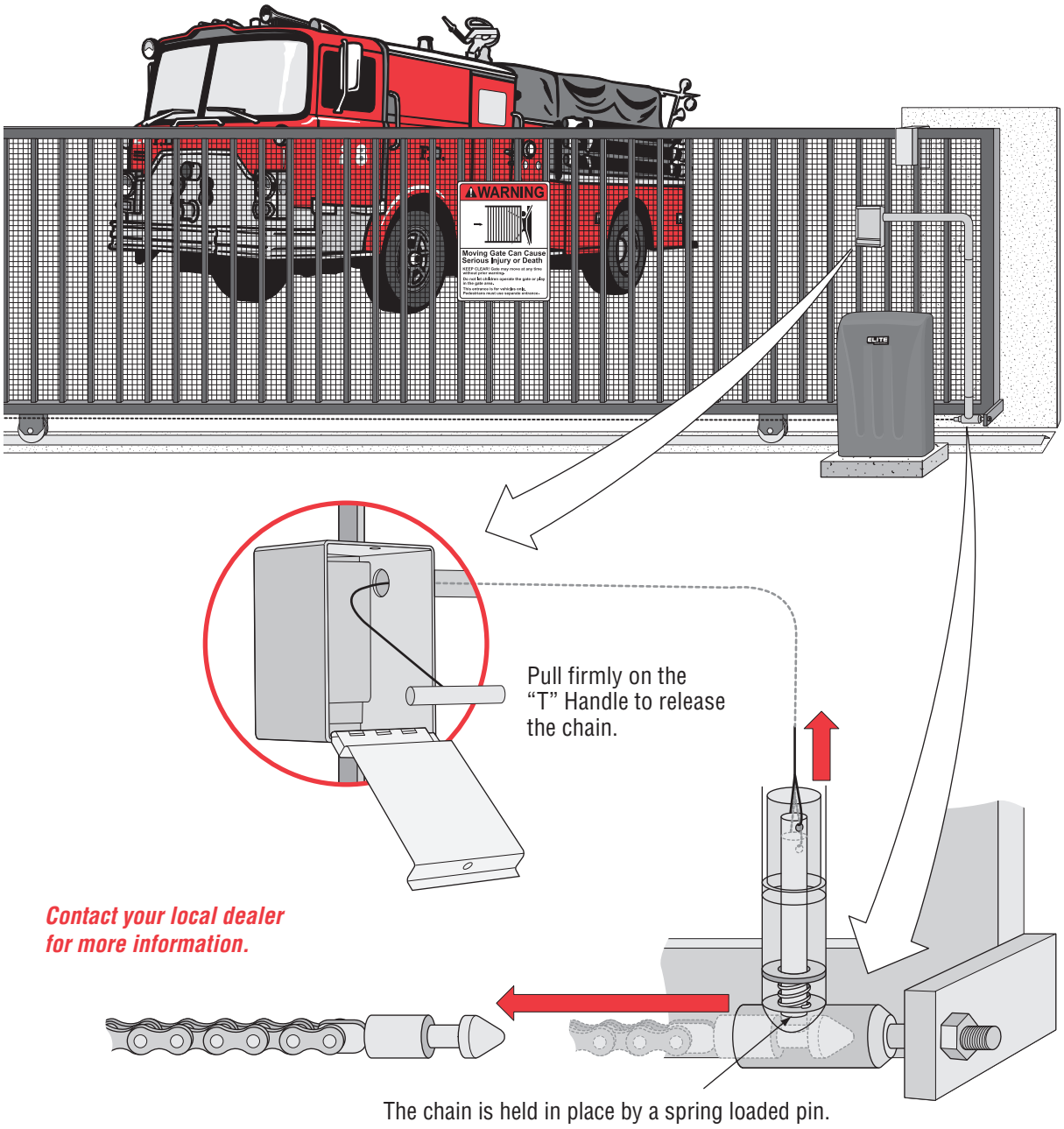
CAUTION

Chamberlain Elite recommends using a larger battery (12 VDC, 30 AHr) (Part # A12330SGLPK) in this operator when using the optional solar panel.



“OPTIONAL” FIRE RELEASE BOX

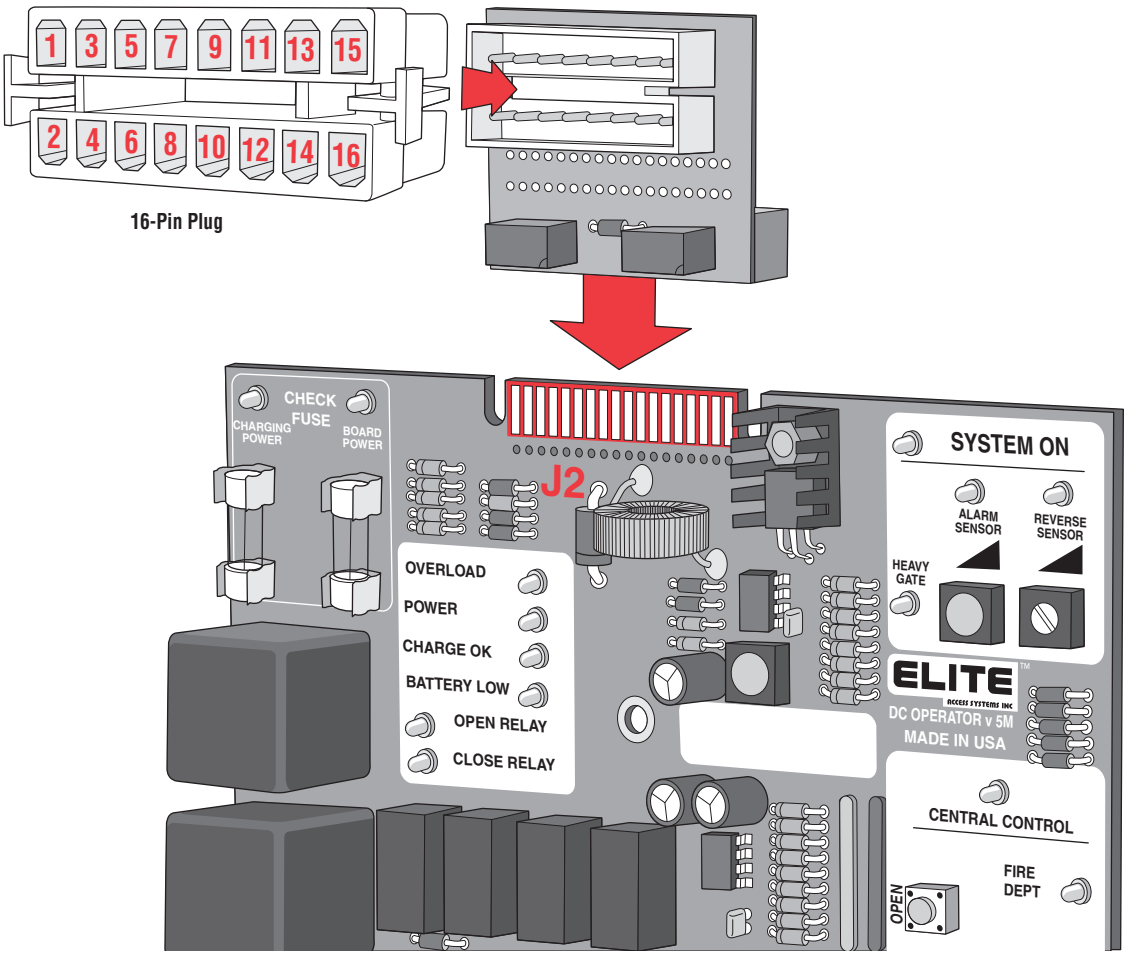
The “Fire Release Box”, is designed for use on sliding gates. It consists of a plated box, with doors on the front and back. The doors can be locked with your own padlock, or the fire department’s padlock. The fire box would be fixed to the gate pickets. It can be opened from either side of the gate. A steel cable with a T-handle runs from the box to the release mechanism at the rear end of the chain. We do not provide the 1/2" EMT to run the cable through. The release mechanism, is placed where the chain bolt would normally be. When you pull on the T-handle, you release the chain from the bolt. To reset, simply reinsert the pin into the housing for normal operation (Part # **ACP17**).



"OPTIONAL" INPUT BOARD

The optional board allows extra control of the gate, is available only from Chamberlain 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 (N.O.)
3 & **4** Stop Switch (N.C.) (Cut **W1** Jumper at Bottom of Board)
5 & **6** Timer Close Output to Slave
7 & **8** Timer Input from Master (Close Command or Close Switch) (N.O.)
9 &**10** Alarm Output will be set off with very heavy gates or object preventing gate operation. (Not Burglar Alarm) (9 = +12 VDC, 10 = Alarm)
11 & **4** Emergency Open Switch (Direct Command from Battery to Motor)
12 & **7** Emergency Close Switch (Direct Command from Battery to Motor)
13 & **14** Magnetic Lock - Dry Contact Relay (13 = Com, 14 = N.C.)
15 & **16** Center Loop Option (For Swing Gate Operators Only)



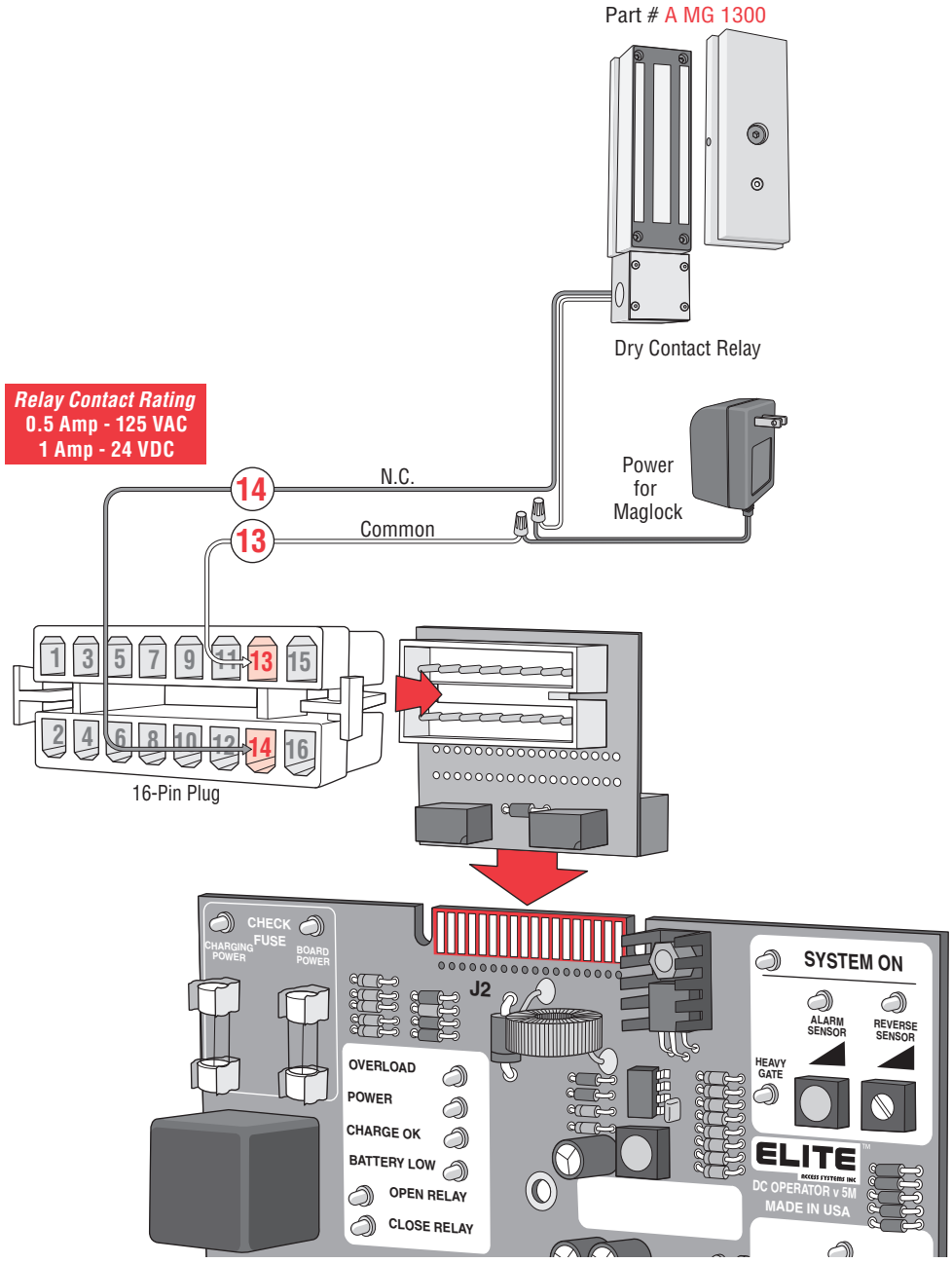
SOLENOID/MAGLOCK CONNECTION

The “Optional” input board ***MUST*** be used to perform this function (Part# **Q203**).

CAUTION

To ENSURE proper operation of external devices:

- ENSURE bare wires make good contact inside removable terminal connections.
- DO NOT let wire insulation interfere with connection.



"OPTIONAL" 12 VDC PHOTO BEAM WIRING

⚠WARNING

To prevent SERIOUS INJURY or DEATH from a moving gate:

- Locate entrapment protection devices to protect in BOTH the open and close gate cycles.
- Locate entrapment protection devices to protect between moving gate and RIGID objects, such as posts or walls.

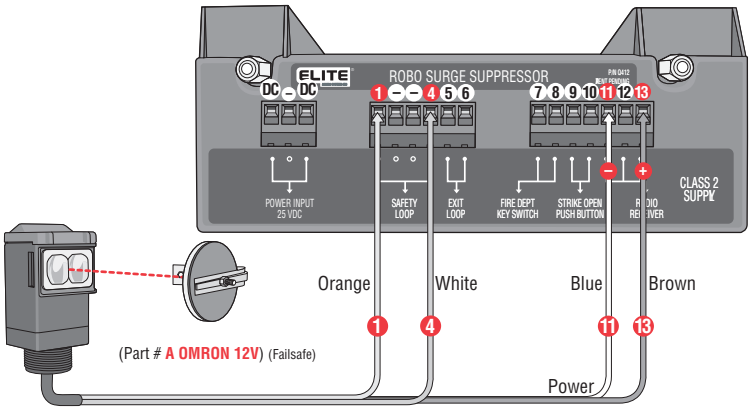
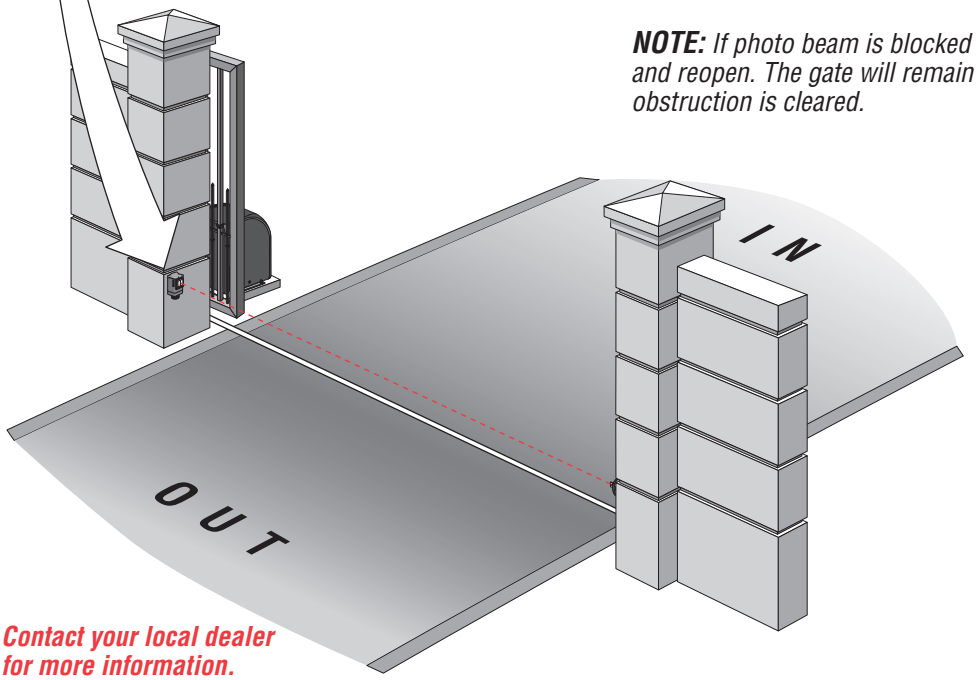


Photo Beam (Safety) 12 VDC

It is best to use 12 VDC Failsafe Photo Beam Sensors for this Safety Option

Failsafe Photo Beam: If a failsafe photo beam is not working or loses power or photo beam is blocked, then the photo beam will stop ***all*** gate operation.

NOTE: *If photo beam is blocked the gate will stop and reopen. The gate will remain open until the obstruction is cleared.*



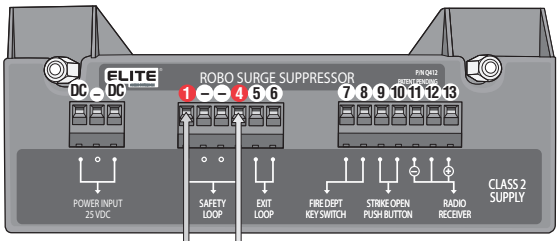
Contact your local dealer for more information.

OPTIONAL EDGE SENSOR WIRING

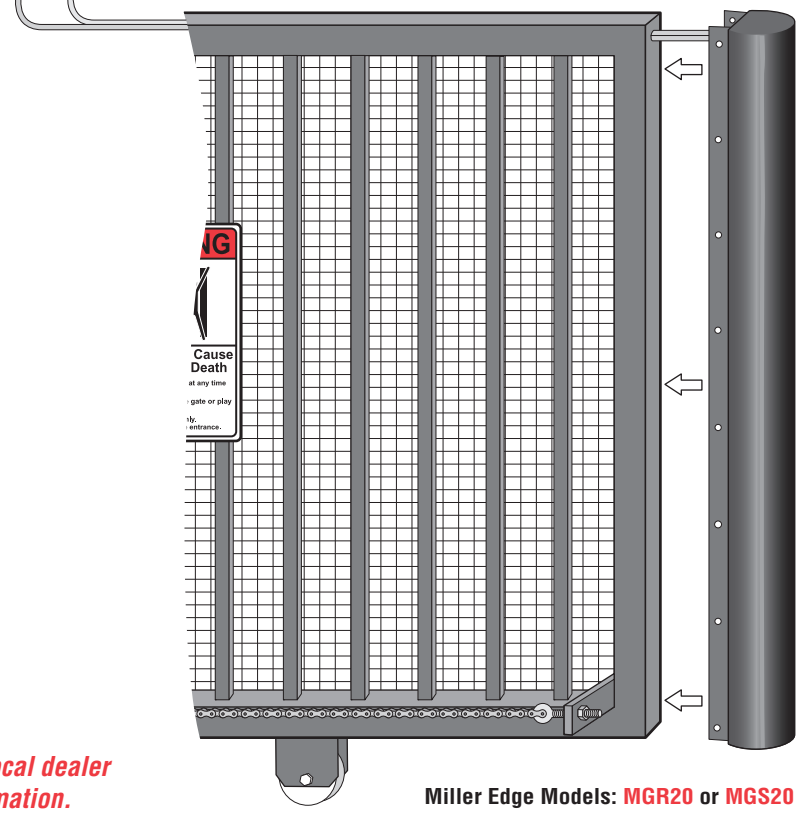
⚠WARNING

To prevent SERIOUS INJURY or DEATH from a moving gate:
- Locate entrapment protection devices to protect in BOTH the open and close gate cycles.
- Locate entrapment protection devices to protect between moving gate and RIGID objects, such as posts or walls.

NOTE: *When touched, these electrically activated edge sensors immediately signal the gate operator to stop and reverse. Property owners are obligated to test edges monthly. See page 37 for edge sensor part numbers.*



- **Never Paint Sensing Edge**
- **Never Pull On Wires**
- **Never Cut or Puncture Edge**
- **Never Operate Unguarded Equipment**



Contact your local dealer for more information.

Miller Edge Models: MGR20 or MGS20

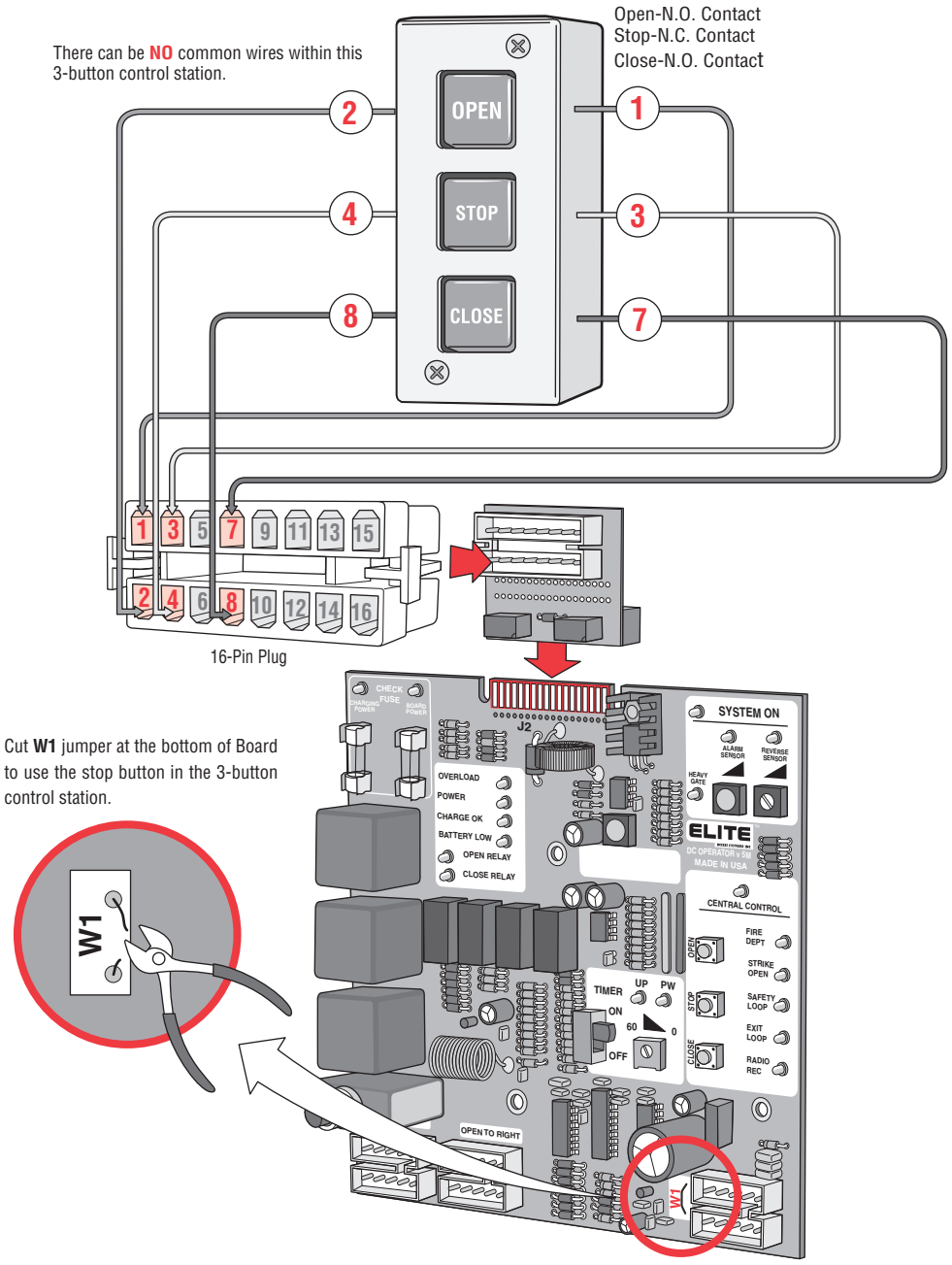
3-BUTTON CONTROL STATION WIRING CONNECTION

IMPORTANT NOTE: *The "Optional" input board (Q203) must be used to perform this function.*

CAUTION

To ENSURE proper operation of external devices:

- ENSURE bare wires make good contact inside removable terminal connections.
- DO NOT let wire insulation interfere with connection.



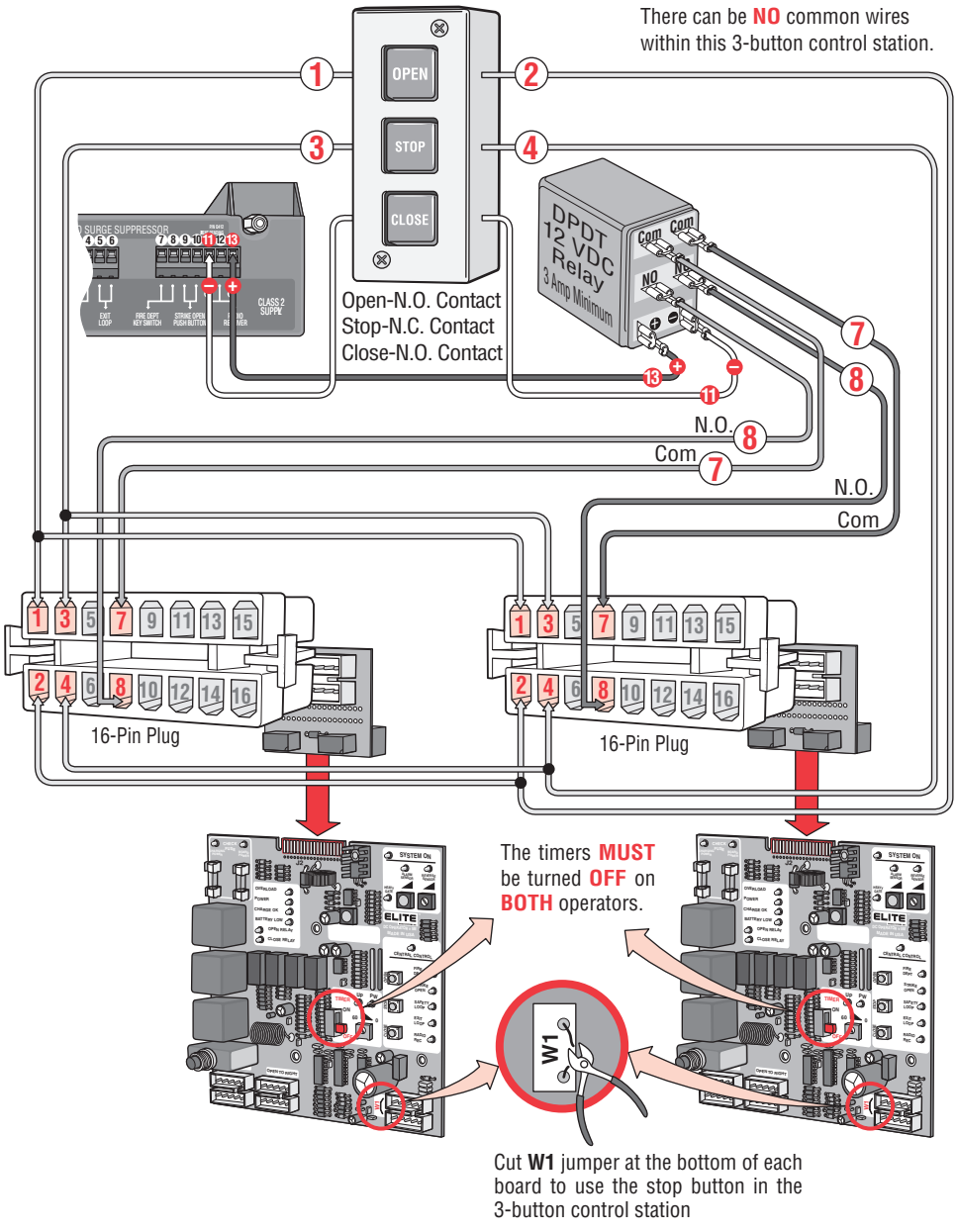
3-BUTTON CONTROL STATION WIRING MASTER/SECONDARY

IMPORTANT NOTE: *The "Optional" input board (Q203) must be used to perform this function. A 12 VDC Double Pull Double Throw (DPDT) 3 Amp Minimum Relay must be used (not provided).*

CAUTION

To ENSURE proper operation of external devices:

- ENSURE bare wires make good contact inside removable terminal connections.
- DO NOT let wire insulation interfere with connection.

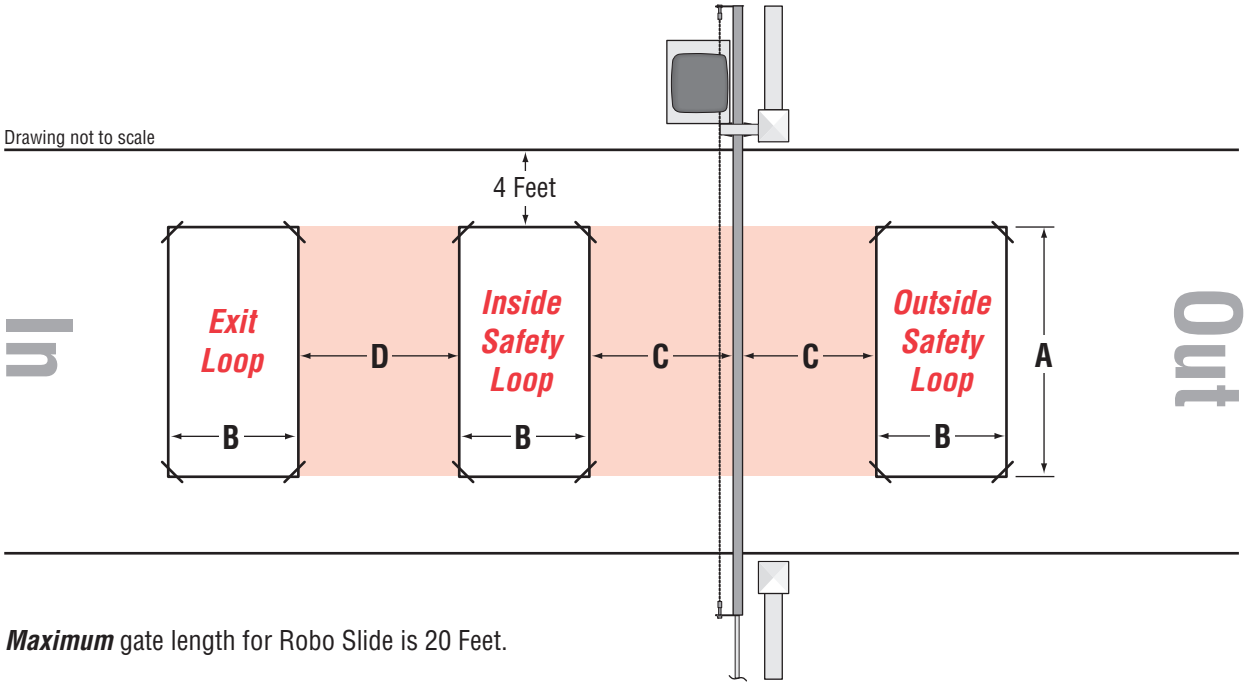


SINGLE OPERATOR LOOP SIZE AND PLACEMENT

It is *VERY* important to have enough separation between loops and gates to prevent false detection.

CAUTION

To AVOID damaging control board, disconnect all power to operator BEFORE installing plug-in loop detectors.
Use a different frequency for every loop detector installed.



Maximum gate length for Robo Slide is 20 Feet.

As **A** increases in size to cover a larger gate opening, the gate will cause a larger change of inductance when opening and closing. Therefore dimension **C** must increase as **A** increases.

If A =	6 Feet	9 Feet	12 Feet	15 Feet	18 Feet	21 Feet
Then C =	4 Feet	4.5 Feet	5 Feet	5 Feet	5.5 Feet	6 Feet

Dimension **D** should be equal to or greater than the larger of the ***"Inside Safety Loop"*** or ***"Exit Loop's"*** dimension **B**.

If the Inside and outside safety loop are connected to the ***same*** loop detector they should be series connected. Dimension **A**, **B** and **C** should be the same for each loop. Both loops should have the same number of turns of wire.

This is for a typical single Robo Slide loop installation. Individual circumstances may alter dimensions.

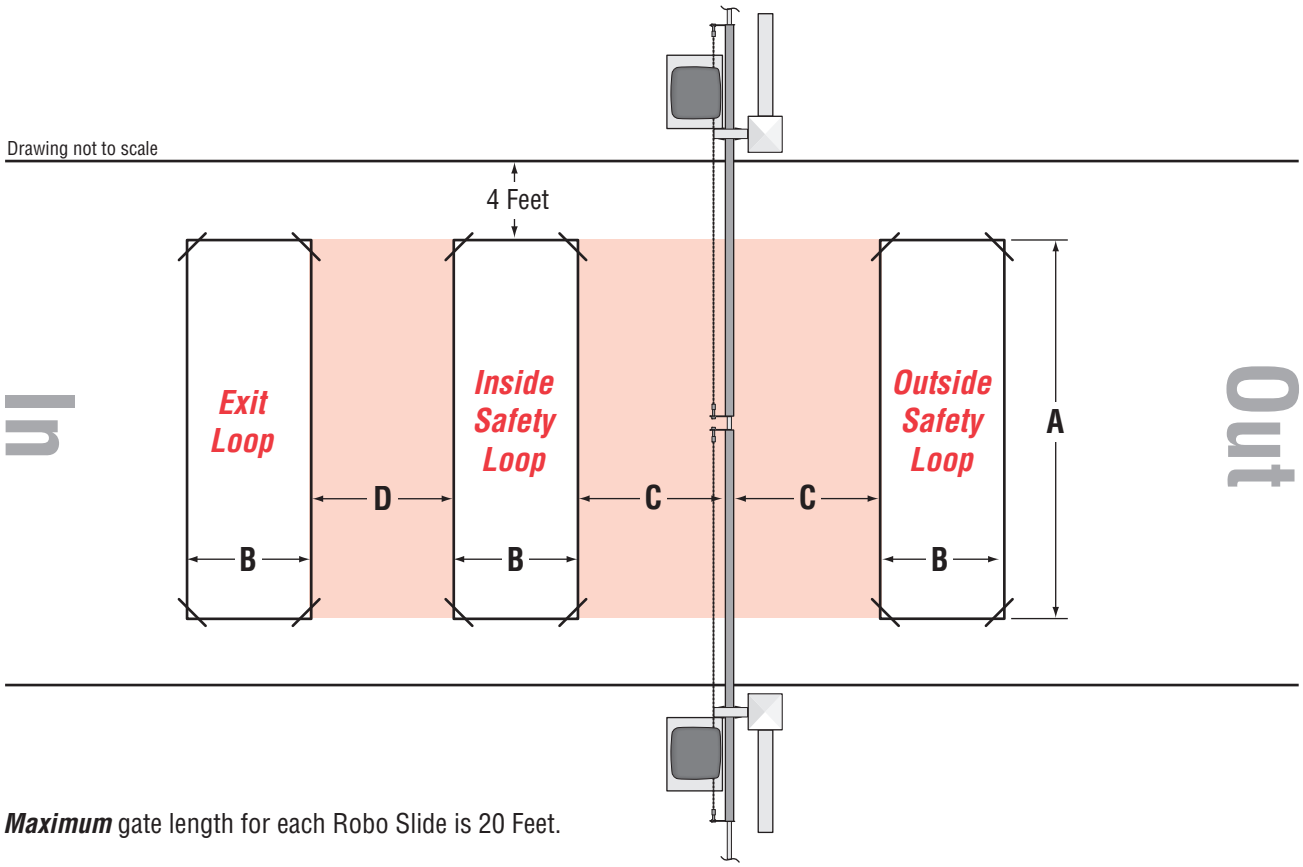
MASTER/SECONDARY LOOP SIZE AND PLACEMENT

It is *VERY* important to have enough separation between loops and gates to prevent false detection.

CAUTION

To AVOID damaging control board, disconnect all power to operator BEFORE installing plug-in loop detectors.

Use a different frequency for every loop detector installed.



Maximum gate length for each Robo Slide is 20 Feet.

As **A** increases in size to cover a larger gate opening, the gate will cause a larger change of inductance when opening and closing. Therefore dimension **C** must increase as **A** increases.

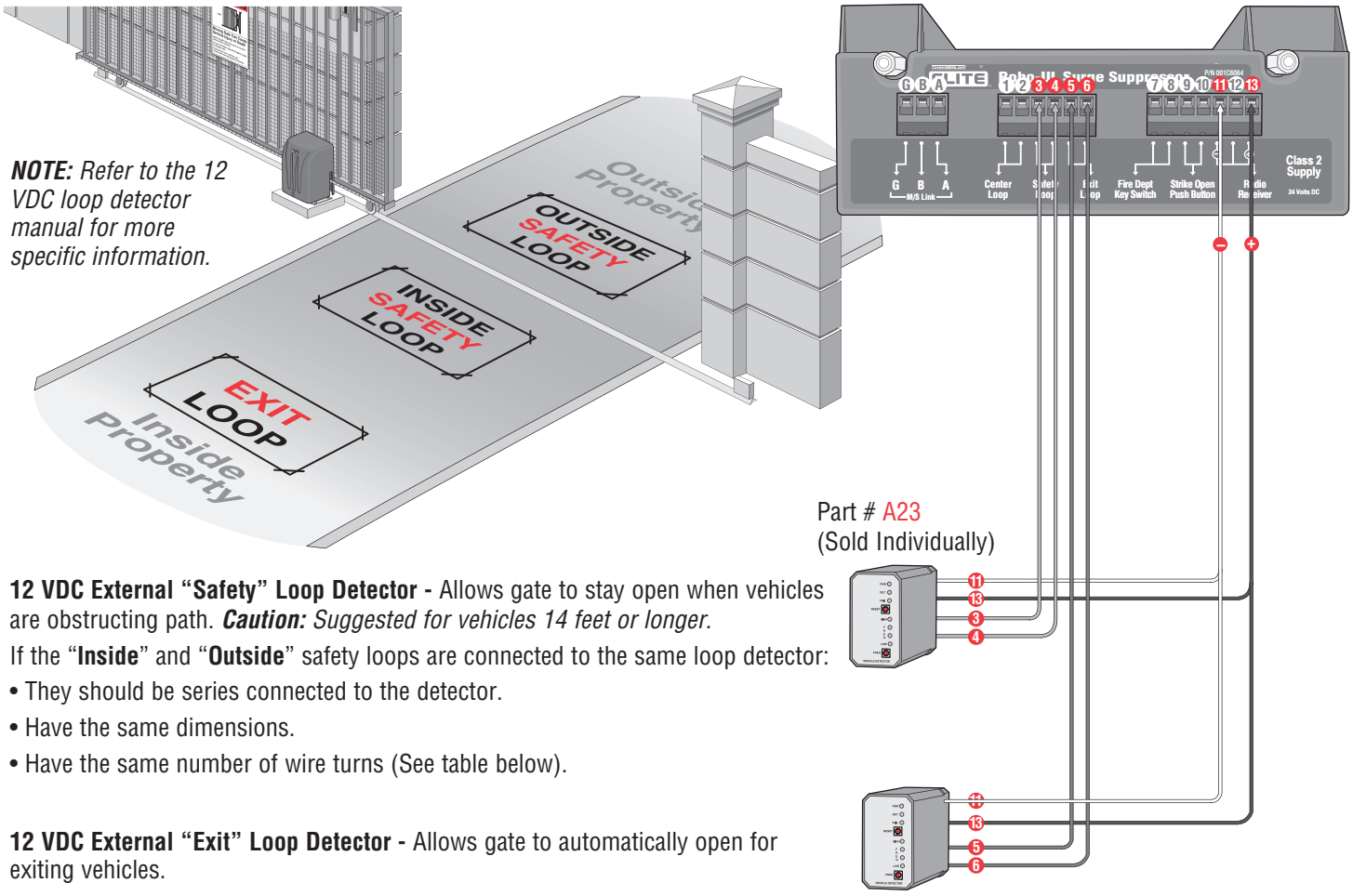
If A =	6 Feet	9 Feet	12 Feet	15 Feet	18 Feet	28 Feet
Then C =	4 Feet	4.5 Feet	5 Feet	5 Feet	5.5 Feet	6 Feet

Dimension **D** should be equal to or greater than the larger of the *"Inside Safety Loop"* or *"Exit Loop's"* dimension **B**.

If the Inside and outside safety loop are connected to the ***same*** loop detector they should be series connected. Dimension **A**, **B** and **C** should be the same for each loop. Both loops should have the same number of turns of wire.

This is for a typical master/secondary loop installation. Individual circumstances may alter dimensions.

12 VDC EXTERNAL LOOP DETECTOR WIRING



NOTE: *Refer to the 12 VDC loop detector manual for more specific information.*

Part # A23
(Sold Individually)

12 VDC External "Safety" Loop Detector - Allows gate to stay open when vehicles are obstructing path. ***Caution:*** *Suggested for vehicles 14 feet or longer.*

If the "**Inside**" and "**Outside**" safety loops are connected to the same loop detector:

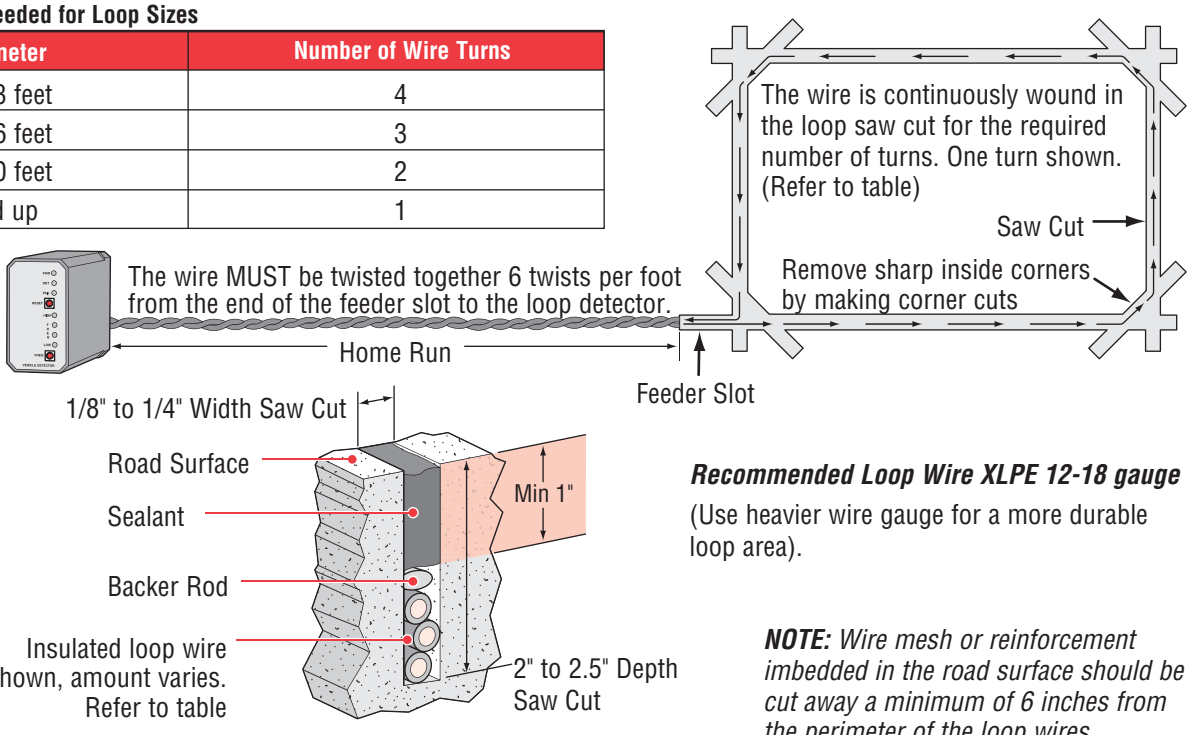
- They should be series connected to the detector.
- Have the same dimensions.
- Have the same number of wire turns (See table below).

12 VDC External "Exit" Loop Detector - Allows gate to automatically open for exiting vehicles.

Installing Insulated Loop Wire

Number of Wire Turns Needed for Loop Sizes

Loop Perimeter	Number of Wire Turns
10 feet to 13 feet	4
14 feet to 26 feet	3
27 feet to 80 feet	2
80 feet and up	1



Recommended Loop Wire XLPE 12-18 gauge

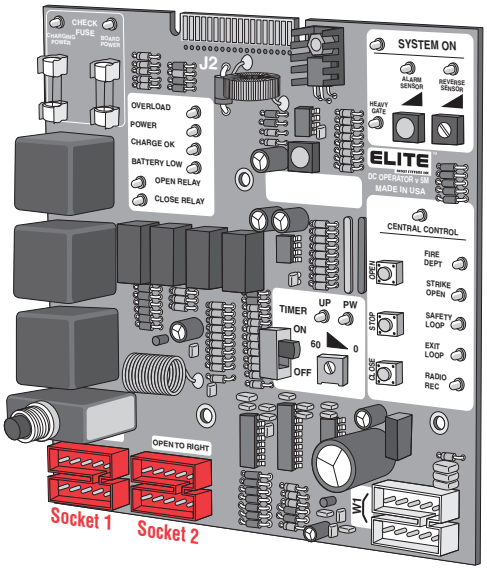
(Use heavier wire gauge for a more durable loop area).

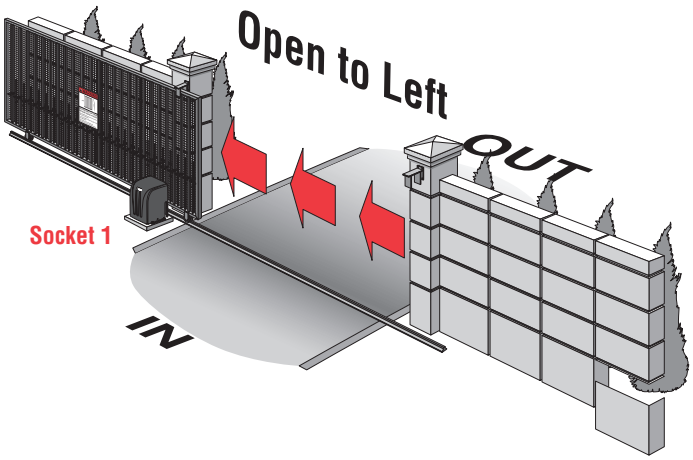
NOTE: *Wire mesh or reinforcement imbedded in the road surface should be cut away a minimum of 6 inches from the perimeter of the loop wires.*

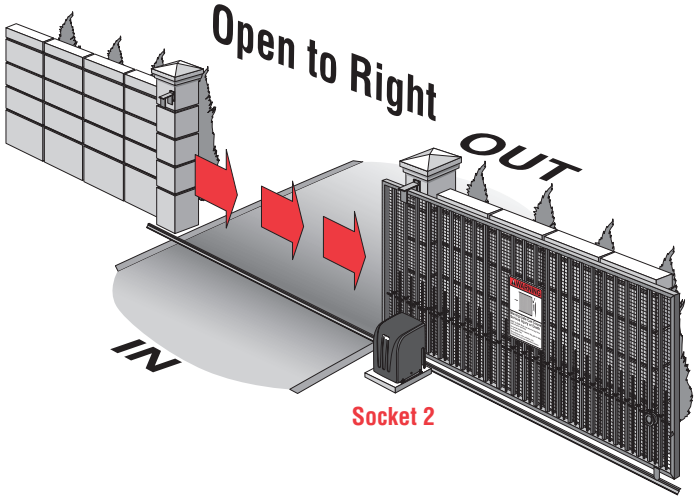
Adjustments

GATE MOVEMENT DIRECTION

Plug in the motor harness wires to the left (**Socket 1**) if your gate, from the inside of the property, opens to the left. Plug into the right (**Socket 2**) if the gate opens to the right.



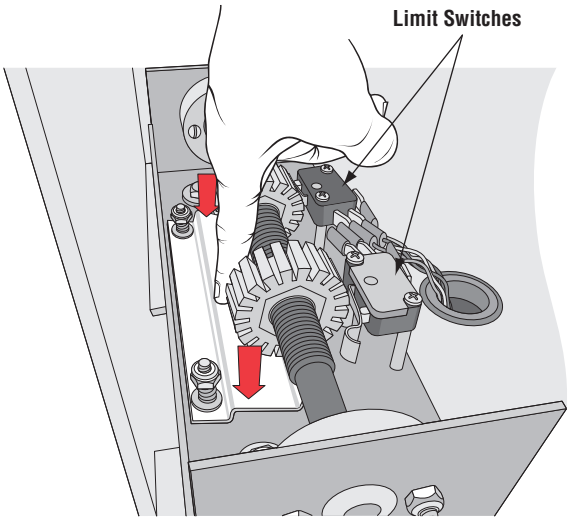




LIMIT SWITCH ADJUSTMENTS

CAUTION

To reduce the risk of SERIOUS INJURY or DEATH:
Disconnect power BEFORE performing ANY adjustments.



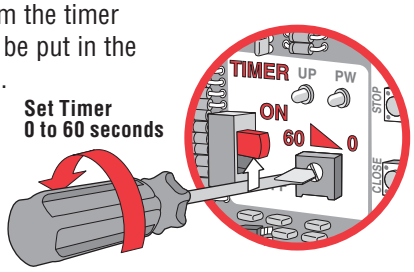
Push and ***hold*** lock plate to release limit nuts.

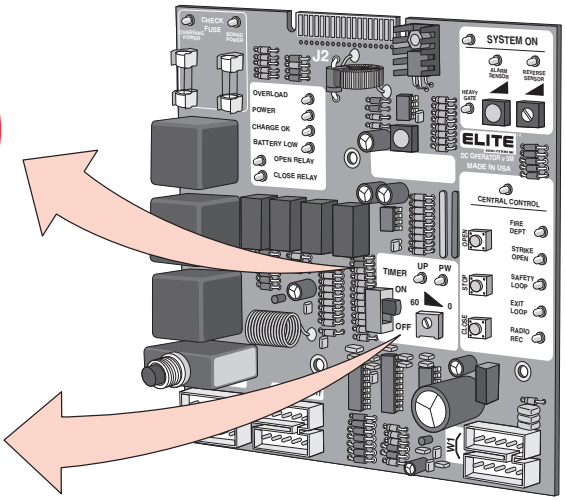
Each notch is an estimated one inch of gate travel.

Roll limit nuts to adjust the open and close limit switches.

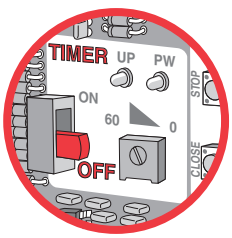
SETTING TIMER

To use the automatic close for the gate system the timer switch should be put in the **"ON"** position.





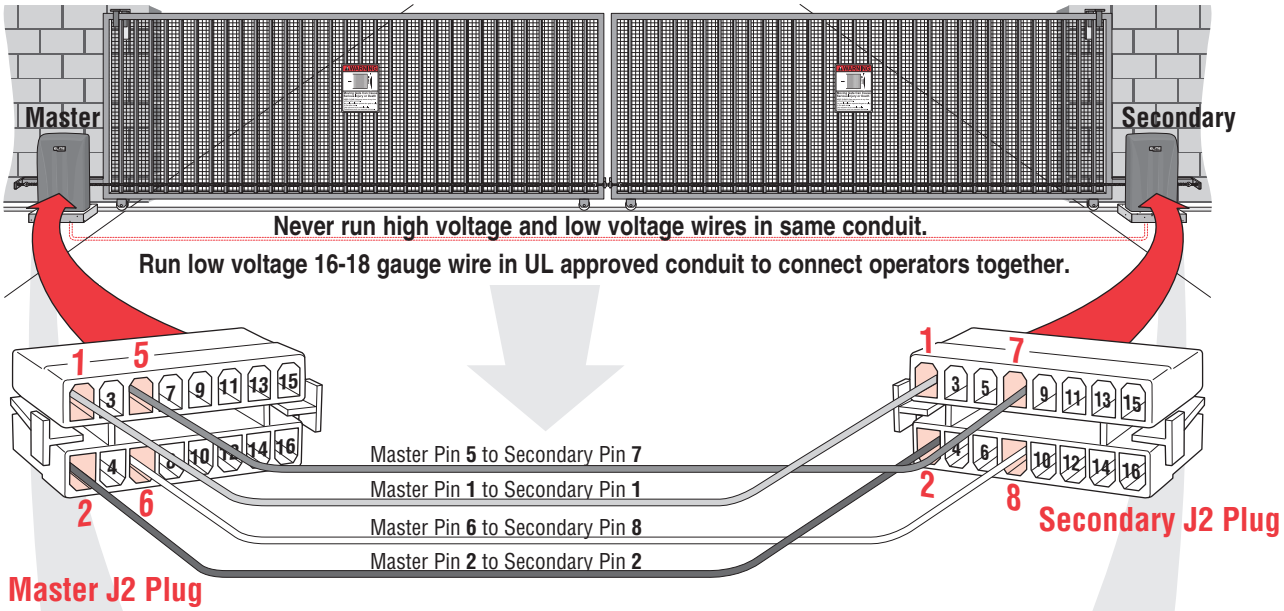
To use the push close command, the timer should be switched to the **"OFF"** position.



MASTER AND SECONDARY WITH TIMER

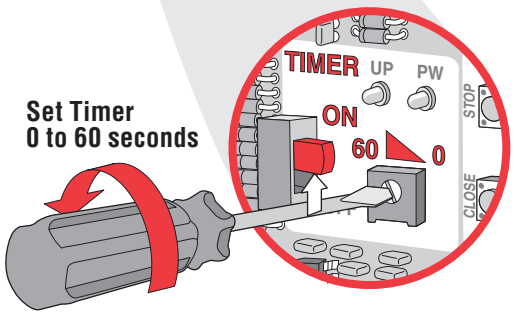
To use the master/secondary option with Robo Slide, you must purchase the **Optional Input Board** (Elite Part # **Q203**) and connect it to the **J2** slot of each operator (Refer to page 15).

25 VDC plug-in transformer, per gate operator required

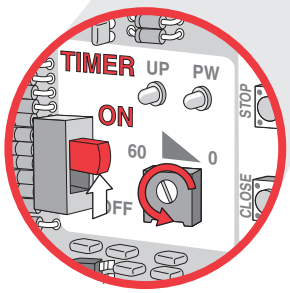


1. Make master/secondary J2 plug connections as shown above
2. Turn timers on **BOTH** control boards to the "**ON**" position
3. Use **MASTER** timer **ONLY** for the auto close time adjustment (0 to 60 sec)
4. Turn the **SECONDARY** timer adjustment all the way Counterclockwise

Master Timer "ON"



Secondary Timer "ON"



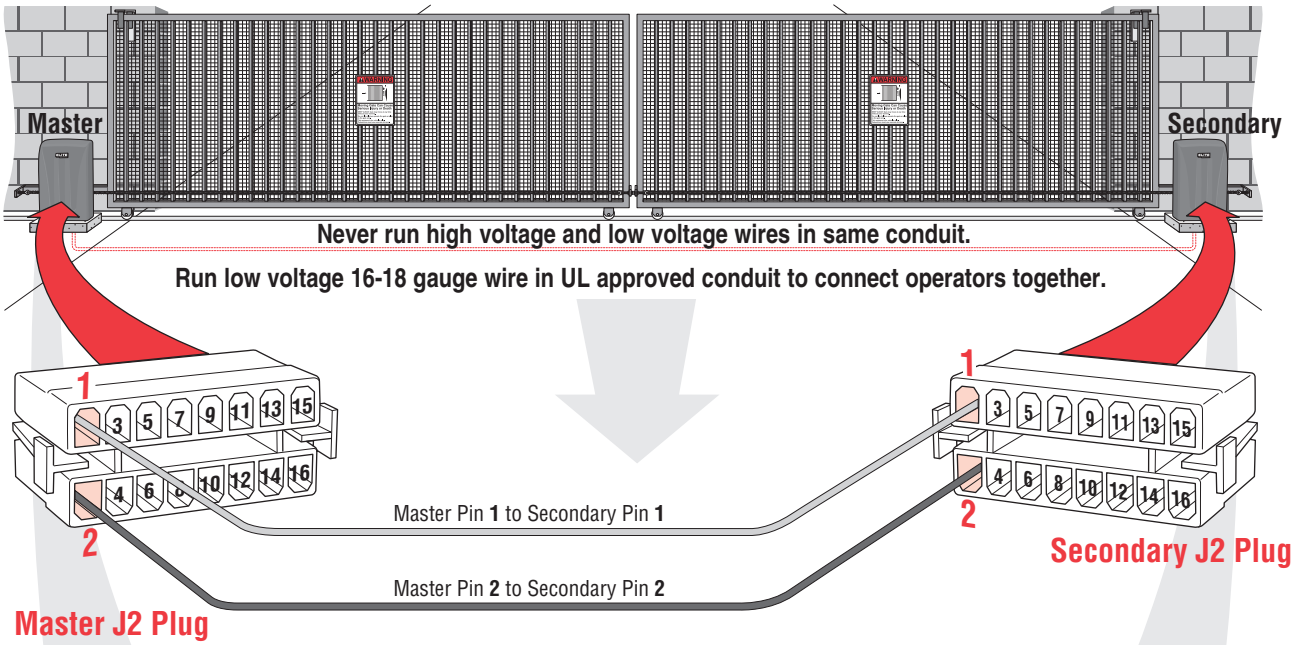
Maximum Counterclockwise Setting

NOTE: *Disconnect the second radio receiver when using a master/second setup.*

MASTER AND SECONDARY WITHOUT TIMER

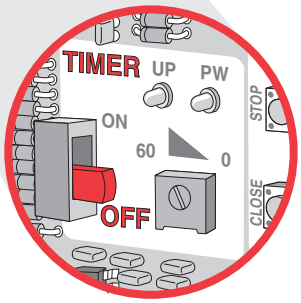
To use the master/secondary option with Robo Slide, you must purchase the **Optional Input Board** (Part # **Q203**) and connect it to the **J2** slot of each operator (Refer to page 15).

25 VDC plug-in transformer, per gate operator required

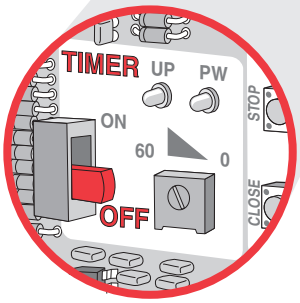


1. Make master/secondary J2 plug connections as shown above
2. Turn timers on **BOTH** control boards to the "**OFF**" position

Master Timer "OFF"



Secondary Timer "OFF"



315 MHZ RADIO RECEIVER PROGRAMMING

Setting Security Mode (High) or (Normal):

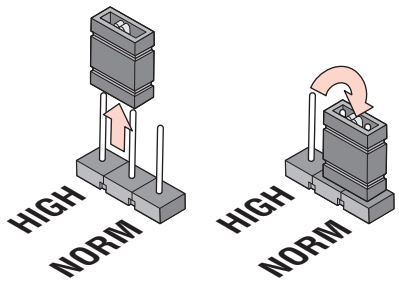
The receiver is factory set at **HIGH** security mode. To verify, refer to the label next to jumper P4. (See illustration below)

The Receiver can be used with up to ***15*** *rolling code remotes or passwords in* ***HIGH*** *security mode.* Alternately, it can be used with up to ***31*** *of any type remote in* ***NORMAL*** *security mode,* including any combination of rolling code, billion code, or dip switch remotes.

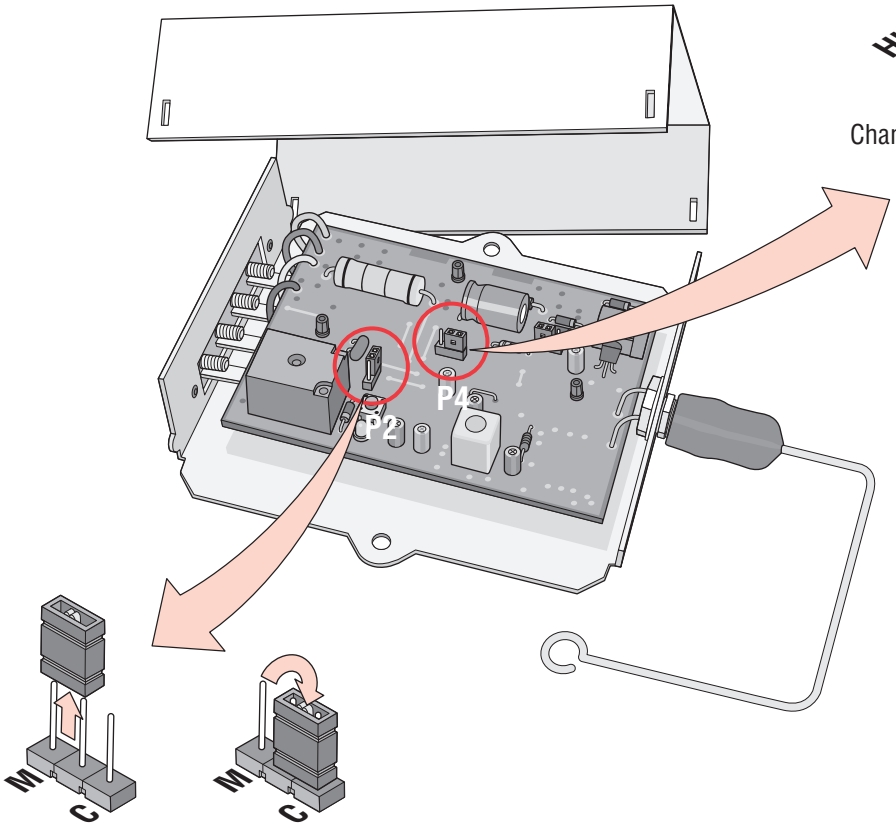
When changing from **NORMAL** to **HIGH** security mode, *all previous remote control codes must be erased.* See next page to erase and reprogram remote controls that are being used.

CAUTION

To AVOID damaging receiver, disconnect receiver's power before changing jumpers.



Changing security from High to Normal.



Changing output duration from Momentary to Constant.

WARNING

To reduce the risk of SERIOUS INJURY or DEATH from a moving gate:

- ALWAYS keep remote controls out of reach of children. NEVER permit children to operate, or play with remote control.
- Activate gate ONLY when it can be seen clearly, is properly adjusted, and there are no obstructions in gate's path.
- ALWAYS keep gate in sight until completely closed. NEVER permit anyone to cross path of a moving gate.

Setting Output Duration (M) or (C):

The receiver is factory set at (**M**) Momentary. To verify, refer to the label next to jumper P2. (See illustration above)

For commercial applications, the receiver can be set to either (**C**) constant or (**M**) momentary closure.

With the jumper in the (**M**) momentary position, the *contacts will close for 1/4 second regardless of the length of remote control transmission.*

With the jumper in (**C**) constant position, the *contacts will stay closed as long as the remote control continues transmitting.* Push and **HOLD** remote button to open or close gate.

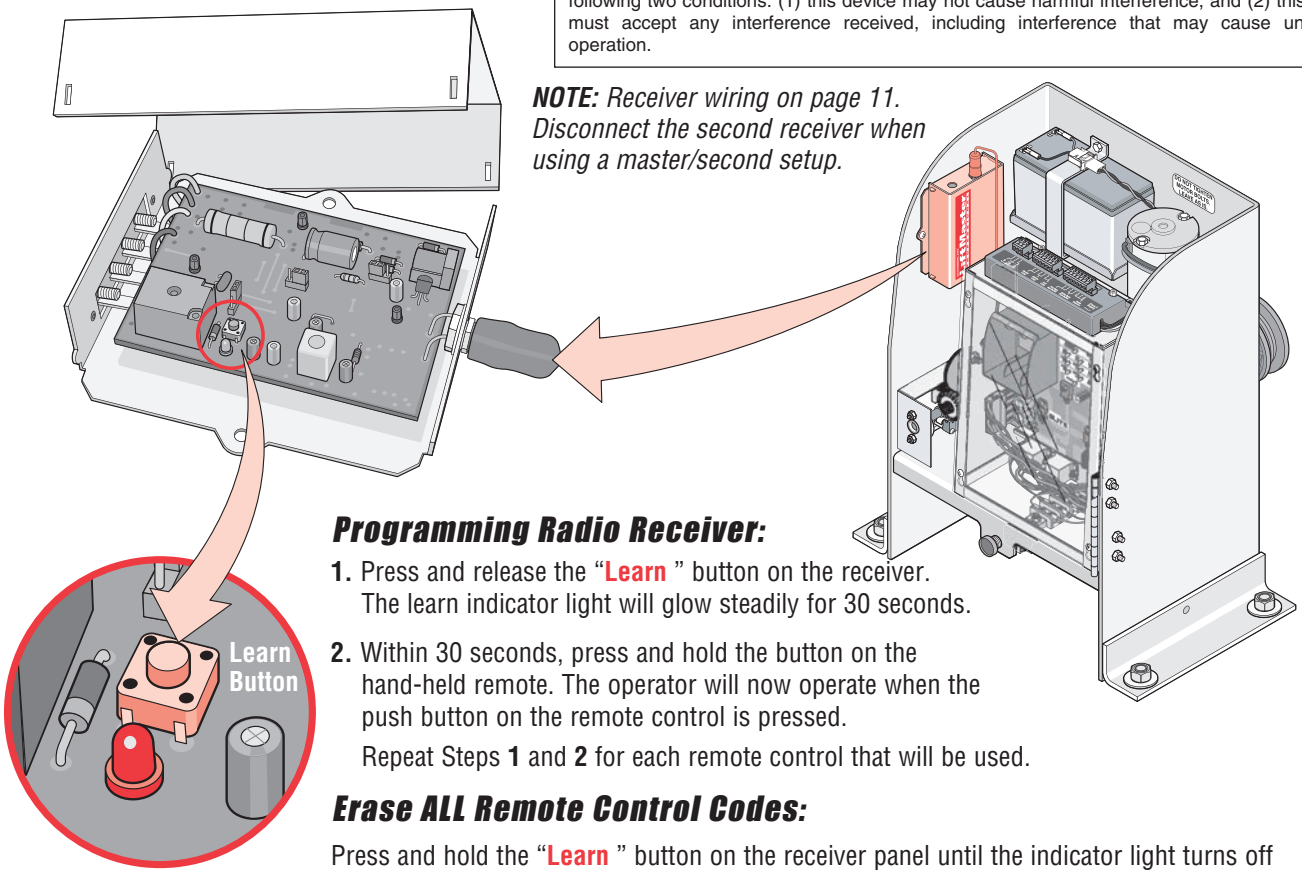
WARNING

To reduce the risk of SERIOUS INJURY or DEATH, the use of CONSTANT OPERATION on residential operators is PROHIBITED.

315 MHZ RADIO RECEIVER PROGRAMMING

IMPORTANT: *Hand Held Remote* ***NOT*** *provided.*

NOTICE: To comply with FCC and or Industry Canada (IC) rules, adjustment or modifications of this receiver and/or transmitter are prohibited, except for changing the code setting or replacing the battery. THERE ARE NO OTHER USER SERVICEABLE PARTS.
Tested to Comply with FCC Standards FOR HOME OR OFFICE USE. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



NOTE: *Receiver wiring on page 11. Disconnect the second receiver when using a master/second setup.*

Programming Radio Receiver:

1. Press and release the "**Learn** " button on the receiver. The learn indicator light will glow steadily for 30 seconds.
2. Within 30 seconds, press and hold the button on the hand-held remote. The operator will now operate when the push button on the remote control is pressed.

   Repeat Steps **1** and **2** for each remote control that will be used.

Erase ALL Remote Control Codes:

Press and hold the "**Learn** " button on the receiver panel until the indicator light turns off (about 6 seconds). All previous codes are now erased. Reprogram each remote you wish to use.

Optional 315 MHz Hand Held Remotes

LiftMaster SECURITY+

Mini 3 Button
Part # 370LM

Part # 371LM

Part # 372LM

Part # 373LM

Part # 374LM

LiftMaster PASSPORT™

Part # CPT13

Part # CPT23

Part # CPT33

Part # CPT43

Mini 3 Button
Part # CPTK33

Mini 3 Button with
HID Prox, Sensor
Part # CPTK33PH

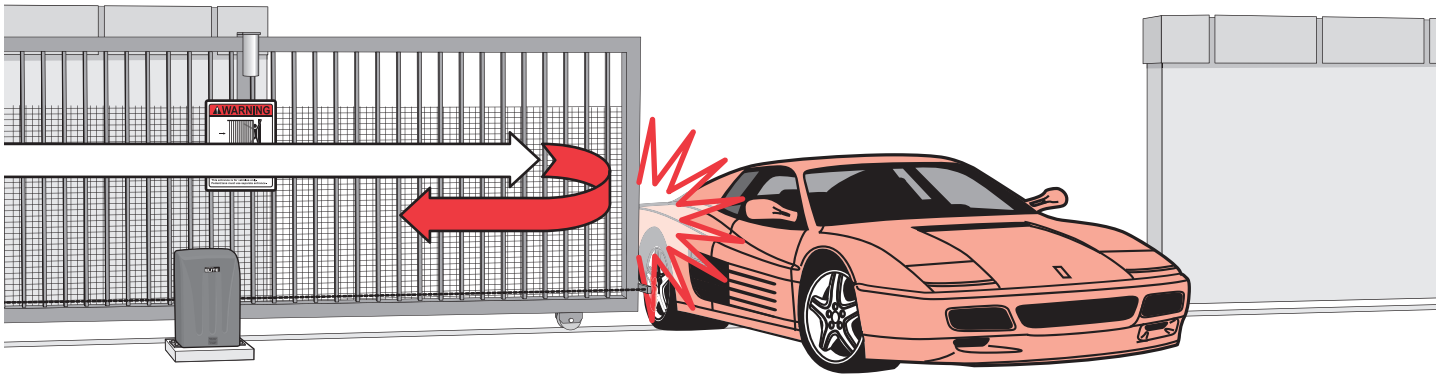
TWO-WAY ADJUSTABLE REVERSING SENSOR

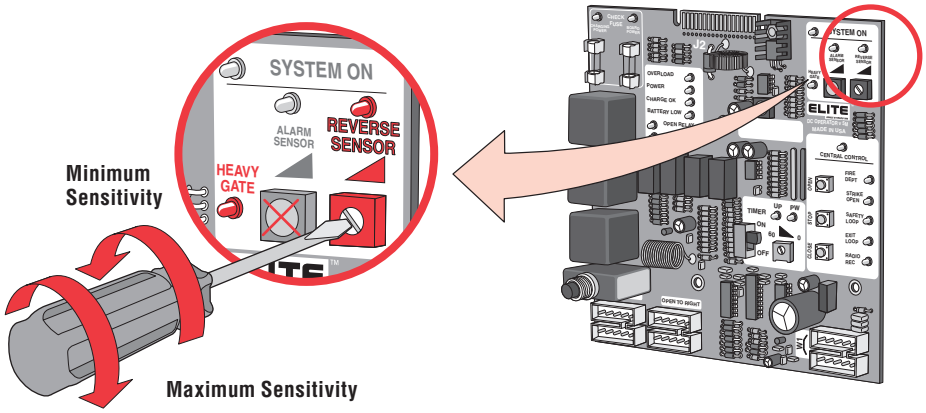
Adjust the "**Reverse Sensor**" on the control board. **Alarm Sensor does not need to be adjusted except where noted below.**

The level of reverse sensitivity depends on the weight of the gate and the condition of installation.

Sensor is set too sensitive = if the gate stops in midcycle or reverses by itself.

Sensor is not set sensitive enough = if the gate hits an object and does not stop or reverse.





Important Note!

There is a "**Heavy Gate**" LED which will light up when the gate is heavier than normal. This is a diagnostic LED and the operator will still function normally when this indicator is on.

NOW YOUR INSTALLATION IS COMPLETE

Operation and Maintenance

IMPORTANT SAFETY INSTRUCTIONS

⚠ WARNING

To reduce the risk of SEVERE INJURY or DEATH:

1. READ AND FOLLOW ALL INSTRUCTIONS.
2. NEVER let children operate or play with gate controls. Keep the remote control away from children.
3. ALWAYS keep people and objects away from the gate. NO ONE SHOULD CROSS THE PATH OF THE MOVING GATE.
4. Test the gate operator monthly. The gate MUST reverse on contact with a rigid object or stop when an object activates the non-contact sensors. After adjusting the force or the limit of travel, retest the gate operator. Failure to adjust and retest the gate operator properly can increase the risk of INJURY or DEATH.
5. Use the emergency release ONLY when the gate is not moving.
6. KEEP GATES PROPERLY MAINTAINED. Read the owner's manual. Have a qualified service person make repairs to gate hardware.
7. The entrance is for vehicles ONLY. Pedestrians MUST use separate entrance.
8. Disconnect ALL power BEFORE performing ANY maintenance.
9. ALL maintenance MUST be performed by a Chamberlain professional.
10. **SAVE THESE INSTRUCTIONS.**

1. Disconnect power before servicing.

2. The gate area should be kept clean to insure proper operation.

3. Make sure the reversing sensor is functioning properly. Check it monthly (Page 30).

4. Make sure the gate track is clear of dirt, rocks or other substances.

5. Make sure the wheels are operating smoothly on the track.

6. Oil the chain regularly with a chain lubrication oil available at most motorcycle stores.

7. Replace blown fuses ONLY with sizes specified (Page 34).

8. Check for proper synthetic oil level in the gear box. (10W-30 weight synthetic oil).

9. Severe or high cycle usage will require more frequent maintenance checks.

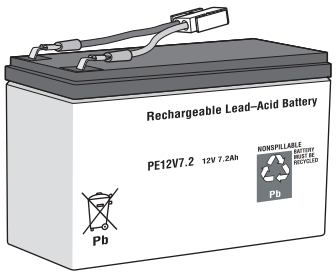
10. Inspection and service should always be performed anytime a malfunction is observed or suspected.

11. When servicing, please do some "house cleaning" of the operator and the area around the operator. Pick up any debris in the area. Clean the operator as needed.

12. It is suggested that while at the site voltage readings be taken at the operator. Using a Digital Voltmeter, verify that the incoming voltage to the operator it is within ten percent of the operators rating.

CAUTION

To reduce the risk of FIRE or INJURY to persons use ONLY Chamberlain part # ABT12 for replacement battery.



LED DESCRIPTION

LED Description	 *LED On*	 *LED Off*
① **Power** at all times when there is one or more power sources **ie:** Battery, 25 VDC or solar	Power source OK and board power fuse OK	**1**. No power source at all *If dimmed down* **1**. Bad board power fuse
② **Charger OK** on when there is any charging power **ie:** 25 VDC - solar	Transformer or solar OK and charging power fuse OK	**1**. No Transformer or Solar *If dimmed down* **1**. Bad Charging power fuse
③ **Battery Low** normally off - it will indicate low battery	*Flashing LED - Battery is less than required limit needs to be recharged* **1**. Excess usage **2**. Bad charging system **3**. Under rate solar panel **4**. Bad battery **5**. Bad battery connection	Battery OK Battery voltage is over minimum required limit
④ **Heavy Gate** will work only when the gate is in motion	**1**. Gate is too heavy **2**. Bad wheels **3**. Bad rollers **4**. Chain is too tight **5**. Steep slope on open or close cycle **6**. Low battery	Gate weight and condition are OK
⑤ **Open Relay**	Open relay is energized	Open relay is not energized
⑥ **Close Relay**	Close relay is energized	Close relay is not energized
⑦ **System On** will work only when the gate is in motion	Detecting motor current	**1**. Motor stop **2**. No motor current detected
⑧ **Alarm Sensor** when LED goes on you will hear a "**beep**" sound for about 20 seconds LED will flash ***3 times*** for "**board OK**" during power connection.	**1**. Hearing beep sound means overload **2**. Gate is too heavy **3**. Broken wheel **4**. Gate off track **5**. Unwanted object has physically stopped gate	System is OK

NOTE: *Circled red numbers indicates location on control board, identified on page 10.*

LED DESCRIPTION - CONTINUED

LED Description	 *LED On*	 *LED Off*
⑨ **Reversing Sensor**	Sensor is detecting obstruction	No obstruction is detected
⑩ **Central Control**	Acknowledgement of receiving open command from one of the surge suppressor terminals • **Fire Department 7** & **8** • **Strike Open 9** & **10** • **Safety Loop 1** & **4** • **Exit Loop 5** & **6** • **Radio Receiver 11** & **12**	Not receiving any command
⑪ **Fire Dept**	Receiving signal at the surge suppressor terminal block **7** & **8**	Not receiving signal at the surge suppressor terminal block **7** & **8**
⑫ **Strike Open**	Receiving signal at the surge suppressor terminal block **9** & **10**	Not receiving signal at the surge suppressor terminal block **9** & **10**
⑬ **Safety Loop**	Receiving signal at the surge suppressor terminal block **1** & **4**	Not receiving signal at the surge suppressor terminal block **1** & **4**
⑭ **Exit Loop**	Receiving signal at the surge suppressor terminal block **5** & **6**	Not receiving signal at the surge suppressor terminal block **5** & **6**
⑮ **Radio Rec**	Receiving signal at the surge suppressor terminal block **11** & **12**	Not receiving signal at the surge suppressor terminal block **11** & **12**
⑯ **Timer PW**	Timer power is on	Timer is not on
⑰ **Timer UP**	Output signal to close relay	Not receiving signal to close relay

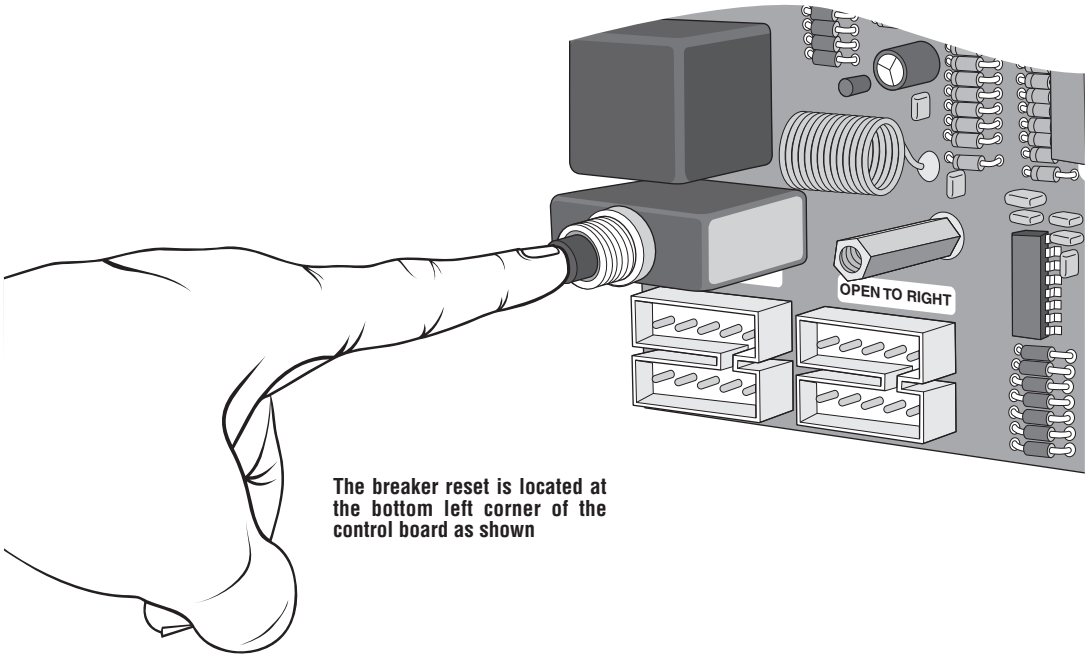
NOTE: *Circled red numbers indicates location on control board, identified on page 10.*

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.

⚠WARNING

To prevent SERIOUS INJURY or DEATH from a moving gate:
ALWAYS disconnect the battery before resetting the breaker or injury could occur as the gate starts.



The breaker reset is located at the bottom left corner of the control board as shown

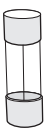
HOW TO CHECK THE FUSES

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.

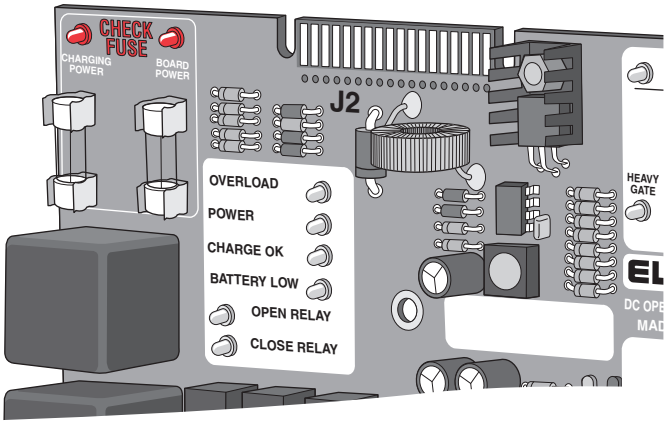
CAUTION

To AVOID damaging the control board, replace fuses ONLY with same type and rating specified above.

Replace fuse with 1.5A - 250V fuse

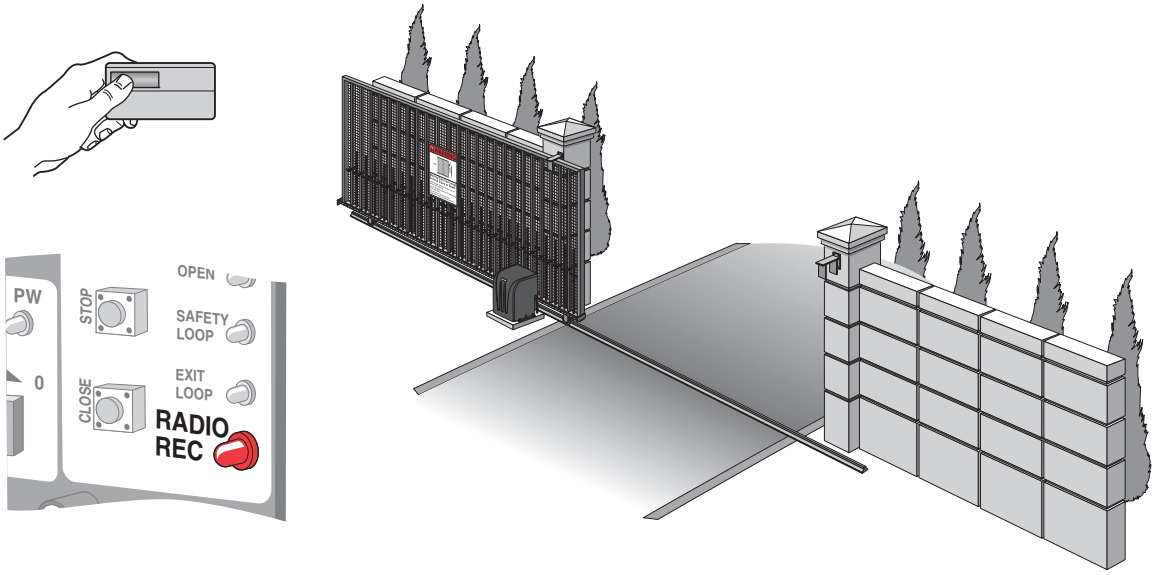


Robo Fuse
(Part # **Q162**)



Troubleshooting

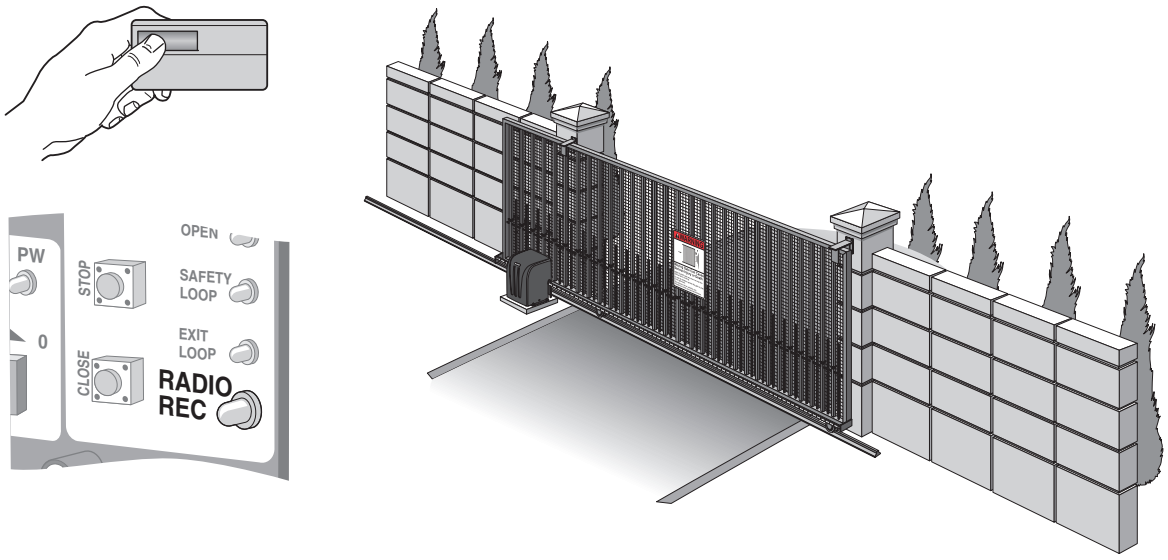
THE GATE WILL NOT CLOSE



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.

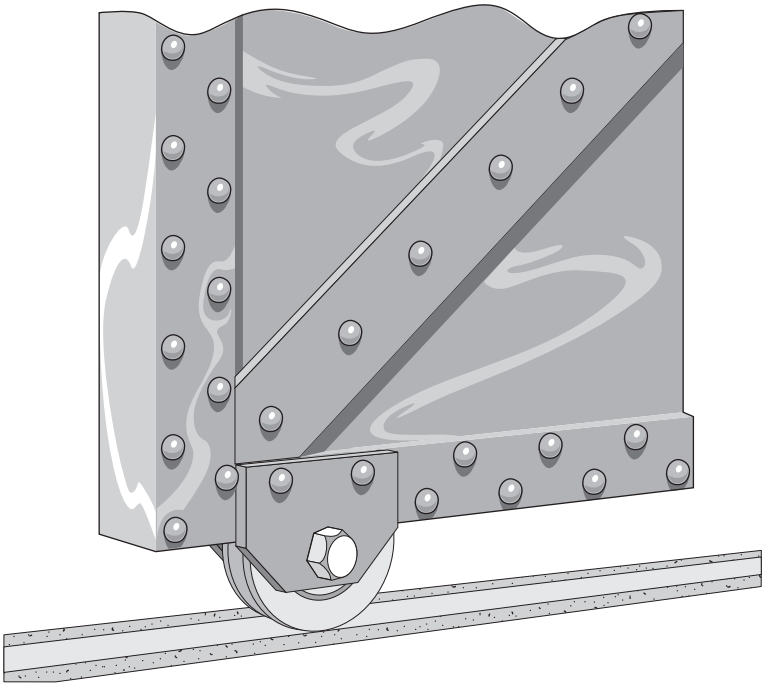
Possible Solutions: Dead battery in the remote control. Remote control code switches are different from radio receiver code switches. The radio receiver has malfunctioned in the "OFF" position.

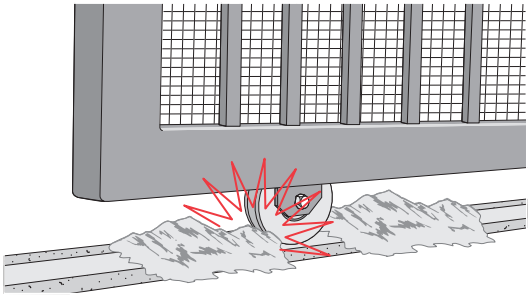
For further information, contact your local dealer.

IF YOU HEAR A BEEP SOUND

ALARM SENSOR

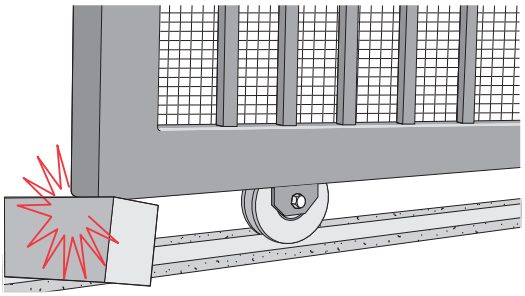
The gate is TOO Heavy.





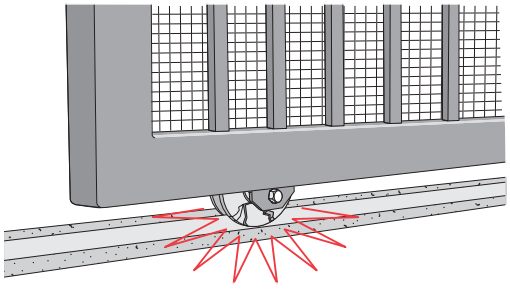
ALARM SENSOR

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



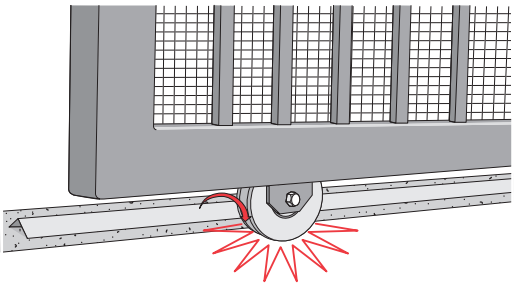
ALARM SENSOR

The gate is hitting a wall or vehicle.



ALARM SENSOR

The gate has one or more broken wheels.

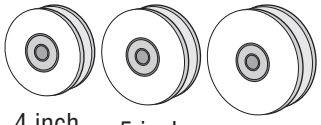


ALARM SENSOR

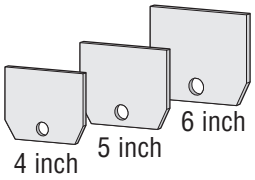
The gate is off the track.

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

Accessories

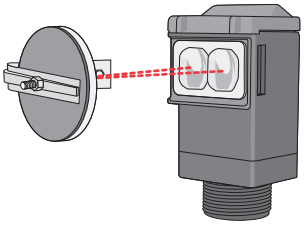


V-Groove Power Wheels Series

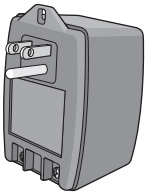


Brackets

Remote Controls

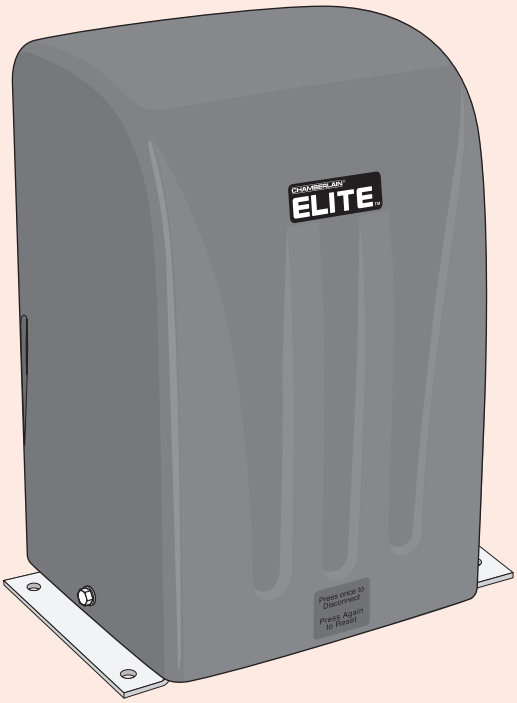


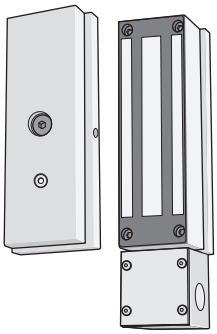
12 VDC Photo Sensor
Part # AOMRON12V



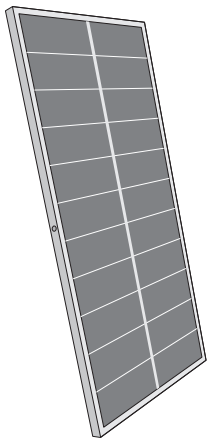
25 Vdc Transformer
Part # APOW1

For more information about accessories:
www.chamberlain.com

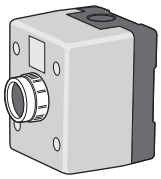




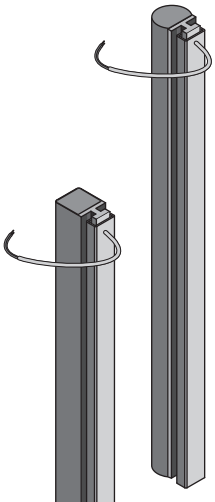
Magnetic Locks (Outdoor)
Part # MG1300



Solar Panel
(UL Listed Class 2 Output)
Part # SOLAR3

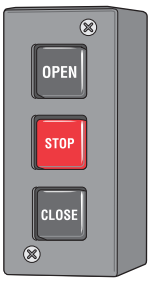


Stop Buttton
Part # AEXITP



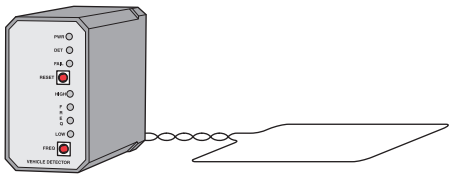
UL Approved Round Sensing Edge
Part # G65MGR20*x*
x = length (4, 5, 6 ,8 ft)
(e.g. G65MGR206 is 6 ft)

UL Approved Square Sensing Edge
Part # G65MGS20*x*
x = length (4, 5, 6 ,8 ft)
(e.g. G65MGS204 is 4 ft)



3-Button Control Station
Part # 02103

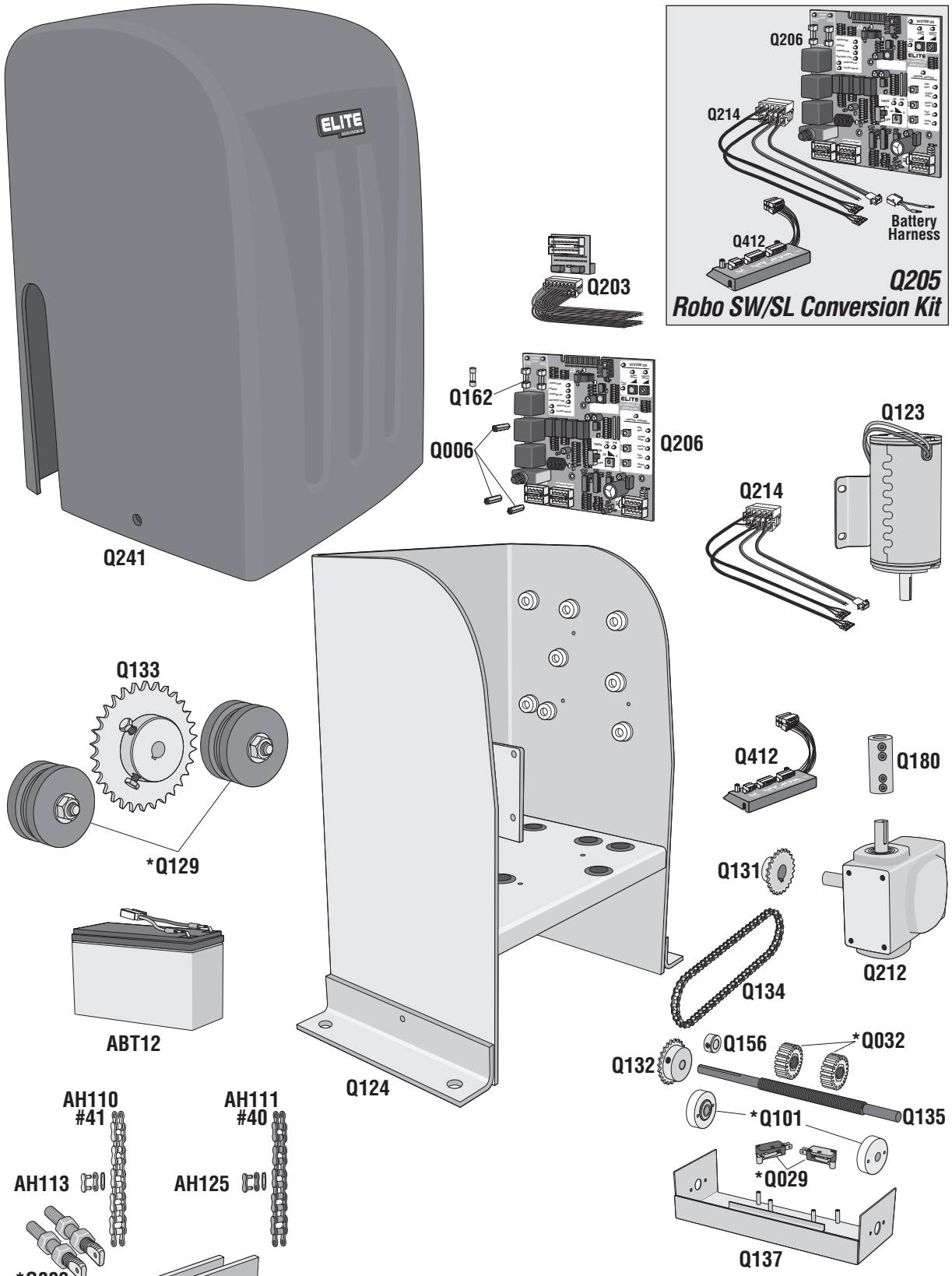
Plug-In Loop Detectors
Part # AELD



12 VDC External Loop Detectors
Part # A23

Repair Parts

ROBO SLIDE PARTS



NOTE: **Sold individually, 2 shown.*
For part list, refer to next page.

Robo SW / SL Conversion Kit

Q205
- Q211 - Limit/Motor Harness
- Q412 - Surge Suppressor Terminal
- Q206 - Control Board
- Battery Harness

ABT12 - 12 VDC, 7 amp. Battery with Harness
AH110 - Gate Chain #41 (10 ft) (20 ft included)
AH111 - Gate Chain #40 (10 ft) Optional
AH113 - Master Link #41
AH125 - Master Link #40
APOW1 - 25VDC 1.6A
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 - Robo Slide
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
Q212 - Gear Reducer 40 - 30:1
Q214 - Limit/Motor Harness
Q241 - Cover, Polyethylene Robo Slide
Q412 - Surge Suppressor Terminal

Multiple Parts “Q” Number

HOW TO ORDER REPAIR PARTS

DEK CANADA INC
1928 ST-REGIS BLVD.
DORVAL, QC
H9P 1H6

TEL: 514-685-5800
TOLL-FREE: 1-800-361-3198
FAX: 514-685-5804

www.dekcanada.com

WHEN ORDERING REPAIR PARTS
PLEASE SUPPLY THE FOLLOWING INFORMATION:

PART NUMBER DESCRIPTION MODEL NUMBER

Installation Checklist

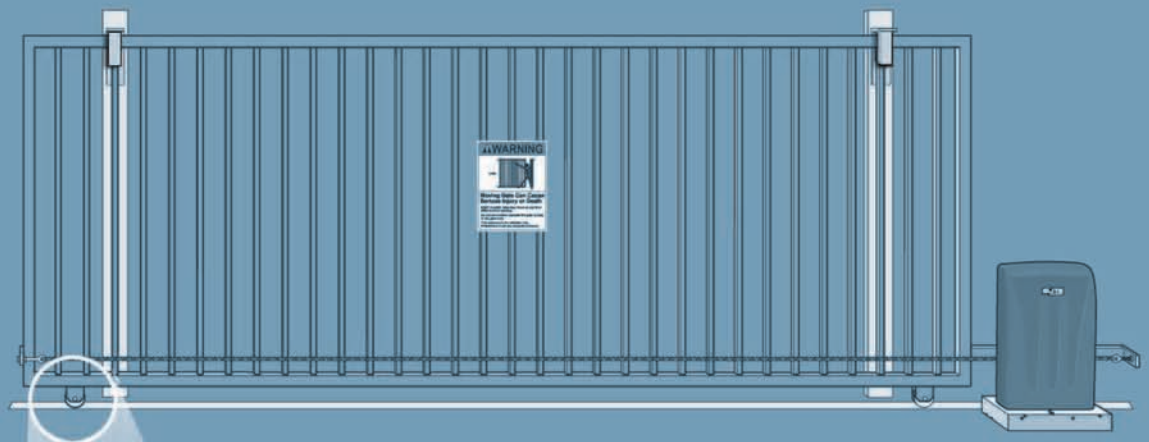
- ☐ ***1.*** Owner and Installer **must** read all warnings and safety precautions (Pages 2-7).
- ☐ ***2.*** Make sure concrete mounting pad is big enough and deep enough for operator (Page 8).
- ☐ ***3.*** Operator must be **securely** fastened to concrete pad (Page 8).
- ☐ ***4.*** Operator chain must be **4 inch Minimum** from gate. Chain must not be too tight or too loose (Page 8).
- ☐ ***5.*** Gate operator should be grounded to an earth ground rod within 3 feet (Page 9).
- ☐ ***6.*** Verify that both the battery and plug-in transformer are connected properly. Know where the main power disconnect plug is to disconnect **all** power to operator (Page 12).
- ☐ ***7.*** Verify that the gate opens and closes as needed (Page 24 & 25).
- ☐ ***8.*** When gate hits object during operation, it **must** stop or reverse, depending on the direction gate is traveling (Page 30).
- ☐ ***9.*** Make sure that any pinch point or potential entrapment are guarded by means of safety devices or like (Pages 2, 4, 5).
- ☐ ***10.*** Warning placards need to be permanently mounted on **both** sides of gate (Page 6).
- ☐ ***11.*** Test all additional equipment connected to operator.
- ☐ ***12.*** Make sure all wire connections are **securely** fastened.
- ☐ ***13.*** Review typical maintenance on operator (Page 31).
- ☐ ***14.*** Schedule periodic maintenance on operator by qualified service technician.
- ☐ ***15.*** Inquire about Manufacturers “operator warranty”. (Warranty Card Included with operator)
- ☐ ***16.*** Inquire about **separate** “installation warranty” with installer.

Installer Company Name, Address and Phone Number

Date of installation: _____

FEATURES AND SPECIFICATIONS

We suggest the following items manufactured by Chamberlain Professional Products for better and safer operations.



POWER WHEELS

These wheels are the best choice for high trafic sliding applications.

WARNING SIGN

Use a warning sign on gate to prevent injury to children.

ATTENTION

In order to reduce any severe injuries, Chamberlain professional Products recommends the electric gate be either; covered with a mesh or installed in such a way which to prevent small children or any other persons from being able to stand, hang or climb on the electric gate.

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