RSW 2500 Residential Crank Swing Arm Gate Operator

Installation & User Manual



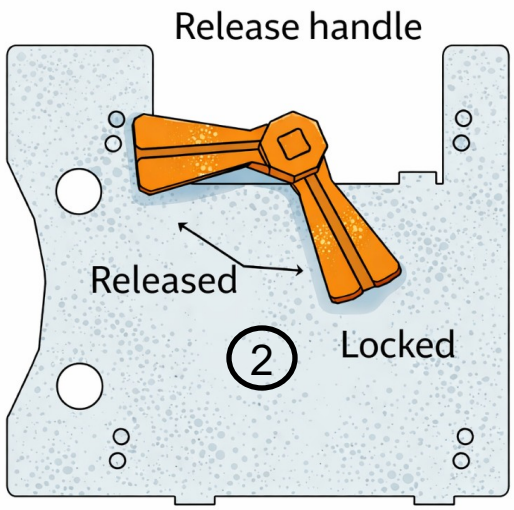
SGC
ACCESS CONTROLS

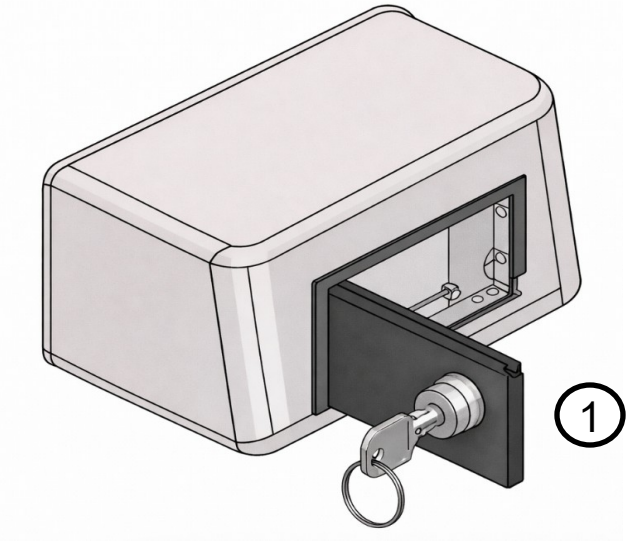
Model: CB-2500 Smart Control Board **Application:** Dual Swing Gate Operator

Gate Access… Just Got Easier!

First, **Turn Off Power**, then

1. Open Operator Door
2. Turn Release Handle





Release the clutch by rotating the clutch handle 90°
Gate should be released and move freely, now pull the gate open or push the gate open, as pictured.



Attention!!! Release the clutch ONLY when power is shut off.

After pushing gate open or closed turn handle back to locked position. When power is turned back on gate will return to its original settings, no need to reset limits. Not sure, call your installer.

Your Installer	Phone



HOMEOWNERS ATTENTION

*All safety items are not suggestions they are **MANDATORY!***
All operations indicated in this manual must be carried out exclusively by skilled and Authorized State Contractor and in full compliance with the regulations in Local Laws.
Please note that Warranty will not be honored .

The contents of this manual may be “changed at any time and without notice”

PRODUCT OVERVIEW

Specification	Details	Specification	Details
Model	RSW-2500	Max Gate Length (Single)	11 ft
Power Input	AC 110V / 60Hz or 220V / 50Hz	Max Gate Weight	800 lbs
Motor Type	DC Swing Gate Operator	Protection Rating	IP54
Opening Time	Approx. 15 seconds	Operating Temperature	-20°F to 122°F
Maximum Torque	236 lb-ft	Usage Class	Residential / Light Commercial

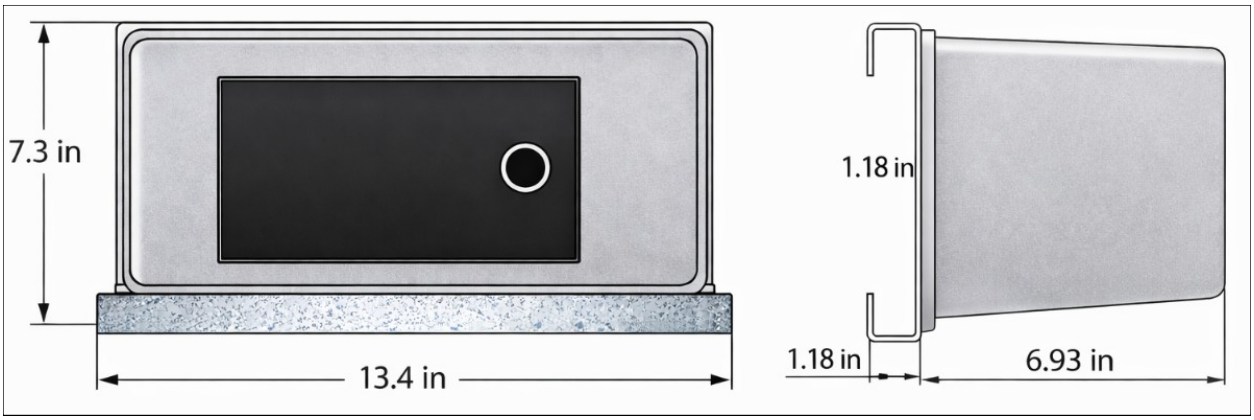


TABLE OF CONTENTS

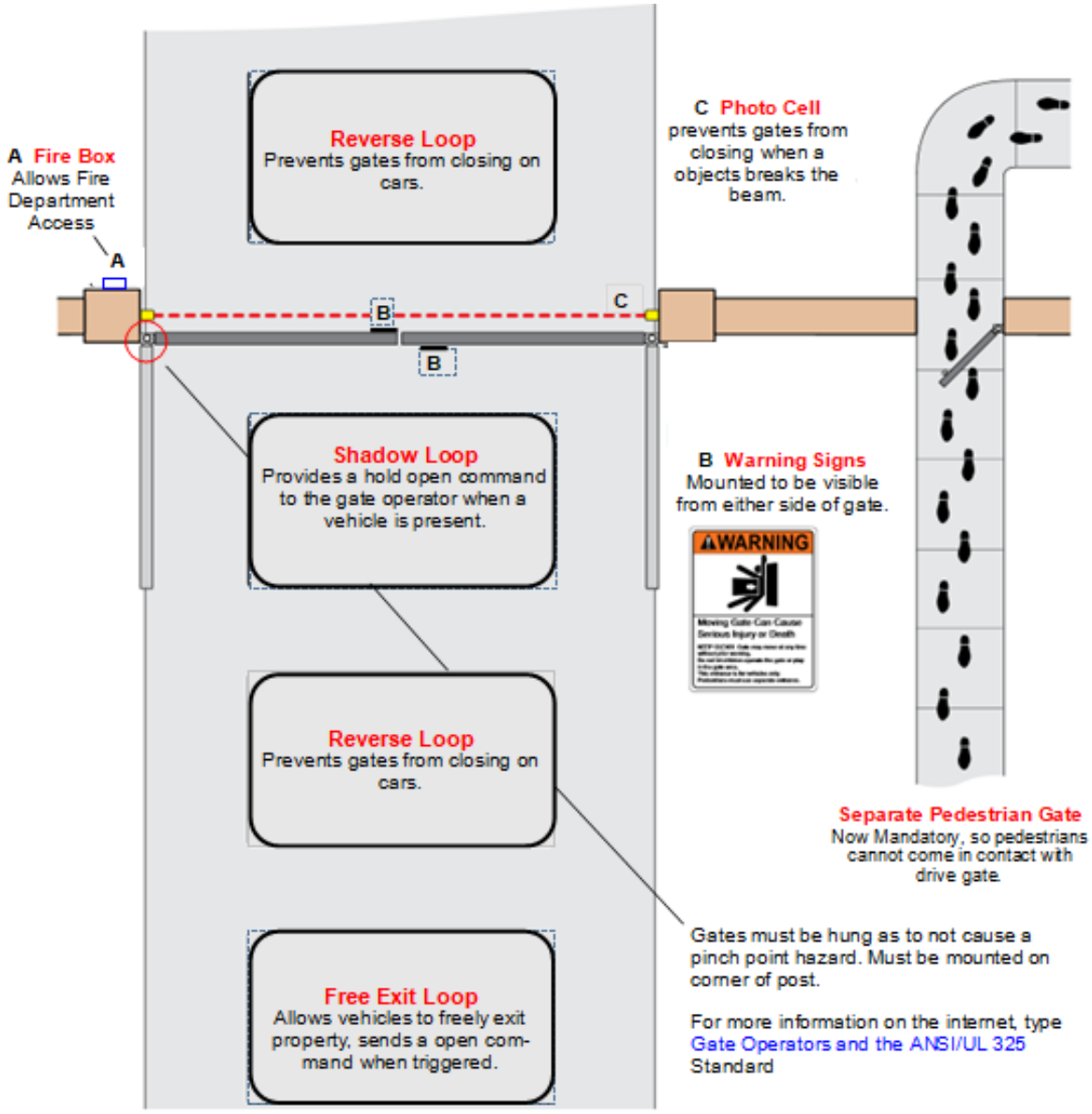
Emergency Release	Page 2
Safety Instructions	Page 4 - 6
Example Of System Layout	Page 7
Gate Arm Overview	Page 8
Installing the Operator	Page 9 - 10
Attaching The Arm	Page 10 - 12
Setting The Limits	Page 13
Control Board Overview	Page 14
Control Board Programming	Page 15 - 17
Photocell Safety	Page 18
Parts List	Page 19
Electrical Connections	Page 20
Maintenance	Page 21
Warranty and Troubleshooting	Page 22

Serial Number	Gate Size
Installation Date	Address
Installing Company	Phone #

The contents of this manual may be “changed at any time and without notice”

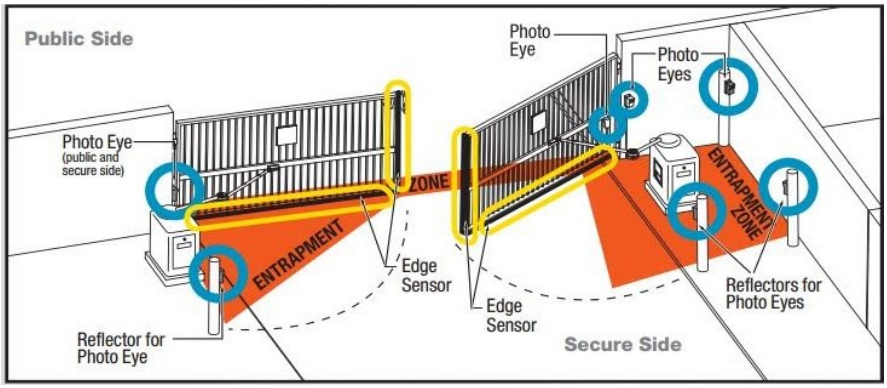
IMPORTANT!
Instructions regarding RSW-2500 Swing Gate Operator Installation

I. Install the gate operator only when all exposed pinch points are eliminated or guarded.
2. The operator is **ONLY** intended for installation only on gates used for vehicle's. ***Pedestrians MUST be supplied with a separate access point.***
3. The gate must be installed in a location that allows vehicles with clearance off any public access road.
4. Please follow all of these instructions. Improper installation may cause serious bodily harm. Before continuing, please also read the general precautions for users. The contents of this manual may be changed at any time and without notice.



5. The gate or gates must swing freely and work properly in both directions prior to the installation of the gate operator.
6. The gate must also be installed so that enough clearance is supplied between the gate and any structures when opening and closing to reduce the risk of entrapment.

7. Keypads, Push Buttons and any other controls must be 15 ft. away from the gate to prevent someone coming in contact with gate while operating such a device.
8.The manufacturer cannot be held liable for any damage caused by improper, unreasonable or erroneous use.
9. The device must be installed, wired, connected and tested according to good professional practice, in compliance with the standards and laws in force.
10. Make sure the mains power supply is off or disconnected during all installation procedures.
11. Check that the temperature ranges given are suitable for the installation site.
12. Do not install the operator on surfaces that could yield and bend. If necessary, add suitable reinforcements to the anchoring points.
13. Make sure that no direct jets of water can wet the product at the installation site (sprinklers, water cleaners, etc.).
14. Make sure you have set up a suitable GFI cut-off device along the power supply that is compliant with the installation rules.
It should completely cut off the power supply.
15. Use suitable protection to prevent any mechanical hazards due to persons loitering within the operating range of the operator. (see page 17)



Safety is NOT a suggestion it is Mandatory. Please email us at info@sgcaccess.com if you have any questions on safety requirements.
Its protection that can save property damages, bodily injuries or even death if not followed correctly.

16. The electrical cables must pass through conduit pipes in order to guarantee adequate protection against mechanical damage.
17. The electrical cables **must be of the right gauge** and amperage to prevent any parts that may overheat during use (such as the motor and transformer).
18. Before installation, check that the guided part is in good mechanical condition, covered with protective covers and that it opens and closes correctly and smoothly.
• **The product cannot be used to automate any gate or part that includes a pedestrian gate.**
• Make sure that nobody can become trapped between the gate and fixed parts (see image above), when the gate part is set in motion.
• All fixed controls must be clearly visible after installation, in a position that allows the gate or part to be directly visible, but far away from moving parts. In the case of a hold-to-run control, this must be installed at a minimum height of 4ft from the ground and must not be accessible to the public.
• Make sure that the operator has been properly adjusted and that the safety and protection devices and the manual release are working properly.
• Any residual risks must be indicated clearly with proper signage affixed in visible areas, and explained to end users. • Put the machine's ID plate in a visible place when the installation is complete.
• If the power supply cable is damaged, it must be immediately replaced by an authorized dealer, or in any case, by qualified licensed contractor, to prevent any risk.
• **If the product malfunctions, stop using it and contact your installing dealer.**
See Gate Operators Safety Guidelines @ TDS353.pdf



Separate Pedestrian Access



Access Controls Placement



Liability & Compliance

Property Owners must never allow anyone to hang on or ride the gate!

Mandatory Safety Requirements

Separate Pedestrian Access: UL 325 and ASTM F2200 require that pedestrians be directed to a **separate entrance and exit** that is not used by vehicular traffic.

Location of Pedestrian Gates: The walk gate must be positioned so that individuals do not come into contact with the moving vehicular gate.

Signage Requirements: Clearly visible **warning signs** must be posted on both sides of the gate, instructing pedestrians to use the separate walk-through entrance.

Access Controls Placement: Activation devices (like keypads or buttons) must be installed at least **15 feet** away from moving parts to prevent anyone from reaching through the gate while it is in motion.

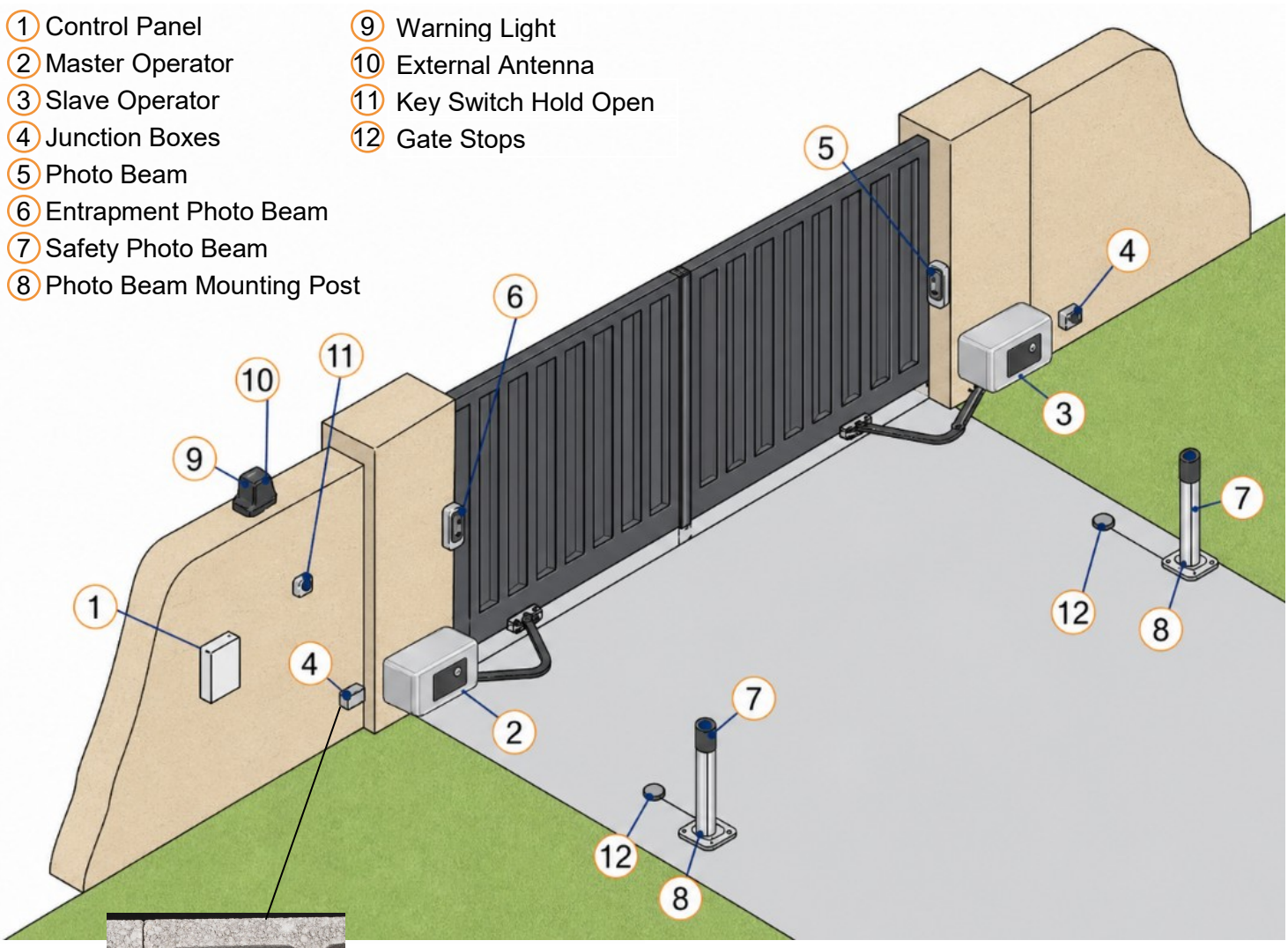
Property Owner Responsibility: Property owners are responsible for ensuring their gate systems meet these standards to avoid **liability** in the event of an accident.

Safety Devices: Automated gates must have at least **two independent entrapment protection devices** (e.g., photo eyes and safety edges) to stop or reverse the gate if an obstruction is detected.

The contents of this manual may be “changed at any time and without notice”

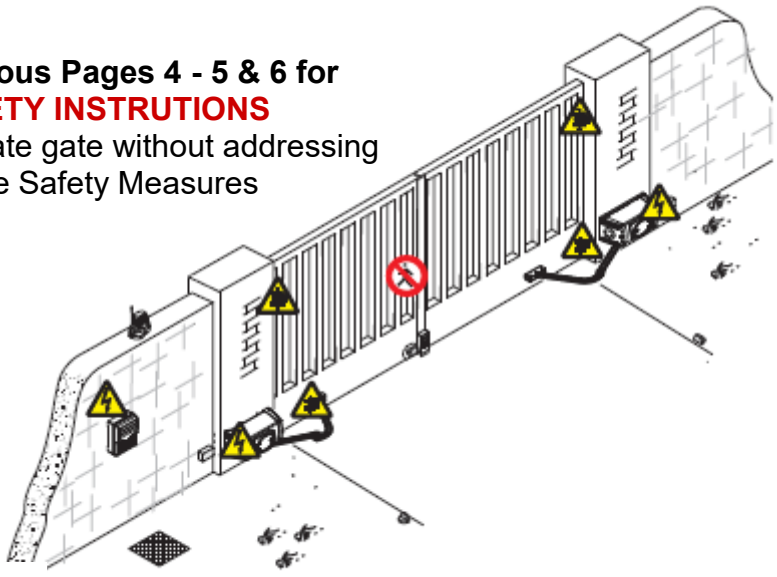
EXAMPLE OF SYSTEM LAYOUT

1. Control Panel
2. Master Operator
3. Slave Operator
4. Junction Boxes
5. Photo Beam
6. Entrapment Photo Beam
7. Safety Photo Beam
8. Photo Beam Mounting Post
9. Warning Light
10. External Antenna
11. Key Switch Hold Open
12. Gate Stops





See Previous Pages 4 - 5 & 6 for
SAFETY INSTRUTIONS
Do Not operate gate without addressing these Safety Measures



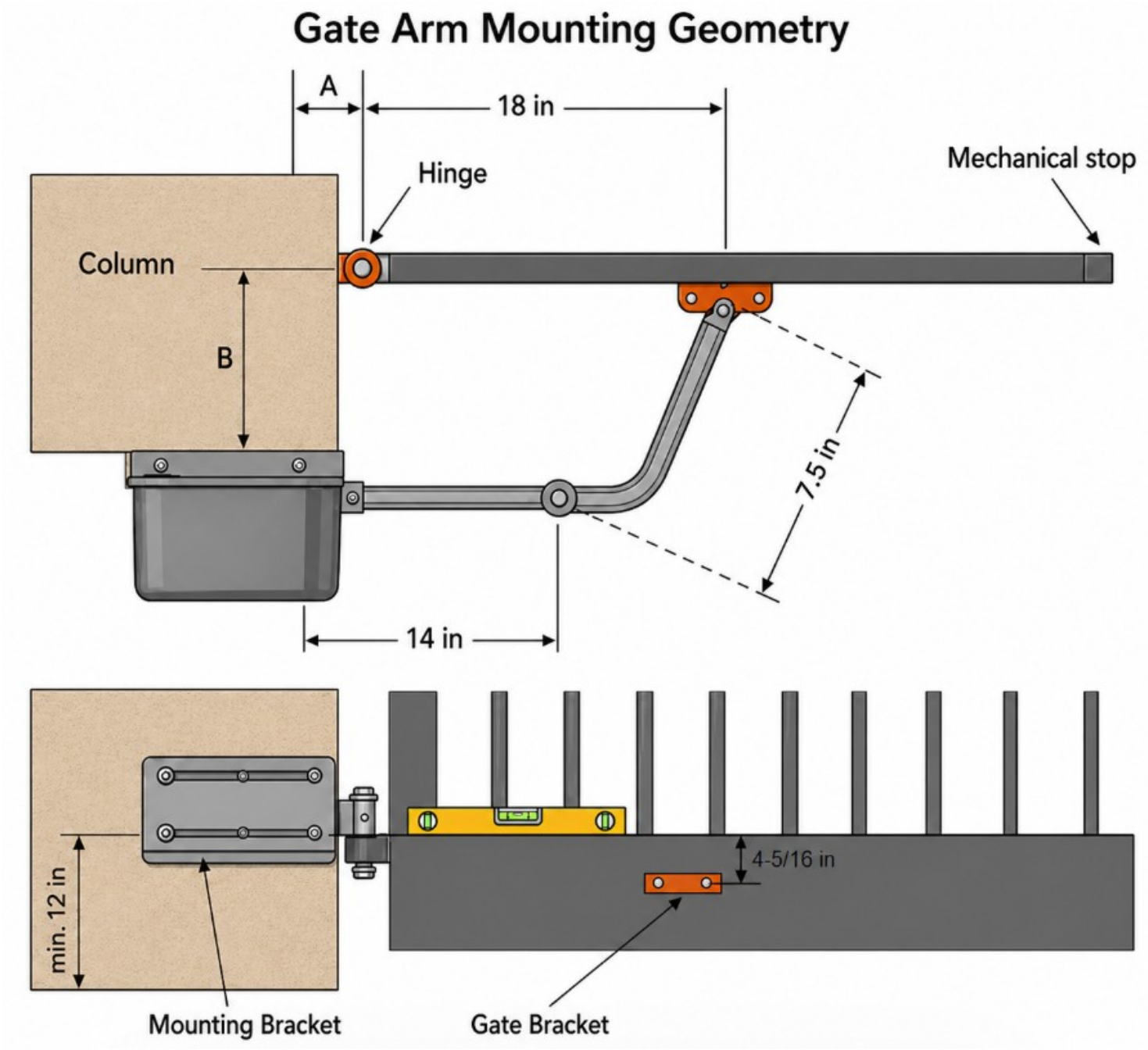

Danger of crushing


Danger of crushing hand


Danger of Electrical Shock


NEVER allow Pedestrian use

NOTE: The following illustrations are only examples, given that the space for securing the operator and accessories varies depending on the overall dimensions. The installation technician is responsible for choosing the most suitable solution.



If dimension of **B is 0–11.5 inches**, the dimension of **A must be not less than 4.5 inches**.
If dimension of **B is 11.8–14.75 inches**, the dimension of **A must be not less than 6 inches**.

Mounting Base Plate

The mounting of Motor Base Plate has different factors involved,

1. Attachment point to the gate.
2. The mounting base plate should be at least **6" above ground level**.

Position and secure the brackets as shown in the drawing. This instruction outlines three common methods for securing brackets to a leaf or surface, requiring the installer to select the method best suited for the specific material and thickness.

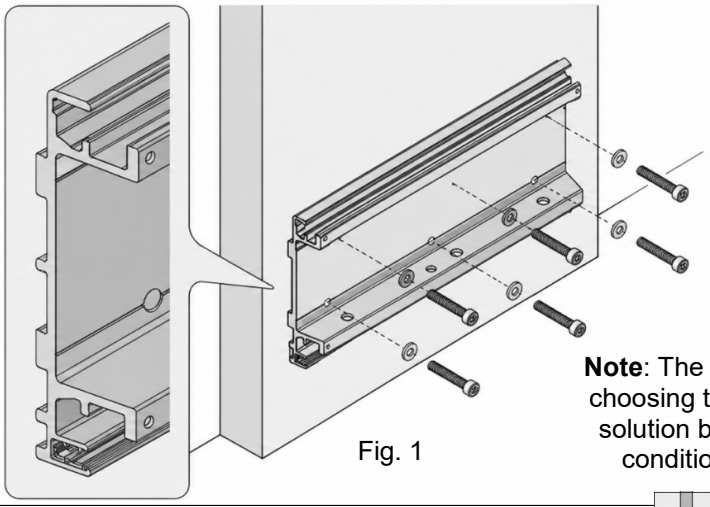


Fig. 1

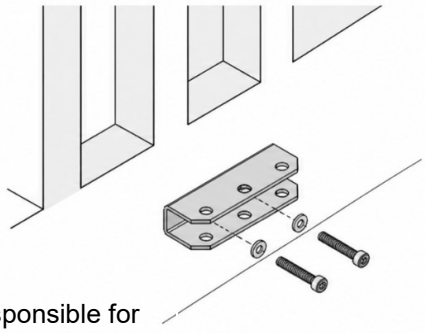


Fig. 2

Note: The installer is responsible for choosing the appropriate anchoring solution based on the specific site conditions and material types.

Mounting Options

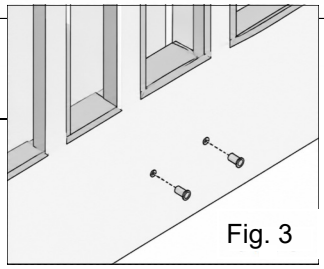


Fig. 3

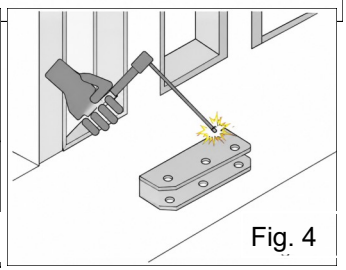


Fig. 4

- **Fig. 2 Bolts and Nuts**: Used for through-bolting to provide high strength, typically requiring access to both sides of the leaf.
- **Fig. 3 Inserts**: Suitable for thinner materials or blind applications (where you cannot reach behind), such as threaded inserts.
- **Fig. 4 Welding:** Used for metal surfaces requiring a permanent, high-strength, and rigid attachment.

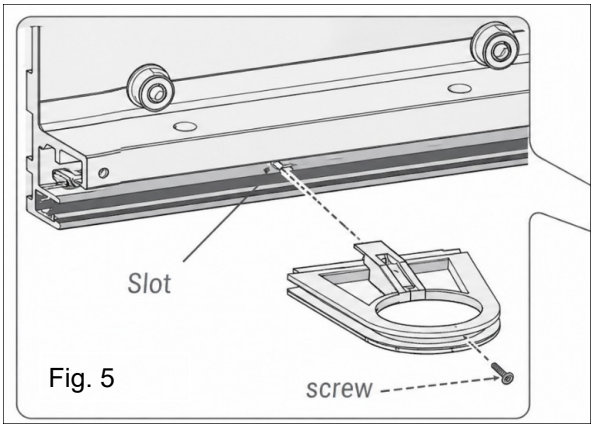


Fig. 5

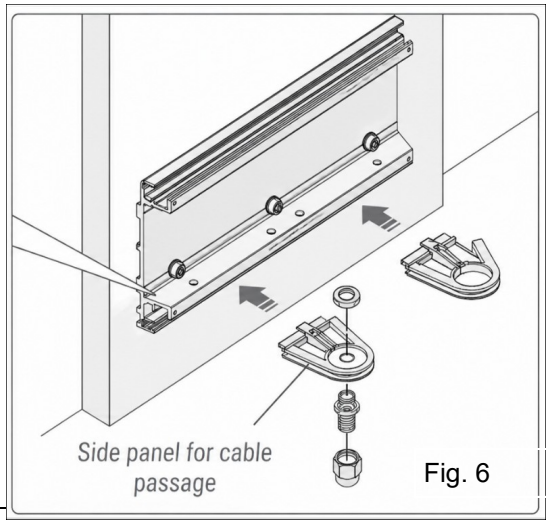
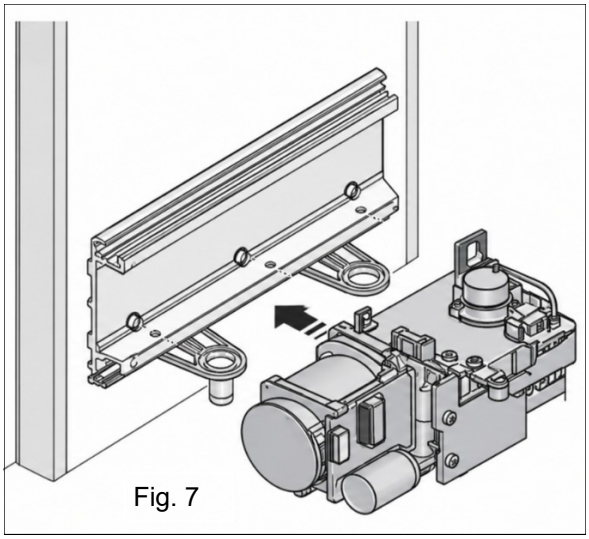
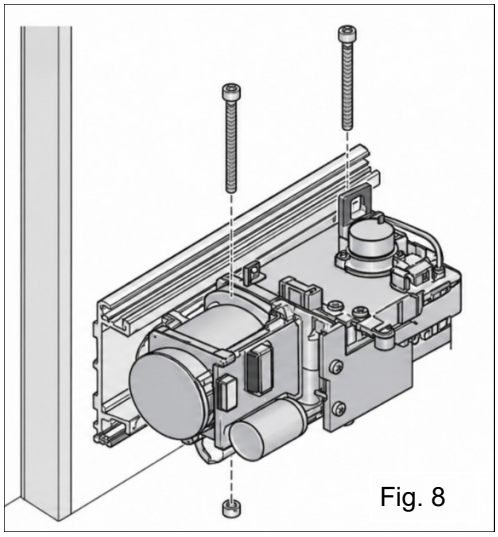


Fig. 6

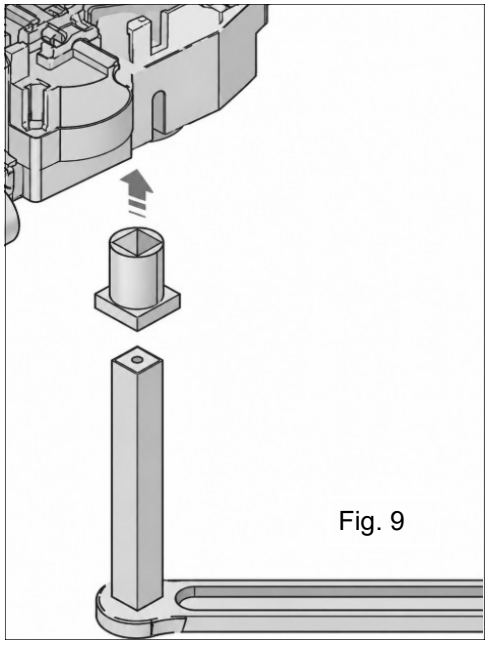
Transmission Arm Covers

Insert the Transmission Arm Covers in the pillar bracket slots. One is used for passing through the cables, the other for passing through the gearmotor arm.
Before inserting the panel for passing through the cables, assemble a cable gland suitable for the cables to be used.


Fig. 7


Fig. 8

ATTACHING THE ARM


Fig. 9

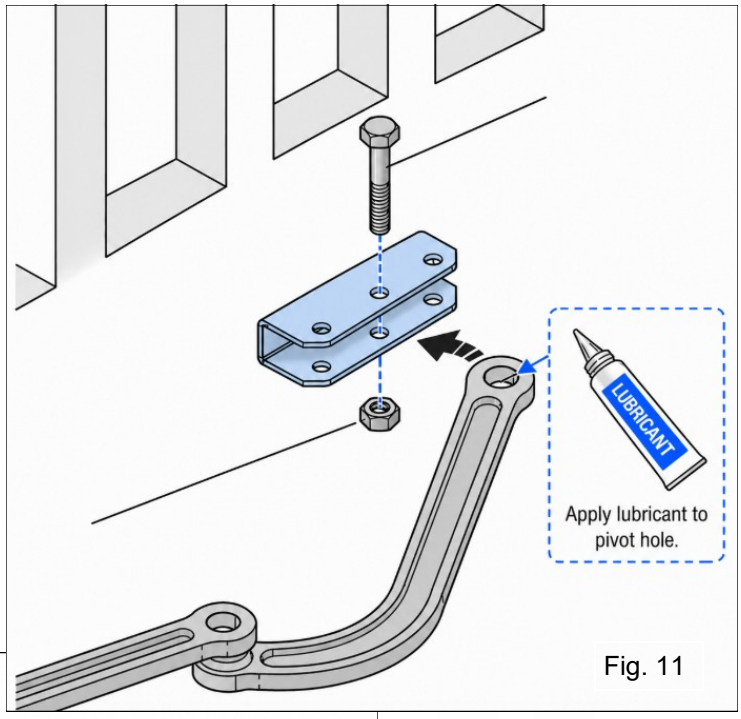


Fig. 11

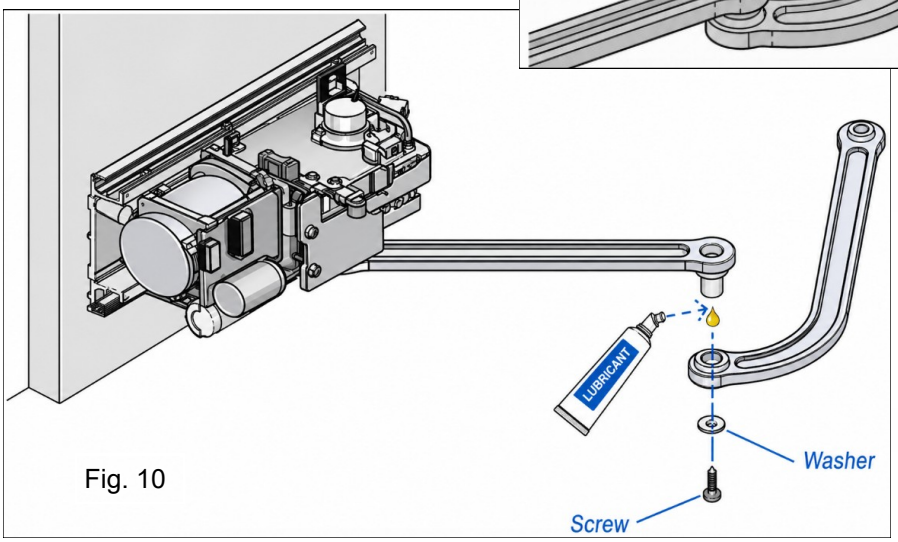
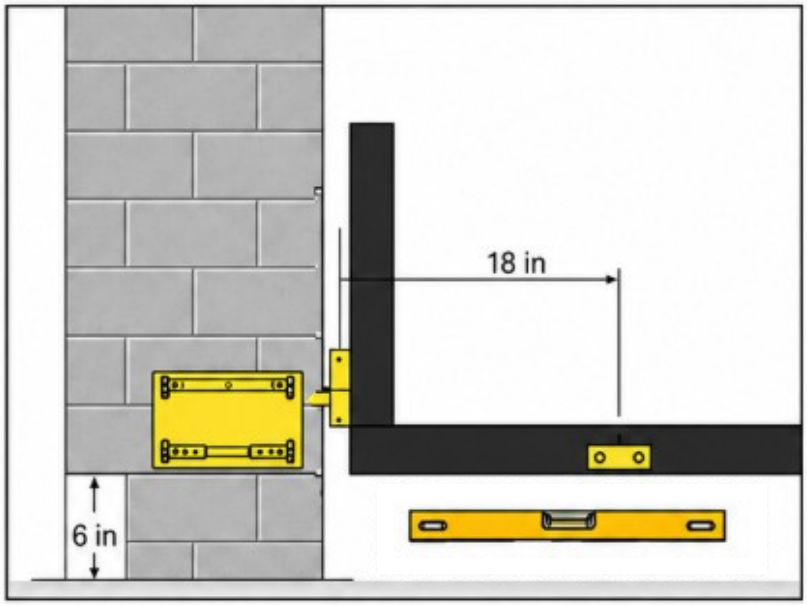
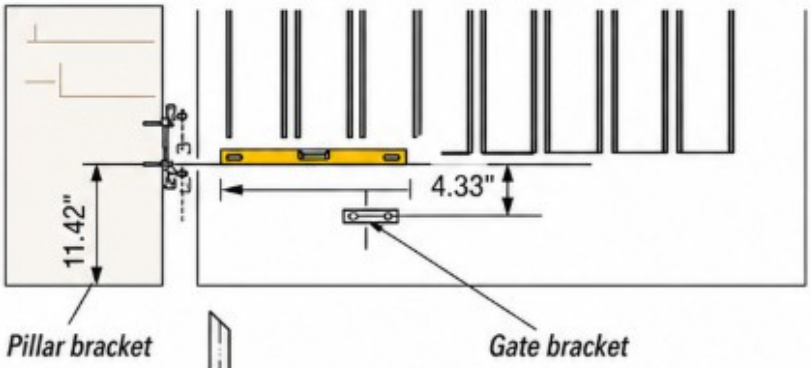


Fig. 10

Fig 7 Insert the gearmotor into the bracket
Fig 8 Secure it with screws and nuts.
Fig 9 Insert the transmission arm with the bushing in the motor shaft and secure it with the washer and screw.
Fig 10 Secure the drive arm to the transmission arm using the screw and washer.
Fig 11 Secure the drive arm to the gate bracket with the screw and nut.

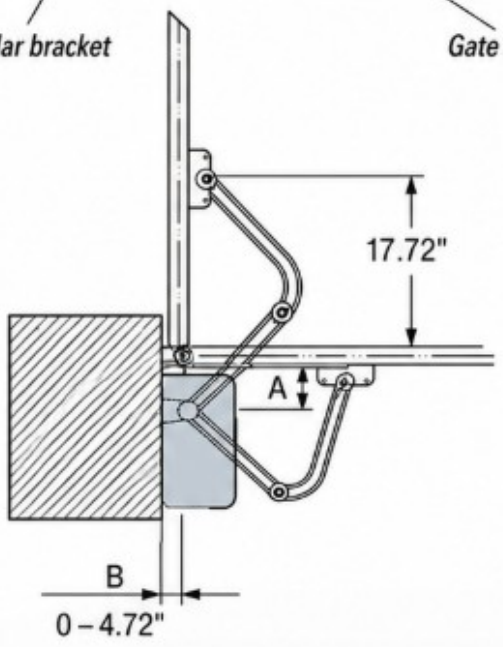


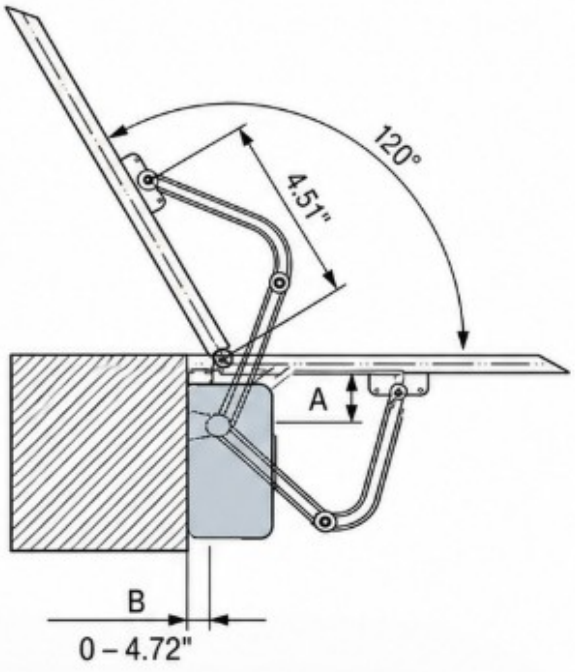
- Use **5/16 in. bolts** and **9/16 in. anchors** to install the mounting base plate to the column.
- The mounting base plate should be installed at least **6 in. above ground level.**
- Secure **Gate Bracket** to the gate using **5/16 in. bolts** or other means (see previous page)



Application size

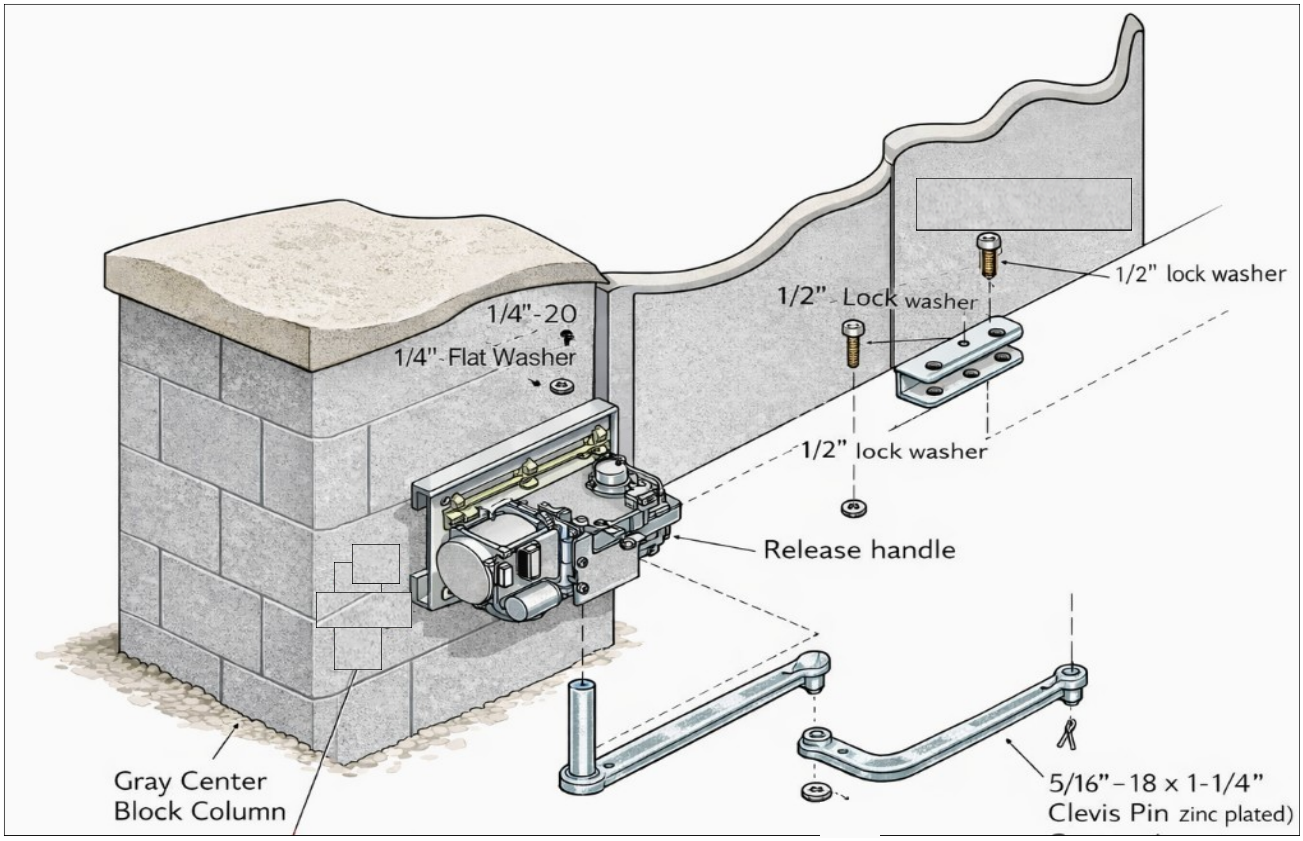
Leaf opening	A (in)	B (in)
90°	5.91	0 – 4.72"
120°	5.91	0 – 2.36"



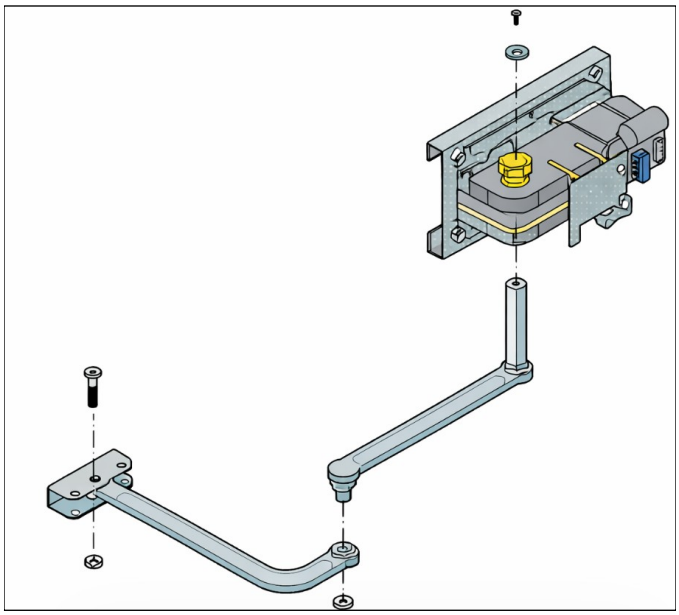


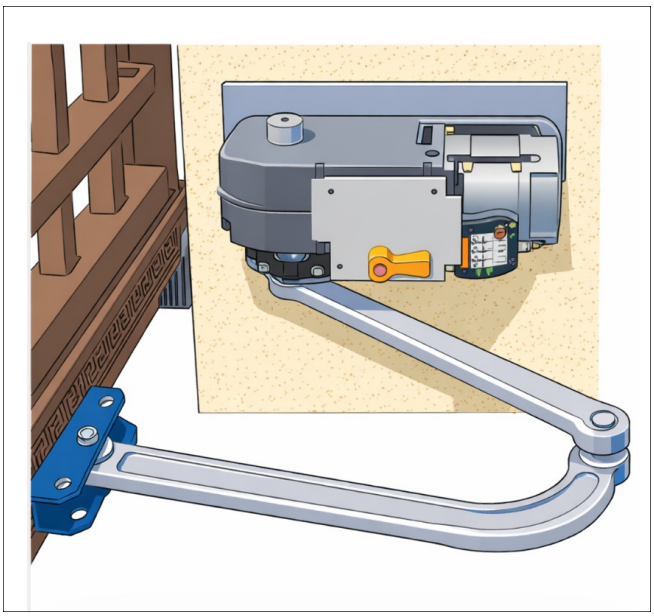
Install the motor on the mounting base plate: Alignment of 4 holes, fixing two of the hole with 5/16" × 4-1/4" bolt inch bolt, install the motor to the right gate, adjust position of the motor, then fixing the other two holes.

The contents of this manual may be “changed at any time and without notice”



The straight arm is inserted into the output shaft of the motor, until the end of the shaft and the end of the straight arm in the same plane, fixing the washer by screw, fixing the shaft of the straight arm by two pairs of screws.
Using screws and washers to connect the two arms. Open the clutch by clockwise rotation of the release handle.
When you install the right side of the motor, follow the steps shown in Fig.2.





Crucial Warning: Prevent Operator Damage

⚠ Caution: if there are no gate stops, the limits must be set for open and close or Damage to operator will occur.

You must set the open and close limits.

Failure to do so without physical gate stops will cause severe damage to the operator. Follow these steps to secure the end runs and determine the limit points:

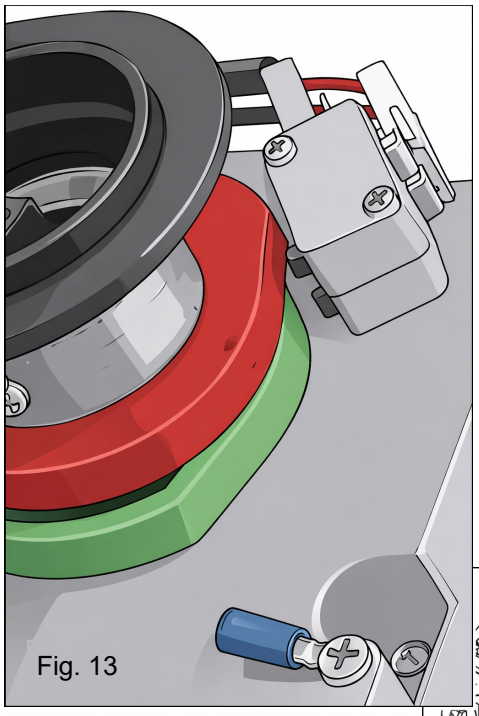


Fig. 13

- **Release the motor clutch Fig 12**,and push the gate to the desired OPEN position manually
- **Insert Cams:** Slide the limit switch cams directly onto the guide rail.
- **Open Position Gate:** Move the gate manually to your desired fully open position.
- **Set Open Cam:** Rotating the upper cam of the shaft to the touch (cut off) micro switch.
- **Secure Cam:** Tighten the cam screw firmly to lock it in place.
- **Close Position Gate:** Move the gate manually to your desired fully closed position.
- **Set Close Cam:** Rotating the upper cam of the shaft to the touch (cut off) micro switch.
- **Secure Cam:** Tighten the cam screw firmly to lock it in place.
- **Test Runs:** Run the operator electrically to verify exact stopping points.

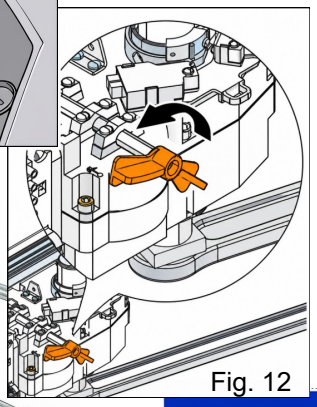
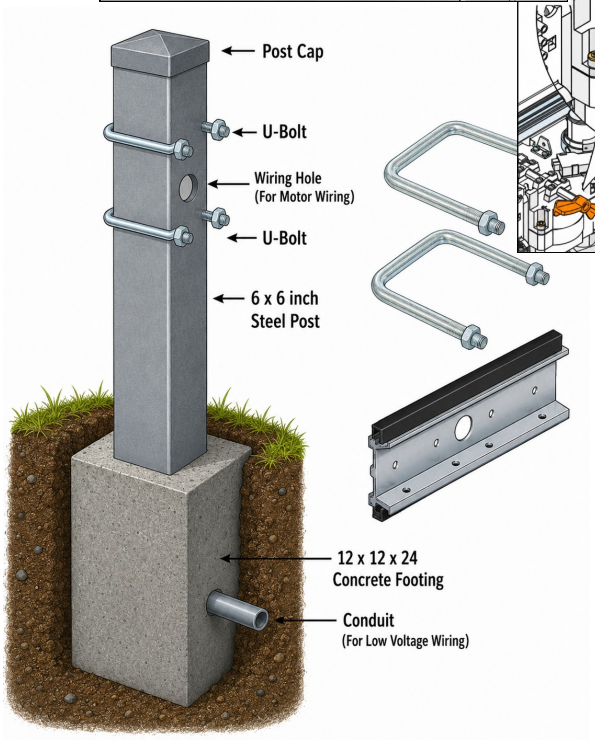
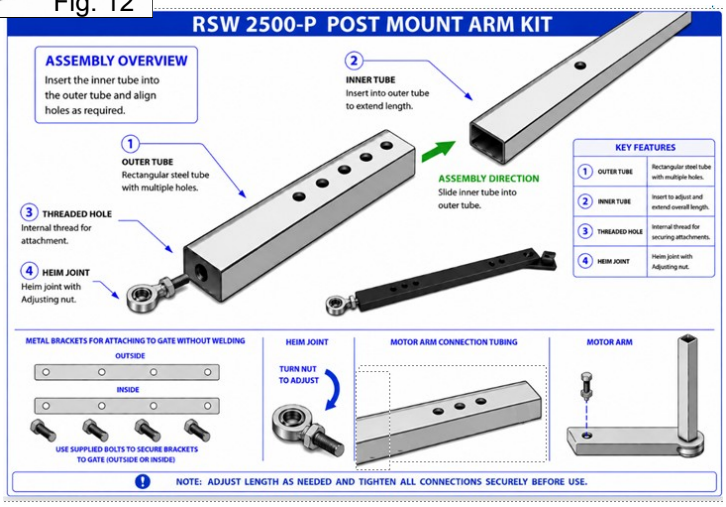


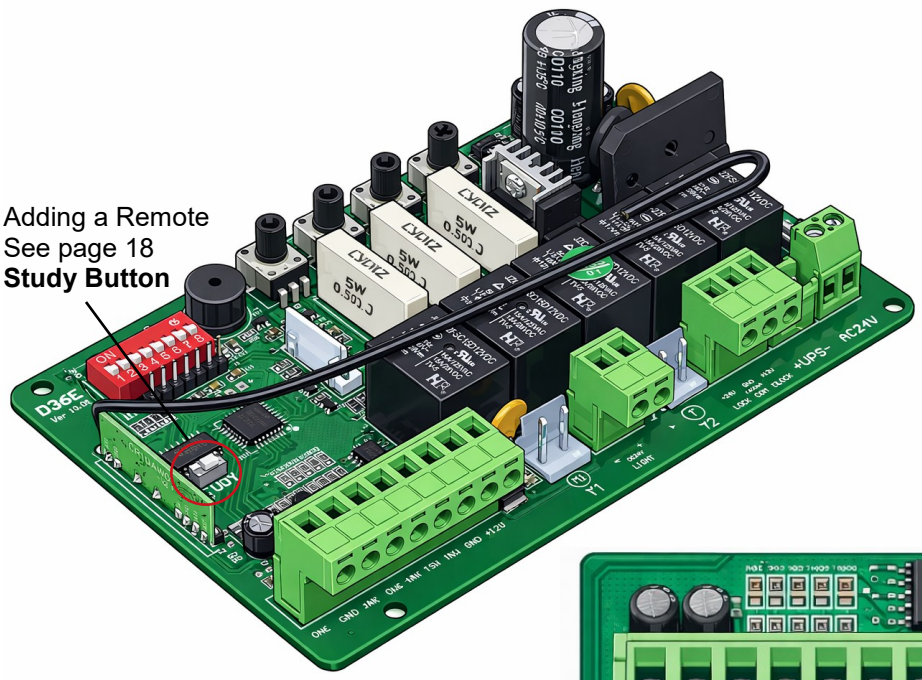
Fig. 12



Optional Post Mount Kit
RSW 2500-P Kit

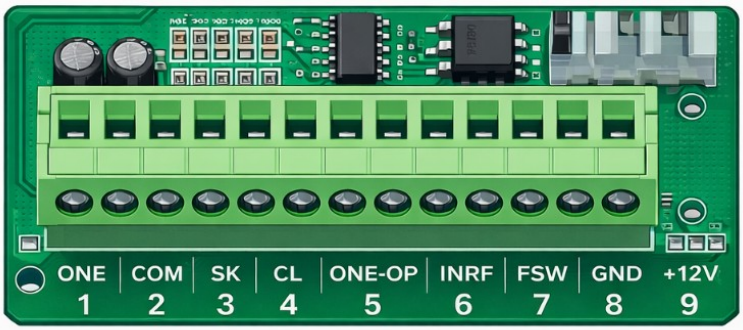


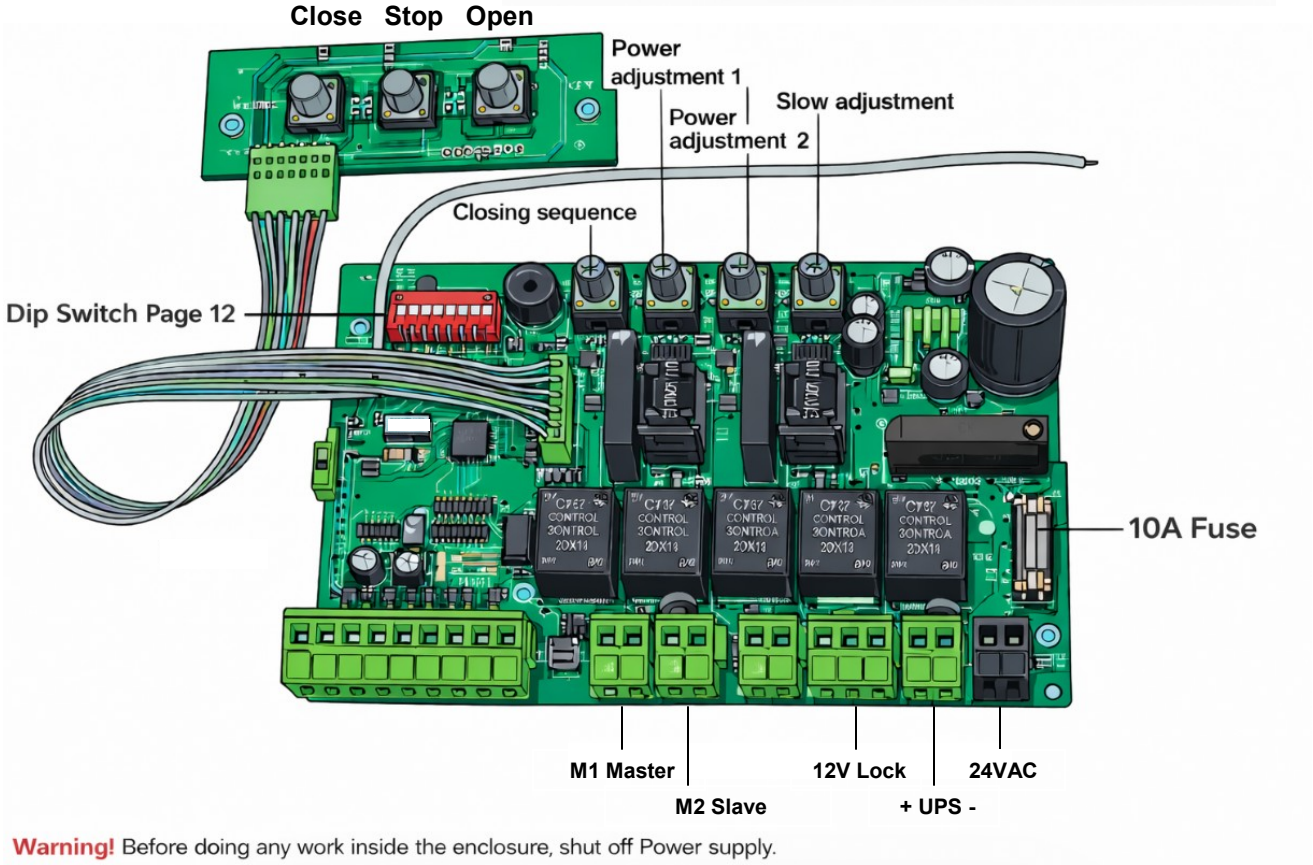
CONTROL BOARD OVERVIEW



Images Not to scale

1. **ONE:** Open-Close-Stop cycle input
2. **COM:** Common
3. **SK:** Open Command (Keypad)
4. **CL:** Close Command
5. **ONE-OP:** Open (Single Leaf)
6. **INRF:** Photocell / Safety Input
7. **FSW:** Loop Detector Input
8. **GND:** Ground
9. **+12V:** Power Output





Warning! Before doing any work inside the enclosure, shut off Power supply.

The contents of this manual may be “changed at any time and without notice”

Soft Start / Soft Stop Intelligent Control System

FUNCTIONS & FEATURES	Page 12	*AUTO CLOSE FUNCTION*	Page 14
RED DIP SWITCH SETTINGS	Page 12	*AUTO CLOSE SETUP*	Page 14
SOFT START SETUP	Page 13	*MOTOR DIRECTION*	Page 14
GATE CLOSE SEQUENCE	Page 13	*ADDING SYSTEM COMPONETS*	Page 14
STRENGHT ADJUSTMENT	Page 14	*TROUBLESHOOTING*	Page 14
REMOTE CONTROL PROGRAMING	Page 14	*PHOTOCELL SAFETY*	Page 15

Important Notice

Please read this manual carefully before installation and operation.

Product Overview

The SGC D36 Intelligent Control Board is designed for two-wire, dual swing gate operators with *soft start* and *soft stop* functionality.

System Description

Power Input AC 110V / DC 24V
Rated Power 180W
Frequency 433.92 MHz Rolling Code
Remote Range Up to 50 ft
Wiring Distance Up to 100 ft

1. *FUNCTIONS & FEATURES*

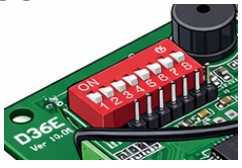
Anti-Collision Protection

After the gate completes travel, pressing the re verse command allows the motor to reverse direction and prevents over-travel damage.

- **Motor Run-Time Protection**
  Prevents excessive motor operation during faults.
  Adjustable run time: 2 – 240 seconds
- **Auto Close Function**
  Adjustable automatic closing delay:1 – 240 seconds
- **Adjustable Motor Force**
  Motor torque can be independently adjusted.
  If an obstruction is detected, the gate will stop or reverse to prevent injury or damage.
- **Soft Start / Soft Stop (Low-Speed Mode)**
  Provides smooth operation and reduces mechanical wear by slowing gate travel near limits.
- **Anti-Clamp Safety Function**
  During closing, if an obstacle interrupts the infrared beam:→ Gate will **stop and reverse automatically**
- **LED Display Interface**
  User-friendly LED display for:
  1.Programming
  2.Diagnostics
  3.Maintenance

2. *RED DIP SWITCH SETTINGS*

General Note:
All DIP switches are located on the control board.
Power OFF before making changes.



RED DIP switch 1 *Remote Control Mode*
OFF (Factory Default) Multi-Button Control
ON: Single-Button Cycle Mode
Each press cycles through:
OPEN → STOP → CLOSE → STOP → OPEN
✔ One button controls full gate cycle
✔ Ideal for standard residential setups

RED DIP switch 2 *Dual Gate Opening Sequence*
OFF: Gate 1 and Gate 2 open simultaneously
ON: Gate 2 opens 5 seconds before Gate 1
✔ Used for Maglock or staggered dual gate systems

RED DIP switch 3 *Auto Close Function*
OFF: Auto close disabled
ON: Auto close enabled
Operation Notes:
Gate opens to limit
Delay timer begins (LED flashes during countdown
Gate closes automatically after set time
Auto Close Time Programming:
1. Set DIP 3 = ON
2. Set DIP 8 = ON
3. Press F Button
4. Each press = 1 second delay
5. Press F multiple times to set total delay
6. Turn DIP 8 = OFF to save

RED DIP switch 4 - Low-Speed Close Function
OFF: Low-speed function disabled
ON: Low-speed function enabled
Function Behavior:
Gate slows down approximately 3 ft before full close Provides smoother stopping and reduces impact stress
Function Behavior:
Gate slows down approximately 3 ft before full close.
Provides smoother stopping and reduces impact stress.

RED DIP switch 5 - Resistance bounce function
OFF: The motor will automatically stop when meet obstructions during opening or closing.
ON: if meet obstructions during opening the motor will automatically stop. During closing, if meet obstructions the motor will stop first, and then open the gate to open limit in case of clip person or vehicle.

RED DIP switch 6 - Lock function
OFF: No voltage during opening.

RED DIP switch 6 - Lock function
OFF: No voltage during opening.
ON: During opening, motor will close and reverse 1 second, electric lock get electric and start action 2 seconds, motor start opening. Electric lock will hold electric 3 seconds and release when the motor start opening.

RED DIP switch 7 - Single Gate (Leaf) Open via Remote Lock Button
OFF: Remote **LOCK** button opens **Door 2 only** (single leaf operation)
ON: Remote **LOCK** button disabled for single leaf opening

RED DIP switch 8 - SET / Programming Mode
OFF: Normal operation mode
ON: Enter function setting/programming mode

P7 JUMPER – LOCK FUNCTION ENABLE
- Install jumper on LOCK pins to enable function
- Press STOP + LOCK to lock/unlock system

3. SOFT START SETUP

Soft Start / Soft Stop (Low-Speed) Adjustment
Mode 1 – Automatic Learning (Recommended)
A. Ensure gate is fully closed before starting *(critical)*.
B. Turn:
- RED DIP 8 = ON
- RED DIP 4 = ON

C. Press OPEN (control panel or remote).
D. System will:
- Run full open/close cycle
- Automatically learn slow-down points

F. After both leaves fully close:
- Set RED DIP 8 = OFF
- Buzzer will sound → Learning complete

✔ System will automatically slow down approx. 3 ft before full open/close.
Mode 2—Manual Learning (Advanced)
A. Start with gate fully closed.
B. Turn:
- RED DIP 8 = ON
- RED DIP 4 = ON

C. Press OPEN.
Setting Slow Speed Points
Opening
- Gate 1 opens first
- Press STOP at desired slow-down position
- Repeat for Gate 2

Closing
- Gate 2 closes first
- Press STOP at desired slow-down position
- Repeat for Gate 1

After full close:
- Set RED DIP 8 = OFF
- Buzzer confirms completion

✔ User-defined slow speed zones are now stored.

4. GATE CLOSE SEQUENCE

- Locate the Adjustment Screw
- Adjust Timing: To make the gate close slower, turn the adjustment screw clockwise. To make it faster, turn it counter-clockwise.

5. TORQUE ADJUSTMENT / Torque 1 & 2

IMPORTANT
Adjusting the Running Strength *(torque) of a motor is a critical safety feature designed to protect both the Operator and nearby Persons by causing the motor to stop if it encounters significant resistance, such as a person or object being clipped by an auto.*
Safety Stop Mechanism*: When the motor meets resistance that exceeds the set torque limit (often called* ***stall torque****), the motor will stop turning to prevent damage or injury.*
Setting the Threshold:
Increase: If the motor stops too easily during normal use, slightly increase the torque limit.
Decrease: If the motor doesn't stop when it hits an obstacle, lower the torque limit to increase sensitivity.
Test the Sensitivity:
After making an adjustment, safely simulate a "big resistance" (without using a person) to ensure the motor stops as expected.
Confirm Settings: **When all adjustments are complete check again to confirm setting.**
Overview
- CL-L (Close Delay):
  Adjust motor closing delay → 0–10 seconds
- TORQUE 1 / TORQUE 2:
  Clockwise = Increase force
  Counter-clockwise = Decrease force
- MT-V (Low-Speed Torque):
  Adjust force during slow speed closing

6.REMOTE CONTROL PROGRAMING

Add Remote with Control Board
1. Press Study (White Learn Button)
2. LED turns OFF
3.Press LOCK button on remote twice quickly
4. Buzzer “DI” confirms learning
   ✔ Repeat for additional remotes

Important Notes
- Keep remote away from board when programming
- Press remote within 1 second of learn mode
- Do NOT press STUDY / learn button again after programming
  ✔ Max capacity: 298 remotes
  ✔ Oldest remote is overwritten when full

Delete All Remotes
1.Press and hold SN2 button (~8 seconds
2.Buzzer sounds
3.LED changes state
4.Release button
✔ All remotes erased

7. AUTO CLOSE FUNCTION

Enable / Disable
DIP 3 = ON → Auto Close ENABLED
DIP 3 = OFF → Auto Close DISABLED

8. AUTO CLOSE SETUP

Turn RED DIP 8 = ON Turn RED DIP 3 = ON
Press F button
Each press = 1 second delay
After setting:
Turn RED DIP 8 = OFF
Leave RED DIP 3 unchanged
✔ LED flashes during countdown (1 Hz)
✔ Gate closes automatically after delay

9.MOTOR DIRECTION (Verification CRITICAL)

After wiring and powering system:
Press OPEN → Gate must open
Press CLOSE → Gate must close
If Direction Is Incorrect
Reverse motor wiring:
Swap RED & BLACK wires

Motor 1 wrong	Reverse Motor 1 wires
Motor 2 wrong	Reverse Motor 2 wires
Both wrong	Reverse both motors

10.ADDING SYSTEM COMPONENTS

Access Control Devices

Keypad KP-900/950 OR (Card Reader / Intercom)

Wiring Connections:
Keypad +12V → Control Board Terminal # 9
Keypad GND → Control Board Terminal # 8
Keypad NO → Control Board Terminal # 3
Keypad COM → Control Board Terminal # 2
Important Notes: Device must provide a low-voltage negative trigger output. Use only compatible access control devices

External Push Button PB-800

Wiring Connections:
Keypad +12V → Control Board Terminal # 9
Keypad GND → Control Board Terminal # 8
Keypad NO → Control Board Terminal # 3
Keypad COM → Control Board Terminal # 2
Important Notes: Device must provide a low-voltage negative trigger output. Use only compatible access control devices

12V Electric Lock Output

Prevents forced gate opening when gate is closed.
Activation Requirement:
Set RED DIP Switch 6 = ON
Operation Sequence:
Motor briefly closes then reverses (1 sec)
Lock energizes for ~2 seconds (unlock action)
Gate begins opening
Lock remains powered for ~3 seconds, then releases

Ground Loop Detector

Provides automatic closing after vehicle passes.
Recommended Use:
• Vehicle detection → Ground Loop Detector
Wiring Connections:
Detector +12V → Board Terminal # 9 - 12V
Detector GND → Board Terminal # 8 - GND
Detector NO → Board Terminal # 6 - INRF
Detector COM → Board Terminal # 2 - COM

Photocell / Safety Input *SEE PAGE 18*

Provides automatic closing after vehicle or person passes.
Recommended Use:
• Vehicle detection → Safety Edge Kit
• Pedestrian detection → Infrared Sensor
Wiring Connections:
Photocell +12V → Board Terminal # 9 - 12V
Photocell GND → Board Terminal # 8 - GND
Photocell NO → Board Terminal # 7- FSW
Photocell COM → Board Terminal # 2 - COM
Function:
✔ Stops gate during closing
✔ Reverses to open position

SGC One, Two & Four Button Remotes

Press channel ONE or Two LED will come on..
Press button on remote, Led will go off.
To Remove all remotes from memory, hold down program button on receiver for 5 seconds LED will go off.

Notes

Verify all safety devices (photo eyes, edges) before operation. Improper setup may result in injury or equipment damage

IMPORTANT INSTALLATION NOTES

Use minimum 18AWG strained wire for connections
Keep control board close to motors
Ensure proper grounding with grounding rod.

11.TROUBLESHOOTING

Issue	Possible Cause	Solution
Gate runs backwards	Motor polarity reversed	Swap red/black wires
Short remote range	Signal obstruction	Relocate antenna
Gate won't auto close	DIP 3 OFF or timer not set	Enable + program time
Lock not working	DIP 6 OFF	Turn ON

Photocell Connection Guidelines
Photocells must be connected according to the specific area they are intended to protect (see Fig. P1).

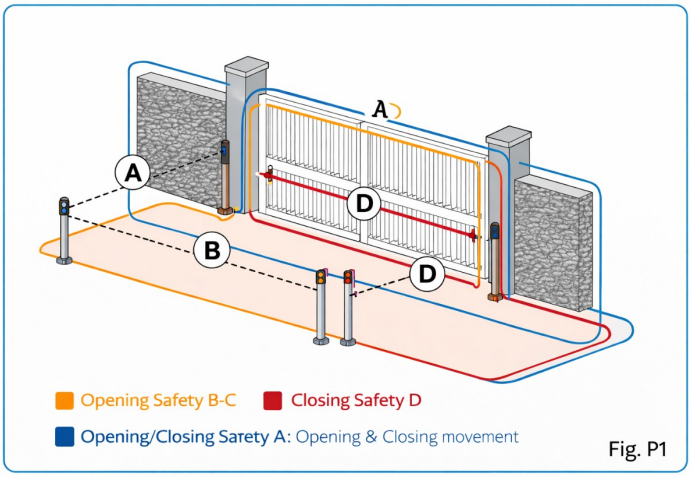
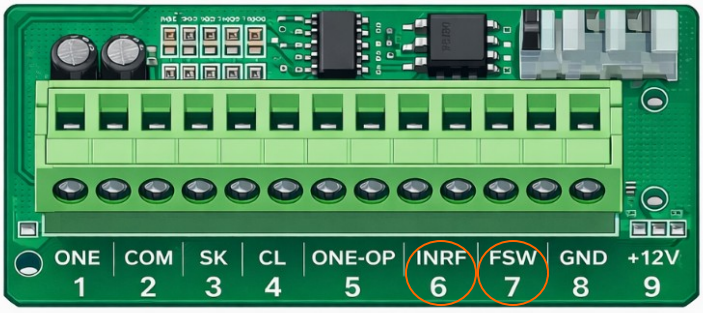


Fig. P1

- **Opening/Closing Safety (A):** These photocells protect the area covered by the gate during **both opening and closing movements**.
- **Opening Safety (B–C):** These photocells protect the area covered by the gate during the **opening movement only**. They have **no effect during closing**.
- **Safety Features:** Includes terminal inputs for normally closed (N.C.) safety contacts to prevent accidents
  during operation.
- **Closing Safety (D):** These photocells protect the area covered by the gate during the **closing movement only**. They have **no effect during opening**.
- **Photo Connections** The FSW and INRF terminals differentiate between safety devices based on the phase of gate movement. **FSW (Fail-Safe Wire / Photo-eye)** is usually for closing safety, stopping or reversing the gate when triggered, while **INRF** relates to inputs for controlling the operator's response to safety sensors, often for opening.



- **Terminal 7 FSW (Fail-Safe/Photo eye):** Typically
  active only during the **closing cycle**. If a photo eye (infrared beam) connected to this terminal is broken while the gate is closing, it causes the gate to immediately stop or reverse.
- **Terminal 6 INRF (Input Reference/Safety Edge):** Often used for input sensing or as a dedicated terminal for safety edges during the **opening cycle**, or for specific monitored devices that prevent entrapment. It ensures the operator knows an obstruction is detected and stops movement.

Option 1: DIP Switch 1 = OFF (Individual Button Control)

Each button on the remote performs a separate function:

- Open ► Stop ► Close ► Lock
- Each function operates independently.

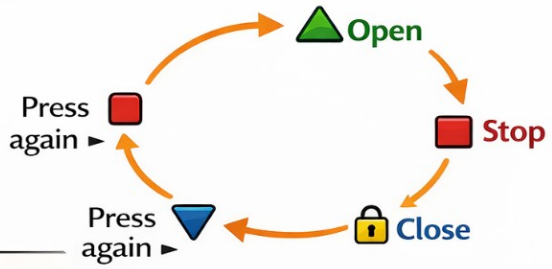
Option 2: DIP Switch 1 = ON (Single-Button Cycle Mode)

One button controls all actions in a repeating cycle:

Press sequence:

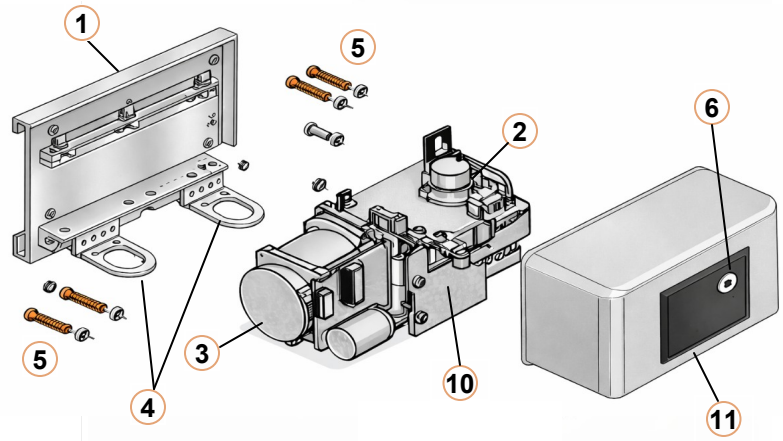
- 1. Press ► Door opens
- 2. Press again ► Door stops
- 3. Press again ► Door closes
- 4. Press again ► Door opens

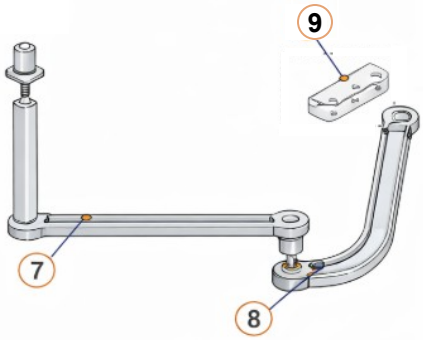
→ *Cycle repeats*



Additional Notes

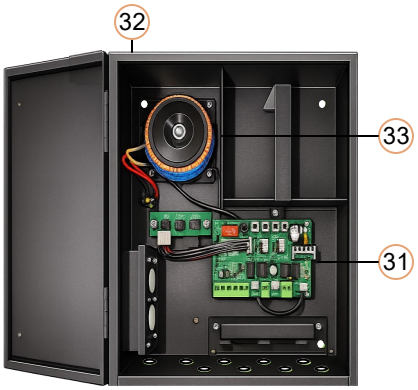
- In single-button mode, each remote can control ▸up to 4 gates.
- Button 1 ► Gate 1 • Button 2 ► Gate 2 • Button 3 ► Gate 3
- Button 4 ► Gate 4 • Button 4 ► Gate 4 • Button 4 ► Gate 4







1. 1 x Mounting Bracket
2. 2 x Limit Cams
3. 1 x Gearbmotor
4. 2 x Transmission Arm Covers
5. 4 x Mounting Bolts
6. 1 x Door Lock # CL-30S
7. 1 x Motor Drive Arm
8. 1 x Gate Drive Arm
9. 1 x Gate Bracket
10. 1 x Release Handle
11. 1 x Cover
12. 2 x M8x120 screws
13. 4 x 3.9x16 screws
14. 1 x M12x50 screw
15. 2 x 2.9x19 screws
16. 2 x 2.9x9.5
17. 2 x 3.9x19 screws
18. 2 x SGC Door Keys
19. 1 x M12 nut
20. 2 x M8 nuts
21. 1 x Washer
22. 1 x Washer
23. 1 x Transmission Arm Passage
24. 1 x Release Handle
25. 4 x M3x6 screws
26. 2 x cams
27. 1 x arm bushing
28. 1 x U-bolt
29. 2 x One Button Remotes
30. 1 x Cable Passage
31. 1 x Control Board
32. 1 x Control Panel Enclosure
33. 1 x Toroidal Transformer



NOTE: Some items may change with model number and voltage requirements.

- All connections should be ran inside PVC Conduit.
- Provided holes are for 3/4 PVC fittings.
- All wire should be rated for outdoor use.
- All low voltage connection wire should be minimum 18ga.Stranded wire.

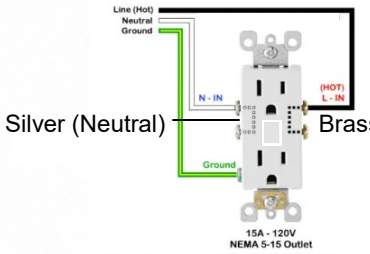


1 Electrical Connection
2 Spare
3 Spare
4 Keypad & Fire
5 Loop Wiring
6 Photo Eyes
7 Motor One
8 Motor Two

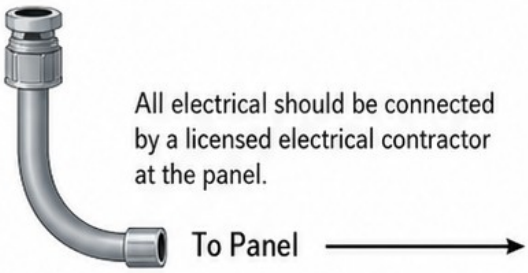


Wiring Receptacle To GFI Breaker

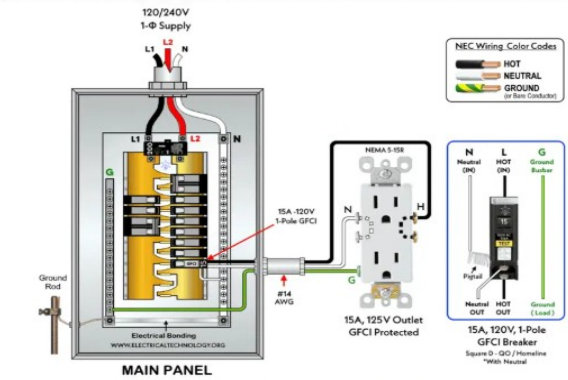
1. The BRASS screws should be connected to the GFI Breaker Hot (Power, Voltage).
2. The SILVER screws should be connected to the Neutral wire. In other words, the hot wire from main breaker should be connected to the narrow blade terminal where the Neutral wire should be connected to the wide blade terminal.
3. The ground wire is connected to the ground terminal (mostly green color screw).



Silver (Neutral) — Brass (HOT)



Wiring a Single Pole GFCI Circuit Breaker

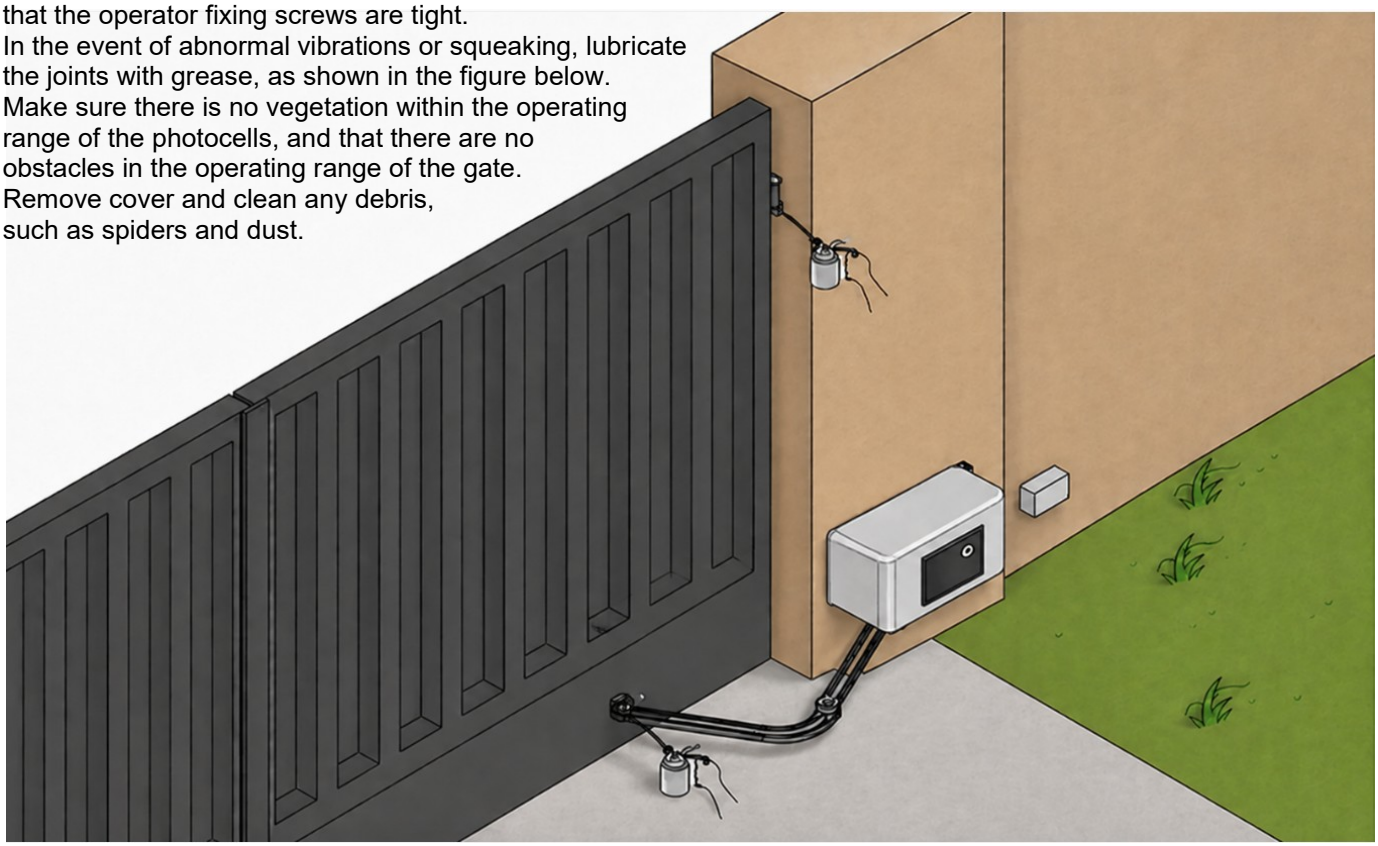


Wiring a 15A/120V, Single-Pole GFCI Circuit Breaker

☞Before any maintenance, disconnect power to prevent any possible dangerous situations that can be caused by accidental movement of the operator.

Periodic Maintenance

☞ It is advisable to check lubrication periodically and check that the operator fixing screws are tight.
In the event of abnormal vibrations or squeaking, lubricate the joints with grease, as shown in the figure below.
Make sure there is no vegetation within the operating range of the photocells, and that there are no obstacles in the operating range of the gate.
Remove cover and clean any debris, such as spiders and dust.



Periodic Maintenance & Safety Device log to be completed by the user (every six months)

Date	Work Performed	Safety Items	Name Of Technician

The contents of this manual may be “changed at any time and without notice”

Superior Gate Controls Inc.
Access Controls

LIMITED WARRANTY

(479) 903-9993
sgcaccess@gmail.com
www.superiorgatecontrols.com

SGC Access Controls products are manufactured to provide reliable service when properly installed and maintained. This Limited Warranty outlines the coverage, conditions, and limitations applicable to SGC gate operators, accessories, and replacement parts.

LIMITED WARRANTY INFORMATION

THIRD-PARTY REPAIRS:

Opting for repairs conducted by unauthorized third-party service providers Will void this manufacturer's warranty. We require repairs to be carried out by authorized service centers or technicians to ensure quality and preserve warranty coverage. Repairs made by unauthorized repair shop not only risks further damage but also nullifies the warranty protection. Warranty for parts will only be replaced to the purchasing installation company for the warranty period.

ACTS OF NATURE:

Natural disasters such as floods, earthquakes, or lightning strikes, ect. are considered unforeseeable events beyond the control of the manufacturer. Consequently, damages caused by such acts of nature are not covered. To protect against these risks, consumers may need to explore additional insurance options or take preventive measures to safeguard their products in areas prone to natural disasters.

UNAUTHORIZED MODIFICATIONS:

If a product is modified or altered without proper authorization of the installing dealer, it Will void the manufacturer's warranty. This includes Electrical modifications, hardware alterations, or installing unofficial third-party components. Engaging in such activities not only risks damage to the product but also eliminates any coverage provided by this warranty. Consumers should refrain from making unauthorized modifications if they wish to preserve their warranty rights.

NORMAL WEAR AND TEAR:

Everyday use, including minor scuffs, fading, or performance decline due to regular usage, is not considered a defect. It is important to note that the duration of the warranty period varies, and products may exhibit signs of wear and tear over time. Understanding what is classified as normal wear and tear helps manage expectations regarding warranty coverage. Ask you installer about a **Extended Warranty or Maintenance Contract**

ACCIDENTAL DAMAGE:

Accidents happen, and unfortunately, our manufacturer's warranties do not extend coverage for accidental damage. Whether it's an animal, spilling liquid on the cover, or damage caused by an auto, these incidents are considered user-induced and fall outside the realm of warranty protection. It is wise to consider purchasing additional insurance coverage or investing in protective cases and covers to safeguard against accidental damage.

WARRANTY REGISTRATION *Info*

First, We at Superior Gate Controls would like to THANK YOU for your purchase and Welcome you. If you ever have any questions on operation or features of our product pleas give us a call at (479)903-9993. All repair questions or parts must be purchased or answered by your Installation Company. Thank You again.

Installation Company _____

Phone _____ **Contact** _____

Customer _____

Phone _____

Address _____ **City** _____ **Zip** _____

Model Number _____ **Ser #** _____

Date _____ **Note** _____

Keep for your information

Limited Warranty Information

SGC Access Controls products are manufactured to provide reliable service when properly installed and maintained. This Limited Warranty outlines the coverage, conditions, and limitations applicable to SGC gate operators, accessories, and replacement parts

Warranty Coverage

SGC Gate Operators, accessories, and factory-installed spare parts are covered under the same warranty period as the product with which they are sold. Batteries are excluded from standard product coverage and carry a maximum warranty period of one (1) year.

Products repaired under warranty will retain the remainder of the original warranty period. Products repaired outside of warranty are warranted for ninety (90) days on replacement parts and workmanship.

Warranty Service Procedure

To obtain warranty service:

1.Contact SGC Access Controls for a Return Material Authorization (RMA) number before returning any product.
2.Return the defective product freight prepaid by the purchaser.
3.Upon inspection, SGC will repair or replace the product at its discretion if determined defective under normal use and service conditions.
4.Repaired or replaced products will be returned freight prepaid by SGC Access Controls.

Conditions of Warranty

This warranty applies only to products:

1. Properly installed and by an authorized dealer.
2. Used under normal service conditions
3. Operated according to SGC instructions and specifications

This warranty does not apply to products that have been:

1. Modified or repaired outside of SGC facilities
2. Misused, abused, or neglected
3. Damaged by accident or improper installation
4. Subjected to improper power sources or electrical surges
5. Damaged by natural disasters or acts of God including fire, flood, lightning, windstorm, hail, or vandalism

Exclusions

This warranty does not cover normal maintenance items including but not limited to:

1. Hydraulic oil
2. Motor brushes
3. Routine maintenance components

SGC Access Controls reserves the right to make design or appearance modifications to products without obligation to update previously manufactured units.

Limitation of Liability

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SGC expressly disclaims any and all liability for personal injury, property damage or loss, whether direct, indirect or incidental, resulting from use of our products. Or resulting from incorrect attachment, improper installation or use, unimproved modifications, or neglect of this product (inadequate maintenance).

Again SGC Access Controls shall not be liable for:

1. Loss of profits
2. Downtime expenses
3. Property damage
4. Personal injury
5. Indirect, incidental, consequential, special, or punitive damages arising from the use or inability to use the product.

Purchaser Rights

This Limited Warranty extends only to wholesale customers purchasing through authorized SGC distribution channels. End users should contact their dealer regarding dealer-specific warranty coverage.

Some states do not allow limitations on incidental or consequential damages, therefore certain limitations may not apply. This warranty provides specific legal rights which may vary from state to state