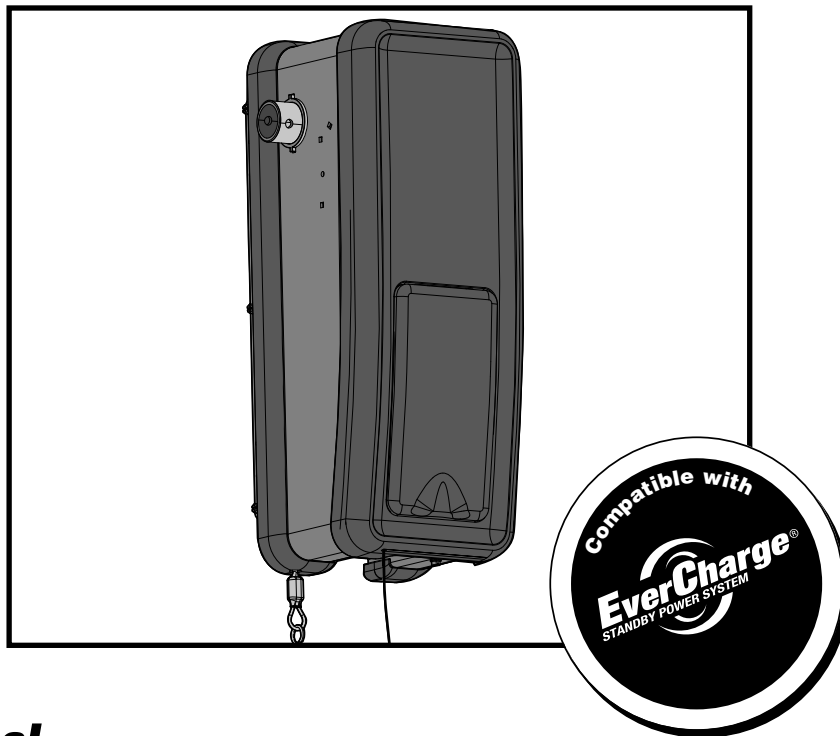




SECURITY+® DOOR OPERATOR Model 3950

For Light Duty Commercial Use



Owner's Manual

- Please read this manual and the enclosed safety materials carefully!
- The door **WILL NOT CLOSE** unless The Protector System® is connected and properly aligned.
- Periodic checks of the operator are required to ensure safe operation.
- The model number label is located behind the hinged door of your operator.
- **DO NOT** exceed 10 complete cycles of door operation per hour.
- **DO NOT** use with sectional type doors.
- This manual is to be left with the property owner.

2 YEAR WARRANTY

Serial # _____
(Located on electrical box cover)

Installation Date _____

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INTRODUCTION

Safety Symbol Review and Signal Word Review

This door operator has been designed and tested to offer safe service provided it is installed, operated, maintained and tested in strict accordance with the instructions and warnings contained in this manual.

 **WARNING**

Mechanical

 **WARNING**

Electrical

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 door and/or the door operator if you do not comply with the cautionary statements that accompany it. Read them carefully.

Preparing Your Door

Before you begin:

- Remove any ropes connected to door.
- Raise and lower the door to ensure the door does not bind or stick and is properly balanced. If your door binds, sticks or is out of balance refer to the door manufacturer for more information.

For live shaft type doors the drive shaft needs to extend 1-1/2" beyond the door mount bracket.

- If the operator is mounted below 8 feet (2.5 m), a chain guard must be installed to protect against possible injury. See accessories page.

WARNING

To prevent possible **SERIOUS INJURY** or **DEATH**:

- **ALWAYS** call a trained door systems technician if door binds, sticks or is out of balance. An unbalanced door may not reverse when required.
- **NEVER** try to loosen, move or adjust door, door springs, cables, pulleys, brackets or their hardware, **ALL** of which are under **EXTREME** tension.
- Disable **ALL** locks and remove **ALL** ropes connected to door **BEFORE** installing and operating door operator to avoid entanglement.
- **DO NOT** install operator below 6 feet (1.83 m).

CAUTION

To prevent damage to door and operator:

- **ALWAYS** disable locks **BEFORE** installing and operating the operator.
- **ONLY** operate door operator at 120V, 60 Hz to avoid malfunction and damage.
- **DO NOT** exceed 10 complete cycles of door operation per hour.
- **DO NOT** run operator if the door is locked.
- Chain guard to be installed where the drive chain is exposed lower than 8 feet (2.5 m).

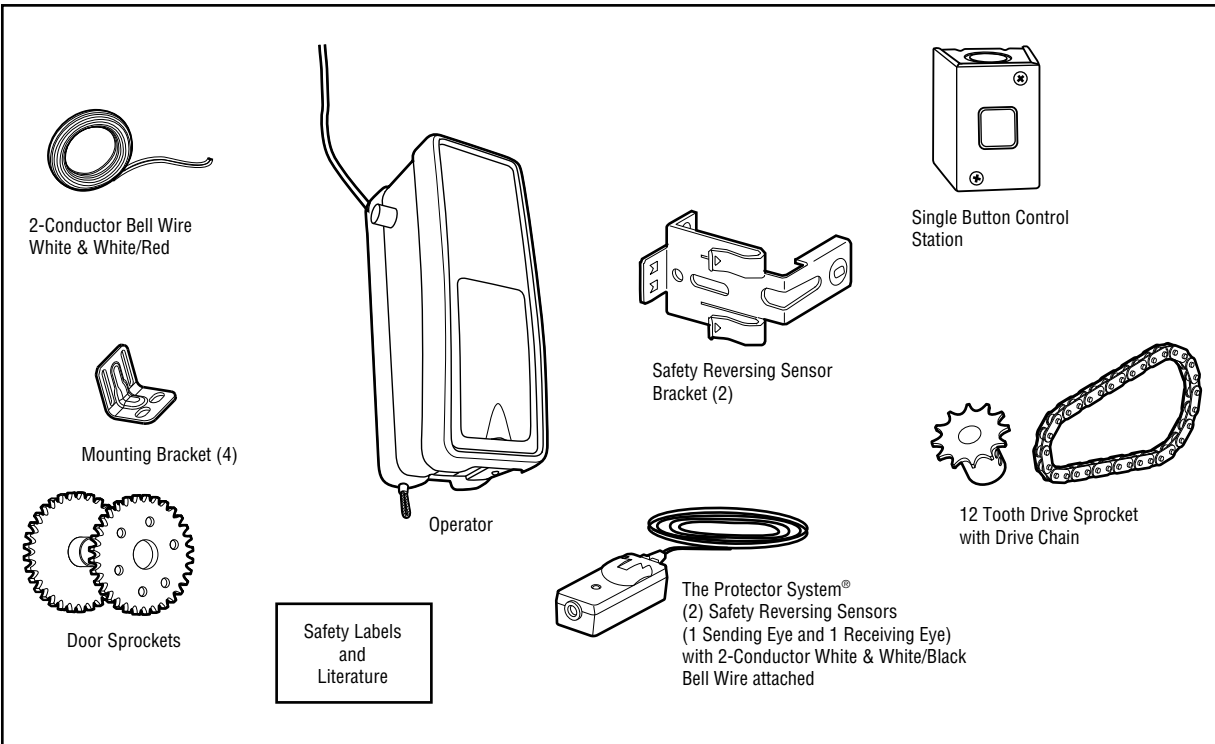
Specifications

Volts 120 Vac - 60 Hz, **ONLY**
Current 1.0 AMP
Rated Load 325 in. lb/sec.
10 Cycles per Hour
Maximum Door Height 12 feet
Maximum Door Size 14 feet x 12 feet
(not to exceed 168 sq./ft)

Carton Inventory

Your door operator is packaged in one carton which contains the motor unit and the parts illustrated below.

Note that accessories will depend on the model purchased. If anything is missing, carefully check the packing material.



Hardware Inventory

Installation Hardware

Tubular Spacer 1/2" (6)
Tubular Spacer 2" (3)
Cap Screw 1/4"-20 x 2" (1)
Nylock Lock Nut 1/4"-20 (1)
Hex Head Bolt 3/8"-16 x 4" (3)
Flat Washer 3/8" (3)
Serrated Flange Nut 5/16"-18 (3)
Carriage Head Bolt 1/4"-20 x 1/2" (2)

Self Taping Screw #10-32 (8)
Rope (1)
Handle (1)
Wing Nut 1/4"-20 (2)
Hex Drive Round Head Bolt 1/4"-20 x 1/2" (2)
Warning Tag for Release Handle (1)

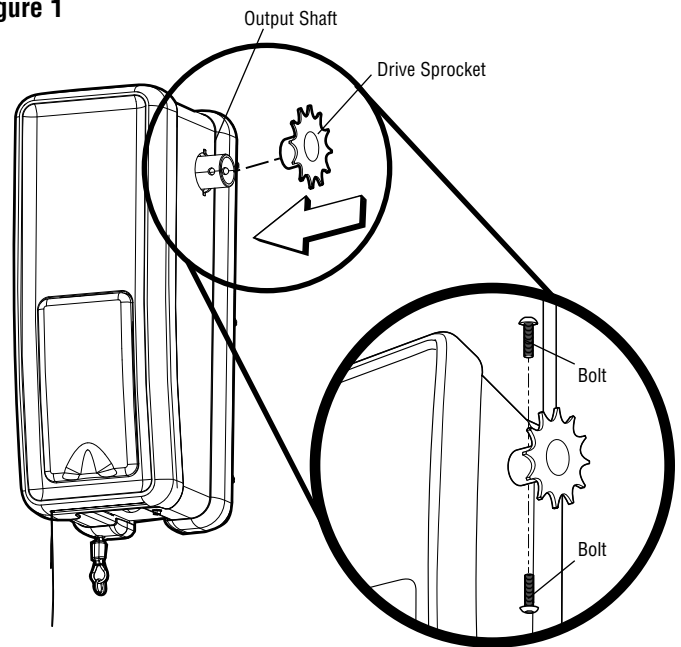
ASSEMBLY STEP 1

Attach the Drive Sprocket

The drive sprocket can be installed on the right or left side of the operator depending on your installation. The drive sprocket has three holes to aid in the alignment of the drive sprocket with the door sprocket.

1. Insert the drive sprocket into the output shaft.
2. Align the center holes in the drive sprocket with the hole in the output shaft.
3. Insert bolts into the output shaft and the drive sprocket.
4. Finger tighten the bolts.

Figure 1



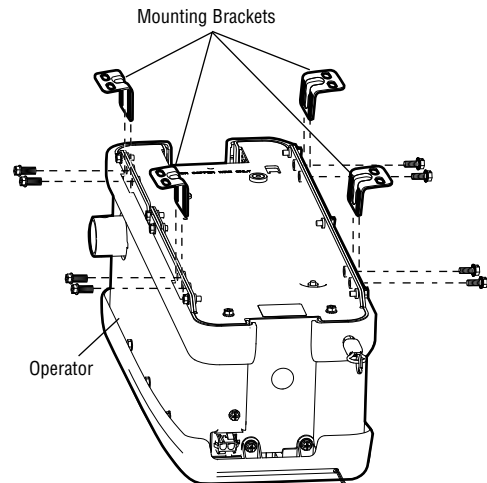
ASSEMBLY STEP 2

Attach Mounting Brackets

The operator can be mounted to the wall with the mounting brackets provided. An optional guide mounting bracket is available for purchase (see accessories).

1. Position two mounting brackets on each side of the operator.
2. Fasten the mounting brackets to the operator using the self-threading screws (8) provided.

Figure 2



INSTALLATION

IMPORTANT INSTALLATION INSTRUCTIONS

WARNING

To reduce the risk of SEVERE INJURY or DEATH:

1. READ AND FOLLOW ALL INSTALLATION WARNINGS AND INSTRUCTIONS.
2. Install door operator ONLY on properly balanced and lubricated door. An improperly balanced door may not reverse when required and could result in SEVERE INJURY or DEATH.
3. ALL repairs to cables, spring assemblies and other hardware MUST be made by a trained door systems technician BEFORE installing operator.
4. Disable ALL locks and remove ALL ropes connected to door BEFORE installing operator to avoid entanglement.
5. Mount emergency release handle no higher than 6 feet (1.83 m) above floor.
6. NEVER connect door operator to power source until instructed to do so.
7. NEVER wear watches, rings or loose clothing while installing or servicing operator. They could be caught in door or operator mechanisms.
8. Install wall-mounted door control:
 - within sight of the door.
 - out of reach of children at minimum height of 5 feet (1.5 m).
 - away from ALL moving parts of the door.
9. Install the Entrapment Warning Placard next to the control station in a prominent location.
10. Place manual release/safety reverse test label in plain view on inside of door.
11. Upon completion of installation, test safety reversal system.
12. Install the operator at least 8 feet (2.5 m) or more above the floor if the operator has exposed moving parts.

INSTALLATION STEP 1

Install the Door Sprocket

The instructions below are general and we recommend you refer to the door manufacturer for specific instructions for your door.

Live shaft type (Figure 1):

1. Slide the door sprocket onto the end of the door shaft.
2. Mark and drill a hole through the door shaft.
3. Attach the door sprocket to the door shaft with the through bolt and nylock nut.

NOTE: Drive shaft must extend 1-1/2" beyond the door support bracket.

Dead shaft type (Figure 2):

1. Slide the door sprocket onto the end of the door shaft.
2. Slide the through bolts with flat washers into the door sprocket with tubular spacers and attach to the door drum.
3. Secure the sprocket to the drum as shown.

Figure 1

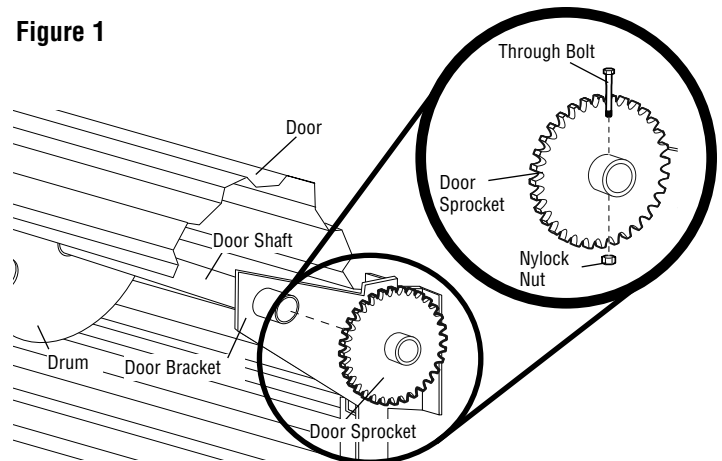
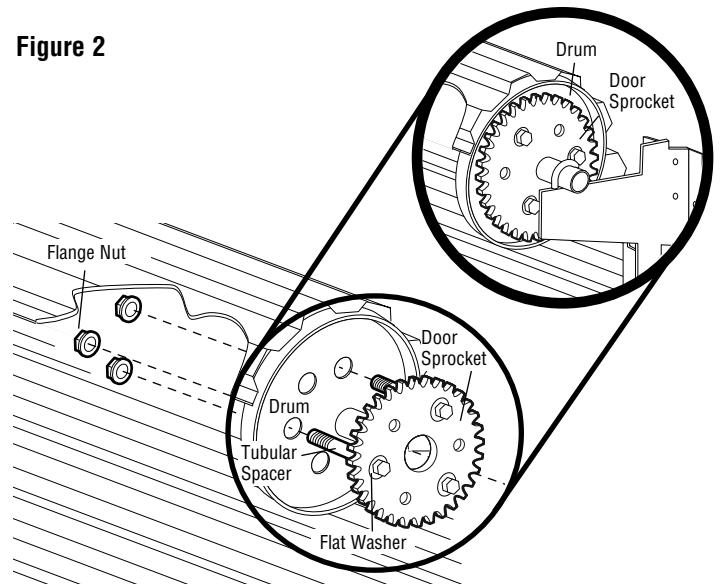


Figure 2



INSTALLATION STEP 2

Mount the Operator

The operator can be mounted to the wall with the mounting brackets provided.

An optional guide mounting bracket is available for purchase (see accessories).

Fasten the operator to the mounting surface using appropriate method and hardware (not provided).

Anchors must be fastened to structural members only. Use concrete anchors for masonry construction.

NOTE: Mounting the operator to drywall is not recommended.

1. Raise the operator to approximate mounting position, make sure the drive sprocket is aligned with the door sprocket.

NOTE: If the drive and the door sprockets are not aligned, the drive sprocket can be laterally adjusted by removing the bolt from the drive sprocket.

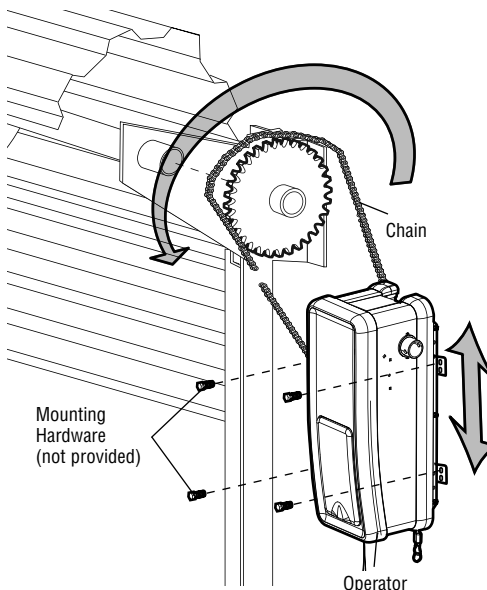
2. Wrap the chain around the door and drive sprockets.
3. Connect the ends of the chain using the master link (provided).
4. Raise or lower the operator until the chain is taut (not tight). Make sure the operator output shaft is parallel to door shaft and sprockets are aligned.
5. Secure the operator to wall using appropriate method.
6. Tighten the drive sprocket bolts using a 5/32" Allen wrench.

⚠ WARNING

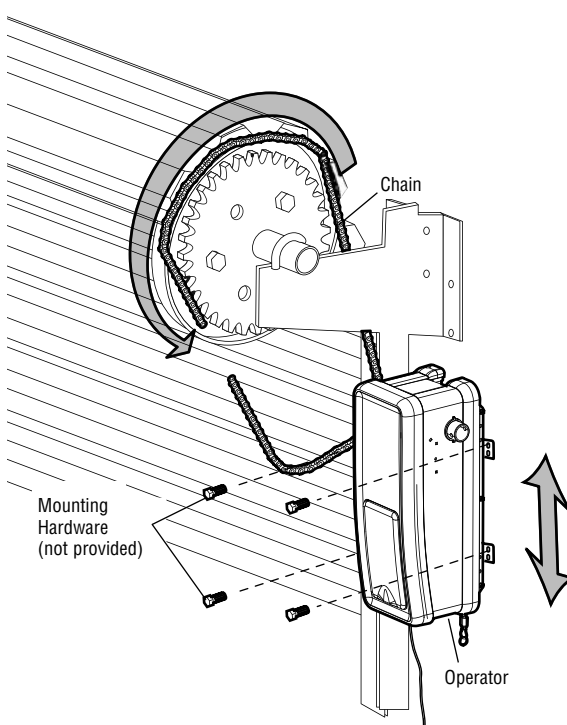
To prevent possible SERIOUS INJURY or DEATH:

- Concrete anchors **MUST** be used if mounting bracket into masonry.
- **NEVER** try to loosen, move or adjust door, springs, cables, pulleys, brackets or their hardware, **ALL** of which are under **EXTREME** tension.
- **ALWAYS** call a trained door systems technician if door binds, sticks or is out of balance. An unbalanced door might not reverse when required.
- Operator **MUST** be mounted at a right angle to the door shaft.

Live Shaft



Dead Shaft



INSTALLATION STEP 3

Attach the Emergency Release Rope and Handle

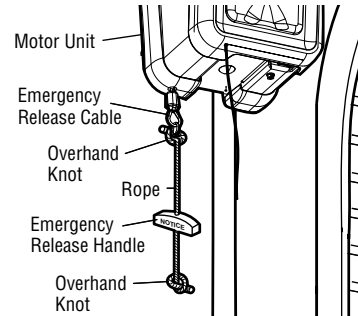
1. Thread one end of the rope through the hole in the top of the red handle so "NOTICE" reads right side up as shown. Secure with an overhand knot at least 1" (2.5 cm) from the end of the rope to prevent slipping.
2. Thread the other end of the rope through the loop in the emergency release cable.
3. Adjust rope length so the handle is no higher than 6 feet (1.83 m) above the floor. Secure with an overhand knot.

NOTE: If it is necessary to cut the rope, heat seal the cut end with a match or lighter to prevent unraveling.

⚠ WARNING

To prevent possible **SERIOUS INJURY** or **DEATH** from a falling door:

- If possible, use emergency release handle to disengage door **ONLY** when door is **CLOSED**. Weak or broken springs or unbalanced door could result in an open door falling rapidly and/or unexpectedly.
- **NEVER** use emergency release handle unless doorway is clear of persons and obstructions.



INSTALLATION STEP 4

Install the Single Button Control Station

1. Remove the control station cover.
2. Fasten the control station to the wall at least 5 feet (1.5 m) above the ground. The installation surface must be smooth and flat.
3. Select appropriate knockout and run the wires to the operator.
4. Connect wires to the control station and replace the control station cover.
5. Fasten the warning placards to the wall.

⚠ ⚠ WARNING

To prevent possible **SERIOUS INJURY** or **DEATH** from electrocution:

- Be sure power is not connected **BEFORE** installing door control.
- Connect **ONLY** to 24 VOLT low voltage wires.

To prevent possible **SERIOUS INJURY** or **DEATH** from a closing door:

- Install door control within sight of door, out of reach of children at a minimum height of 5 feet (1.5 m) and away from **ALL** moving parts of door.
- **NEVER** permit children to operate or play with door control push buttons or remote controls.
- Activate door **ONLY** when it can be seen clearly, is properly adjusted and there are no obstructions to door travel.
- **ALWAYS** keep door in sight until completely closed. **NEVER** permit anyone to cross path of closing door.

DO NOT EXCEED 10 DOOR OPERATIONS PER HOUR.
FASTEN LABEL ADJACENT TO DOOR.
NE PAS FAIRE FONCTIONNER LA PORTE PLUS DE 10 FOIS PAR HEURE.
FIXER L'ÉTIQUETTE PRÈS DE LA PORTE.

132A01522

⚠ WARNING

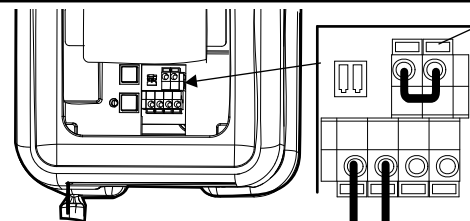


Moving Door Can Cause Serious Injury or Death

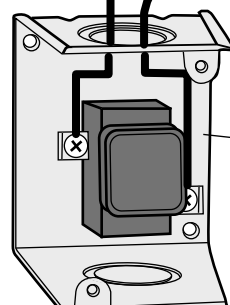
Keep Clear! Door May Move at any Time Without Prior Warning

Do Not Let Children Operate the Door or Play in the Door Area

Keep Door in Sight at all Times When Door is Moving



Door Control Connections



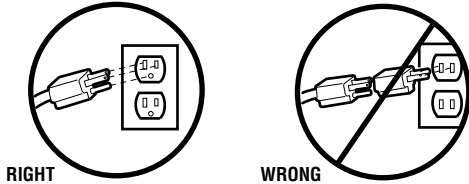
Single Button Control Station

INSTALLATION STEP 5

Electrical Requirements

To avoid installation difficulties, do not run the operator at this time.

To reduce the risk of electric shock, your operator has a grounding type plug with a third grounding pin. This plug will only fit into a grounding type outlet. If the plug doesn't fit into the outlet you have, contact a qualified electrician to install the proper outlet.



If permanent wiring is required by your local code, refer to the following procedure.

To make a permanent connection through the 7/8" hole in the back of the operator (according to local code):

1. Remove cover screws and set the cover aside.
2. Remove the attached green ground terminal.
3. Cut black and white wires and strip away 1/2" (1.3 cm) of insulation, 3" (7.6 cm) before spade terminals.
4. Remove the power cord from unit.
5. Install a 90° conduit or flex cable adapter to the 7/8" hole.
6. Run wires through conduit, cut to proper length and strip insulation.
7. Attach with wire nuts.
8. Properly secure wire under plastic ties so that wire does not come in contact with moving parts.
9. Reinstall the cover.

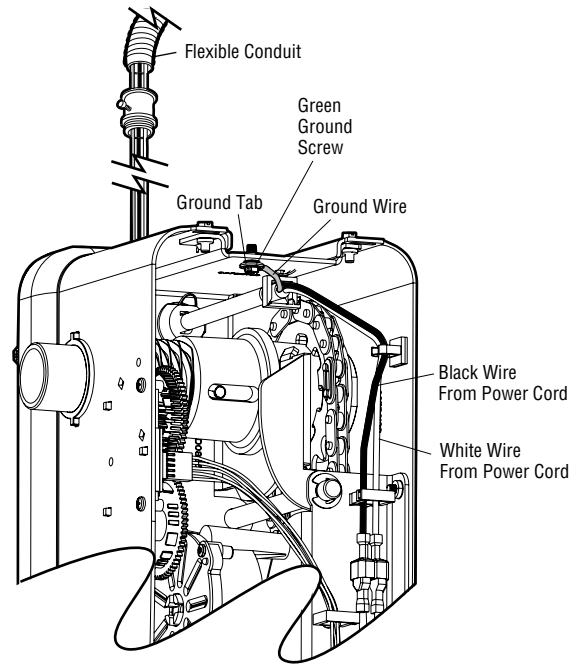
To avoid installation difficulties, do not run the operator at this time.

WARNING

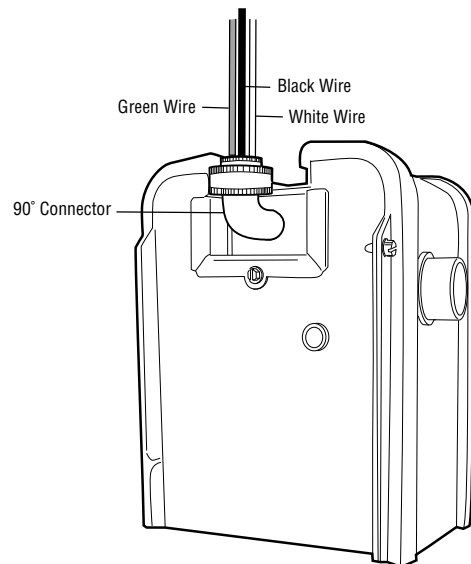
To prevent possible SERIOUS INJURY or DEATH from electrocution or fire:

- Be sure power is not connected to the operator, and disconnect power to circuit BEFORE removing cover to establish permanent wiring connection.
- Door installation and wiring MUST be in compliance with ALL local electrical and building codes.
- NEVER use an extension cord, 2-wire adapter or change plug in ANY way to make it fit outlet. Be sure the operator is grounded.

PERMANENT WIRING CONNECTION



PERMANENT WIRING CONNECTION



INSTALLATION STEP 6

Install The Protector System®

The safety reversing sensor must be connected and aligned correctly before the door operator will move in the down direction. This is a required safety device and cannot be disabled.

IMPORTANT INFORMATION ABOUT THE SAFETY REVERSING SENSOR

When properly connected and aligned, the safety reversing sensor will detect an obstacle in the path of its electronic beam. The sending eye (with an amber indicator light) transmits an invisible light beam to the receiving eye (with a green indicator light). If an obstruction breaks the light beam while the door is closing, the door will stop and reverse to full open position.

The units must be installed inside the building so that the sending and receiving eyes face each other across the door, no more than 6" (15 cm) above the floor. Either can be installed on the left or right of the door as long as the sun never shines directly into the receiving eye lens.

⚠ WARNING

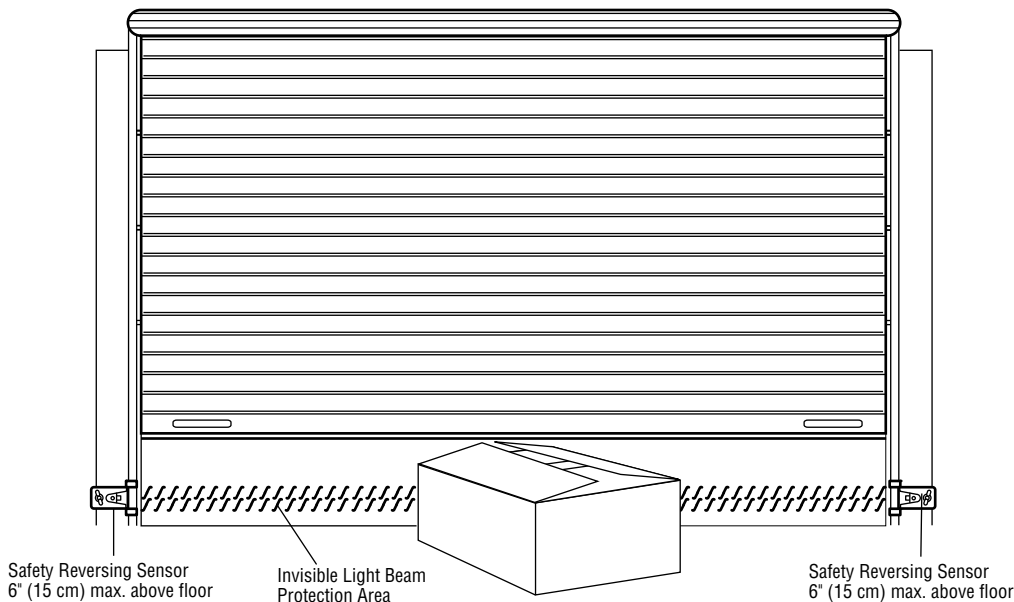
Be sure power is not connected to the door operator BEFORE installing the safety reversing sensor.

To prevent SERIOUS INJURY or DEATH from a closing door:

- Correctly connect and align the safety reversing sensor. This required safety device MUST NOT be disabled.
- Install the safety reversing sensor so beam is NO HIGHER than 6" (15 cm) above floor.

If it is necessary to mount the units on the wall, the brackets must be securely fastened to a solid surface such as the wall framing. Extension brackets (see accessories) are available if needed. If installing in masonry construction, add a piece of wood at each location to avoid drilling extra holes in masonry if repositioning is necessary.

The invisible light beam path must be unobstructed. No part of the door (door tracks, springs, hinges, rollers or other hardware) may interrupt the beam while the door is closing.



Facing the door from inside.

INSTALLING THE BRACKETS

Be sure power to the operator is disconnected. Install and align the brackets so the safety reversing sensors will face each other across the door, with the beam no higher than 6" (15 cm) above the floor. They may be installed in one of three ways, as follows.

Wall installation (Figures 1 and 2):

- Place the bracket against the wall with curved arms facing the door. Be sure there is enough clearance for the sensor beam to be unobstructed.
- If additional depth is needed, an extension bracket (see accessories) or wood blocks can be used.
- Use bracket mounting holes as a template to locate and drill (2) 3/16" diameter pilot holes on the wall at each side of the door, no higher than 6" (15 cm) above the floor.
- Attach brackets to wall with lag screws (Not provided).
- If using extension brackets or wood blocks, adjust right and left assemblies to the same distance out from the mounting surface. Make sure all door hardware obstructions are cleared.

Floor installation (Figure 3):

- Use wood blocks or extension brackets (see accessories) to elevate sensor brackets so the lenses will be no higher than 6" (15 cm) above the floor.
- Carefully measure and place right and left assemblies at the same distance out from the wall. Be sure all door hardware obstructions are cleared.
- Fasten to the floor with concrete anchors as shown.

Figure 1

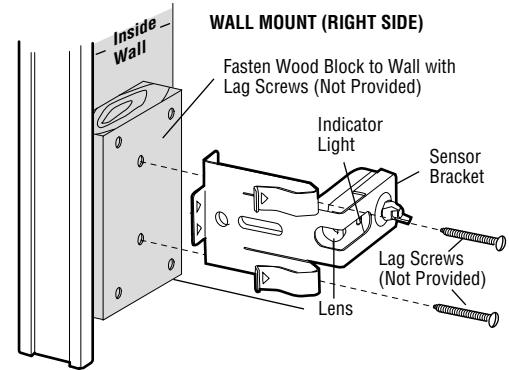


Figure 2

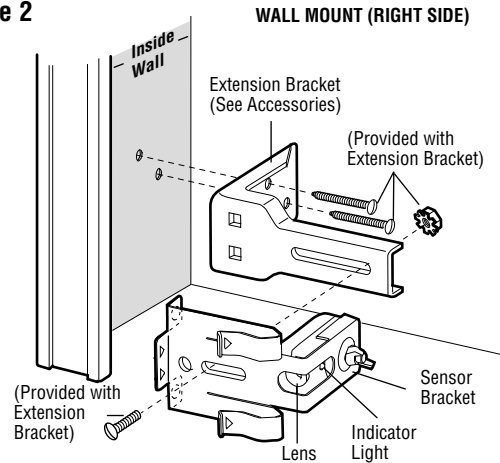
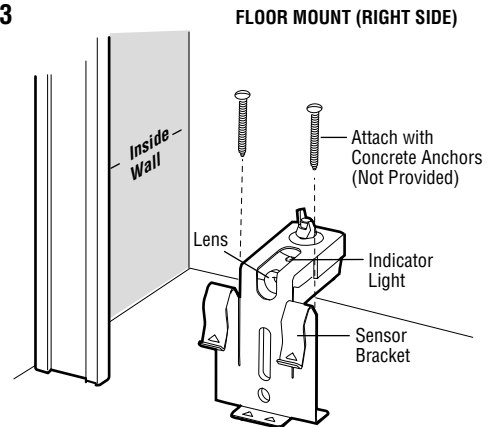


Figure 3



MOUNTING AND WIRING THE SAFETY REVERSING SENSORS

- Slide a 1/4"-20x1/2" carriage bolt head into the slot on each sensor. Use wing nuts to fasten safety reversing sensors to brackets, with lenses pointing toward each other across the door. Be sure the lens is not obstructed by a bracket extension (Figure 4).
- Finger tighten the wing nuts.
- Run the wires from both safety reversing sensors to the operator. Use insulated staples to secure wire to wall and ceiling.
- Strip 7/16" (11 mm) of insulation from each set of wires. Separate white and white/black wires sufficiently to connect to the operator quick-connect terminals: white to white and white/black to grey (Figure 5).

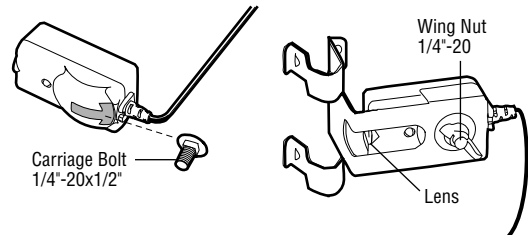
ALIGNING THE SAFETY REVERSING SENSORS

- Plug in the operator. The indicator lights in both the *sending* and *receiving eyes* will *glow steadily* if wiring connections and alignment are correct.

The *sending eye* amber indicator light will glow regardless of alignment or obstruction. If the green indicator light in the *receiving eye* is off, dim, or flickering (and the invisible light beam path is not obstructed), alignment is required.

- Loosen the *sending eye* wing nut and readjust, aiming directly at the *receiving eye*. Lock in place.
- Loosen the *receiving eye* wing nut and adjust the safety reversing sensor until it receives the sender's beam. When the green indicator light *glows steadily*, tighten the wing nut.

Figure 4

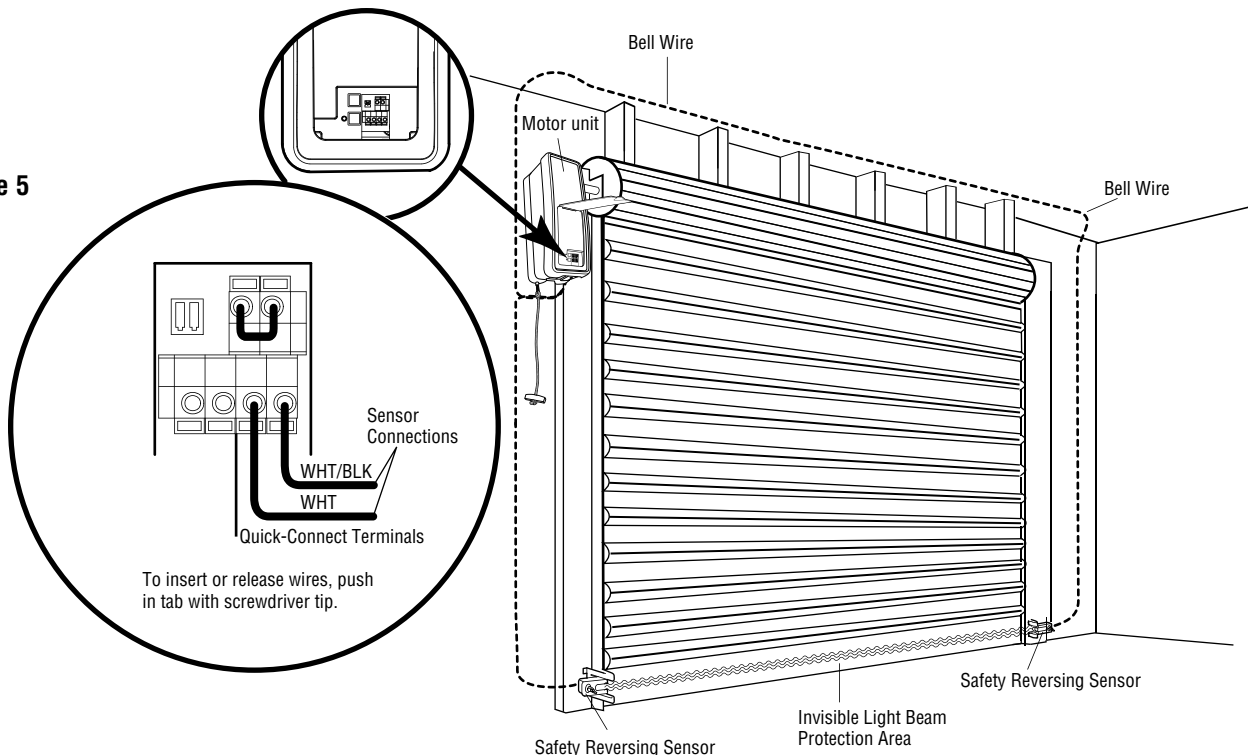


TROUBLESHOOTING THE SAFETY REVERSING SENSORS

1. If the *sending eye* indicator light does not *glow steadily* after installation, check for:
 - Electric power to the operator.
 - A short in the white or white/black wires. These can occur at staples, or at operator connections.
 - Incorrect wiring between safety reversing sensors and operator.
 - A broken wire.
2. If the *sending eye* indicator light *glows steadily* but the *receiving eye* indicator light doesn't:
 - Check alignment.
 - Check for an open wire to the receiving eye.
3. If the *receiving eye* indicator light is dim, realign either sensor.

NOTE: When the invisible beam path is obstructed or misaligned while the door is closing, the door will reverse. If the door is already open, it will not close.

Figure 5



ADJUSTMENT STEP 1

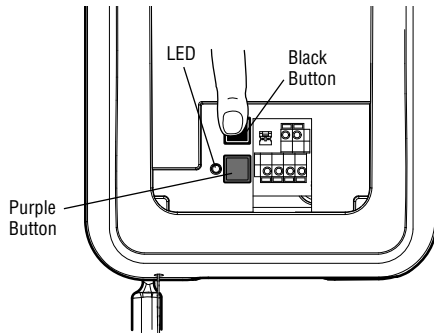
Program the Travel Limits

Travel limits regulate the points at which the door will stop when moving up or down.

Adjust the position of the door by using the black and purple buttons. Black moves the door UP (open) and purple moves the door DOWN (close).

NOTE: The safety reversing sensors **MUST** be installed to program the limits.

Figure 1



Setting the UP position:

1. Press and hold the black button until the LED starts flashing slowly, then release.
2. Push and hold the black button until the door reaches the desired UP (open) position.

NOTE: Make sure the door opens high enough for your vehicle.

3. Push the door control. This sets the UP (open) limit and begins closing the door.
4. Immediately when the door begins to close, press and release either the black or purple button. This will stop the door.

Setting the DOWN position:

5. Push and hold the purple button until the door reaches the desired DOWN (closed) position.
6. Once the door is closed, if there appears to be too much pressure on the door, you may toggle the door back and forth using the black and purple buttons to reach the desired closed position.
7. Push the door control. This sets the DOWN (close) limit and the door should open.

Proceed to *Set the Force*.

WARNING

Without a properly installed safety reversal system, persons (particularly small children) could be **SERIOUSLY INJURED** or **KILLED** by a closing door.

- NEVER learn forces or limits when door is binding or sticking. Repair door first.
- Incorrect adjustment of door travel limits will interfere with proper operation of safety reversal system.
- After ANY adjustments are made, the safety reversal system **MUST** be tested.

CAUTION

To prevent damage to vehicles, be sure fully open door provides adequate clearance.

Figure 1

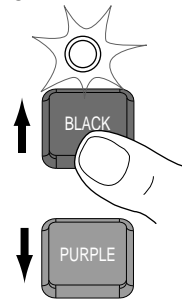


Figure 2

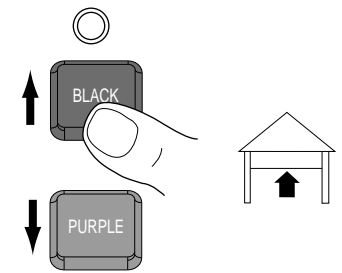


Figure 3

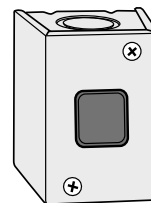


Figure 4

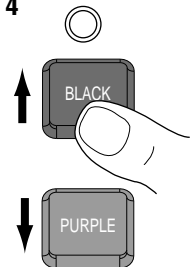


Figure 5

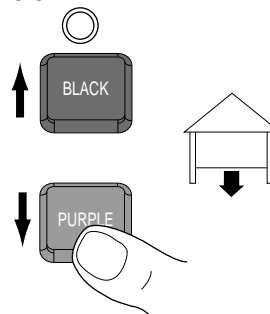


Figure 6

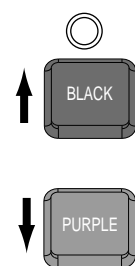
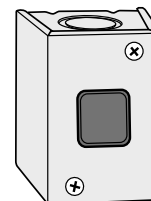


Figure 7



ADJUSTMENT STEP 2

Set the Force

The force setting measures the amount of force required to open and close the door.

1. Push the purple button twice to enter into the Force Adjustment Mode. The LED will flash quickly.
2. Push the remote control or door control. The door will close (DOWN).
3. Push the remote control or door control again. The door will open (UP).
4. Push the remote control or door control a third time to close the door (DOWN).

The LED will stop flashing when the force has been programmed.

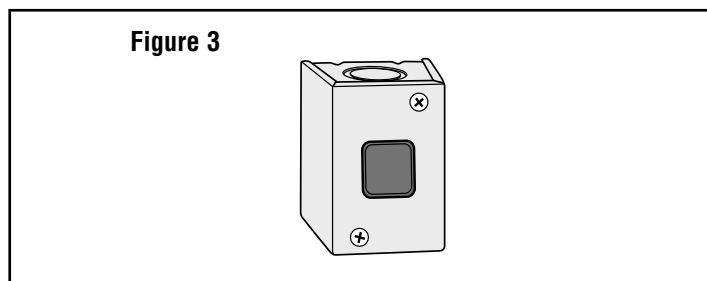
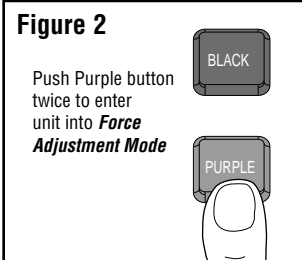
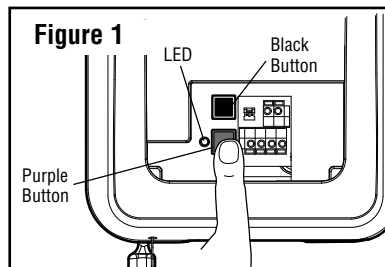
The door must travel through a complete cycle, up and down, in order for the force to be set properly. If the garage door opener cannot open and close the door fully, inspect the door to ensure that it is balanced properly and is not sticking or binding.

If the door is not stopping exactly where you would like it, repeat *Program the Travel Limits*.

⚠ WARNING

Without a properly installed safety reversal system, persons (particularly small children) could be SERIOUSLY INJURED or KILLED by a closing door.

- NEVER learn forces or limits when door is binding or sticking. Repair door first.
- Too much force on door will interfere with proper operation of safety reversal system.
- After ANY adjustments are made, the safety reversal system MUST be tested.



ADJUSTMENT STEP 3

Test The Protector System®

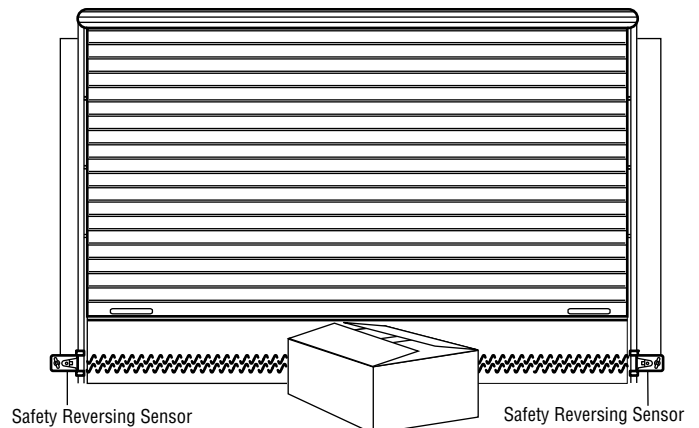
- Press the single button control station to open the door.
- Place the operator carton in the path of the door.
- Press the single button control station to close the door. The door will not move more than an inch, and the operator lights will flash.

The door operator will not close if the indicator light in either sensor is off (alerting you to the fact that the sensor is misaligned or obstructed).

If the operator closes the door when the safety reversing sensor is obstructed, do not operate the door. Call for a trained door systems technician.

⚠ WARNING

Without a properly installed safety reversing sensor, persons (particularly small children) could be **SERIOUSLY INJURED** or **KILLED** by a closing door.



ADJUSTMENT STEP 4

To Open the Door Manually

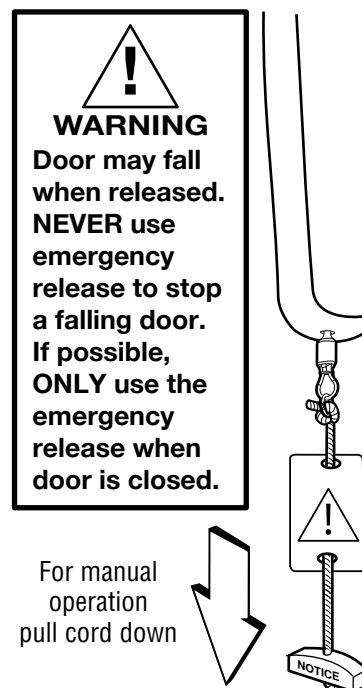
- The door should be fully closed if possible.
- Pull the emergency release handle until the latch engages (a click noise can be heard). The door should then be able to be opened manually.
- Return the door to the closed position.
- Pull the emergency handle a second time until the latch releases.
- The door will reconnect on the next open or close operation.

NOTE: To prevent damage to the motor assembly, **NEVER** use the emergency release to toggle or stop a falling door. **ONLY** use the emergency release to manually open or close the door.

⚠ WARNING

To prevent possible **SERIOUS INJURY** or **DEATH** from a falling door:

- If possible, use emergency release handle to disengage door **ONLY** when door is **CLOSED**. Weak or broken springs or unbalanced door could result in an open door falling rapidly and/or unexpectedly.
- **NEVER** use emergency release handle unless doorway is clear of persons and obstructions.



OPERATION

IMPORTANT SAFETY INSTRUCTIONS

WARNING

To reduce the risk of SEVERE INJURY or DEATH:

1. READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS.
2. ALWAYS keep remote controls out of reach of children. NEVER permit children to operate or play with door control push buttons or remote controls.
3. ONLY activate door when it can be seen clearly, it is properly adjusted and there are no obstructions to door travel.
4. ALWAYS keep door in sight until completely closed. NO ONE SHOULD CROSS THE PATH OF THE MOVING DOOR.
5. NO ONE SHOULD GO UNDER A STOPPED, PARTIALLY OPENED DOOR.
6. If possible, use emergency release handle to disengage door ONLY when door is CLOSED. Weak or broken springs or unbalanced door could result in an open door falling rapidly and/or unexpectedly, causing SEVERE INJURY or DEATH.
7. NEVER use emergency release handle unless doorway is clear of persons and obstructions.
8. After ANY adjustments are made, the safety reversal system MUST be tested.
9. Safety reversal system MUST be tested every month. Door MUST reverse on contact with 1-1/2" (3.8 cm) high object (or a 2x4 laid flat) on the floor. Failure to adjust the garage door opener properly may cause SEVERE INJURY or DEATH.
10. ALWAYS KEEP DOOR PROPERLY BALANCED (see page 3). An improperly balanced door may not reverse when required and could result in SEVERE INJURY or DEATH.
11. ALL repairs to cables, spring assemblies and other hardware, ALL of which are under EXTREME tension, MUST be made by a trained door systems technician.
12. ALWAYS disconnect electric power to garage door opener BEFORE making ANY repairs or removing covers.
13. **SAVE THESE INSTRUCTIONS.**

Using Your Operator

Press and hold the push button on the single button control station until the door starts to move.

When the operator is activated (with the safety reversing sensor correctly installed and aligned)

1. If open, the door will close. If closed, it will open.
2. If closing, the door will reverse.
3. If opening, the door will stop.
4. If the door has been stopped in a partially open position, it will close.
5. If an obstruction interrupts the sensor beam while closing the operator will reverse.
6. The sensor has no effect in the opening cycle.
7. If fully open, the door will not close when the beam is broken.

Care of Your Operator

MAINTENANCE SCHEDULE

Once a Month

- Manually operate door. If it is unbalanced or binding, call a trained door systems technician.
- Check to be sure door opens & closes fully. Adjust limits and/or force if necessary (see Adjustment Steps 1 and 2).
- The operator does not require additional lubrication. Do not grease the door tracks.

HAVING A PROBLEM? (TROUBLESHOOTING)

1. The operator doesn't operate from either the door control or the remote control:

- Does the operator have electric power? Plug a lamp into the outlet. If it doesn't light, check the fuse box or the circuit breaker. (Some outlets are controlled by a wall switch.)
- Is there a build-up of ice or snow under the door? The door may be frozen to the ground. Remove any restriction.
- The door spring may be broken. Have it replaced (see page 3 for reference).

2. Operator operates from the remote, but not from the single button control station:

- Are the wiring connections correct? Review Installation Step 4.

3. The door operates from the single button control station, but not from the remote control:

- Program the operator to match the remote control code. (Refer to instructions on the motor unit panel.) Repeat with all remotes.

4. The remote control has short range:

- Check to be sure the antenna on the side or back panel of operator extends fully downward.
- Some installations may have shorter range due to a metal door, foil backed insulation, or metal siding.

5. The door opens and closes by itself:

- Be sure that all remote control push buttons are off.
- Remove the bell wire from the door control terminals and operate from the remote only. If this solves the problem, the single button control station is faulty (replace), or there is an intermittent short on the wire between the control console and the motor unit.
- Clear memory and re-program all remote controls.

6. The door doesn't open completely:

- Is something obstructing the door? Is it out of balance, or are the springs broken? Remove the obstruction or repair the door.

7. The door opens but won't close:

- Check the safety reversing sensor. See Installation Step 6.
- See Adjustment Step 2. For an existing installation, see below.

Repeat the safety reverse test after the adjustment is complete.

8. The door reverses for no apparent reason:

- Is something obstructing the door? Pull the emergency release handle. Operate the door manually. If it is unbalanced or binding, call a trained door systems technician.
- Clear any ice or snow from the floor area where the door closes.
- Review Adjustment Step 2.

Repeat safety reverse test after adjustments.

9. The door reverses for no apparent reason:

- Check the safety reversing sensor. Remove any obstruction or align the receiving eye. See Installation Step 6.

10. The operator strains to operate door:

- The door may be out of balance or the springs may be broken. Close the door and use the emergency release handle to disconnect the door. Open and close the door manually. A properly balanced door will stay in any point of travel while being supported entirely by its springs. If it does not, disconnect the operator and call a trained door systems technician.

11. The operator motor hums briefly, then won't work:

- The door springs may be broken. See above.

12. The operator won't operate due to power failure:

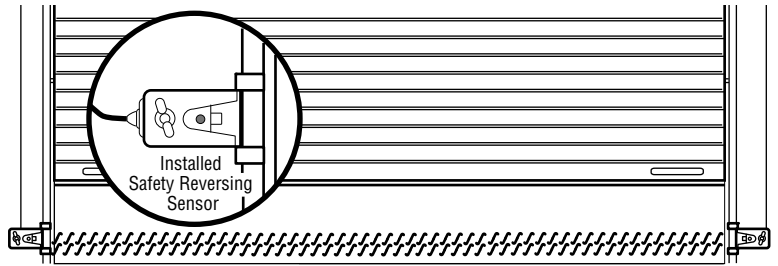
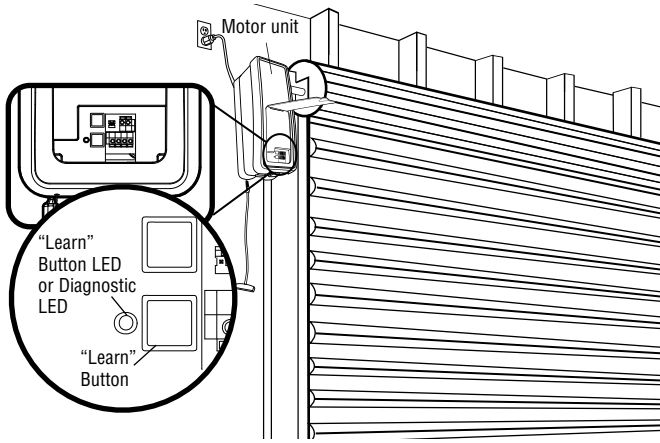
- Use the emergency release handle to disconnect the door. The door can be opened and closed manually. When power is restored, pull manual release a second time.
- If a standby power unit is connected, the operator should be able to operate up to 20 times without power.

13. Door loses limits:

- Reprogram limits see Adjustment Step 1.

14. The operator moves when the door is in operation:

- Minor movement for this operator is normal as long as it is not excessive.
- Check all mounting hardware to the operator and/or operator mounting brackets. Verify the operator is mounted at a right angle to the door shaft, sprocket and chain are aligned.



Your door operator is programmed with self-diagnostic capabilities. The "Learn" button/diagnostic LED will flash a number of times then pause signifying it has found a potential issue. Consult Diagnostic Chart below.

Diagnostic Chart

1 FLASH

Safety reversing sensors wire open (broken or disconnected).

OR

2 FLASHES

Safety reversing sensors wire shorted or black/white wire reversed.

3 FLASHES

Door control or wire shorted.

4 FLASHES

Safety reversing sensors slightly misaligned (dim or flashing LED).

5 FLASHES

Motor overheated or possible RPM sensor failure. Unplug to reset.

9 FLASHES

Factory installed jumper loose or missing.

- **Symptom: One or both of the Indicator lights on the safety reversing sensors do not glow steady.**
 - Inspect sensor wires for a short (staple in wire), correct wiring polarity (black/white wires reversed), broken or disconnected wires, replace/attach as needed.
 - Disconnect all wires from back of motor unit.
 - Remove sensors from brackets and shorten sensor wires to 1-2 feet (30-60 cm) from back each of sensor.
 - Reattach sending eye to motor unit using shortened wires. If sending eye indicator light glows steadily, attach the receiving eye.
 - Align sensors, if the indicator lights glow replace the wires for the sensors. If the sensor indicator lights do not light, replace the safety reversing sensors.

- **Symptom: The door doesn't activate from the door control.**
 - Inspect door control/wires for a short (staple in wire), replace as needed.
 - Disconnect wires at door control, touch wires together. If motor unit activates, replace door control.
 - If motor unit does not activate, disconnect door control wires from motor unit. Momentarily short across red and white terminals with jumper wire. If motor unit activates, replace door control wires.

- **Symptom: Sending indicator light glows steadily, receiving indicator light is dim or flashing.**
 - Realign receiving eye sensor, clean lens and secure brackets.

- **Symptom: Door travels 2-3 inches and stops.**
 - Reprogram limits and forces. See Adjustments section.
 - If the operator continues to travel 2-3 inches, check the travel module connection or replace the travel module.

Symptom: Door travels 2-3 inches and stops.

 - Reengage the emergency release.
 - Motor may need to be replaced.

- **Symptom: Door reverses while closing.**
 - Check the factory installed jumper at the terminal connections. Factory installed jumper must be in place for proper operation. Operator will not function without the jumper.

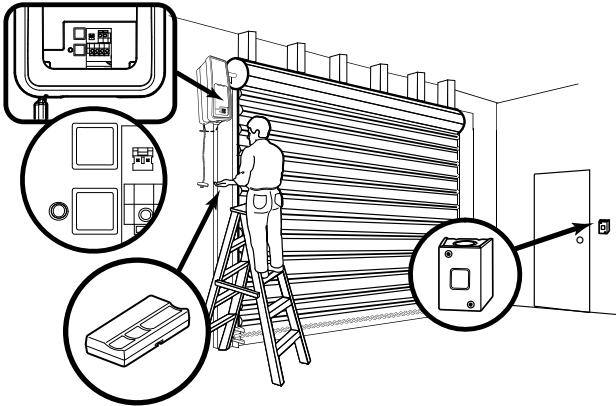
PROGRAMMING

NOTICE: If this Security+® door operator is operated with a non-rolling code transmitter, the technical measure in the receiver of the door operator, which provides security against code-theft devices, will be circumvented. The owner of the copyright in the door operator does not authorize the purchaser or supplier of the non-rolling code transmitter to circumvent that technical measure.

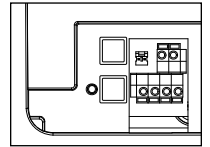
To Add or Program a Hand-held Remote Control (Not Provided)

Below are instructions for programming your operator to operate with optional Security+® remote controls. A maximum of eight Security+® remote controls can be programmed to work with your operator.

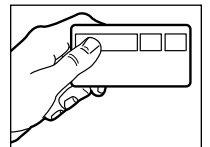
USING THE “LEARN” BUTTON



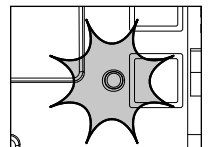
1. Press and release the purple “learn” button on the motor unit. The learn indicator light will glow steadily for 30 seconds.



2. Within 30 seconds, press and hold the button on the hand-held remote* that you wish to operate your door.



3. Release the button when the learn indicator light blinks and shuts off upon learning the remote control. If the optional remote light is installed, the light will blink.



4. If the safety reversing sensors are not installed or misaligned, the door will not close from a hand-held remote control. If this occurs, the door can be closed by pressing and holding the push button on the single button control station until the door has closed. Releasing the push button prior to the door closing will cause the door to reverse.

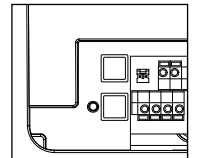
To Erase All Codes From Motor Unit Memory

To deactivate any unwanted remote, first erase all codes:

Press and hold the “learn” button on motor unit until the learn indicator light goes out (approximately 6-9 seconds).

All previous codes are now erased.

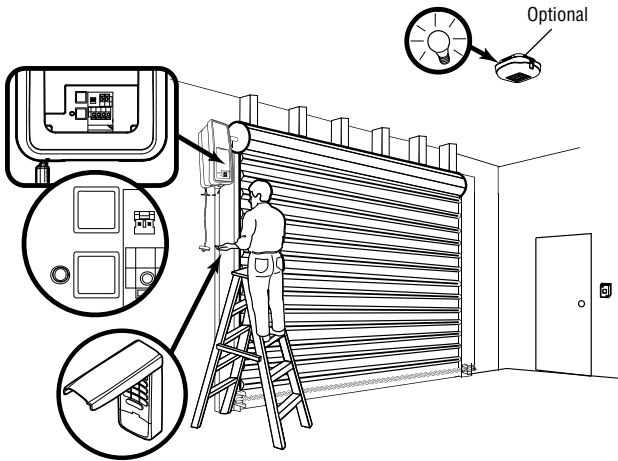
Reprogram each remote or keyless entry you wish to use.



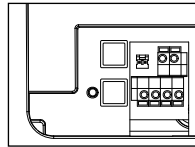
To Add, Program or Change a Keyless Entry PIN (Not Provided)

NOTE: The optional Keyless Entry must be programmed to operate your door operator.

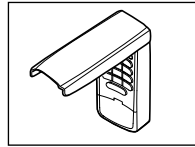
USING THE “LEARN” BUTTON



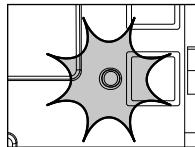
1. Press and release the purple “learn” button on motor unit. The learn indicator light will glow steadily for 30 seconds.



2. Within 30 seconds, enter a four digit personal identification number (PIN) of your choice on the keypad. Then press and hold the ENTER button.



3. Release the button when the learn indicator light blinks and shuts off upon learning the remote control. If the optional remote light is installed, the light will blink.



To change an existing, known PIN

If the existing PIN is known, it may be changed by one person without using a ladder.

1. Press the four buttons for the present PIN, then press and hold the # button.

The operator light will blink twice. Release the # button.

2. Press the new 4-digit PIN you have chosen, then press Enter.

The motor unit lights will blink once when the PIN has been learned.

Test by pressing the new PIN, then press Enter. The door should move.

To set a temporary PIN

You may authorize access by visitors or service people with a temporary 4-digit PIN. After a programmed number of hours or number of accesses, this temporary PIN expires and will no longer open the door. It can be used to close the door even after it has expired. To set a temporary PIN:

1. Press the four buttons for your personal entry PIN (not the last temporary PIN), then press and hold the button.

The operator light will blink three times. Release the button.

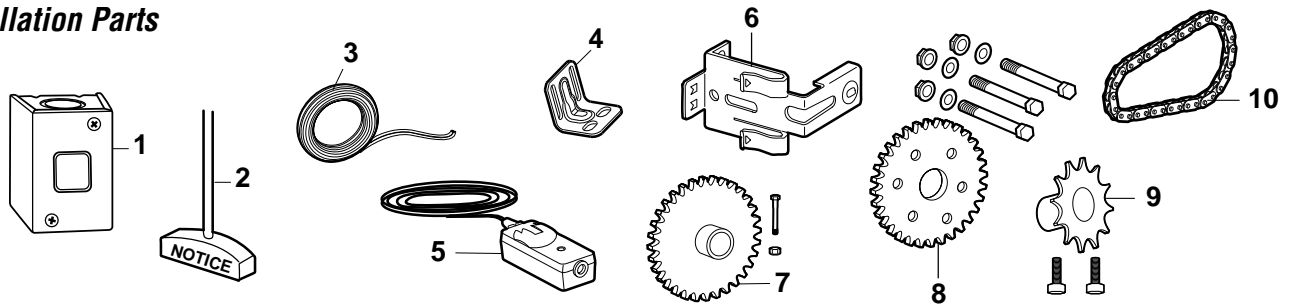
2. Press the temporary 4-digit PIN you have chosen, then press Enter.

3. To set the number of hours this temporary PIN will work, press the number of hours (up to 255), then press *.

NOTE: If the optional remote light is installed, the remote light will blink 4 times.

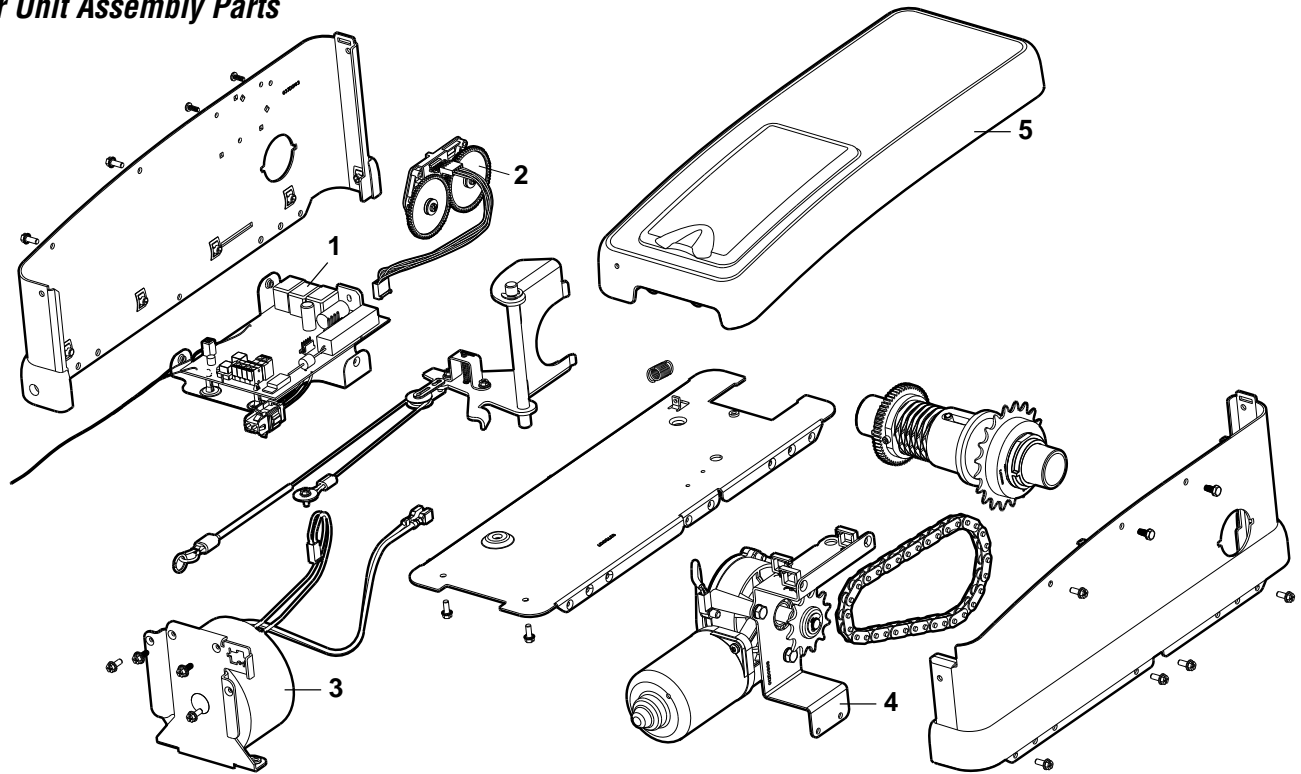
REPAIR PARTS

Installation Parts



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	APBS 1	Single button control station	6	41A5266-1	Safety reversing sensor brackets (2)
2	41A6298-5	Emergency release rope, handle assembly and installation hardware bag (includes hardware listed on page 4)	7	41A7279	Live shaft sprocket kit
3	41B4494-1	2-conductor bell wire white & white/red	8	41A7280	Dead shaft sprocket kit
4	41C0902	Mounting bracket (1)	9	41A7278	12 tooth sprocket kit
5	41A5034	Safety reversing sensor kit (receiving and sending eyes) with 3 feet (.9 m) 2-conductor bell wire attached	10	41A7314	Drive chain (#48)
					NOT SHOWN
				114A4066	Owner's manual

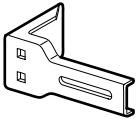
Motor Unit Assembly Parts



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	K41DJC001	Logic board complete with plate (315 MHz)	4	41A6095	Motor with bracket
2	41A6408	Travel Module	5	41A6348-3	Cover
3	41C168	Transformer			

ACCESSORIES

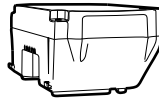
41A5281



Extension Brackets:

(Optional) For safety reversing sensor installation onto the wall or floor.

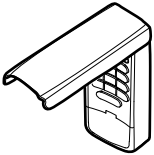
475LM



EverCharge® Standby Power System:

Provides backup power to the model 3900 door operator.

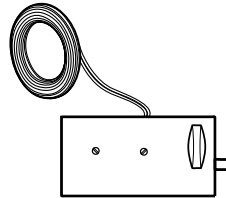
377LM



Keyless Entry with Security+®:

Enables end user to operate door operator from outside by entering a password on a specially designed keyboard. Also can add a temporary password for visitors or service persons. This temporary password can be limited to a programmable number of hours or entries.

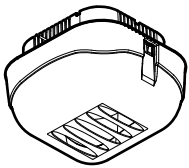
41A6102



Power Door Lock:

Enables the end user to prevent the door from being manually opened once closed.

380LM



Remote Work Light:

Enables homeowner to turn on a work light from their car with their door operator remote or from anywhere in their home with an additional LiftMaster Security+® remote.

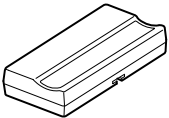
3950MB



Guide Mounting Bracket Kit:

The bracket can be mounted in several different configurations with the motor location outside or inside the door guides.

371LM



1-Button Security+® Remote Control:

Includes visor clip.

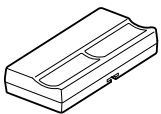
3950CGJ



Chain Guard:

The chain guard is required to comply with UL requirements for applications where the drive chain is exposed lower than 8 feet (2.5 m).

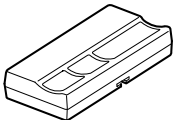
372LM



2-Button Security+® Remote Control:

Includes visor clip.

373LM



3-Button Security+® Remote Control:

Includes visor clip.

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www.liftmaster.com

For professional installation, parts and service, contact your local LIFTMASTER/CHAMBERLAIN dealer. Look for him in the Yellow Pages, or call our Service number for a list of dealers in your area.

HOW TO ORDER REPAIR PARTS

Selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

**WHEN ORDERING REPAIR PARTS,
ALWAYS GIVE THE FOLLOWING INFORMATION:**

- **PART NUMBER**
- **PART NAME**
- **MODEL NUMBER**

ADDRESS ORDERS TO:

THE CHAMBERLAIN GROUP, INC.
Technical Support Group
6050 S. Country Club Road
Tucson, Arizona 85706

SERVICE INFORMATION

TOLL FREE NUMBER:

1-800-528-2806