Guardian™
ACCESS & DOOR HARDWARE

MODEL 628
GARAGE DOOR OPENER
3/4 HP$_E$*

QUIET
CONFIDENCE

The quiet DC motor drive runs smoothly, quietly and reliably. Ideal for heavy carriage house doors or the homeowner with a bedroom above the garage.

▸ Smooth and Quiet
▸ Heavy-Duty Chain or Durable Belt Drive
▸ 200W Courtesy Light
▸ Robust Safety Photo-Eye System
▸ 5-Year Motor Warranty

CONTROLS INCLUDED:

Deluxe Door Control Console
Open your door turn on your lights and set remote security lock-out from one convenient location.

2-Button Remote Control
Comes with convenient visor or wall mount and small enough to fit into your pocket or purse, open up to two Guardian garage door openers.

Guardian™ strives to exceed the expectations of our customers through our comprehensive service, innovative designs and uncompromising demand for quality.

Guardian™
ACCESS & DOOR HARDWARE

SPECIFICATIONS:

Electrical/Motor
Power: $^3/_4$ HPe*
Input Voltage: 120V 50/60 Hz
Current: 4A
Motor type: 24V AC
Power cord: 48 inch, 3-prong
ETL Listed to UL 325: Yes

Lighting
Number of Bulbs: 2
Total Wattage: 200W
Delay duration: 4.5 minutes

Radio Controls
Frequency: 303 MHz
Coding system: Fixed, over 4 million
Operating range (tested): 200 feet
Code registers: 20
Standard remote control battery: 12V A23

Safety & Features
Down safety reversal
Up safety stop
Infra-red photo eyes
Emergency quick release
Pet / Ventilation opening
Soft-start & stop electronic learn limits

Standard Accessories
2-Button remote control
Deluxe Door Control Console

Rail and Drive
Material: Steel
Type: One-piece interchangeable, T or C
Drive: Full chain or glass fiber reinforced belt
Pre-tensioned at the factory
Lengths: for 7' door height, 8' & 10' optional

Installation
Headroom clearance required: 2 inches
Installed length (std. T-rail): 123.5 inches
Max. door opening (std. rail): 7'2"
Travel speed: 5.8 in/s
Limit setting: Electronic
Force setting: Electronic auto-learn

Shipping Dimensions
Power head: 24.5"x12"x8"; 17 lbs.
Std. 7' door, T-rail, chain: 123"x3.2"x1.6; 17 lbs.
Std. 7' door, T-rail, belt: 123"x3.2"x1.6; 14 lbs.
Std. 7' door, C-rail, chain: 123"x3.5"x1.4; 18 lbs.
Std. 7' door, C-rail, belt: 123"x3.2"x1.6; 16 lbs.
*Meets Guardians lifting force specification for
$^3/_4$ HP garage door opener.

5-Year Motor Warranty
1-Year on all other parts. Please refer to
operator owner's manual for more details.

SAFETY & SECURITY
Guardian garage door openers are manufactured to comply with the latest industry standards. Our advanced, steel-enclosed, water-resistant, photo-eye system ensures the highest degree of reliability in detecting obstructions during operation.

OPTIONAL CONVENIENCE ACCESSORIES
Ask your dealer about adding more convenience and control with your new operator.

Wireless Keyless Entry Keypad
never be locked out
Completely weatherproof, with this wireless and keyless entry keypad mounted outside your door, quickly and securely be granted entry without the use of a remote. One keypad can control multiple Guardian garage door openers.
Item #GDOWLESKEY

Premium 3-Button Remote Control
convenience with style
Perfect for those seeking more style and need to access several garage doors with one device. The backlit LED lets you know that the digital signal has been sent.
Item # GDOP3B

Premium 3-Button Mini Remote Control
for active lifestyles
Stylish enough to show off and small enough to fit into your pocket or purse. Equipped with LED backlit LED buttons for your convenience, bring elegance to your garage door opener with this compact remote that can fit on your keychain.
Item # GDO3BMINI

Premium Door Control Console
more control
Open your door, turn on the lights and set remote security lock-out all from one convenient location.
Item # PWLLSTN

International Door Association
Member DASMA Door & Access System Manufacturers Association International
HomeLink BY GENTEX CORPORATION
Guardian™ ACCESS & DOOR HARDWARE
ADH Guardian USA LLC
9732 Alburtis Ave.
Santa Fe Springs, CA 90670
www.adhguardianusa.com

Guardian™

MODEL 628
PRO SERIES 3/4HP

WARNING:
To reduce the risk of injury to persons - Use this operator only with Residential Sectional Garage doors.

ETL LISTED US
Intertek

Owner's Manual

● **Please read and understand this manual and safety instructions carefully before installation.**

● **The Opener WILL NOT CLOSE until the Photo Eye Safety System is properly installed and aligned.**

● **REGULARLY CHECK and TEST the Opener according to the safety label to ENSURE SAFE OPERATION.**

● **Retain this manual for future reference.**

Serial # __ __ __ __ __ __ __   Date Installed __ __ /__ __ /__ __ __ __

Located on the bar code label on top of your opener.
The illustrations used in this instruction manual may differ from the actual product you have purchased.

Table of Contents
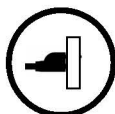
Symbols and Icons

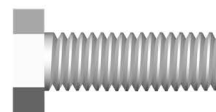| ⚠ WARNING	READ WARNINGS CAREFULLY to prevent **SERIOUS INJURY or DEATH** caused by electrocution or mechanical hazard.

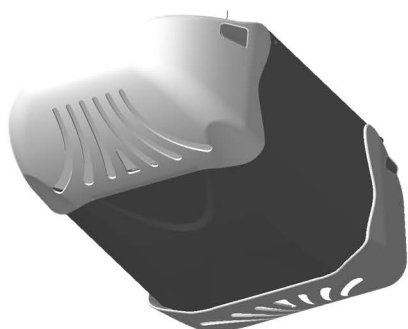DO NOT connect power   Please connect power

Beeps from built-in buzzer of the opener   Installation hardware shown in actual size

* Optional Accessories
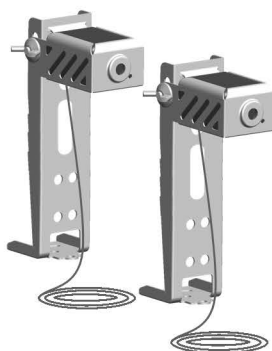
Inventory

Opener Unit + Lamp Dome

Photo Eye Safety System

Emergency Release Handle + Rope

OPTIONAL

Remote Control *
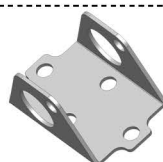
OPTIONAL

Push Button *

OPTIONAL

Door Control Console *

Screw #6 x 1"   x 2

Drywall Anchor   x 2

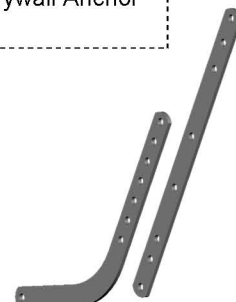Literature + Safety Labels

Door Bracket

Header Bracket

Clevis Pin Long   x1
5/16'' x 2-1/4''

Hitch Pin — Locking Clevis Pins x1

Door Arms

* Optional Accessories
* Items may differ to pictures shown

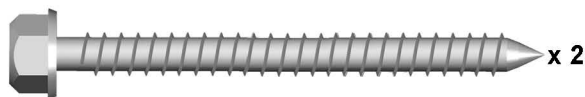## INSTALLATION HARDWARE, LOCATED IN HARDWARE BAG (SHOWN IN ACTUAL SIZE 1:1)

Clevis Pin — Door arms
5/16" x 1"   x 2

Hitch Pin
— Locking Clevis Pins   x 2
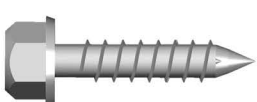
Lag Screw 1/4" x 1"
— Door Bracket   x 2

Lag Screw 1/4" x 1"
— Photo Eye System   x 4

Lag Screw 5/16" x 2 1/2"
— Header Bracket / Mounting Opener   x 2
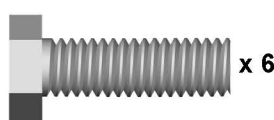
Bolt 5/16" -18 x 1"
— Door arms / Mounting Opener   x 6
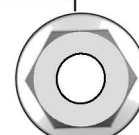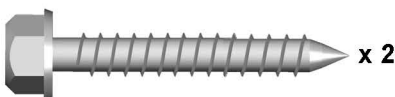
5/16" Flange Nut   x 6

Emergency Release Handle
+ Rope   x 1

Lag Screw 5/16" x 1-5/8"
— Door Bracket / Mounting Opener   x 2

Flange Nut
1/4" -20   x 4

T-rail Assembly

Hexagonal Screw
#10 - 24 x 1/2"   x 1

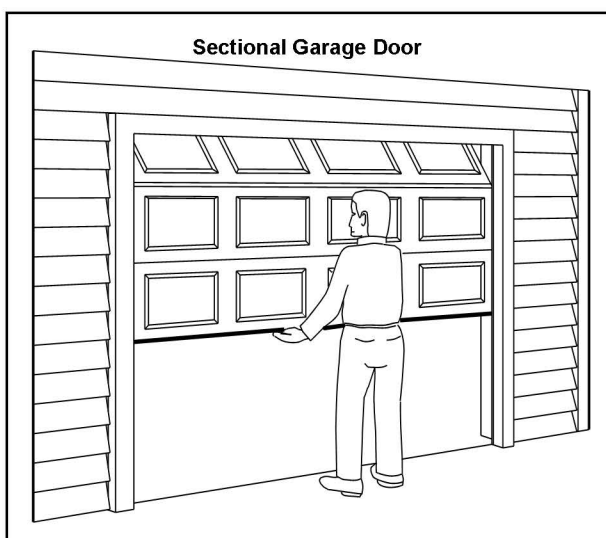Washer #10   x 1

Spring Washer #10   x 1

Preparation

Sectional Garage Door

BEFORE Beginning Installation:

1. **Disable locks and remove all ropes connected to the garage door.**

2. **Perform the following door test to ensure your door is balanced and in good working condition.**

To Test Your Garage Door

1. Raise and lower the door to check if there is any sticking or binding.

2. Check for loose hinges, damaged rollers, frayed cables and damaged or broken springs.

3. Lift the door approximately halfway and release. The door should stay at the point under proper spring tension.

Call a qualified garage door service technician if your door binds, sticks or is unbalanced.

Tools Required

Level

Tape Measure

Drill, 3/16" and 5/16" Drill Bits

Pencil

Pliers

Hack Saw

Screwdriver

Step Ladder

Ratchet with
5/16", 7/16" and 1/2" sockets

Adjustable Wrench

Rubber Mallet

Hammer

Assembling T-Rail

1/4" Flange Nut x 4   Screw   Spring Washer   Washer

Fig.1

To Assemble the Rail

Align the pre-assembled T-rail on the top of opener in the direction as shown in Fig.1.

Secure the T-rail to the opener firmly using 1/4" flange nut x 4.

Final Step to T-Rail Installation

Fasten the Screw(2) to the motor shaft with spring washer(3) and washer(4) in between.

Tension the Belt / Chain

⚠ **WARNING**
To prevent SERIOUS INJURY: - DO NOT connect power until instructed. - Keep hands and fingers clear from sprocket during operation. - Wear gloves when installing chain/belt and cable. - Keep hands and fingers away from joints and possible sharp edges.

①

Tighten until...

Shaft-Linker

②

Flange Nut

Tighten nut
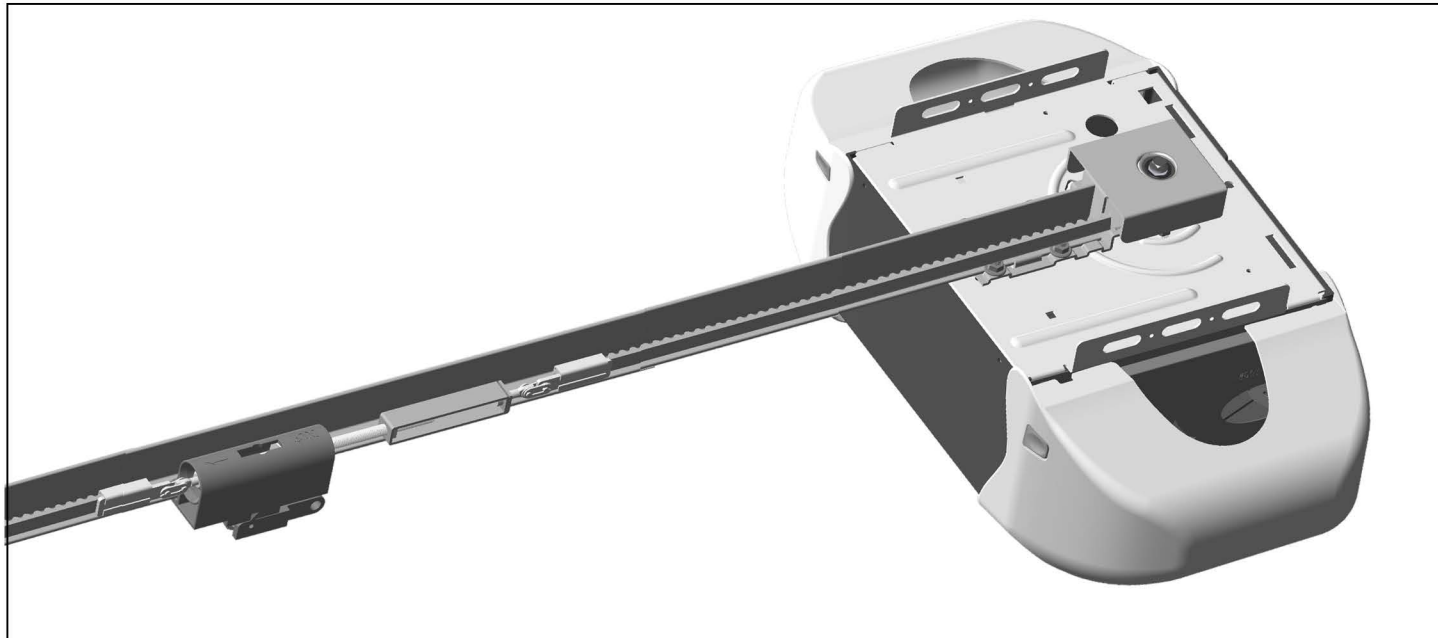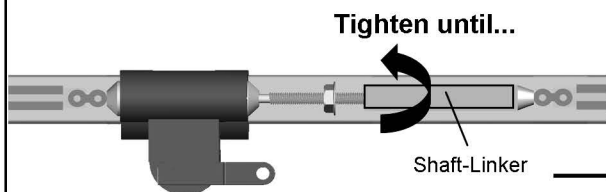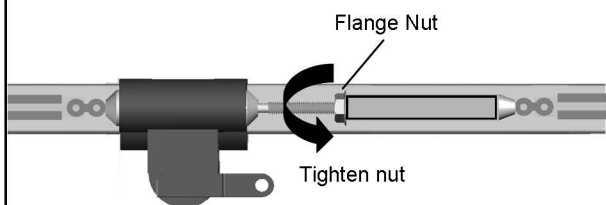
Note: The chain or belt rail assembly comes pre-tensioned from the factory.

Tension the Belt

1. Rotate the Shaft Linker towards the Trolley Shaft until the belt is slightly loose about 1/4" (6mm) above the base of the rail, referring to the actual-sized illustration below.

Mid-point of rail assembly

Top of Rail

Actual Size

Belt

1/4" (6mm)

Base of Rail
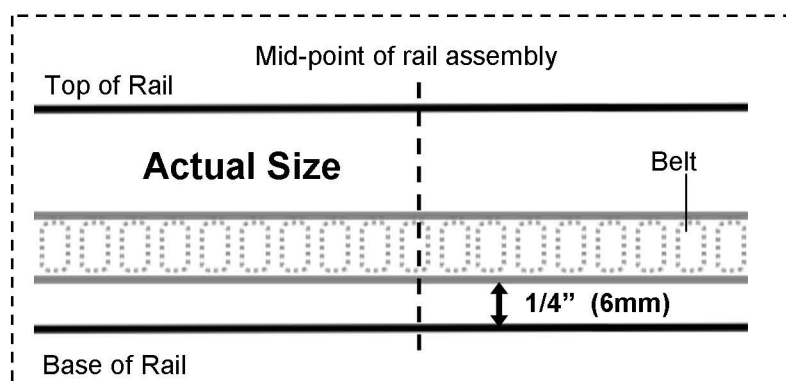
2. Tighten the Flange Nut on Trolley Shaft against the Shaft-Linker.

Remove the temporary screw driver holding the position of the trolley.

Mounting Header Bracket

Fig.1

To Install Header Bracket

Note: Installation procedures may vary according to door type.

1. While inside your garage, close the door and mark the vertical centerline of the garage door. Extend the line onto the header wall above the door spring.

2. Open the door to the highest point of travel. Mark a line on the header wall 2" (5cm) above the highest point of travel.

Note: DO NOT install the Header Bracket over drywall. In some installations, it may be necessary to install a 2x4 across two wall studs to create a suitable location for the Header Bracket.

If installing into masonry, use concrete anchors (not provided).

Wall-Mounting

As shown in Fig.2, place the Header Bracket on the vertical centerline in direction shown.

Mark and drill two 3/16" holes. Fasten the Header Bracket securely to a structural support using two 5/16" x 2-1/2" Lag Screws.

Alternative Ceiling-Mounting

Ceiling-mounting is suggested ONLY when clearance is minimal.

Extend the vertical centerline onto the ceiling as shown in Fig.3. Center the Header Bracket on the vertical mark, no more than 6" (15cm) from the header wall. Mark and drill holes to fasten the Header Bracket securely to a structural support.
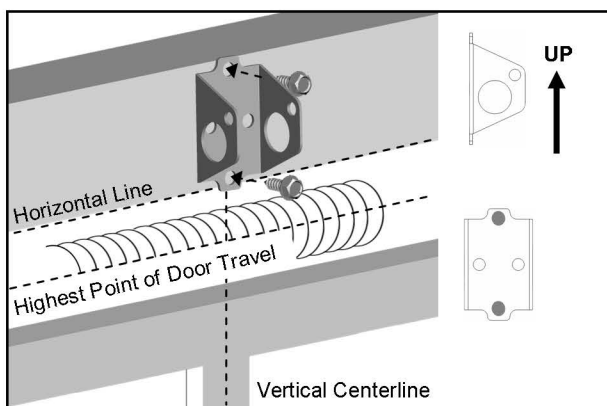
Fig.2 (Wall-Mounting)
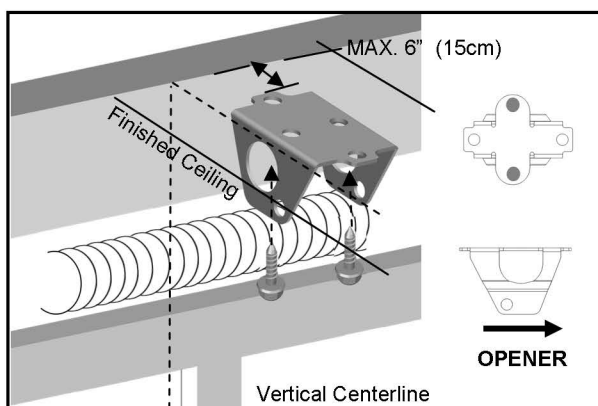
Fig.3 (Ceiling-Mounting)
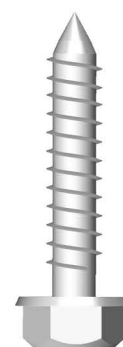
Lag Screw
5/16" x 2-1/2"

⚠ **CAUTION**
To prevent SERIOUS INJURY: - DO NOT connect power until instructed. - REINFORCEMENT is recommended for fiberglass, aluminum or lightweight steel garage doors BEFORE installing the door Bracket. Contact your door manufacturer for reinforcement options.

Carton

Hitch Pin   Clevis Pin - 5/16" x 2-1/4"

Fig.1

Top Edge of Door

2-4" (5-10cm)

Vertical Centerline of Door

UP
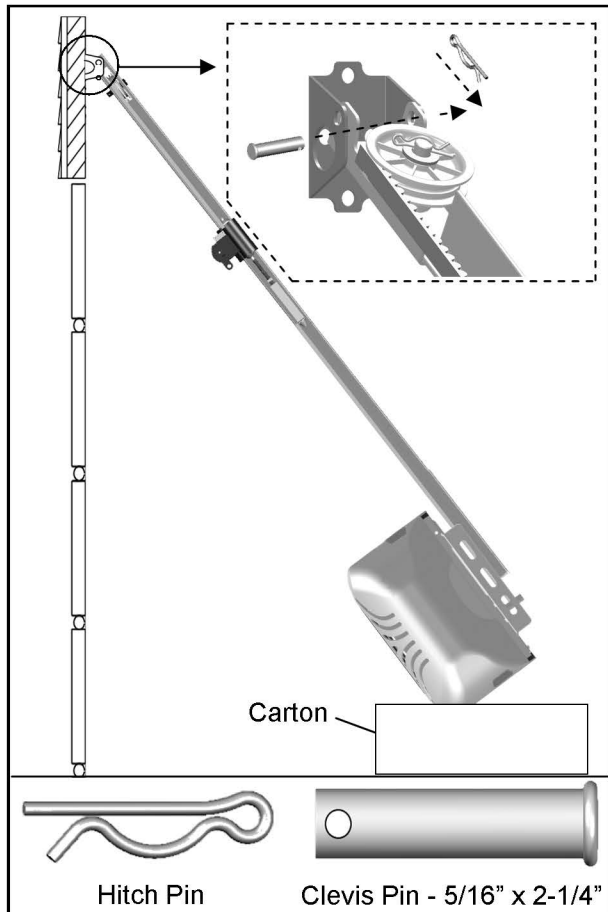
Self-Threading
Screw - 1/4" x 1"
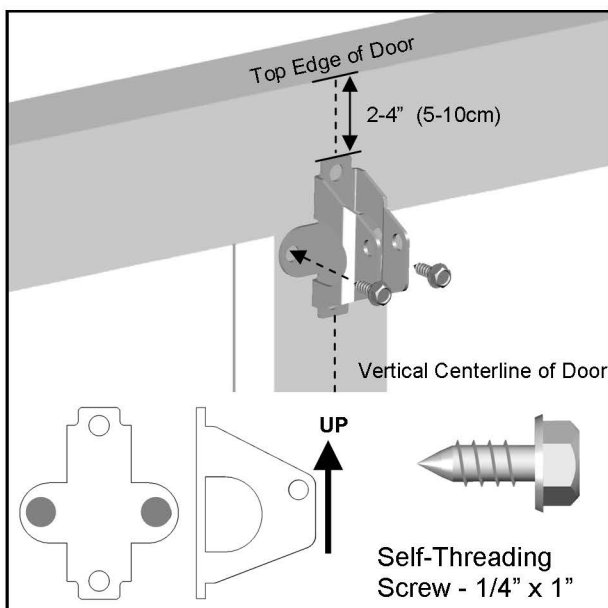
Fig.2

To Attach the Opener to the Header Bracket

1. As shown in Fig.1, use the packaging carton as temporary support for the Opener. Place the Opener on carton to prevent damage.

2. Align the mounting hole on the header rail to the mounting hole on the Header Bracket.

3. Connect the Header Rail and the Door Bracket together with a 5/16" x 2-1/4" Clevis Pin and lock it in place with a Hitch Pin.

To mount the Door Bracket

Note: Some door reinforcement kits may provide direct attachment of the door arm to the reinforcement bracket. If you have a door reinforcement bracket with this option, skip this step and proceed with the next step "Mounting Opener to Ceiling".

1. Position the Door Bracket on the centerline of the door approximately 2" - 4" (5-10cm) below the top edge of the door, as shown in Fig.2.

2. Depending on the construction of your door, install using one of the steps shown if Fig. 3 below:

   For steel / lightweight doors with vertical steel reinforcements / factory reinforced.

   (a) Mark and drill two 3/16" holes. Make sure not to drill through the garage door. Secure the Door Bracket with two 1/4" x 1" Self-Threading Screws (provided) as shown in Fig.3(a).

   (b) Alternative installation: Drill two 5/16" holes through the door. Secure the Door Bracket using two 5/16" Bolts, lock washers and nuts (not provided) as shown in Fig.3(b). The length of bolts will depend on the thickness of your door.

   Wood door

   (c) Mark and drill two 5/16" holes through the garage door. Secure the Door Bracket using two 5/16" carriage bolts, washers and nuts (not provided) as shown in Fig.3(c). The length of bolts will depend on the thickness of your door.

Note: DO NOT use Self-Threading Screws on a wood door.

(a)   (b)   (c)
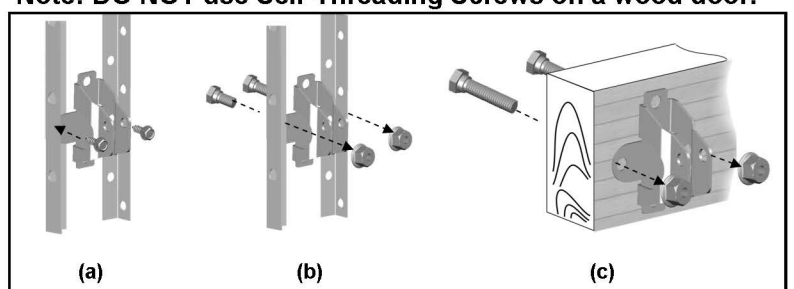
Fig.3

Mounting Opener to Ceiling

⚠ **WARNING**
To prevent SERIOUS INJURY or DEATH: - DO NOT connect power until instructed. - Install the Opener at least 7 feet (2.13m) above the floor. - Fasten the Opener SECURELY to STRUCTURAL SUPPORTS of the garage to prevent falling. - If installing Brackets to masonry, concrete anchors (not provided) MUST be used.

Fig.1

Fig.2

Fig.3

To Mount the Opener to Ceiling

The three most common installation options are shown in Fig.1-3.

Fig.1 shows mounting the Opener directly to structural support on the ceiling. Fig.2 and 3 show mounting on a finished ceiling, with heavy duty angle iron*.
*(angle iron not included)

Determine the mounting option that works best for your application and follow installation steps below:

1. Raise the Opener and rail assembly and temporarily place it on a stepladder.

2. Position the Opener and rail assembly so that it is aligned to the center line of the garage door. If the Header Bracket was mounted off center, align the Opener with the Header Bracket.

3. Measure the distance from each side of the Opener to the structural supports.

4. Cut both Hanging Brackets* to appropriate length

   *(Hanging Bracket not included)

5. Drill 3/16" holes in the structural supports.

6. Secure one end of each of the Hanging Brackets to the structural supports using 5/16"-18x1" Lag Screws (provided).

7. Secure the Opener to the Hanging Brackets and secure each side with a 5/16"-18x1" Bolt and Flange Nut (provided).

8. Move the door manually to check clearance between highest point of travel of the door and rail. If the door hits the rail, raise the Header Bracket or adjust the mounting of Opener.

9. Remove the ladder ONLY when the Opener is securely mounted to the structural supports.

Fastening Hanging Brackets to structural supports
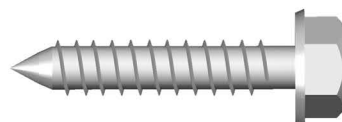
Lag Screw 5/16" x 1-5/8"

Securing Opener to Hanging Brackets

5/16" Flange Nut   Bolt 5/16" - 18 x 1"
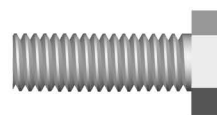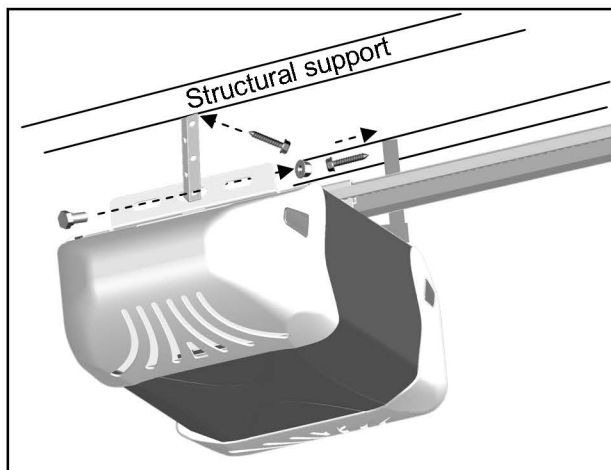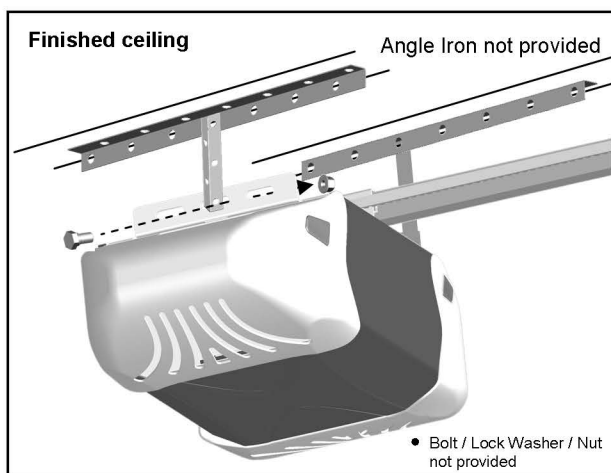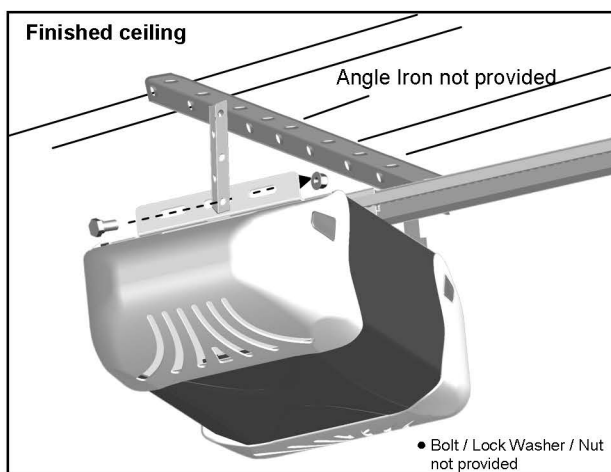
Attaching Door Arms

Straight Door Arm

Curved Door Arm

NOTE: The straight door arm must be installed vertically to the door when door is at closed position.

To Connect Door Arm

Follow the steps shown in Fig. 1

1. Fasten the Straight Door Arm to the Trolley with a 5/16" - 18 x 1" Clevis Pin and lock it with a Hitch Pin.

2. Fasten the Curved Door Arm to the Door Bracket with 5/16" - 18 x 1" Clevis Pin and lock it with a Hitch Pin.

3. To connect the door arms together, choose two pairs of holes which are as far apart as possible. Fasten the arms using two 5/16" - 18 x 1" Bolts and Flange Nuts.

Flange Nut

Bolt 5/16" - 18x1"

Hitch Pin

Clevis Pin - 5/16" x 1"

Ceiling

Rail of Opener

<1-3/4"mm

Door Panel

Ceiling

Rail of Opener

>1-3/4"mm

Door Panel
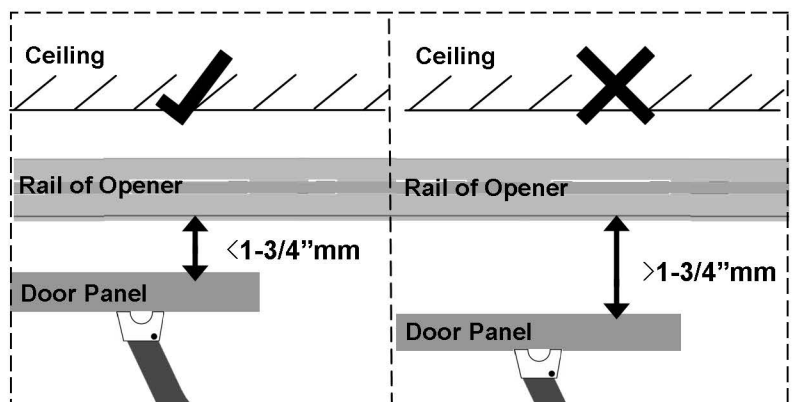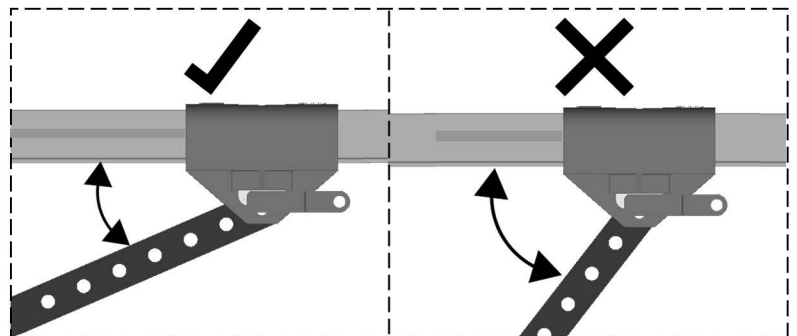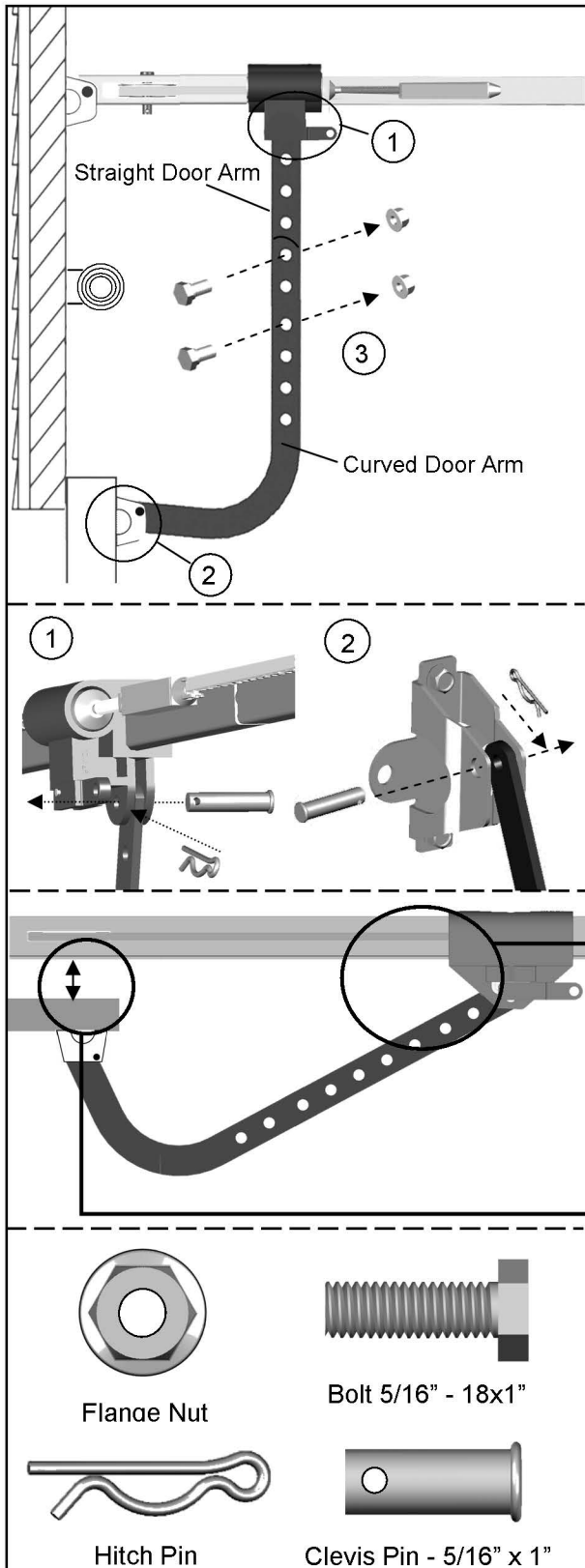
Fig.1

Installing Light and Emergency Release Handle

⚠ WARNING

To prevent SERIOUS INJURY or DEATH from electrocution:

- Disconnect power cord before installing/replacing light bulb.

To prevent possible OVERHEATING or damage to Opener:

- Use ONLY A19 (E26) incandescent bulbs (100W max.).
- DO NOT use short neck or specialty light bulbs.
- DO NOT use halogen bulbs.
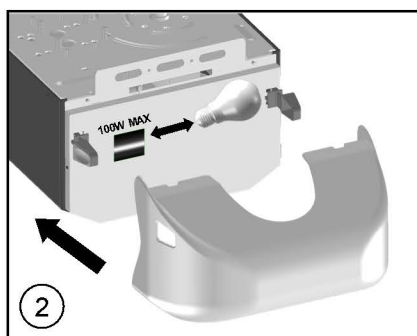
Fig.1
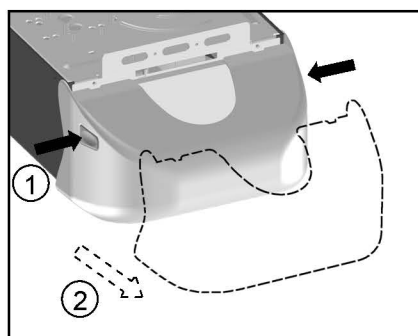
Fig. 2

To install light bulb as shown in Fig.1:

1. Install a standard A19 (E26) 100 watt maximum light bulb.

2. Re-attach the Lamp Dome.

To replace light bulb as shown in Fig.2:

1. Press the release buttons and detach it from the Opener.

2. Replace light bulb and reattach the lamp dome.

Notice

When replacing the light bulb, make sure the bulb on the Opener has cooled down to prevent injury.

⚠ WARNING

To prevent SERIOUS INJURY or DEATH from a falling garage door:

- In case of power failure or door obstruction, PULL EMERGENCY HANDLE to release door from Opener.
- When Emergency Release is in the released position, the door can be operated manually.
- To reconnect, flip the lever on the Trolley towards Opener, back to Connect position, it will reconnect automatically upon pressing Push Button or Remote Control.
- DO NOT use Emergency handle to pull the door open or closed.
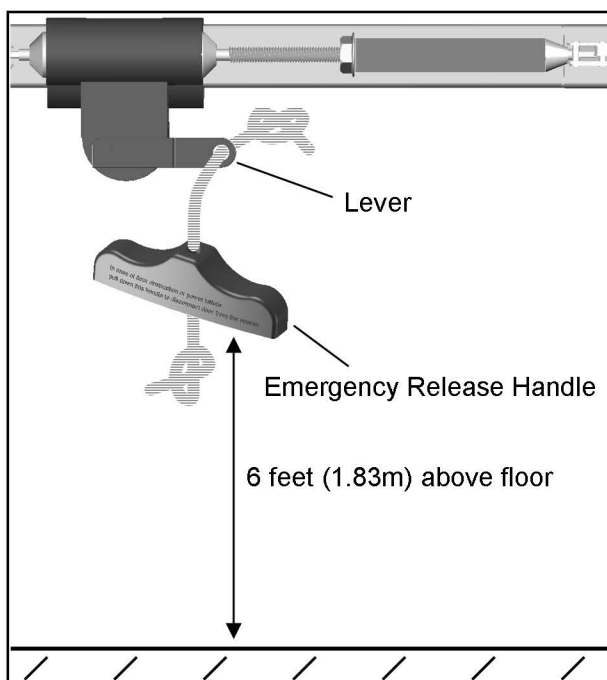
Fig. 2

Safety Notice

Mount the emergency release within reach, but at least 6 feet above the floor and avoiding contact with vehicles to avoid accidental release.

To attach the Emergency Release Handle:

1. Thread one end of the rope through the hole of the Emergency Release Handle and secure with an overhand knot.

2. Thread the other end of the rope through the hole in the Trolley lever.

3. Measure the rope length so that the handle is 6 feet (183cm) above the floor and is clear from the top of your vehicle. Secure with a overhand knot.

Wiring Instructions

Wire from accessories

Remove and discard pre-cut skin

Fig. 1

Wire Terminals

1/2"

Wire shown in actual size

Screwdriver or similar tool

Fig. 2

In the following section, the Photo Eye Safety System and Push Button will be connected to the Opener. Please read and understand the wiring instructions before connecting wires.

1. Remove the pre-cut skin on the open end of wire from accessories. Wires MUST NOT be frayed and connected properly as shown in Fig.1.

2. To connect a wire to an assigned terminal, use a small "flat head" screwdriver to push in the orange tab on the Wire Terminal as shown in Fig.2.

3. Insert approximately 1/2" (13mm) of the wire into the terminal while pushing in the tab as shown in Fig.2.

4. Each accessory requires a pair of terminals, Each pair of terminals MUST be connected with one white wire and one striped wire (non-polarized) from the SAME accessory as shown in Fig.2.

5. Check for proper connection by gently pulling on the wire. The wire should not come out of the terminal. NO exposed part of the wire should be visible outside of the terminal.

6. Use the insulated staples provided to secure the wires to the wall and/or ceiling. Be careful not to damage the wires while securing the staples.
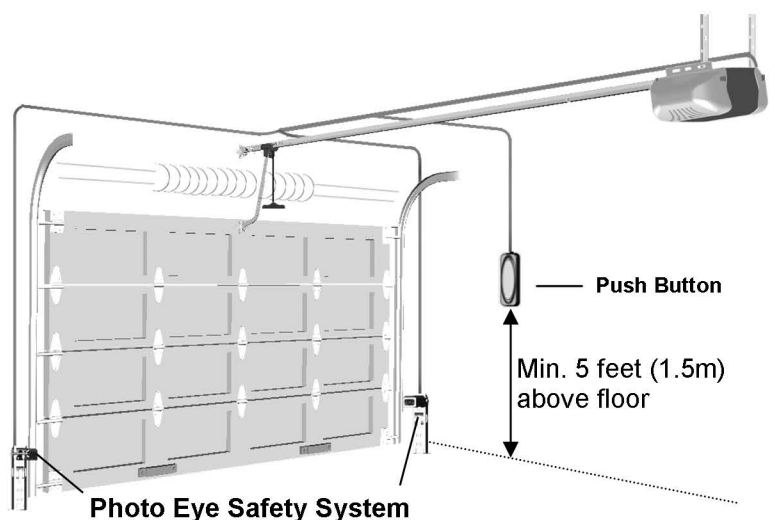
Push Button

Min. 5 feet (1.5m) above floor

Photo Eye Safety System

<table>
<tr><td colspan="2" align="center">⚠ WARNING</td></tr>
</table>

⚠ WARNING

To prevent SERIOUS INJURY or DEATH from electrocution:
- Power MUST NOT be connected BEFORE Photo Eye Safety system is connected and aligned.
- The Opener will not operate until the Photo Eye Safety System is properly connected and aligned.
- Install the Photo Eyes NO higher than 6" (15cm) above the floor.

No part of garage door or other objects should obstruct the Photo Eye Safety System during door-closing.
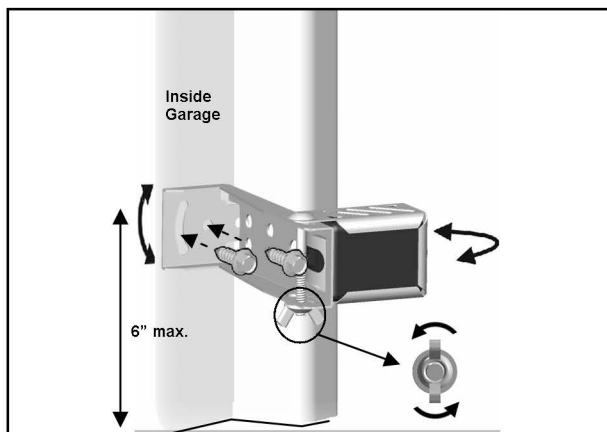
Fig. 1 (Wall Mount)
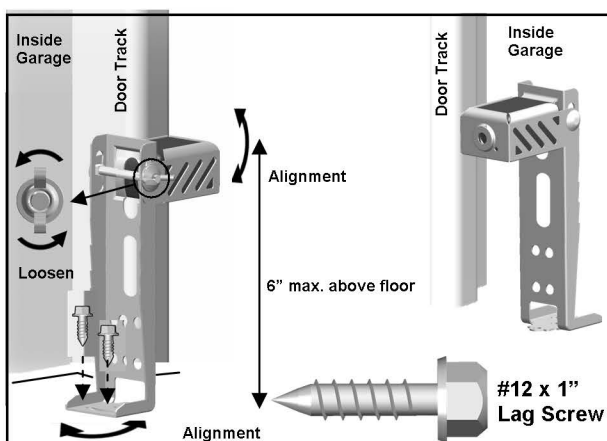
Fig. 2 (Floor Mount)
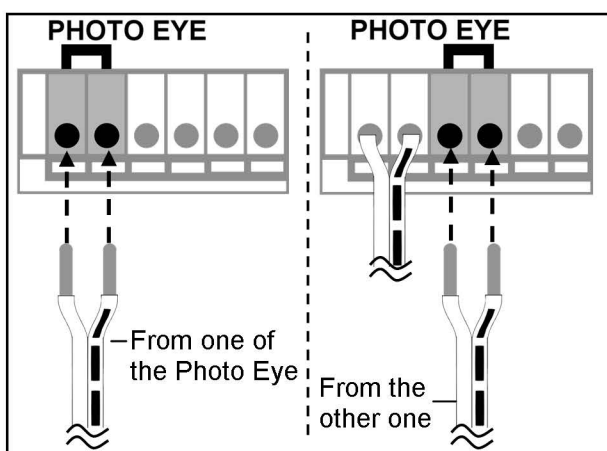
Fig. 3

About the Photo Eye Safety System

The Photo Eye Safety System provides protection against entrapment while the door is closing. When properly connected and aligned, the emitter Photo Eye emits an invisible infrared light beam while the Sensor Photo Eye monitors that beam.

If the beam is obstructed during door-closing, the entrapment protection will be triggered and the door will stop and reverse to the open position. The courtesy light will flash for 30 seconds indicating an obstruction.

Installing The Photo Eye Safety System

Wall-mounting

1. Place the Photo Eyes facing each other on each side of the garage door. Position the sensors so they are no higher than 6" (15cm) above the floor, as shown in Fig.1.

2. Drill 3/16" holes using the mounting holes on the Bracket as a template. Secure with 1/4" x 1" Lag Screws (provided).

3. If necessary use the Optional Wall-mount Position (Fig.1) to better fit your door-track and improve obstacle avoidance. To adjust the position, loosen the wing nut, disassemble the Bracket and move the Photo Eye to the lower position on the holder.

4. If necessary, align the Photo Eyes by loosening the wing nut . (This step may be further required in **Aligning the Photo Eye Safety System** on page 15.)

Alternative Floor-mounting

1. Place the Photo Eyes facing each other on each side of the garage door, as shown in Fig.2.

2. If attaching to concrete, secure the photo eyes using concrete anchors and bolts (not provided).

3. If necessary, align the Photo Eyes by loosening the wing nut. (This step may be further required in **Aligning the Photo Eye Safety System** on page 15.)

To Connect Photo Eye Safety System

1. Connect a pair of wires from either one of the Photo Eyes to a pair of "PHOTO EYE" terminals on the rear of the Opener as shown in Fig. 3. Refer to **Wiring Instructions** on page 12 for proper connections.

2. Repeat above step to connect the other Photo Eye.

3. Refer to **Wiring Instructions** on page 12 to ensure wires are connected properly.

Connecting Push Button

<table>
<tr><td colspan="2" align="center">⚠ WARNING</td></tr>
<tr><td>

To prevent SERIOUS INJURY or DEATH from electrocution:
- Power MUST NOT be connected until instructed.

To prevent SERIOUS INJURY or DEATH from using the Push Button and a closing door:
- Install the Push Button within sight of the door at a minimum height of 5 feet (1.5m) above the floor. Make sure it is out of the reach of children and moving parts of door and hardware.
- NEVER permit children to access the Push Button or Remote Controls.
- Operate the door ONLY when it is adjusted properly with no obstructions present and is in clear sight.
- ALWAYS keep a moving door in sight until it's completely closed.
- NEVER cross the path of a moving door.

</td></tr>
</table>

Screw # 6 x1-3/8"   Drywall Anchor

Push Button

Min. 5 feet (1.5m) above floor
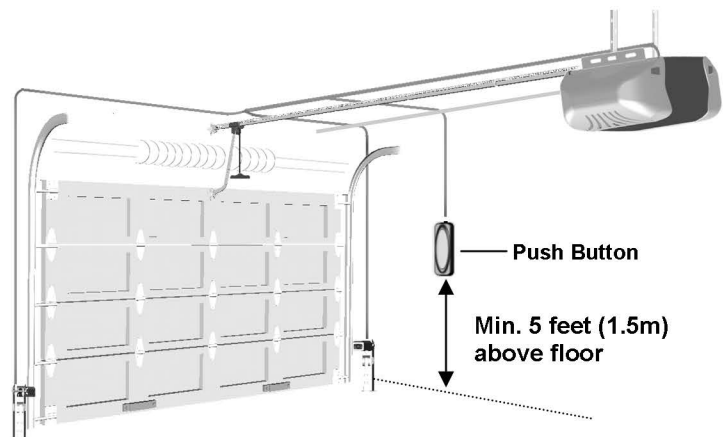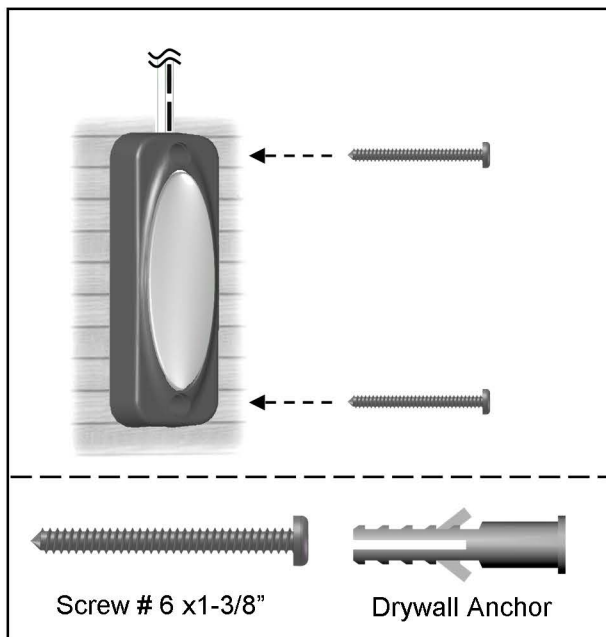
The Push Button is a wired, illuminated door control placed inside your garage.

To install the Push Button:

1. Inside your garage, install Push Button within sight of the door at a minimum height of 5 feet (1.5m) off the ground. Ensure it is installed out of the reach of children and free from the moving parts of the door and hardware.

2. Securely fasten it to a solid surface with # 6x1-3/8" screws. If attaching to drywall or other hollow surface, drill 3/16" holes and use the provided Drywall Anchors.

PUSH BUTTON

From Push Button

To Connect the Push Button to the Opener

Connect the pair of wires from the Push Button to the pair of "PUSH BUTTON" terminals on the rear of the Opener. Refer to **Wiring Instructions** on page 12 to ensure wires are properly connected.
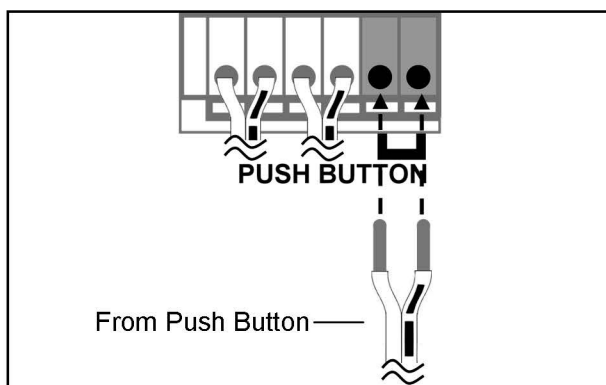
Connecting Door Control Console * (OPTIONAL)

## ⚠ WARNING

To prevent SERIOUS INJURY or DEATH from electrocution:
- Power MUST NOT be connected until instructed.

  To prevent SERIOUS INJURY or DEATH from using the Door Control Console or Push Button and a closing door:
- Install the Door Control Console or Push Button within sight of the door at a minimum height of 5 feet (1.5m) above the floor. Make sure it is out of the reach of children and moving parts of door and hardware.
- NEVER permit children to access the Door Control Console , Push Button or Remote Controls.
- Operate the door ONLY when it is adjusted properly with no obstructions present and is in clear sight.
- ALWAYS keep a moving door in sight until it's completely closed.
- NEVER cross the path of a moving door.

Screw #6 x1"   Drywall Anchor
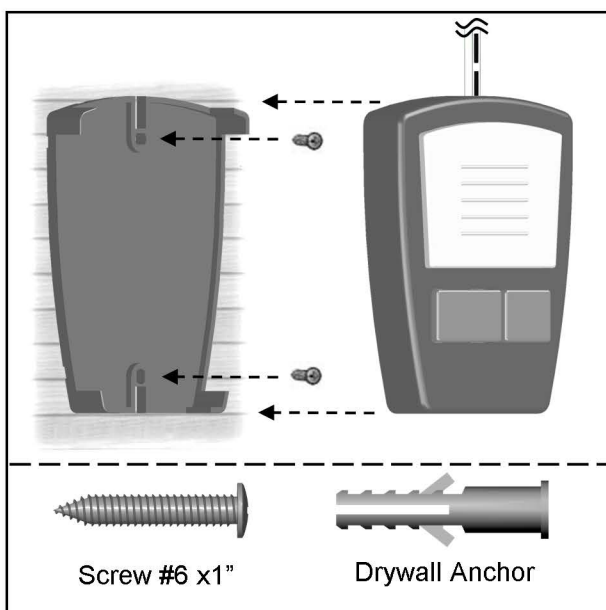
Fig. 1

The Door Control Console is a wired, illuminated door control placed inside your garage.

To install the Door Control Console:

1. Inside your garage, install the back plate of the Door Control Console within sight of the door at a minimum height of 5 feet (1.5m) off the ground. Ensure it is installed out of the reach of children and free from the moving parts of the door and hardware.

2. Fasten it to a solid surface with 1" screws. If attaching to drywall or other hollow surface, drill 3/16" holes and use the provided Drywall Anchors.

3. Snap the Door Control Console onto the back plate.

To Connect the Door Control Console to the Opener

Connect the plug from the Door Control Console to the "Wall Panel" outlet on the rear of the Opener, as shown in Fig.2.

Fig. 2

Door Control Console

Min. 5 feet (1.5m) above floor
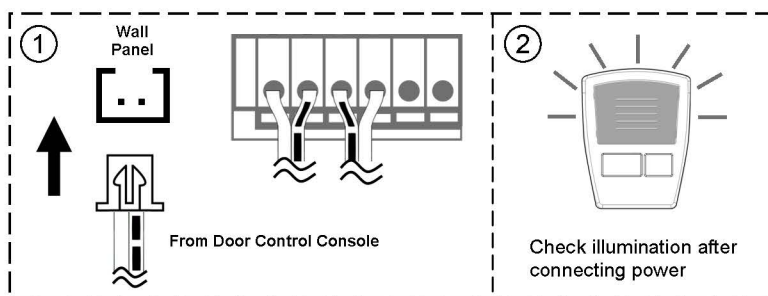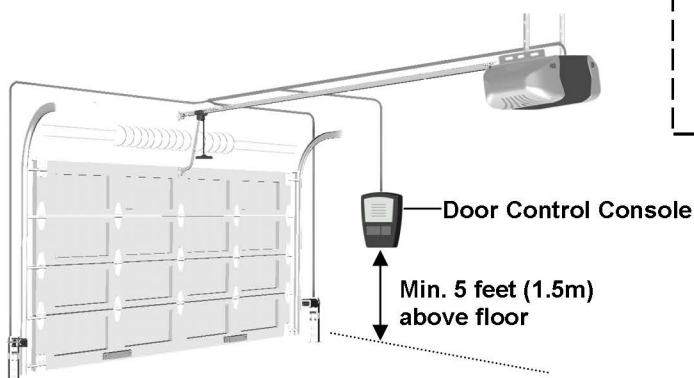
**Using the Door Control Console
(ONLY after installation is completed)**

Door — Press and release to access the door

Light — Turns the courtesy light On/Off
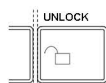
Vacation Lock
Unlock — Door can be accessed by either Door button or controls
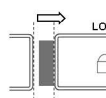
Lock — Prevent access of door by any   controls and Door button.

* Optional Accessories

Connecting Power

⚠ WARNING

To prevent SERIOUS INJURY or DEATH from electrocution or fire:

- Power MUST be DISCONNECTED BEFORE proceeding with permanent wiring procedures.
- Garage Door Opener installation and wiring MUST be in compliance with all local electrical and building codes. Make sure the Opener is ALWAYS grounded.
- NEVER use an extension cord, 2-wire adapter or modify the power plug in any way to make it fit the outlet.

Ordinary Power Connection

For Permanent Wiring ONLY

Conduit with wire

Line (Black)

Neutral (White)

White (from Light)

White (from Logic Board)

Yellow (from Motor)

Ground (Green/Yellow)

Ground Screw (Green)

Black (from Logic Board)

Wire nut (Not provided)

DO NOT OPERATE OPENER AT THIS TIME.

To Connect Power

Plug the Opener into a grounded outlet ONLY. If there is no grounded outlet present, call a qualified electrician to replace the outlet. Use of a surge protector is highly recommended page 4.

Permanent Wiring (If Required by Local Code)

1. Remove the enclosure by removing the 6 screws located on the sides and rear of the Opener.
2. Cut the two cable pressure connectors connecting line (black) and neutral (white) wire from the power cord.
3. Remove the grounding screw connecting the green wire.
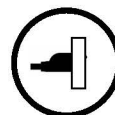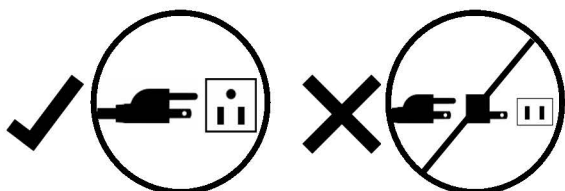4. Remove the power cord.
5. Group neutral (white) wires from power source with 2 white wires from light cable, and logic board, and yellow wire from motor, inside the Opener. Connect them with a wire nut.
6. Group line (black) wires from power source with another black wires from logic board inside the Opener. Connect them with a wire nut.
7. Secure the ground (green or bare) wire from the power source with a grounding screw.
8. Reinstall the enclosure.
9. Turn on power supply. If the wiring is properly connected, a "click" should be heard and the light will illuminate (if a bulb is installed). If there is no response from the Opener, check power source and wiring.

Aligning the Photo Eye Safety System

⚠ WARNING

To prevent SERIOUS INJURY or DEATH from a closing garage door:

- The Photo Eye Safety System MUST be installed BEFORE connecting power.
- The Photo Eye Safety System MUST be properly connected and aligned BEFORE operating the Opener.

Invisible Light Beam

Emitter

ALIGNED

Sensor

GREEN LIGHT
ON

RED LIGHT
ON
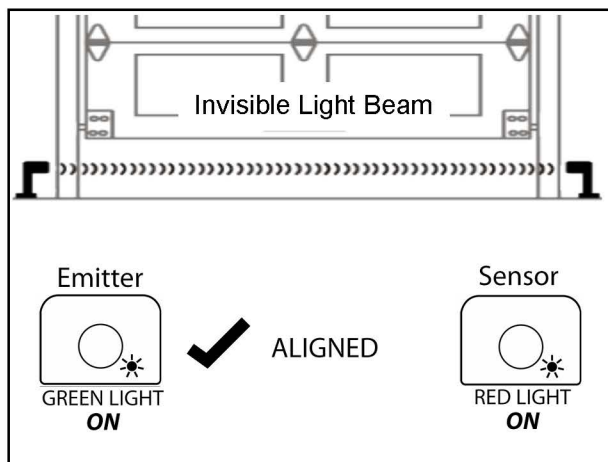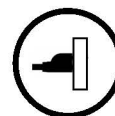
To Align the Photo Eye Safety System:

1. When the Photo Eye System is properly connected and the power is connected, one of the Photo Eyes will emit a steady green light. This Photo Eye is the Emitter that generates the Invisible Light Beam.

2. When properly aligned, the Sensor should emit a steady red light when it senses the invisible light beam from the Emitter.

3. If the indication is unsteady, flashes or is dim, check for any obstructions and adjust the position until the Sensor gives a STEADY RED LIGHT.

Note: The path of the invisible light beam MUST NOT be obstructed. No part of the garage door or any hardware should interfere with the beam or the Opener will not close the door.

⚠ WARNING

To prevent SERIOUS INJURY or DEATH from improper Force Adjustment:

- DO NOT adjust force to compensate binding or sticking of the garage door. Call a qualified garage door service person to make necessary adjustments in case of binding.
- DO NOT increase force beyond minimum force required for closing the door. Too much force will cause improper operation of safety reversal mechanism.
- After ANY adjustments, Safety Reverse Test MUST be performed to ensure the door reverses on contact with a 1.5" high object (2x4 laid flat).
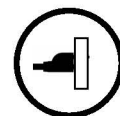
NOTICE: This opener will not work until you set the travel limits and the travel force adjustment. The opener will beep 5 times if it is operated without programming.

I. Setting UP Limit
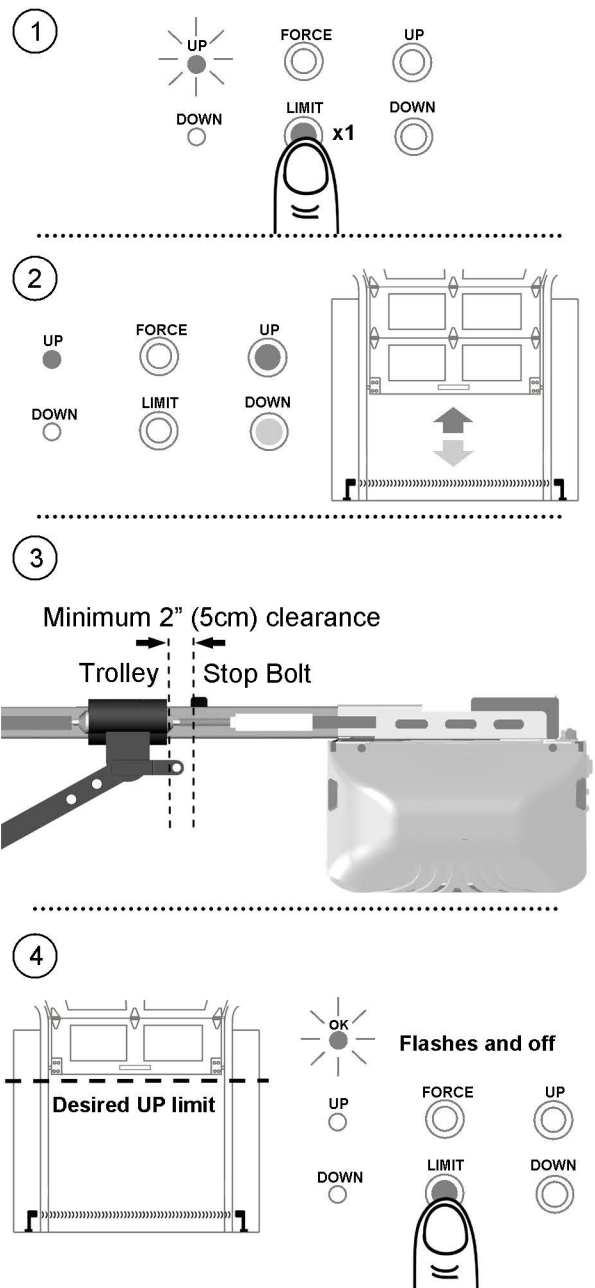
About Travel Limit Adjustment

Limit Adjustments regulate the fully-open (UP limit) position and fully-closed (DOWN limit) position, at which the door will stop when opening and closing.

Make sure the trolley is engaged before proceeding adjustments.

I. Setting UP Limit

1. Press "LIMIT" button once to enter Travel Limit Adjustment. "UP" indicator (green) is on*.

   *NOTE: Once you have pressed and released the "Limit" button, the "UP" light will stay for 10 seconds for you to press the "UP" button and begin programming. If the "UP" light goes out before you are finished you need to start over.

2. Press & hold the "UP" button, the door travels up. You may use both "UP" or "DOWN" buttons to inch-adjust the door to the desired UP limit position.

3. Make sure there is enough clearance for your vehicle(s), and there is a minimum 2" (5cm) gap between Trolley and Stop Bolt.

4. Once the door is at the desired UP limit position, press "LIMIT" button once, "OK" indicator (orange) flashes and goes off. The UP limit is set.

⚠ WARNING
To prevent SERIOUS INJURY or DEATH from improper Force Adjustment:
- DO NOT adjust force to compensate binding or sticking of the garage door. Call a qualified garage door service person to make necessary adjustments in case of binding.
- DO NOT increase force beyond minimum force required for closing the door. Too much force will cause improper operation of safety reversal mechanism.
- After ANY adjustments, Safety Reverse Test MUST be performed to ensure the door reverses on contact with a 1.5" high object (2x4 laid flat).

NOTICE: The opener will not work until you set the travel limits and the travel force adjustment.

II. Setting DOWN Limit

①

②

③ Flashes and off

Desired DOWN limit
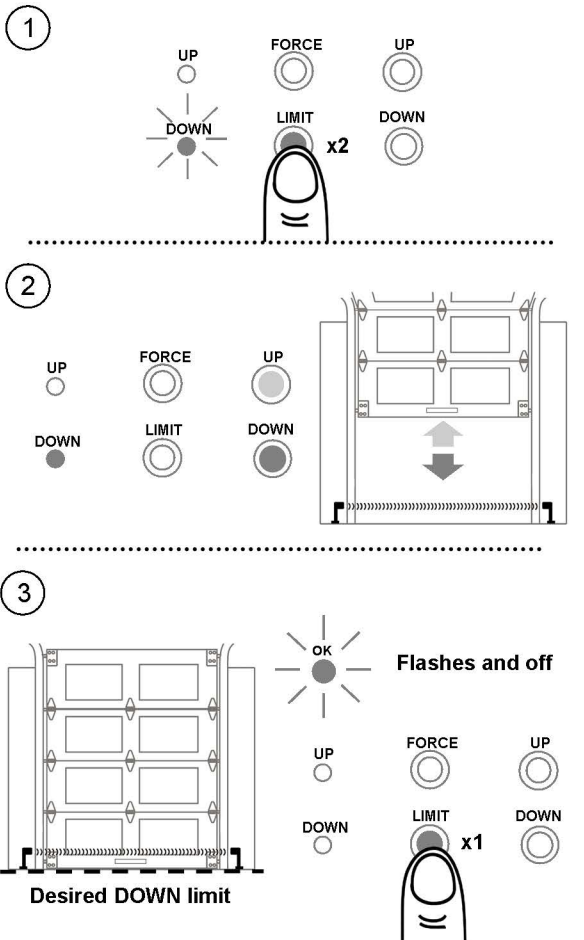
CAUTION: WHILE SETTING THE DOWN LIMIT, CAREFULLY WATCH DOOR TRAVEL DISTANCE. RELEASE BUTTON WHEN THE DOOR MAKES CONTACT WITH THE GROUND!

II. Setting DOWN Limit

1. Following UP limit setting, press "LIMIT" button twice to enter DOWN-limit setting. "DOWN" indicator (red) is on*.

   *NOTE: Once you have pressed and released the "LIMIT" button, it will stay for 10 seconds for you to press the "DOWN" button and begin programming. If the "DOWN" light goes out before you are finished you need to start over.

2. Press & hold the "DOWN" button, the door travels down. You may use both "UP" or "DOWN" buttons to inch-adjust the door to the desired DOWN limit position.

3. Once the door is at the desired DOWN limit position, press "LIMIT" button once, "OK" indicator (orange) flashes and goes off. DOWN limit is set.

Both "UP" and "DOWN" (green and red) indicators are now on, indicating that both UP and DOWN limits are set, and the opener is ready for Auto Force Adjustment, see Page19.

Auto Force Adjustment

<table>
<tr><td colspan="2" align="center">⚠ WARNING</td></tr>
<tr><td colspan="2">To prevent SERIOUS INJURY or DEATH from improper Force Adjustment:</td></tr>
<tr><td>
- DO NOT adjust force to compensate binding or sticking of the garage door. Call a qualified garage door service person to make necessary adjustments in case of binding.

- DO NOT increase force beyond minimum force required for closing the door. Too much force will cause improper operation of safety reversal mechanism.

- After ANY adjustments, Safety Reverse Test MUST be performed to ensure the door reverses on contact with a 1.5" high object (2x4 laid flat).
</td></tr>
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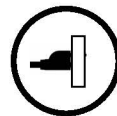
Auto Force Adjustment
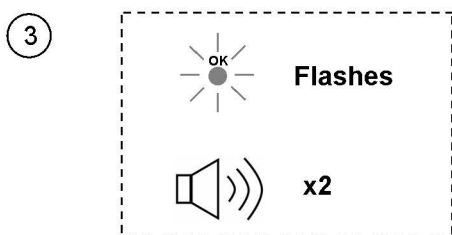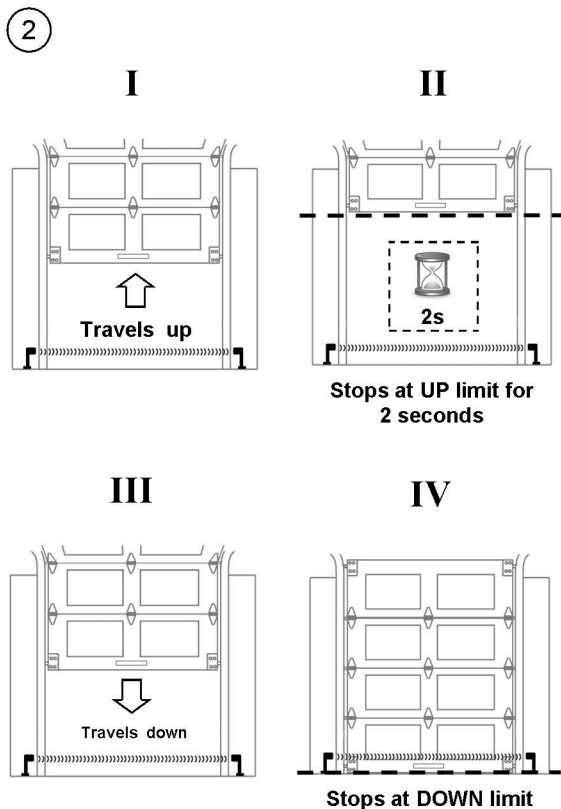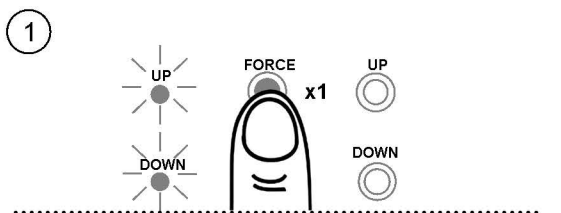
Following limit-setting, the unit is now ready to automatically adjust the forces for opening and closing the door. Proceed with the following steps to complete adjustment.

1. With both "UP" and "DOWN" indicators are on after Travel Limit Adjustment, press the "FORCE" button once to enter Auto Force Adjustment.

2. The door will travel up automatically (I) and stop at UP limit for 2 seconds (II). Door will then travel down automatically (III) and stop at down limit (IV).

3. The "OK" indicator (orange) will flash with beeps, the Auto Force Adjustment is completed.

Final Adjustments and Testing

Travels up

1-1/2" (3.8cm) thick solid object (or 2x4 laid flat)

Travels down

Door reverses and beeps upon strike

Testing the Safety Reverse System

The Safety Reverse System prevents the door from closing when an obstruction is present.

1. Open the door by using the Push Button.

2. Place a 1-1/2" (3.8cm) thick solid object (or 2x4 laid flat) on floor under the center of garage door.

3. Keeping the door in sight, use the Push Button to close the door.

4. The door MUST REVERSE and beep within 1.5 seconds upon striking the object , and stop at the fully open position.

5. The Safety Reverse System works properly and the opener is ready to use.

If the door fails to reverse upon contact with obstruction, adjust the Opener as follows:

The close travel maybe inadequate, slightly increase the DOWN limit. (See Travel **Limit Adjustment** on page 17-19)

Conduct the test again. If the door reverses on contact, remove the object and run at least 3 COMPLETE travel cycles to ensure proper adjustment.

If the Opener still fails the Safety Reverse Test, call a qualified technician for door adjustment.

Emitter

GREEN LIGHT

Flashes

Beeps and reverses upon obstruction

x20

Sensor

RED LIGHT

OFF

Testing the Photo Eye Safety System

1. Open the door by using the Push Button.

2. Make sure both Photo Eyes steadily emit the green and red indicator lights. (If not, check alignment)

3. Place an object under the door about 8" (20cm) high by 12" (30cm) wide (the opener carton can be used),

4. The green indicator light on the emitter eye should flash.

5. The red indicator light on the sensor eye should be dimmed.

6. Keep the door in sight and use the Door Control Console, Push Button or Control to try to close the door.

7. The door should NOT move more than 1" (2.5cm) and the opener will beep.
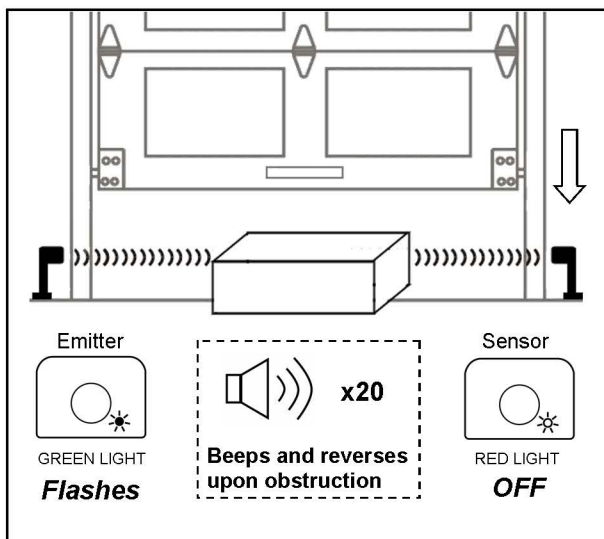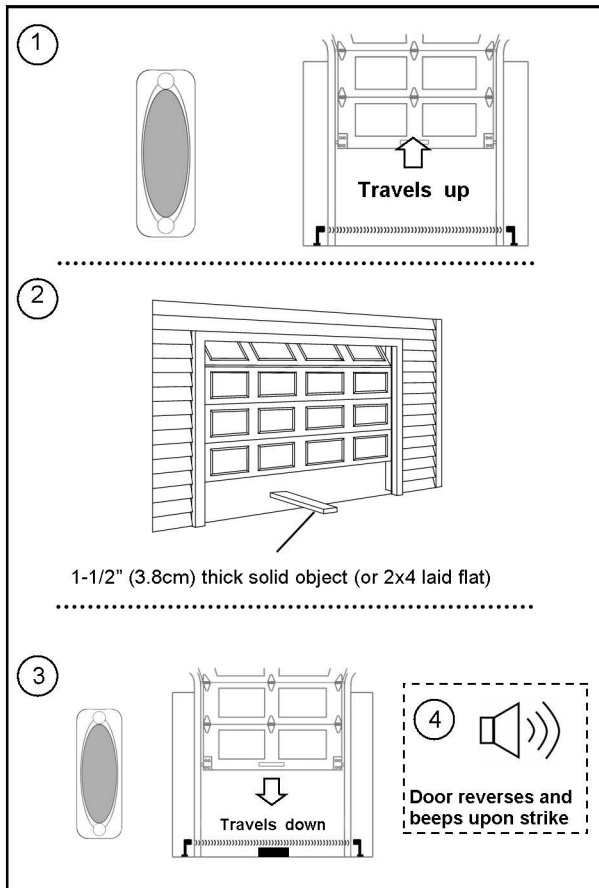
Programming Remote Controls

⚠ WARNING

To Prevent SERIOUS INJURY or DEATH:
- Keep remote control and battery out of reach of children.
- NEVER permit children to access the Door Control Console, Push Button nor Remote Controls.
- Operate the door ONLY when it is properly adjusted, and there are no obstructions present.
- ALWAYS keep a moving door in sight until completely closed. NEVER cross the path of a moving door.
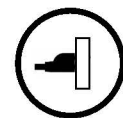
To reduce risk of fire, explosion or electric shock:
- DO NOT short circuit, recharge, dissemble or heat the battery.
- Replace with 23AE 12 Volt batteries ONLY. Dispose of batteries properly.

Signal and Battery Indicator

Visor Clip

Holster

Fig.1

LEARN

OK

30 seconds

OK x2

x2
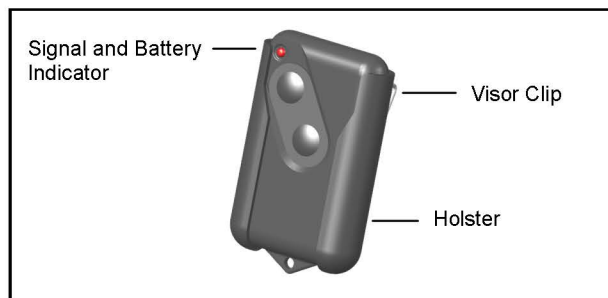
Fig.2

To Program Remote Control (s):

1. Press/release the "LEARN" button once on the rear control panel, "OK" LED will glow and beep. The unit is now ready to accept a remote control in the next 30 seconds as shown in Fig.2.

2. Press/release any desired button on the Remote Control.

3. The "OK" LED will flash and beep twice indicating Remote Control is stored successfully.

Up to 20 Remote Controls (including wireless keypad codes) can be added to the unit by repeating the above procedures.

If more than 20 Remote Controls are stored, the first stored Remote Control will be replaced. (i.e. the 21st Remote Control replaces the 1st stored Remote Control .)

Removing ALL Remote Controls:

To remove ALL Remote Controls from memory, press and hold the "LEARN" button for 5 seconds. The "OK" LED will flash and beep 2 times indicating. ALL Remote Controls have been removed from memory.
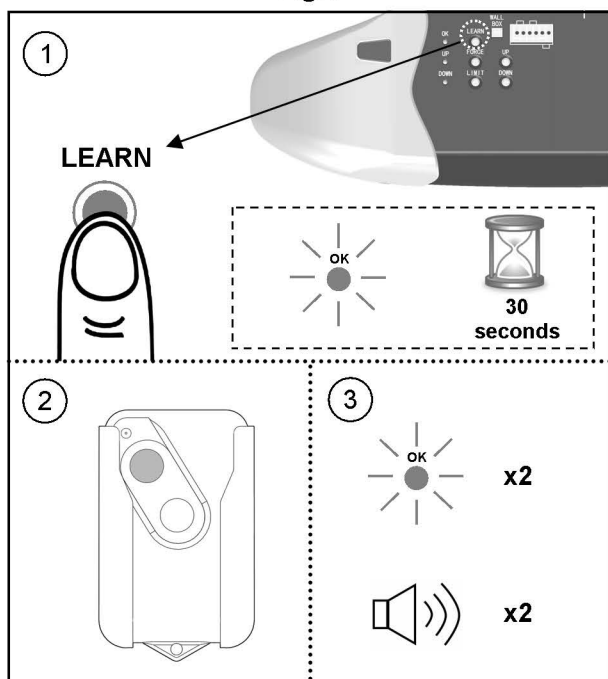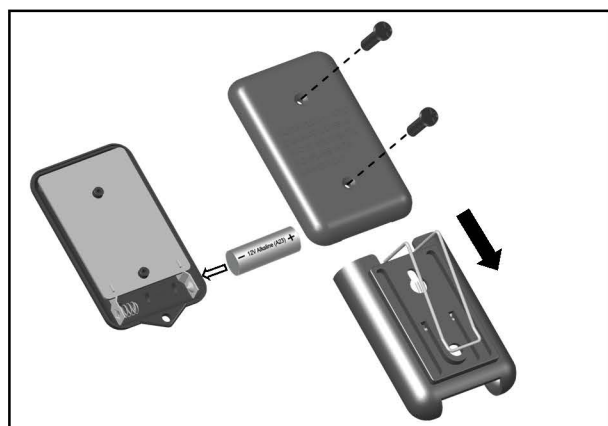
Fig.3

Replacing Remote Control Battery:

When the battery of the Remote Control is low, the indicator light will become dim and/or the range of the Remote Control will decrease. To replace the battery, remove the battery cover from the Remote Control as shown in Fig 4. Replace with a 23AE 12 volt alkaline battery with polarity shown in Fig.3.

⚠ WARNING
To Prevent SERIOUS INJURY or DEATH: - READ AND FOLLOW ALL INSTRUCTIONS AND WARNINGS IN THE OWNER'S MANUAL AND LABELS - Keep Remote Control and battery out of reach of children. - NEVER permit children to access the Door Control Console, Push Button or Remote Controls. - Operate the door ONLY when it is properly adjusted, and there are no obstructions and is in clear sight. - ALWAYS keep a moving door in sight until completely closed. NEVER cross the path of a moving door. - If Travel limit adjustment is made, Force Adjustment may also needed. - After ANY adjustments, the Safety Reverse Test MUST be performed to ensure the door reverses on contact with a 1-1/2" thick object (2x4 laid flat). - ALWAYS ensure that your door is balanced and in good working condition.

Attach the protective cover to the opener after installation and adjustment is completed.

Emergency Release Handle
Push Button
Photo Eye Safety System
Invisible Light Beam
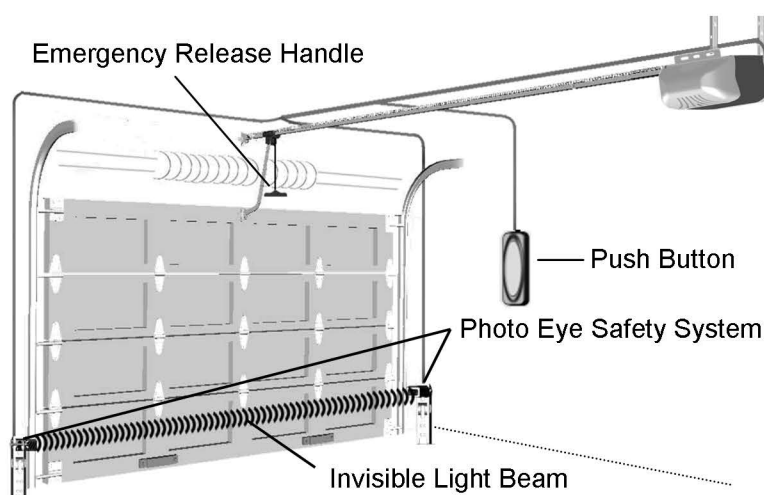
Actual Operating Scenario

Activating the Opener

Controls	Operation
Push Button (Indoor)	Momentary press the "DOOR" button on the Push Button, the door starts to move, and controls as follows: - Open or close the door. - Reverse the door while it is closing - Stops the door while it is opening. Constant press to close the door when the Photo Eye Safety System is not installed, misaligned or obstructed INTENTIONALLY. Press and hold the button until door is fully closed.
Remote Control	Remote distance up to 100ft. in open field. For safety concerns, the Remote Control WILL NOT work if the Photo Eye Safety System is not properly installed and aligned.
Wireless Keyless Entry Keypad*	Program the Wireless Keyless Entry Keypad accordingly and access the door using the PIN code.

*Optional

Door Status vs. Activation

Door status	Activation using Push Button / Remote Control
Door at fully open / close position	Door will move to fully close / open position
Door is closing	Door will reverse
Door is opening	Door will stop
Door is stopped as intended in partially open position	Close
Door is obstructed while closing	Door will reverse while flashing courtesy light
Door is obstructed while opening	Door will stop
Door is fully opened and Photo Eye System is obstructed	Door will not close

Courtesy Light / Buzzer Responses

Operation / Condition	Courtesy Light / Buzzer Responses
Opener is initially plugged-in (no travel limits stored)	Flash x 5
Reconnecting power (with travel limits stored)	Flash x 3
"LEARN" button is pressed	Beep x 1
Upon activation	Light On for 4.5 minutes
Upon activation by remote controls	Beep x 1, Light On for 4.5 minutes
Remote Control / Keyless Entry PIN code accepted	Beep x 2
Opener is operated without programming	Beep x 5
Door travels with abnormal speed	Beep x 12 (1 beep / second)
Photo Eye System is obstructed during door-closing	Beep x 20
The door is obstructed during travel	Beep x 25

Manual Operation

⚠ WARNING
To Prevent SERIOUS INJURY or DEATH: - Use Emergency Release to disconnect Trolley ONLY when the door is CLOSED to prevent unexpected rapid falling in case of a unbalanced / poor-conditioned door. - Use Emergency Release ONLY when doorway is clear of persons and obstructions. - DO NOT use Emergency Release to pull the door open or closed.

Lever

CONNECT

DISCONNECT

Flip to reconnect
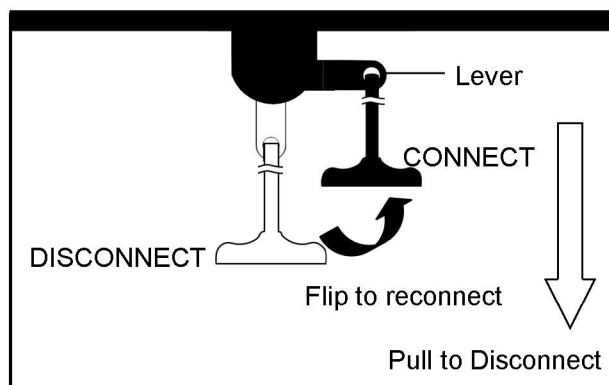
Pull to Disconnect

In case of a power failure or door obstruction, PULL EMERGENCY Handle to release door from Opener.

To Disconnect Trolley for Manual Operation

With the door closed, pull down the emergency release handle to the DISCONNECT position. The door can be raised / lowered manually.

To Re-connect Trolley

Pull the Handle toward the Opener so that the lever will flip up to the CONNECT position. The Trolley will reconnect itself when the Opener is activated or when the door is manually opened/closed.

Maintenance

Schedule	Maintenance
Once a month	Door balance test, refer to page 4. Safety reverse test, refer to page 20.
Twice a year	Check chain/belt tension (refer to page 6 for adjustment if necessary).
Once a year	- Limit and Force adjustment may be necessary due to weather conditions. Refer to pages 17-19 for adjustment. Conduct Safety Reverse Test after ANY adjustments. - Lubricate door rollers, bearings and hinges. The Opener is permanently lubricated, DO NOT lubricate or grease the Opener, rail or door tracks.

Troubleshooting

Problem	Possible Cause / Solution
Opener does not close and beeps	The Photo Eye may be obstructed, not properly aligned or installed, check connection and alignment referring to pages 13 & 16.
Opener does not respond to Remote Control	- Refer page 21 to reprogram Remote Control. - Check Remote Control battery.
Opener stops before reaching full open / close position	Travel Limit is not properly adjusted, check adjustment referring to pages 17-19. Conduct Safety Reverse Test after ANY adjustment.

The door reverses unintentionally	- Make sure the Photo Eye Safety System is aligned and clear of obstructions.
	- If door is replaced or door condition has significant changes,
	  - Refer to page 4 to check the door balance
	  - Refer to page 17-19 to re-adjust Travel Limits and Travel Force.

The door reverses upon touching the floor and the courtesy light flashes	Refer to page 17-19 to reset Travel Limits and Travel Force.
The Opener does not close the door and the indicator on one of the Photo Eyes flashes	The Photo Eye Safety System is misaligned or obstructed, refer to page16 for proper alignment.
The Opener is working properly but the courtesy light does not turn on	Replace light bulb (A19 incandescent Max.100W).
The courtesy light does not turn off	Defective Logic Board.

Note: If installing operators on two doors in the same garage, to ensure proper operation, Photo Eyes should be aligned as below:

Repair Parts
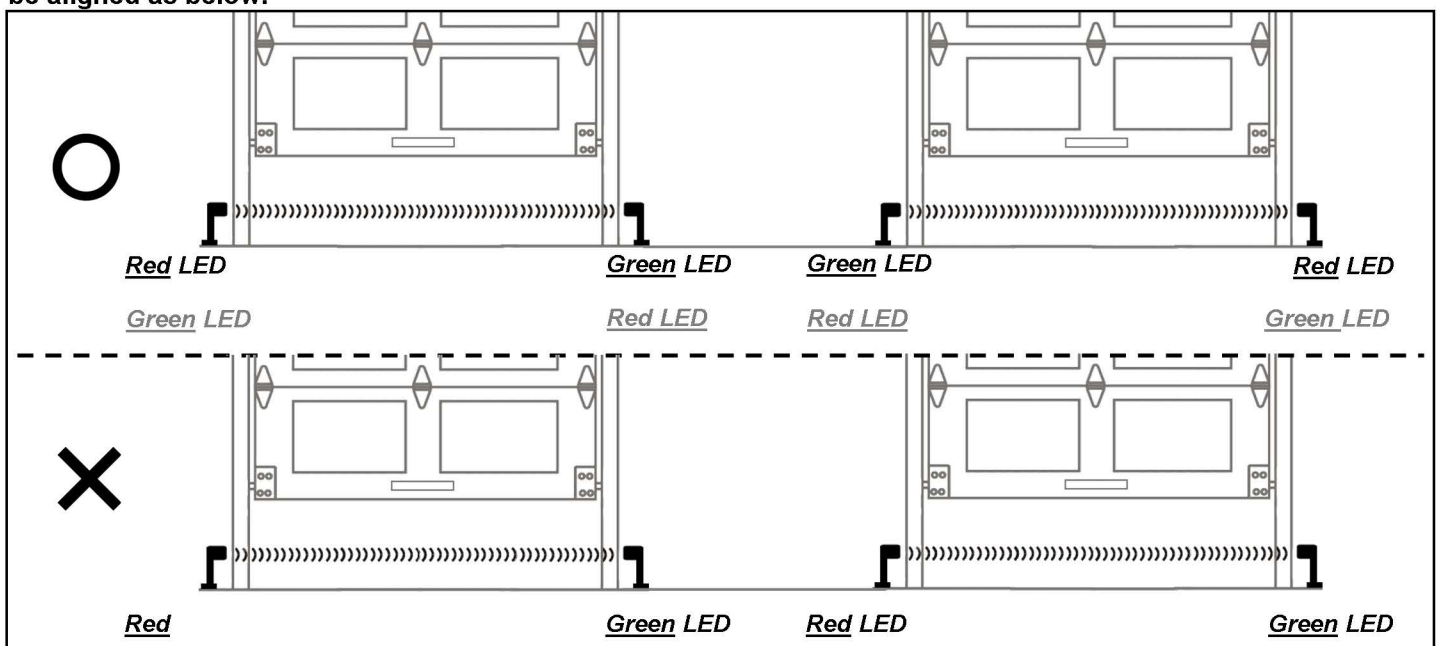
Installation Parts
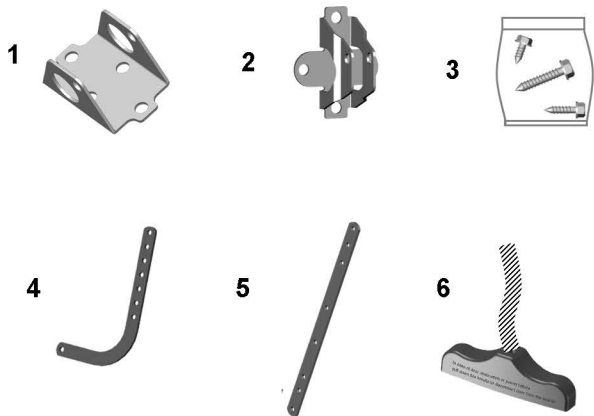
Item	Part No.	Name / Description
1	GUDT-027	Header Bracket
2	GUDT-022	Door Bracket
3	GUDT-023	Hardware Bag (Installation hardware shown on P.3)
4	GUDT-024	Curved Door Arm
5	GUDT-025	Straight Door Arm
6	GUDT-026	Emergency Release Handle & Rope

Accessories
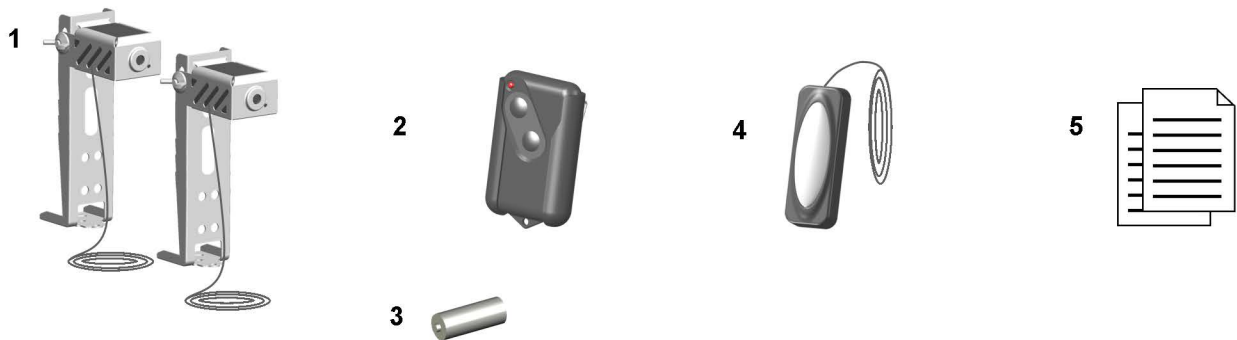
Item	Part No.	Name / Description
1	GUDT-208	Photo Eye Safety System (Emitter + Sensor with Brackets)
2	GUDT-206	Remote Control
3	GUDT-203	12V AE23 Alkaline Battery
4	GUDT-207	Push Button
5	GUDT-209	Owner's manual
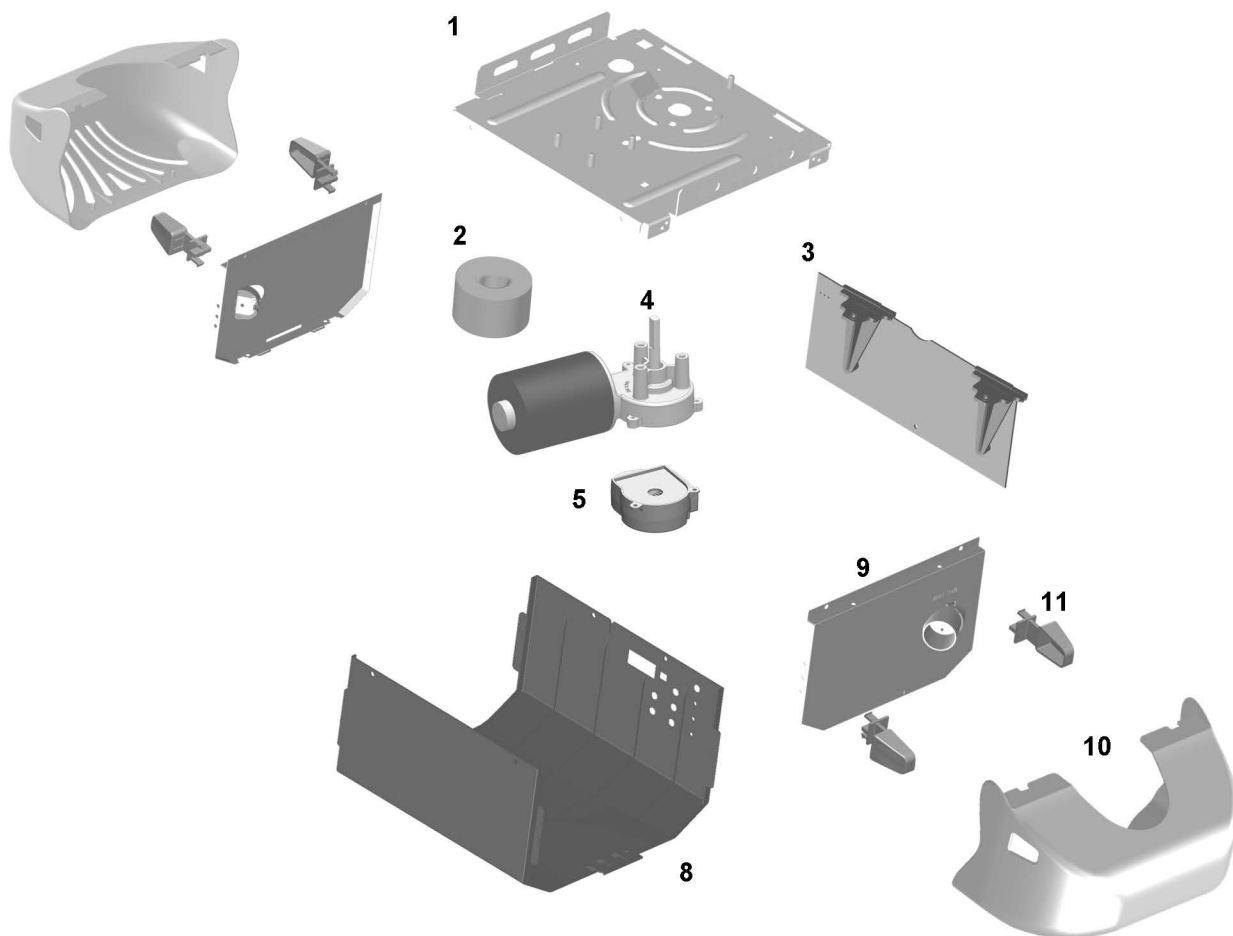
Item	Part No.	Name / Description
1	GUDT-301	Chassis
2	GUDT-302	Transformer
3	GUDT-312	Logic Board
4	GUDT-313	DC Motor (with encoder shaft)
5	GUDT-314	Encoder Module
8	GUDT-308	Opener Cover
9	GUDT-309	Lamp Plate
10	GUDT-310	Lamp Dome
11	GUDT-311	Lamp Dome Clip

* Should be replaced by qualified technician only

Guardian

WARRANTY

GARAGE DOOR OPERATORS

Manufacturer hereby warrants:

1. Garage Door Operators to be free from defects in material and workmanship for a period of five (5) years for motors and one (1) year for Electronics and Mechanics from date of purchase, if installed by an authorized reseller, otherwise if installed by the purchaser one (1) year will apply.

2. Garage Door Operators (Commercial and Industrial Application) to be free from defects in material and workmanship for a period of three (3) months from date of purchase.

3. Where the garage door operator has been returned to the manufacturer for Warranty repairs, all costs incurred in the return will be paid for by the purchaser. If in the opinion of the manufacturer the product is faulty, all defective parts will be replaced at no charge to the purchaser.

4. Proof of purchase must be given to the manufacturer at time of Warranty claim.

5. The manufacturer reserves the right to modify any existing or future products without incurring any obligation to incorporate such modification to products already manufactured or to which this Warranty may relate.

6. Warranty only applies if this product has been installed to the Manufacturers recommendation

7. This Warranty does not apply to any defect, loss or damage arising or caused directly or indirectly by or as a result of :
   (i) Any defect (including detects in component parts or accessories) arising from or attributable to the failure to carry out normal preventive maintenance or adjustment itself.
   (ii) To any additional damage or deterioration arising from attributable to the operation of the Operator after it is known to be defective.

8. Exclusions to Warranty Period:
   (i) Repair or Warranty Work - three (3) month

9. Not included in Warranty:
   (i) Batteries.
   (ii) Fuses.
   (iii) Light bulbs.
   (iv) Sensitivity adjustment.
   (v) Handheld Remote Controls and receiver range.

10. Note : All Warranties will be void subject to:
    (i) Water damage and condensation.
    (ii) Power supply black out or surge.
    (iii) Act of God.
    (iv) Modification or adjustment by unauthorized persons.
    (v) Any interference from radio (including citizen band radios or and other electronic device)
    (vi) Preventative maintenance and regular servicing not undertaken.
    (vii) Account not paid in full by the purchaser.

11. Subject only to the provisions of the Trade practices Act and any legislation of the State or Territory wherein the operators of the Manufacturer have been sold or installed (which may confer certain rights on consumers of goods and those rights by such legislation may be rendered incapable of exclusion) this Warranty supersedes and excludes all representations, warranties and conditions whether expressed or implied by law and the Manufacturer shall have no liability or otherwise than herein provided for any loss and damage (including consequential loss and damage, loss of use or profits) by reasons of delay, defective or faulty materials or workmanship, negligence or any act, matter or thing done permitted or omitted to be done by the Manufacturer.

WARRANTY

THIS WARRANTY FORM SHOULD BE COMPLETED AT TIME OF INSTALLATION

This Warranty Form should be retained by the purchaser at all times and produced with the purchase docket by the Purchaser as proof of the purchase date. _____

PURCHASER'S NAME: _____

PURCHASER'S ADDRESS: _____

INSTALLED BY: _____

INSTALLER'S ADDRESS: _____

INSTALLER'S SIGNATURE: _____

SERIAL NUMBER OF THE OPERATOR: _____

GUARDIAN SERVICE

Your operator has been installed by a professional installation specialist. If service information is required please contact the installing company or your local Guardian dealer. Look for your Guardian dealer online, in the yellow pages or call our service number for a dealer near you.

Service number : **1-424-272-6998**

Please have the following information when you call:

• Model number of the operator

• Serial number of the operator--located on the bar code label on top of the opener, above the adjustment buttons

Installation Quick Reference for Models 615 & 628

⚠️ **The door operator should always be assembled and installed in the closed position.**

🄶uardian™

I. Setting UP Limit

① UP / DOWN / FORCE / LIMIT ×1 / UP / DOWN

Press and release LIMIT button

② UP / DOWN / FORCE / LIMIT / UP / DOWN

Press UP button to adjust up limit

③ OK — LED flashes once
Desired UP limit
FORCE / LIMIT ×1 / UP / DOWN

Press and release LIMIT button when desired up limit position is reached

III. Auto Force Adjustment

① UP / DOWN / FORCE ×1 / UP / DOWN

Press and release FORCE button

②
I — Travels up
II — Stops at UP limit for 2 seconds (2s)
III — Travels down
IV — Stops at DOWN limit

③ OK — Flashes ×3

II. Setting DOWN Limit

① UP / DOWN / FORCE / LIMIT ×2 / UP / DOWN

Press and release LIMIT button twice

② UP / DOWN / FORCE / LIMIT / UP / DOWN

Press DOWN button to adjust down limit

③ OK — LED flashes once
Desired DOWN limit
UP / DOWN / FORCE / LIMIT ×1 / UP / DOWN

Press and release Limit button when desired down limit position is reached

Manual Force Setting (For Installers ONLY!)

① **UP Force Setting** / **DOWN Force Setting**
UP / DOWN / FORCE

Press and hold FORCE button for 2 seconds to enter "UP Force Setting".

Once in "UP Force Setting" press and release force button to toggle between DOWN Force Setting & UP Force Setting.
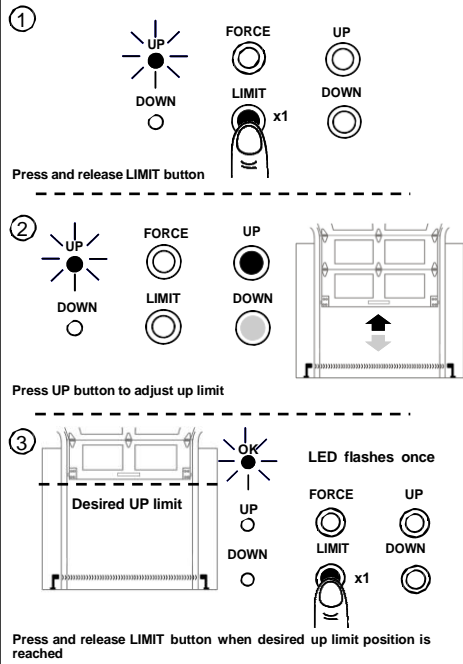
② UP / DOWN / UP / DOWN

To Adjust the Force, press and release UP/DOWN button to increase/decrease force. Each press represents one increment and is confirmed by a single beep. When the maximum amount of force allowed is reached each additional press will result in 2 quick beeps indicating the maximum force allowed has been reached.

③ FORCE / OK ×3

Press and release "FORCE" button to complete force setting, the "OK" LED will flash and beep 3 times.

Switching Operation Modes

I. Switching from Normal mode to Overdrive mode
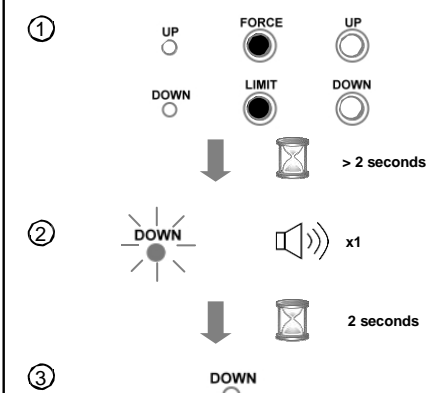
① UP / DOWN / FORCE / LIMIT / UP / DOWN — > 2 seconds

② DOWN ×1 — 2 seconds

③ DOWN

II. Switching from Overdrive mode to Normal mode

Method I. Switching Mode

UP / DOWN / FORCE / LIMIT / UP / DOWN — > 2 seconds

UP ×1

Method II. Restore to factory default

FORCE / LIMIT / UP / DOWN — > 5 seconds

Courtesy LED flashes x5
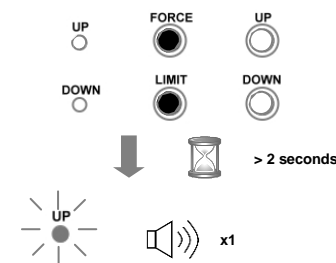
I. Switching from Normal mode to Overdrive mode

Press and hold both "FORCE" & "LIMIT" buttons simultaneously for 2 seconds until "DOWN" LED illuminates. (The red DOWN LED indicates the operator has successfully been placed in "Overdrive Mode"). The "DOWN" LED will turn off in 2 seconds. Please proceed to program Travel Limits.

NOTE:

All previous limit settings will be cleared upon switching modes.

Soft start / stop feature is disabled in overdrive mode.

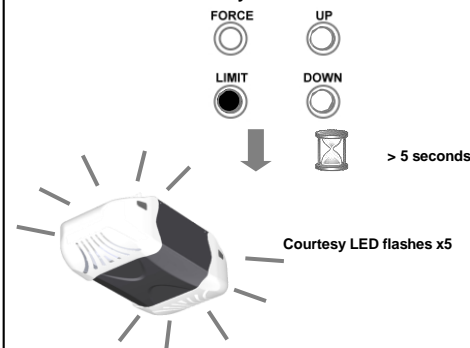## II. Switching from Overdrive mode to Normal mode

Method I. Switching Mode

Repeat #1 in Switching from Normal Mode to Overdrive Mode. The "UP" LED indicates the operator has successfully been placed in "Normal Mode". The "UP" LED will turn off in 2 seconds. Please proceed to program Travel Limits.

NOTE:

All previous limit settings will be cleared upon switching modes.

Method II. Restore to factory default

1. Press and hold "LIMIT" button for about 5 seconds
2. The unit will restart by itself with 5 courtesy LED flashes.
3. The unit is returned to factory default and is ready for programming limits.

NOTE:

All previous limit settings will be cleared upon switching modes.

⚠️ **Warning!** For your safety, Over-Drive Mode operation is NOT recommended. Please check your door immediately!

See Instruction Manual for Further Information.

Courtesy Light & Sound Responses—615 & 628

Operation / Condition	Courtesy Light / Buzzer Responses	Trouble shooting
Opener is initially plugged-in (no travel limits stored)	Flashes 5 times (5X)	Unplug & reconnect operator to power Check if the operator has limits stored
Reconnecting power (with travel limits stored)	Flashes 3 times (3X)	Confirms limits stored
"LEARN" button is pressed	Beeps 1 time (1X)	Radio learn cycle initiated
Upon activation	Light On for 2.5 minutes	Logic initiated
Upon activation by remote transmitters	Beeps 1x (1X), Light On for 2.5 minutes	Check for learned remote
Remote Transmitter or Keyless Entry PIN code accepted	Beeps 2 times (2X)	Code accepted during Learn cycle All codes have been erased during Erase cycle Check vacation lock switch (ON) if no movement
Upon programming remote control or keypad	Beeps 3 times (3X)	Remote control code already stored in memory
Opener is operated without programming	Beeps 5 times (5X)	Program or reprogram limits
Door does not move or travels at abnormal speed	Beeps 12x (12X)	Check power, continuity Stuck relay—tap relay or panel to free If only 1" or 28" travel--check RPM encoder
Photo Eye System is obstructed during door-closing	Beeps 20 times (20X)	Check PE alignment (solid red & green LEDs)
The door is obstructed during travel	Beeps 25 times (25X)	Clear obstruction or manually increase force

Courtesy Light & Sound Responses—315, 415 & 425

Operation / Condition	Courtesy Light Response	Troubleshooting
Opener is initially plugged-in / Power restored	Flashes 5 times (5X)	Operator powered
Upon Opener activation	Turns on for 3-1/2 minutes and turns off automatically	Logic initiated
"LEARN" button is pressed	Turns on for 30 seconds	Program remotes when light is on
Remote Control / Keyless Entry PIN code accepted	Flashes 5 times (5X)	Confirm learn of remote control
The Photo Eye System is obstructed during door-closing or door is obstructed during opening	Flashes for 30 seconds (Re-align and clear obstruction)	Clear any obstruction, check PE (solid red & green LED), PE jumper, increase force setting
Opener motor overheat (Thermal Protection)	Flashes 5 times (5X) Wait about 15 minutes to cool down	Normal condition. Motor will operate again when cool
Maximum or Minimum Force setting reached	Flashes 6 times (6X)	12 increments—flashes at min/max force setting