

Linear 661



Nice G.O.
Smart
Connected



Smart Garage Door Operator

EN - Installation and Operation Instructions

For more information, please visit www.devancocanada.com
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Important Safety Notes

For Residential Sectional Type Doors Only

Please read the instructions carefully! This garage door operator is designed to provide safe and reliable service if installed and tested as described in these instructions. A garage door is the largest mechanical appliance in a residence. Care must be taken to prevent injury or death during installation and operation of the garage door and garage door operator.

THE FOLLOWING FORMATS ARE USED FOR SAFETY NOTES IN THESE INSTRUCTIONS.

WARNING

This type of warning note is used to indicate possible mechanical hazards that may cause serious injuries or death.

WARNING

This type of warning note is used to indicate possible electrical shock hazards that may cause serious injuries or death.

CAUTION

This type of warning note is used to indicate the possibility of damage to the garage door or garage door operator.

Important Installation Safety Instructions

WARNING

TO REDUCE THE RISK OF SEVERE INJURY OR DEATH TO PERSONS, REVIEW THESE INSTALLATION SAFETY STEPS BEFORE PROCEEDING

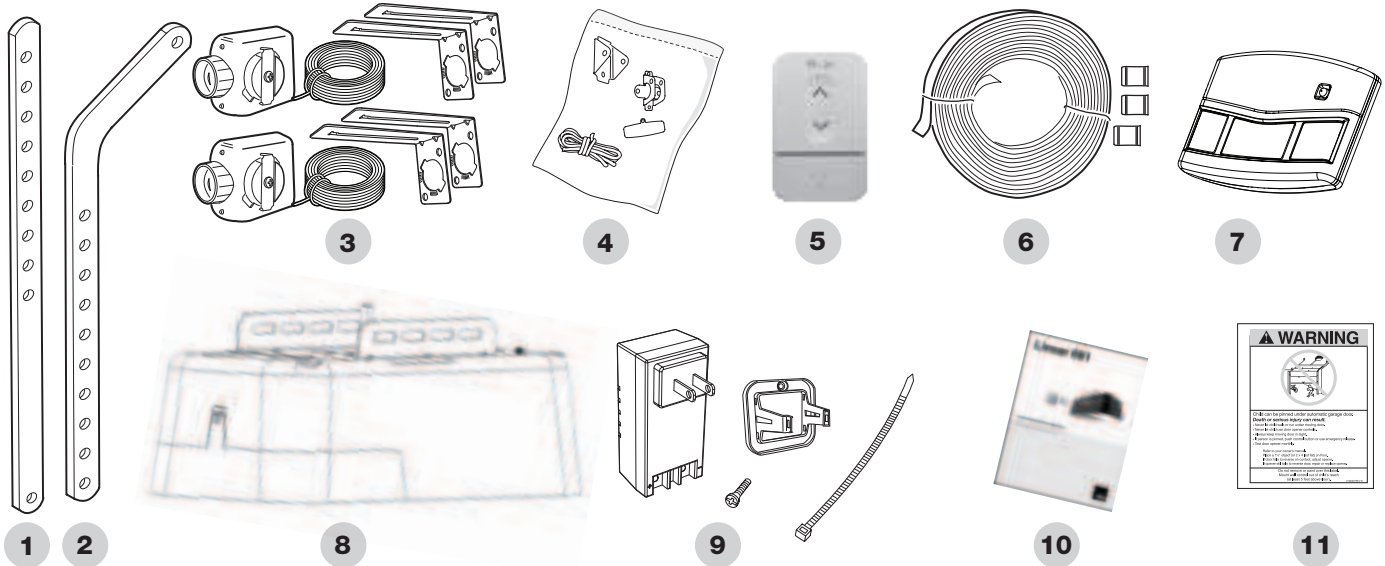
1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
2. Install only on a properly balanced sectional garage door. An improperly balanced door could result in severe injury or death. Repairs to cables, spring assemblies, and other hardware must be made by a qualified service person before installing the opener.
3. Disable all locks and remove all ropes connected to the garage door before installing the opener. Ropes connected to a garage door can cause entanglement and death.
4. If possible, install door opener 7 feet or more above the floor with the manual release handle mounted 6 feet above the floor.
5. Do not connect the opener to the power source until instructed to do so.
6. Locate the wall station or push button within sight of the door at a minimum height of 5 feet so that small children cannot reach it. Locate the wall station or push button away from all moving parts of the door.
7. Install the User Safety Label on the wall adjacent to the wall station or push button.
8. Upon completion of the installation, the door must reverse when it comes in contact with a 1-1/2" high object (or a 2x4 laid flat at the center of the door) on the floor and when the infrared safety beam is blocked.
9. Do not wear watches, rings or loose clothing while installing or servicing an opener. Jewelry or loose clothing can be caught in the mechanism of the garage door or the opener.
10. DISCONNECT THE ELECTRIC POWER AND BATTERY CONNECTION FROM THE GARAGE DOOR OPENER BEFORE MAKING ANY REPAIRS OR REMOVING THE COVER.
11. Disconnecting the Door from the Opener: With the door in any position (preferably closed), carefully pull the red release handle. USE CAUTION IF THE DOOR IS OPEN. An open or partially open door may fall rapidly if disconnected from the opener. Do not allow anyone in the path of the door.
12. Use this operator only with sectional overhead door no more than 8 feet tall.

IMPORTANT

THIS LINEAR661 OPERATOR INSTALLATION SHOULD ONLY BE INSTALLED BY A QUALIFIED GARAGE DOOR PROFESSIONAL.

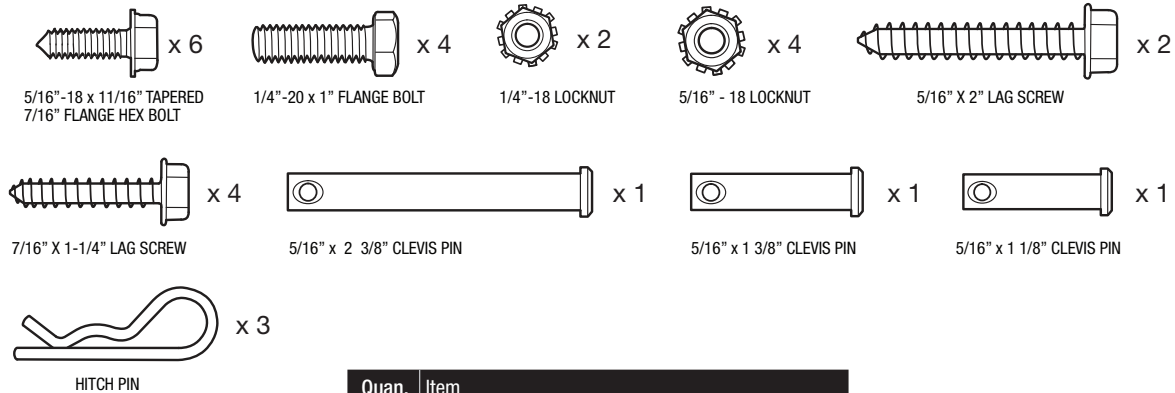
IT IS THE INSTALLER'S RESPONSIBILITY TO ENSURE ALL AUTOMATED GARAGE DOOR INSTALLATIONS ARE UL-325 COMPLIANT. DO NOT PROCEED WITH THIS INSTALLATION IF YOU ARE NOT TRAINED AND AWARE OF THESE REQUIREMENTS AND GUIDELINES.

Parts Included



ID	Part
1	Door Arm (Straight)
2	Door Arm (Bent)
3	Safety Beam Sender & Receiver (with wire) / Brackets (x4)
4	Hardware Kit
5	Wall Station
6	Wire Kit
7	MTS3 Remote
8	Garage Door Operator
9	Power Supply, Retaining Bracket and Screw, Zip Tie
10	Manual
11	Warning Label

Assembly Hardware Included



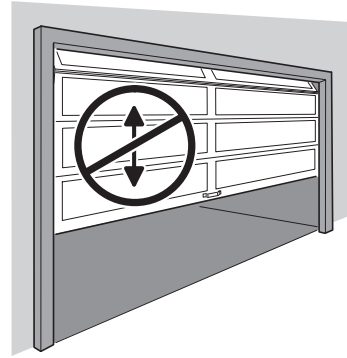
Quan.	Item
6	5/16" - 18 x 11/16" Tapered 7/16" Flange Hex Bolt
4	1/4" - 20 x 1" Flange Bolt
2	1/4" - 20 Locknut
4	5/16" - 18 Locknut
2	1/4" X 2" Lag Screw
4	7/16" X 1 - 1/4" Lag Screw
1	5/16" x 1 1/8" Clevis Pin
1	5/16" x 1 3/8" Clevis Pin
1	5/16" x 2 3/8" Clevis Pin
3	Hitch Pin

Installing the Garage Door Operator

Check the Door Balance

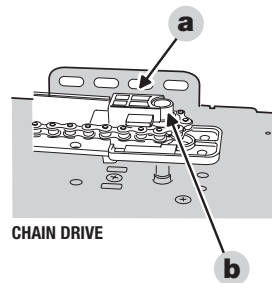
- From outside the garage, slowly open the door all the way and then close it all the way. Notice if there is any binding, sticking or rubbing. The door should move smoothly in both directions.
- Raise the garage door up about halfway. Carefully release the door, and see if the door balances. It should stay in place.
- Close the door.

IMPORTANT: If the garage door is unbalanced or the door travel isn't smooth, have a qualified garage door professional adjust or repair the door.

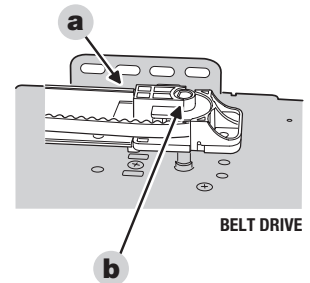


Attach the Rail to the Operator

- To protect the finish, place the operator head on the garage floor with cardboard underneath.
- Align the rail (a) over the center of the operator head (b).
- Be certain the Flat on the sprocket lines up with the Flat on the drive shaft.



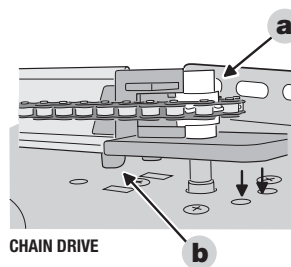
CHAIN DRIVE



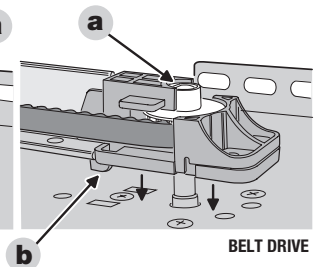
BELT DRIVE

Mating the Sprocket and Shaft

- Slide the sprocket onto the shaft.
- Tabs should fit into the slots.



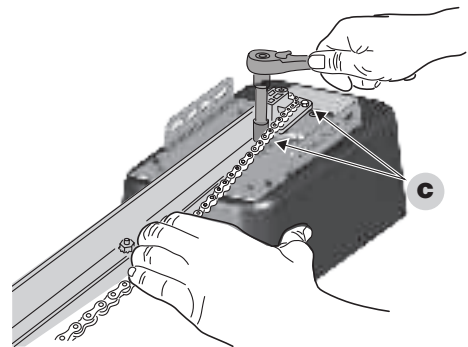
CHAIN DRIVE



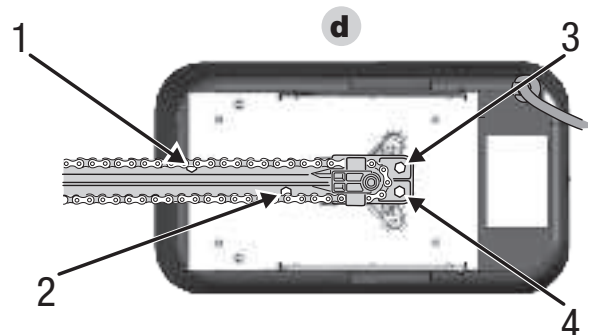
BELT DRIVE

- Attach the rail to the operator head by installing four 1/4"-20 x 11/16" bolts.

NOTE: Pull the chain or belt away from the rail to fit the socket on the front bolts.



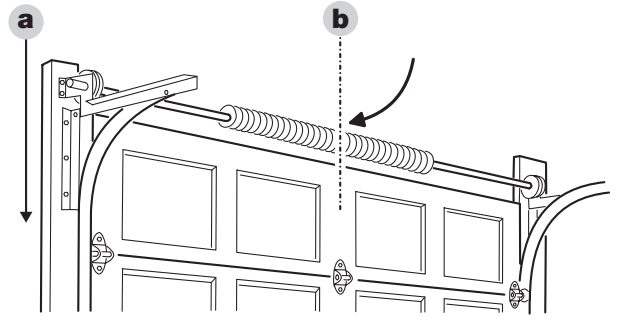
- Tighten the four bolts in the order shown with a 7/16" socket.



Locate the Header Bracket Position

- Close the door.
- From inside the garage, use a pencil to mark the vertical centerline of the door on the header wall and on the top panel of the door.

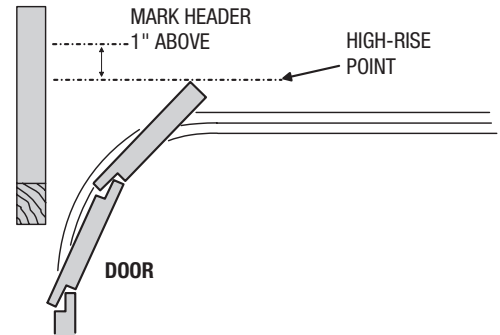
Examine the area above the center of the door (on the door header wall) for a header bracket mounting location.



- Open the door to the high-rise point (the point where the top edge of the door is highest above the floor), and measure the distance to the floor.
- Close the door, and use a pencil to mark the header wall 1" above the measured high-rise point.

NOTE: In some installations, the header bracket location will be higher than the door header. This will require adding a 2x4 (or larger) cross piece to the wall studs to provide a mounting location for the header bracket. Use lag screws (not supplied) to attach the 2x4 to the studs.

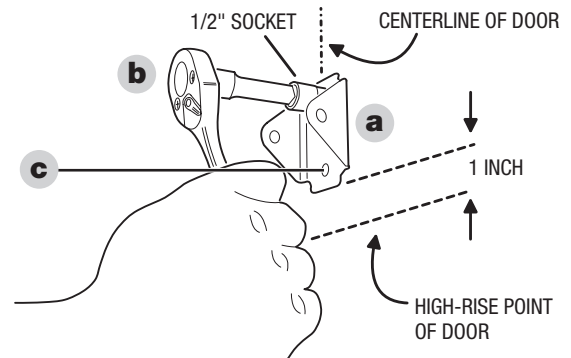
- On doors with low headroom, the header bracket can be attached to the ceiling up to 6" back from the header wall (see next step).



Install the Header Bracket

Attaching the Header Bracket to the Wall

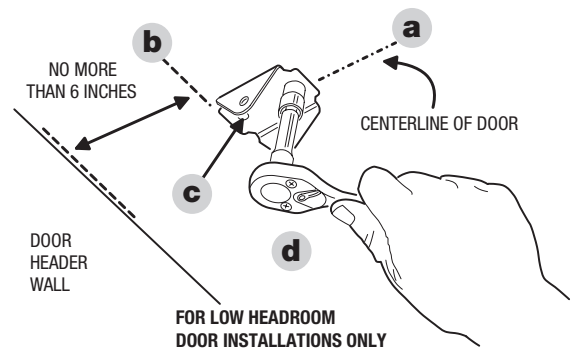
- Hold the header bracket on the center line drawn above the door with the bottom edge of the bracket on the line marked above the high-rise point. Use a pencil to mark the two bracket holes.
- Drill two 3/16" pilot holes about 2" deep.
- Use a 1/2" socket to fasten the bracket with two 5/16" x 2" lag screws.



ALTERNATE - Attaching the Header Bracket to the Ceiling

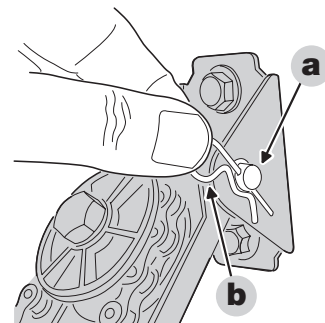
NOTE: On a finished ceiling, be sure to fasten to a joist under the sheetrock where the header bracket will be located (use a stud finder). If there is no joist, install a 2x4 cross piece between the two closest joists, and then fasten the header bracket to it.

- Extend the center line drawn on the header wall along the ceiling.
- Hold the bracket on the center line with the edge of the bracket no further than 6" from the header wall. Use a pencil to mark the two bracket holes.
- Drill two 3/16" pilot holes about 2" deep.
- Use a 1/2" socket to fasten the bracket with two 5/16" x 2" lag screws.



Connect the Rail to the Header Bracket

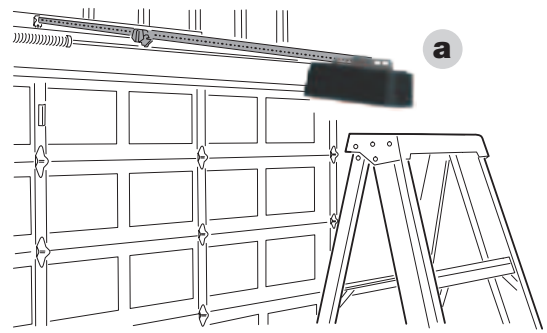
- Place the assembled operator on the empty carton on the floor with rail towards the door.
- Insert the end of the rail into header bracket.
- Insert the 5/16" x 2-3/8" clevis pin through header bracket and rail.
- Secure the clevis pin with the hitch pin.



Hang the Operator

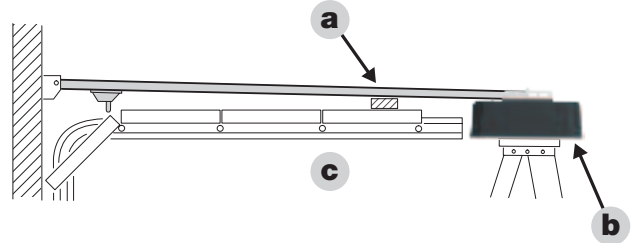
Installation requirements vary with garage construction. Hanging brackets should be angled to provide rigid support. **Hanging material is not provided.** Angle iron and lag screws are recommended. **DO NOT USE NAILS.** Detailed in this section are typical operator hanging methods. Certain installations will require improvised methods.

- Raise the operator head, and set it on top of a stepladder (use extra spacers on top of ladder if it isn't tall enough).



Adjusting the Operator Height

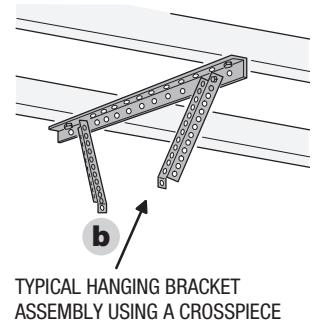
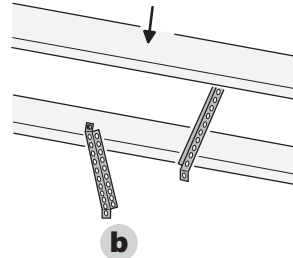
- Carefully open the door to the full up position. Lay a 2x4 across the top section of the door as a spacer.
- Adjust the operator height until the rail touches the spacer. The rail should be close to level.
- Center the operator head and rail with the centerline mark on the top of the door.
 - For finished ceilings only:** An angle iron cross piece between the two closest joists above the operator will be required. Mark mounting hole locations, drill pilot holes and attach the piece with two lag screws (not supplied).



Hanging Bracket

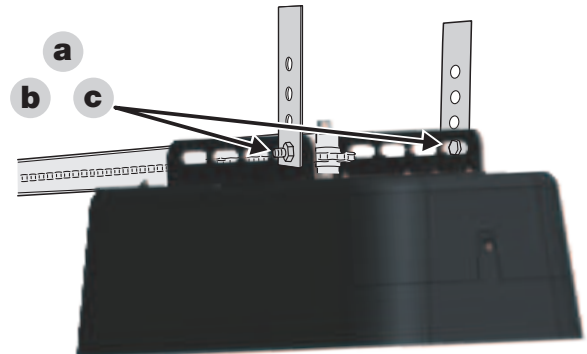
- Measure the distance from each of the operator's hanging tabs to the ceiling joists or angle iron cross piece.
- Cut two angle iron pieces to the required lengths for hanging brackets. Bend brackets if required.
 - For unfinished ceilings:** Hold each bracket in place and use a pencil to mark the locations where they will be attached to the joists, drill pilot holes and attach the pieces with two lag screws (not supplied).
 - For finished ceilings with an angle iron cross piece:** Attach the two hanging brackets to the cross piece with two bolts and two keps nuts (not supplied).

TYPICAL HANGING BRACKETS
SCREWED DIRECTLY TO JOISTS



Hanging the Operator

- Attach operator to hanging brackets using two 5/16-18 x 1" hex bolts and two 5/16-18 keps nuts (supplied).
- Insert bolts from the inside of hanger brackets with the nuts on the outside of the operator, and then tighten nuts with a 1/2" socket.
- Tighten all hanging hardware.
- Open and close the door manually. The door should clear the rail by at least 1".
- Attach the trolley's release lever to the red release handle with the cord supplied, so the handle is at least 6 feet from the floor. Cut off any excess cord.



Install the Wall Station



WARNING



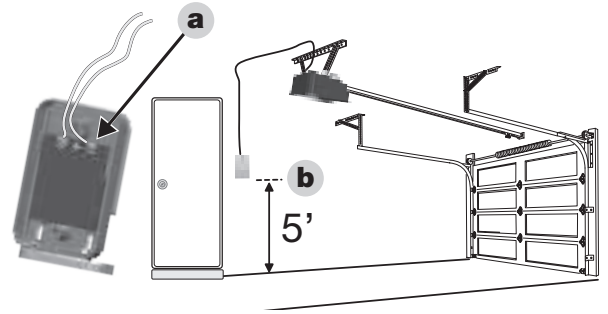
Children operating or playing with a garage door operator can injure themselves or others. The garage door could cause serious injury or death. Do not allow children to operate the remote control(s) or the wall station. Install the wall station out of reach of children and away from all moving parts of the door. The door must be clearly visible from the wall station. A moving garage door could injure someone under it. Only activate the door when it is properly adjusted, when it can be seen clearly and when there are no obstructions to the door travel.

UL NOTE: All low voltage Class 2 cable used with this operator must be UL Listed Type CL2, CL2P, CL2R, or CL2X or other cable with equivalent or better electrical, mechanical and flammability ratings. CAT-5 and CAT-6 cables do not meet these requirements.

Connect the Wall Station Wires

- Strip back 1/2" of insulation, and connect the Wall Station wires to each of the two terminals on the back of the wall station. Polarity does not matter.
- Measure and mark the distance to mount the Wall Station at least 5 feet above floor level.

NOTE: The Wall Station power wires are non-polarized.

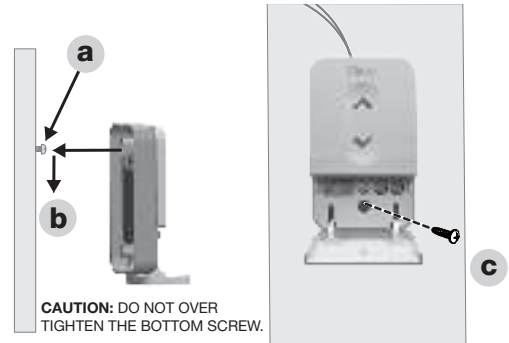


Mounting the Wall Station

- Use the screws provided to mount the wall station near an access door at a minimum height of five feet. **SEE IMPORTANT WARNING, PREVIOUS PAGE.**
- Mount the first screw in the location desired, then hang the Wall Station.
- Securely mount the Wall Station with the bottom screw.

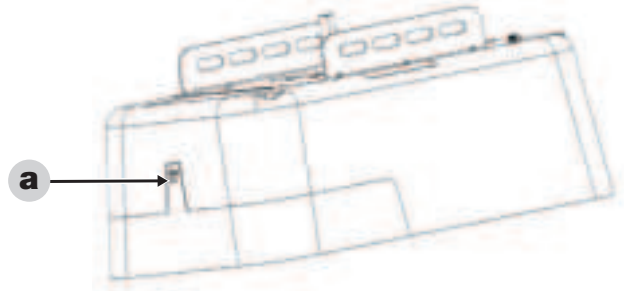
NOTE: The Wall Station is also sized to mount on a standard single gang box.

- For non-prewired installations, route the wire (supplied) to the back of the operator. Use insulated staples (not supplied) to secure the wire. Staples must straddle both wires to avoid electrical shorts.
- Apply the User Safety Instruction Label to the wall next to the wall station. Use staples or tacks to help the label remain in place over time.

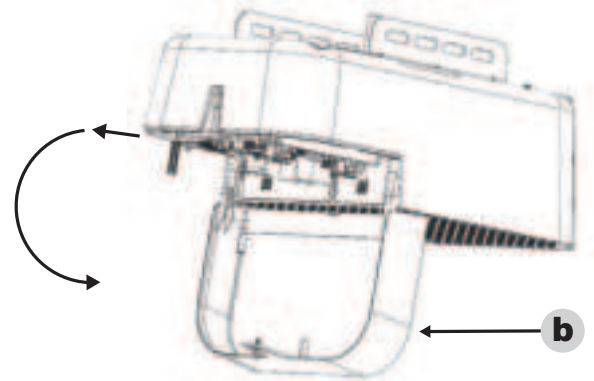


Connecting the Wall Station Wiring

- Loosen (but do not attempt to remove) the retaining screw that allows for opening the cover to expose the circuit board.

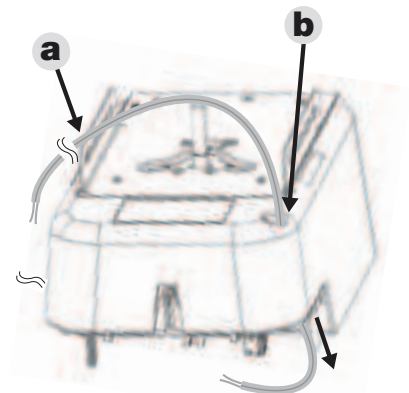


- Pull cover outward slightly to release it from the housing, then rotate the cover down to expose the circuit board, programming buttons and wiring connectors.



Route Cables

- Feed the wires (a) through the access hole (b) on the opposite side of the opener.

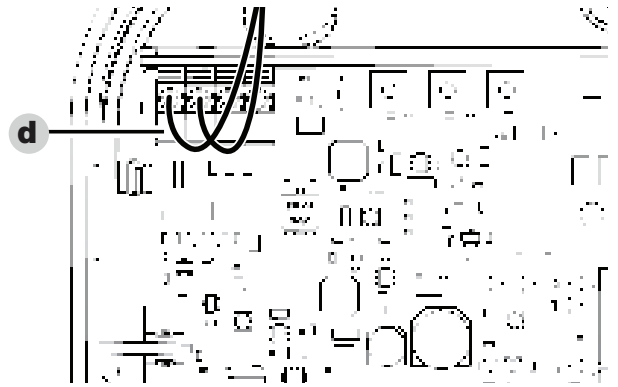


- c) Cut the Wall Station wire about 6" longer than needed to reach the operator terminals. Strip back 1/2" of insulation.
- d) Connect either wire to the operator's WALL STATION terminal and the other wire to one of the operator's COMMON terminal.

IMPORTANT: DO NOT PLUG THE OPERATOR IN AT THIS TIME!

⚠ WARNING ⚠

Persons, particularly children, could be killed by a closing garage door without a properly installed and adjusted safety beam optical obstacle sensing system.



Install the Safety Beam

NOTE: The safety beam's infrared light beam must not be obstructed by the door, or by any part of the door hardware. Use wooden spacers between the beam brackets and wall if necessary to create proper clearance.

⚠ WARNING ⚠

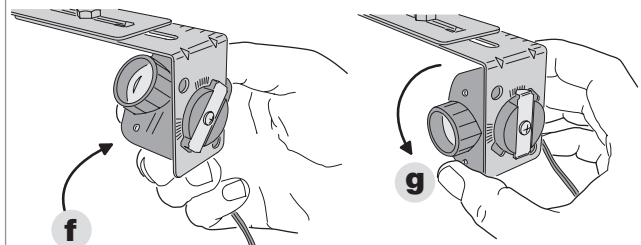
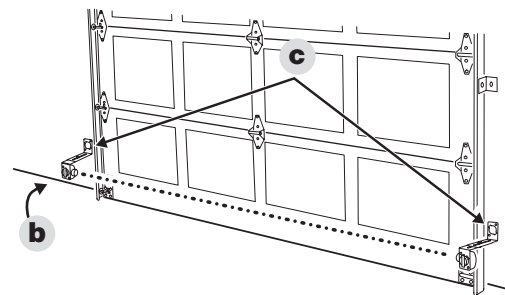
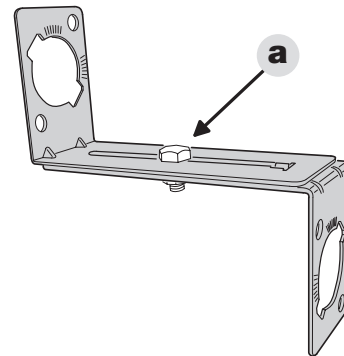
To protect small children, do not install the safety beam higher or lower than instructed.

- a) Assemble the two safety beam brackets from the four L-shaped brackets using two 1/4"-20 x 11/16" bolts and 1/4"-20 keps nuts (one nut & bolt for each bracket).
- b) Position the assembled brackets on each side of the door **so the center line of the safety beam lenses will be 5-1/2" above the floor**. Use the index marks on the brackets to make the bracket assemblies equal lengths.
- c) Mark the locations for the bracket mounting screws.

NOTE: The safety beam receiver (the unit with two indicators) should be located on the "shady" side of the door to prevent sunlight from shining directly into the receiver's lens.

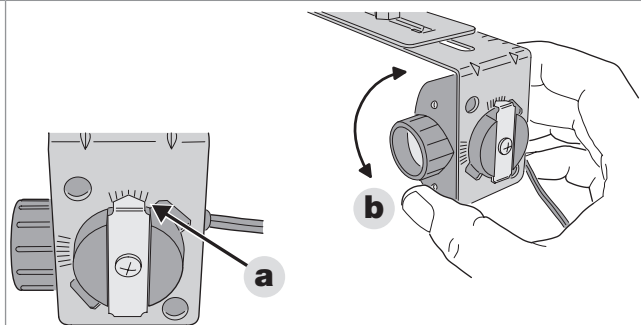
- d) Drill two 3/16" pilot holes for lag screws at marks.
- e) Mount the brackets with two 1/4" x 1-1/4" lag screws and tighten with a 7/16" socket.
- f) Insert the sender and receiver into the bracket holes so the lenses of the units will face each other.
- g) Twist the units until the spring clips lock into a detent mark on the brackets. To protect the units from being bumped after installation, it is recommended to mount the sender and receiver inside the brackets as shown.

IMPORTANT: Be careful to route the safety beam wiring away from any moving parts of the door or operator.



Pre-Adjusting the Beams

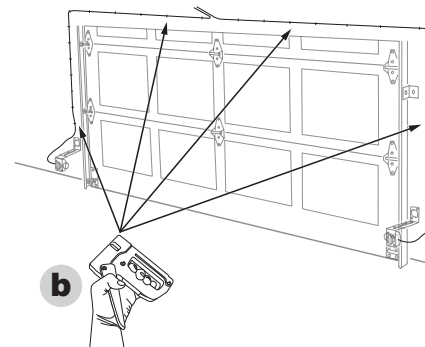
- a) The spring clip latches into the detent marks to hold the unit's position.
- b) Adjust the units so that the lenses point toward each other.



Wiring the Beams

Non-prewired Installation

- For non-prewired installations, route the wires from the sender and receiver, up the wall above the door hardware, then over to the center of the door, then along the top of the rail (or ceiling), and back to the operator head. Cut the wires about 6" longer than needed to reach the operator terminals. Strip back ½" of insulation from the ends of the wires.
- For non-prewired installations, secure all the wires (supplied) to the wall and ceiling with insulated staples (not supplied). Staples must straddle both wires to prevent shorts. Secure the wire to the top of the rail with wire clips (provided).



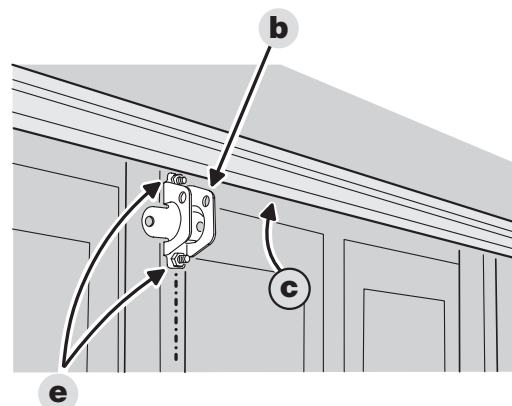
- At the operator, twist one wire from each pair together then twist the other wire from each pair together.
- Attach either twisted connection to the operator's BEAM terminal. Connect the other twisted connection to the operator's other COMMON terminal.

NOTE: Route wires away from LED lights.



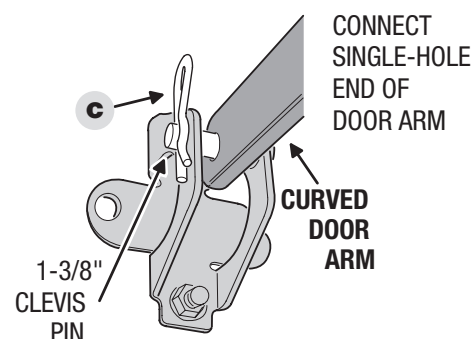
Install the Door Bracket and Door Arm

- Fully close the door.
- Hold the door bracket against the inside of the door's top panel.
- Align the top edge of the bracket 2" to 4" below the top edge of the door; or, if there is a structural support across the top of the door, place the top edge of the bracket directly below the support.
- Align the vertical centerline drawn on the door with the center of the bracket. See the figure for details. Mark the left and right holes of the bracket.
- Drill 1/4" holes at marks and insert two 1/4"-20 x 2" carriage bolts (not supplied) from outside of door through the door bracket.



Connecting the Door Arm to the Door Bracket

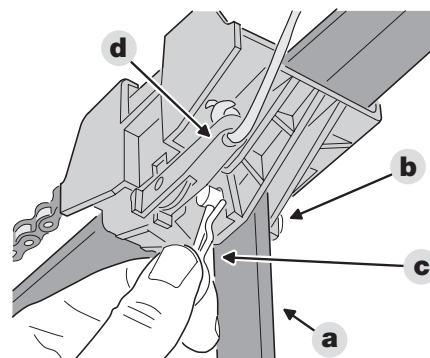
- Secure the door bracket with two 1/4"-20 keps nuts (not supplied).
- Tighten with a 7/16" socket.
- Slide the 5/16" x 1-3/8" clevis pin through one hole on door bracket, the single hole on the curved door arm, and then through the other hole on the door bracket.
- Secure the clevis pin with the hitch pin.



Connecting the Door Arm to the Trolley

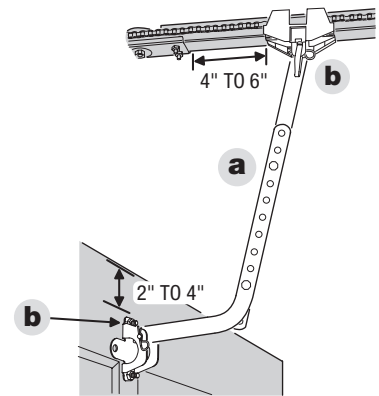
- Insert the single hole end of the straight door arm into the slot in the trolley.
- Slide the 1-1/8" clevis pin through the hole.
- Secure the clevis pin with the hitch pin.
- Flip the trolley release lever to disconnect the trolley.
- Rotate the curved door arm upward to meet the straight door arm connected to the trolley.

NOTE: The straight door arm should be slightly angled toward the operator head.



Connecting the Door Arms

- Align the two door arms so that the holes in both arms overlap.
- Connect the arms together using two 5/16-18 x 1" bolts inserted in the highest and lowest matching holes, secure the bolts with two 5/16" keps nuts, tighten with a 1/2" socket.



Install Optional Outlet Retaining Bracket and Connect the Power Supply



WARNING

To prevent electrocution or fire, installation and wiring must be in compliance with local electrical and building codes.

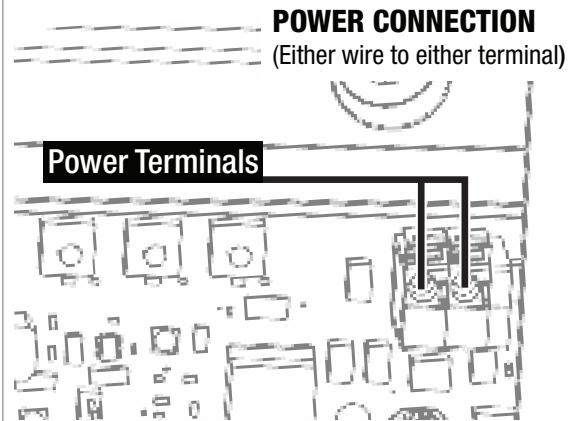
This operator includes an AC to DC plug-in power supply instead of an AC power cord. The power supply provides low voltage DC power for the operator to operate. For your convenience, an optional outlet mounting bracket is also supplied to help secure the power supply to the ceiling outlet.

Connecting Power

- Connect the power wires to the terminals (either wire to either terminal).

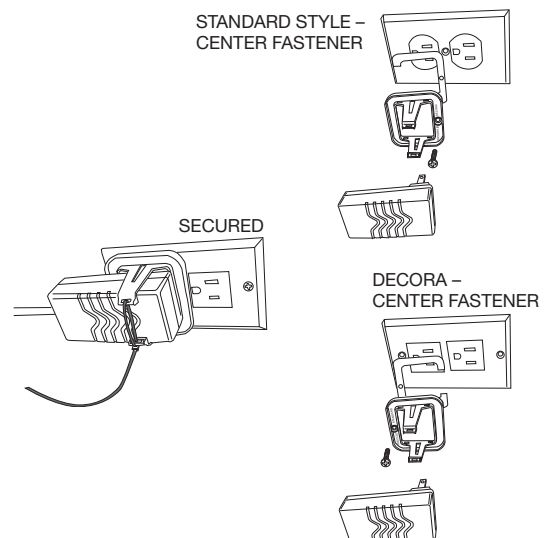
NOTE: Route wires away from LED lights.

NOTE: A green light near the power terminal will indicate incoming power is present



Install the Power Supply and Optional Mounting Bracket

- The optional mounting bracket is compatible with both *Center Fastener* or *Decora* style outlets. Either can be mounted with the included fastening screw or the included double sided adhesive.
- To mount the optional mounting bracket to the outlet, peel the adhesive backing from the bracket and attach the bracket to the receptacle cover plate around the desired outlet.
- To mount the optional mounting bracket with the fastener, remove the outlet *Center Fastener* or one of the *Decora* plate fasteners. Attach the mounting bracket with the included fastener over the desired outlet with the mounting hole aligned to the open fastener hole.
- Spread the ears of the optional retaining bracket apart, and then plug the power supply into the outlet. The included zip tie can be used to secure the mounting ears together.
- Once power is applied from the power supply, the operator will perform self diagnostics (including the status of the battery). The battery status is given during startup according to the following table:



Initial Power-Up Battery Status Check Indication

1 LONG BEEP	Battery is good
2 LONG BEEPS	Battery is marginal (Enough battery power to install and set up the operator, but will need some time to charge for any extended usage)
3 LONG BEEPS	Battery is low (may or may not run enough times to complete operator setup)
4 LONG BEEPS	Operation is starting up at below "battery disconnect level". Operator will need to charge before set up or operation.

Aligning the Infrared Safety Beam

The safety beam has two components, a sender and a receiver. The sender produces a narrow infrared beam that travels across the bottom of the door opening to the infrared receiver. If an object blocks the infrared beam while the door is closing, the door will stop, then reverse and fully open (the operator's light will flash three times). **As a safety feature, the operator will not attempt to close if the door is open and the infrared safety beam is blocked or out of alignment. In this case, the door can be forced closed by pressing and holding the wall station pushbutton (be sure the door area is in clear view).**

⚠ WARNING ⚠

With the door closed, disengage the trolley from the chain or belt during these alignment tests by pulling the red release handle.

⚠ WARNING ⚠

Serious injury or death from a closing garage door may result because of failure to test and adjust safety reverse system. Repeat this test monthly and adjust as needed.

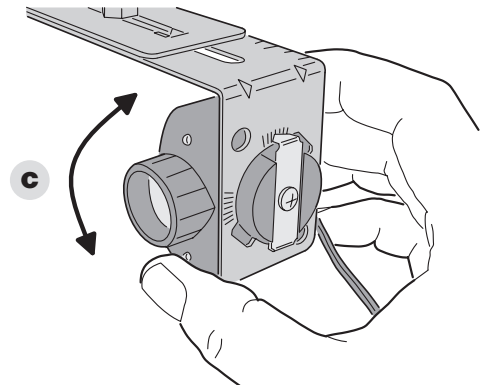
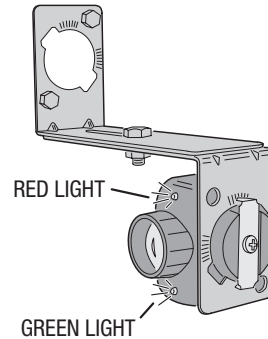
Safety Beam

- Check that the operator has power. The green lights on the sender and receiver should be lit.
- If the receiver's green light is on (but the red light is off) the receiver has power, but it's not detecting the infrared beam from the sender. The red light might flash when the beam is partially detected. This can be caused by misalignment or something blocking the beam. Adjust the safety beam sender and receiver while watching the receiver's red light (stay out of the beam while aligning it).
- When the red light stays on, rotate the sender towards the ceiling and stop when the red light on the receiver begins to flicker.
- Rotate the sender back towards a horizontal position with the floor and stop as soon as the red light on the receiver lights solid. The beam is now properly aligned.

SAFETY BEAM INDICATOR TABLE

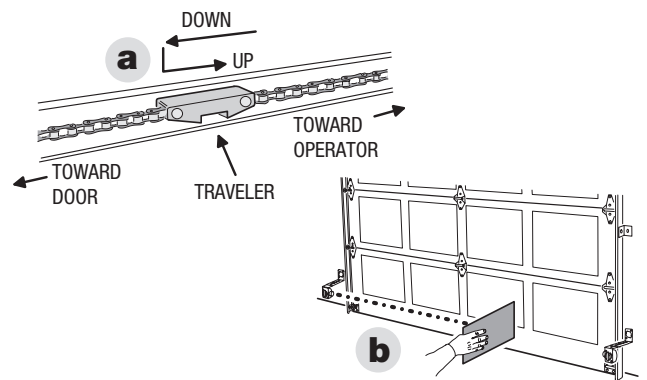
GREEN ON	POWER ON
GREEN OFF	POWER OFF
RED ON	BEAM OK - NO BLOCKAGE
RED OFF	BEAM BLOCKED OR MIS-ALIGNED
RED FLASHING	BEAM ALIGNED POORLY

NOTE: If the receiver's red light remains off, check for: **1)** Dirt on the receiver's lens, **2)** Sunlight shining into the receiver's lens, **3)** A short in the safety beam wiring (from staples or at the operator terminals).



Checking for Reversal

- With the door closed and the operator disengaged from the door, press the wall station button to move the traveler (the part on the belt or chain that the trolley engages with) to the up position (away from the door). **NOTE: Do not cycle the operator to full travel without the door connected.**
- Push the wall station button again. While the traveler is moving to the down position (toward the door), block the safety beam. **THE TRAVELER MUST STOP, THEN REVERSE TO THE UP POSITION.** The operator's light and red light should flash three times.

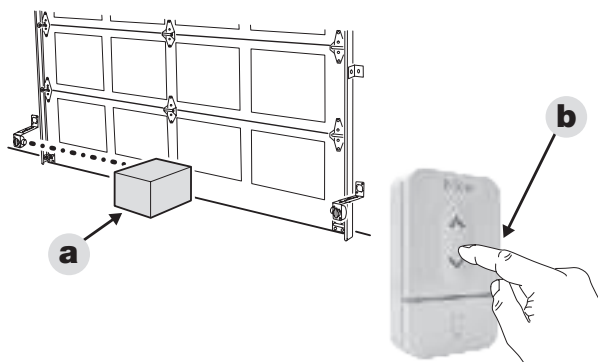


Checking Forced Closure Feature

- Place an object in the path of the safety beam. Check that constant pressure is required on the wall station button to cause the traveler to move toward the down position.
- Release the Wall Station button before the operator stops; check that the traveler returns to the up position.

NOTE: The garage door operator will not respond to a CLOSE command from a radio transmitter if the safety beam is blocked.

- To reconnect the operator, flip the release lever up. Raise the door manually until the operator reconnects.



Remote Controls

The operator is supplied with a three-button remote control (the second and third buttons can be used to control an additional operator or gate if it contains a Linear MegaCode™ receiver). Additional single and multi-button, remote controls, keypads, and external receivers can be purchased.

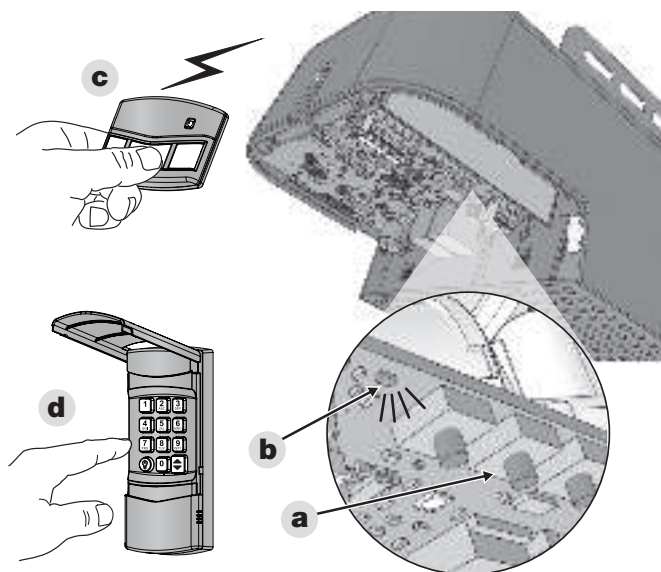
⚠ WARNING ⚠

Children operating or playing with a garage door operator can injure themselves or others. The garage door could cause serious injury or death. Do not allow children to operate the remote control(s) or the wall station. A moving garage door could injure or kill someone under it. Activate the operator only when the door is clearly visible, free of obstructions and adjusted properly.

To Add or Remove a Remote Control or Keypad

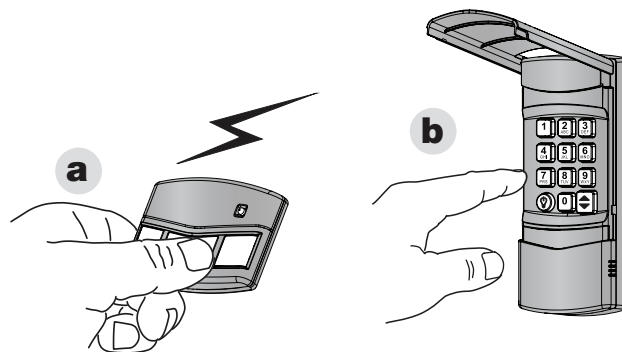
- Press the operator's LEARN button (a) located on the main circuit board. The operator's red light (b) will flash once and turn on for about 15 seconds. **A remote button or keypad 1-6 digit code must be added or removed while the red light is still on.**
- Press the desired remote button (c) or the keypad's  button (d).
- The operator's red light will **flash once if a remote button or keypad code was added**, or the opener's light and the red light will **flash four times if a remote button or keypad code was removed**.
- Repeat Steps a & b for any additional remote controls.

NOTE: The red LED (b) will light when RF activity is detected.



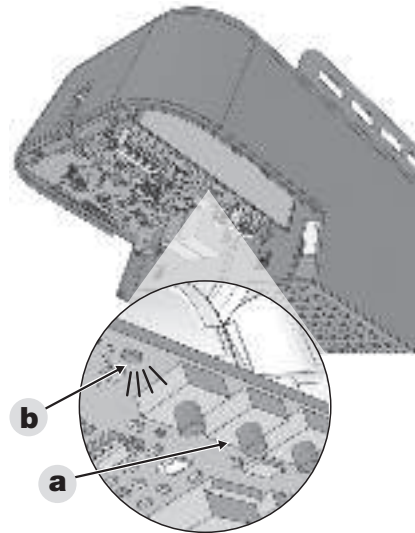
Testing

- Stand and clear of the door**, and press the remote control (a) or keypad (b) button and verify that the operator starts.
- PRESS THE REMOTE CONTROL'S BUTTON AGAIN TO STOP THE DOOR MID-TRAVEL.**



To Remove All Remote Control and Keypads

- Press and hold the operator's LEARN button for ten seconds or more. Release the LEARN button.
- The red light will blink three times signaling that all of the remotes and keypads in the operator's memory were erased.



Adjusting the Open and Close Limits

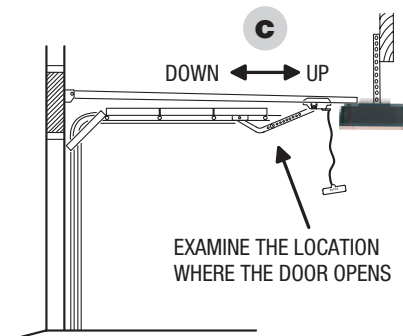
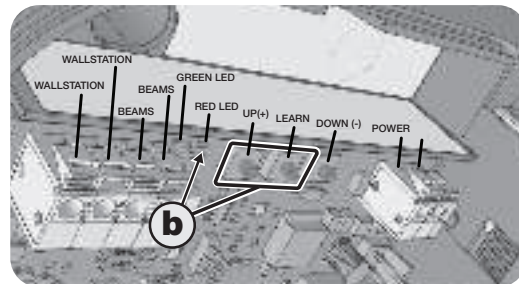
The limit settings control how far the door will open and close. Set the limits so the door opens just short of any door stops, and closes at the floor level. **The operator is preset on its close limit and the open limit is preset for a 7-foot high door.** Use the wall station or a transmitter to test operate the door. If required, use the following steps to adjust the limits.

⚠ CAUTION ⚠

Set the open and close limits carefully. Setting the limits beyond the distance that the door can travel could cause damage to the door, the door hardware, or operator.

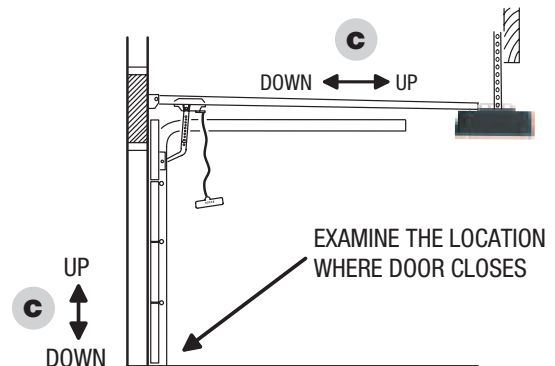
Adjusting the Open Limit (if required)

- Use the wall station or a transmitter to move the door near the desired open limit position.
 - On the operator, press both the UP and LEARN buttons for three seconds.
 - If necessary, use the UP and DOWN buttons to jog the door at slow speed to fine-tune the open limit position.
 - When the door is at the proper open limit position, press the LEARN button to store the setting and exit setup. The green indicator and the operator's light will flash two times after a successful change.
- If the limit times out or is unchanged, the operator will beep three times.



Adjusting the Close Limit (if required)

- Use the Wall Station or a transmitter to move the door near the desired close limit position.
 - Press both the DOWN and LEARN buttons for three seconds.
 - If necessary, use the UP and DOWN buttons to jog the door at slow speed to fine-tune the close limit position.
 - When the door is at the proper close limit position, press the LEARN button to store the setting and exit setup after a successful change.
- If the limit times out or is unchanged, the operator will beep three times.
- NOTE:** If the operator is Field Reset (see pg. 26), both the open and close limits must be adjusted and the automatic door force setup must be completed for proper operation.



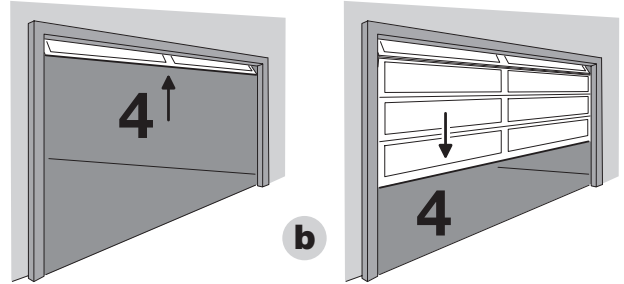
Automatic Door Force Setup

The operator automatically measures the door force throughout the entire travel of the door each time the operator cycles. The following steps are all that's required to setup the safety reversal system.

- Be sure that the trolley latch is up, and the door is connected to the operator.
- After limits have been set, you may begin using the operator. The learning process will be complete after the fourth cycle.

⚠ CAUTION ⚠

Do not cycle the operator full travel without the door connected. The automatic door force setting will adjust to the unloaded condition and may trip the safety system when the door is reconnected.



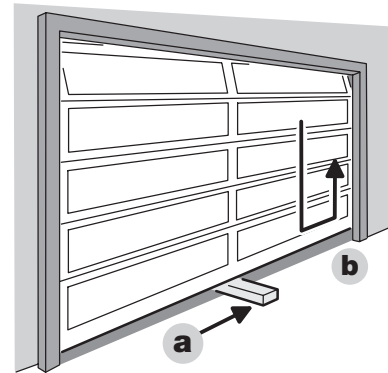
Safety Reversal System Test

The operator determines if there is an obstruction if a higher than expected amount of force is detected during a door cycle. If an obstruction is encountered during a closing cycle, the operator and door will stop then fully open. If an obstruction is encountered during an opening cycle, the operator and door will stop.

- Lay a 2 x 4 board flat on the floor where it will be struck by the **center** of the door as it closes.
- Verify that the door reverses when it strikes the board. The door **must** reverse within two seconds after striking the board.
- If the door does not reverse upon obstruction, remove the board, adjust the close limit and then repeat the obstruction test.

⚠ WARNING ⚠

Always perform the Safety Reversal System Test after making any adjustments to the operator. **PERFORM THE SAFETY REVERSAL SYSTEM TEST MONTHLY!**



Adjusting the Force Factor (Installation Option, Normally Not Used)

The operator uses the peak force measured during each of the last four complete cycles plus a "force factor" to calculate the maximum allowed force setting for the current door cycle. If the calculated maximum force setting is exceeded during the current door cycle, the operator reacts to the obstruction. As door hardware conditions change over time with weather and wear, the calculation of the maximum door force setting using the four cycle running average will compensate for the current conditions of the installation.

The door force is preset for the lowest amount of pressure on an obstacle to detect an obstruction. THE FACTORY SETTING IS OPTIMIZED FOR MOST INSTALLATIONS.

Changing the Force Factor Setting

As an installation option, the operator's "force factor" can be adjusted to change the amount of pressure exerted on an obstacle before the operator reacts to the obstruction.

- Press both the UP and DOWN buttons for three seconds.
- Use the UP or DOWN buttons to set the force factor. Pressing the UP button **increases** the force factor, pressing the DOWN button **decreases** the force factor.

FORCE FACTOR INDICATOR TABLE

GREEN ON	LOW FORCE FACTOR
RED & GREEN ON	MEDIUM FORCE FACTOR
RED ON	HIGH FORCE FACTOR

- After selecting the force factor, press the LEARN button to store the setting and exit setup. *(If the force factor is not set within one minute, the operator will return to normal operation at its previous force factor setting.)*
- After changing the force factor setting, perform the Safety System Reversal Test.

Setting Up the Wall Station

This Wall Station controls operation of the door and light using the buttons. When paired with the Nice G.O. smartphone app, you can control the garage door(s) from any location, invite and manage other users' app and operator access, control the lights, schedule operator events and be alerted of all garage door activities.

Requirements

To use with the app you will need:

- a Wi-Fi network with Internet connectivity,
- a strong Wi-Fi signal in the garage where you are installing the Wall Station and
- an Android or iOS phone.

Test Wi-Fi Signal Strength with Your Smart Phone

If you have 2 or 3 bars on your phone from the Wi-Fi network, the signal is strong and you can proceed. If not, use one of these options to extend your Wi-Fi network's range.

- Move your Wi-Fi router closer to the garage.
- Purchase a Wi-Fi range extender.



The Wi-Fi wall station must receive a strong signal from your home's Wi-Fi router to work.

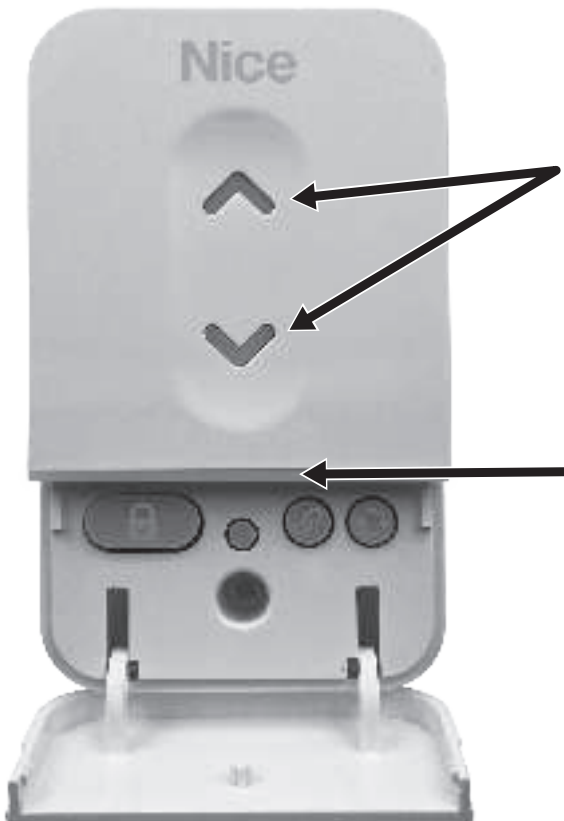
LEDs on the Wall Station

The Wall Station has two LEDs that convey information at a glance. The top LED provides information on the vacation mode.

Vacation Mode LED	
ON	Normal operation. Vacation mode disabled.
FLASHING	Vacation mode enabled.

The bottom LED indicates the state of the Wi-Fi connection and device.

Wi-Fi Connectivity LED	
RED - Solid	Not paired, not connected to access point
RED - Blinking	Pairing Mode
BLUE - Solid	Connected and functioning normally
BLUE - Blinking	Paired but unable to connect to the internet
MAGENTA - Blinking	Over the air update
MAGENTA - Solid	Over the air reboot
YELLOW - Blinking	Unable to connect to Wi-Fi



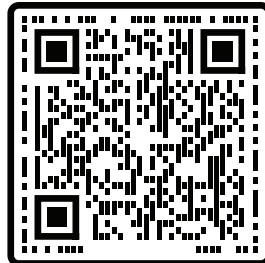
Nice G.O. Homeowner Smartphone App Installation

Download, Register and Activate Application

Use the homeowner's smartphone to visit the app store to download and install the Nice G.O. application. On initial use, you'll be asked to register and create their account. Once completed, sign in with the new account information (QR Code available below).

Connect the Opener to the Nice G.O. app

Stand near Wi-Fi wall station. On your mobile device in the Nice G.O. app, tap the plus sign at the bottom right of screen to Connect Your Device. Follow directions in app to Connect Your Device.



Scan to
download app.



Using the Garage Door Operator

IMPORTANT USER SAFETY INSTRUCTIONS

⚠ WARNING ⚠

**A MOVING GARAGE DOOR CAN CAUSE INJURY OR DEATH!
TO REDUCE THE RISK OF DEATH OR SEVERE INJURY:**

1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
2. NEVER LET CHILDREN OPERATE, OR PLAY WITH DOOR CONTROLS! KEEP REMOTE CONTROL AWAY FROM CHILDREN!
3. Always keep moving door in sight and away from people and objects until it is completely closed. NO ONE SHOULD CROSS THE PATH OF THE MOVING DOOR.
4. NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR.
5. Test door operator monthly. The garage door MUST reverse on contact with a 1-1/2 inch object (or a 2x4 board laid flat at the center of the door) on the floor. If adjusting either the force or the limit of travel, re-test the door operator. Failure to adjust the operator properly may cause severe injury or death.
6. If possible, use the red emergency release handle only when the door is closed. Use caution when using this release with the door open. Weak or broken springs may cause the door to fall rapidly, causing injury or death.
7. KEEP GARAGE DOORS PROPERLY BALANCED. (See Garage Door Operator Maintenance) An improperly balanced door could cause severe injury or death. Have a qualified service person make repairs to cables, spring assembly and other hardware.

8. SAVE THESE INSTRUCTIONS.

Opening the Door

- a) With the door in view, press the wall station button or the button assigned to the operator on the remote control, or enter a valid access code and press START/STOP on a remote keypad.

When the operator is activated, the operator's light will turn on and the door will begin to open.

The door will open until the open limit is reached. If an obstacle is encountered (operator's light flashes four times) while the door is opening, the door will stop.

The operator's light will stay on for about five minutes after the door stops.

WALL STATION



- OR -

REMOTE CONTROL



REMOTE KEYPAD



- OR -

Closing the Door

- a) With the door in view, press the wall station button or the button assigned to the operator on the remote control, or enter a valid access code and press START/STOP on a remote keypad.

When the operator is activated, the operator's light will turn on and the door will begin to close.

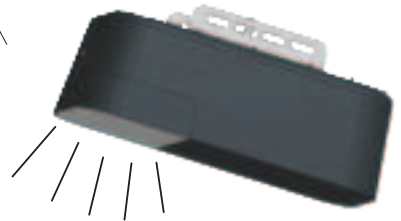
The door will close until the close limit is reached. If an obstacle is encountered (operator's light flashes four times), or the safety beam is interrupted (operator's light flashes three times) during closing, the door will stop, then re-open.

The operator's light will stay on for about five minutes after the door stops.

WALL STATION

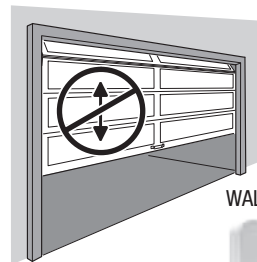


NOTE: A FLASHING
LIGHT INDICATES
TROUBLE



Stopping the Door Mid-travel

- a) The door can be stopped immediately at any time by pressing the wall station button, the remote control's pushbutton, or press the START/STOP button on a remote keypad (if the remote keypad was used to start the door).
- b) The next time the operator is activated, the door will move in the opposite direction.



REMOTE CONTROL



WALL STATION



REMOTE
KEYPAD

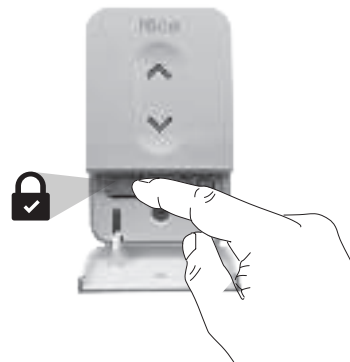
Vacation Lock for Additional Security

- Press the Wall Station's LOCK button to prevent remote controls and keypads from opening the door after the door is completely closed. They can close the door, but not open it once closed. The door can still be opened or closed by using the wall station pushbutton or via the Nice G.O. app.

NOTE: To indicate that the Vacation Lock is enabled, the blue arrows will flash.

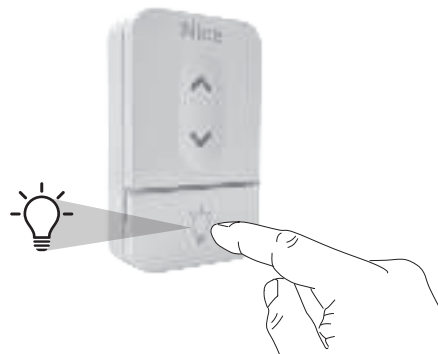
NOTE: If a transmitter is activated in an attempt to open the door while in vacation mode, the operator will beep and flash five times.

- Press the Wall Station's LOCK button again to unlock and return the operator to normal operation.



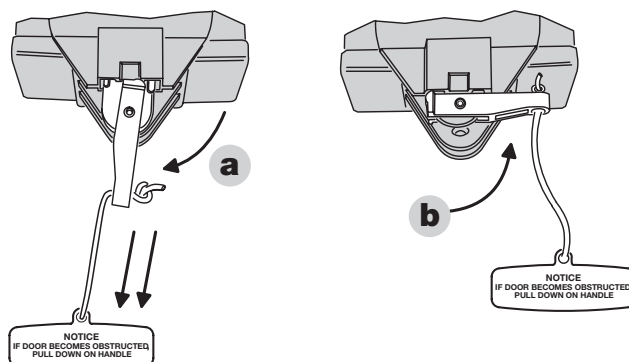
Controlling the LED Lights

- The LED lights can be lit by pushing the wall station's LIGHT button. The light will remain on until the LIGHT button is pressed again or the operator is cycled.
- If the LED lights are on, pushing the wall station's LIGHT button will turn the operator's light off.



Disconnecting the Door from the Operator

- With the door in any position (preferably closed), carefully pull the red release handle. **USE CAUTION IF THE DOOR IS OPEN, THE DOOR MAY DROP.** The disconnected door can be opened or closed manually.
- To re-connect the operator, flip the release lever up. Raise or lower the door manually until the operator reconnects.



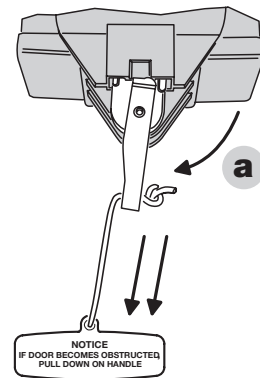
Garage Door Operator Maintenance

Weather conditions may affect the door operation which could require some re-setting of the operator's adjustments. Doors may swell and become heavier during wet periods, door hinges and rollers might bind during cold periods. To insure safe operation of the door, perform the following tests, including any additional test steps described.

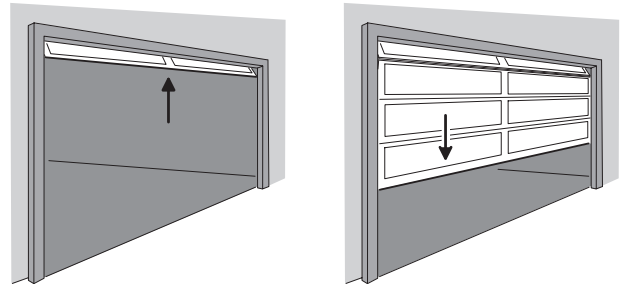
Once a Month

Disconnect the Door from the Operator

- a) With the door in any position (preferably closed), carefully pull the red release handle. **USE CAUTION IF THE DOOR IS OPEN, THE DOOR MAY DROP.** The disconnected door can be opened or closed manually.

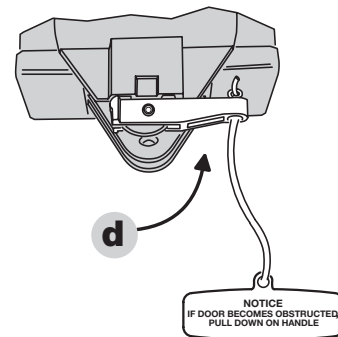


- b) From outside the garage, slowly open the door manually all the way, and then close it all the way. Notice if there is any binding, sticking or rubbing. The door should move smoothly in both directions.
- c) Raise the garage door about halfway up. Carefully release the door and see if the door balances. It should stay in place. Close the door.



- d) To re-connect the operator, flip the release lever up. Raise or lower the door manually until the operator reconnects.

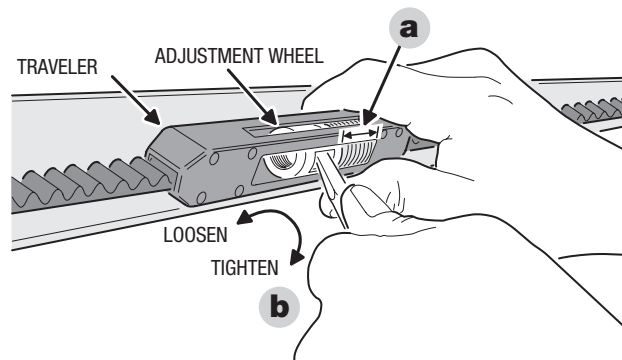
NOTE: If the garage door is unbalanced or the door travel isn't smooth, have a qualified garage door professional adjust or repair the door.



Every 6 Months

Check the belt tension.

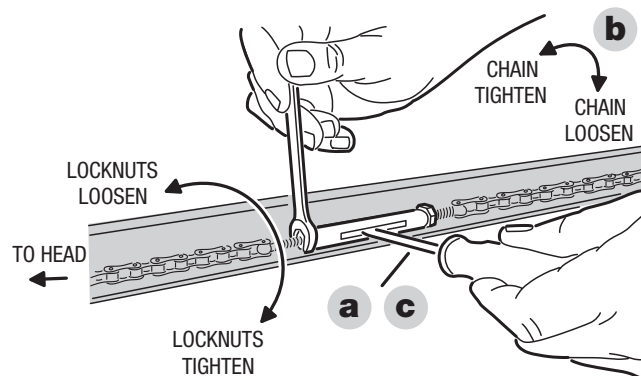
- The tension spring in the traveler keeps the belt taut. The factory setting for the tension spring length is .9" long. If the tension spring is longer than 1", adjust the belt.
- Hold the traveler so the adjustment wheel is visible through the large slot.
- Use a flat blade screwdriver to turn the adjustment wheel to compress the tension spring until its length is between .9" and 1" long.
- Check the door hardware for lubrication needs. Lubricate door hinges, rollers and bearings according to door manufacturer's recommended procedures.



Adjust the Chain

If necessary, use the following steps to adjust the chain.

- Hold the turnbuckle with a flat blade screwdriver, and loosen the two locknuts with a 7/16" end wrench.
- Twist the turnbuckle to adjust the chain tension. Adjust the chain until the turnbuckle is slightly above the rail.
- Hold the turnbuckle with a flat blade screwdriver and tighten the two locknuts with a 7/16" end wrench.
- Check the door hardware for lubrication needs. Lubricate door hinges, rollers and bearings according to door manufacturer's recommended procedures.

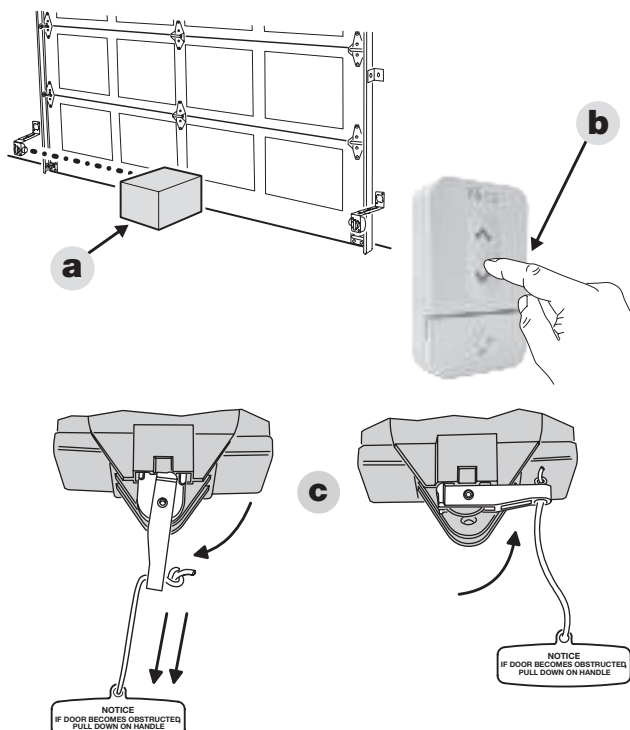


Checking Forced Closure Feature

- Place an object in the path of the safety beam. Check that constant pressure is required on the wall station button to cause the traveler to move toward the down position.
- Release the Wall Station button before the operator stops; check that the traveler returns to the up position.

NOTE: The garage door operator will not respond to a CLOSE command from a radio transmitter if the safety beam is blocked.

- To reconnect the operator, flip the release lever up.
- Raise the door manually until the operator reconnects.



⚠ WARNING ⚠

The garage door operator must not be installed and used on an unbalanced door. The operator's internal door force sensor will not function properly on an unbalanced door. Risk of serious injury or death may result.

⚠ WARNING ⚠

Always perform the Safety Reversal System Test (pg. 17) after making any adjustments to the operator.

⚠ WARNING ⚠

Garage door hardware (springs, cables, brackets, pulleys, etc.) are under extreme pressure and tension. DO NOT ATTEMPT TO LOOSEN, TIGHTEN OR ADJUST ANY DOOR HARDWARE. CALL A QUALIFIED GARAGE DOOR INSTALLATION PROFESSIONAL!

Align the Infrared Safety Beam

The safety beam has two components, a sender and a receiver. The sender produces a narrow infrared beam that travels across the bottom of the door opening to the infrared receiver. If an object blocks the infrared beam while the door is closing, the door will stop, then reverse and fully open (the operator's light will flash three times). **As a safety feature, the operator will not attempt to close if the door is open and the infrared safety beam is blocked or out of alignment. In this case, the door can be forced closed by pressing and holding the wall station pushbutton (be sure the door area is in clear view).**

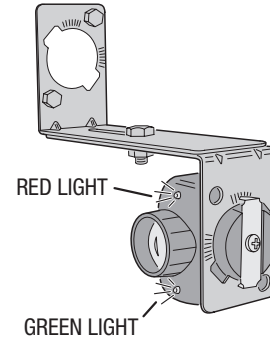
⚠ WARNING ⚠

With the door closed, disengage the trolley from the chain or belt during these alignment tests by pulling the red release handle.

⚠ WARNING ⚠

Serious injury or death from a closing garage door may result because of failure to test and adjust safety reverse system. Repeat this test monthly and adjust as needed.

- a) Check that the operator has power. The green lights on the sender and receiver should be lit.

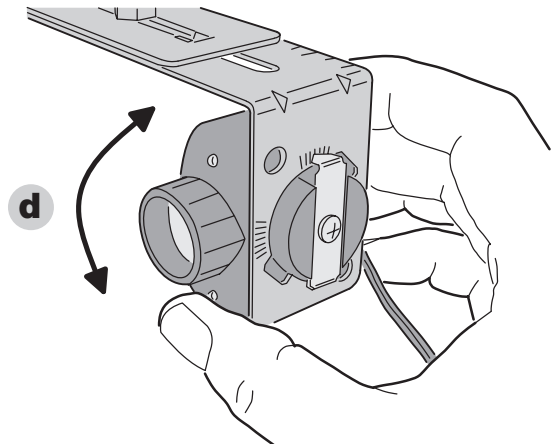


- b) If the receiver's green light is on (but the red light is off) the receiver has power, but it's not detecting the infrared beam from the sender. The red light might flash when the beam is partially detected. This can be caused by misalignment or something blocking the beam. Adjust the safety beam sender and receiver while watching the receiver's red light (stay out of the beam while aligning it).
- c) When the red light stays on, rotate the sender towards the ceiling and stop when the red light on the receiver begins to flicker.
- d) Rotate the sender back towards a horizontal position with the floor and stop as soon as the red light on the receiver lights solid. The beam is now properly aligned.

SAFETY BEAM INDICATOR TABLE

GREEN ON	POWER ON
GREEN OFF	POWER OFF
RED ON	BEAM OK - NO BLOCKAGE
RED OFF	BEAM BLOCKED OR MIS-ALIGNED
RED FLASHING	BEAM ALIGNED POORLY

NOTE: If the receiver's red light remains off, check for: **1)** Dirt on the receiver's lens, **2)** Sunlight shining into the receiver's lens, **3)** A short in the safety beam wiring (from staples or at the operator terminals).



After Servicing the Operator

- a) Check Safety Beam operation (pg. 21).
- b) Adjusting the Open and Close Limits (pg. 16).
- c) Safety Reversal System Test (pg. 17).

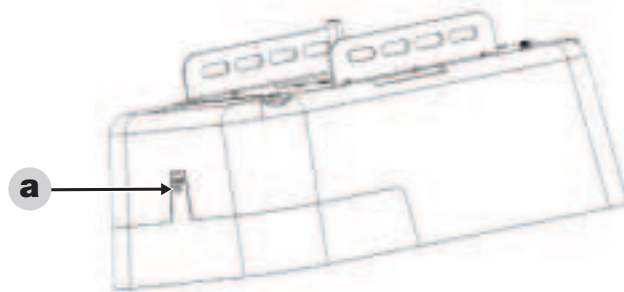
⚠ WARNING ⚠

The garage door operator must not be installed and used on an unbalanced door. The operator's internal door force sensor will not function properly on an unbalanced door. Risk of serious injury or death may result.

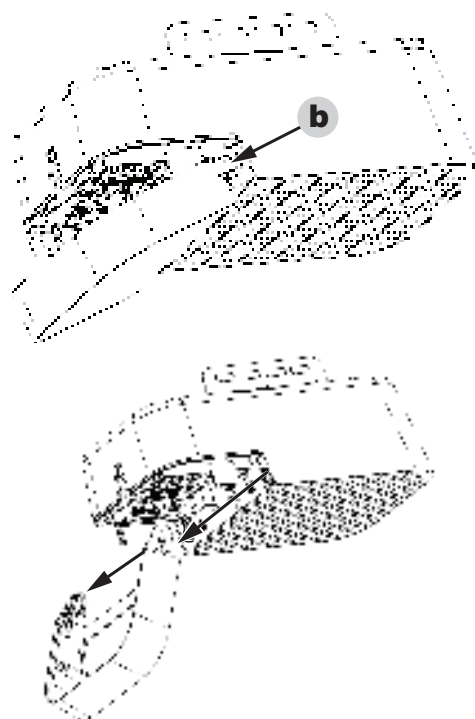
Battery Replacement

Operator Battery Replacement

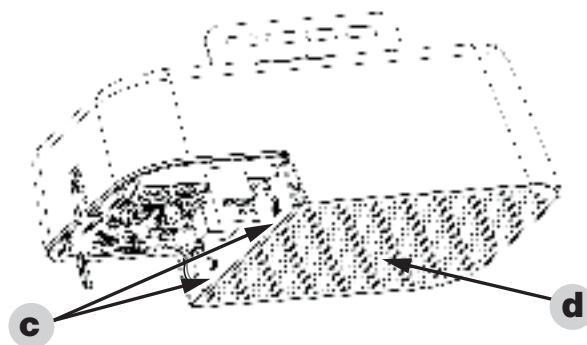
- a) Loosen (but do not attempt to remove) the retaining screw that allows for opening the cover to expose the Control board.



- b) Press gently inward on both hinges, then pull outward to remove the cover.

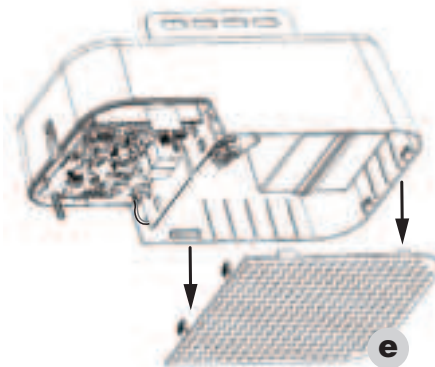


- c) Pull slightly on the plastic separator to release the two tabs that secure the battery cover (d).



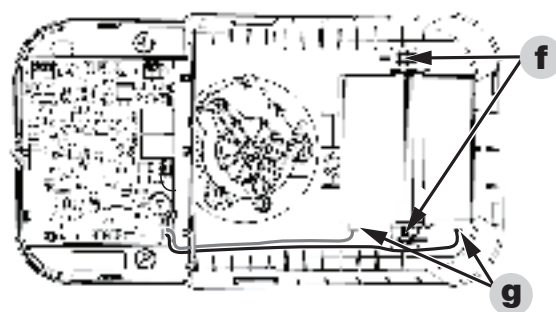
Battery Replacement

e) Remove the battery cover.



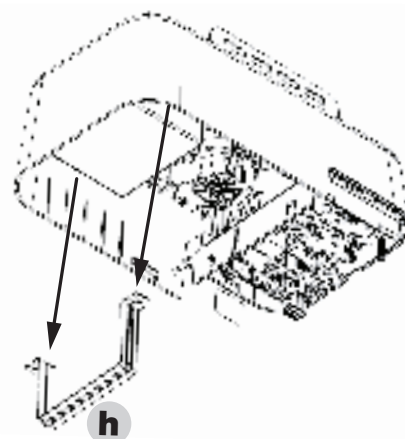
f) Loosen (but do not remove) the two bracket retaining screws.

g) Disconnect the battery power wires.

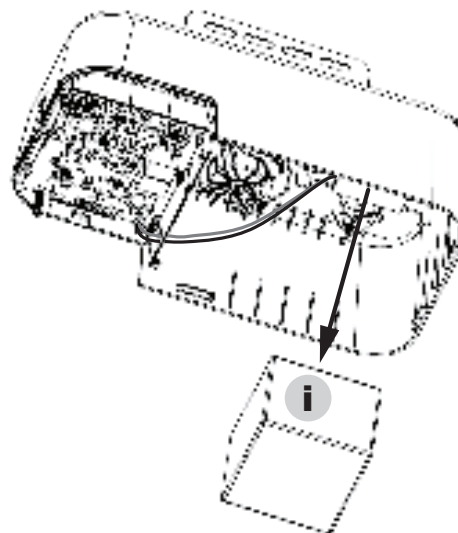


h) Remove the bracket with one hand while securing the battery with the other hand.

NOTE: Be careful not to drop the battery.



i) Remove the battery.

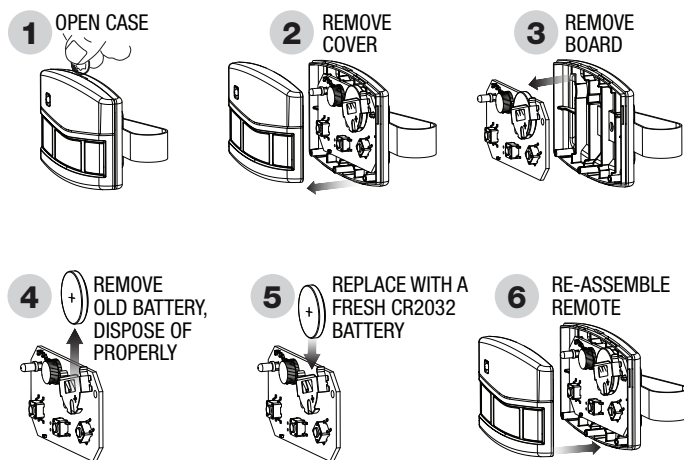


- j) Insert the new battery, then secure it with the retaining bracket.
- k) Reconnect the wiring.
- l) Replace both covers.
- m) Reconnect the AC power.



Replacing a Remote Control's Batteries

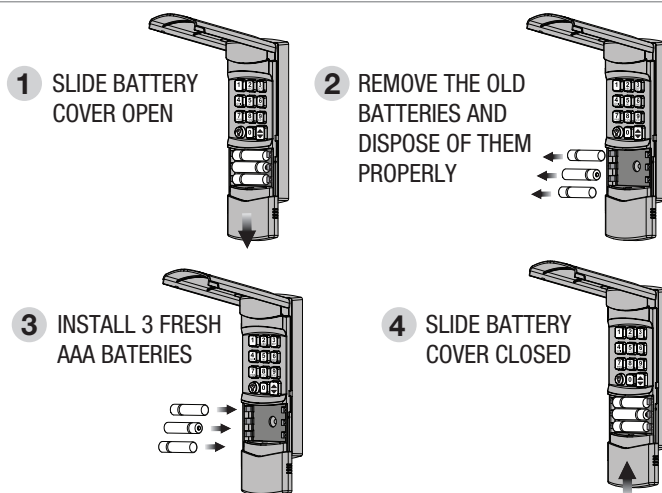
When the BLUE light on the remote glows dimly, or fails to light at all when the remote is activated, the batteries need replacing. Follow the steps in the illustration.



Replacing the Keypad's Batteries

Follow the steps in the diagram and use caution to keep batteries away from children.

- Replace old batteries with fresh AAA Alkaline batteries.
- Properly dispose of old batteries.
- Many electronic stores and supermarkets have battery recycling bins.
- Alkaline batteries can be safely disposed of with normal household waste.
- Never dispose of batteries in fire because they could explode.



⚠ WARNING ⚠

KEEP BATTERIES OUT REACH OF CHILDREN. Swallowing batteries can lead to serious injury or death. If you suspect someone has swallowed a battery, go to the hospital immediately. Do not induce vomiting or eat or drink anything. For more information, call the National Battery Ingestion Hotline: 202-625-3333.

Field Reset

In installations where the door spring, door, or hardware is being replaced and the operator was already programmed for the old door, reset the operator's settings using the following steps.

- a) Press and hold down the UP, DOWN, and LEARN buttons at the same time for ten seconds.
- b) Release the buttons (after the ten seconds). The red and green LED's flash twice, and unit will beep twice. The operator will erase all force history and reset the force setting back to LOW and erase all set limits, **but it will still retain all programmed transmitters in memory.**
- c) **AFTER PERFORMING A FIELD RESET, AT LEAST ONE OF THE OPEN OR CLOSE LIMITS MUST BE ADJUSTED BEFORE THE OPERATOR WILL FUNCTION.**
See pg. 16.

Troubleshooting

Beep/Flash Trouble Code	Problem	Cause	Remedy
1 Beep/Flash	No Problem	Remote control entered into memory	Add any additional remote controls
2 Beeps/Flashes	Door won't operate	Shorted wall station wires	Check wall station wires. Be sure both are connected to the terminal. Check for a staple in the wall station wires. Remove any staples compressing the wire. Check for frayed wires.
3 Beeps/Flashes	Door won't close	Safety beam obstacle	Check for obstacles. Align the safety beams.
4 Beeps/Flashes	Door reverses or won't open or close	Open or close force exceeded	Check for obstruction or binding of the garage door. Adjust force factor if necessary. Perform a field reset if necessary.
5 Beeps/Flashes	Door won't open from remote control	Remote was activated while in vacation mode.	Activate Vacation Mode switch on wall station (or with the Nice G.O. app) to exit vacation mode.
6 Beeps/Flashes	Limit error	Down limit and up limit are set too close together or reversed.	Reset the open and close limits. If error occurs again, contact a qualified garage door professional.
7 Beeps/Flashes	Door reverses or won't open or close	Encoder has detected an error	Check for obstruction or binding of the garage door. If error occurs again, contact a qualified garage door professional.
Beep Only Trouble Code	Problem	Cause	Remedy
2 Beeps	Low Battery	No AC line power for extended amount of time, or excessive recent use of operator.	Check to make sure AC power is on and is connected to the operator. Allow time for the battery to charge. It will take approximately 10 hours to fully recharge the battery.
4 Beeps	Diminished Battery Capacity	Battery is approaching the end of its effective life.	The battery will need replacing in the near future. Please contact your GDO dealer to replace the battery.
5 Beeps	Minimal Battery Capacity	Battery has reached the end of its effective life.	Replace the battery ASAP. Please contact your Dealer to schedule a replacement.

Limited Warranty

This product is warranted to the original consumer against defects in material and workmanship by Nice North America LLC:

MODEL	ELECTRONICS & BATTERY	MECHANICAL	MOTOR	BELT	CHAIN
LINEAR661	1 year	5 years	Lifetime	Lifetime	5 years

This product is warranted to the original consumer against defects in material and workmanship for the periods mentioned above. Nice North America will repair, or at its option, replace, any device that it finds requires service under this warranty, and will return the repaired or replaced device to the consumer at Nice North America's cost. Devices must be sent to Nice North America for service at owner's expense. This warranty does not apply to damage to the product from negligence, abuse, abnormal usage, misuse, accidents, normal wear or tear or due to failure to follow Seller's instructions, or arising from improper installation, storage or maintenance. In no event will Nice North America be responsible for incidental, compensatory, punitive, consequential, indirect, special or other damages. The remedies provided by this warranty are exclusive. Some states do not allow the exclusion or limitation of incidental and consequential damages, so the above limitation or exclusion may not apply to you. Any warranties implied by law are limited to the time periods set forth above. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For warranty service and shipping instructions please contact **Nice North America Technical Services at 1-800-421-1587**. Prior to a Return Authorization number being approved and generated, troubleshooting will be required with a Nice North America technical services representative. In order to be protected by this warranty, save your proof of purchase or formal bill of sale as it may be required should service be needed. Contact Nice North America Technical Services for troubleshooting and consideration of a Return Authorization and other important details. For additional information on our warranty policies please reference <https://niceforyou.support/>

FCC & IC Notice

This device complies with Part 15 of the FCC Rules and Industry Canada license exempt standard(s). Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including interference received that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1) l'appareil ne doit pas produire de brouillage, et
- 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class B digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician to help.

Warning

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

HOW TO ORDER REPAIR PARTS

DEVANCO  **CANADA**

19192 HAY ROAD, UNIT Q
SUMMERSTOWN, ON, K0C 2E0

TOLL FREE 1-855-931-3334
WWW.DEVANCOCANADA.COM

**WHEN ORDERING REPAIR PARTS
PLEASE SUPPLY THE FOLLOWING INFORMATION:**

- ✓ PART NUMBER
- ✓ DESCRIPTION
- ✓ MODEL NUMBER