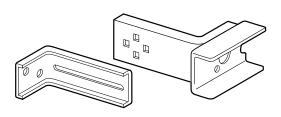
# Safety Sensor Brackets Model 41a6569



# **A WARNING**

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

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

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

## Be sure power to the opener is disconnected.

The sending eye transmits an invisible light beam to the receiving eye. The units can be installed on either side of the garage door as long as the sun never shines directly into the receiving eye lens. Look at the label on the connector end of each case to identify the sensors.

The brackets must be connected and fastened so that the sending and receiving eyes face each other as shown in Figure 1. If an obstruction breaks the light beam while the garage door is closing, the door will stop and reverse to full open position, and the opener lights will flash for 5 seconds.

The brackets must be securely fastened to a solid surface such as the studs on either side of the door, or add a piece of wood at each location if installing in masonry construction.

The invisible light beam path must be unobstructed. No part of the garage door (or door tracks, springs, hinges, rollers or other hardware) can interrupt the beam while the door is closing. If it does, use a piece of wood to build out each sensor mounting location to the minimum depth required for light beam clearance.

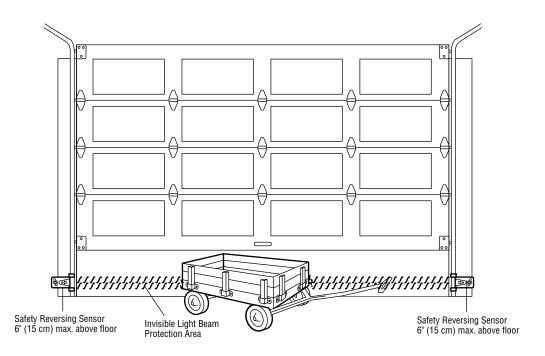


Figure 1: Facing the door from inside the garage

## Install the Safety Reversing Sensor

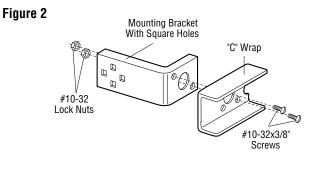
Figures 2 and 3 show assembly of brackets and "C" wrap based on the recommended installation of the sensors on each side of the garage door as shown on page 1. Figures 4 and 5 are variations which may fit your installation requirements better.

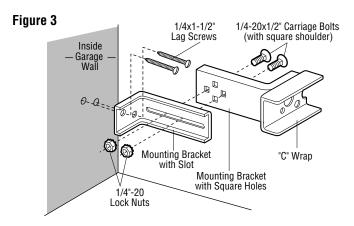
# Make sure the wraps and brackets are aligned so the sensors will face each other across the garage door.

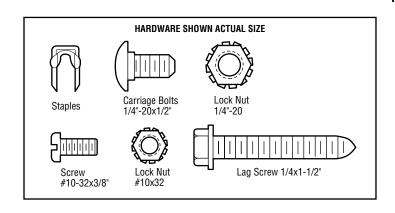
- Fasten the "C" wraps to the mounting brackets having square holes, using the hardware shown in Figure 2.
- Connect each assembly to a slotted bracket, using the hardware shown in Figure 3.

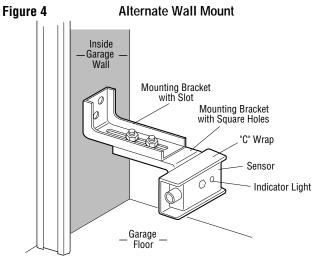
**NOTE:** the alignment of the brackets for left and right sides of the door.

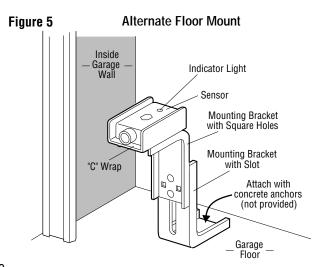
- Finger tighten the lock nuts.
- Use bracket mounting holes as a template to locate and drill (2) 3/16" diameter pilot holes on both sides of the garage door, 4"- 6" above the floor but not exceeding 6" (15 cm). (See warning on page 1.)
- Attach bracket assemblies with 1/4"x1-1/2" lag screws as shown in Figure 3.
- Adjust right and left side bracket assemblies to the same distance out from the mounting surface. Make sure all door hardware obstructions are cleared. Tighten the nuts securely.

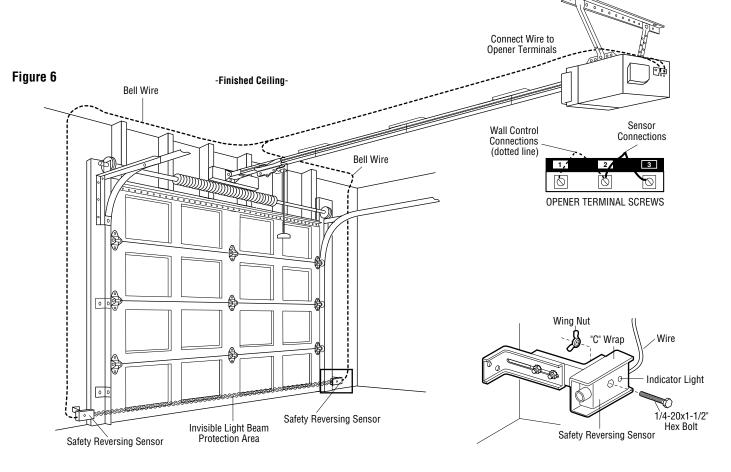






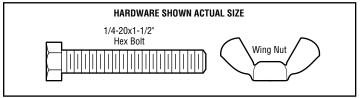






#### ALIGNING THE SAFETY REVERSING SENSORS

- Center each sensor unit in a "C" wrap with lenses pointing toward each other across the door.
- Secure Safety Reversing Sensors with the hardware shown In Figure 6. Finger tighten the wing nut on the *receiving eye* to allow for final adjustment. Securely tighten the *sending eye* wing nut.
- Run wires from both Safety Reversing Sensors to the opener as shown. Use insulated staples to secure the wire to the wall and ceiling.
- Connect both sets of wires to the opener terminals as shown (depending upon your model).
- Plug in the opener. If your opener has the Multi-Function Door Control, make sure the Lock Feature is off. Indicator lights in both the *sending* and *receiving eyes* will *glow* steadily if connections and alignment are correct. If the indicator light is off the *receiving eye* (and the invisible light beam path is not obstructed), alignment is required.
- Loosen the receiving eye wing nut to allow slight rotation of unit. Adjust Safety Reversing Sensor vertically and horizontally until the indicator light glows with a steady light.
- When indicator lights are *glowing steadily* in both units, tighten the wing nut in the *receiving eye* unit.



### TROUBLESHOOTING THE SAFETY REVERSING SENSORS

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

**NOTE:** When the invisible beam path is obstructed or misaligned while the door is closing, the door will reverse. If the door is already open, it will not close. The opener lights will blink 10 times.

## Test the Safety Reversal System

#### **TEST**

- With the door fully open, place a 1-1/2" (3.8 cm) board (or a 2x4 laid flat) on the floor, centered under the garage door.
- Operate the door in the down direction. The door must reverse on striking the obstruction.

#### **ADJUST**

 If the door stops on the obstruction, it is not traveling far enough in the down direction. Increase the DOWN limit by turning the DOWN limit adjustment screw counterclockwise 1/4 turn.

**NOTE:** On a sectional door, make sure limit adjustments do not force the door arm beyond a straight up and down position.

- Repeat the test.
- When the door reverses on the 1-1/2" (3.8 cm) board, remove the obstruction and run the opener through 3 or 4 complete travel cycles to test adjustment.
- If the unit continues to fail the Safety Reverse Test, call for a trained door systems technician.

#### **IMPORTANT SAFETY CHECK:**

Test the Safety Reverse System after:

- · Each adjustment of door arm length, limits, or force controls.
- Any repair to or adjustment of the garage door (including springs and hardware).
- Any repair to or buckling of the garage floor.
- Any repair to or adjustment of the opener.

## Test The Protector System®

- Press the remote control push button to open the door.
- Place the opener carton in the path of the door.
- Press the remote control push button to close the door. The door will not move more than an inch (2.5 cm), and the opener lights will flash.

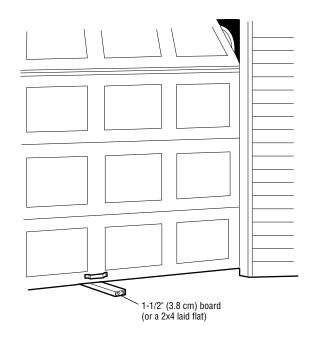
The garage door opener will not close from a remote if the indicator light in either sensor is off (alerting you to the fact that the sensor is misaligned or obstructed).

If the opener closes the door when the safety reversing sensor is obstructed (and the sensors are no more than 6" (15 cm) above the floor), call for a trained door systems technician.

## **A WARNING**

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

- Safety reversal system MUST be tested every month.
- If one control (force or travel limits) is adjusted, the other control may also need adjustment.
- After ANY adjustments are made, the safety reversal system MUST be tested. Door MUST reverse on contact with 1-1/2" high (3.8 cm) object (or 2x4 laid flat) on the floor.



# **A WARNING**

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

