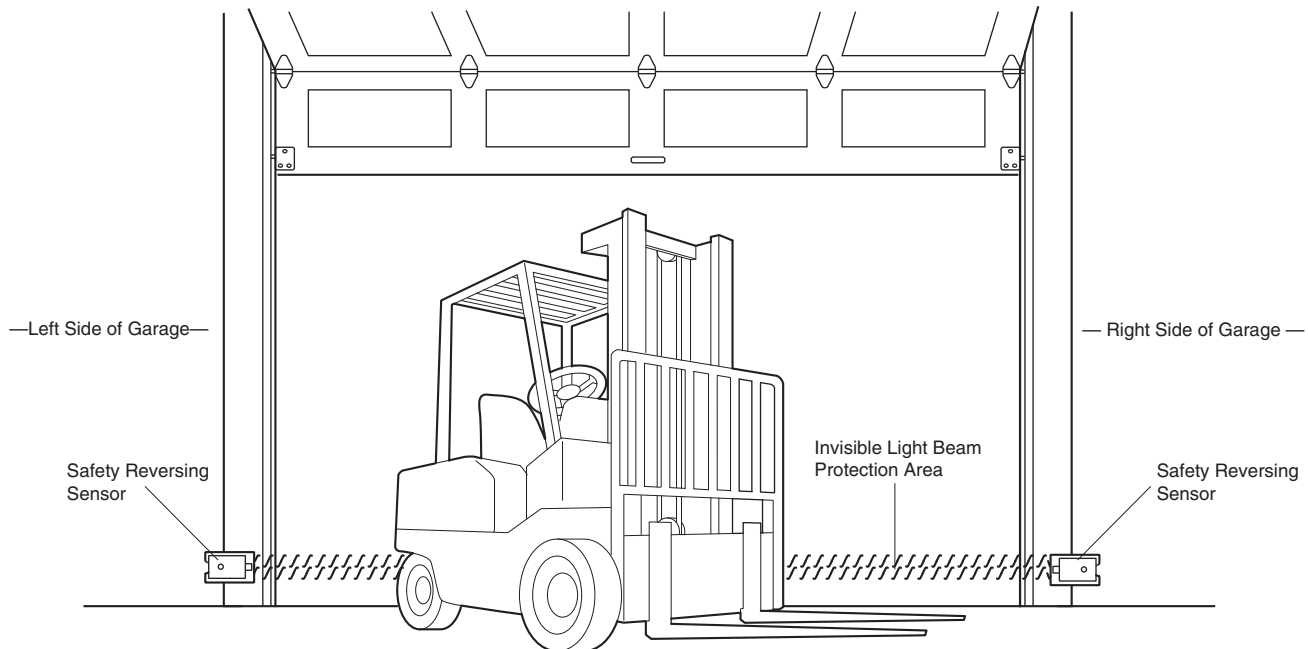
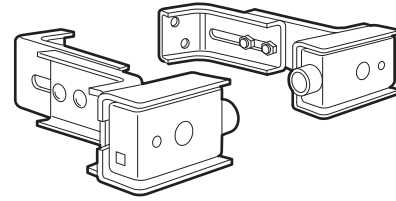


⚠ WARNING

This device is for use **ONLY** on LiftMaster Commercial Door Operators. Use on other than recommended equipment voids warranty, and may cause **PROPERTY DAMAGE** or **SERIOUS PERSONAL INJURY**. Read and follow all instructions.

Have door in full open or closed position and disconnect power to the garage door opener **BEFORE** installing the CDO Commercial Protector System®.



Facing the door from inside the garage (installation procedures are the same for all door types).

Install the Protector System®

IMPORTANT INFORMATION ABOUT THE SAFETY REVERSING SENSOR

Be sure power to the opener is disconnected.

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

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

The brackets must be securely fastened to a solid surface such as the wall framing. If installing in masonry construction, add a piece of wood at each location to avoid drilling extra holes in masonry if repositioning is necessary.

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

INSTALLING THE BRACKETS

Figures 1, 2 and 3 show recommended assembly of the bracket(s) and "C" wrap based on the *wall* installation of the sensors on each side of the door as shown on page 1 or on the *door tracks* themselves.

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 door.**

Wall or Door Track Installation Procedure

- Fasten the "C" wraps to the mounting brackets having square holes, using hardware shown (Figure 1).

Wall Installation Procedure

- Connect each assembly to a slotted bracket, using the hardware shown (Figure 2). **Note alignment of 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" (10-15 cm) above the floor. Do not exceed 6" (15 cm).
- Attach bracket assemblies with 1/4"x1-1/2" lag screws (Figure 2).
- Adjust right and left side bracket assemblies to the same distance out from mounting surface. Make sure all door hardware obstructions are cleared. Tighten the nuts securely.

Door Track Installation Procedure

- Discard slotted bracket. Drill 3/8" holes in each track and fasten securely with hardware (Figure 3).

Figure 1 WALL or DOOR Track Installation

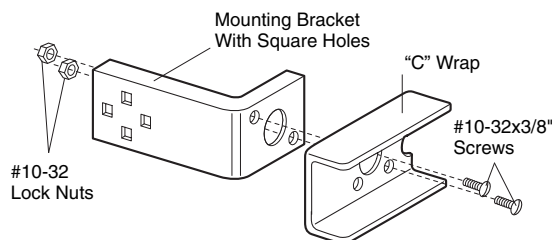


Figure 2 WALL Installation

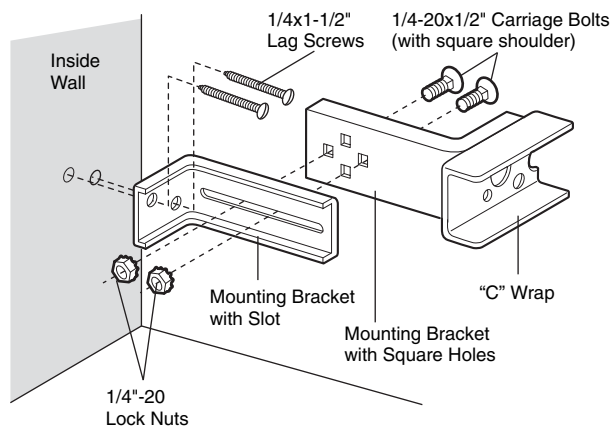
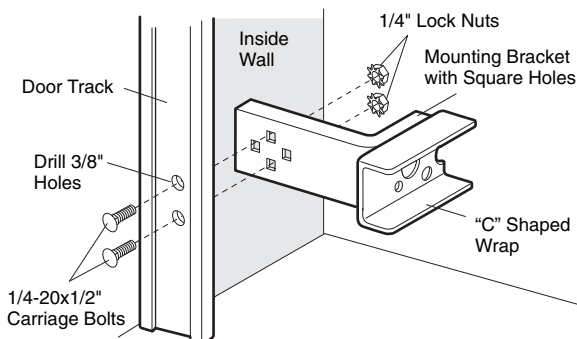


Figure 3 DOOR Track Installation



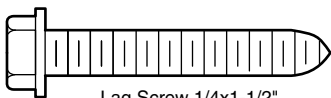
HARDWARE SHOWN ACTUAL SIZE



Screw
#10-32x3/8"



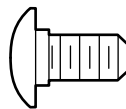
Lock Nut
#10x32



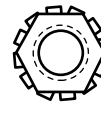
Lag Screw 1/4x1-1/2"



Staples



Carriage Bolts
1/4-20x1/2"



Lock Nut
1/4-20

Figure 4 Alternate Wall Mount

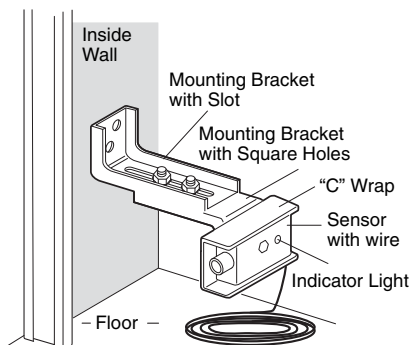
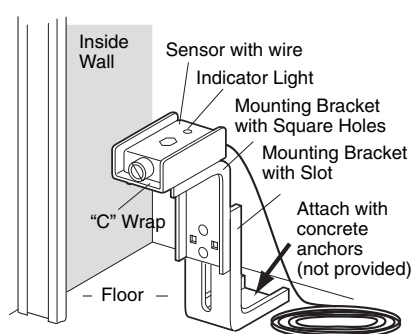
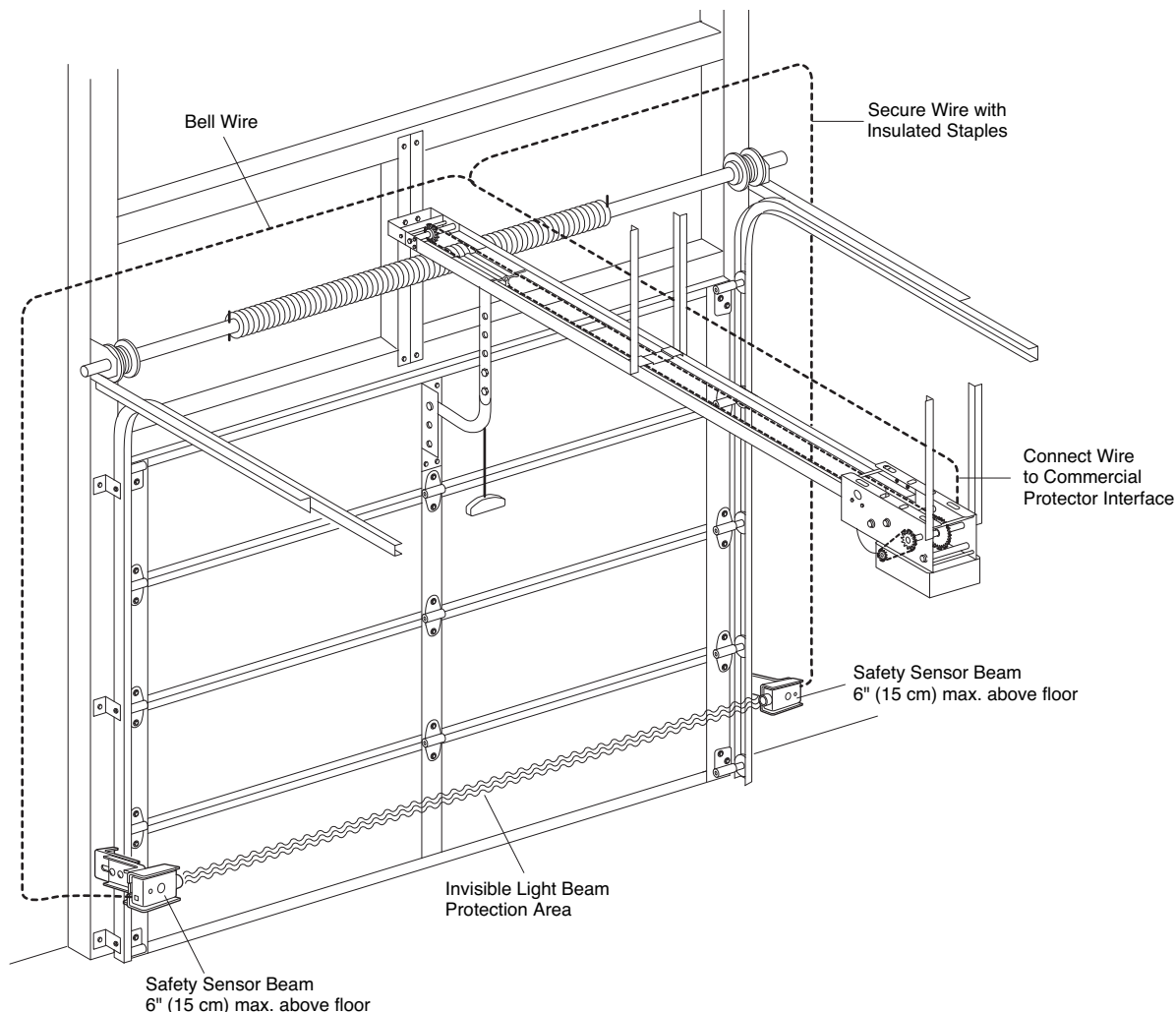


Figure 5 Alternate Floor Mount





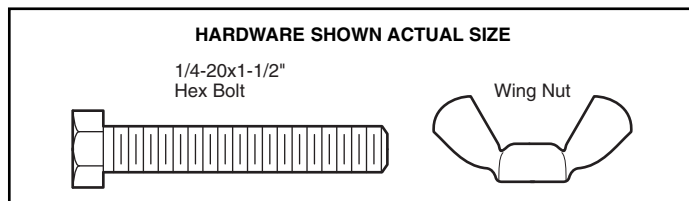
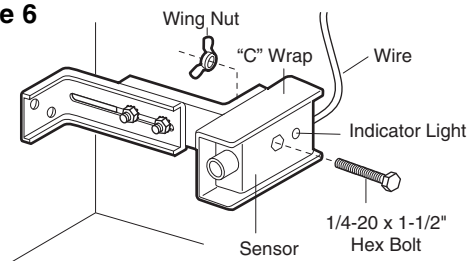
MOUNTING AND WIRING THE SAFETY SENSORS

- Insert the wire connector into each sensor and push until you hear a click. The white tab on the sensor should be flush with the back of connector.
- Center each sensor unit in a "C" wrap with lenses pointing toward each other across the door.
- Secure sensors with hardware as shown. Finger tighten the wing nut on the *receiving* eye to allow for final adjustment. Securely tighten the *sending* eye wing nut.
- Run paired wires from both sensors to the opener (Figure 6). Use insulated staples to secure the wire to the wall and ceiling.
- For wiring connections, see following pages:
 CPS page 4
 CPS-L page 4
 CPSII page 5

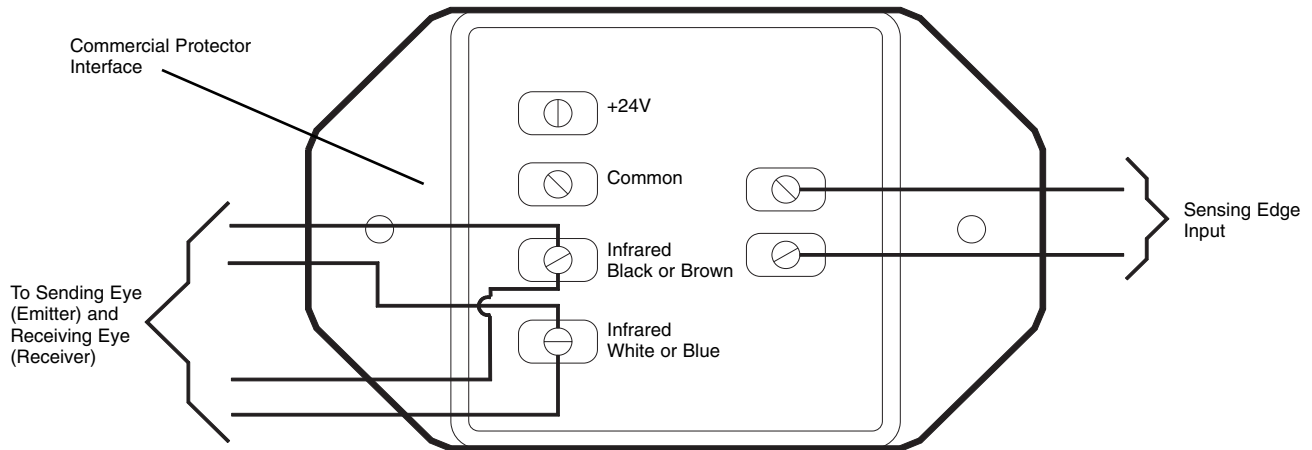
ALIGNING THE SAFETY SENSORS

- Power up the opener. Green indicator lights in both the sending and receiving eyes will *glow steadily* if wiring connections and alignment are correct.
 If the receiving eye indicator light is not glowing steadily (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 sensor vertically and/or horizontally until the green indicator light *glows steadily*.
- When indicator lights are *glowing steadily* in both units, tighten the wing nut in the receiving eye unit.

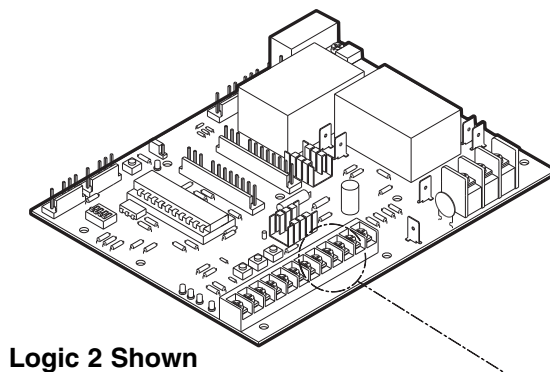
Figure 6



CPS Wiring Connections

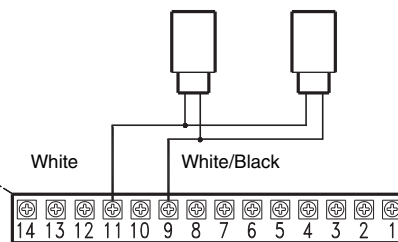


CPS-L Wiring Connections for use with Solid State II (Logic Control Board Ver 2)



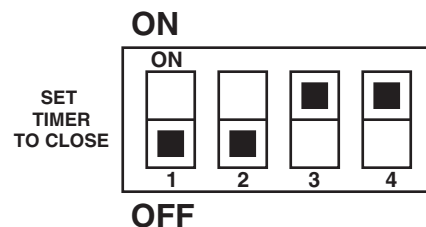
CAUTION

Once eyes are connected it will be necessary to set DIP switch to Timer to Close mode (refer to "Activate Photo Eyes" instructions below).

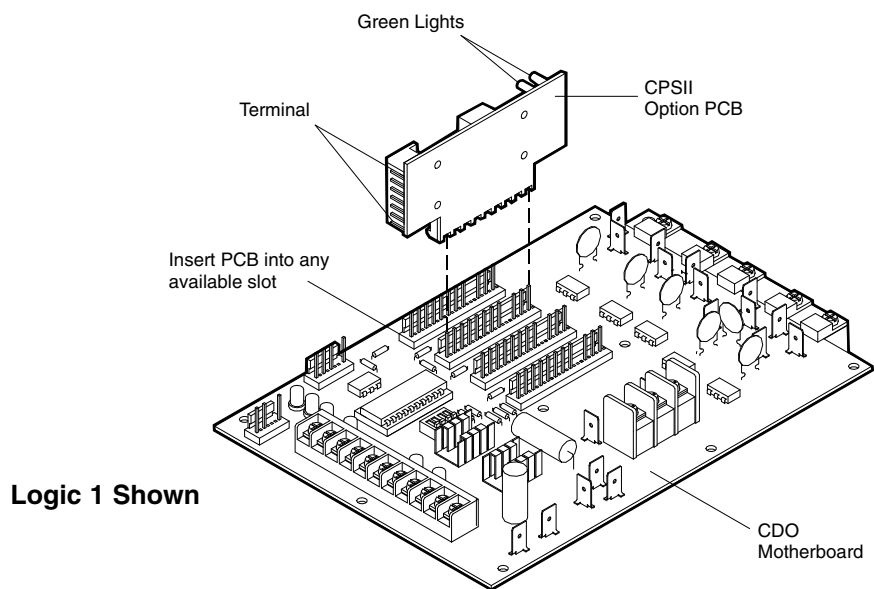


TO ACTIVATE SAFETY SENSOR EYES

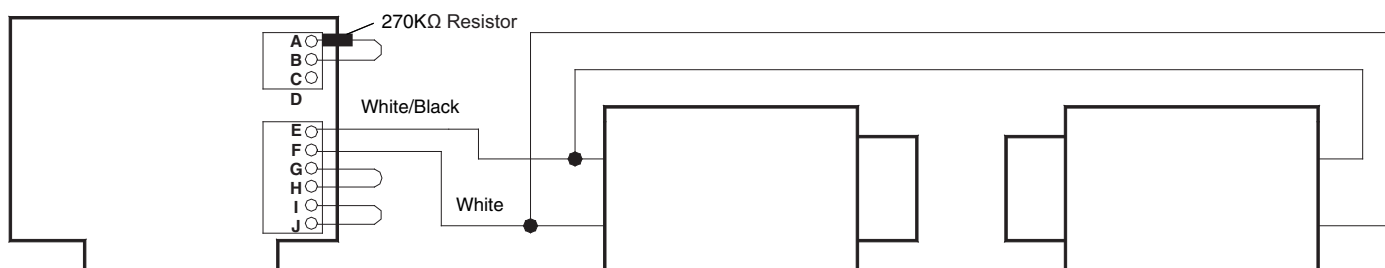
1. Set DIP switch on logic board to "Set Timer to Close" mode. (Refer to illustration below.)
2. Press the CLOSE button to clear timer. If using "Timer to Close," set delay time now.
3. Set DIP switch back to desired operating mode. (Refer to owner's manual for DIP switch settings.)
4. Starting with the door in the close position, run the door through one full open-close cycle to "Learn" the sensor eyes.
5. After the open-close cycle:
 - a) Confirm the the LEDs on both sensor eyes are lit.
 - b) Test the Safety Sensor Eyes operation by interrupting the sensors while closing the door.



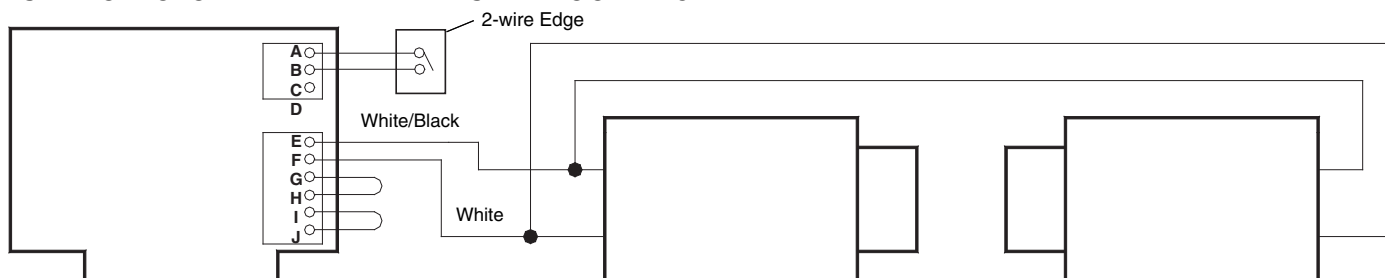
CPSII Wiring Connections for use with Solid State Logic Control Board



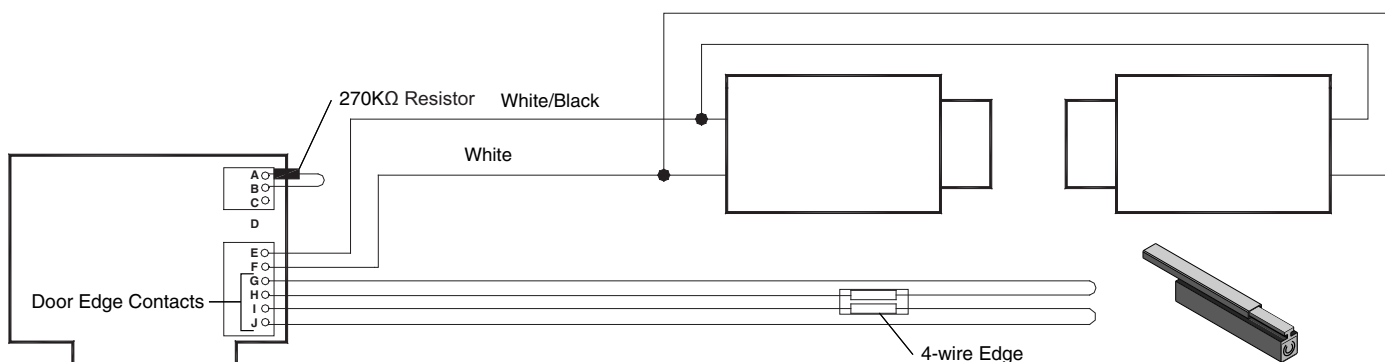
CPSII PROTECTOR ONLY



CPSII PROTECTOR AND 2-WIRE FAIL SAFE DOOR EDGE



CPSII PROTECTOR AND 4-WIRE FAIL SAFE DOOR EDGE



Testing the Protector System®

WARNING

Without a properly working CDO Commercial Protector System®, persons (particularly children) could be SERIOUSLY INJURED or KILLED by a closing garage door. Repeat this test once a month. Professional service is required if the opener closes the door when the CDO Protector System® is obstructed.

TEST THE CDO COMMERCIAL PROTECTOR SYSTEM®

- Press the OPEN button to fully open the door.
- Press the CLOSE button to close the door.
- Obstruct the light beam while the door is closing. *The door should stop and reverse.*

The door opener will not close if the indicator light in either sensor is *not glowing steadily*, alerting you to the fact that the sensor is misaligned or obstructed.

Troubleshooting

1. If the sending eye and receiving eye indicator lights do not glow steadily after installation, check for:
 - Electric power to the opener.
 - A short in the White or White/Black wires.
 - Incorrect wiring between sensors and interface.
 - An open wire (wire break).
2. If receiving eye indicator light is off (and the invisible light beam path is not obstructed), check for an open wire to the receiving eye.

NOTE: For non-solid state operators, if the door is stopped in a mid position, activation of the sensors will cause the door to open. This is similar to activating a sensor edge.

3. **CPS-L Only:** If the sending eye and receiving eye indicator lights are both lit but interrupting the photo eyes does not cause the door to reverse when closing, refer to “To Activate Safety Sensor Eyes” on page 4.

Replacement Parts

CPS	Commercial Protector Interface	41K4629
CPSII	CPSII PC Board	41K4654
CPS / CPSII / CPS-L		
	Sensor Hardware Kit	41D4116
CPSII / CPS-L		
	Receiver	001A5053-9

How to Order Repair Parts

Our large service organization spans America. Call our toll free number: **1-800-528-2806**

When ordering repair parts, please supply the following information:

PART NUMBER	DESCRIPTION	MODEL NUMBER
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Address orders to:

THE CHAMBERLAIN GROUP, INC.

Technical Support Group
6020 S. Country Club Road
Tucson, Arizona 85706

