

AC LED Lighting Option Installation Instructions

vario™ 4C configurable mail shelter



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A GIBRALTAR INDUSTRIES COMPANY 

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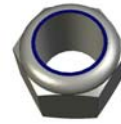
Tools Required

- 3/8” drill
- 3/8” drill bit
- Torx T-20 driver bit
- Caulking gun
- Silicone (or equivalent) sealant
- Ratchet
- 9/16” socket
- 9/16” wrench
- 7/32” allen wrench
- 3/16” allen wrench
- Fish tape
- Electrical crimping tool

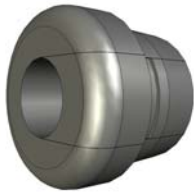
Kit Components



48195 – Capscrew, 3/8-16 x 1.25



48177 – Nut, 3/8 Hex Nylock



48232 – Strain Relief



48175 – Washer, 3/8 Flat



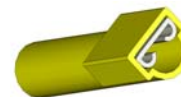
48188 – Pine Tree Clip



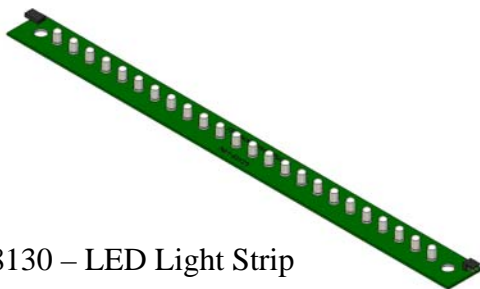
48318 – Mounting Bracket, Motion Detector



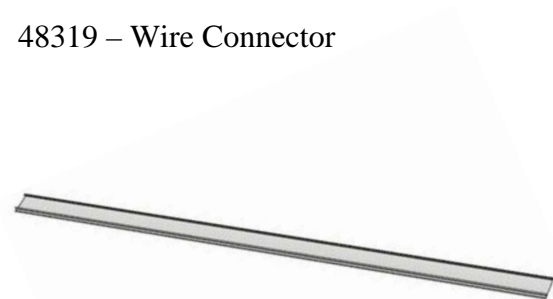
48303-2 – Motion Detector, Secondary



48319 – Wire Connector

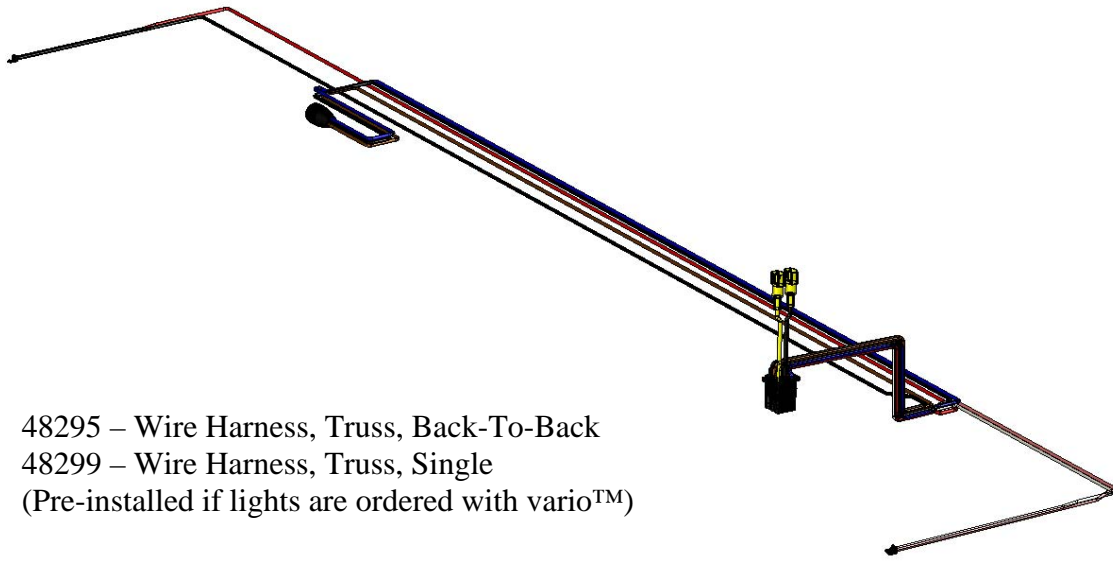


48130 – LED Light Strip

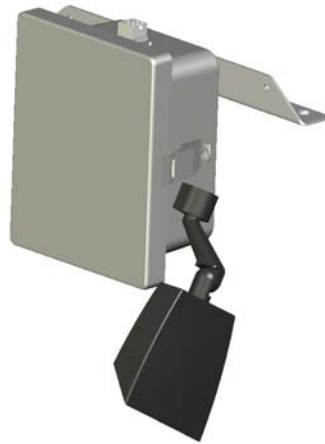


LED Lens

Kit Components (cont'd)



48295 – Wire Harness, Truss, Back-To-Back
48299 – Wire Harness, Truss, Single
(Pre-installed if lights are ordered with vario™)



48477 – Electrical Component Enclosure, AC LED



48191 – Wire Harness, Light Strip Connector



48298 – Wire Harness, Light Adapter

Step 1 – Route Truss Wiring Harness

******For retrofit after-market installation only.******

- a) Obtain 48295 Truss Wiring Harness and familiarize yourself with the harness by referring to Figures 1 through 4.

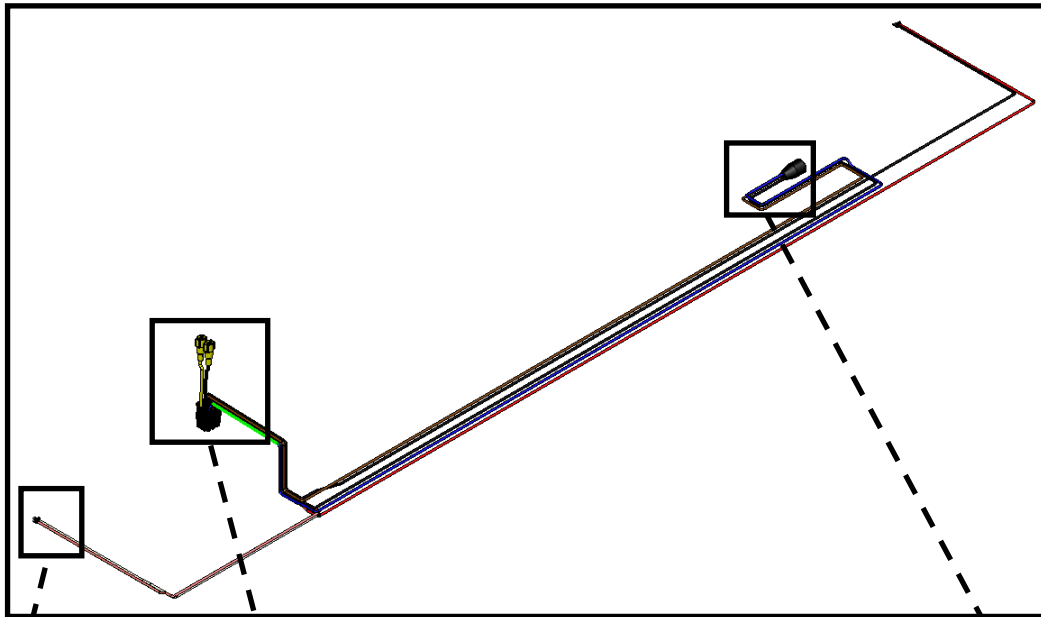


Figure 1 – Main wire harness

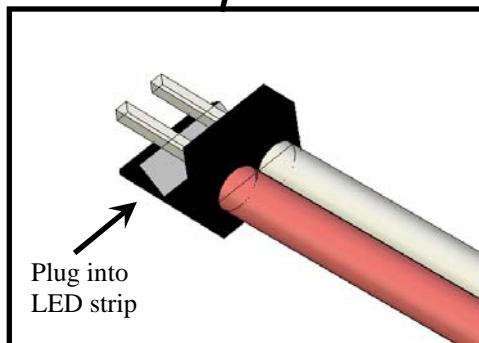


Figure 2 – Small plug; one exits the end of each side of the end truss (*back-to-back varios™ only; for single varios™ only one plug is on the harness*)

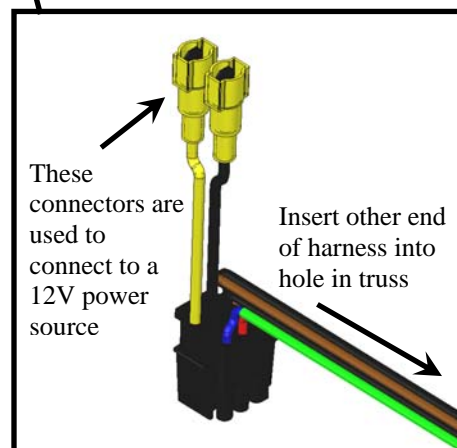


Figure 3 – Large plug

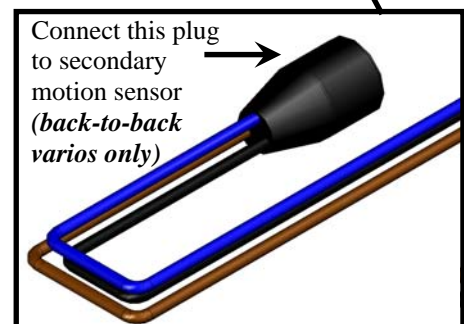


Figure 4 – Medium sized plug that exits other hole in end truss (*back to back varios™ only; for single varios™ this plug is not on the harness*)

- b) Insert the end *without* the large plug into the hole on the end truss. See Figure 8.
- c) Using an electrical fish tape, route the harness so the medium round plug exits the truss as shown in Figure 7.
- d) Route the harness so the smallest plugs exit the end truss as shown in Figures 7 and 8.
- e) Insert (2) 48232 strain reliefs as shown in Figures 5 through 8.

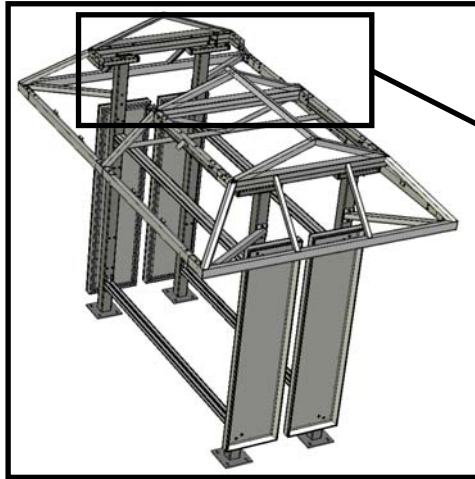


Figure 5

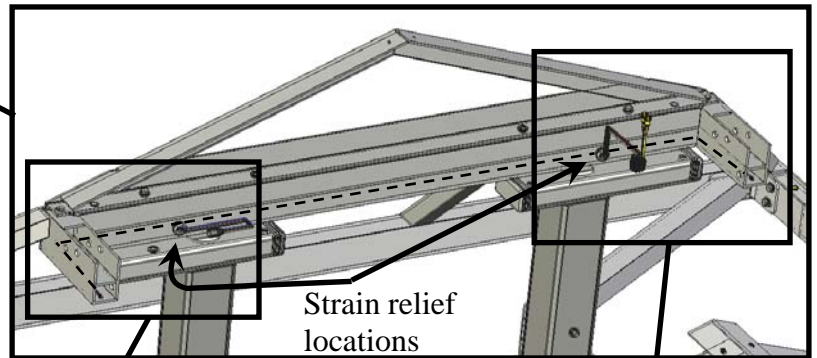


Figure 6

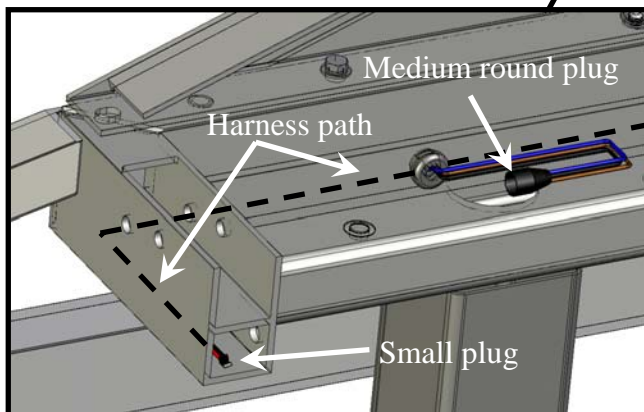


Figure 7

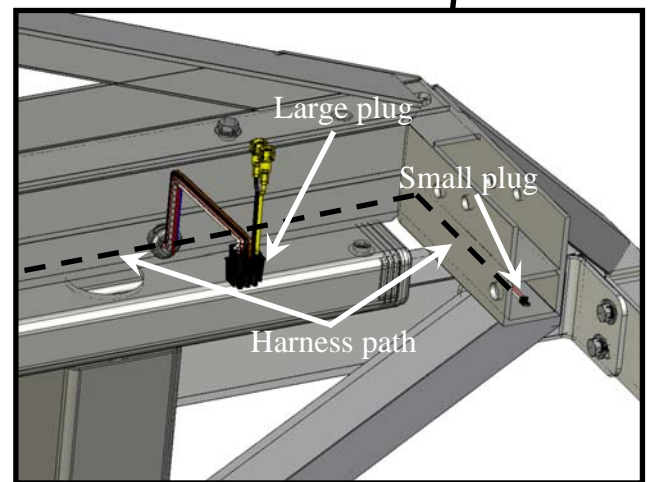


Figure 8

Step 2 – Install Component Enclosure

- a) The component enclosure should be installed to the vertical support closest to the incoming power supply.
- b) Use (2) 48195 Screws, (2) 48175 Washers, and (2) 48177 nuts to attach the top bracket to the upper tube of the vertical support. See Figures 9 and 10.

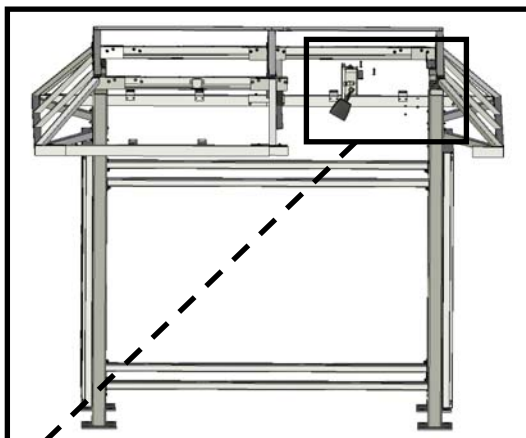


Figure 9

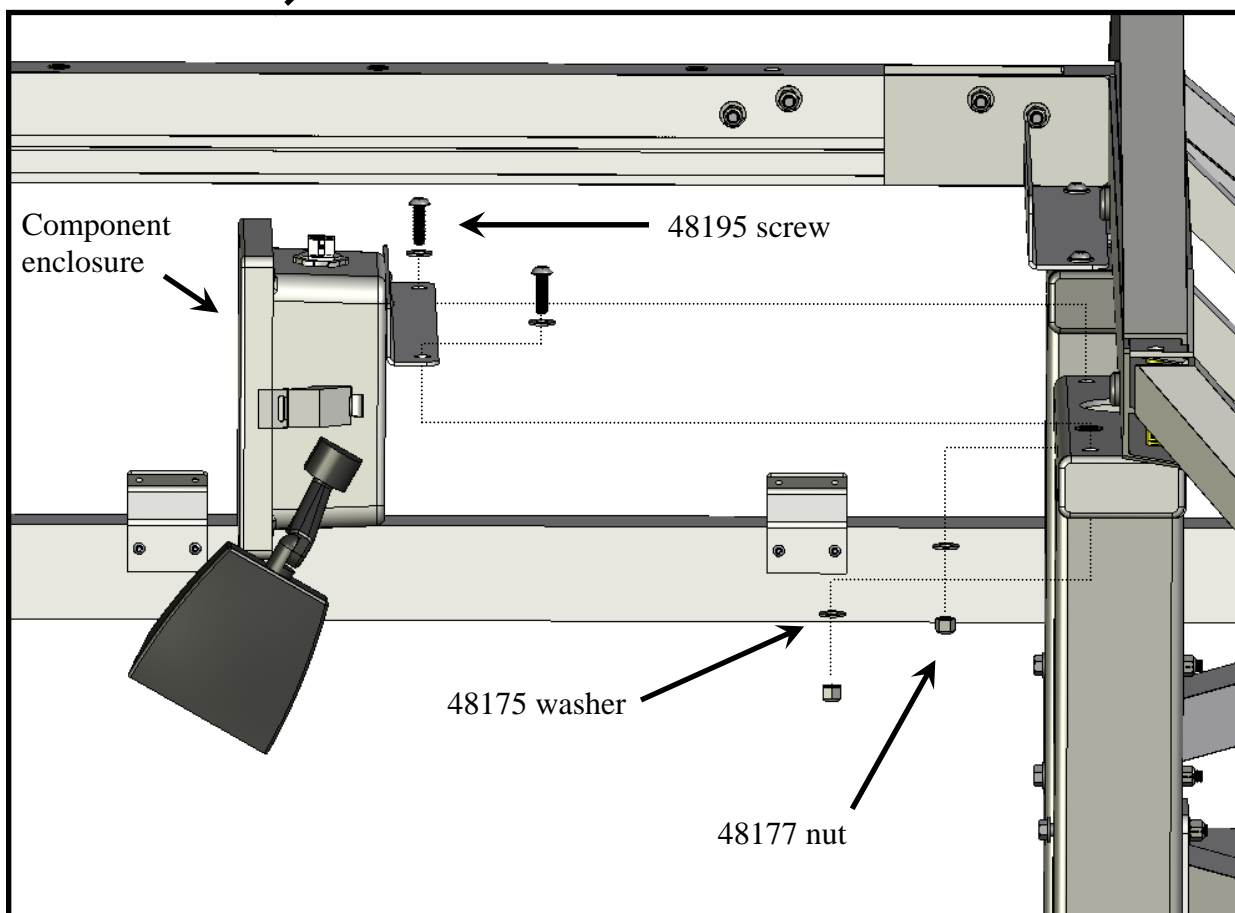


Figure 10

- c) Connect large harness connector to mating connector on top of the enclosure. See Figures 11 and 12.

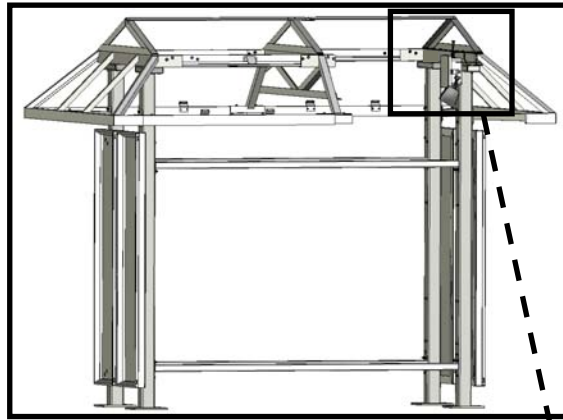


Figure 11

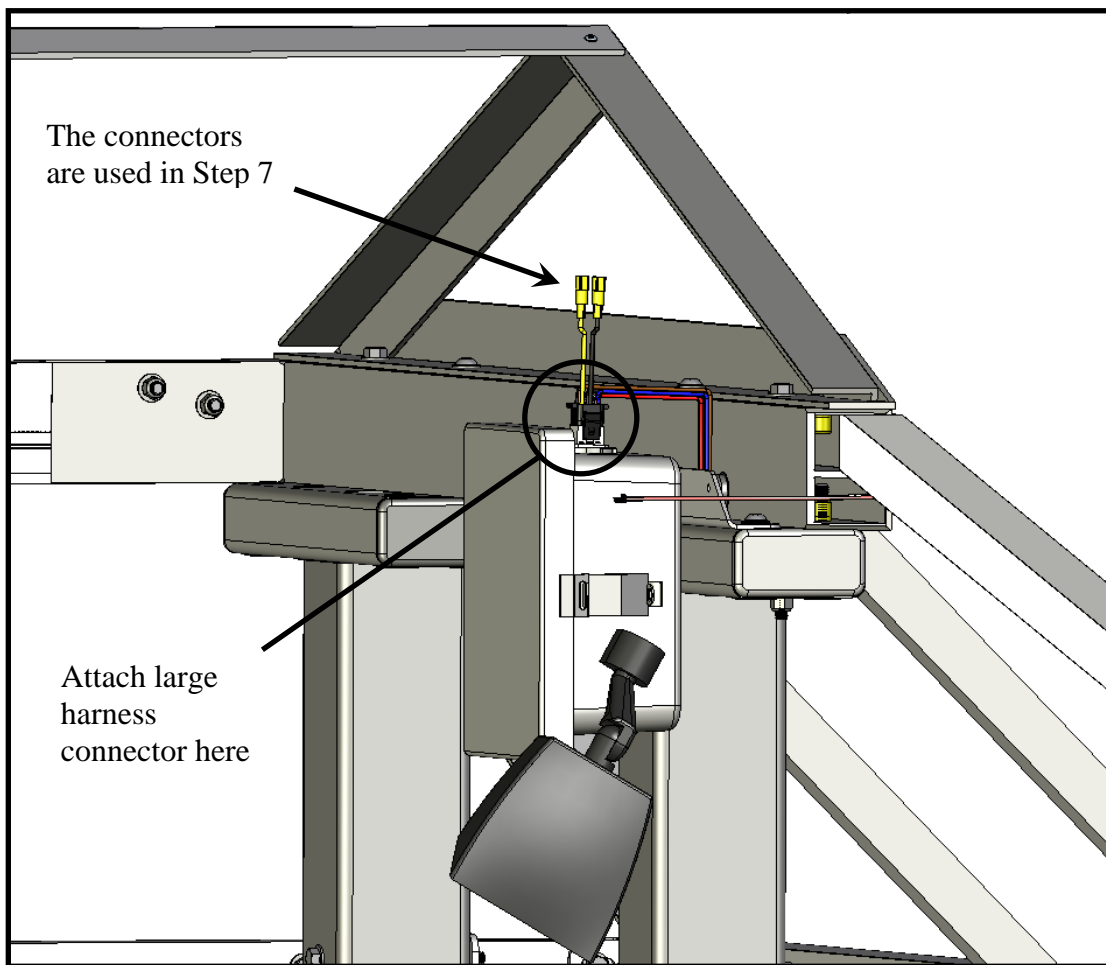


Figure 12

Step 3 – Install Secondary Motion Sensor******Required for back-to-back units only********All others proceed to Step 4.**

- a) See Figure 13 for the mounting location of the secondary motion sensor.

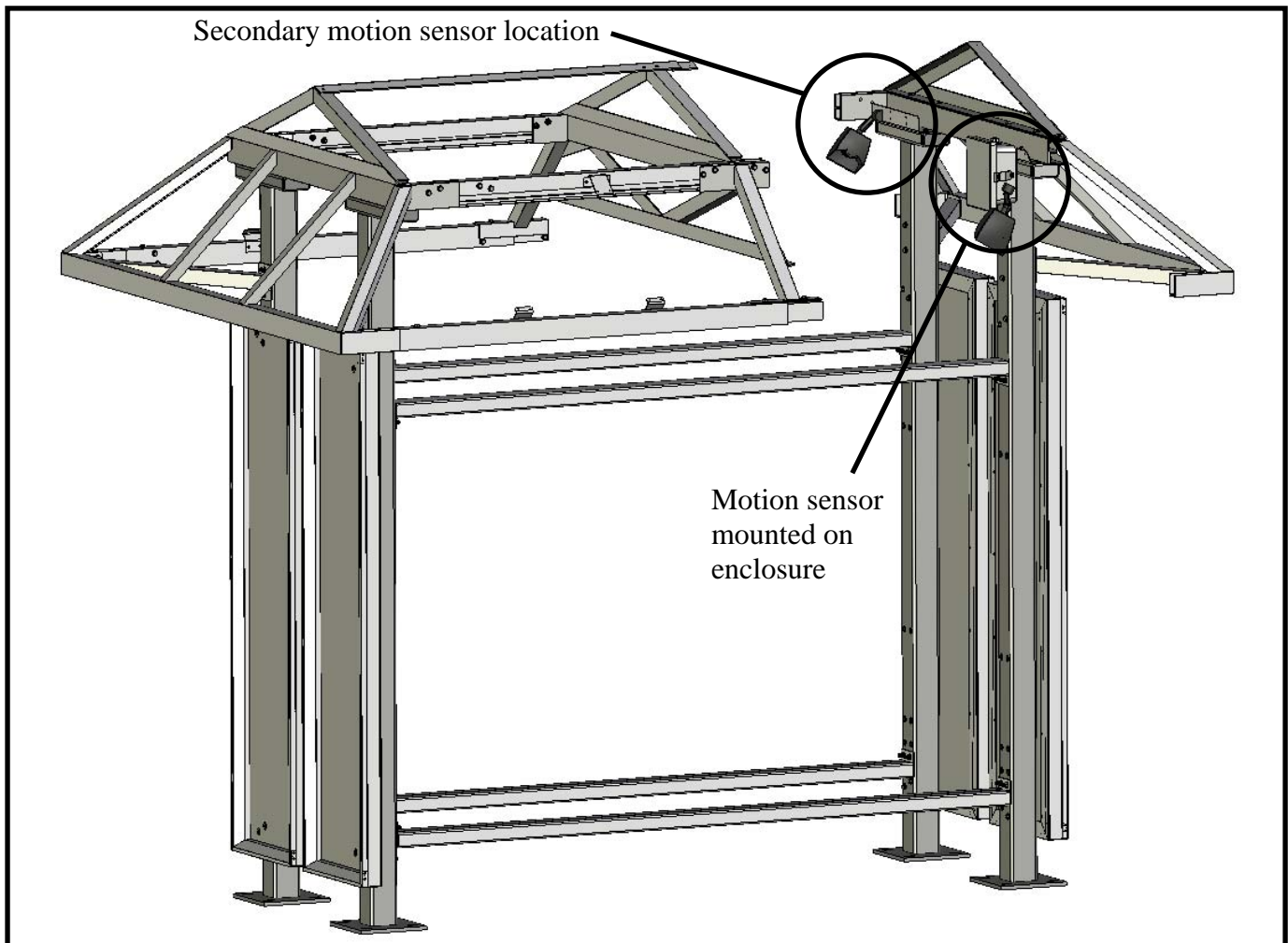


Figure 13

- b) Obtain (1) 48318 Sensor Mounting Bracket and (1) 48303 Motion Sensor.
- c) Remove the large nut from the motion sensor.
- d) Attach motion sensor to sensor mounting bracket by inserting threaded portion of motion sensor through large hole in the mounting bracket. See Figure 14.

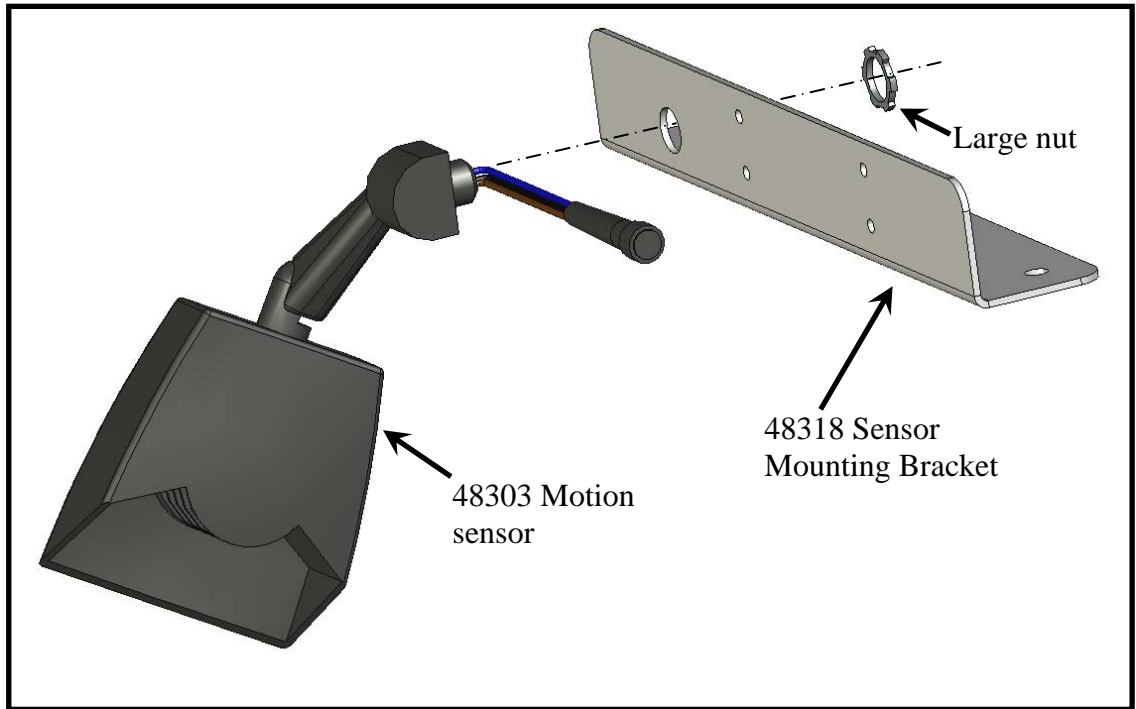


Figure 14

- e) Reinstall the nut onto the threads of the motion sensor. Tighten nut, but do not over tighten to ensure the threads do not become stripped.

- f) Mount sensor/bracket assembly using (2) 48195 screws, (2) 48175 washers, and (2) 48177 nuts as shown in Figure 15.
- g) Connect motion sensor connector to the medium black connector on the harness. Figure 16 shows the secondary motion sensor fully installed.

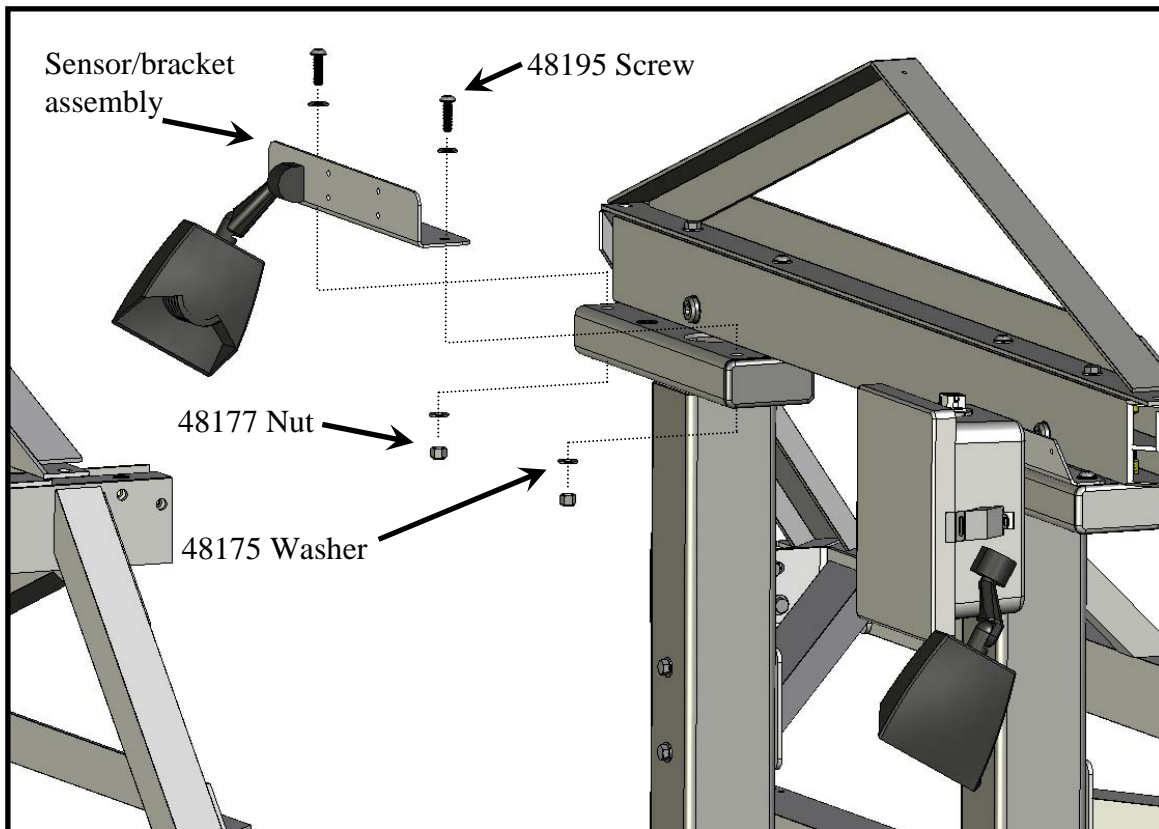


Figure 15

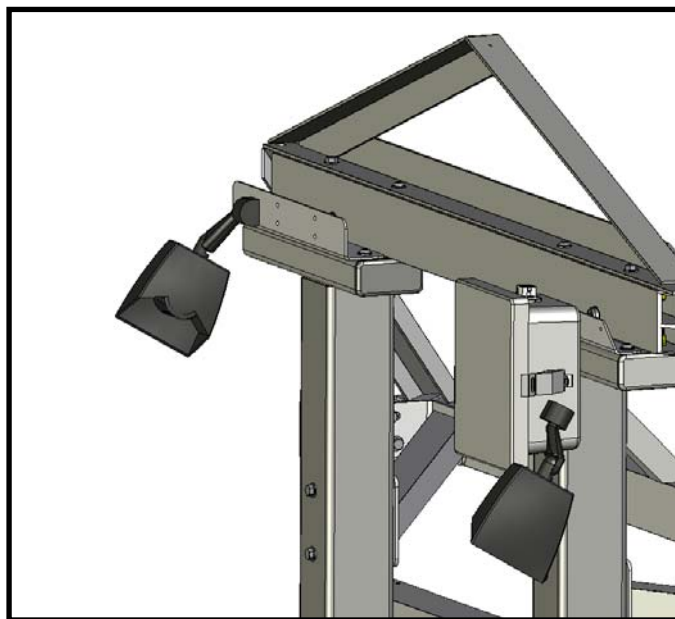


Figure 16

Step 4 – Install LED Strips

- a) Before installing 48130 LED strips, familiarize yourself with the features of the strip. See Figures 17 through 19.

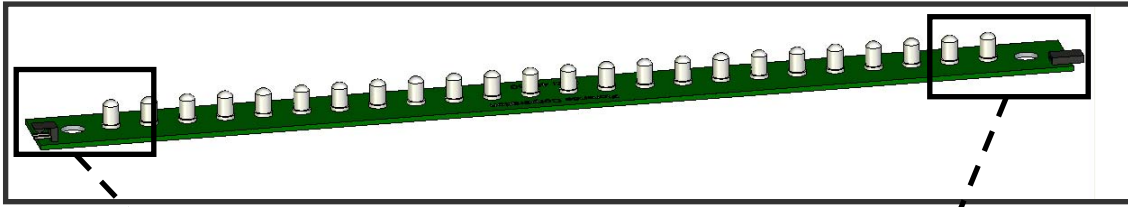


Figure 17

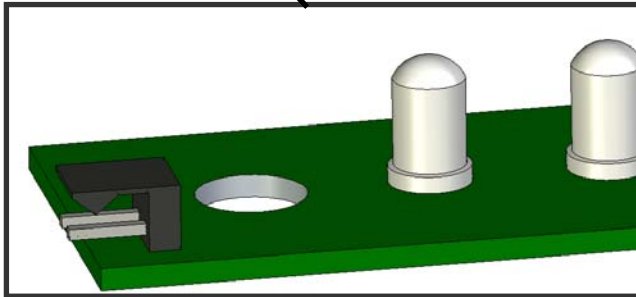


Figure 18 – Male End Plug

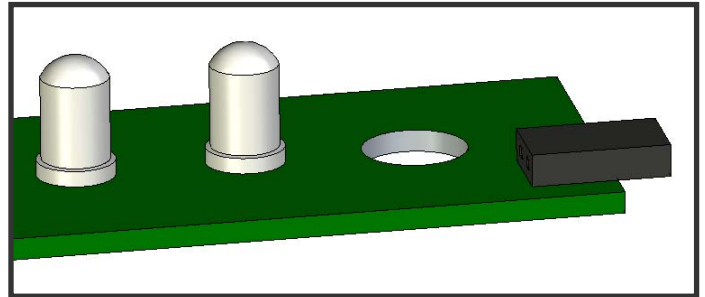


Figure 19 – Female End Plug

- b) Place the LED light strip with the female plug oriented towards the end of the vario™ that has the component enclosure mounted and hold it in place with your fingers. See Figure 20.



Figure 20

- c) Insert one 48188 plastic Pine Tree Clip fastener (Figure 21) into each hole in the LED light strip to secure the strip in place. See Figure 22.



Figure 21

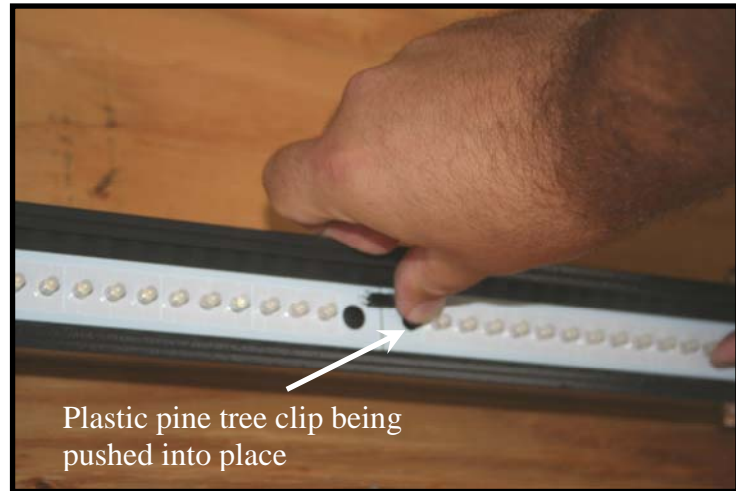


Figure 22

- d) Obtain another light strip and plug the proper end into the strip that was just mounted. See Figures 23 and 24 for details of how the strips plug into one another.

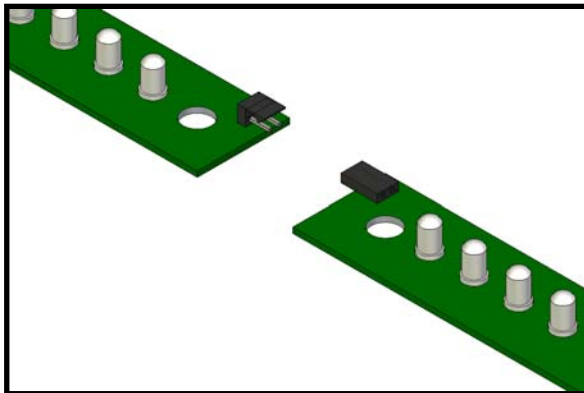


Figure 23

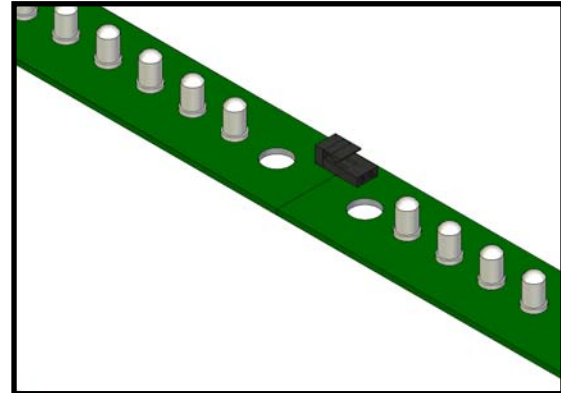


Figure 24

- e) Repeat steps 5(c) through 5(e) until all upper stringers have LED strips in them.

- f) ******For Vario™ III or IV only****all others skip to Step 5.:** Place 48191 Center Truss Harness (Figure 25) through channel of center truss so that an LED strip can be plugged into it on either side of the truss. See Figures 26 and 27.

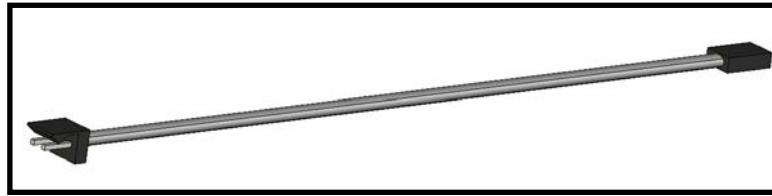


Figure 25

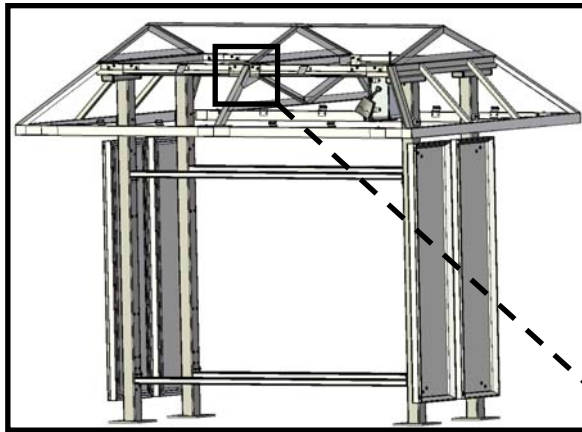


Figure 26

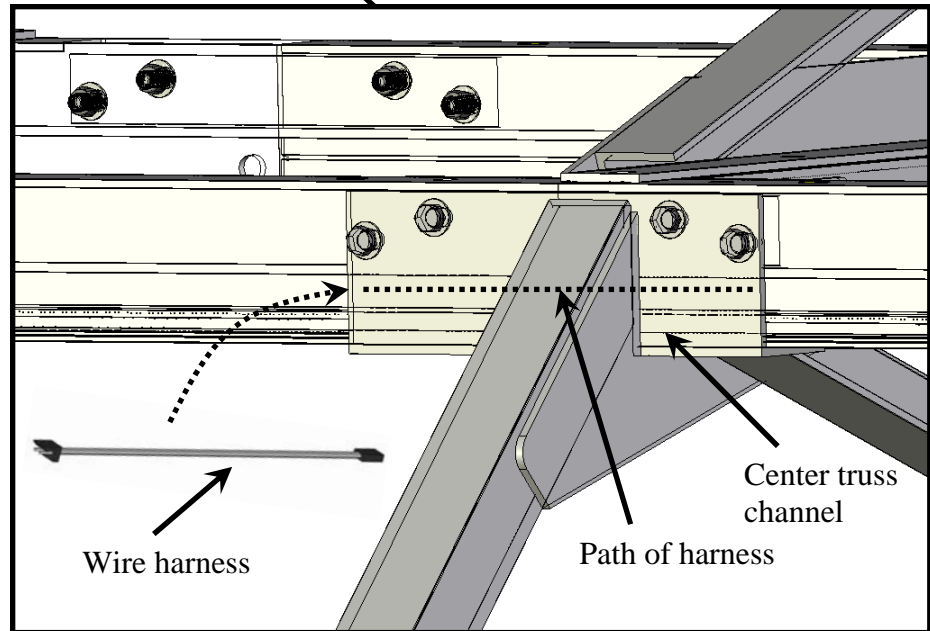


Figure 27

- g) Connect LED strips to the center truss harness (**vario™ III or IV only**) and to the end truss harness(es).
- h) NOTE: If the plugs on the LEDs do not mate up to the harness properly (i.e., male-to-female) then use 48298 light adapter wire harness to connect the LED strip to the end truss harness. See Figures 28 and 29 for detail of connections.

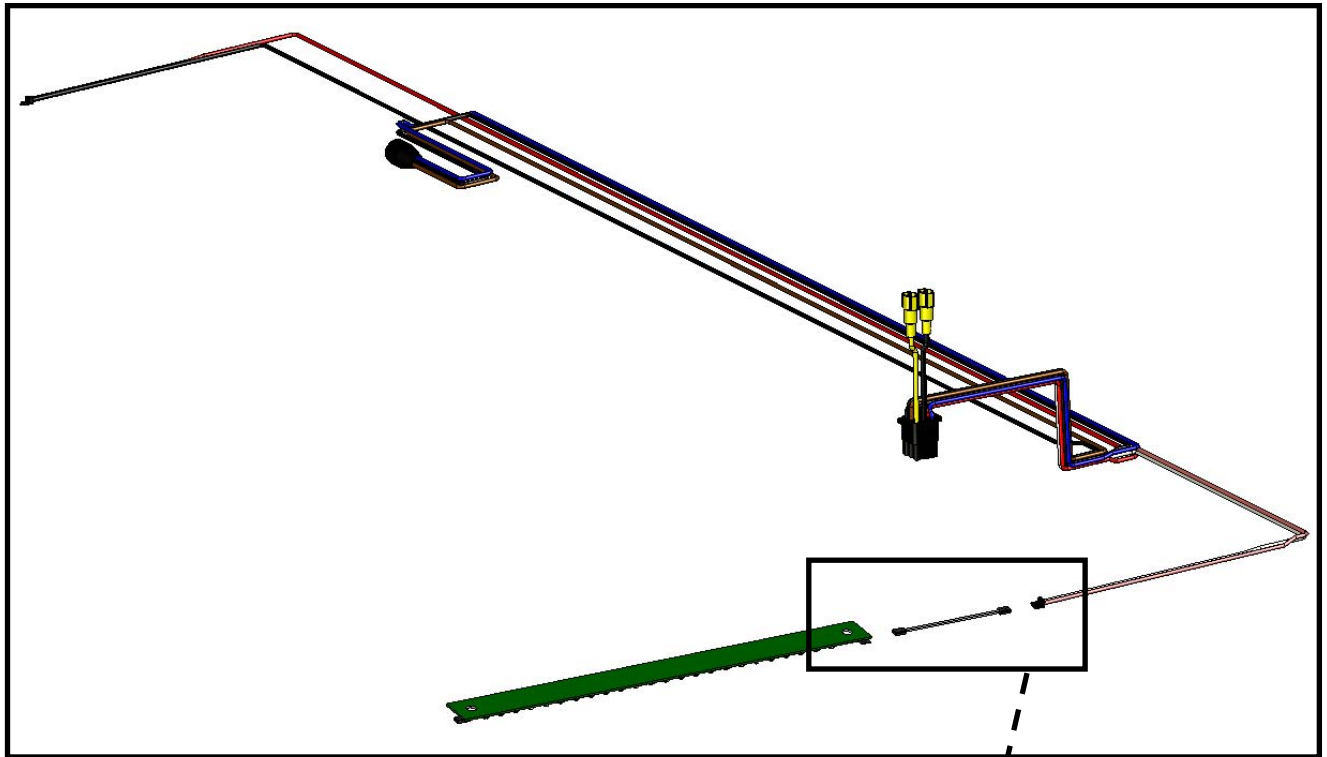


Figure 28

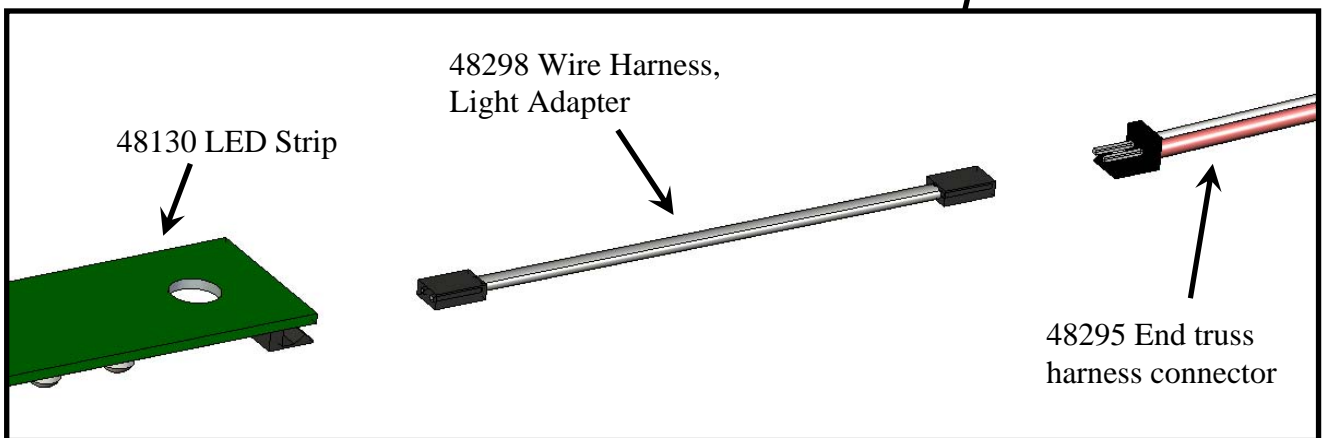


Figure 29

Step 5 – Install LED Lens

- a) Obtain one section of LED lens and push the end of it into the channel of the end truss or center truss. See Figure 30 and 31.



Figure 30



Figure 31

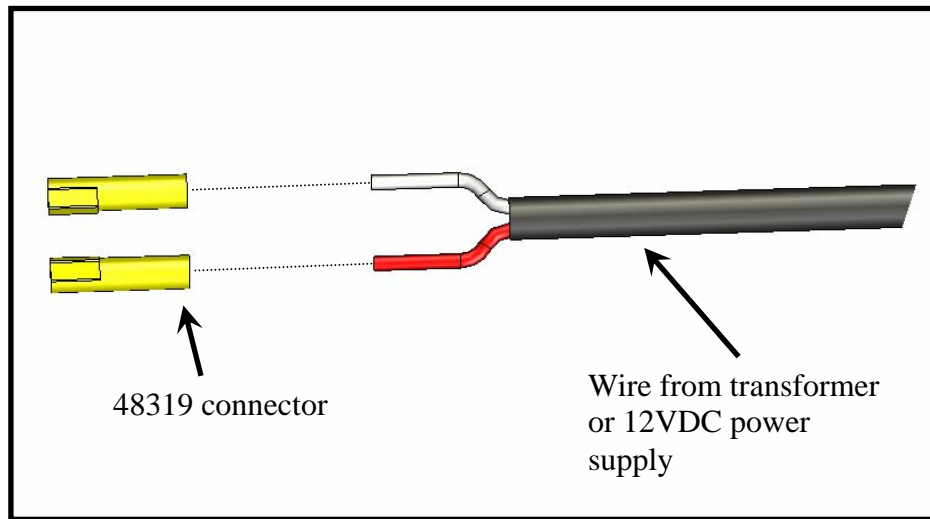
- b) Secure the LED lens by gently pressing it into the upper stringer. Press hard enough for the lens to “snap” into place. Do this for the entire length of each lens section. See Figure 32.



Figure 32

Step 6 – Connect Power

- a) AC power **must** be converted to 12VDC via a transformer or 12VDC power supply of the installer's choice.
- b) Once the power supply is installed (not necessarily on the vario™), crimp (1) 48319 connector to the positive wire and one to the negative wire. See Figure 33.

*Figure 33*

vario™	Recommended Minimum Power Supply
I Standard	12 watts
II Standard	12 watts
III Standard	24 watts
IV Standard	24 watts
I Back to Back	24 watts
II Back to Back	24 watts
III Back to Back	36 watts
IV Back to Back	36 watts

c) Plug the connectors into the truss wiring harness as shown in Figures 34 and 35.

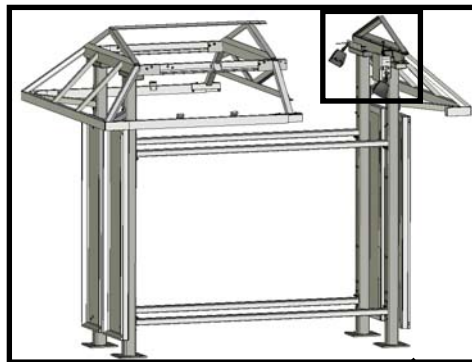


Figure 34

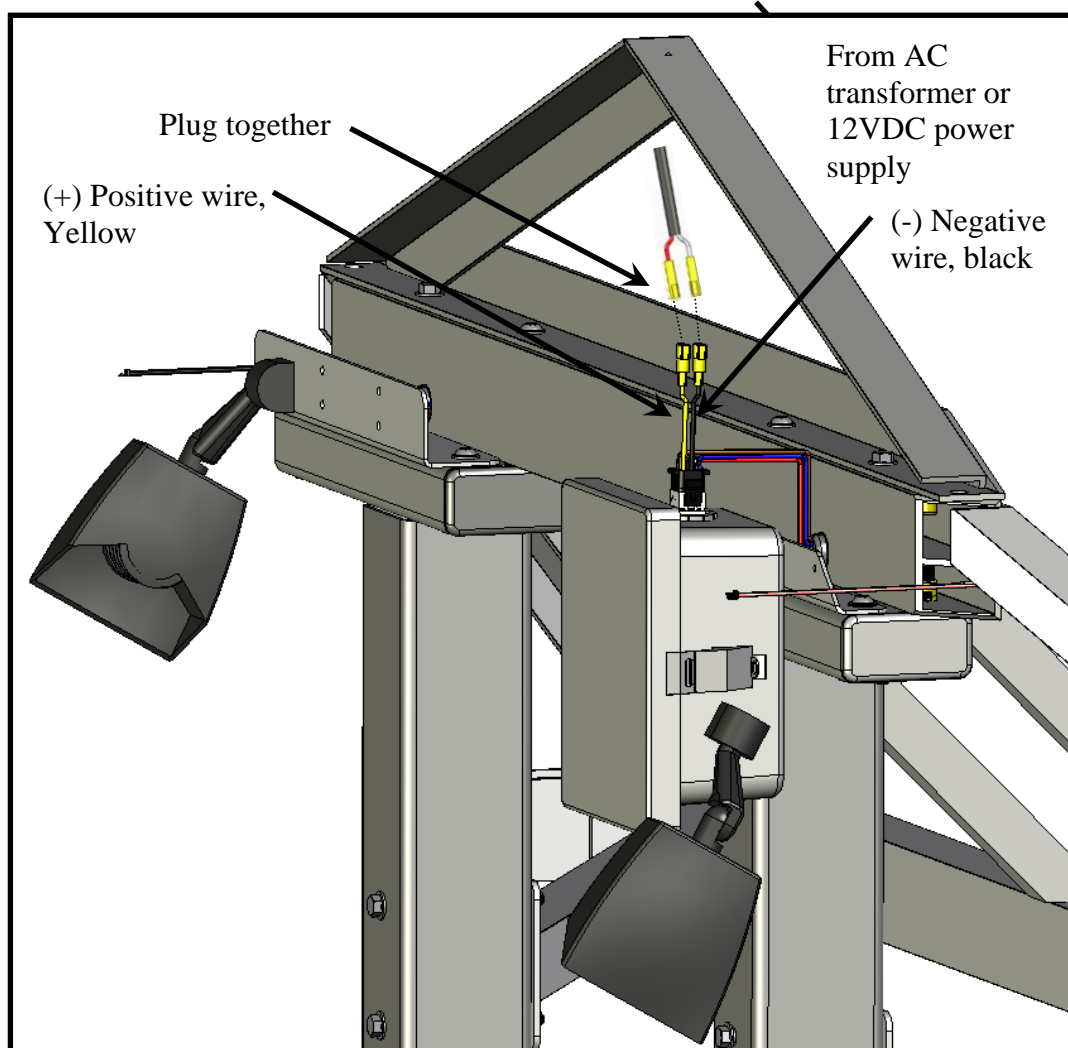


Figure 35

Step 7 – Adjust Motion Sensor(s)

Note: The red LED above the sensor lens shows the logic state of the sensor. If the sensor is set for night only operation, the LED will go on for daytime detections without turning on the lights. At night, the LED will be on all the time, except during detections (at which the vario™ LED lights will go on). At night, the LED on the sensor serves as a deterrent indicating a security device in operation.

Note: If installing or adjusting during daylight, remember that the sensor will provide five minutes of “test time” after power is turned on. After five minutes, the sensor will switch to “automatic mode” and will not work during daylight if the photocell control is turned to the “night only” position. If more than five minutes of test time is required, turn the power off for at least 10 seconds and then back on again.

- a) Rotate sensor to the angle that maximizes field of detection. The sensor should be able to detect any person that walks to the front of the mailboxes. See Figure 36.

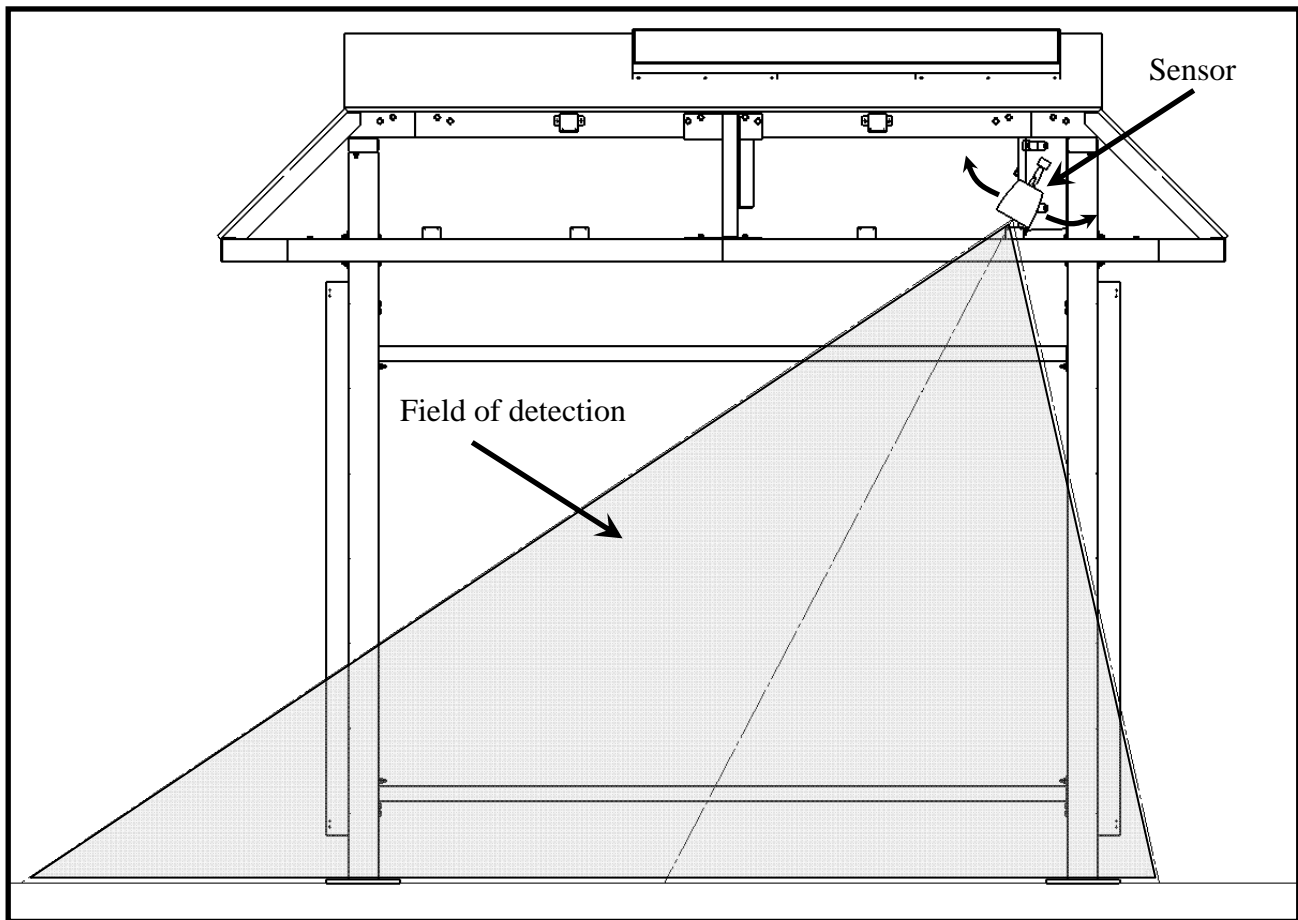


Figure 36

- a) The motion sensor has three performance adjustments. See Figure 37.
- Sensitivity – this adjusts how much movement is required to activate the sensor, and subsequently the vario™ lights.
 - Photocell – this adjusts the amount of darkness required for the motion sensor to operate. To run the lights only after sundown, turn the dial clockwise.
 - Time – this adjusts for how much time the LED lights will be on after they are activated. The range is from 5 seconds to 12 minutes.



Figure 37

Congratulations! The vario™ LED AC light system has now been successfully installed.

For replacement parts please visit www.florencemailboxes.com.