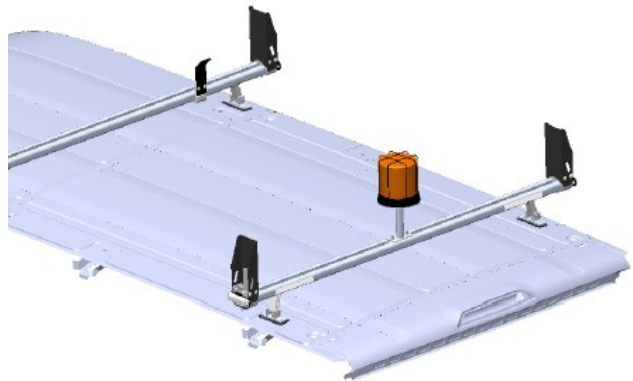
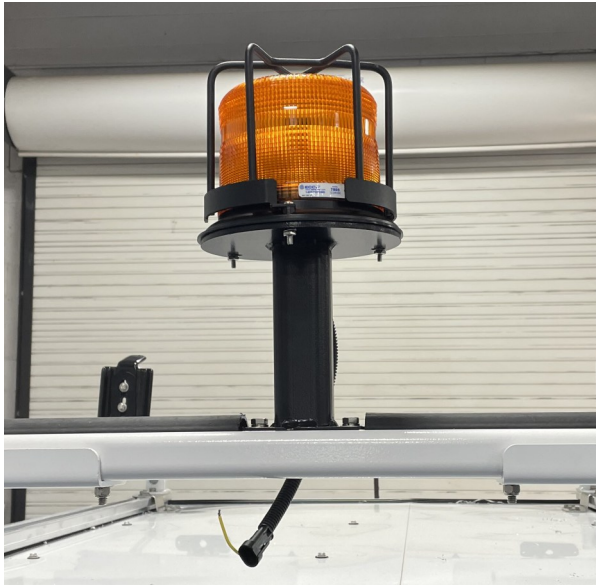


Introduction / Comments:

Install Instructions Ladder Rack Lighting for Express Vans

Note:

Read all instructions prior to installation. Review the Adrian Steel **GENERAL PRECAUTIONS PAGES (56638)** before attempting installation. Only personnel familiar with using electrical best practices should perform this install. Reference **ELECTRICAL BEST PRACTICES MANUAL (54479)** before attempting installation.



Installation Instructions Ladder Rack Lighting For Express Vans

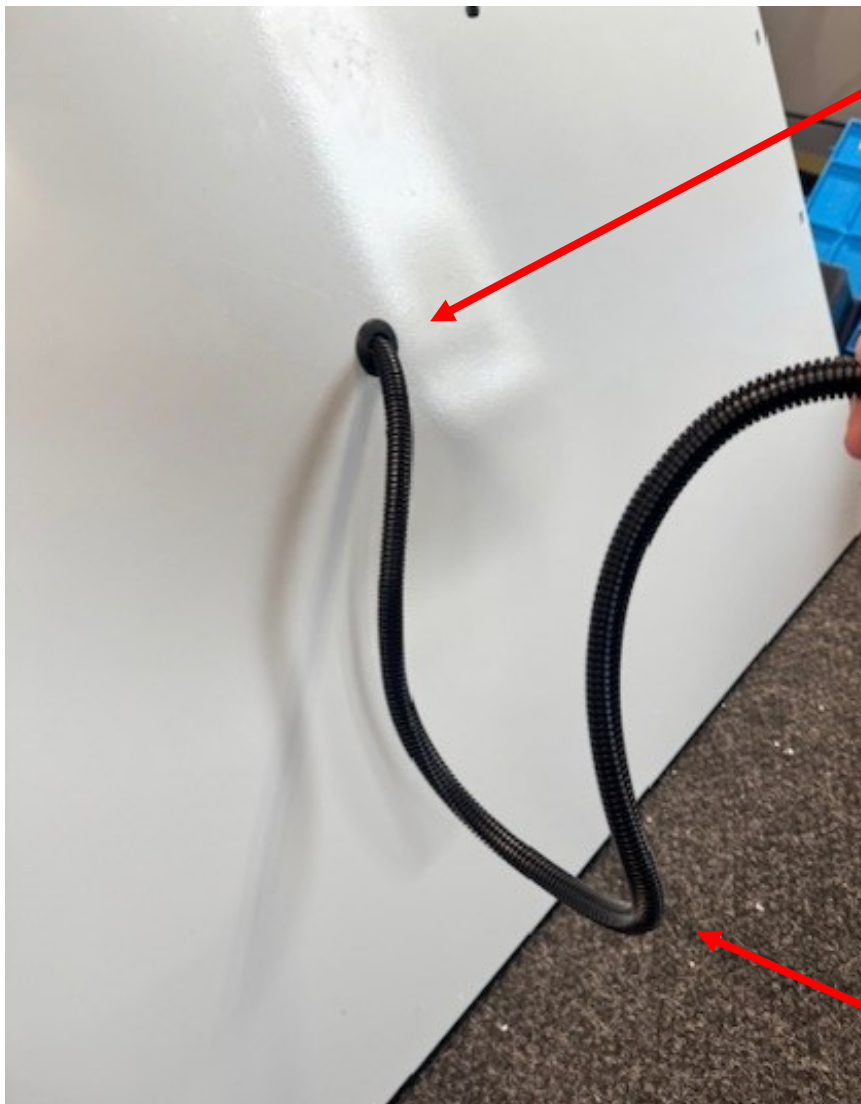
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*****TORQUE*****
Torque all strobe fasteners to 10 in-lbs.
DO NOT OVER TIGHTEN
DO NOT MOUNT ON A CURVED SURFACE

Best Practices to Follow when Routing Through Firewall:

- Create a drip loop with the harness being routed through the firewall as shown so that the water does not flow into the grommet.
- Make sure that the proper grommet for the hole being routed through is used so that there are no openings for water to get through.
- Use silicone after routing and apply around the grommet and wire to seal it. Make sure to let the silicone dry for 30 minutes to an hour.



Apply silicone around the grommet and wire loom so that it is completely sealed.

Drip loop created so water runs off of loom and not into the cab of the vehicle.

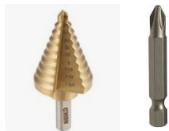
****Please read statement below before moving forward****

Before installation, disconnect the OEM's negative battery cable.

These plug and play kits are completely modular and can be configured in many different ways. Placement of lights will be determined by sales order drawings/customer ask. Therefore, these instructions are for the most standard configurations, and for reference only.

Please reference the order drawing and spec sheet to see what components are going to be installed on this particular upfit.

These installation instructions are for most cases and for reference. Not all installs will have strobes, beacons, and lightbars. Reference the instructions for only what you are installing.



Tools required:

13mm and 10mm socket and wrenches

Phillips #1 and #3 bit,

1/2" drill bit and 5/16" step drill bit

Power drill and impact

Torque wrench

Trim tools

Chevrolet Express Ladder Rack Lighting Harnesses

70977: 4 Corner Strobes On Utility Rack

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4/5	2	67615	Strobe Harness For 68" Rack

70981 / 70985: 4 Corner Strobes On Grip Lock And Prolift

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4/5	2	67614	Strobe Harness For 58" Rack

70978: Front And Rear Strobes On Utility Rack, Grip Lock, And Prolift

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4/5	2	67616	Strobe Harn Front/Rear 58"/68" Rack

71055: Beacon Only On Utility Rack

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
5	1	67622	Beacon Harness For 58"/68" Rack

70979: 4 Corner Strobes And Beacon On Utility Rack

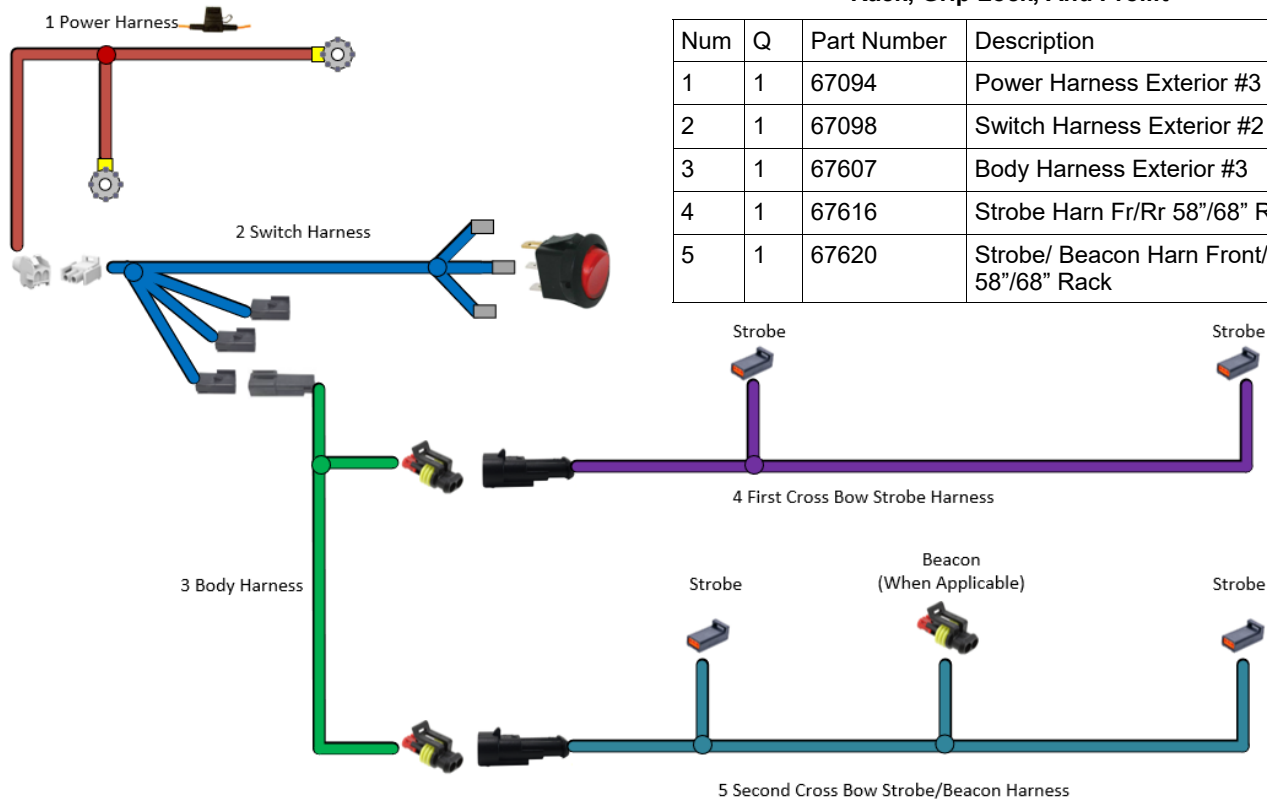
Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4	1	67615	Strobe Harness For 68" Rack
5	1	67619	Strobe/Beacon Harn For 68" Rack

70983 / 70987: 4 Corner Strobes And Beacon On Grip Lock And Prolift

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4	1	67614	Strobe Harness For 58" Rack
5	1	67618	Strobe/Beacon Harn For 58" Rack

70980: Front And Rear Strobes And Beacon On Utility Rack, Grip Lock, And Prolift

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4	1	67616	Strobe Harn Fr/Rr 58"/68" Rack
5	1	67620	Strobe/ Beacon Harn Front/Rear 58"/68" Rack



Parts Reference—Only If Needed. Kit Numbers: Kit Type: Product Structures

Chevrolet Express Ladder Rack Brackets And Bags

70977: 4 Corner Strobes On Utility Rack

Num	Q	Part Number	Description
N/A	1	BAG66095	Bag For Strobes On Utility Rack
1	4	67686	Ecco Plug And Play Strobes
2	4	66103-B	Strobe Bracket For Utility Rack

70981: 4 Corner Strobes On Grip Lock

Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/ Prolift
1	4	67686	Ecco Plug And Play Strobes
3	4	67130-B	Strobe Bracket For Grip Lock

70985: 4 Corner Strobes On Prolift

Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/ Prolift
1	4	67686	Ecco Plug And Play Strobes
4	4	67136-B	Strobe Bracket For Prolift

70979: 4 Corner Strobes And Beacon On Utility Rack

Num	Q	Part Number	Description
N/A	1	BAG66095	Bag For Strobes On Utility Rack
N/A	1	BAG66092	Bag For Beacon On Utility Rack
1	4	67686	Ecco Plug And Play Strobes
2	4	66103-B	Strobe Bracket For Utility Rack
6	1	70970	Beacon Assembly Kit—Boxed

70987: 4 Corner Strobes And Beacon On Prolift

Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/ Prolift
N/A	1	BAG66092	Bag For Beacon On Utility Rack
1	4	67686	Ecco Plug And Play Strobes
4	4	67136-B	Strobe Bracket For Prolift
6	1	70970	Beacon Assembly Kit—Boxed

71055: Beacon Only On Utility Rack, Grip Lock, And Prolift

Num	Q	Part Number	Description
N/A	1	BAG66092	Bag For Beacon On Utility Rack
6	1	70970	Beacon Assembly Kit—Boxed

70983: 4 Corner Strobes And Beacon On Grip Lock

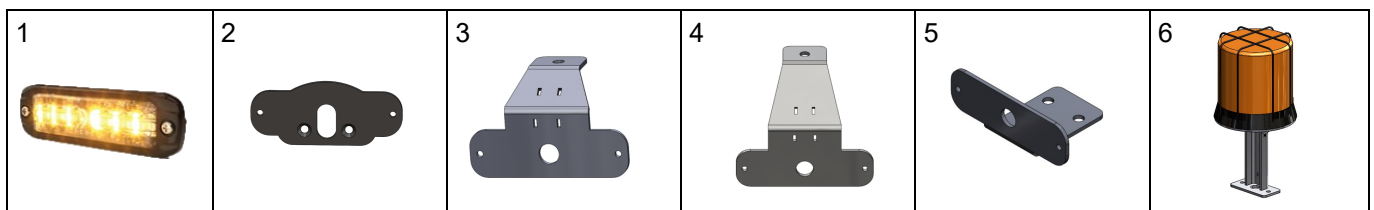
Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/ Prolift
N/A	1	BAG66092	Bag For Beacon On Utility Rack
1	4	67686	Ecco Plug And Play Strobes
3	4	67130-B	Strobe Bracket For Grip Lock
6	1	70970	Beacon Assembly Kit—Boxed

70978: Front And Rear Strobes On Utility Rack, Grip Lock, and Prolift

Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/ Prolift
1	4	67686	Ecco Plug And Play Strobes
5	4	67824-B	Front/Rear Strobe Bracket All Racks

70980: Front And Rear Strobes With Beacon On Utility Rack, Grip Lock, and Prolift

Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/ Prolift
N/A	1	BAG66092	Bag For Beacon On Utility Rack
1	4	67686	Ecco Plug And Play Strobes
5	4	67824-B	Front/Rear Strobe Bracket All Racks
6	1	70970	Beacon Assembly Kit—Boxed



Chevrolet Express Half/Half Ladder Rack Lighting Harnesses

70996: 4 Corner Strobes: Half Utility / Half Grip Lock

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4/5	2	67614	Strobe Harness For 58" Rack

70998: 4 Corner Strobes: Half Utility / Half Prolift

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4/5	2	67614	Strobe Harness For 58" Rack

71000: 4 Corner Strobes: Half Grip Lock / Half Prolift

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4/5	2	67614	Strobe Harness For 58" Rack

71018: 4 Corner Strobes With Beacon: Half Utility / Half Grip Lock

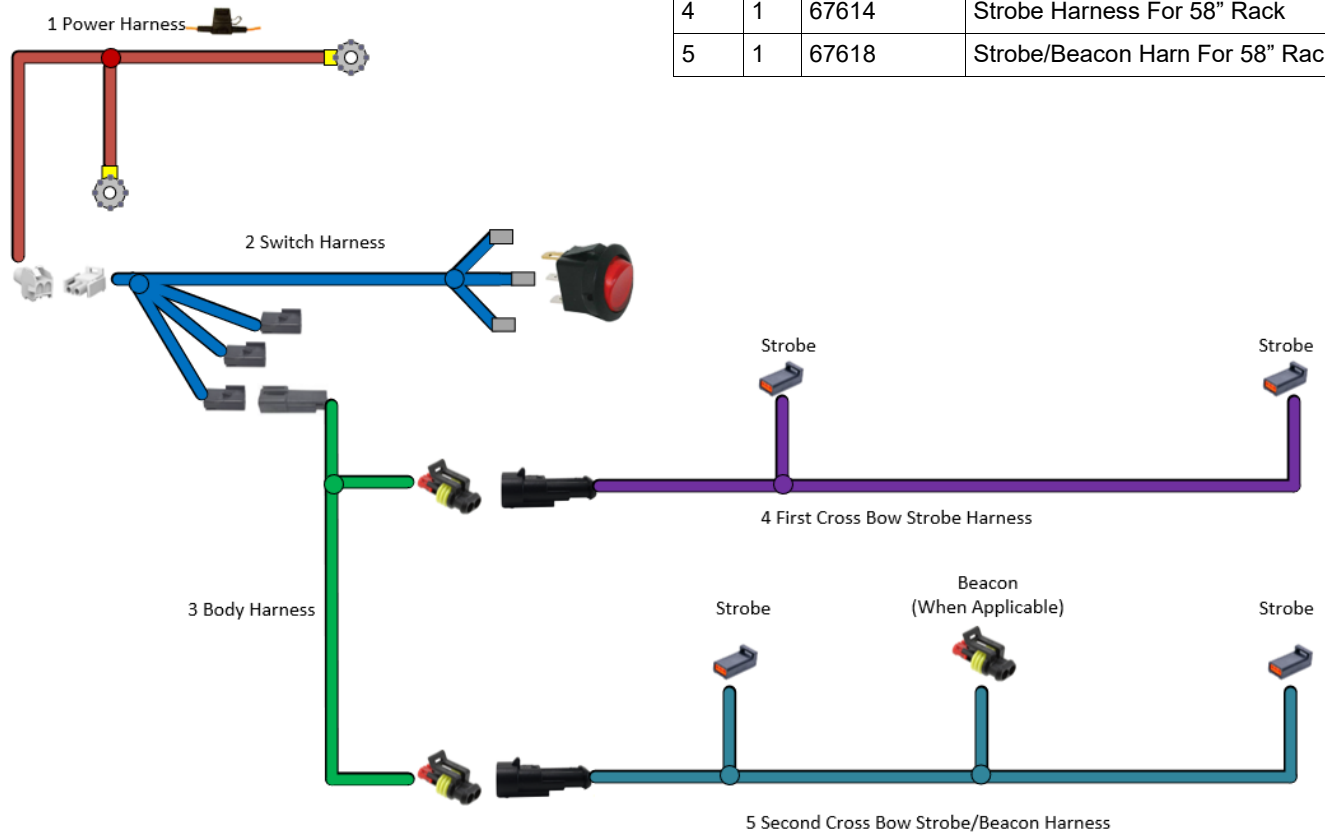
Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4	1	67614	Strobe Harness For 58" Rack
5	1	67618	Strobe/Beacon Harn For 58" Rack

71020: 4 Corner Strobes With Beacon: Half Utility / Half Prolift

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4	1	67614	Strobe Harness For 58" Rack
5	1	67618	Strobe/Beacon Harn For 58" Rack

71022: 4 Corner Strobes With Beacon: Half Grip Lock / Half Prolift

Num	Q	Part Number	Description
1	1	67094	Power Harness Exterior #3
2	1	67098	Switch Harness Exterior #2
3	1	67607	Body Harness Exterior #3
4	1	67614	Strobe Harness For 58" Rack
5	1	67618	Strobe/Beacon Harn For 58" Rack



Chevrolet Express Half/Half Ladder Rack Brackets And Bags

70996: 4 Corner Strobes: Half Utility / Half Grip Lock

Num	Q	Part Number	Description
N/A	1	BAG66095	Bag For Strobes On Utility Rack
N/A	1	BAG70965	Bag For Strobes On Grip/Prolift
1	4	67686	Ecco Plug And Play Strobes
2	2	66103-B	Strobe Bracket For Utility Rack
3	2	67130-B	Strobe Bracket For Grip Lock

70998: 4 Corner Strobes: Half Utility / Half Prolift

Num	Q	Part Number	Description
N/A	1	BAG66095	Bag For Strobes On Utility Rack
N/A	1	BAG70965	Bag For Strobes On Grip/Prolift
1	4	67686	Ecco Plug And Play Strobes
2	2	66103-B	Strobe Bracket For Utility Rack
4	2	67136-B	Strobe Bracket For Prolift

71000: 4 Corner Strobes: Half Grip Lock / Half Prolift

Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/Prolift
1	4	67686	Ecco Plug And Play Strobes
3	2	67130-B	Strobe Bracket For Grip Lock
4	2	67136-B	Strobe Bracket For Prolift

71018: 4 Corner Strobes With Beacon: Half Utility / Half Grip Lock

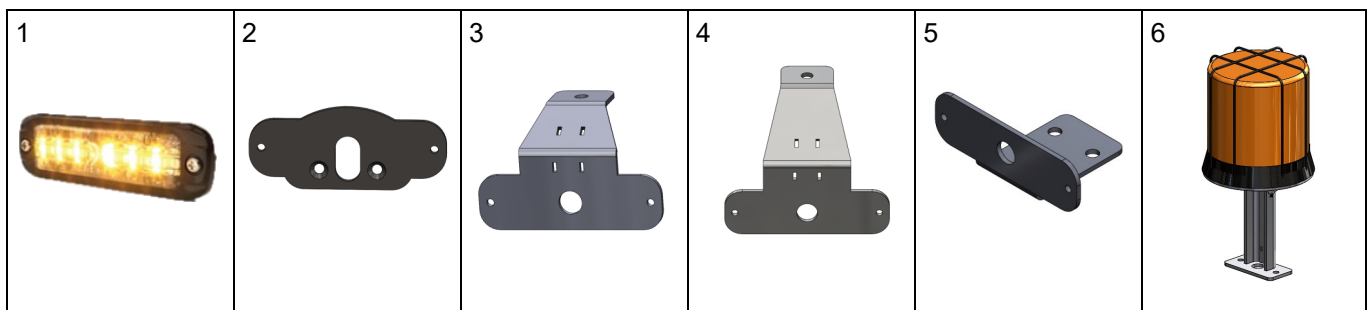
Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/Prolift
N/A	1	BAG66092	Bag For Beacon On Utility Rack
N/A	1	BAG66095	Bag For Strobes On Utility Rack
1	4	67686	Ecco Plug And Play Strobes
2	2	66103-B	Strobe Bracket For Utility Rack
3	2	67130-B	Strobe Bracket For Grip Lock
6	1	70970	Beacon Assembly Kit—Boxed

71020: 4 Corner Strobes With Beacon: Half Utility / Half Prolift

Num	Q	Part Number	Description
N/A	1	BAG66095	Bag For Strobes On Utility Rack
N/A	1	BAG66092	Bag For Beacon On Utility Rack
N/A	1	BAG70965	Bag For Strobes On Grip/Prolift
1	4	67686	Ecco Plug And Play Strobes
2	2	66103-B	Strobe Bracket For Utility Rack
4	2	67136-B	Strobe Bracket For Prolift
6	1	70970	Beacon Assembly Kit—Boxed

71022: 4 Corner Strobes With Beacon: Half Grip Lock / Half Prolift

Num	Q	Part Number	Description
N/A	1	BAG70965	Bag For Strobes On Grip/Prolift
N/A	1	BAG66092	Bag For Beacon On Utility Rack
1	4	67686	Ecco Plug And Play Strobes
3	2	67130-B	Strobe Bracket For Grip Lock
4	2	67136-B	Strobe Bracket For Prolift
6	1	70970	Beacon Assembly Kit—Boxed

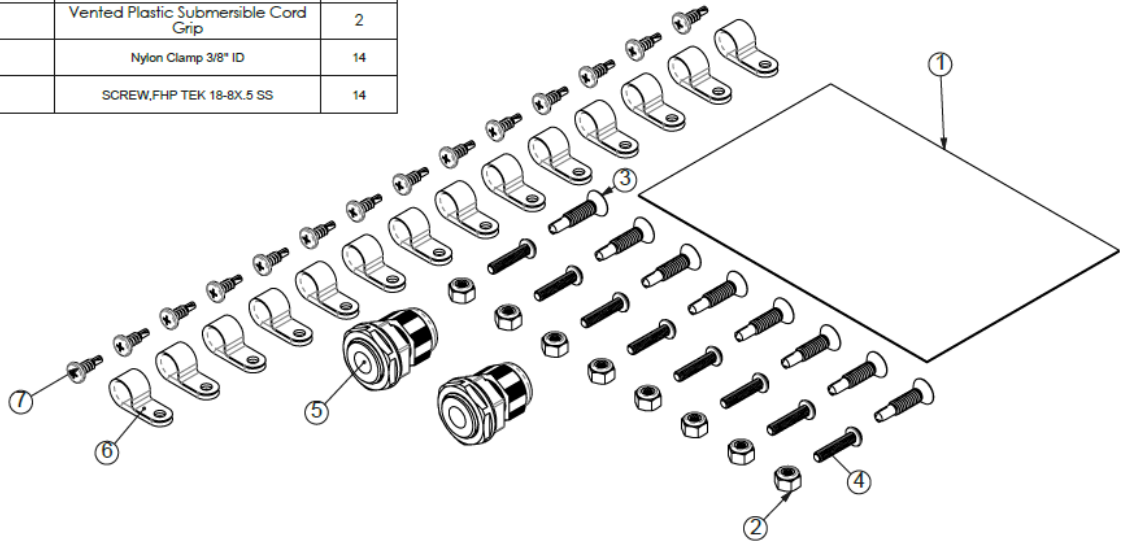


Fastener Bags

Note: Not all components in the bags will be used on every install

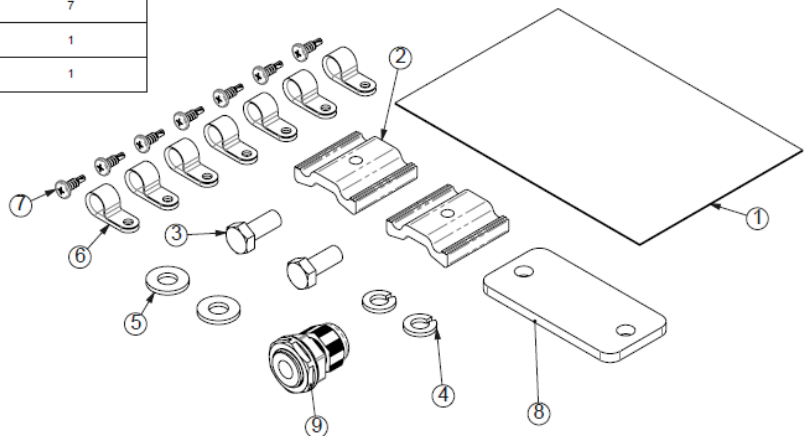
BAG66095 For utility rack strobe kit only:

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BAG0406-A	4" x 6" 3MIL AUTOBAG	1
2	FAS0501	NUT, HEX NLK 8-32 SS	8
3	FAS0502	SCREW, FHPSD 12-14X1.00 SS	8
4	FAS0503	SCREW, RHP 8-32X.75 SS	8
5	65314	Vented Plastic Submersible Cord Grip	2
6	66843	Nylon Clamp 3/8" ID	14
7	FAS0842	SCREW, FHP TEK 18-8X.5 SS	14



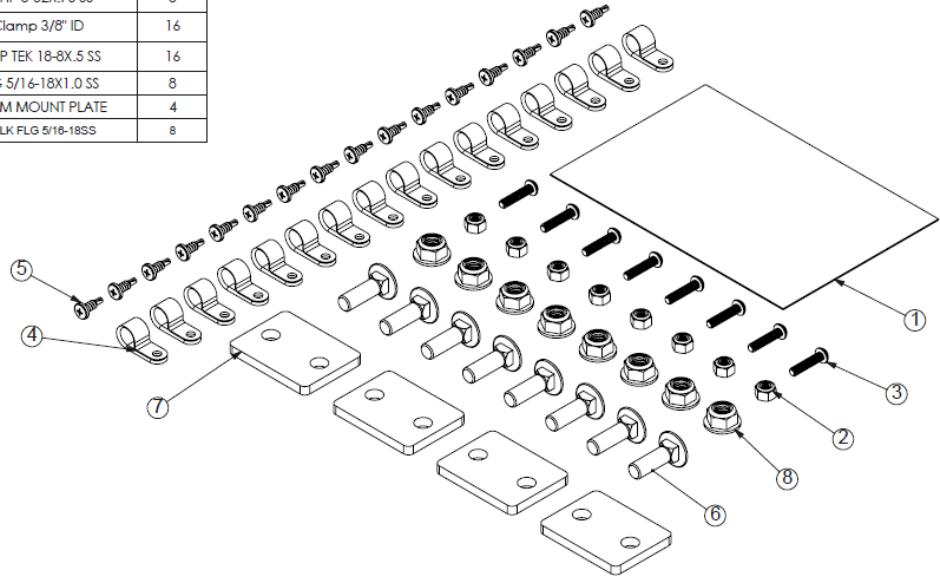
BAG66092 For all ladder rack beacon kits:

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BAG0406-A	4" x 6" 3MIL AUTOBAG	1
2	35335-0	SLIDE, 1.5" / AD RAIL	2
3	FAS0799	Screw, Hex Hd, 5/16-18x0.75 SS	2
4	FAS0588	Washer, Lock, Split, 5/16, SS	2
5	FAS0552	Washer, Flat, 5/16, SST	2
6	66843	Nylon Clamp 3/8" ID	7
7	FAS0842	SCREW, FHP TEK 18-8X.5 SS	7
8	64831	REAR ROLLER, SPACER	1
9	65314	Vented Plastic Submersible Cord Grip	1



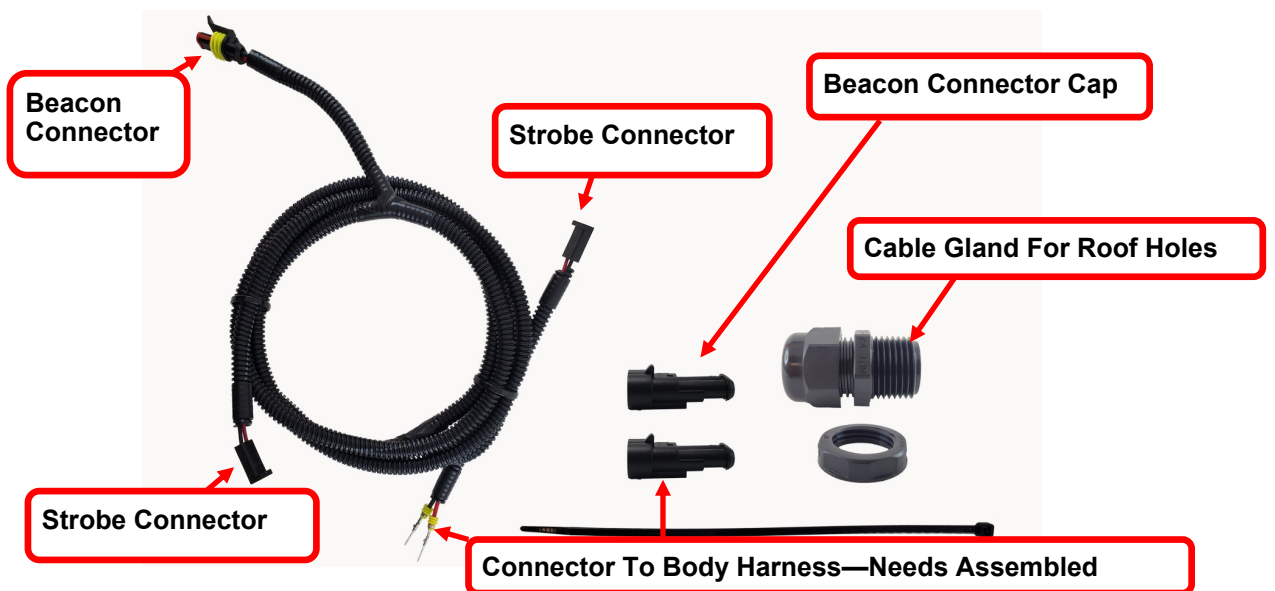
BAG70965 For all grip lock and prolift rack strobe kits -4 corner strobes and front / rear strobes:

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BAG0406-A	4" x 6" 3MIL AUTOBAG	1
2	FAS0501	NUT,HEX NLK 8-32 SS	8
3	FAS0503	SCREW,RHP 8-32X.75 SS	8
4	66843	Nylon Clamp 3/8" ID	16
5	FAS0842	SCREW,FHP TEK 18-8X.5 SS	16
6	FAS0398	BOLT,CRG 5/16-18X1.0 SS	8
7	63933	UTILITY, COM MOUNT PLATE	4
8	FAS0881	NUT,HEX NLK FLG 5/16-18SS	8



****Important note: Installing the beacon hardware, strobes, and wiring may be much easier to do before installing anything onto the ladder rack cross bows. Also, before installation of the ladder rack to the vehicle.****

67618 Cross Bow Harness Reference Diagram:



Placements

Switch placement: Under Steering Wheel

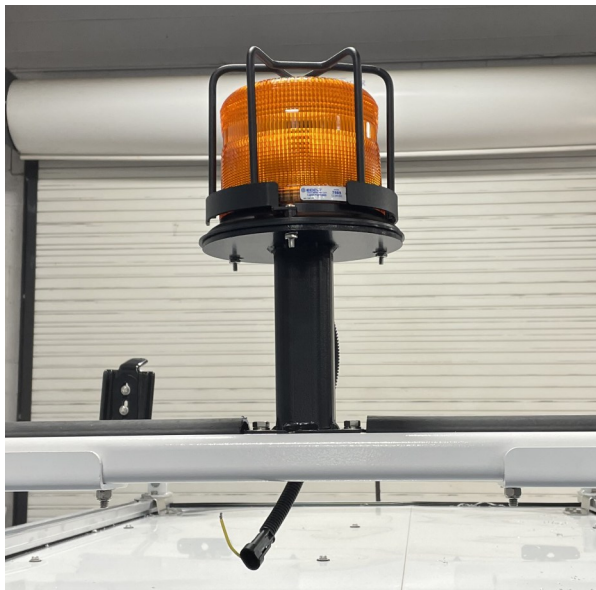


Corner Strobes: On Corners Of All Ladder Rack Cross Bows



*****TORQUE STROBES TO 10-IN-LB'S MAXIMUM*****

Beacon: Middle Of Rear Cross Bow

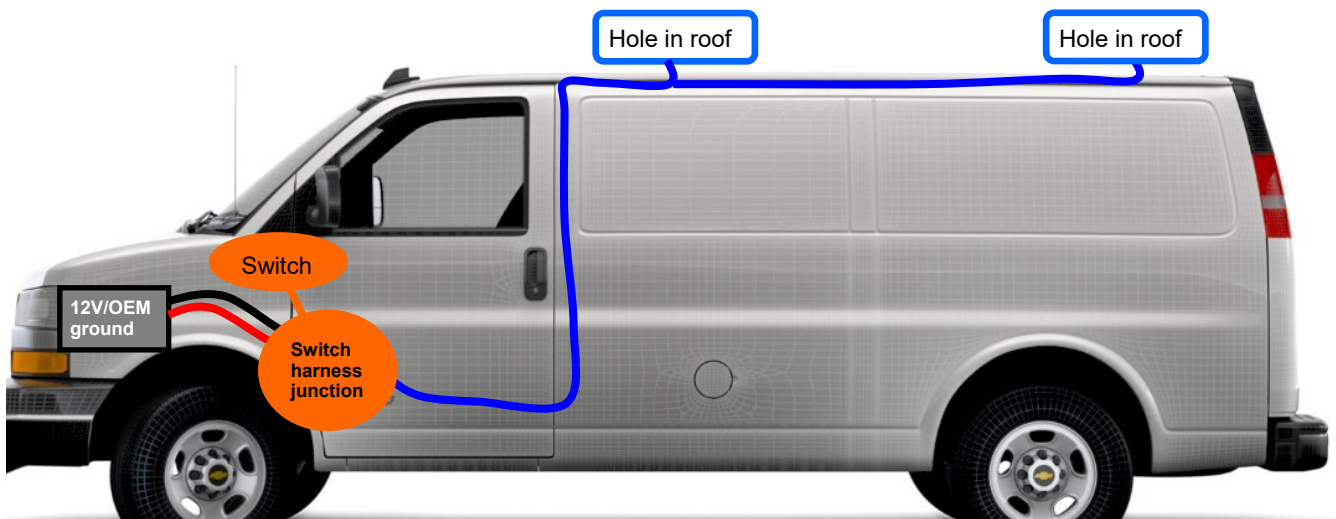
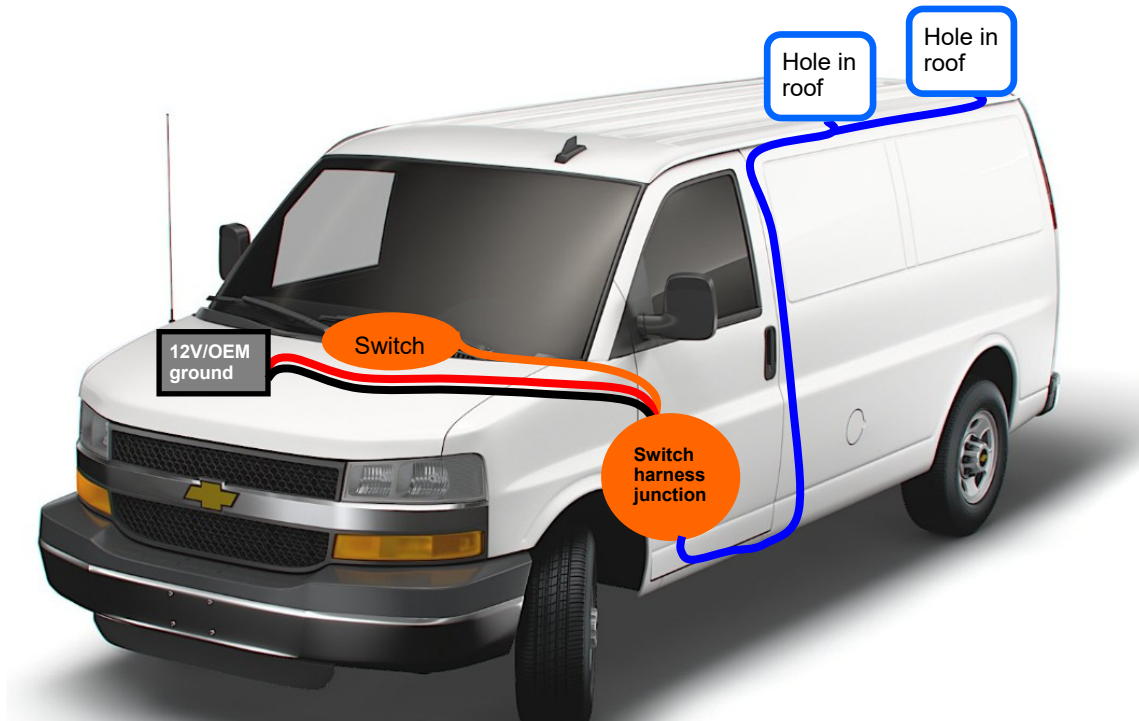


Front / Rear Strobes: Middle Of Cross Bows



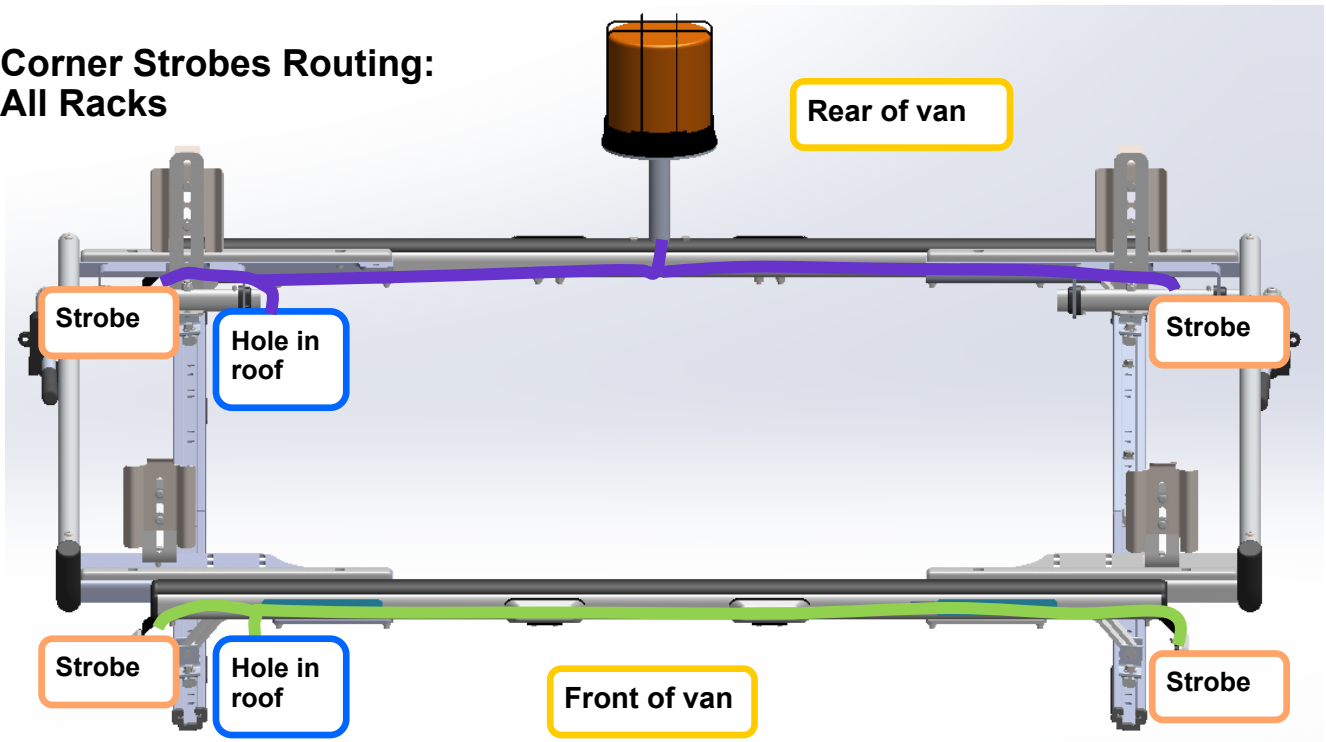
The purpose of plug and play lighting is to be completely modular. Due to this feature, refer to the order drawing for all exact lighting placements. These installation instructions are for most cases and for reference. Not all installs will have strobes or beacons. Reference the instructions for only what you are installing.

Routing Overview



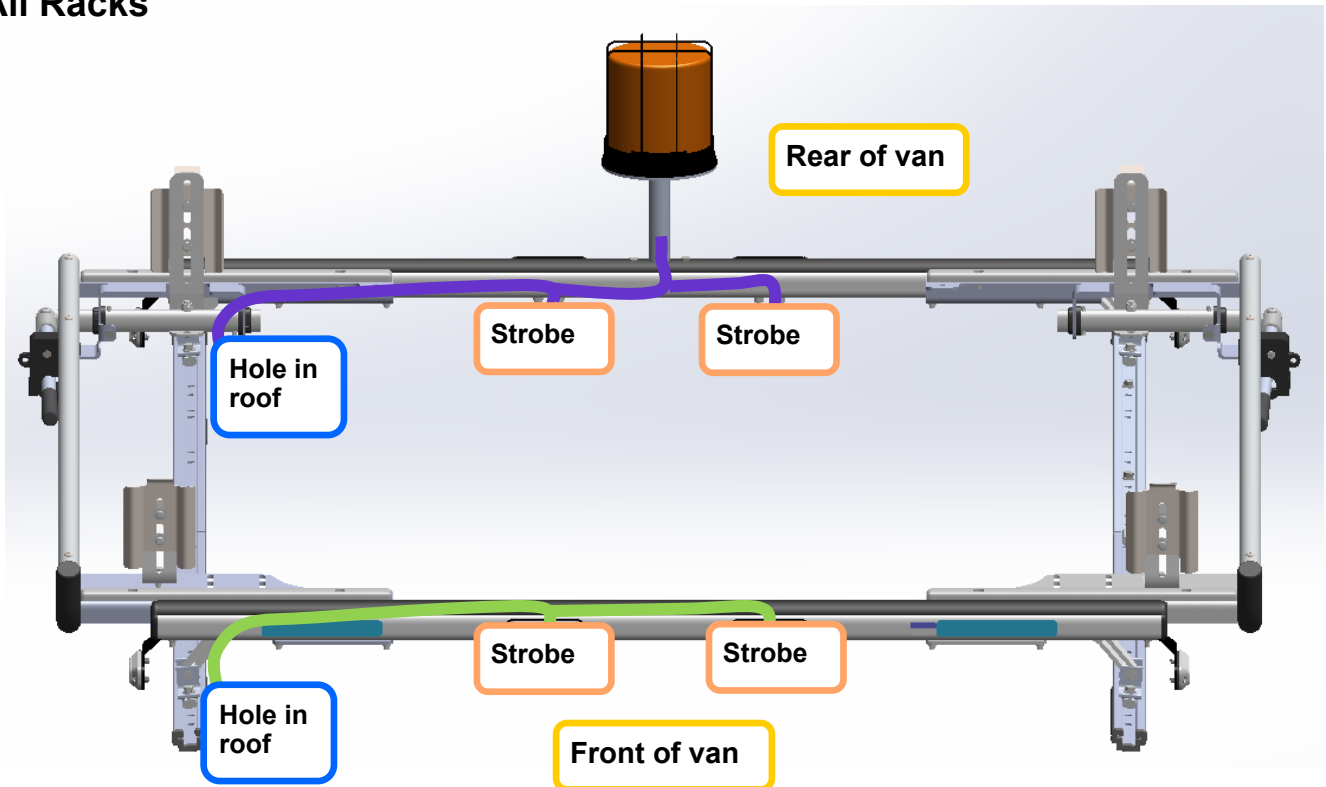
Color	Key - Items
Red/Black	Power harness: Battery to kick panel
Orange	Switch harness: Switch in dash
Blue	Body Harness: Switch to ladder rack harnesses

Corner Strobes Routing: All Racks

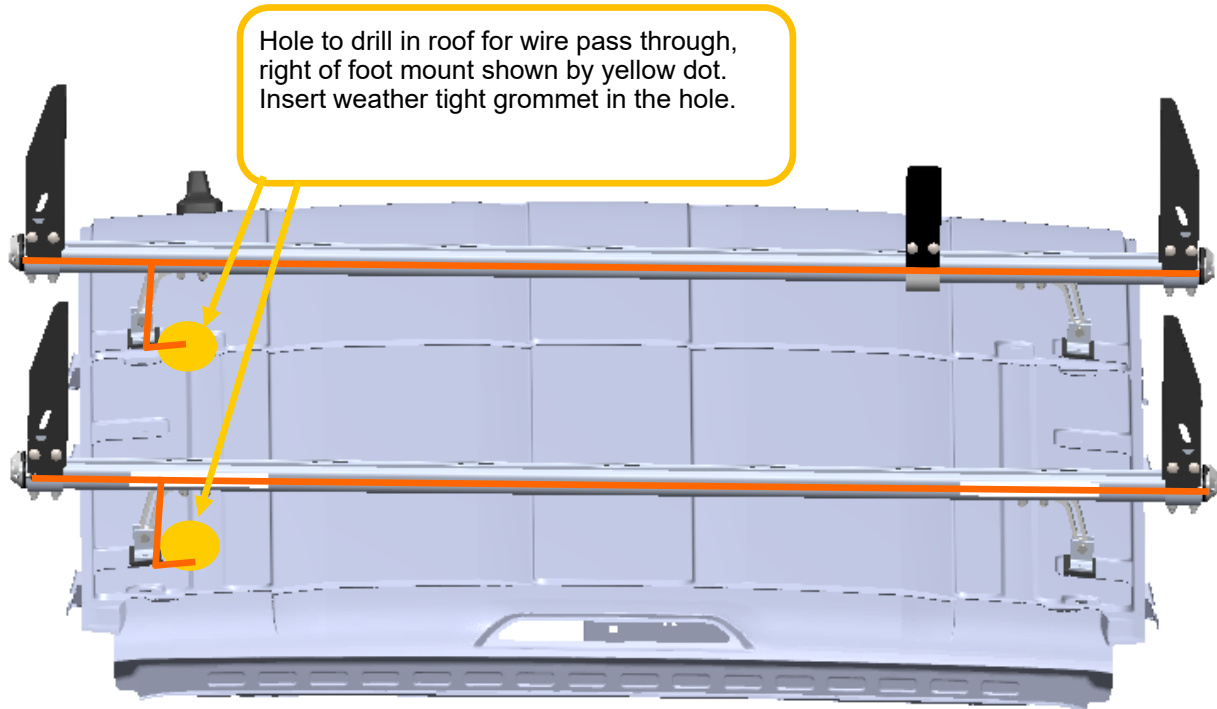


Color	Key - Items
Green	Front Cross Bow Strobe Harness
Purple	Rear Cross Bow Strobe / Beacon Harness

Front/Rear Strobe Routing: All Racks



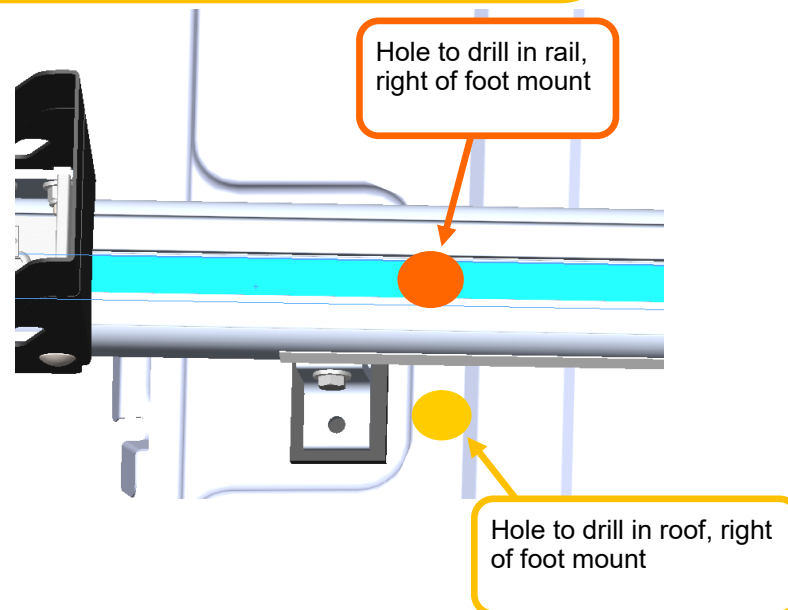
Utility Rack Routing



Drill hole in rail through the channels, to the right of the foot mount. (Shown Below) in orange.

Routing shown in orange. Route through the hole/grommet in roof, up the foot, then to both strobes. Route using the upper channel.

If need be, route the wires using the bottom channel. Then use the self tapping screws and nylon clips to secure the wiring.



Beginning Install



Step 1: Locate the power harness #67094.

Remove the fuse from the inline fuse holder until the end of the install.

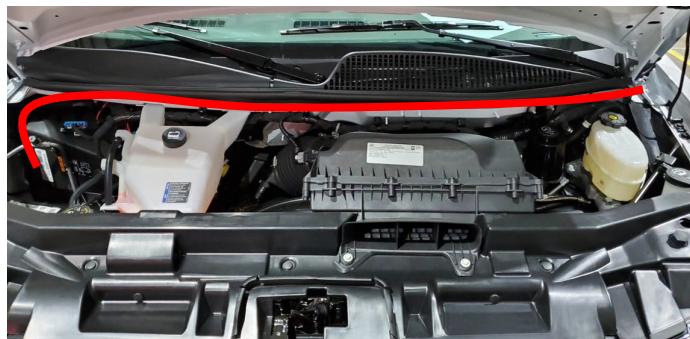
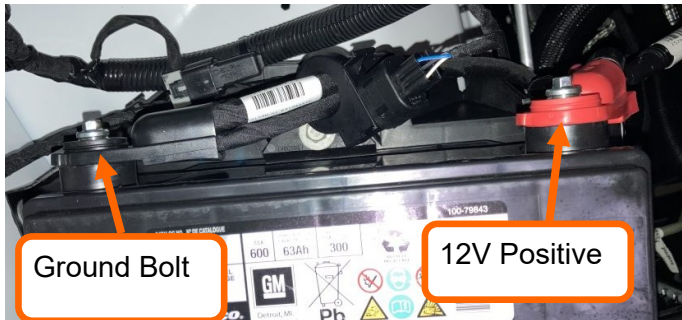
Under the hood:

Step 2: Attach the red wire with the ring terminal to the 12V positive post.

Locate the OEM battery on the passenger side of the bay.

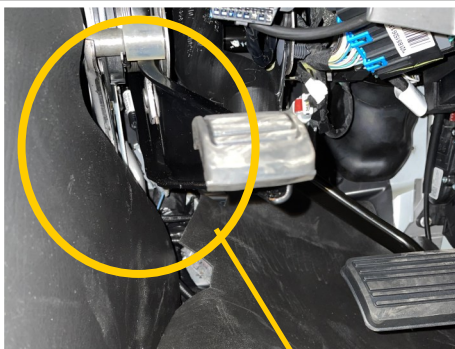
Attach the red wire with the ring terminal to the 12V positive post.

Attach the black wire with the ring terminal to the OEM ground post.



Route the white connector end of the harness towards the cab following the OEM harnesses to the firewall grommet (to the cab). It is located behind the E-brake (cab side).

Secure with zip ties.



Step 3:

Cut/drill a hole in the grommet to route the power harness through.

Silicone the grommet holes/wiring once the harness has been routed through.

Make sure to leave a drip loop with the wire harness.

Reference Pg. 3 for routing through the firewall.



OEM Grommet

Power harness

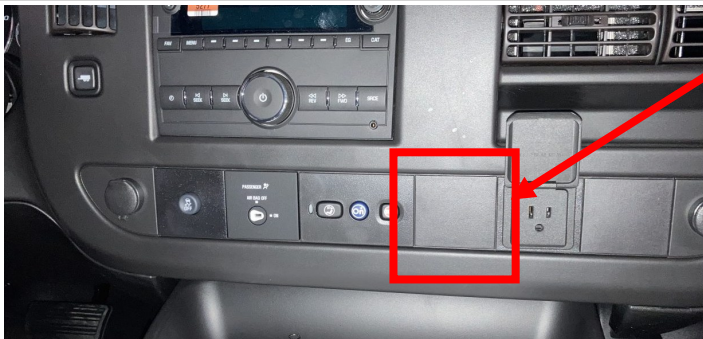
Switch Harness



Step 4: Continue routing the power harness up into the knee bolster area.

Locate the switch harness #67098

Connect the switch harness connector to the power harness in the kick panel area.



Step 5: Using a trim tool, carefully remove the empty square trim piece in the center dash.

If there is no inverter with this install: Drill a hole in the center of the trim panel for the switch:

A hole diameter of 3/4" (19mm) is necessary to install the snap in switch (do not insert switch yet).

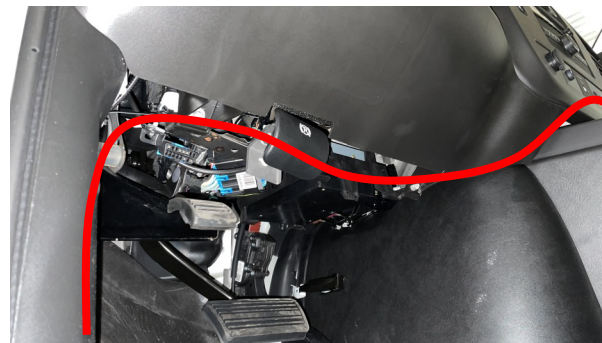
If an inverter switch is already in this place, move the strobe switch to the left of the inverter switch, directly in line with it. Or however you can fit both switches in the same panel.



Step 6: Using a fish tape: Route the switch end of the switch harness under the steering column behind the panels and through the opening in the switch location.

AVOID MOVING/ROTATING OBJECTS.

Secure with zip ties.





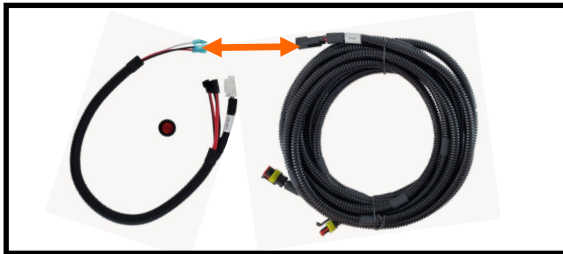
Connect the ground spade to the gold pin on the rocker switch

Connect the white battery power spade to the opposite terminal on the switch.

Connect the red spade to the middle pin.

Insert the switch into the hole and place the strobe/beacon decal (if supplied) around the switch.

Reassemble all trim and secure wiring.



Step 7: Locate the body harness 67607.

Connect the harness to the switch harness (one of the remaining unused connectors) in the driver's foot well.



Step 8: Locate the driver's side door sill area.

Carefully route the strobe harness through the door trim down to the floor. Be sure not to interfere with the hood latch.

Continue routing the harness down to the floor, under the sill trim, and under the driver's seat.

Then route the harness up the partition and secure with zip-ties.

See routing paths shown in red.



Re-insert trim that was pulled up after routing.





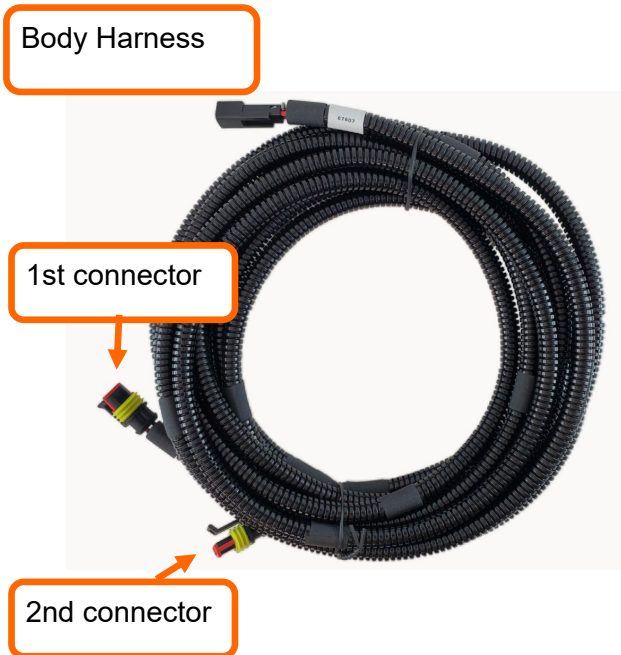
Route the body harness rearward following the OEM harness on the driver's side wall.

Loosely secure the wiring to the OEM harness, as you may need to adjust the harness once the ladder rack has been installed and holes have been drilled in the roof.

The first body harness connector to the ladder rack harness should be loosely placed where the front cross bow will sit. Then the second connector should be placed loosely where the rear cross bow will sit.

Please note there will be slack in the harness, tie these up with zip ties.

Once the ladder rack harnesses are connected to the body harness, you can completely secure the body harness.



Please read carefully for next steps to the install:

You will not need to reference the entirety of the following instructions. You will only need to reference per the install you are completing.

Please note there are many configurations of the ladder racks. Refer to the order drawing for type of ladder rack per each side of the vehicle. (There can half grip lock / half prolift / half utility rack, full grip lock, full prolift, full utility rack, etc). Then assemble the corresponding bracketry per each ladder rack. Note there are different brackets for the strobes for the utility rack, grip lock, and prolift. For any uncertainties please refer to pages 4-7 for the needed harnesses and bracketry per the kit installing.

Please note the following strobe brackets per ladder rack:
Front/rear strobe brackets: 67824-B
Utility rack corners: 66103-B
Grip lock corners: 67130-B
Prolift corners: 67136-B

Utility Rack Corner Strobe Install

Note: utility rack wiring will be ran inside the cross bow channels of the ladder rack for 4 corner strobes.



Step 1: Locate the strobe harnesses for both the front and rear cross bows.

List of applicable part numbers:

- 67614 - 58" cross bow corner strobe harness
- 67615 - 68" cross bow corner strobe harness
- 67618 - 58" cross bow corner strobe with beacon harness
- 67619 - 68" cross bow corner strobe with beacon harness



Step 2: Preassemble wiring and lights to the utility rack before mounting to the roof of the van.

The channel you will use to route the wire harness will depend on the utility rack uprights being installed onto the rack.

If the uprights use the upper channel for mounting, use the bottom channel for wire routing. And Vice Versa.

You may also need to go back and fourth between the upper and lower channel depending on the utility rack accessories. Drill a 3/8" hole in the rack to move the wire harness between the two channels



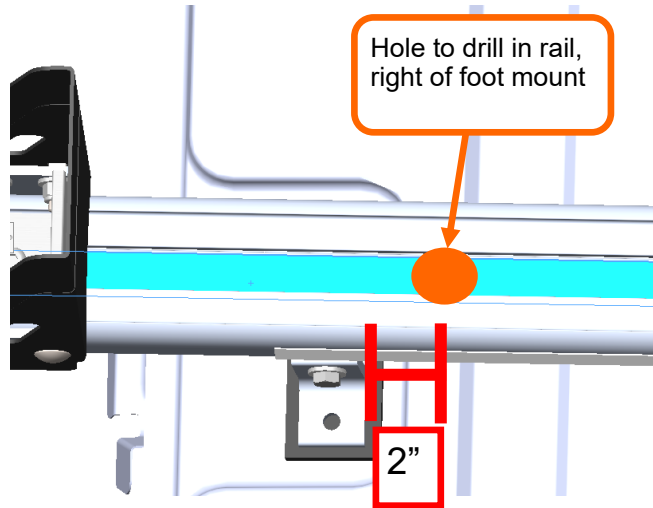
If using the bottom channel immediately after the strobe, notch the utility rack middle, to relieve space for the strobe wires. See pictures to the left for reference.

Use the self tapping screws and nylon clips to secure wiring if using the bottom channel.

Be sure NOT TO PINCH any wiring when tightening down utility rack accessories with sides

You do NOT want to pinch wires like shown in this picture





Step 3: Route the wires between the strobes (on both racks)

Option 1: (The preferred option)

Drill a 3/8" hole from the top channel to the bottom channel, 2 inches to the right of the where the foot mounts to the rail.

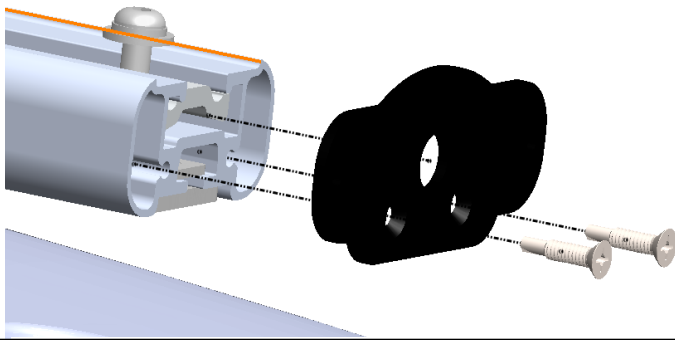
Route the wires in the top rail channel (before inserting the weather strip).

Option 2: Route the wiring in the underside of the channel. You will need to drill a 3/8" hole from the top channel to the bottom channel directly under the beacon mount if there is a beacon installation for this build. This hole should be directly in the middle of the crossbow. If the cross bow is 68", the hole should be 34" from the end. If the cross bow is 58", the hole should be 29" from the end.

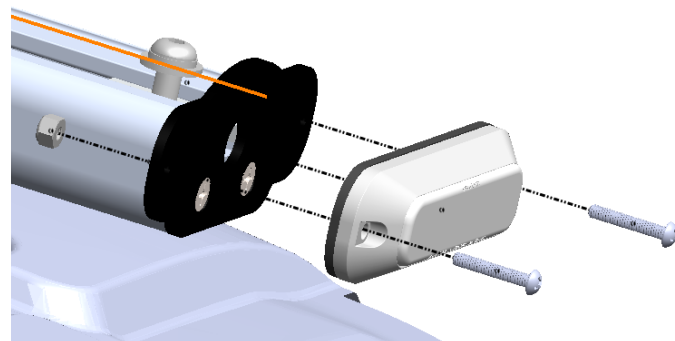
Use the supplied tek screws (FAS0842) and nylon clips (66843) to secure the wiring under the utility rack.

Where you route the wires will depend on what all options you are installing on the utility rack.

If you are installing a few accessories onto the rail that mount to the bottom channel, use the top channel for wire routing. Or vice versa.



Step 4: Using BAG66095: Mount the strobe bracket to the rail using the supplied self drilling screws (FAS0502). Use a No.3 philips head driver.



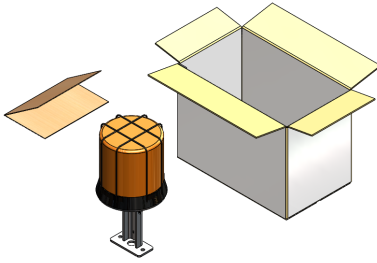
Step 5: Route the strobe wires through the center hole slot of the strobe bracket.

Connect the strobe to the harness connector.

Mount the strobe light to the bracket using the small Philips head screws (FAS0503) and nylon nuts (FAS0501).

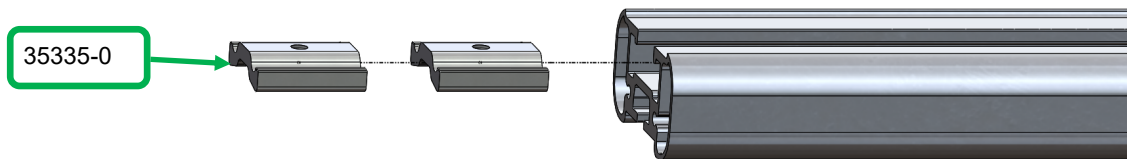
Do steps 4 and 5 for all 4 utility rack ends.

Beacon Install For Ship Thru—Non Drive-A-Way Vehicles. For ALL Racks—Stowed Beacon

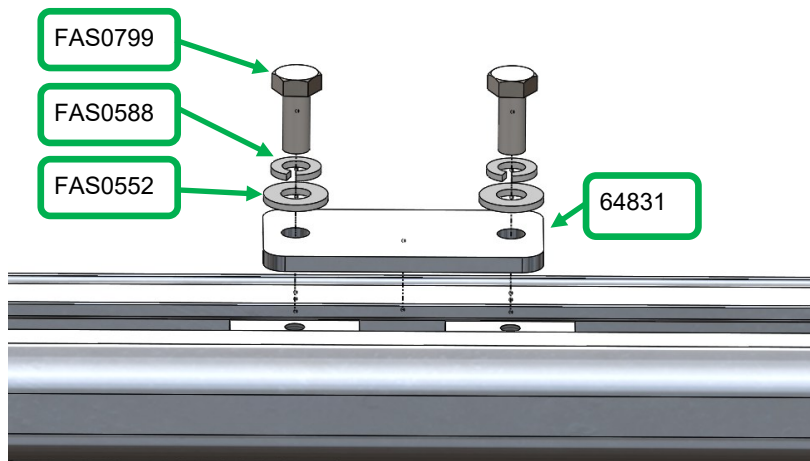


Step 1: Locate the beacon box assembly (this will be in a brown box) labeled 70970. Stow this into the vehicle (if not a drive-a-way vehicle). If this is a drive-a-way vehicle, please follow the dealer instructions inside the beacon assembly box (part number 70972) once these instructions are completed. Or skip to the next page.

Step 2: Locate the fastener bag BAG66092. Grab the 2 identical spacers, part number 35335-0. Insert them (note orientation of the spacers) into the top channel of the rear cross bow rail. Slide them to middle of the cross bow rail.

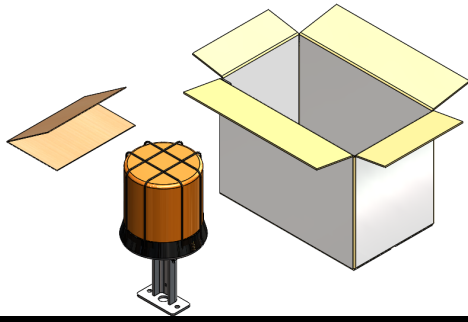


Step 3: Locate the flat spacer (64831), 5/16 bolts (FAS0799), lock washers (FAS0588), and flat washers (FAS0552). Once the spacers from the previous step are in the middle of the cross bow, insert the bolts through the lock washers, flat washers, then flat spacer, into the 35335-0 spacers. Tighten these down so they cannot slide.



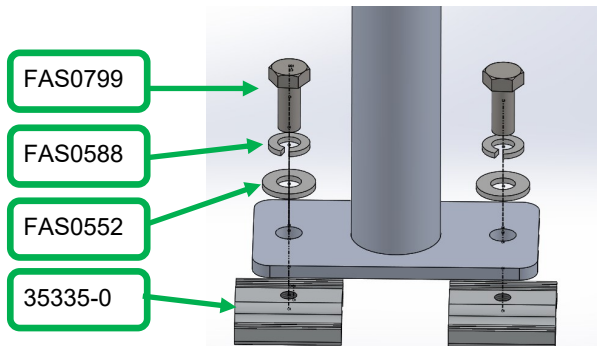
Place the beacon connector cap (found in the harness bag) over the weather proof connector (on the cross bow harness) to keep from water damage.

Beacon Install For Drive-A-Way Vehicles: Not Stowed

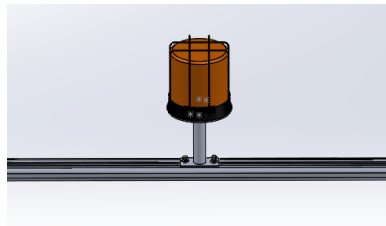
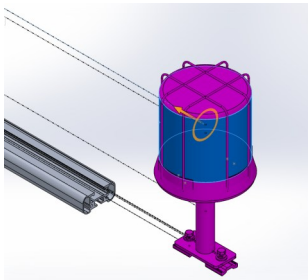


Step 1: Locate the beacon assembly box 70970. Open the box and remove the assembly and instructions.

Locate the fastener bag BAG66092 and grab the 5/16 bolts (FAS0799), lock washers (FAS0588), flat washers (FAS0552), and the rail spacers (35335-0).



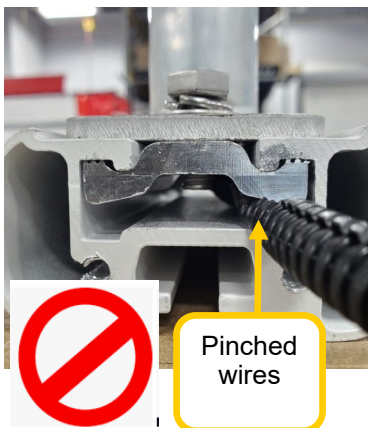
Step 2: Assemble the beacon mount feet by inserting the bolts (FAS0799) through the lock washers (FAS0588) then flat washers (FAS0552) then through the foot into the slides (35335-0). Do not tighten down at this point.



Step 3: Slide the beacon/mount to the center of the rail.

****Note for Utility Racks:**** Be cautious of the wire sliding through the rail.

Tighten the bolts once you have positioned the beacon in the center.



Pinched wires



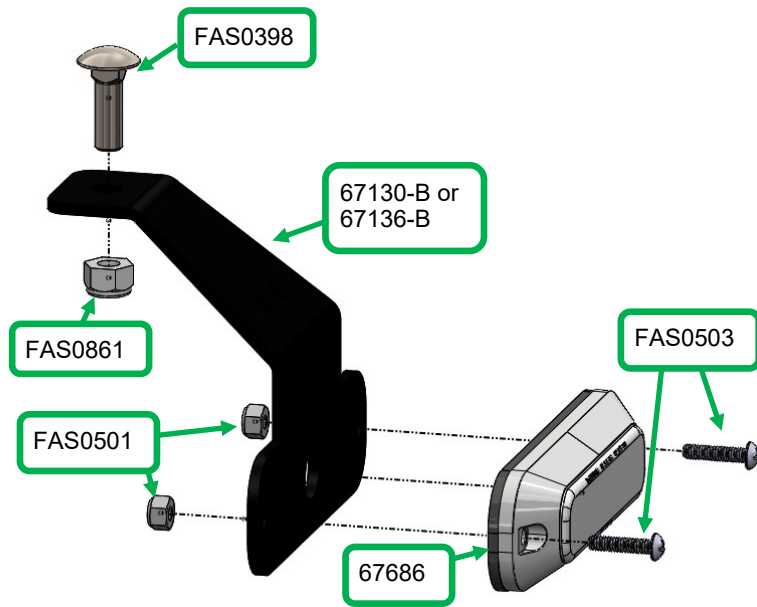
Wires are not pinched

****Utility Rack risk and anytime you use the top channel for routing the beacon harness through.****

*****Be cautious the wires are not pinched after tightening the slides*****

Connect the beacon harness connector to the beacon. Please note routing to the beacon can be different between each rack, as some will be routed using the top channel, some will use the bottom channel, and some will be routed on the outside of the channel up to the beacon. This will strictly depend on the install and what is best for the installer at this time.

Grip Lock And Prolift Rack— Corner Strobes

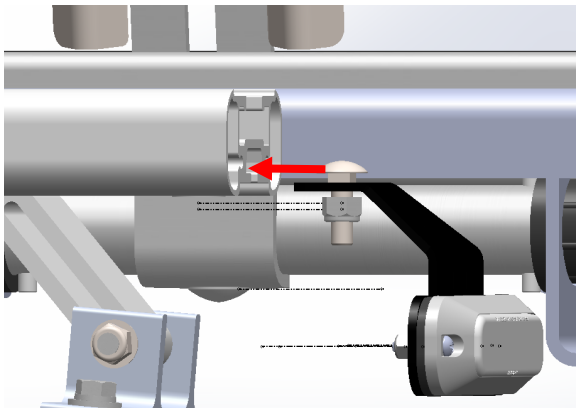


Step 1: Using BAG70965:

Assemble the strobe light to the grip lock bracket (67130-B) or prolift bracket (67136-B) using the small philips head screws and nylon nuts. (2 X FAS0501 and 2 X FAS0503). Note orientation of the bracket and the strobe light.

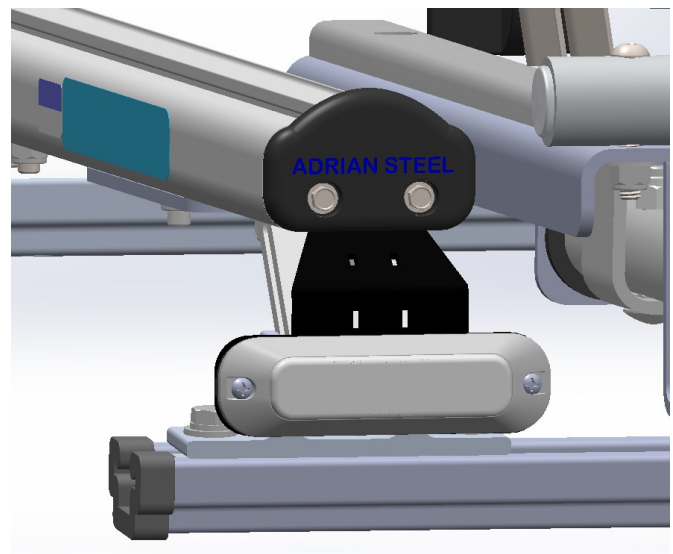
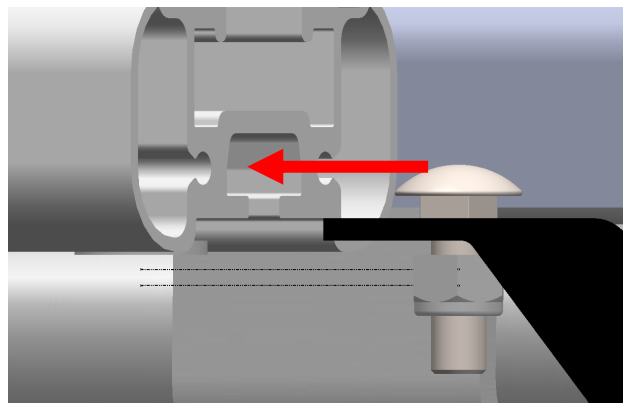
Now insert the 5/16 carriage bolt (FAS0398) through the top of the bracket hole. Thread the 5/16 nylon bolt (FAS0861) on the bolt but do not tighten yet.

Pull the strobe connector through the hole in the strobe bracket. Secure the wiring with zip ties using the slots in the brackets.



Step 2: Slide the nylon nut into the bottom channel of the cross bow. Once it is just far enough in the cross bow to clear the end cap, you can tighten the bolt to the nut to secure the bracket. Then insert the end cap onto the cross bow.

Do this for all the corners of the ladder rack that require a strobe.





67618 reference picture

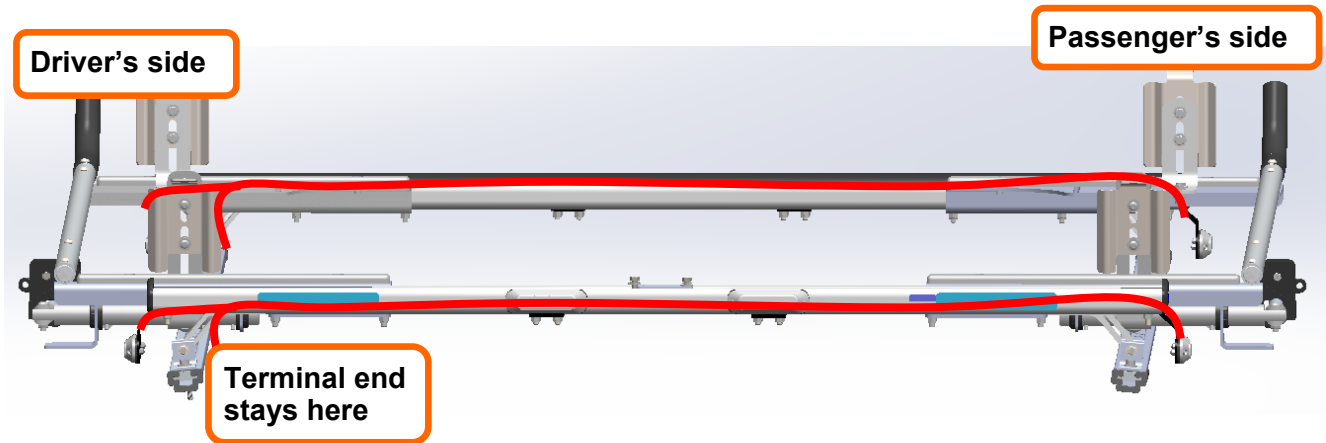
This terminal end will go inside the van and connect to the body harness

Step 3: Locate the strobe harnesses for both the front and rear cross bows.

List of applicable part numbers:
67614 - 58" cross bow corner strobe harness
67615 - 68" cross bow corner strobe harness
67618 - 58" cross bow corner strobe with beacon harness
67619 - 68" cross bow corner strobe with beacon harness

Identify the wire end with the terminals WITHOUT the connector. This end will route through the cable gland / hole in the roof and connect to the body harness inside the van.

Step 4: Keep the terminal end without the connector on the drivers side of the ladder rack. Locate the strobe connector end that is closest to the non-connector end, and connect it to the strobe on the drivers side of the vehicle. Run the wiring across the cross bow and connect the opposing end to the passenger side strobe. Do this for the front and rear cross bows / strobes.



Driver's side

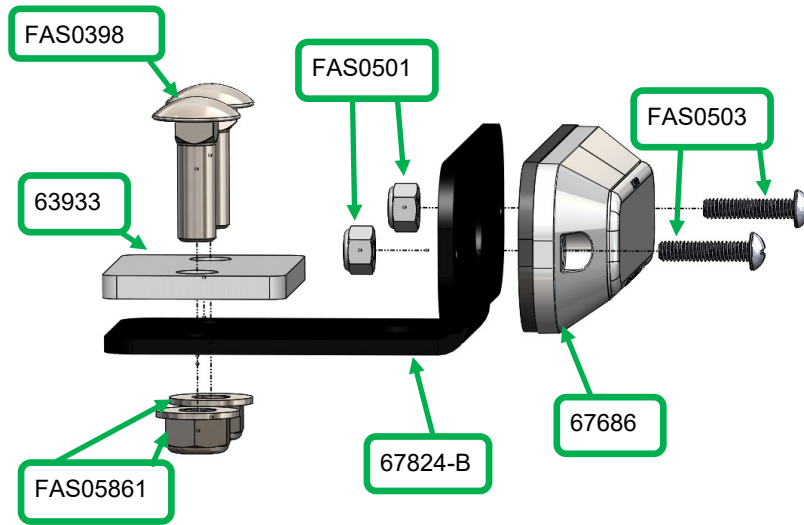
Passenger's side

Terminal end stays here

Step 5: Use the small self tapping screws (FAS0842) and the nylon clamps (66843) to secure the wiring. The ideal routing path is on the insides of the ladder rack cross bows. If this is not applicable, route the wiring under the cross bows. **Do not secure wiring to any moving objects.**



All Ladder Racks—Front And Rear Strobes



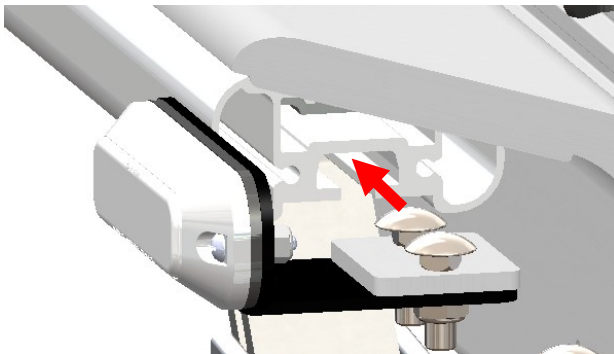
Step 1: Using BAG70965:

Assemble the strobe light to the bracket (67824-B) using the small philips head screws and nylon nuts. (2 X FAS0501 and 2 X FAS0503).

Now insert the 2 5/16 carriage bolts (FAS0398) through the spacer (63933) holes then through bracket holes. Thread the 2 5/16 nylon bolts (FAS05861) onto the carriage bolts but do not tighten yet. Note orientation of the bracket, bolts, nuts, and the spacer.



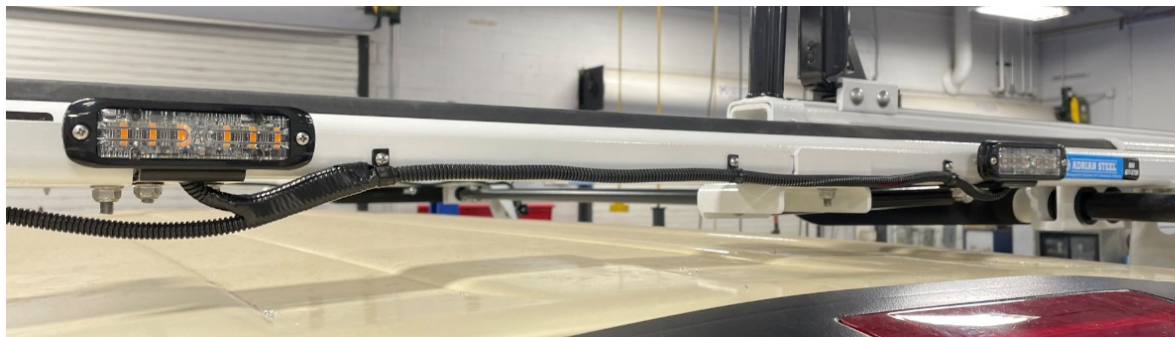
Step 2: Pull the strobe connector through the hole in the strobe bracket. Secure the wiring with zip ties using the slots in the brackets.



Step 3: Slide the carriage bolt heads into the bottom channel of the ladder rack cross bar until the desired locations of the strobes. These strobes can be placed in various spots across the cross bow. Ideal locations is to have them symmetrical from the center. Be sure to have enough wiring to get to each connector on the harness.

Note the strobe locations will change based off each rack due to the ladder rack components on the cross bow.

Picture below is an example of the grip lock.





67618 reference picture

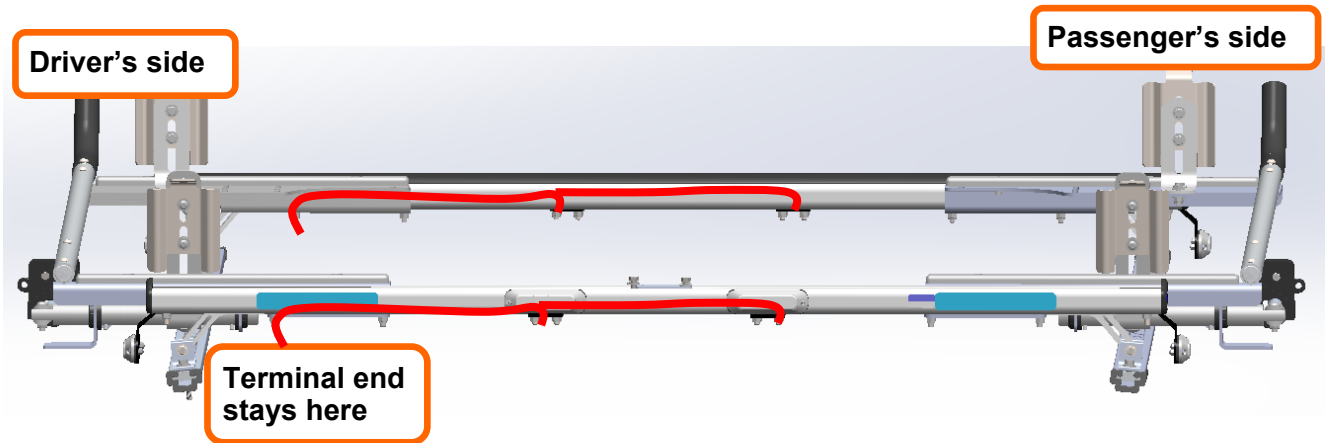
Step 4: Locate the strobe harnesses for both the front and rear cross bows.

List of applicable part numbers:
67616 - Front and rear strobes harness
67620 - Front and rear strobes with beacon harness

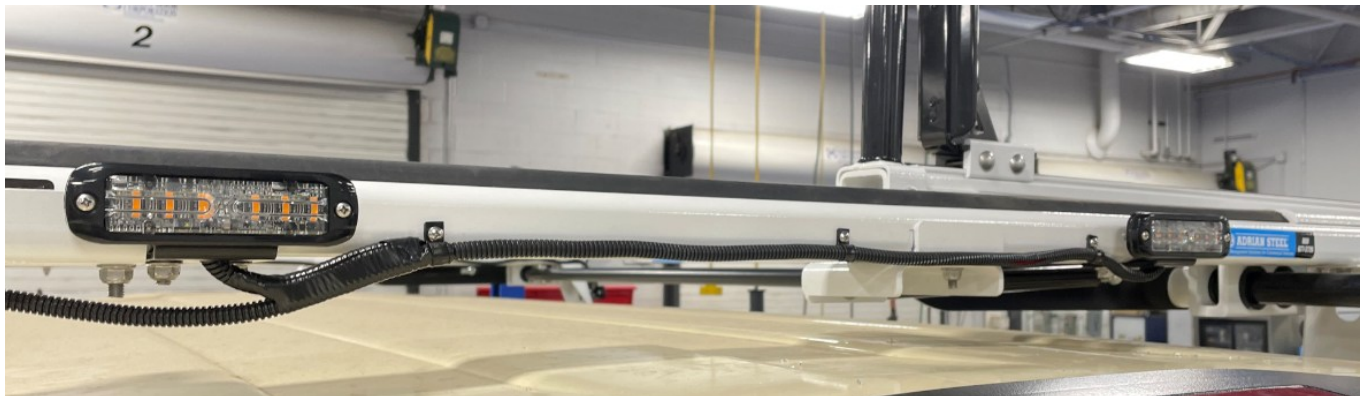
Identify the wire end with the terminals WITHOUT the connector. This end will route through the cable gland / hole in the roof and connect to the body harness inside the van.

This terminal end will go inside the van and connect to the body harness

Step 5: Keep the terminal end without the connector on the drivers side of the ladder rack. Locate the strobe connector end that is closest to the non connector end, and connect it to the strobe on the drivers side of the vehicle. Run the wiring across the cross bow and connect the opposing end to the passenger side strobe. Do this for the front and rear cross bows / strobes.

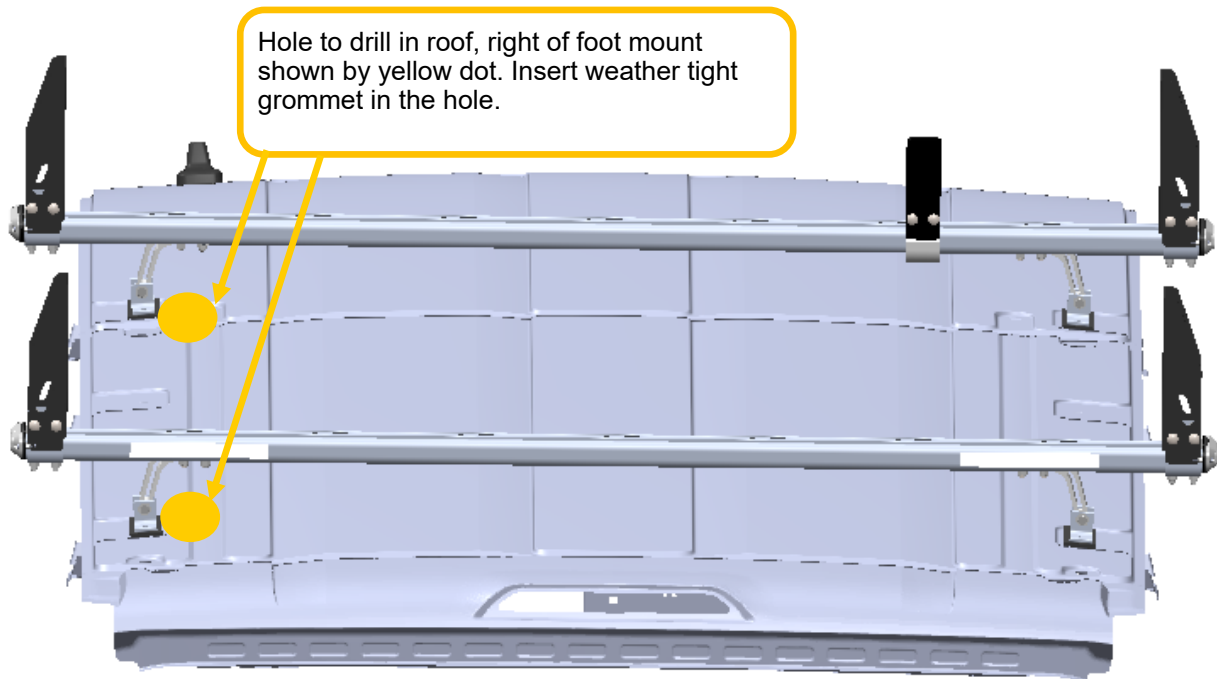


Step 6: Use the small self tapping screws (FAS0842) and the nylon clamps (66843) to secure the wiring. The ideal routing path is on the insides of the ladder rack cross bows. If this is not applicable, route the wiring under the cross bows. **Do not secure wiring to any moving objects.** **Use the harness to help determine the locations of the strobes. Once fully determined, tighten down the strobe brackets.

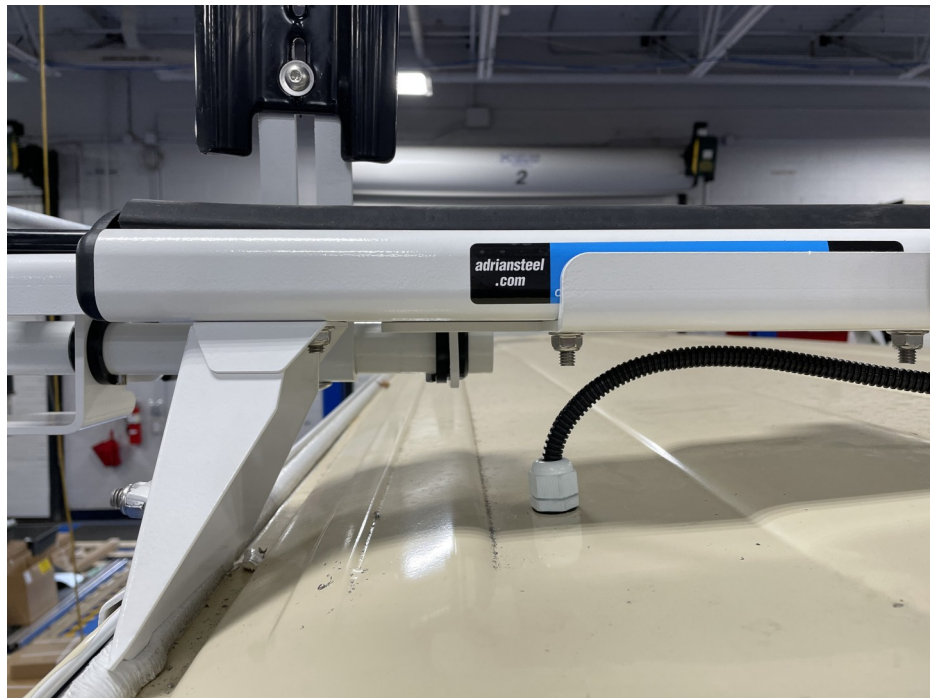


All Ladder Racks—Mounting And Roof Drilling

Use the ladder rack instructions to finish the ladder rack install. Mount the rack to the roof—or at least know exactly where it is going to mount. Determine the hole location that is needed for the wire pass through cable gland. This should be as close as possible to the rack foot on the drivers side, to the right of the foot. See the diagram below for approximate location. Each vehicle will be different, so be sure to check the inside of the van before drilling the hole.



Drill a 7/8" hole in the roof. Insert the cable gland into the hole. Route the wire terminal end of the harness through the hole and silicone. Do this for both the front and rear cross bows. Picture below is an example of the Chevy Express roof.



Terminal ends of the harness WITHOUT the connector



Locate the connector housing inside the lightbar/beacon box.

Note if it has a red insert inside the connector or not. Refer to picture for red insert inside the connector.



Insert the lightbar wire terminals into the connector. **See steps below:**

In these steps be very careful to place the terminals into the correct side of the connector.

Line the red wire terminal up with cavity #1 and the black wire terminal up with cavity #2.



Note the connector has a "1" and a "2" noted on the connector (circled in red). The red wire will be inserted into the #1 cavity of the connector. The black wire will be inserted into the #2 cavity on the connector.



Be sure to align the terminal prongs up with the inside of the connector pin outs.

Carefully insert the terminals into their designated section.

Also be sure the terminals snap into position. You should feel or hear a click when they are correctly inserted.

Pull on the wiring to be sure the connectors have been inserted completely.



If not already done:

Insert the red plastic piece into the top end of the connector. This will also click into place.

Do this for both the cross bow harnesses.

Now connect this connector/harness to the body harness that has been routed through the van already. Finish securing the harness to the vehicle.

Insert the fuse into the inline-fuse holder on the power harness. The install is now complete. Secure all wiring with zip ties. Re-attach all trim. Re-assure all pass through holes have been silicone. Double check the functionality of the lights and switches.



PART NUMBER

13905-0

ITEM DESCRIPTION: WIRE TIE, NYLON 40Lb, 8.5" BLACK



MANUFACTURER: WAYTEK, INC. or equivalent
MANUFACTURERS PART NUMBER: 21093M or 21093C

SPECIFICATIONS: STANDARD CABLE TIE
 BLACK, NYLON
 8-1/2" LONG
 TENSILE STRENGTH: 40.0 LBS
 21093M = 1,000 quantity
 21093C = 100 quantity

SPECIAL NOTES: PART NUMBER IS BLACK.

SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!

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VAN AND PICKUP EQUIPMENT

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517-265-6194
WWW.ADRIANSTEEL.COM



CAUTION

WHEN INSTALLING EQUIPMENT IN OR ON VEHICLES CHECK FOR FUEL TANKS, FUEL LINES, CONTROL LINES AND ELECTRICAL WIRING BEFORE DRILLING! ALWAYS USE DRILL BITS WITH INTEGRAL STOPS WHENEVER POSSIBLE!

DRAWN BY
MDG

DATE DRAWN
10/26/2006

ECN NUMBER
18021

ECN DATE
11/13/2015

PART WEIGHT
0.01 LBS.

REV. LEVEL
D

PART NUMBER
13905-0

PART NUMBER

26618-0

ITEM DESCRIPTION: SILICONE, 1oz. TUBE



SPECIFICATIONS: SU5005 RTV SILICONE
1oz. TUBE
CLEAR OR EQUIVALENT
SELF PIERCING CAP

SPECIAL NOTES:

SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!

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DRAWN BY
JLC

DATE DRAWN
7/21/2001

ECN NUMBER
16551

ECN DATE
7/22/2014

PART WEIGHT
0.02 LBS.

REV. LEVEL
C

PART NUMBER
26618-0

PART NUMBER

26618-0

ITEM DESCRIPTION: SILICONE, 1oz. TUBE



SPECIFICATIONS: SU5005 RTV SILICONE
1oz. TUBE
CLEAR OR EQUIVALENT
SELF PIERCING CAP

SPECIAL NOTES:

SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!

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DRAWN BY
JLC

DATE DRAWN
7/21/2001

ECN NUMBER
16551

ECN DATE
7/22/2014

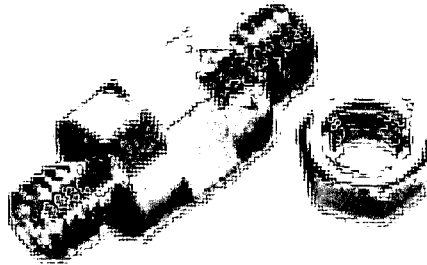
PART WEIGHT
0.02 LBS.

REV. LEVEL
C

PART NUMBER
26618-0

PART NUMBER
32649-0

ITEM DESCRIPTION: BATTERY BOLT EXTENDERS



MANUFACTURER: WAYTEK WIRE
MANUFACTURERS PART NUMBER: 36244

SPECIFICATIONS: BATTERY BOLT EXTENDER FOR SIDE POST APPLICATIONS.
POWER HOOK-UP FOR DIRECT CONNECTIONS TO BATTERY.
SOLID BRASS BOLT EXTENDER AND PLATED STEEL NUT.

SPECIAL NOTES:

SUPPLIED BY: THIS ITEM IS INSTALLER SUPPLIED!

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DRAWN BY
MDG

DATE DRAWN
03/29/2006

ECN NUMBER
8993

ECN DATE
03/29/2006

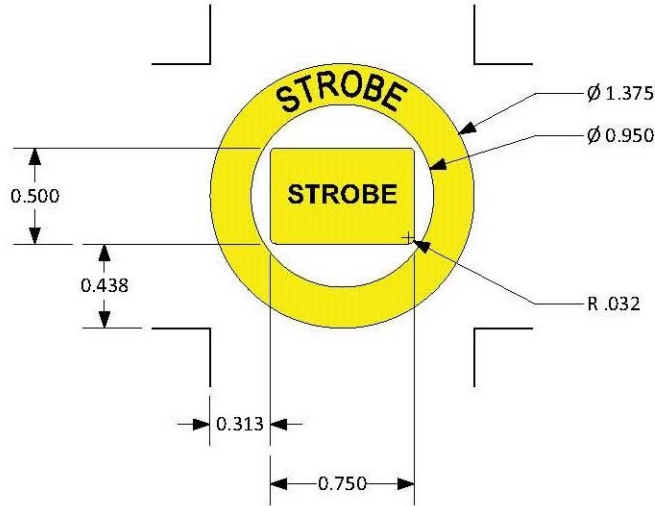
PART WEIGHT
0.05 LBS.

REV. LEVEL
PCS

PART NUMBER

32649-0

ITEM DESCRIPTION: STROBE SWITCH DECAL SET



MANUFACTURER: VANNER
MANUFACTURERS PART NUMBER: TBD

SPECIFICATIONS: (1) Circular Yellow Decal (ID=0.950", OD=1.375") with "STROBE" in black letters
(1) Rectangular Yellow Decal (H=0.500", L=0.750") with "STROBE" in black letters

SPECIAL NOTES: For round rocker switch (OD=0.780") and Ford Transit Upfitter Switches.

SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!

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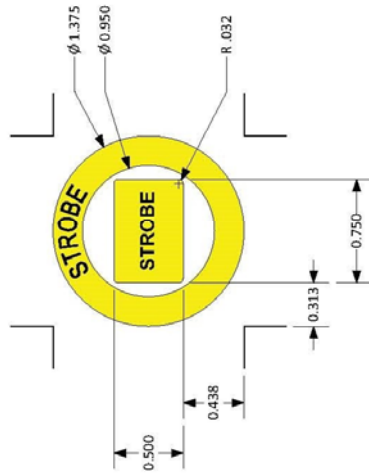


CAUTION
WHEN INSTALLING EQUIPMENT IN OR ON VEHICLES CHECK FOR FUEL TANKS, FUEL LINES, CONTROL LINES AND ELECTRICAL WIRING BEFORE DRILLING! ALWAYS USE DRILL BITS WITH INTEGRAL STOPS WHENEVER POSSIBLE!

DRAWN BY RJB	DATE DRAWN 11/15/2017
ECN NUMBER XXXX	ECN DATE XXXXXX
PART WEIGHT 0.02 LBS.	REV. LEVEL A
PART NUMBER 55073	

REVISIONS			
REV	DESCRIPTION	DATE	REAE/CO

- NOTES:
1. MATERIAL : .002 YELLOW POLYESTER
 2. ARTWORK FROM D91XXXX-A PAGE 1, PMS BLACK
 3. .001 OVERLAMINATE
 4. ADHESIVE BACKED



		HILLIARD, OHIO USA	
TOL. LABEL/METAL	.x ± .025 .xx ± .015 .xxx ± .005	REAE/CO NO.:	XXXX
TOL. CABLES	.xxx ± .25	THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF VANNER INC. AND MAY NOT BE COPIED, REPRODUCED OR DIVULGED TO UNAUTHORIZED PERSONS WITHOUT THE EXPRESS WRITTEN CONSENT OF VANNER INC. IT IS PROVIDED SOLELY FOR THE CONVENIENCE OF THE USER AND SHALL BE RETURNED UPON REQUEST.	
DRN/DATE	MEO 11/14/17	SCALE:	NONE
CHK/DATE	XXX XXXX/XX	TITILE: LABEL, STROBE TXT, .95ID ROUND SWITCH	
DRAWING/ PART NO.	D01XXXX	SHEET 1 OF 1 REV A	

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WHEN INSTALLING EQUIPMENT IN OR ON VEHICLES CHECK FOR FUEL TANKS, FUEL LINES, CONTROL LINES AND ELECTRICAL WIRING BEFORE DRILLING! ALWAYS USE DRILL BITS WITH INTEGRAL STOPS WHENEVER POSSIBLE!

DRAWN BY RJB	DATE DRAWN 11/15/2017
ECN NUMBER XXXX	ECN DATE XXXXXXX
PART WEIGHT 0.02 LBS.	REV. LEVEL A
PART NUMBER 55073	

PART NUMBER
55073

LOC | QTY | Part # | Description | Size

Material: IJ39 | Lamination: 8518

- 1: 6039597.Strobe Switch-1.52" x 2.07"



Note: Part will not be weeded, just cut.

Kit# 8001872 | Adrian Steel Part # 55073

06/01/2023 • JY
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ASCO REV.1 6/14/2023

<p>DISTYLL GRAPHIC SOLUTIONS</p> <p>FINAL DESIGN</p>	CLIENT NAME:		Switch Decals		O-ID: O15319-1
	Adrian Steel				
	DATE:	DESIGNER:			
O5/31/2023	TRN				

Please check information to confirm accurate vehicle specifications.

CLEANING INSTRUCTIONS All surfaces must be considered contaminated. Clean the vehicle surface immediately before applying the film. Dust and other contaminants can collect quickly on the surface and prevent the film from adhering properly. Even a freshly painted surface can collect dust before graphics can be applied.

For the best success with the films recommended for vehicle graphics, always apply the graphics when the air and vehicle surface are both above 60°F (16°C) and below 90°F (32°C) before beginning the installation.

PURCHASED COMPONENT KEY FEATURES

DESCRIPTION OF REQUIREMENTS

DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)

N/A

LOAD/RATING REQUIREMENT

N/A

MATERIAL REQUIREMENT

N/A

PACKAGING REQUIREMENT

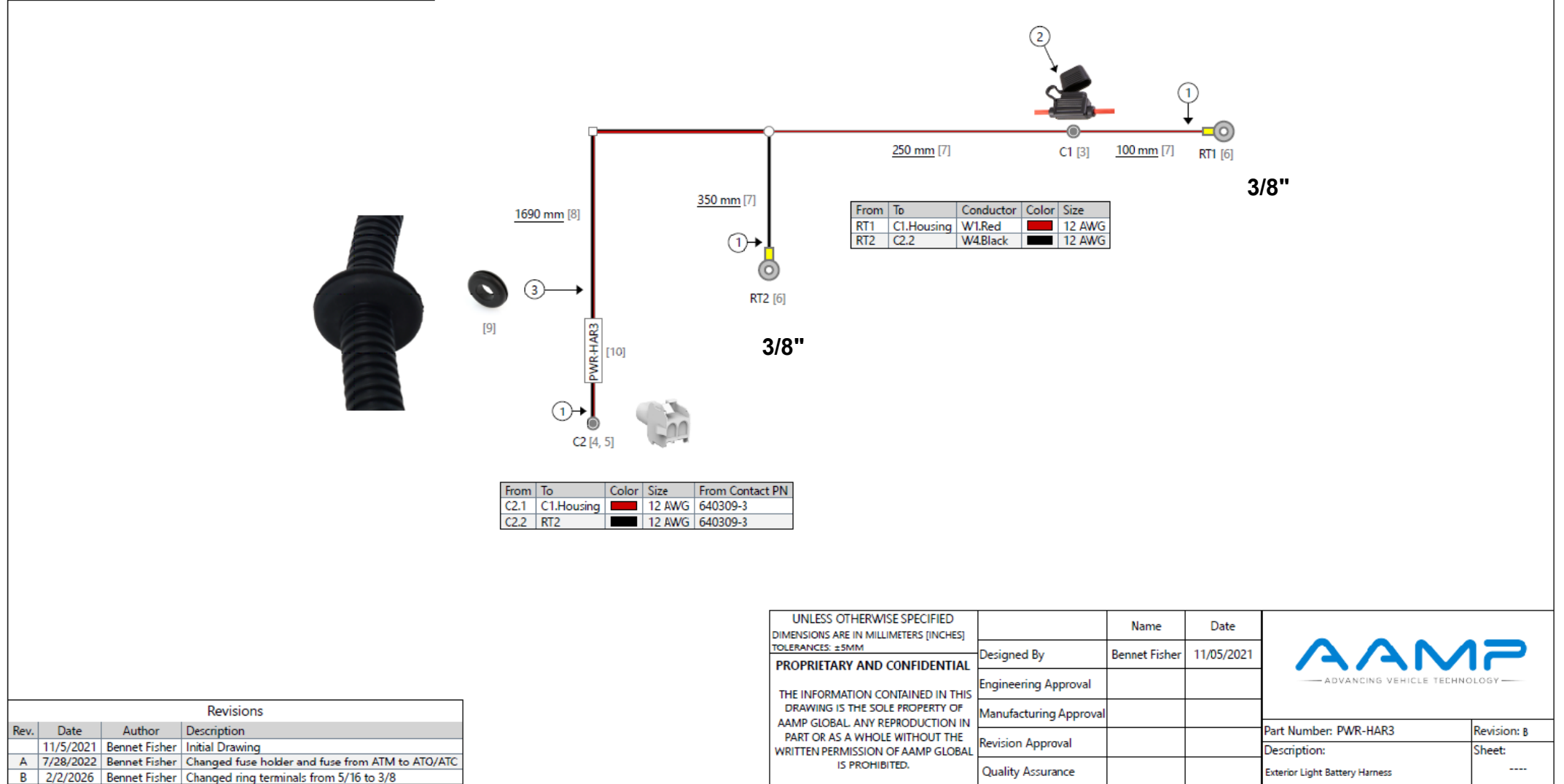
N/A

OTHER REQUIREMENTS

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Wire		12 AWG Red GXL	2040 mm
2	Wire		12 AWG Black GXL	2040 mm
3	Fuse Holder	Egis Mobile Electric	901028	1
4	Connector	TE Connectivity	1-480699-0	1
5	Contact	TE Connectivity	640309-3	2
6	Ring Terminal	Molex	19164-0068	2
7	Corrugated Tubing		0.25" Nylon Split Wall	700 mm
8	Corrugated Tubing		10mm Nylon Split Wall	1690 mm
9	Grommet		14mm Grommet	1
10	Label		Heat Shrink Style Label	1

Coverings	
Id	Assembly
[7]	
[8]	

Notes	
①	Lock Tape Loom with Tesa 51036
②	Add 15A ATO/ATC Fuse
③	Add rubber grommet over harness loom; 150mm behind C2



Revisions			
Rev.	Date	Author	Description
	11/5/2021	Bennet Fisher	Initial Drawing
A	7/28/2022	Bennet Fisher	Changed fuse holder and fuse from ATM to ATO/ATC
B	2/2/2026	Bennet Fisher	Changed ring terminals from 5/16 to 3/8

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS [INCHES] TOLERANCES: ±5MM		Name	Date	 ADVANCING VEHICLE TECHNOLOGY
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AAMP GLOBAL. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AAMP GLOBAL IS PROHIBITED.		Designed By	Bennet Fisher	
		Engineering Approval		
		Manufacturing Approval		
		Revision Approval		
		Quality Assurance		
			Part Number: PWR-HAR3	Revision: B
			Description: Exterior Light Battery Harness	Sheet: ----

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TOLERANCES & INSPECTION

UNLESS OTHERWISE SPECIFIED

ALL BEND ANGLES ARE 90 DEGREES

ALL DIMENSIONS ARE IN INCHES.

REFERENCE DIMENSIONS (X.XXX)
DO NOT REQUIRE INSPECTION

FEATURES	HOLES/SLOTS	ANGLES
0.0 = ± .125	0.0 = ± .062	0° = ± 2°
0.00 = ± .062	0.00 = ± .031	0.0° = ± 1°
0.000 = ± .031	0.000 = ± .015	

Material Thickness: per ASTM Std.
Weld Callouts per AWS

RELEASE & REVISIONS

INITIAL ECN: **25378**

CURRENT ECN: **29126**

ECN DESCRIPTION:
INCREASE RING TERMINALS TO 3/8"

REVISED BY: **MLH**

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
AAMP GLOBAL

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
67094 OR PWR-HAR3

COLOR (ONLY LIST IF COLOR SPECIFIC)
NO



COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERENCE)
(NOTE: DIMENSIONS AND FEATURES MAY VARY FOR A COMODITY ITEM.)
NO

PRINTED DOCUMENT IS UNCONTROLLED Sheet 1 of 1

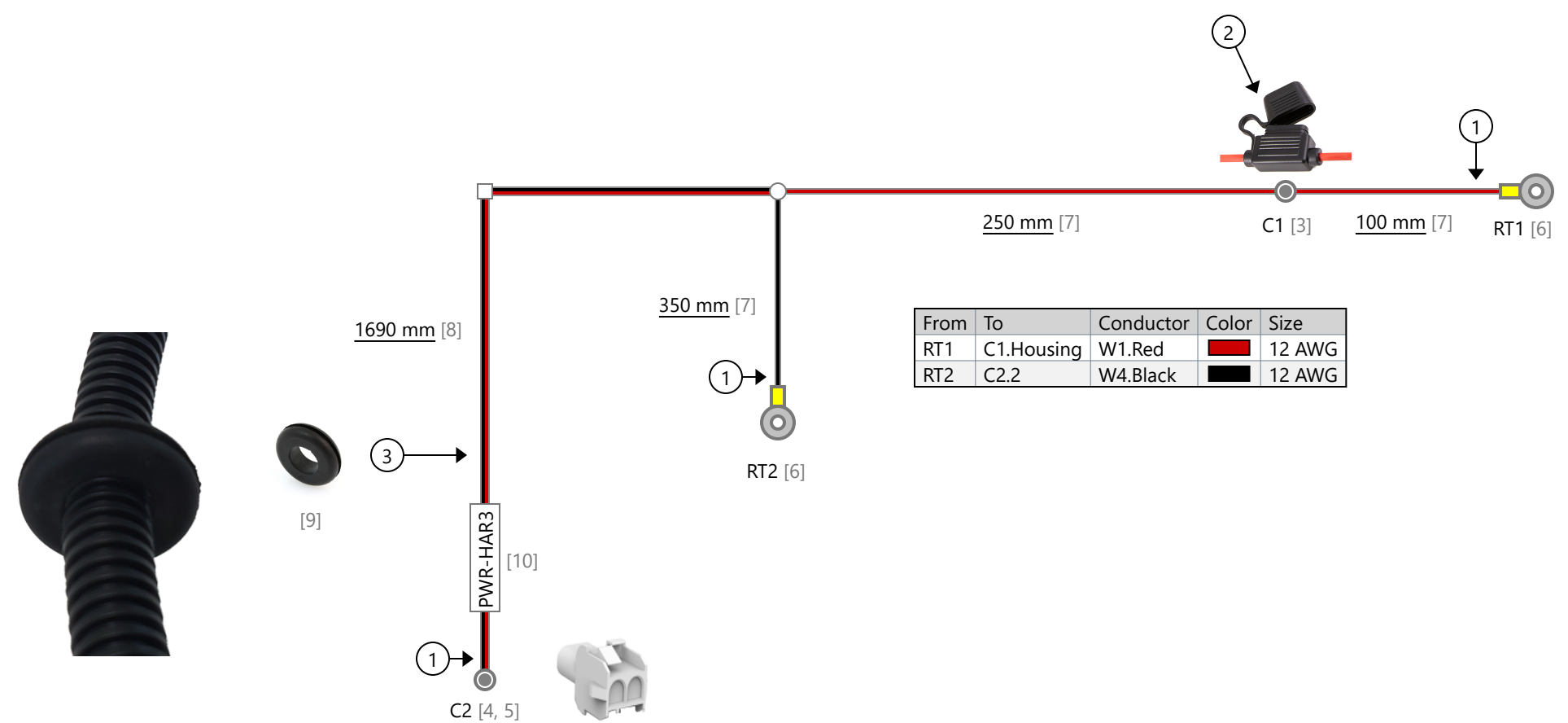
PART / PRODUCT IDENTIFICATION

ADRIAN STEEL®	ADRIAN STEEL COMPANY 906 JAMES STREET, ADRIAN, MI 49221	REVISION LEVEL <h1 style="font-size: 2em;">B</h1>
	MAT'L USED: PURCHASED DESIGNED BY: E.BURKE	
DESCRIPTION: POWER HARNESS EXTERIOR 3		
WEIGHT (Lbs.): 0.2	SEGMENT CODE: ELE	PART NUMBER: 67094

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Wire		12 AWG Red GXL	2040 mm
2	Wire		12 AWG Black GXL	2040 mm
3	Fuse Holder	Egis Mobile Electric	901028	1
4	Connector	TE Connectivity	1-480699-0	1
5	Contact	TE Connectivity	640309-3	2
6	Ring Terminal	Molex	19164-0068	2
7	Corrugated Tubing		0.25" Nylon Split Wall	700 mm
8	Corrugated Tubing		10mm Nylon Split Wall	1690 mm
9	Grommet		14mm Grommet	1
10	Label		Heat Shrink Style Label	1

Coverings	
Id	Assembly
[7]	
[8]	


Notes	
①	Lock Tape Loom with Tesa 51036
②	Add 15A ATO/ATC Fuse
③	Add rubber grommet over harness loom; 150mm behind C2



From	To	Conductor	Color	Size
RT1	C1.Housing	W1.Red	■	12 AWG
RT2	C2.2	W4.Black	■	12 AWG

From	To	Color	Size	From Contact PN
C2.1	C1.Housing	■	12 AWG	640309-3
C2.2	RT2	■	12 AWG	640309-3

Revisions			
Rev.	Date	Author	Description
	11/5/2021	Bennet Fisher	Initial Drawing
A	7/28/2022	Bennet Fisher	Changed fuse holder and fuse from ATM to ATO/ATC
B	2/2/2026	Bennet Fisher	Changed ring terminals from 5/16 to 3/8

<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS [INCHES] TOLERANCES: ±5MM</p> <p>PROPRIETARY AND CONFIDENTIAL</p> <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AAMP GLOBAL. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AAMP GLOBAL IS PROHIBITED.</p>	Name	Date	 <p>— ADVANCING VEHICLE TECHNOLOGY —</p>	
	Designed By	Bennet Fisher		11/05/2021
	Engineering Approval			
	Manufacturing Approval			
	Revision Approval			
Quality Assurance				
Part Number: PWR-HAR3		Revision: B		
Description:		Sheet:		
Exterior Light Battery Harness		----		

PURCHASED COMPONENT KEY FEATURES

DESCRIPTION OF REQUIREMENTS

DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)

N/A

LOAD/RATING REQUIREMENT

N/A

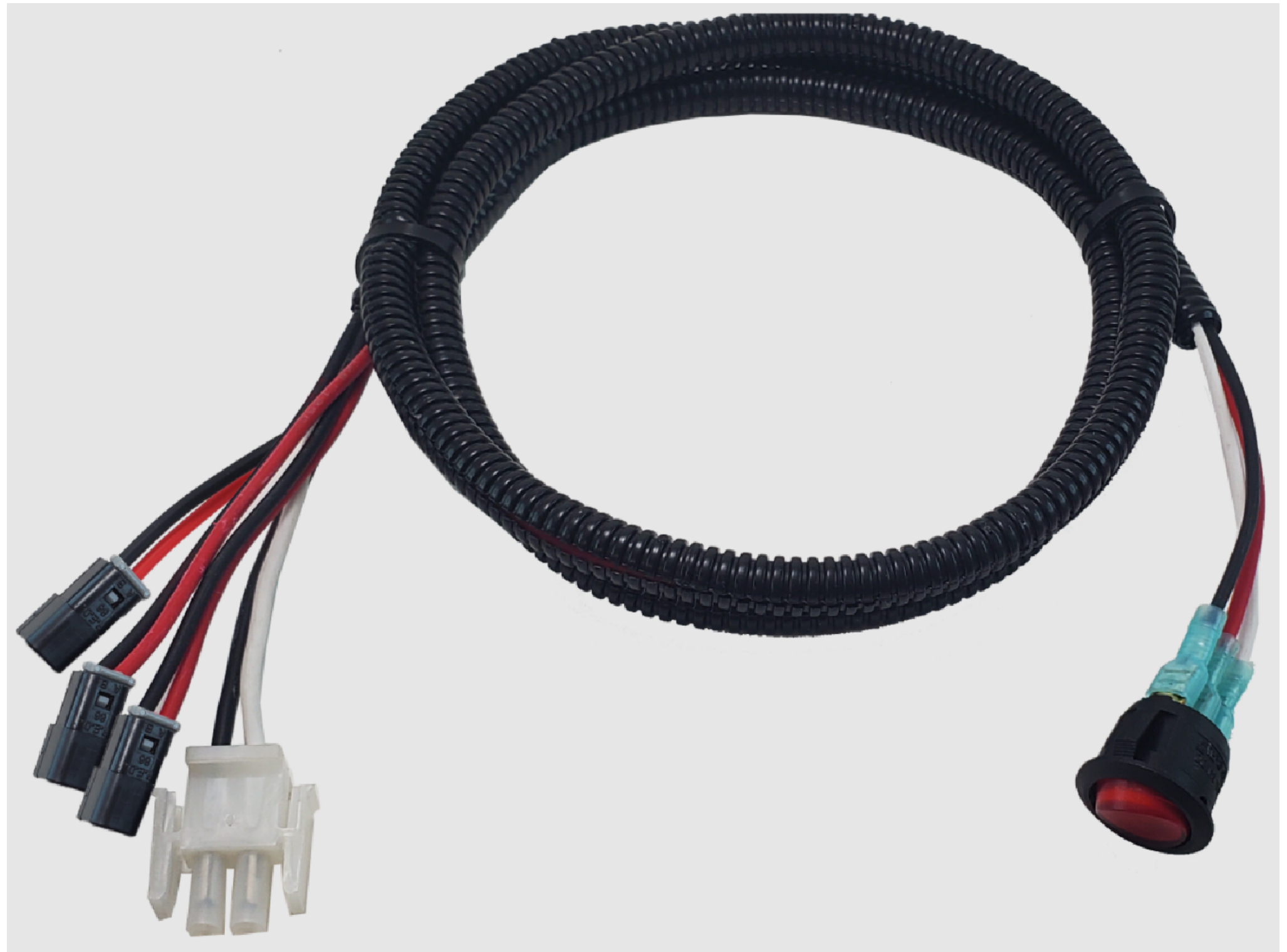
MATERIAL REQUIREMENT

N/A

PACKAGING REQUIREMENT

N/A

OTHER REQUIREMENTS



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TOLERANCES & INSPECTION

UNLESS OTHERWISE SPECIFIED

ALL BEND ANGLES ARE 90 DEGREES

ALL DIMENSIONS ARE IN INCHES.

REFERENCE DIMENSIONS (X.XXX)
DO NOT REQUIRE INSPECTION

FEATURES	HOLES/SLOTS	ANGLES
0.0 = ± .125	0.0 = ± .062	0° = ± 2°
0.00 = ± .062	0.00 = ± .031	0.0° = ± 1°
0.000 = ± .031	0.000 = ± .015	

Material Thickness: per ASTM Std.
Weld Callouts per AWS

RELEASE & REVISIONS

INITIAL ECN: **25378**

CURRENT ECN: **25378**

ECN DESCRIPTION:

RELEASE FOR PRODUCTION

REVISED BY:

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER

AAMP GLOBAL

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

SSW-HAR2 OR 67098

COLOR (ONLY LIST IF COLOR SPECIFIC)

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERENCE)
(NOTE: DIMENSIONS AND FEATURES MAY VARY FOR A COMODITY ITEM.)

NO

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Sheet 1 of 1

PART / PRODUCT IDENTIFICATION



ADRIAN STEEL®

ADRIAN STEEL COMPANY
906 JAMES STREET, ADRIAN, MI 49221

REVISION LEVEL

A

MAT'L USED: **PURCHASED**


DESIGNED BY: **E.BURKE**

DESCRIPTION: **SWITCH HARNESS 2 EXTERIOR LIGHTING**

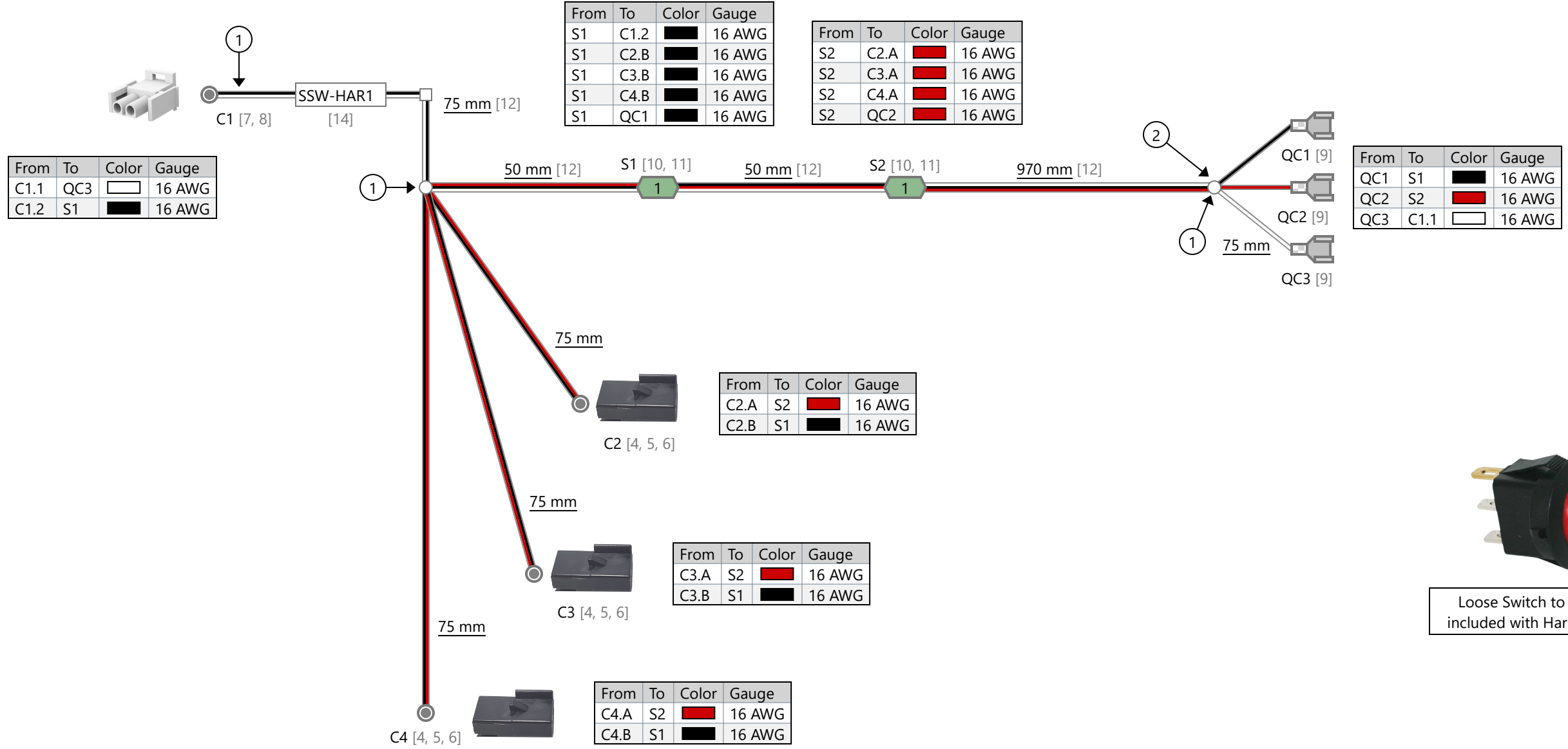
WEIGHT (Lbs.): **0.2**

SEGMENT CODE: **ELE**

PART NUMBER: **67098**


Coverings	
Id	Assembly
[12]	

Notes	
①	Lock Tape Loom with Tesa 51608
②	75mm between end of loom and Quick Connects



Revisions			
Rev.	Date	Author	Description
A	11/5/2021	Bennet Fisher	Initial Drawing

UNLESS OTHERWISE SPECIFIED		Name	Date
DIMENSIONS ARE IN MILLIMETERS (INCHES)		Designed By	Bennet Fisher 11/5/2021
TOLERANCES: ±5MM		Engineering Approval	----
PROPRIETARY AND CONFIDENTIAL		Manufacturing Approval	----
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		Quality Assurance	----



— ADVANCING VEHICLE TECHNOLOGY —

Part Number: SSW-HAR2	Revision: ----
Description: Strobe Switch Harness - 3 Outputs	Sheet: 1 of 1

PURCHASED COMPONENT KEY FEATURES

DESCRIPTION OF REQUIREMENTS

DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)

N/A

LOAD/RATING REQUIREMENT

N/A

MATERIAL REQUIREMENT

N/A

PACKAGING REQUIREMENT

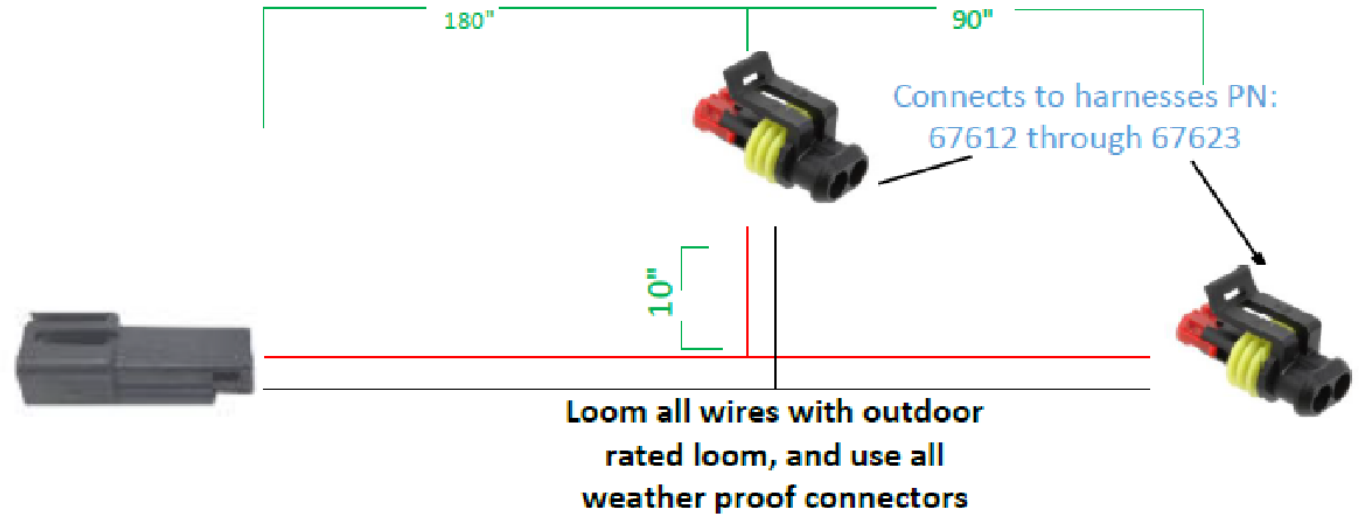
N/A

OTHER REQUIREMENTS

PLUG AND PLAY BODY HARNESS 3 FOR LADDER RACK LIGHTING

- INCLUDES:**
 2 CAPS FOR EXTERIOR CONNECTORS
 20 CABLE TIES
 5 WIRE TIE WITH CHRISTMAS TREES
 7 STICKEY BACKED CABLE TIE HOLDERS
 7 EDGE CLIP ZIP TIES
 7 NYLON PLASTIC LOOP CLAMPS
 7 PHILLIPS HEAD TEK SCREWS

#1



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Sheet 1 of 1

TOLERANCES & INSPECTION

UNLESS OTHERWISE SPECIFIED

ALL BEND ANGLES ARE 90 DEGREES

ALL DIMENSIONS ARE IN INCHES.

REFERENCE DIMENSIONS (X.XXX)
DO NOT REQUIRE INSPECTION

FEATURES	HOLES/SLOTS	ANGLES
0.0 = ± .125	0.0 = ± .062	0° = ± 2°
0.00 = ± .062	0.00 = ± .031	0.0° = ± 1°
0.000 = ± .031	0.000 = ± .015	

Material Thickness: per ASTM Std.
Weld Callouts per AWS

RELEASE & REVISIONS

INITIAL ECN: **26041**

CURRENT ECN: **26041**

ECN DESCRIPTION:

RELEASE TO PRODUCTION

REVISED BY: **EMB**

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER

AAMP

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

67607

COLOR (ONLY LIST IF COLOR SPECIFIC)

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERENCE)
(NOTE: DIMENSIONS AND FEATURES MAY VARY FOR A COMODITY ITEM.)

NO

PART / PRODUCT IDENTIFICATION



ADRIAN STEEL®

ADRIAN STEEL COMPANY
906 JAMES STREET, ADRIAN, MI 49221

REVISION LEVEL

A

MAT'L USED: **PURCHASED**

DESIGNED BY: **E.BURKE**

DESCRIPTION: **BODY HARN 3 EXT P&P**

WEIGHT (Lbs.): **0.1**

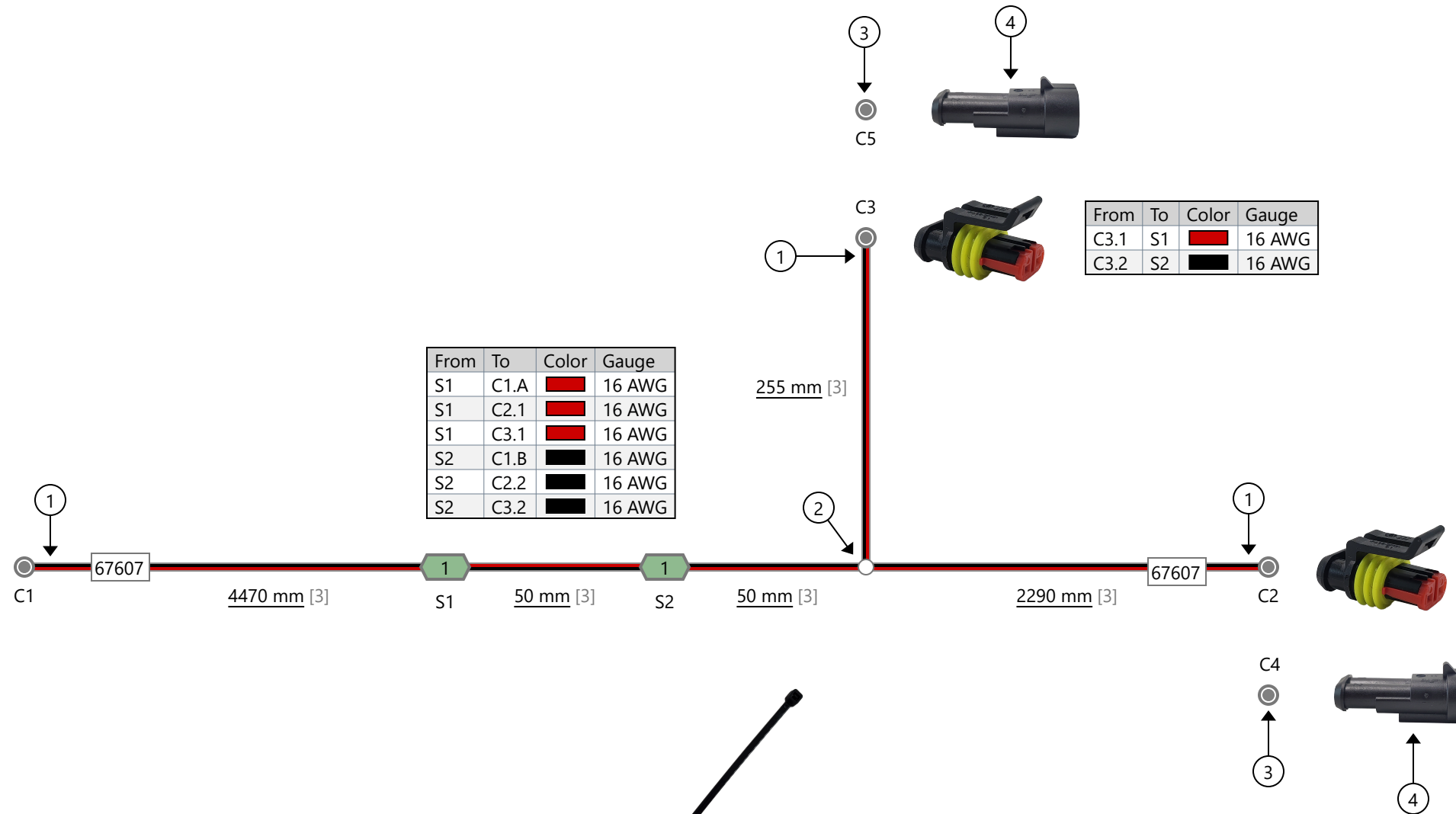
SEGMENT CODE: **ELE**

PART NUMBER: **67607**

Bill of Materials			
Id	Type	Part Number	Quantity
1	Wire	16 AWG Red GXL	7215 mm
2	Wire	16 AWG Black GXL	7165 mm
3	Corrugated Tubing	0.25" Nylon Split Wall	7115 mm
4	Edge Clip Cable Tie	156-00539	7
5	Fastener	90415A330	7
6	Cable Clamp		7
7	Cable Tie Mount		7
8	Cable Tie with Mount	156-00157	5
9	Cable Tie		20

Coverings	
Id	Assembly
[3]	

Notes	
①	Lock Tape Loom with Tesa 51036
②	Lock Tape Loom with Tesa 51036 on both side of wire breakout
③	Plug C4 into C2; Plug C5 into C3
④	C4 & C5 Cavities are sealed



From	To	Color	Gauge
S1	C1.A	Red	16 AWG
S1	C2.1	Red	16 AWG
S1	C3.1	Red	16 AWG
S2	C1.B	Black	16 AWG
S2	C2.2	Black	16 AWG
S2	C3.2	Black	16 AWG

From	To	Color	Gauge
C3.1	S1	Red	16 AWG
C3.2	S2	Black	16 AWG

From	To	Color	Gauge
C2.1	S1	Red	16 AWG
C2.2	S2	Black	16 AWG

From	To	Color	Gauge
C1.A	S1	Red	16 AWG
C1.B	S2	Black	16 AWG



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	Designed By	Bennet Fisher		05/09/2022
	Engineering Approval			
	Manufacturing Approval			
	Revision Approval			
Quality Assurance			Revision: A	
			Sheet: 1	

Revisions			
Rev.	Date	Author	Description
	5/9/2022	Bennet Fisher	Initial Drawing
	7/14/2022	Bennet Fisher	Updated Wire Lengths to Connector C2 and C3
A	12/15/2022	Bennet Fisher	Updated Wire Lengths to Connector C2 and C3; Added loom for C2; Added Connector "Caps" with Seals; Added Second Harness Label

PURCHASED COMPONENT KEY FEATURES

DESCRIPTION OF REQUIREMENTS

DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)

N/A

LOAD/RATING REQUIREMENT

N/A

MATERIAL REQUIREMENT

N/A

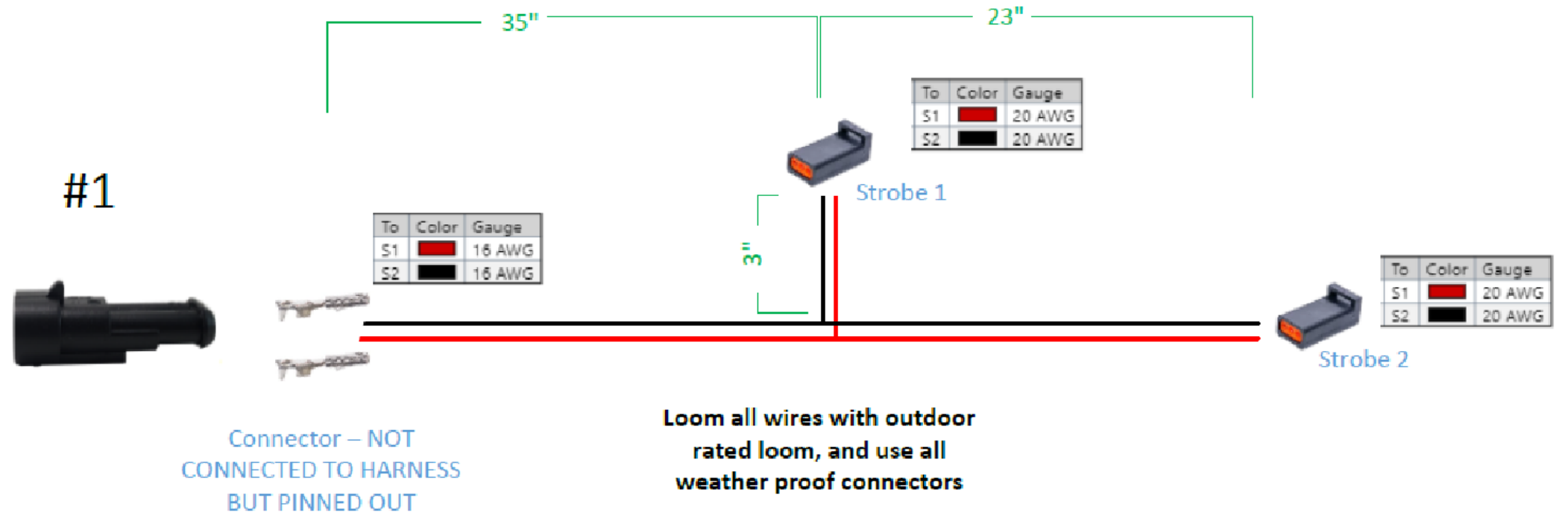
PACKAGING REQUIREMENT

N/A

OTHER REQUIREMENTS

**PLUG AND PLAY HARNESS FOR LADDER RACKS
2 STROBES IN THE MIDDLE OF 58" AND 68" RACK**

**INCLUDES:
10 CABLE TIES
1 CABLE GLAND
1 UN-CONNECTED TE282080-1 IN BAG**



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Sheet 1 of 1

TOLERANCES & INSPECTION

UNLESS OTHERWISE SPECIFIED

ALL BEND ANGLES ARE 90 DEGREES

ALL DIMENSIONS ARE IN INCHES.

REFERENCE DIMENSIONS (X.XXX)
DO NOT REQUIRE INSPECTION

FEATURES	HOLES/SLOTS	ANGLES
0.0 = ± .125	0.0 = ± .062	0° = ± 2°
0.00 = ± .062	0.00 = ± .031	0.0° = ± 1°
0.000 = ± .031	0.000 = ± .015	

Material Thickness: per ASTM Std.
Weld Callouts per AWS

RELEASE & REVISIONS

INITIAL ECN: **26041**

CURRENT ECN: **26041**

ECN DESCRIPTION:

RELEASE TO PRODUCTION

REVISED BY: **EMB**

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER

AAMP

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

67616

COLOR (ONLY LIST IF COLOR SPECIFIC)

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERENCE)
(NOTE: DIMENSIONS AND FEATURES MAY VARY FOR A COMODITY ITEM.)

NO

PART / PRODUCT IDENTIFICATION



ADRIAN STEEL®

ADRIAN STEEL COMPANY
906 JAMES STREET, ADRIAN, MI 49221

REVISION LEVEL

A

MAT'L USED: **PURCHASED**

DESIGNED BY: **E.BURKE**

DESCRIPTION: **STROBE HARN RR/FWD 58/68"**

WEIGHT (Lbs.): **0.1**

SEGMENT CODE: **ELE**

PART NUMBER: **67616**

PURCHASED COMPONENT KEY FEATURES

DESCRIPTION OF REQUIREMENTS

DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)

N/A

LOAD/RATING REQUIREMENT

N/A

MATERIAL REQUIREMENT

N/A

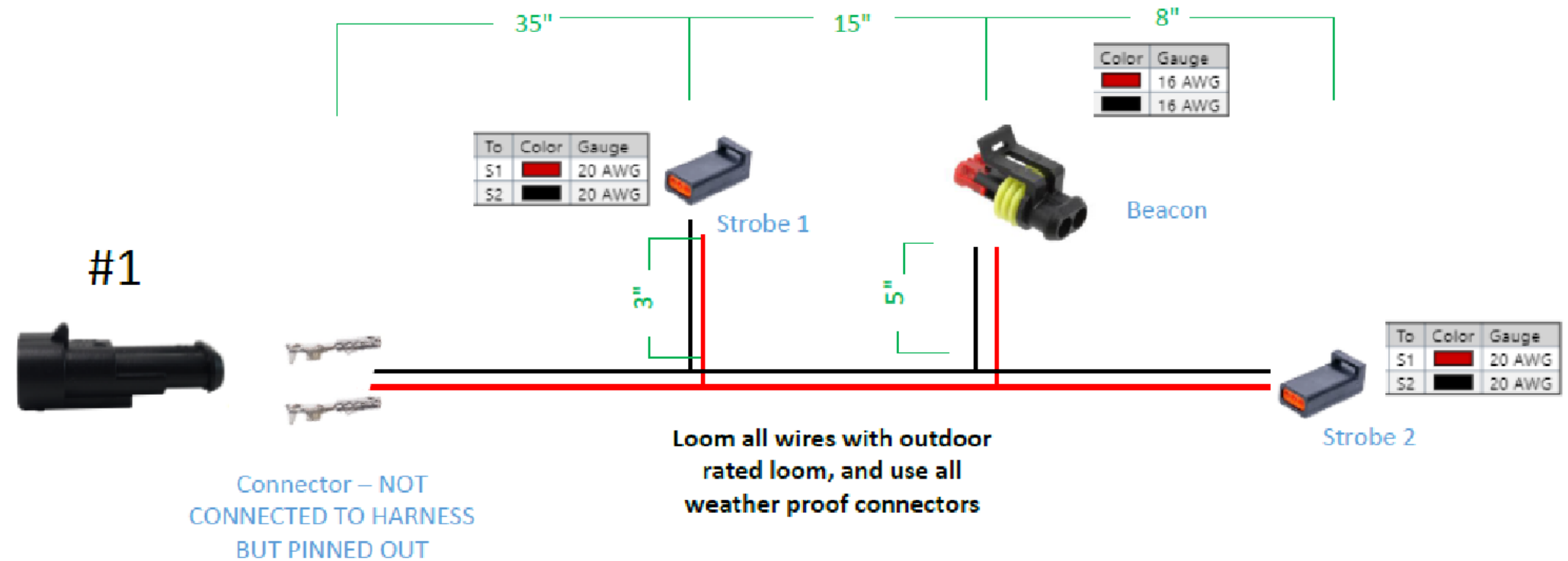
PACKAGING REQUIREMENT

N/A

OTHER REQUIREMENTS

**PLUG AND PLAY HARNESS FOR LADDER RACKS
2 STROBES AND 1 BEACON IN
THE MIDDLE OF 58" AND 68" RACK**

**INCLUDES:
10 CABLE TIES
1 CABLE GLAND
1 UN-CONNECTED TE282080-1 IN BAG
1 CAP FOR EXTERIOR CONNECTOR**



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TOLERANCES & INSPECTION

UNLESS OTHERWISE SPECIFIED

ALL BEND ANGLES ARE 90 DEGREES

ALL DIMENSIONS ARE IN INCHES.

REFERENCE DIMENSIONS (X.XXX)
DO NOT REQUIRE INSPECTION

FEATURES	HOLES/SLOTS	ANGLES
0.0 = ± .125	0.0 = ± .062	0° = ± 2°
0.00 = ± .062	0.00 = ± .031	0.0° = ± 1°
0.000 = ± .031	0.000 = ± .015	

Material Thickness: per ASTM Std.
Weld Callouts per AWS

RELEASE & REVISIONS

INITIAL ECN: **26041**

CURRENT ECN: **26041**

ECN DESCRIPTION:

RELEASE TO PRODUCTION

REVISED BY: **EMB**

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER

AAMP

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

67620

COLOR (ONLY LIST IF COLOR SPECIFIC)

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERENCE)

(NOTE: DIMENSIONS AND FEATURES MAY VARY FOR A COMODITY ITEM.)

NO

PRINTED DOCUMENT IS UNCONTROLLED

Sheet 1 of 1

PART / PRODUCT IDENTIFICATION



ADRIAN STEEL®

ADRIAN STEEL COMPANY
906 JAMES STREET, ADRIAN, MI 49221

REVISION LEVEL

A

MAT'L USED: **PURCHASED**

DESIGNED BY: **E.BURKE**

DESCRIPTION: **STROBE/BCN RR/FWD HARN**

WEIGHT (Lbs.): **0.1**

SEGMENT CODE: **ELE**

PART NUMBER: **67620**

PURCHASED COMPONENT KEY FEATURES

DESCRIPTION OF REQUIREMENTS

DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)

N/A

LOAD/RATING REQUIREMENT

N/A

MATERIAL REQUIREMENT

N/A

PACKAGING REQUIREMENT

N/A

OTHER REQUIREMENTS

**ECCO STROBE LIGHT: ED3801
WITH EXTERIOR PLUG AND PLAY CONNECTOR**



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TOLERANCES & INSPECTION

UNLESS OTHERWISE SPECIFIED

ALL BEND ANGLES ARE 90 DEGREES

ALL DIMENSIONS ARE IN INCHES.

REFERENCE DIMENSIONS (X.XXX)
DO NOT REQUIRE INSPECTION

FEATURES	HOLES/SLOTS	ANGLES
0.0 = ± .125	0.0 = ± .062	0° = ± 2°
0.00 = ± .062	0.00 = ± .031	0.0° = ± 1°
0.000 = ± .031	0.000 = ± .015	

Material Thickness: per ASTM Std.
Weld Callouts per AWS

RELEASE & REVISIONS

INITIAL ECN: **25921**

CURRENT ECN: **25921**

ECN DESCRIPTION:

RELEASE TO PRODUCTION

REVISED BY: **N/A**

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER

ECCO

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

ED3801A-ADR

COLOR (ONLY LIST IF COLOR SPECIFIC)

AMBER LED/CLEAR LENS

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERENCE)
(NOTE: DIMENSIONS AND FEATURES MAY VARY FOR A COMODITY ITEM.)

NO

PRINTED DOCUMENT IS UNCONTROLLED

Sheet 1 of 1

PART / PRODUCT IDENTIFICATION



ADRIAN STEEL®

ADRIAN STEEL COMPANY
906 JAMES STREET, ADRIAN, MI 49221

REVISION LEVEL

A

MAT'L USED: **PURCHASED**

DESIGNED BY: **EMB**

DESCRIPTION: **ECCO STROBE ED3801A W/CON**

WEIGHT (Lbs.): **0.5**

SEGMENT CODE: **EST**

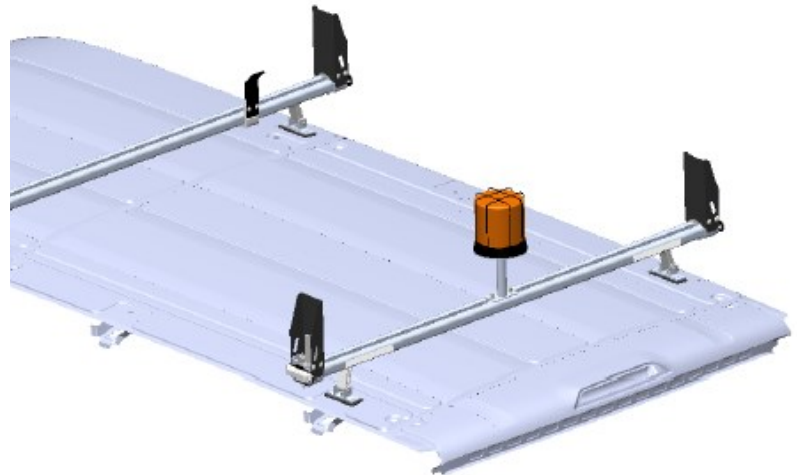
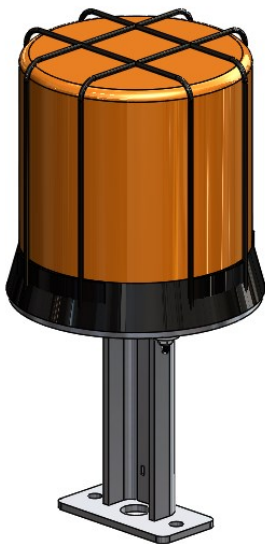
PART NUMBER: **67686**

Introduction / Comments:

Dealer Instructions for 70970

Note:

Read all instructions prior to installation. Review the Adrian Steel **GENERAL PRECAUTIONS PAGES (56638)** before attempting installation. Only personnel familiar with using electrical best practices should perform this install. Reference **ELECTRICAL BEST PRACTICES MANUAL (54479)** before attempting installation.



Dealer Instructions For 70970

Figure 15.1

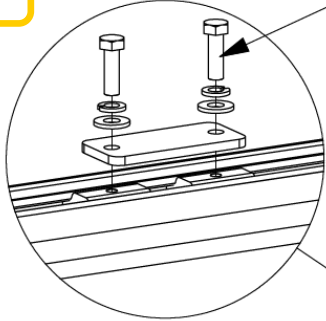
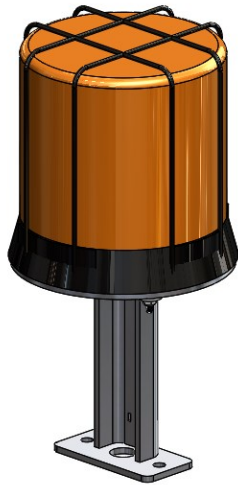


Figure 15.2



Step 1:

Locate the ladder rack rear cross bow center. There will be a metal plate fastened down with bolts, onto 2 spacers. Remove the top metal plate by removing the two bolts. Be careful not to lose the bolts or the slides in the rail, under the ware strip. Figure 15.1.

Now grab the beacon/mount assembly. Figure 15.2.

Assemble the beacon mount feet by inserting the bolt (FAS0799) through the lock washer (FAS0588) then flat washer (FAS0552) then through the foot into the slide. Do not tighten down at this point. Figure 15.3.

Step 2: Connect the beacon harness connector to the beacon. You will need to remove the cap on the beacon harness.

Tighten the bolts once you have positioned the beacon (as centered on the rail as possible). Figure 15.4.

Figure 15.3

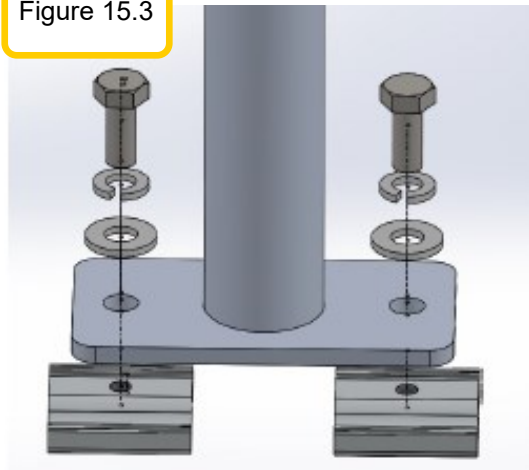


Figure 15.4



Double check the functionality of the lights and switches.