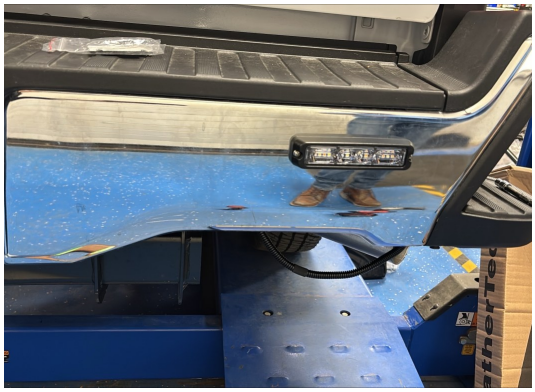
Introduction / Comments:

Install Instructions For Exterior Plug & Play Lights For F250+

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 For Exterior Hood Mounted Plug And Play Lights For F150 & F250+

Table of Contents:

Torque requirements……..2

Introduction Statement……..…….3

Overall Harness Diagram……..3

Tools needed……...3

Harnesses/Components Needed (If Applicable)……4

Component Placements……5

Overall Harness Routing……..……6

Beginning Install……7

Strobe Installation Instructions……9

*****TORQUE*****
Torque all strobe fasteners to 10 in-lbs.
DO NOT OVER TIGHTEN

DO NOT MOUNT ON A CURVED SURFACE

Please read statement below before moving forward

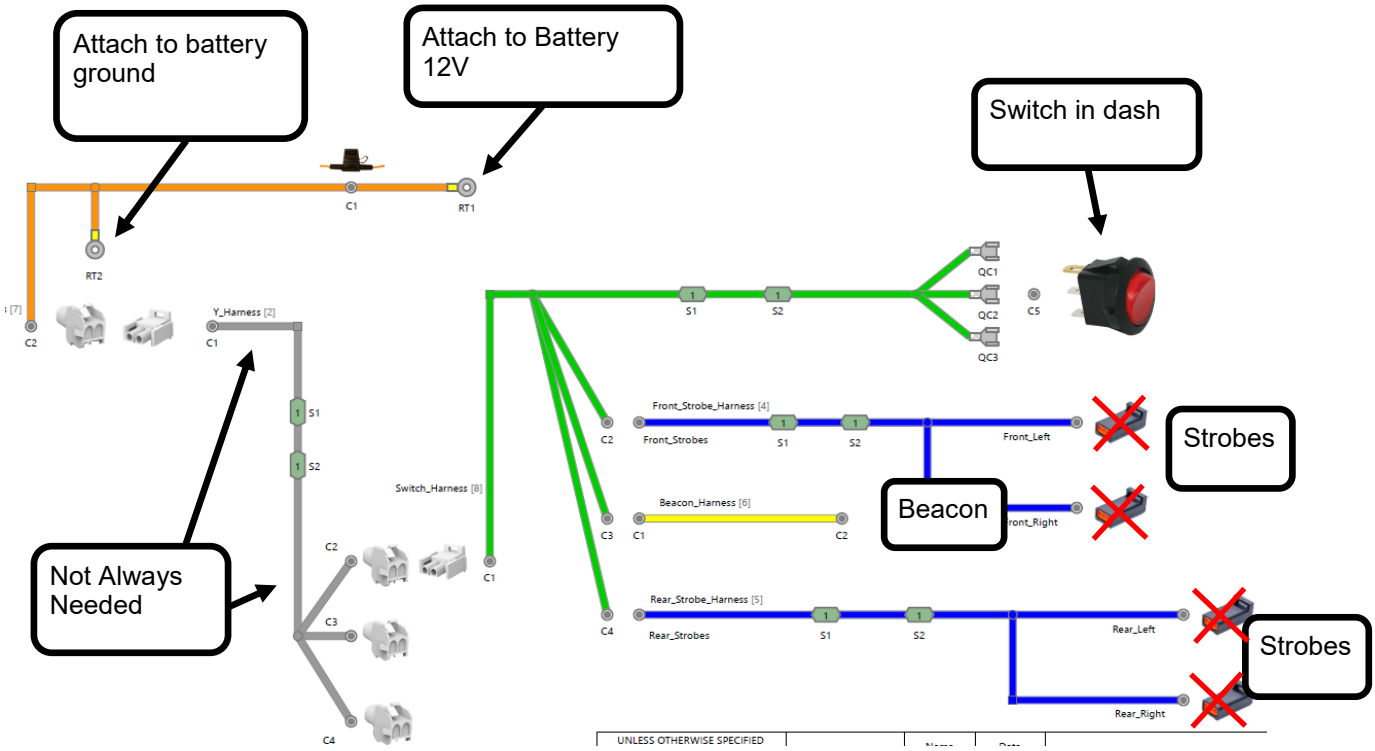
Before installation, disconnect the OEM negative battery cable.

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.

Overall Harness Diagram



Tools required:



10mm, 8mm socket



Phillips bit and 9/64” drill bit



Power drill and impact

Torque wrench

Components



	Part Number	Description
1	67095	Power Harness #4
2	67097	Switch Harness #1
3	67102	Front Strobe Harness #2
4	67108	Rear Strobe Harness #3
5	78897 x 4	Strobes
6	67689	ECCO Lightbar (If applicable)
7	67113	Beacon/Lightbar Harness #3
8	52769	Lightbar Mount

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, beacons, and lightbars. Reference the instructions for only what you are installing.

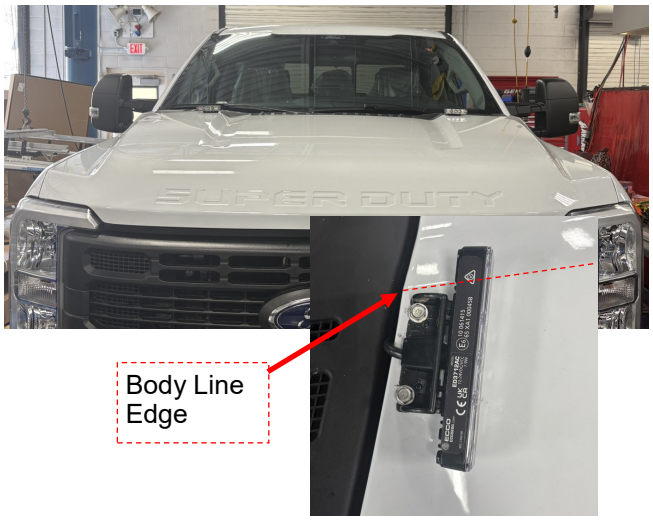
Harness pictures are for reference only.

F250 Placements

Switch placement: Dash panel under headlight buttons

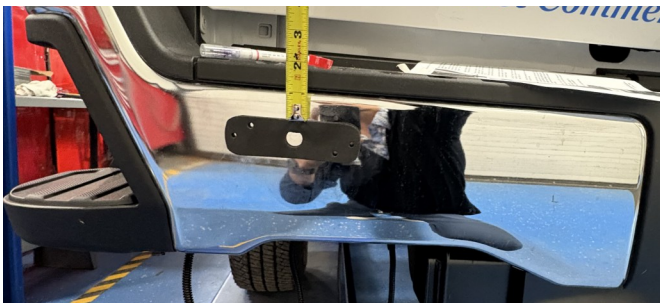


Front Strobes: Hood Mounted Parallel to Hood, Corner at Body Line Edge



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

Rear Strobes: Rear Bumper
11" from straight edge from center of bumper
1" from the top edge of bumper





F150 Placements

Switch placement: Dash panel under headlight buttons



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

Front Strobes: Hood Mounted Parallel to Hood, Measure 18" from midpoint of hood

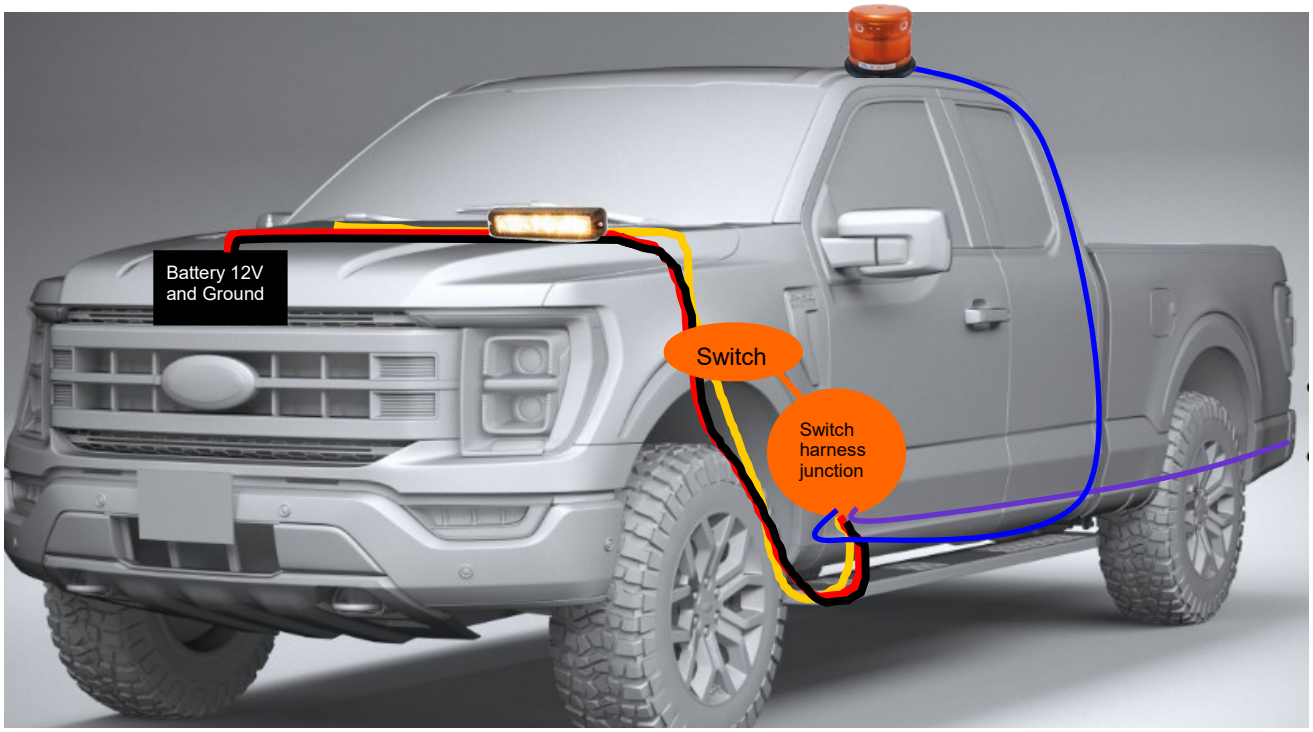


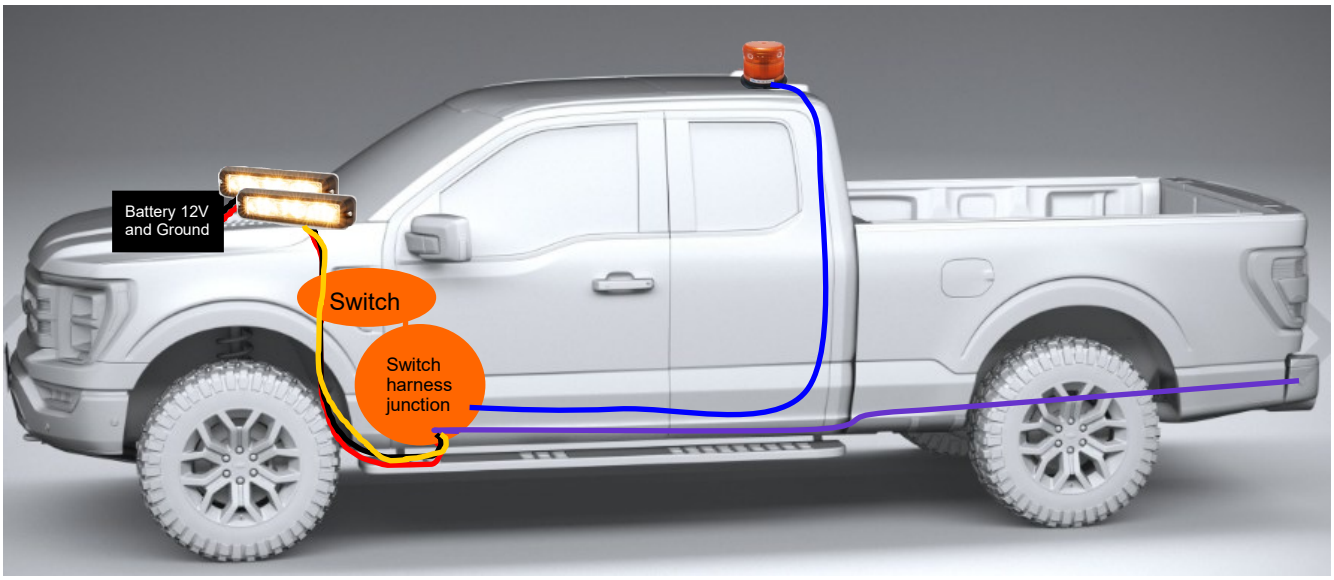
Rear Strobes: Rear Bumper
4" from curved edge from center of bumper
2.5" from the top edge of bumper





Routing Overview

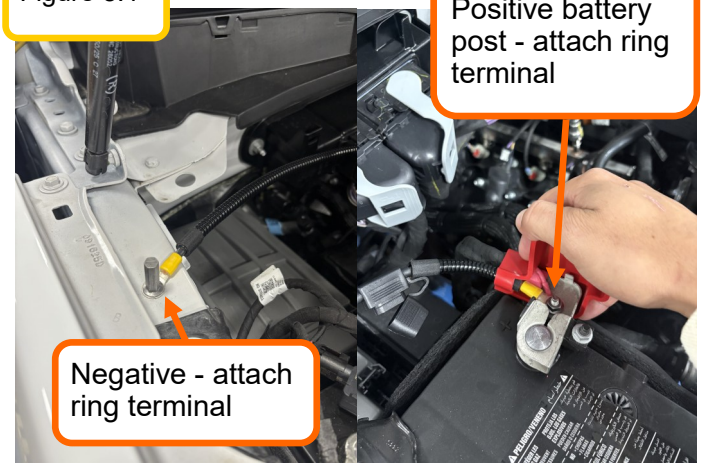




Color	Key - Items
Yellow	Strobes - Front strobe harness #2
Red/Black	Power harness: Battery to kick panel
Orange	Switch harness: Switch in dash
Blue	Beacon harness: Switch to Beacon
Purple	Strobes - Rear strobe harness #3



Figure 8.1



Step 1:

Locate the power harness #67095.

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

Locate the OEM battery under the hood.

Step 2:

Attach the red wire with the ring terminal to the battery positive post.

Attach the black wire with the ring terminal to the negative post.
Figure 8.1.

Figure 8.2



Route the white connector end along the underside of the cab filter (see figure 8.2 red dotted line) to the firewall. (You can tuck the wiring under the filter and hide it. Figure 8.3.)

Step3:

Continue routing down the wheel well and continue routing backwards until you reach underneath the driver's seat.
Locate the driver's side door sill area.
Figure 10.2.

Figure 8.3

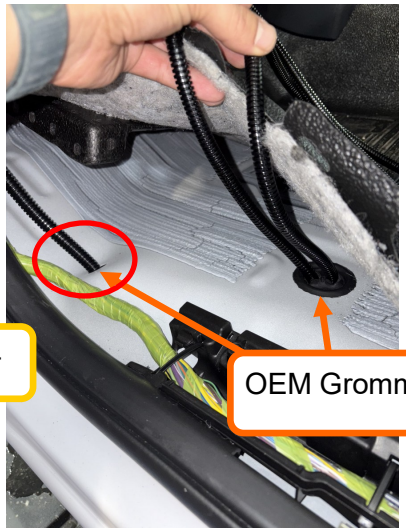


Use a trim tool to remove the trim panels in the driver's step well and dash/kick panel.

Locate the OEM grommets under the carpet. There will be one right next to the foot sill area and one to the right closer to the driver's seat. You will be using the grommet towards the front of the vehicle for the power harness
Figure 8.4.

You will be utilizing the smaller grommet towards the front of the vehicle for the power harness. Figure 8.4

Figure 8.4



F250 NOTE IF NO OEM GROMMET
You will need to drill holes for the front and rear strobe harnesses. YOU MUST USE A GROMMET AND SILICONE

Power harness

Switch Harness



Figure 9.1

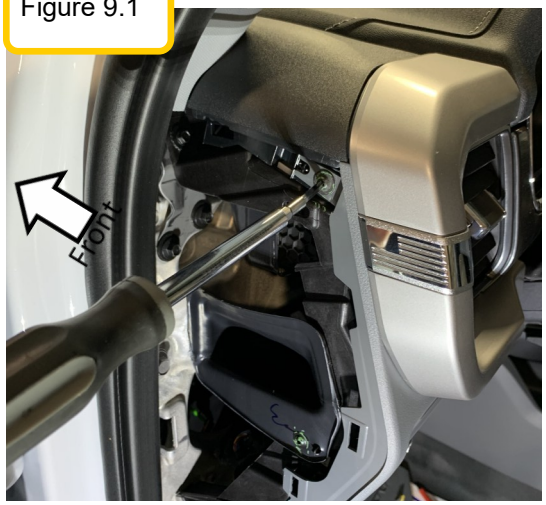
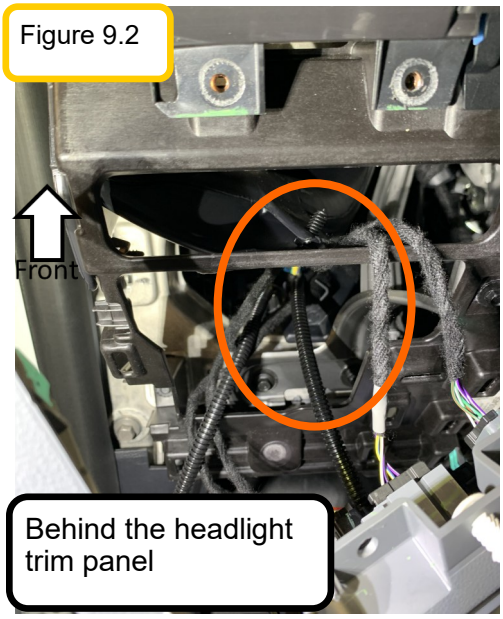


Figure 9.2



Behind the headlight trim panel



Step 4: Locate the switch harness #67097

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

Disassemble the IP trim to gain access behind the dash. Figure 9.1.

Route the switch end of the switch harness up the dash and through the opening in the IP. Figure 9.2.

Secure to the OEM harnesses behind the IP.

****IF OEM BEACON IS INSTALLED SEE NEXT PAGE FOR SWITCH PLACEMENT****

Step 5: Drill a hole for the switch, in the trim panel like shown below.

The hole will be centered in the unused square box above the Emergency brake button. If this spot is un-attainable, move the switch to the right, where it can be located. Be sure the back side of the trim panel is open before drilling the hole. Figure 9.3.

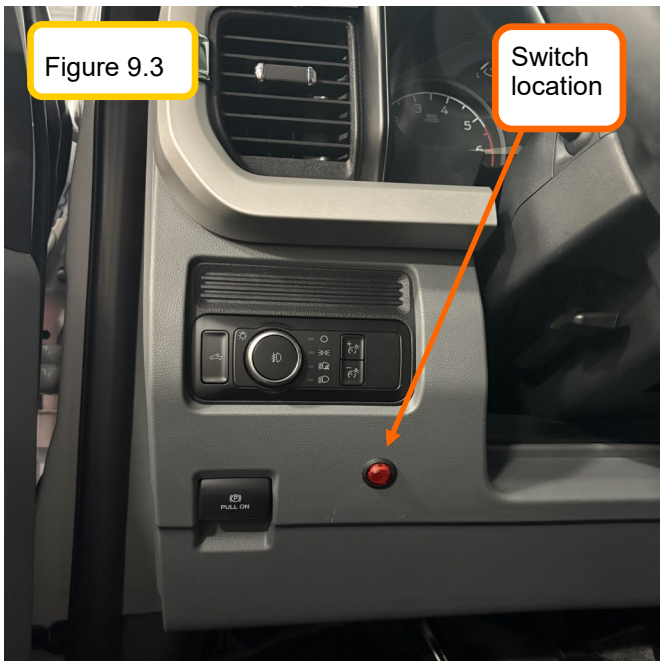
Route the harnesses through the hole

Step 6: Connect the harness to the switch as shown in the image in the bottom left corner

Insert the switch into the hole and place the strobe/beacon decal (if supplied) around the switch.
Reassemble all trim and secure wiring.

Figure 9.3

Switch location



Strobe Switch placement for Trucks with OEM Beacons

For trucks with the OEM Beacon already installed, you will find a switch on the side panel in the driver's seat. We will install our switch in this same location. See image below.

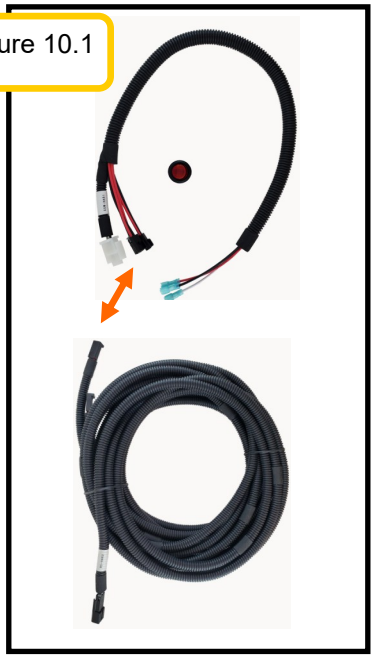




Strobe Install

Strobe pictures are for reference only. Please refer to product structure/spec sheets for the actual strobes for the install.

Figure 10.1



Step 1:
Locate the rear strobe harness #67108.

Connect the rear strobe harness to the switch harness (one of the remaining unused connectors) in the driver's foot well. Figure 10.1.

Step 2:
Locate the 2nd OEM grommet underneath the carpeting below the driver's feet. Figure 10.2

Cut two "X's" in the grommet. Figure 10.3 Route the rear strobe harness through the grommet (by the seat) to the underneath of the vehicle.

Wait until you route the front strobe harness as well **before** you silicone grommet

Figure 10.2



****F250 NOTE IF NO OEM GROMMET****
You will need to drill holes for the front and rear strobe harnesses. YOU MUST USE A GROMMET AND SILICONE. SEE IMAGES BELOW Figure 10.4

Use both grommets provided and drill two 11/16" holes with a step bit

Figure 10.3



Figure 10.4

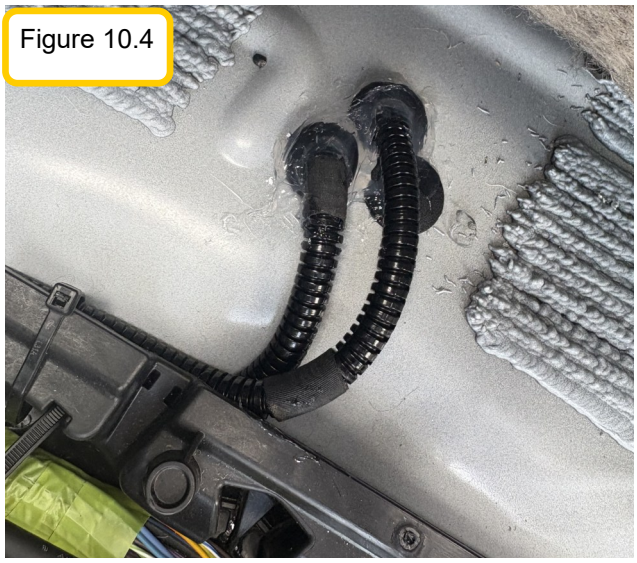


Figure 11.1

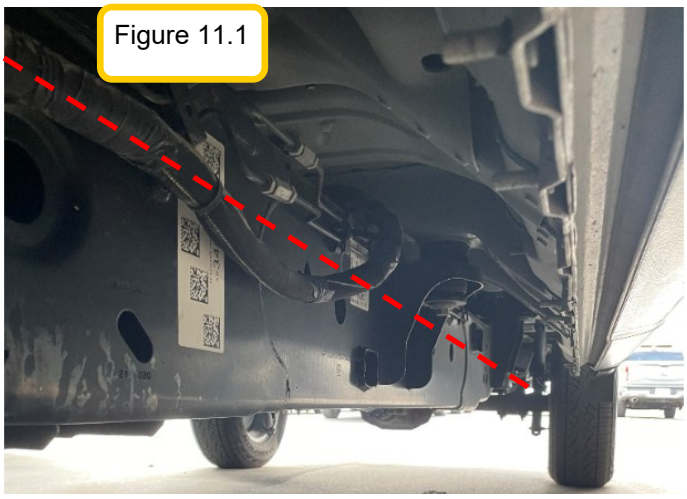


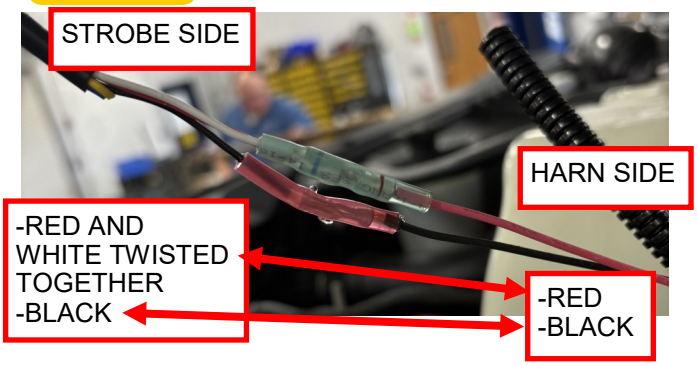
Figure 11.2



Figure 11.3



Figure 11.4



Step 3: Routing (Refer to routing diagrams at the beginning of the instructions)
Route the strobe harness rearward following the frame (red dotted line). Secure with zip ties to the OEM harness. Figure 11.1 and 11.2.

Cut both connectors off the end of the harness.

Step 4: Mounting Rear Strobes F250

Place the strobes in line with the edge of the bumper and 11” from the straight edge of bumper towards the center of the tailgate, and 1” down from the top edge of the bumper. Figure 11.3.

Use the strobe as a template, mark the center hole location and the mounting holes on the bumper.

Drill a 3/8” hole for the wire pass through of the strobe. Use primer on the hole to prevent rusting. Figure 11.3.

Route the harness with the connector removed through the hole you just made. With butt splice connectors connect the Red wire to the **Red AND White wires from the strobe**. Connect the **Black** wire to the **Black** wire from the strobe. Figure 11.4

Drill two holes using a **9/64” Drill Bit** for the mounting screws. **YOU MUST DRILL A 9/64” HOLE OR FASTENERS WILL BREAK.**

Use the provided Flush-mount bracket and fasteners to mount the strobe to the bumper. Figure 11.5

Figure 11.5 Repeat for the right side strobe.

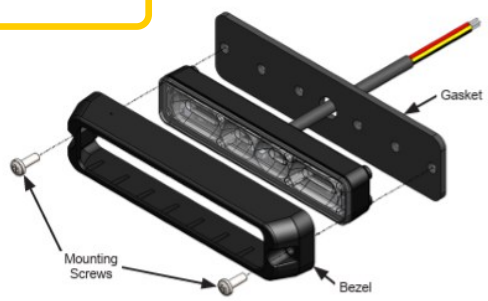




Figure 11.3

F150 Mounting



Figure 11.4

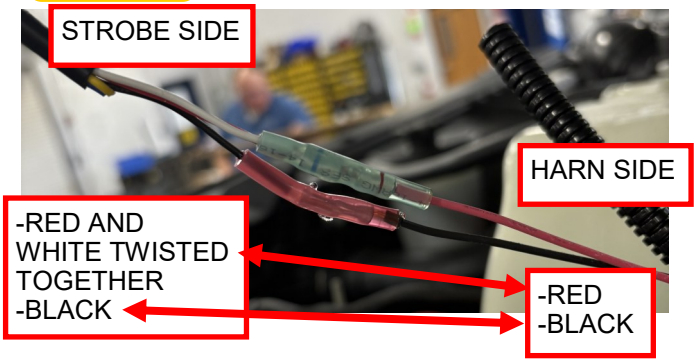
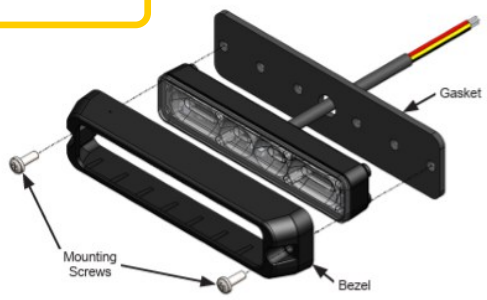


Figure 11.5



Step 4: Mounting Rear Strobes F150

Place the strobes in line with the edge of the bumper and 4” from the curved edge shown towards the outside of the tailgate, and 2.5” down from the top edge of the bumper. Figure 11.3.

Use the strobe as a template, mark the center hole location and the mounting holes on the bumper.

Drill a 3/8” hole for the wire pass through of the strobe. Use primer on the hole to prevent rusting. Figure 11.3.

Route the harness with the connector removed through the hole you just made. With butt splice connectors connect the Red wire to the **Red AND White wires from the strobe.** Connect the **Black** wire to the **Black** wire from the strobe. Figure 11.4

Drill two holes using a **9/64” Drill Bit** for the mounting screws. **YOU MUST DRILL A 9/64” HOLE OR FASTENERS WILL BREAK.**

Use the provided Flush-mount bracket and fasteners to mount the strobe to the bumper. Figure 11.5

Repeat for the right side strobe.

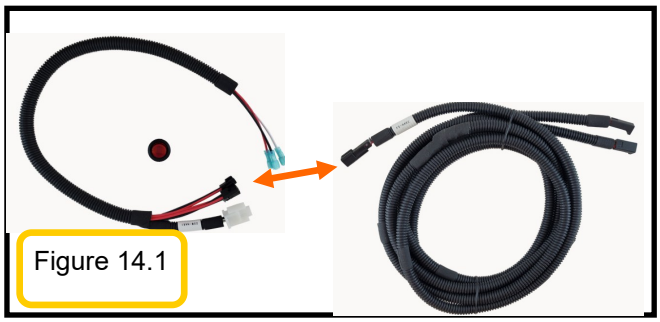


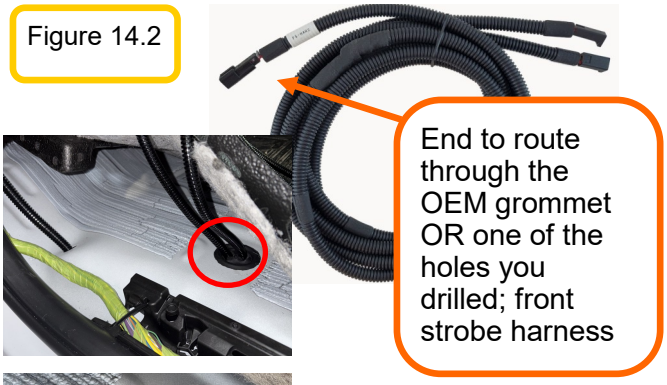
Figure 14.1

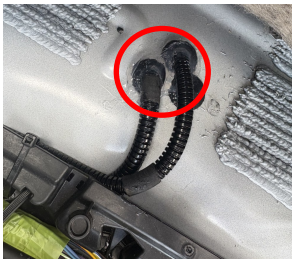
Step 5: Locate the front strobe harness #67104.

Connect the front strobe harness to the switch harness (one of the remaining un-used connectors) in the driver's foot well. Figure 14.1.

Route the front strobe harness through the OEM grommet you cut two X's in. Route the harness down to the underneath of the vehicle, following the OEM harnesses. Figure 14.2

Figure 14.2



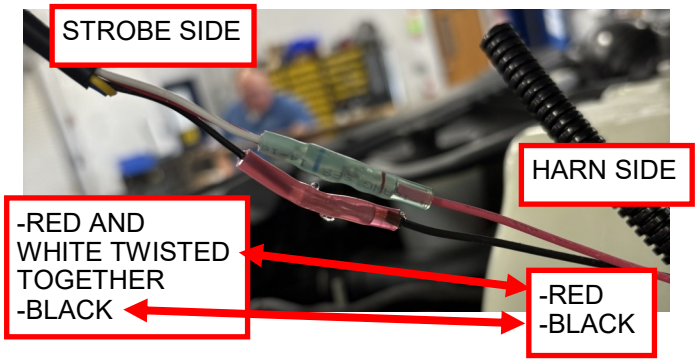


Step 6: Follow the Power Harness from the previous steps to the underside of the cabin filter.

Be sure not to secure or route the harness anywhere near moving or hot objects.

Remove both connectors from the end of the harness.

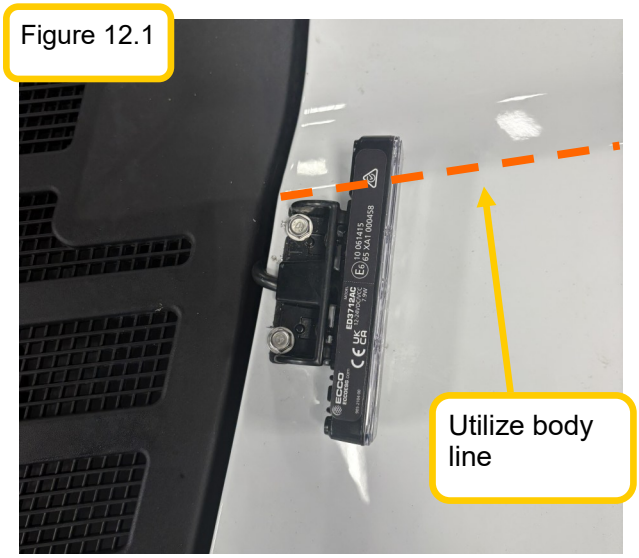
Figure 14.3



Step 7:
Route one of the harness to the passenger's side hood mounted strobe, and the other to the driver's side.

With butt splice connectors connect the Red wire to the **Red AND White wires from the strobe**. Connect the **Black** wire to the **Black** wire from the strobe. Figure 14.3

Figure 12.1



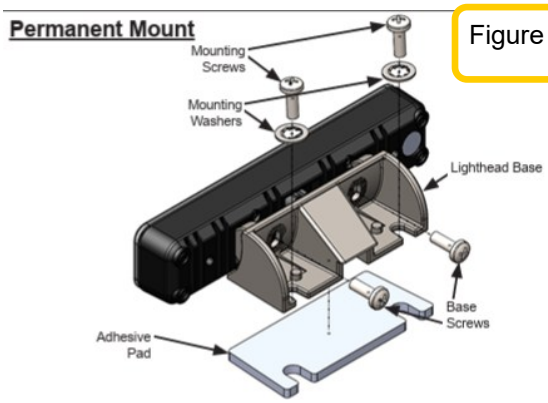


Figure 12.2

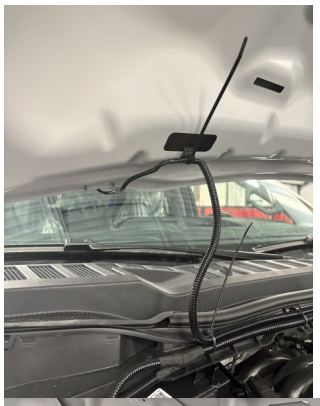


Figure 12.3



F250 Front Strobe Mounting

Step 8: Mounting Front Strobes

Move to the hood of the vehicle.

Using the body lines of the hood. Place the bracket on the edge of the body line. Place bracket parallel to the edge of the hood. Figure 12.1

Use the Hood-mounting bracket and 2 fasteners provided to attached bracket to strobe. Figure 12.2

Use the provided FAS1008 to mount the strobe to the hood.

Secure the harness underneath the hood using provided edge bitter zip ties as shown. Figure 12.3 Secure harness to underneath cabin filter as well

Repeat for the other side strobe.

Figure 12.1



F150 Front Strobe Mounting

Step 8: Mounting Front Strobes

Move to the hood of the vehicle.

Using a tape measure, place it along the hood as shown in Figure 12.1. Find the center point of the hood—32”

Measure 18” from the 32” (24” mark and 50” mark) both on the driver’s side and the passenger’s side. This is where the edge of your strobes will sit

Use the Hood-mounting bracket and 2 fasteners provided to attached bracket to strobe. Figure 12.2

Use the provided FAS1008 to mount the strobe to the hood.

Secure the harness underneath the hood using provided edge bitter zip ties as shown. Figure 12.3 Secure harness to underneath cabin filter as well

Repeat for the other side strobe.

Figure 12.2

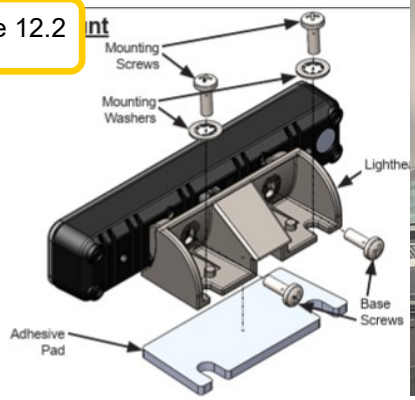
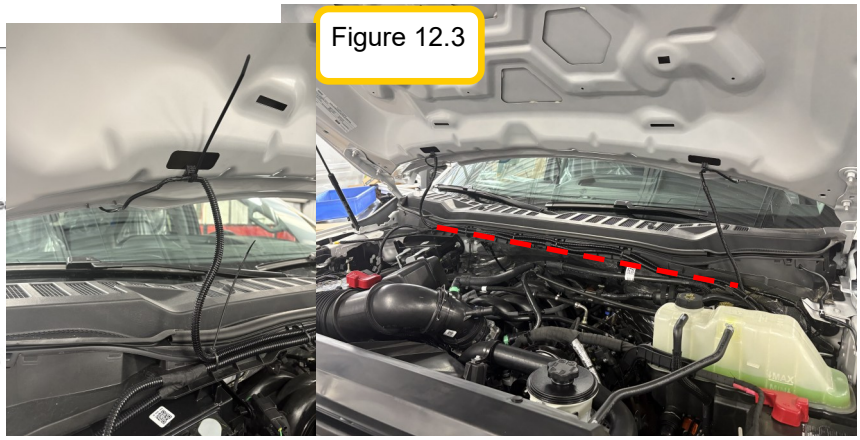
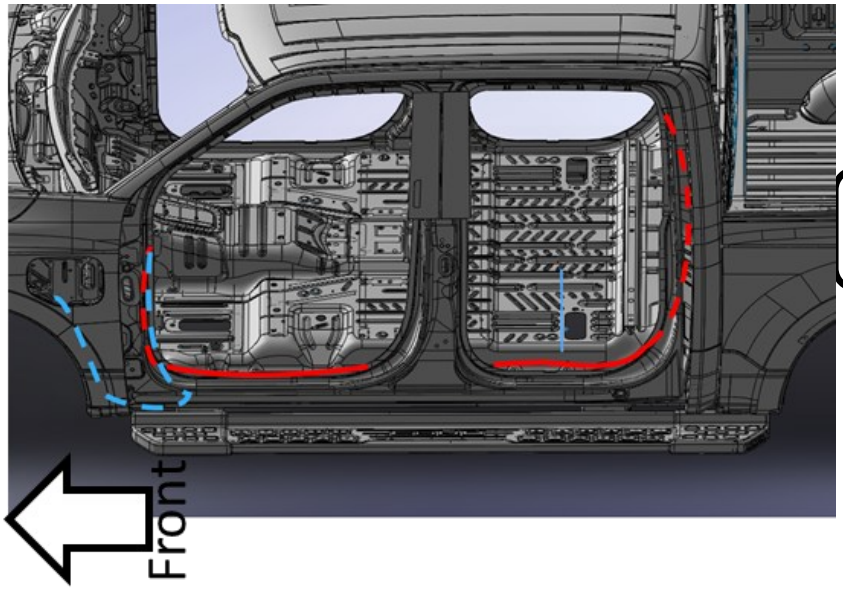


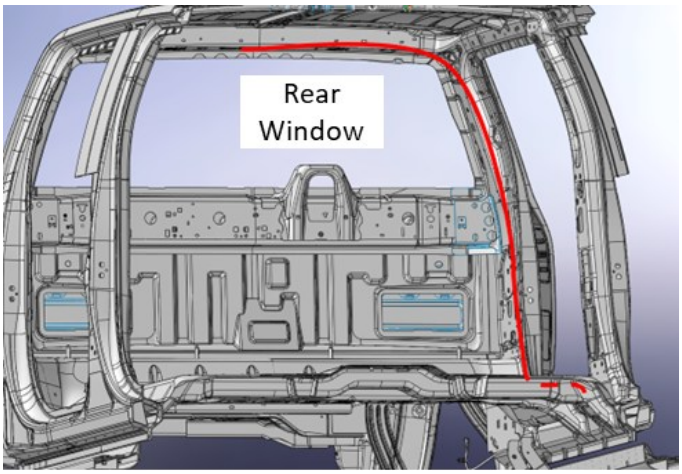
Figure 12.3

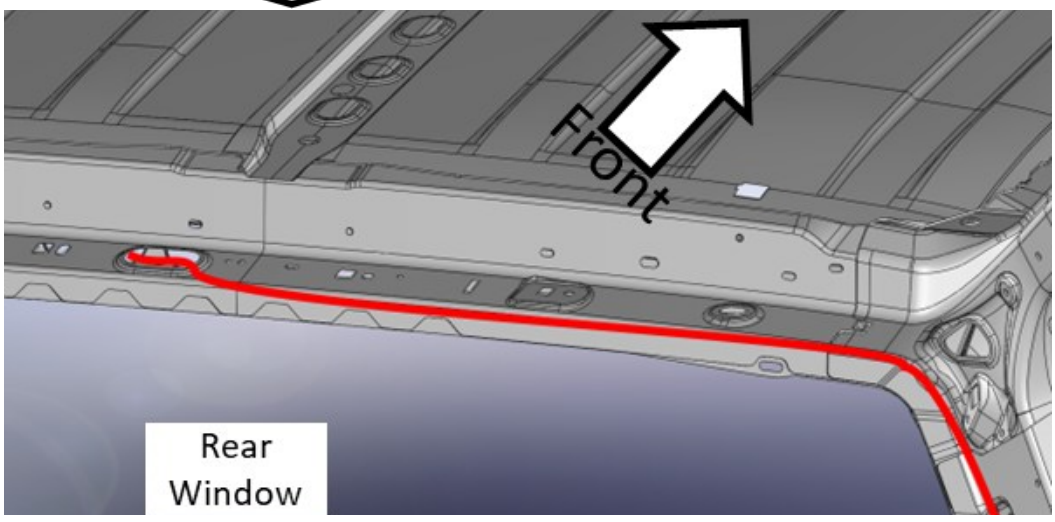


Overview of Routing-Beacon/Lightbar Wire Harness:



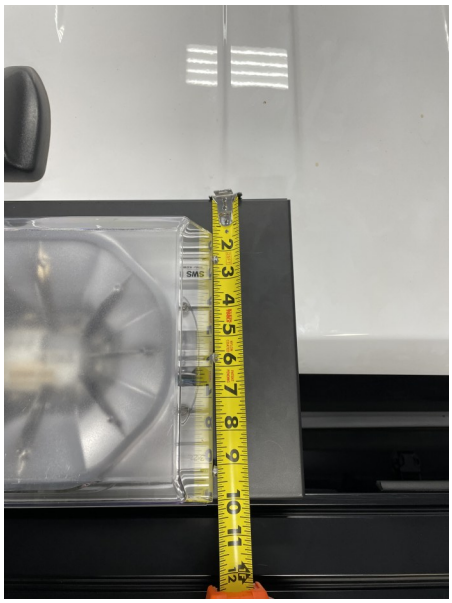
Side view of routing





Beacon/Lightbar Install—If Applicable

Lightbar/ beacon/ and mount pictures are for reference only. Please refer to product structure/ spec sheets for the actual beacon/lightbar/mount for the install.

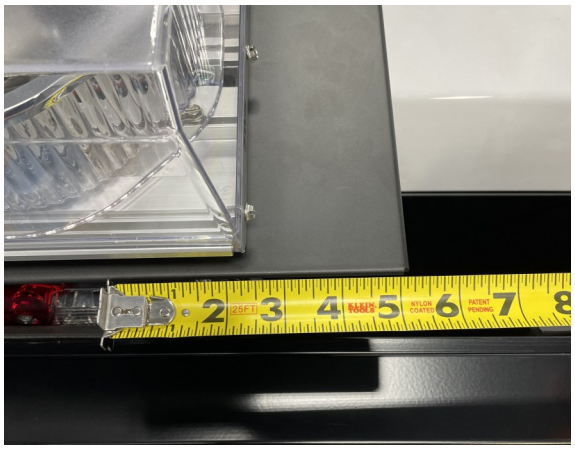


Step 1: On a table/bench: Assemble the light
Assemble the lightbar or beacon to the mount, using the supplied fasteners and rubber spacers with the lightbar.

If installing a Whelen lightbar, use the provided screws (FAS0869), washers (FAS0871), and nuts (FAS0501) in the ASCO kit. They are not provided with the light.
All other lights will have their own hardware.

Note: Lightbar (SWS Apollo) in pictures is for reference only.

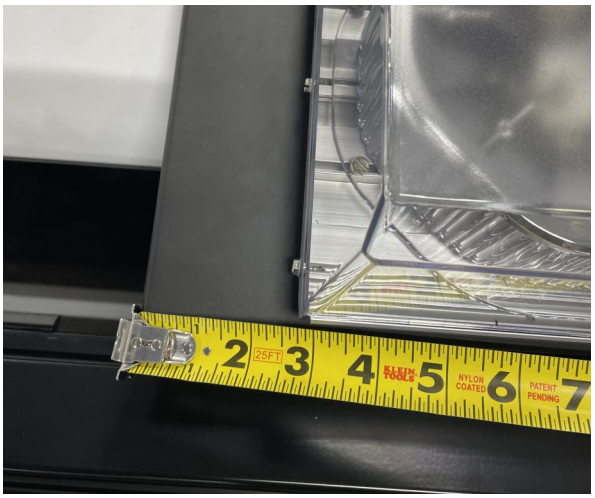
Center the lightbar or beacon onto the mount, side to side, then slide the lightbar to the rear of the mount until it is flush. See pictures for reference.



Use the lightbar/beacon as template, mark the needed holes for mounting. Drill the needed holes for mounting.

Drill the hole for the wiring pass through and insert the provided grommet (if applicable).
If there is a connector on the end of the lightbar/beacon, use the 1” grommet (36096-0). If there is not a connector, use the 3/8” grommet (70805) and refer to the next page.

Silicone the grommet/pass thru wiring.





If Lightbar/Beacon does not have a connector on the wires:

Figure 16.1



Figure 16.2



Figure 16.3

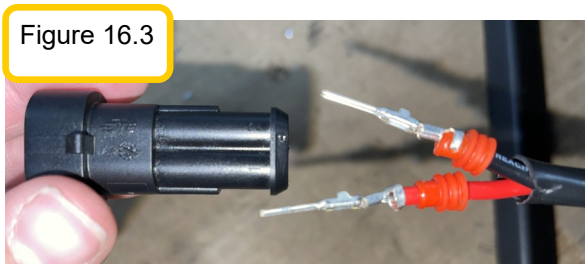


Figure 16.4



Figure 16.5



Figure 16.6

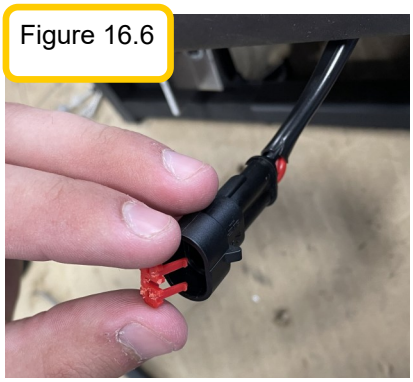


Figure 16.7



After mounting the light to the Acari mount and pulling the wire through the grommet (70805)

Locate the connector housing inside the lightbar/beacon box. Figure 16.1.

Note if it has a red insert inside the connector or not. Refer to figure 16.2 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. Figure 16.3.

Note the connector has a “1” and a “2” noted on the connector (circled in red). Figure 16.4. 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. Figure 16.5.

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. Figure 16.6 and 16.7.

Silicone the grommet/wiring.



Figure 17.1

Pictures to the left are for beacon/lightbar mounting references.
Figure 17.1, 17.2, and 17.3


Figure 17.3



Figure 17.2

Step 2: Disconnect OEM Light
Using a torx T20 bit, remove the 4 screws holding the 3rd brake light to the CHMSL. Figure 17.4.

Remove the OEM light from the CHMSL and disconnect the OEM harness clip. Figure 17.5.

Step3:
Locate the beacon/lightbar harness (67113).

Remove the cable gland off the beacon/ lightbar harness. This will not be needed to the CMSL mounted light install.

Connect the harness to the switch harness (one of the remaining unused connectors) in the driver's foot well. Figure 17.6.


Figure 17.4


Figure 17.5

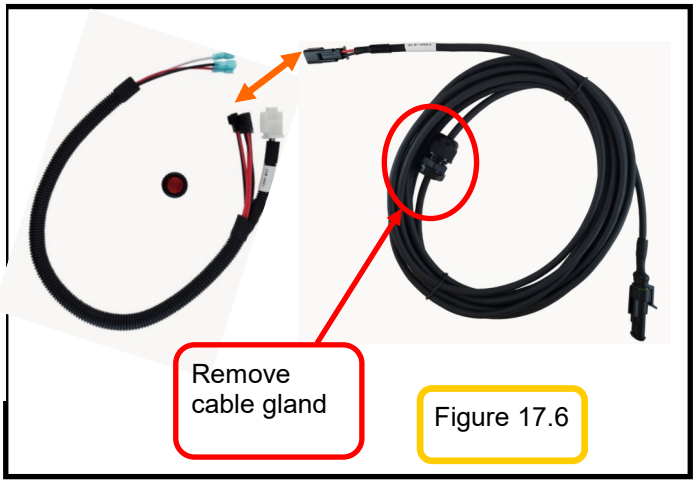


Figure 17.6

Beacon/Lightbar Install—If Applicable



Figure 18.1

Step 4: Routing (Refer to routing diagrams at the beginning of the instructions)
Route the beacon harness following the OEM harness rearward along the foot sill and then up the rear C pillar. Figure 18.1 and 18.2.

****BE SURE TO AVOID ALL SEAT BELT RETENSIONERS****

Step 5: Feed the fish tape through the CHMSL opening towards the driver's side C pillar. Tape the harness to the fish tape and pull through the CHMSL opening. Figure 18.3.

Make sure harness is tucked head liner and C pillar trim. Figure 18.4.

See pictures for routing references. Secure all wiring with cable ties and trim panels.

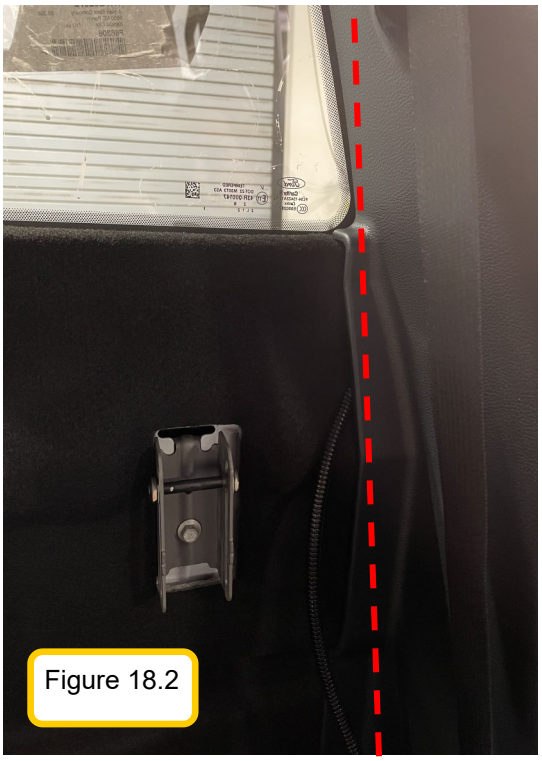

Figure 18.2



Figure 18.3


Figure 18.4

Figure 19.1

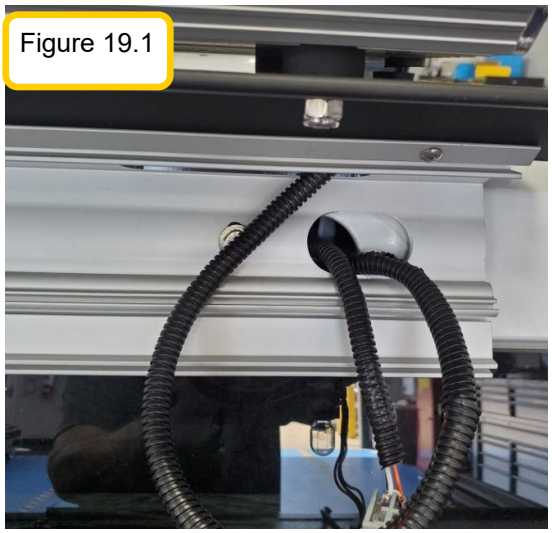


Figure 19.2

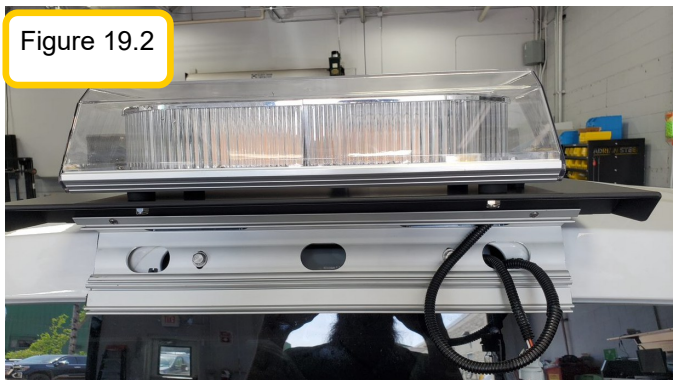


Figure 19.3



Figure 19.4



Step 5: Mounting the light:

Using the mount manufacturer supplied instructions, attach the mount to the vehicle body.

Pull the lightbar harness through the mount opening like seen in the picture to the left—before re-installing the OEM light and black trim plastic piece. Figure 19.1, 19.2, and 19.3.

Connect the beacon/lightbar harness with the beacon/lightbar.

Tape up all non-needed wires from the lightbar/beacon.

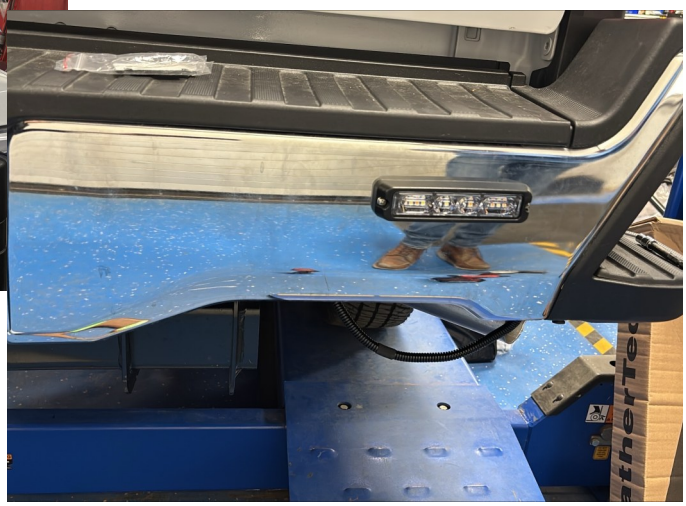
Assemble the rest of the needed lightbar/beacon mount pieces.

Re-connect all the OEM light wiring and attach the light back to the Acari mount/vehicle. Figure 19.4.





F250





F150





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 quanity
21093C = 100 quanity

SPECIAL NOTES: PART NUMBER IS BLACK.

SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!

PURCHASED PRODUCT DATA SHEET (PPDS)

THIS DRAWING/INFORMATION IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER THAT IS DETRIMENTAL TO THE INTEREST OF ADRIAN STEEL. COPYRIGHTS AND OR PATENTS THAT MAY BE THE PROPERTY OF APPLICABLE OWNERS MAY PROTECT INFORMATION AND/OR DRAWINGS OF SUPPLIED PRODUCTS.

ADRIAN STEEL
VAN AND PICKUP EQUIPMENT

906 JAMES STREET
ADRIAN, MI 49221
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	DATE DRAWN
MDG	10/26/2006
ECN NUMBER	ECN DATE
18021	11/13/2015
PART WEIGHT	REV. LEVEL
0.01 LBS.	D

PART NUMBER
13905-0

PART NUMBER
26618-0

ITEM DESCRIPTION: SILICONE, 1oz. TUBE



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

SPECIAL NOTES:

SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!

PURCHASED PRODUCT DATA SHEET (PPDS)

THIS DRAWING/INFORMATION IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER THAT IS DETRIMENTAL TO THE INTEREST OF ADRIAN STEEL. COPYRIGHTS AND OR PATENTS THAT MAY BE THE PROPERTY OF APPLICABLE OWNERS MAY PROTECT INFORMATION AND/OR DRAWINGS OF SUPPLIED PRODUCTS.

ADRIAN STEEL
VAN AND PICKUP EQUIPMENT
906 JAMES STREET
ADRIAN, MI 49221
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	DATE DRAWN
JLC	7/21/2001
ECN NUMBER	ECN DATE
16551	7/22/2014
PART WEIGHT	REV. LEVEL
0.02 LBS.	C

PART NUMBER
26618-0

PART NUMBER
26618-0

ITEM DESCRIPTION: SILICONE, 1oz. TUBE



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

SPECIAL NOTES:

SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!

PURCHASED PRODUCT DATA SHEET (PPDS)

THIS DRAWING/INFORMATION IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER THAT IS DETRIMENTAL TO THE INTEREST OF ADRIAN STEEL. COPYRIGHTS AND OR PATENTS THAT MAY BE THE PROPERTY OF APPLICABLE OWNERS MAY PROTECT INFORMATION AND/OR DRAWINGS OF SUPPLIED PRODUCTS.

ADRIAN STEEL
VAN AND PICKUP EQUIPMENT
906 JAMES STREET
ADRIAN, MI 49221
517-265-6194
WWW.ADRIANSTEEL.COM

⚠ CAUTION ⚠

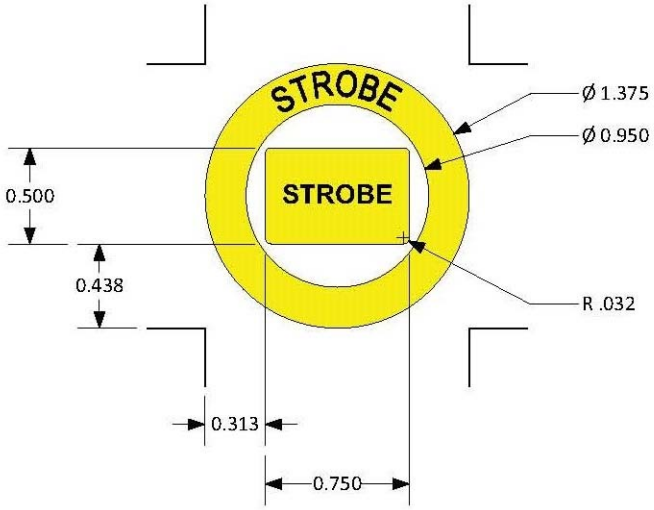
WHEN INSTALLING EQUIPMENT IN OR ON VEHICLES CHECK FOR FUEL TANKS, FUEL LINES, CONTROL LINES AND ELECTRICAL WIRING BEFORE DRILLING! ALWAYS USE DRILL BITS WITH INTEGRAL STOPS WHENEVER POSSIBLE!

DRAWN BY	DATE DRAWN
JLC	7/21/2001
ECN NUMBER	ECN DATE
16551	7/22/2014
PART WEIGHT	REV. LEVEL
0.02 LBS.	C

PART NUMBER
26618-0

PART NUMBER **55073**

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!

PURCHASED PRODUCT DATA SHEET (PPDS)

THIS DRAWING/INFORMATION IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER THAT IS DETRIMENTAL TO THE INTEREST OF ADRIAN STEEL. COPYRIGHTS AND OR PATENTS THAT MAY BE THE PROPERTY OF APPLICABLE OWNERS MAY PROTECT INFORMATION AND/OR DRAWINGS OF SUPPLIED PRODUCTS.

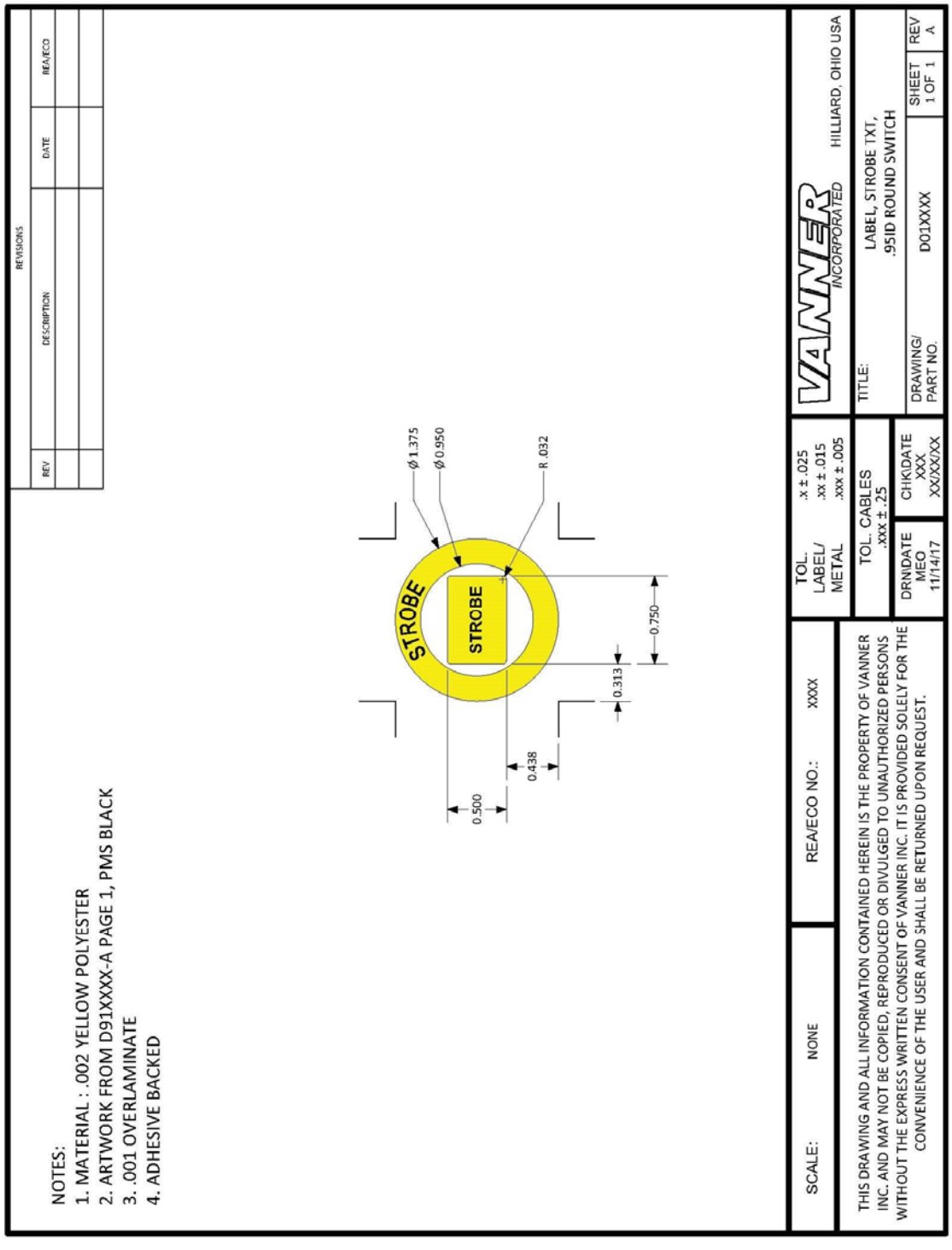
ADRIAN STEEL
Cargo Management Solutions for Commercial Vehicles
906 JAMES STREET
ADRIAN, MI 49221
517-265-6194
WWW.ADRIANSTEEL.COM

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

PART NUMBER
55073



THIS DRAWING/INFORMATION IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER THAT IS DETRIMENTAL TO THE INTEREST OF ADRIAN STEEL. COPYRIGHTS AND OR PATENTS THAT MAY BE THE PROPERTY OF APPLICABLE OWNERS MAY PROTECT INFORMATION AND/OR DRAWINGS OF SUPPLIED PRODUCTS.

ADRIAN STEEL
Cargo Management Solutions for Commercial Vehicles
906 JAMES STREET
ADRIAN, MI 49221
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	DATE DRAWN
RJB	11/15/2017
ECN NUMBER	**ECN DATE**
XXXX	XXXXXXX
PART WEIGHT	**REV. LEVEL**
0.02 LBS.	A
PART NUMBER	
55073	

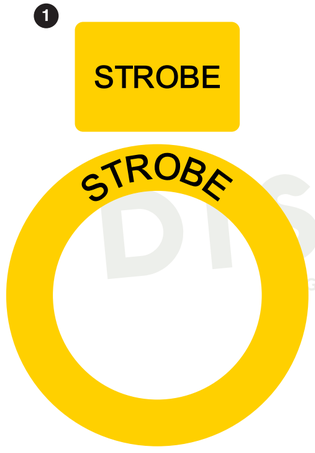
FINAL APPLICATION LAYOUT

IMPORTANT NOTE TO INSTALL CREWS:

LOC | QTY | Part # | Description | Size

Material: IJ39 | Lamination: 8518

1 | 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

© 2022 DISTYLL Graphics Solutions. All rights reserved.

ASCO REV.1 6/14/2023

DISTYLL GRAPHIC SOLUTIONS FINAL DESIGN	CLIENT NAME: Adrian Steel		Switch Decals		O-ID: O15319-1
	DATE: 05/31/2023	DESIGNER: TRN			Rev #: XXXX
					Opt #: A

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 contaminates 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 **Note:** **This is also from HellermannTyton:** **Their Part Number is 156-00592**



THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

PRINTED DOCUMENT IS UNCONTROLLED

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: 22671

CURRENT ECN: 22671

ECN DESCRIPTION:

RELEASE TO PRODUCTION

REVISED BY: **EMS**

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
Fastenal

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
0787863

COLOR (ONLY LIST IF COLOR SPECIFIC)

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

DESIGNED BY: **EMS**

DESCRIPTION:
Clip, Black UV Tie, HellermannTyton

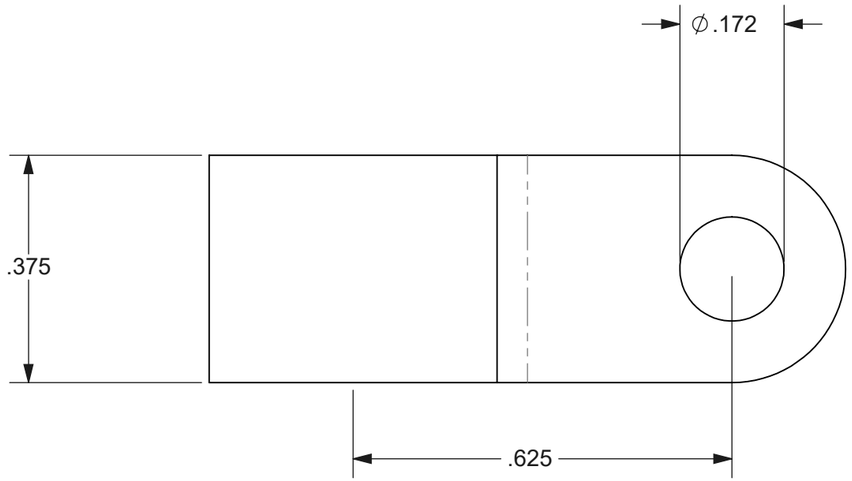
WEIGHT (Lbs.): **0.5**

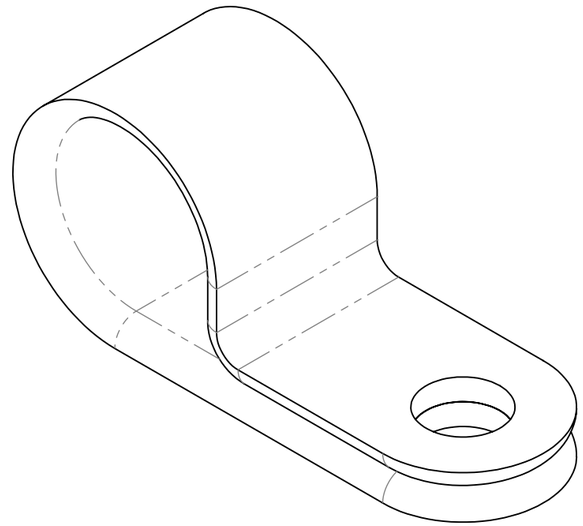
SEGMENT CODE: **ELE**

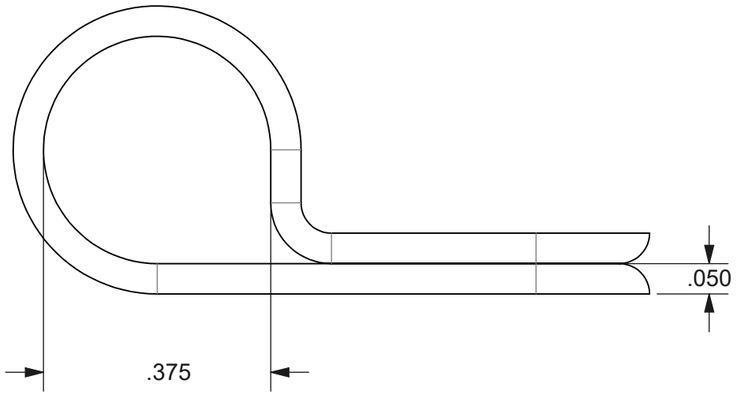
PART NUMBER: **59713**

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 **N/A**







THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

PRINTED DOCUMENT IS UNCONTROLLED

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: **25297**

CURRENT ECN: **25334**

ECN DESCRIPTION:

UPDATE SUPPLIER TO SAY EQUIVALENT

REVISED BY:

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
MCMASTER-CARR OR EQUIVALENT

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
8876T38 OR EQUIVALENT

COLOR (ONLY LIST IF COLOR SPECIFIC)
BLACK

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERANCE)
(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 **B**

MAT'L USED:

DESIGNED BY: **E.BURKE**

DESCRIPTION: **Nylon Plastic Loop Clamp**

WEIGHT (Lbs.): **0.001**

SEGMENT CODE: **HDW**

PART NUMBER: **66843**

Bill of Materials

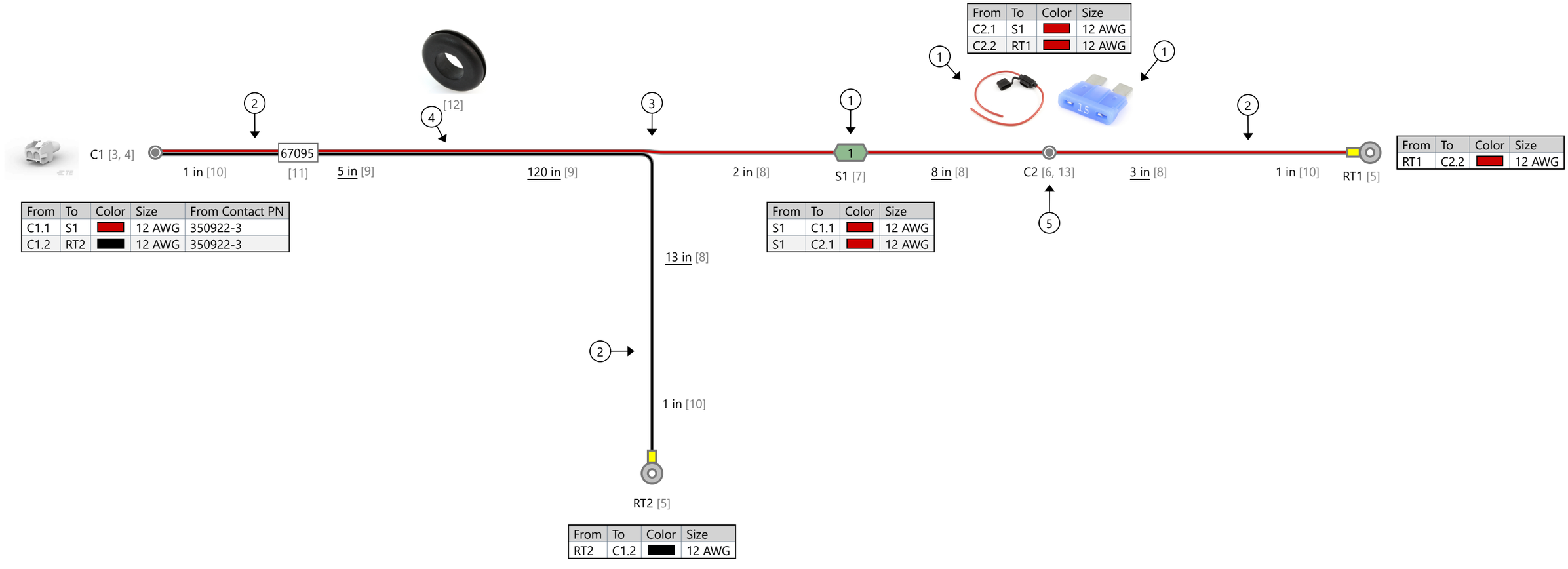
Id	Description	Manufacturer	Part Number	Quantity
1	Red, 12 AWG, TXL, 19/25 Stranding	Prysmian	140682-91W	128 in
2	Black, 12 AWG, TXL, 19/25 Stranding	Prysmian	145823-91W	140 in
3	MATE-N-LOK Connector, 2pos, Receptacle	TE Connectivity	1-480699-0	1
4	MATE-N-LOK Contact, 10-12 AWG, Pin	TE Connectivity	350922-3	2
5	Heat Shrink Ring Terminal, 12-10 AWG, 3/8" Stud	Molex	19164-0068	2
6	ATO/ATC In-Line Fuse Holder, 12 AWG, 30A	Egis	901028	1
7	Splice, Undetermined Length		Generic Splice	1
8	Corrugated Loom, Split Nylon, .250" ID, Black w/ Gray Stripe	Drossbach	014NPBSG BLACK/GRAY	26 in
9	Corrugated Loom, Split Nylon, .350" ID, Black w/ Gray Stripe	Drossbach	038NPBSG0000XZS	125 in
10	Anti-Abrasion Wire Harness Tape, Black	Tesa	TS51036 1.	
11	Generic Heat Shrink Label		Label	1
12	Rubber Grommet, 1/2" ID, 13/16" Panel Hole	Waytek	24514	1
13	ATOF Blade Fuse, 15A, 32VDC, Blue	Littelfuse	0287015.PXCN	1

Coverings

Id	Assembly
[8]	
[9]	
[10]	

Notes

1. Engineering Equivalence Allowed
2. Lock tape loom to wires with Tesa 51036
3. Tape joint with Tesa 51036
4. Install grommet over loom 6" from C1
5. Install 15A ATO fuse in fuse holder



Revisions

Rev.	Date	Author	Description
A	10/28/2026	Andrew Oswalt	Initial Drawing

Initial ECN	25378	Drawn By	APO	Part Number 67095 Or PWR-HAR4	Segment ELE
Current ECN	25378	Weight (lb)	0.2	Description POWER HARNESS EXTERIOR 4	
ECN Description RELEASE FOR PRODUCTION		Sheet	1 of 1	All dimensions in inches unless otherwise specified. Harness length tolerance = +/- 5%, max ≤ 5 in. Loom/tape to connector gap = 1 in. +/- 10% Wires in bundle length tolerance = +/- 5%, max ≤ 1 in. Terminal/contact wire strip length tolerances controlled by MFR.	
		Size	11" x 17"		

ADRIAN

This document contains confidential and proprietary information that cannot be reproduced or divulged, in whole or in part, without written authorization.

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



THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

PRINTED DOCUMENT IS UNCONTROLLED

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-HAR1 OR 67097

COLOR (ONLY LIST IF COLOR SPECIFIC)

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERANCE)
(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: **SWITCH HARNESS 1 EXTERIOR LIGHTING**

WEIGHT (Lbs.): **0.2**

SEGMENT CODE: **ELE**

PART NUMBER: **67097**

Coverings	
Id	Assembly
[12]	

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



1

C1 [7, 8]

SSW-HAR1

[14]

75 mm [12]

From	To	Color	Gauge
C1.1	QC3		16 AWG
C1.2	S1		16 AWG

From	To	Color	Gauge
S1	C1.2		16 AWG
S1	C2.B		16 AWG
S1	C3.B		16 AWG
S1	C4.B		16 AWG
S1	QC1		16 AWG

From	To	Color	Gauge
S2	C2.A		16 AWG
S2	C3.A		16 AWG
S2	C4.A		16 AWG
S2	QC2		16 AWG

1

50 mm [12]

S1 [10, 11]

1

50 mm [12]

S2 [10, 11]

1

360 mm [12]

2

1

75 mm

QC1 [9]

QC2 [9]

QC3 [9]

From	To	Color	Gauge
QC1	S1		16 AWG
QC2	S2		16 AWG
QC3	C1.1		16 AWG

75 mm



C2 [4, 5, 6]

From	To	Color	Gauge
C2.A	S2		16 AWG
C2.B	S1		16 AWG

75 mm



C3 [4, 5, 6]

From	To	Color	Gauge
C3.A	S2		16 AWG
C3.B	S1		16 AWG

75 mm



C4 [4, 5, 6]

From	To	Color	Gauge
C4.A	S2		16 AWG
C4.B	S1		16 AWG



Loose Switch to be included with Harness

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

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN MILLIMETERS [INCHES]
TOLERANCES: ±5MM

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.

	Name	Date
Designed By	Bennet Fisher	11/5/2021
Engineering Approval	----	----
Manufacturing Approval	----	----
Revision Approval	----	----
Quality Assurance	----	----

AAMP
ADVANCING VEHICLE TECHNOLOGY

Part Number: SSW-HAR1

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



THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

PRINTED DOCUMENT IS UNCONTROLLED

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
FS-HAR2 OR 67102

COLOR (ONLY LIST IF COLOR SPECIFIC)

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERANCE)
(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: **FRONT STROBE HARNESS 2**

WEIGHT (Lbs.): **0.2**

SEGMENT CODE: **ELE**

PART NUMBER: **67102**

Coverings	
Id	Assembly
[12]	

Notes	
1	Lock Tape Loom with Tesa 51036



Front_Strobes [1, 2, 3]

From	To	Color	Gauge
Front_Strobes.A	S1		16 AWG
Front_Strobes.B	S2		16 AWG

1

FS-HAR2 [13]

1575 mm [12]

1

S1 [6, 7]

50 mm [12]

1

S2 [6, 7]

50 mm [12]

From	To	Color	Gauge
S1	Front_Left.1		20 AWG
S1	Front_Right.1		20 AWG
S1	Front_Strobes.A		16 AWG
S2	Front_Left.2		20 AWG
S2	Front_Right.2		20 AWG
S2	Front_Strobes.B		16 AWG

660 mm [12]

1

Front_Left [4, 5]



From	To	Color	Gauge
Front_Left.1	S1		20 AWG
Front_Left.2	S2		20 AWG

1

1750 mm [12]

Front_Right [4, 5]



From	To	Color	Gauge
Front_Right.1	S1		20 AWG
Front_Right.2	S2		20 AWG

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

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN MILLIMETERS [INCHES]
TOLERANCES: ±5MM

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.

	Name	Date
Designed By	Bennet Fisher	11/5/2021
Engineering Approval	----	----
Manufacturing Approval	----	----
Revision Approval	----	----
Quality Assurance	----	----

AAMP
ADVANCING VEHICLE TECHNOLOGY

Part Number: FS-HAR2

Revision: ----

Description:
Front Strobe Harness

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



THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

PRINTED DOCUMENT IS UNCONTROLLED

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
RS-HAR3 OR 67108

COLOR (ONLY LIST IF COLOR SPECIFIC)

COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERANCE)
(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: **REAR STROBE HARNESS 3**

WEIGHT (Lbs.): **0.2**

SEGMENT CODE: **ELE**

PART NUMBER: **67108**

Coverings	
Id	Assembly
[12]	

Notes	
1	Lock Tape Loom with Tesa 51036



Rear_Strobes [1, 2, 3]

From	To	Color	Gauge
Rear_Strobes.A	S1		16 AWG
Rear_Strobes.B	S2		16 AWG

1

RS-HAR3

[13]

7620 mm [12]

1

S1 [6, 7]

50 mm [12]

1

S2 [6, 7]

50 mm [12]

From	To	Color	Gauge
S1	Rear_Left.1		20 AWG
S1	Rear_Right.1		20 AWG
S1	Rear_Strobes.A		16 AWG
S2	Rear_Left.2		20 AWG
S2	Rear_Right.2		20 AWG
S2	Rear_Strobes.B		16 AWG

965 mm [12]

1

Rear_Left [4, 5]



From	To	Color	Gauge
Rear_Left.1	S1		20 AWG
Rear_Left.2	S2		20 AWG

1

1750 mm [12]

Rear_Right [4, 5]



From	To	Color	Gauge
Rear_Right.1	S1		20 AWG
Rear_Right.2	S2		20 AWG

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

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN MILLIMETERS [INCHES]
TOLERANCES: ±5MM

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.

	Name	Date
Designed By	Bennet Fisher	11/5/2021
Engineering Approval	----	----
Manufacturing Approval	----	----
Revision Approval	----	----
Quality Assurance	----	----

AAMP
ADVANCING VEHICLE TECHNOLOGY

Part Number: RS-HAR3 | Revision: ----

Description: Rear Strobe Harness | 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 **N/A**





THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

PRINTED DOCUMENT IS UNCONTROLLED

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: **28622**

CURRENT ECN: **28622**

ECN DESCRIPTION:

RELEASE FOR MARKET FILL

REVISED BY: **A. GARAVALIA**

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
ECCO

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
ED3712AC

COLOR (ONLY LIST IF COLOR SPECIFIC)

COMMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERANCE)
(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: **A. GARAVALIA**

DESCRIPTION: **HOOD MOUNTED EXTERIOR STROBE ECCO ED3712AC**

WEIGHT (Lbs.): **1.0 LBS**

SEGMENT CODE: **EST**

PART NUMBER: **78897**