

Plug & Play Two Strip Lights Kit

CATALOG NUMBER

69645



LED Light Strips Installed on Roof Bows

PRODUCT FEATURES

Plug & Play Two Strip Lights w/ Switches Kit - Low Roof

- Included in this kit is two (2) 36" LED Strip Lights, voltage timer module, power harness, roof bow harnesses #3 & #4.
- This kit is ideal for the RAM ProMaster.
- There are no OEM options required for this product. OEM options LCP, LDB, and 22G are not compatible with this product.
- This kit is designed to provide LED lighting to the cargo area of the vehicle and can be controlled by switches.

Model Year Validated:

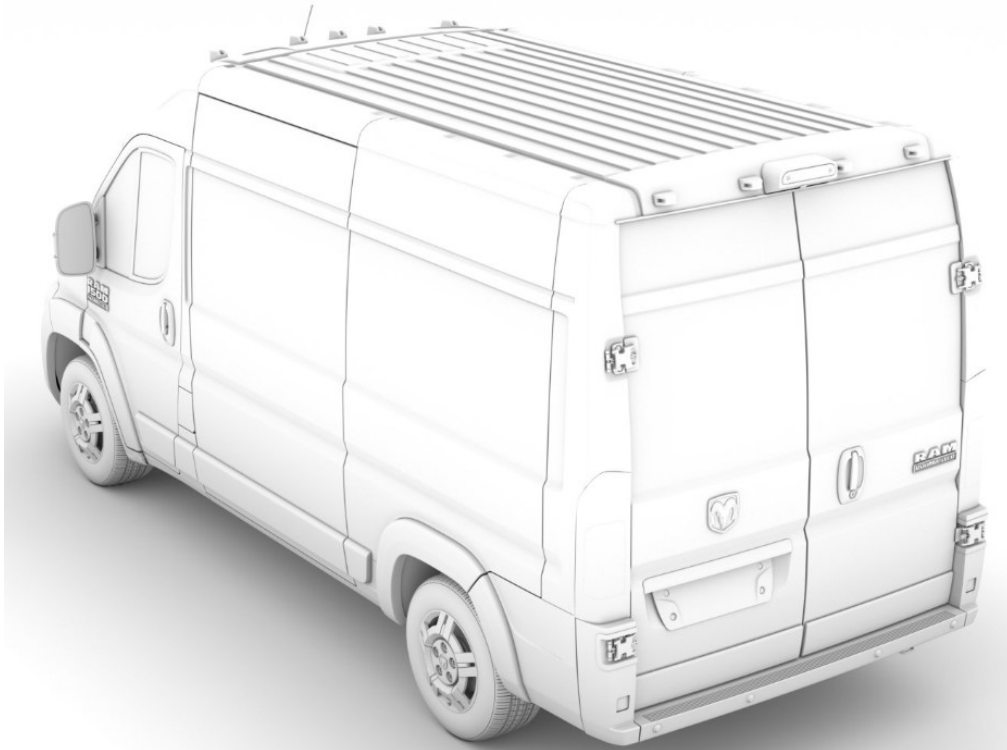
2022

Introduction / Comments:

Install Instructions For Interior Plug & Play Lights For Promaster

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.

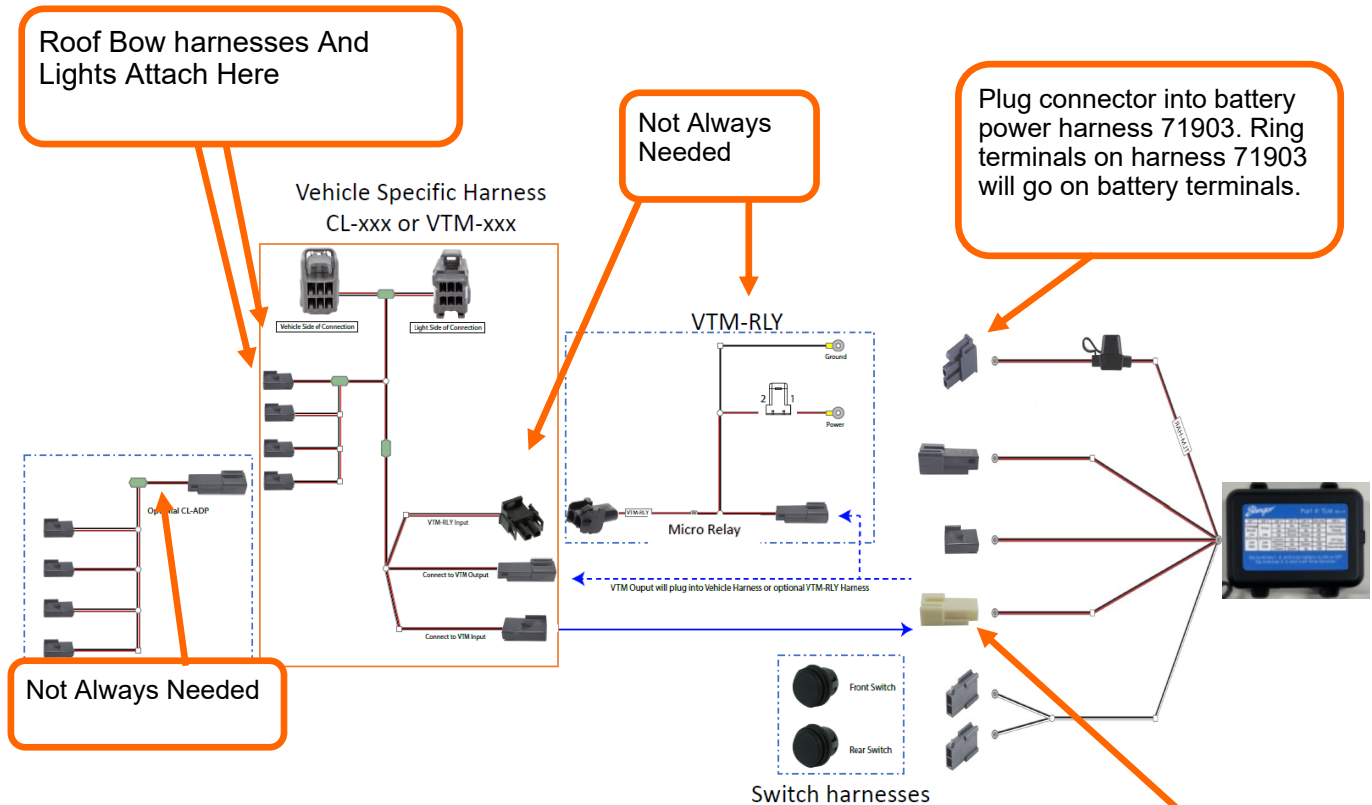


Installation Instructions For Interior Plug And Play Lights For Promaster

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

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. The only harness that is specific to the transit vehicle are the power harnesses 65796. Routing will be very standard across all kits, but placement of lights and switches are subject to be different from these instructions if called out on the order drawing differently.

Overall Harness Diagram



Tools required:

Crimpers

M8 Socket and/or wrench

Power drill, 3/8" step drill bit, Philips head bit (if installing dome lights)



For all vehicles that are NOT RAM. This connector will be black. **RAM vehicles, this will be white.** See page 4 for more details.

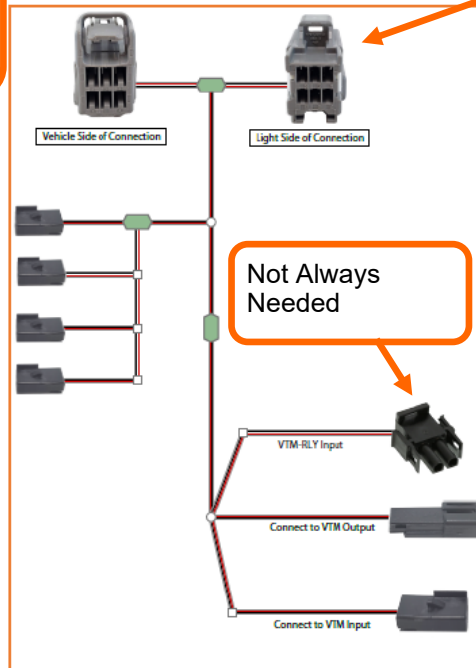
Specific Harness Diagram



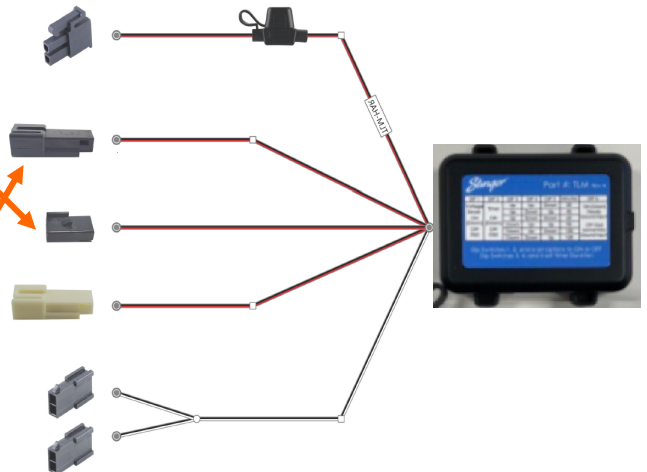
Roof Bow
Harnesses
and Lights
Connect Here

Vehicle Specific Harness
CL-xxx or VTM-xxx

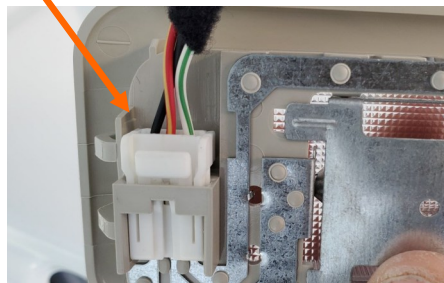
Insert into OEM
Light Connector:
See Below



Switch
Harness in
between



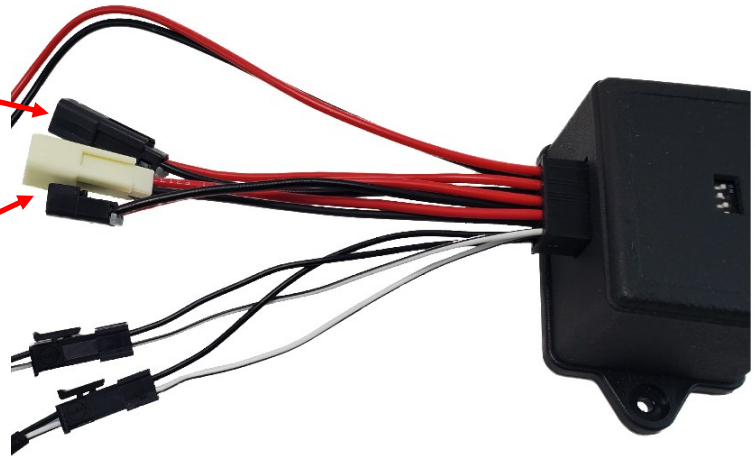
OEM Light Connector located on the back of the OEM light: Remove
the OEM light from the location



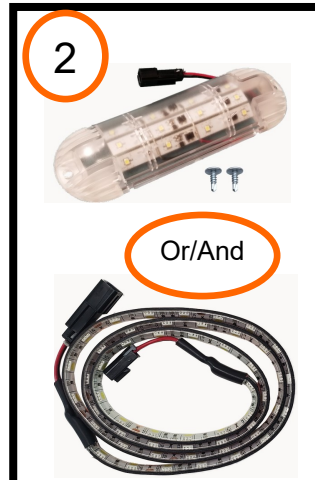
Timer / Low Voltage Module (TLM) Harness Reference

For all vehicles except RAM, the black input connector will be used to plug into the vehicle specific harness. The white connector will NOT be used.

For all RAM vehicles, the white connector will be used to plug into the vehicle specific harness. The black connector will NOT be used.



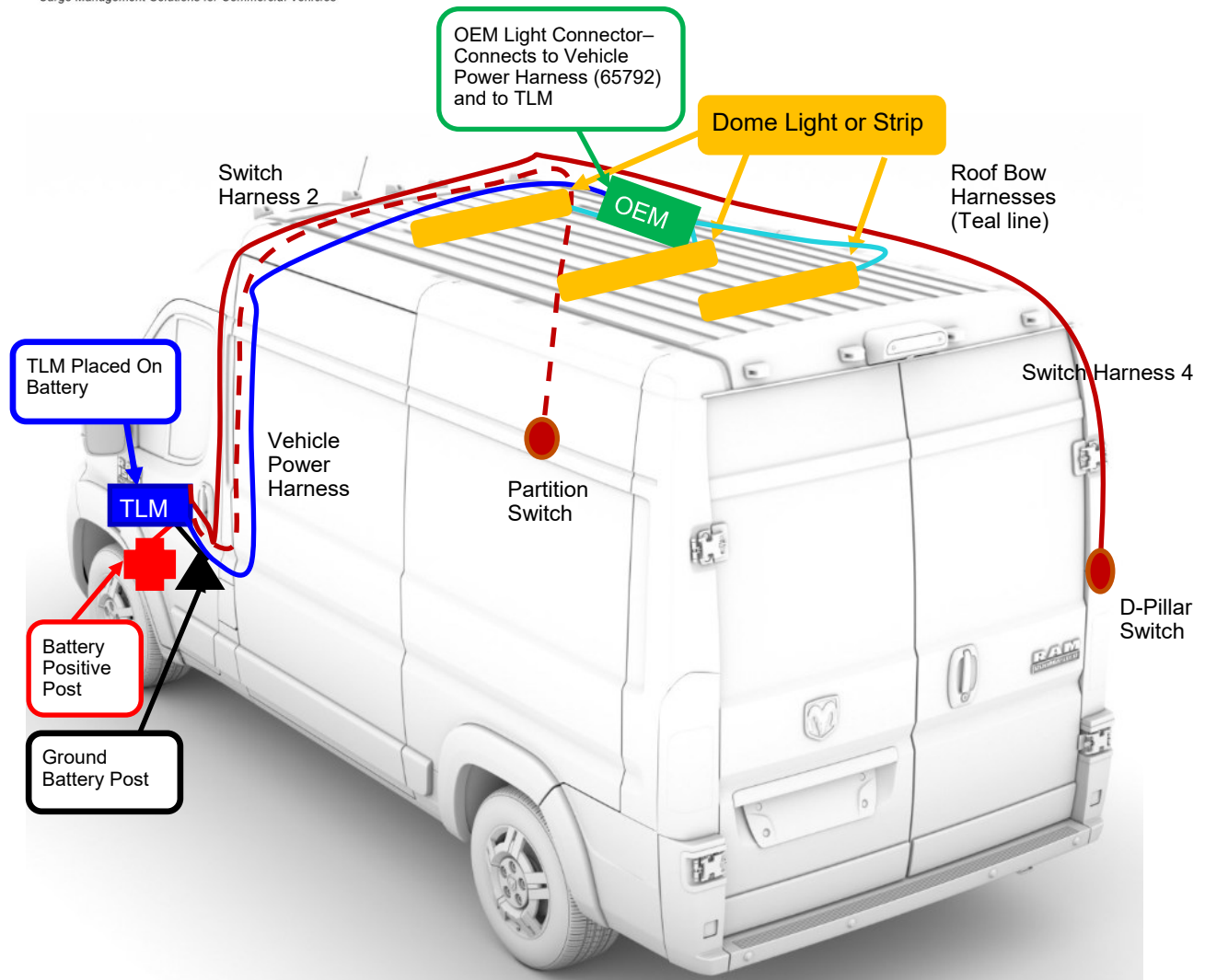
Harnesses Needed



	Part Number	Description
1	65786	Timer / Low Voltage Module (TLM)
2	63480 Or/And 64222, 65346, 65347, 65348	Dome Light Or/And Strip Lights
3	63481 Or/And 63842, 63483, 63484	Roof Bow Harnesses 1 through 4
4	65796	Power Harness
5	65787 Or/And 65788, 65789, 65790	Switch Harness 1 through 4 for TLM
6	71903	Battery Power Harness



Harness pictures are for reference only.



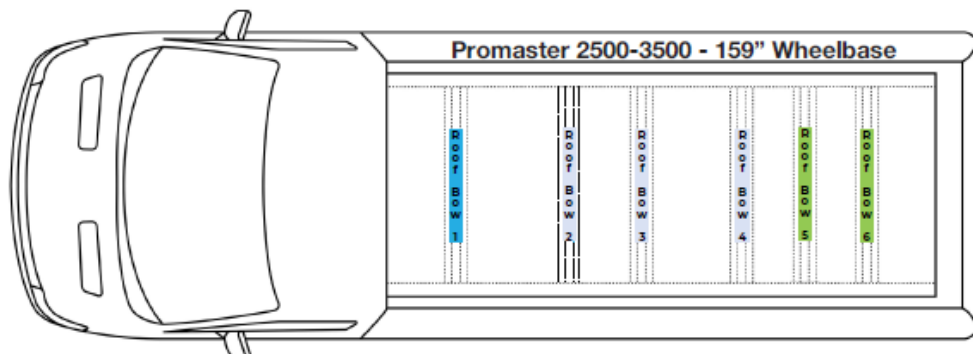
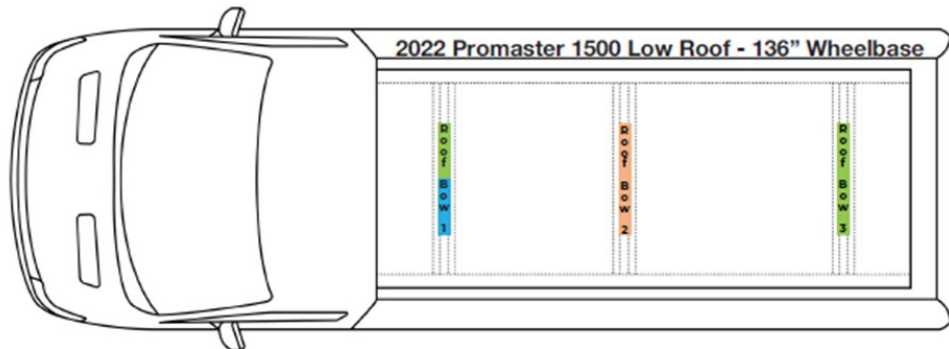
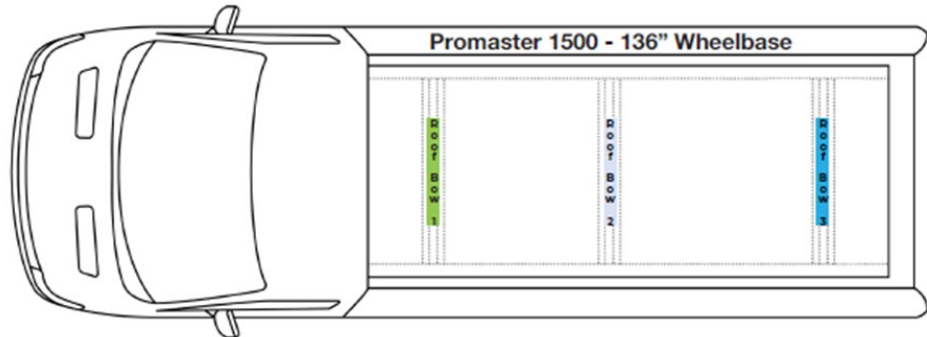
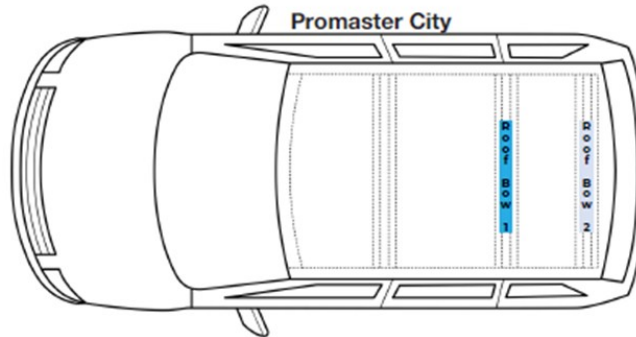
Color	Key - Items
Blue	TLM/Harness
Green	Vehicle Specific Power Harness
Black	Ground Location
Red	12V location
Redish/Brown	Switch Harnesses
Yellow	Dome or Strip Lights
Teal	Roof Bow Harnesses

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.

Roof Bow Harnesses And Light Placements: Refer To Ordering Drawing For Light Placements



Vehicle	Roof Bow 1	Roof Bow 2	Roof Bow 3	Roof Bow 4	Roof Bow 5	Roof Bow 6
Promaster City	P-HARRB2	P-HARRB1	N/A	N/A	N/A	N/A
Promaster 1500 136" WB	P-HARRB3	P-HARRB1	P-HARRB2	N/A	N/A	N/A
Promaster 1500 136" WB (2022)	P-HARRB3 + P-HARRB2	P-HARRB4	P-HARRB3	N/A	N/A	N/A
Promaster 2500-3500 159" WB	P-HARRB2	P-HARRB1	P-HARRB1	P-HARRB1	P-HARRB3	P-HARRB3



Optional Required Harnesses:

64244: This adapter harness allows for extra extensions to be added (if needed).



Be sure not to overload the OEM circuit by putting too many lights on the circuit. Consult ASCO Electrical Engineering team for application advice if using more than 4 lights.

Add Relay Harness 65791 for extra amperage. (Not always needed)

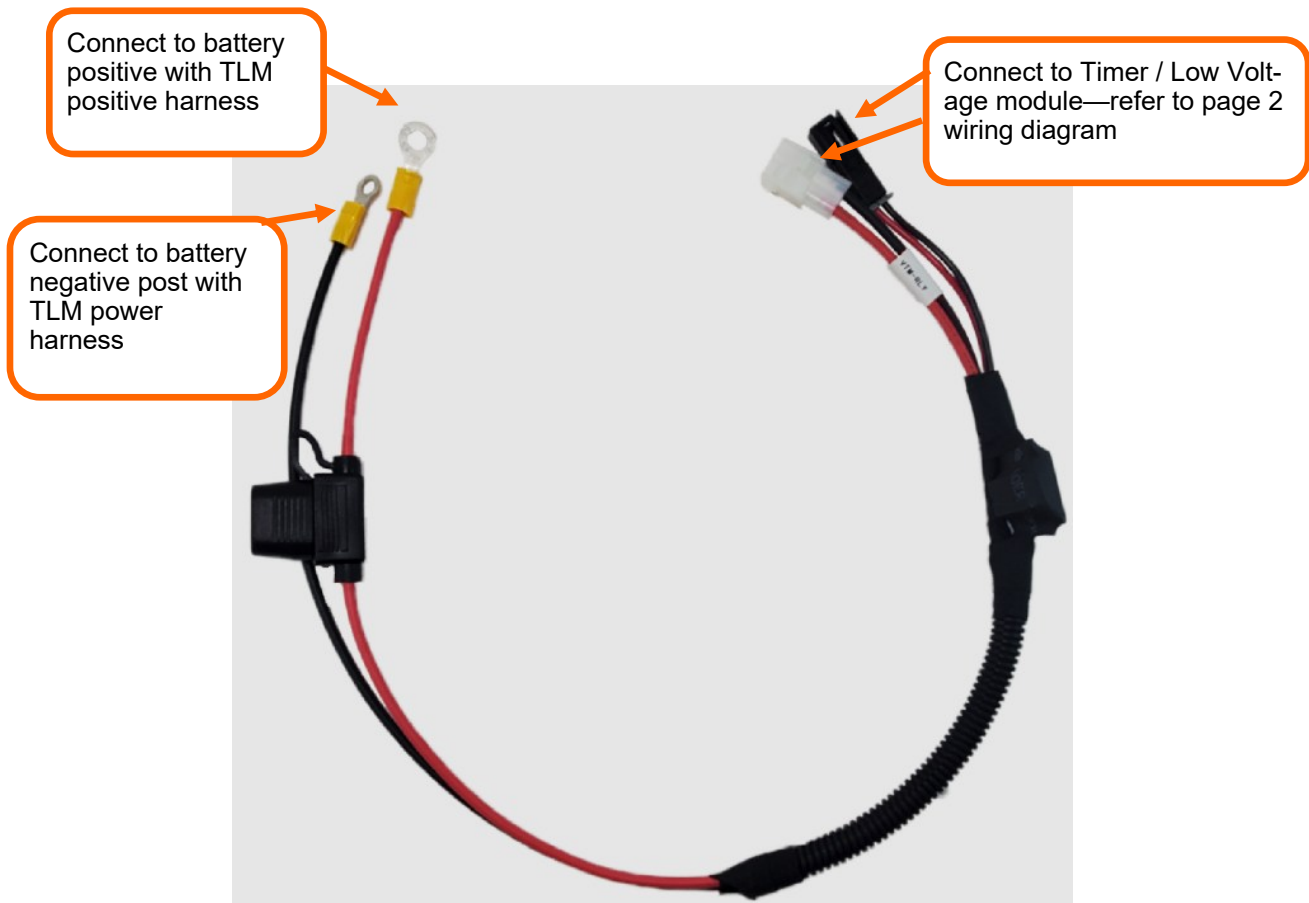
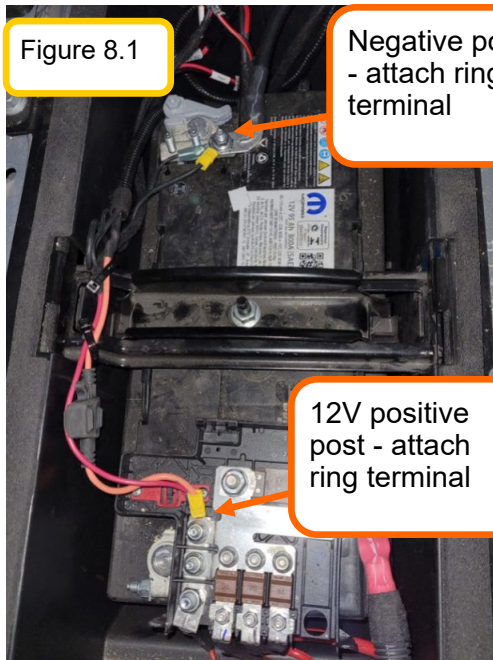


Figure 8.1



Negative post
- attach ring
terminal

12V positive
post - attach
ring terminal

Step 1: Locate the TLM harness #76654
Plug the harness connector into the timer / low volt-
age module.

Locate the power harness #71903 and plug that into
the TLM harness.

Step 2: Locate the OEM battery under the foot well
of the driver's seat.

Attach the positive (red) wire to the 12V positive
post outlined in figure 8.1. Secure with the OEM nut.

Attach the ground ring terminal (black) to the nega-
tive post. Secure with the OEM nut. See Figure 8.1.

Step 3: *Please be sure to set all the dip switch-
es on the TLM UP*****

Refer to the bottom picture for dip switch settings. If
the customer would like a different amount time oth-
er than 90 minutes, use the dip switches to set the
time.

Apply the VHB tape the back of the TLM (voltage
timer module). See figure 8.2.

Stick the TLM to the top of the negative side of the
battery and secure with zip ties. See figure 8.3.

Plug the switch harnesses (65788 & 65790) into the
TLM harness. See pages 2 & 3 for
reference.

Route the harness bundle under the floor mat like
shown in figure 8.4. Continue routing the bundle be-
tween the seats, rearward to the B-pillar, then up
and behind the partition. Reference page 5 for over-
all wiring.

Figure 8.2



Figure 8.3

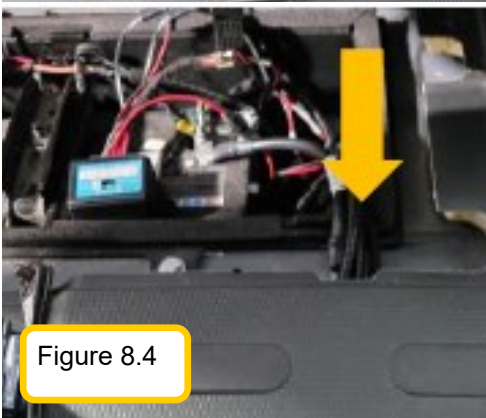
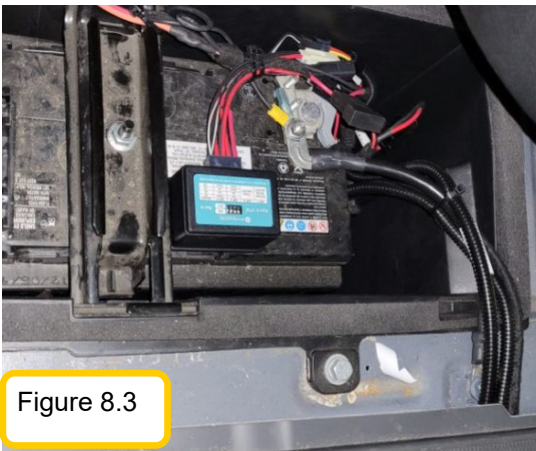


Figure 8.4

TLM Dip Switch Settings

DIP 1	DIP 2	DIP 3	DIP 4	DIP 5	Minutes	DIP 6
Voltage Sense ON (Down) OFF (Up)	Timer ON (Down) OFF (Up)	Up	Up	Down	30	ON (Down) Steady Ground Input
		Up	Down	Up	45	
		Up	Down	Down	60	
		Down	Up	Up	90	OFF (Up) Momentary Ground Input
		Down	Up	Down	120	
		Down	Down	Up	150	

Figure 9.1



Step 4: For High roof vehicles:

Locate the OEM cargo light on the passenger side of the roof. Figure 9.1.

For Low Roof Vehicles:

Locate the rear OEM cargo light above the back doors. Figure 9.2.

Carefully remove the OEM light with a trim tool. Figure 9.3.

Unplug the OEM connector from the back of the light. Figure 9.4.

Plug the vehicle specific power harness (65796) into the OEM connector:

You no longer need the OEM light. You can dispose of it how you would like.

Route the power harness down the partition to the TLM module, and plug it in. Be sure to use the white colored TLM input connector referenced on page 4. The black connector will NOT be used for this install.

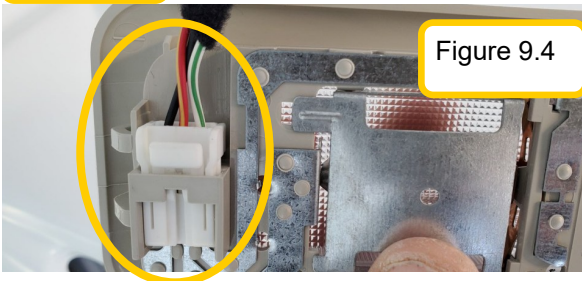
Figure 9.2



Figure 9.3



Figure 9.4



Step 5:

Connect the roof bow harnesses (63481 Or/ And 63842, 63483, 63484 all that are applicable) to the power harness and route them to their desired light locations. (Light locations on the roof bows). Figure 9.6.

Refer to page 6 for which harnesses to use for the roof bows.

Use zip ties/fir trees to secure all wiring.

Figure 9.5



Figure 9.6



Figure 10.1



Step 6:

Before mounting any lights, prep the surface where the light will be placed with the supplied alcohol pad. Let dry for a few minutes, then mount the light.

Be sure the surface is clean before applying the VHB tape. Read the supplied instructions in the lighting boxes.

Mount the strip/dome lights to their desired locations: Refer to the order drawing.

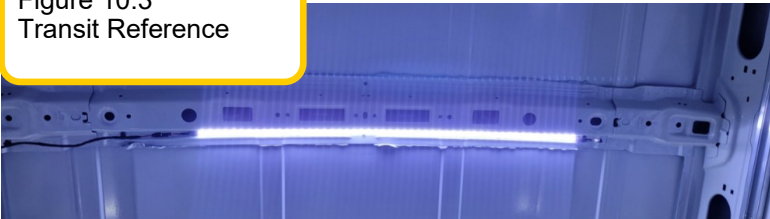
Figure 10.2



For dome lights, use the VHB tape already on the back of the light, and also secure with the supplied tek screws.

Dome lights are to be placed as close to the center of the roof bow as possible. Figure 10.1 and 10.2.

Figure 10.3
Transit Reference



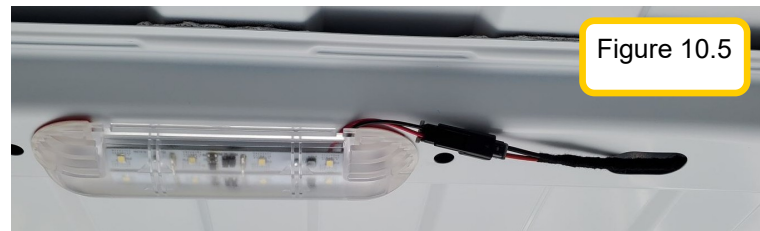
For the strip lights, use the VHB tape supplied on the back of the lights, and use the little square sticky backs with zip ties that are supplied in the box.

Figure 10.4
GM Express
Reference



Strip lights are to be placed as close to the center as possible of the roof bows. See reference pictures of the Chevy Express and Transit vans below. Use best judgement for the strip light placements, just be sure to do the same for all the needed roof bows. Figure 10.3 and 10.4 for references.

Figure 10.5



Route the roof bow harnesses to the lights and connect them. When applicable route the harness inside the roof channel. When not, use zip ties and fire trees to secure the wiring. Figures 10.5 and 10.6.

Figure 10.6

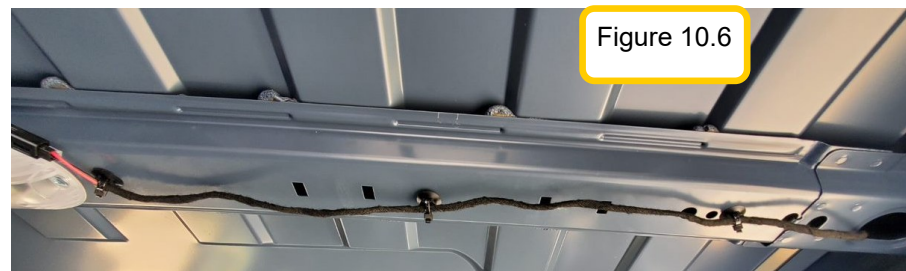


Figure 11.1



Partition Switch

Locations:

Switch hole in steel partition behind the passenger's seat (figure 11.1) or drill out switch hole in composite partition (figure 11.2).

This location will require harness #65788

Rear Switch Location:

Passenger side rear D-pillar.

Drill out the circle divot on the rear D-pillar trim panel. Reference figure 11.3.

This location will require harness #65790

Figure 11.2



Step 7:

Route the 65788 harness from the TLM harness location to the partition switch location.

Do the same with harness 65790 to the D-pillar switch location.

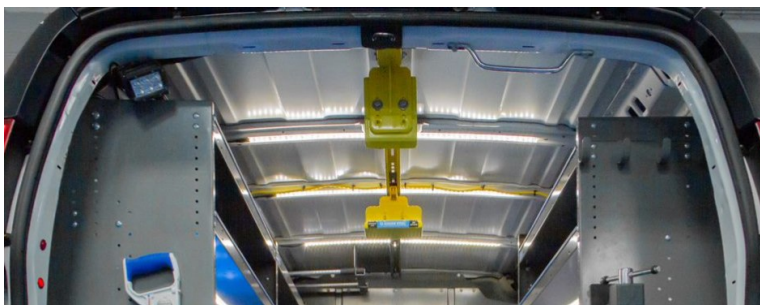
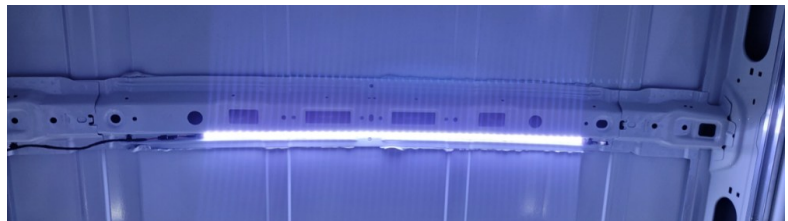
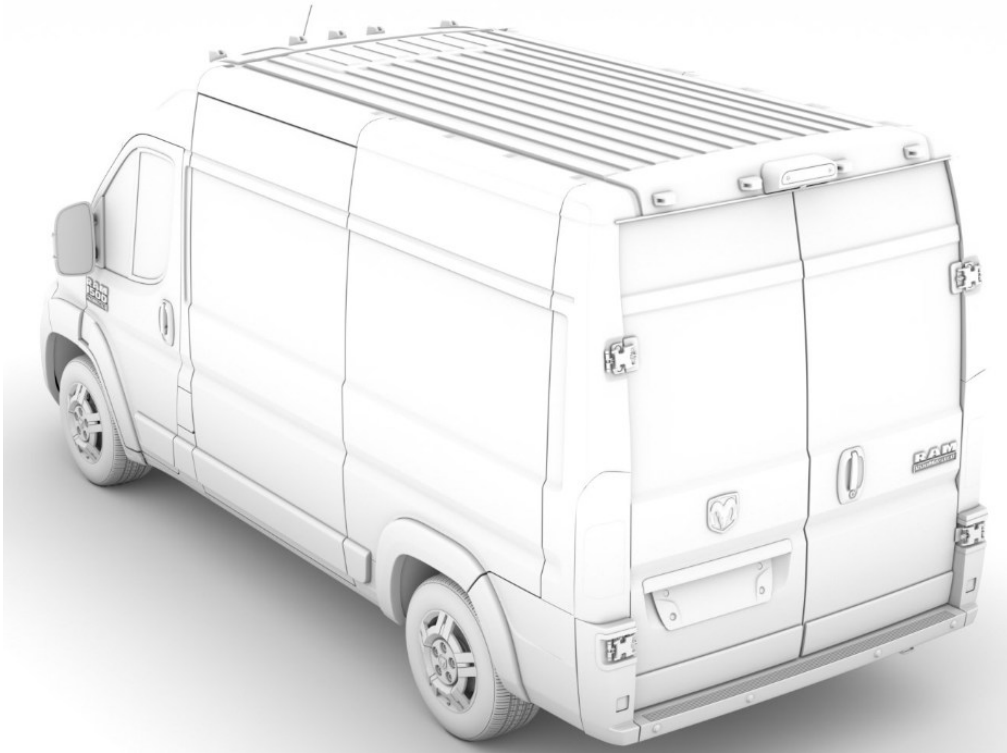
Use Zip ties to secure wiring.

Drill needed holes for the switches in rear D pillar panel, and composite partition (if applicable).

Figure 11.3



Insert the switches into the holes with the "1" in the 12:00 position, connect the harness (the connection orientation does not matter).



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. Double check the functionality of the lights and switches.

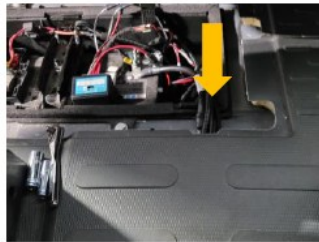
Promaster basic install photos



power and
specific bolts on
ness, and wire
bracketry



VTM and VTM relay will
be placed on the top
negative side of the
battery and wiring tucked
away



VTM and switch harnesses ran
under floor mat between seats,
behind front passenger seat, up
passenger B pillar, and along
curbside roof line to rear D
pillar, then drop down.

Parts List

- Timer module (65780)
- VTM relay and vehicle s (65791) and (65796)
- 3 - CL-24BLED (65346)
- 3 - CL-36BLED (65437)
- 2 - CL-48BLED (65438)
- 3 - STL-40489-2 (63480)
- 2 - CL-ADP (64244)
- 6 - P-HARRB1 (63481)
- 3 - P-HARRB2 (63482)
- 3 - P-HARRB3 (63483)



489-2 lights
n roof bows 2, 4
e B pillar is roof

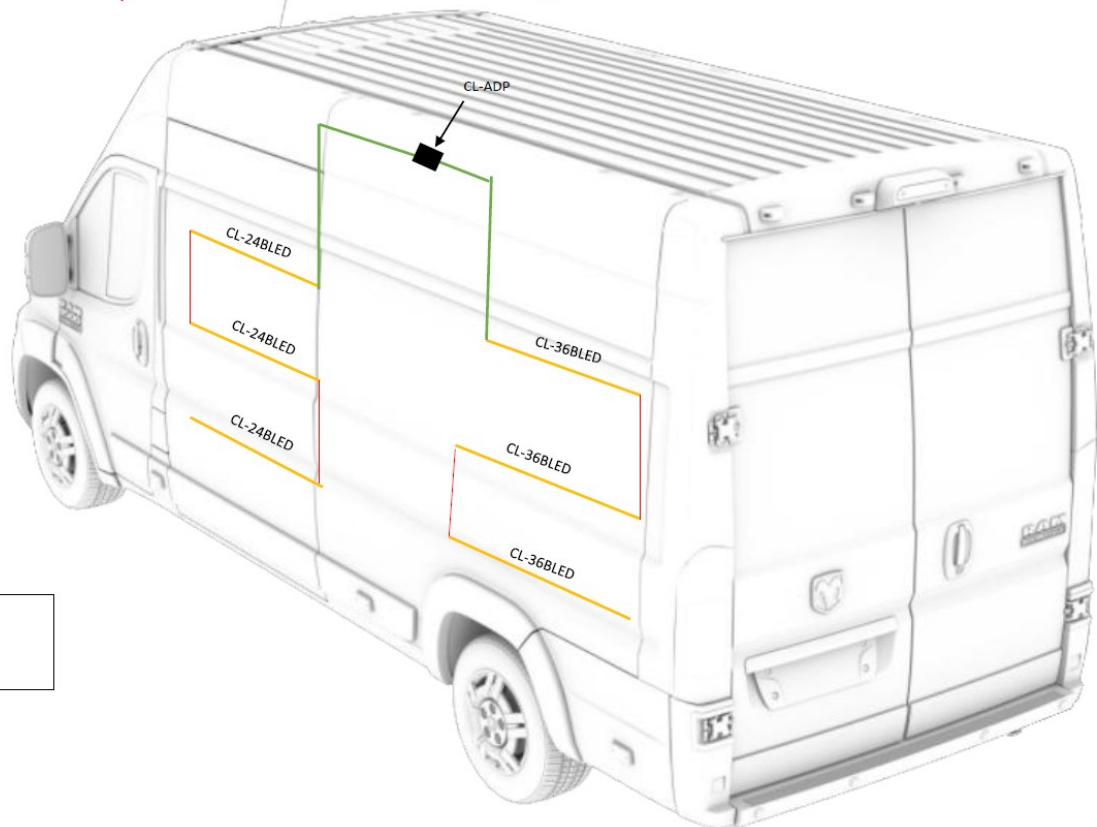


CL-ADP at 4th roof bow on
street side of vehicle



Curbside dome light
junction point and CL-ADP
above and to the right of
sliding door

Promaster line diagram cont.



Legend:

P-HARRB1
P-HARRB2

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!

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
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

PURCHASED COMPONENT KEY FEATURES

DESCRIPTION OF REQUIREMENTS

DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)

Base is a 0.975 inch square

LOAD/RATING REQUIREMENT

N/A

MATERIAL REQUIREMENT

N/A

PACKAGING REQUIREMENT

N/A

OTHER REQUIREMENTS

Black adhesive wire tie mounting base.

Cure Time: Bond 15 Min., Max
Adhesion 1 Hr.

Max. Operating 158

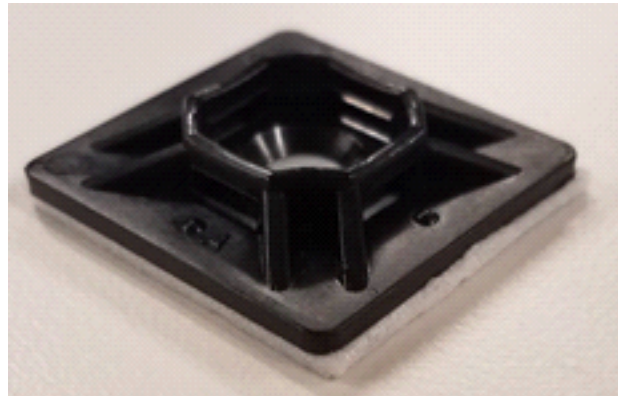
Temp. F:

Max. Operating 70

Temp. C:

Min. Installation 65

Temp. F:



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

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: 17429

CURRENT ECN: 22185

ECN DESCRIPTION:

**Size of the base changed with a
change in supplier**

REVISED BY: D. LaCroix

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER

Midstate

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

49401

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.)

YES

PRINTED DOCUMENT IS UNCONTROLLED

Sheet 1 of 1

PART / PRODUCT IDENTIFICATION



ADRIAN STEEL®

ADRIAN STEEL COMPANY
906 JAMES STREET, ADRIAN, MI 49221

REVISION LEVEL

B

MAT'L USED:

DESIGNED BY: **RJB**

DESCRIPTION:

Adhesive wire tie base

WEIGHT
(Lbs.): **0.05**

SEGMENT
CODE: **HDW**

PART NUMBER: **49401**

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

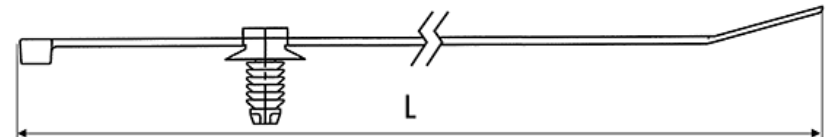
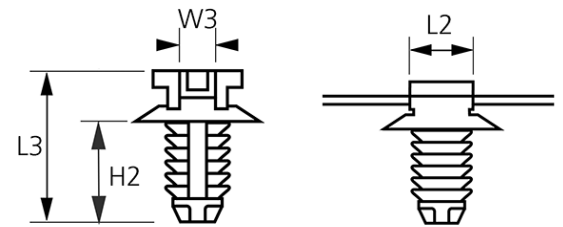
OTHER REQUIREMENTS

- **Roof Bow #3**
- **(5x) WIRE TIE W/CHRISTMAS TREE**
- **2570mm Length**



P-HARRB3

(5x)



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

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: 24359

CURRENT ECN: 24359

ECN DESCRIPTION:

QE8539 RELEASE MODULAR DOME LIGHTING

REVISED BY: MJF

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER

ECHOMASTER FLEET SOLUTIONS

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

P-HARRB3

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.)

YES

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: **MJF**

DESCRIPTION: **ROOF BOW HARNESS #3**

WEIGHT
(Lbs.):

.50

SEGMENT
CODE: **EAU**

PART NUMBER: **63483**

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

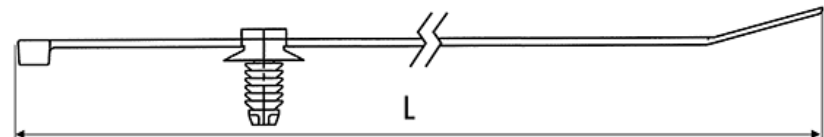
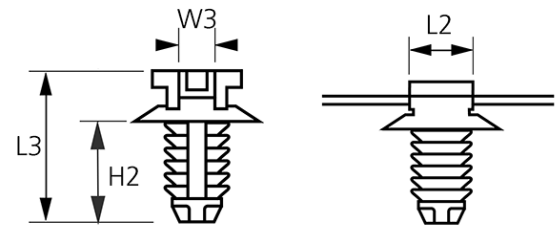
OTHER REQUIREMENTS

- **Roof Bow #4**
- **(5x) WIRE TIE W/CHRISTMAS TREE**
- **3470mm Length**



P-HARRB4

(5x)



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

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: 24359

CURRENT ECN: 24359

ECN DESCRIPTION:

QE8539 RELEASE MODULAR DOME LIGHTING

REVISED BY: MJF

PURCHASED COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER

ECHOMASTER FLEET SOLUTIONS

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

P-HARRB4

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.)

YES

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: **MJF**

DESCRIPTION:

ROOF BOW HARNESS #4

WEIGHT
(Lbs.):

.50

SEGMENT
CODE: **EAU**

PART NUMBER: **63484**

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: Connector / Terminal Configuration: • MALE 2 PIN ON ONE END • FEMALE 2 PIN ON THE OPPOSITE END. BOM: <table><tr><th>Item</th><th>Qty.</th><th>Description</th></tr><tr><td>1</td><td>1</td><td>36" WHITE LED STRIP LIGHT W/ADHESIVE</td></tr><tr><td>2</td><td>2</td><td>4" ZIP TIE</td></tr><tr><td>3</td><td>2</td><td>CABLE TIE MOUNT</td></tr><tr><td>4</td><td>1</td><td>ALCOHOL PAD</td></tr></table>	Item	Qty.	Description	1	1	36" WHITE LED STRIP LIGHT W/ADHESIVE	2	2	4" ZIP TIE	3	2	CABLE TIE MOUNT	4	1	ALCOHOL PAD
Item	Qty.	Description													
1	1	36" WHITE LED STRIP LIGHT W/ADHESIVE													
2	2	4" ZIP TIE													
3	2	CABLE TIE MOUNT													
4	1	ALCOHOL PAD													



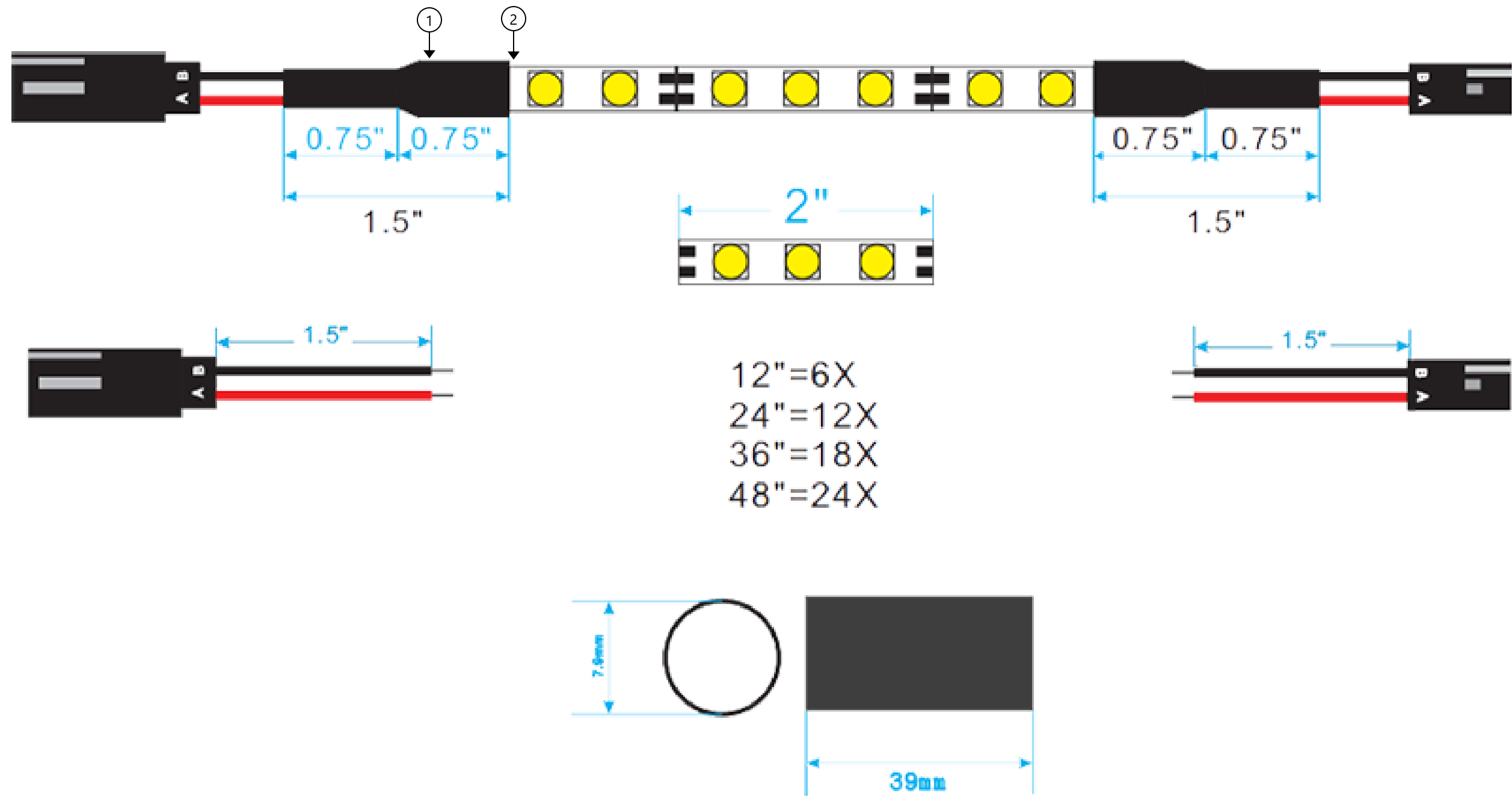
THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER
DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

TOLERANCES & INSPECTION			RELEASE & REVISIONS	
UNLESS OTHERWISE SPECIFIED ALL BEND ANGLES ARE 90 DEGREES ALL DIMENSIONS ARE IN INCHES. REFERENCE DIMENSIONS (X.XXX) DO NOT REQUIRE INSPECTION			INITIAL ECN:	24697
			CURRENT ECN:	25778
			ECN DESCRIPTION:	
			Revise Modular Lights With New 3M Adhesive	
Material Thickness: per ASTM Std. Weld Callouts per AWS			REVISED BY: JLT	

PURCHASED COMPONENT
REFERENCED SUPPLIER AND/OR MANUFACTURER AAMP
REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER CL-36BLED rev.B
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.) YES

PRINTED DOCUMENT IS UNCONTROLLED			Sheet 1 of 1
PART / PRODUCT IDENTIFICATION			
 ADRIAN STEEL®	ADRIAN STEEL COMPANY 906 JAMES STREET, ADRIAN, MI 49221		REVISION LEVEL B
	MAT'L USED:	DESIGNED BY: J. TYNER	
DESCRIPTION: MODULE DOME LED STRIP 36"			
WEIGHT (Lbs.): 0.3	SEGMENT CODE: EAU	PART NUMBER: 65347	

Notes	
①	3:1 Adhesive Heat Shrink to be placed over LED Solder Joints
②	5925 Adhesive Liner Edges to be exposed next to heat shrink



Revisions			
Rev.	Date	Author	Description
A	11/1/21	Bennet Fisher	Initial Drawing
B	7/27/2022	Bennet Fisher	Adhesive changed to VHB 5925

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	 — ADVANCING VEHICLE TECHNOLOGY —	
	Designed By	Bennet Fisher	11/1/21		
	Engineering Approval				
	Manufacturing Approval				
	Revision Approval			Part Number: CL-36BLED	
Quality Assurance				Description: 36" LED Strip	
				Revision: B	
				Sheet: 1	

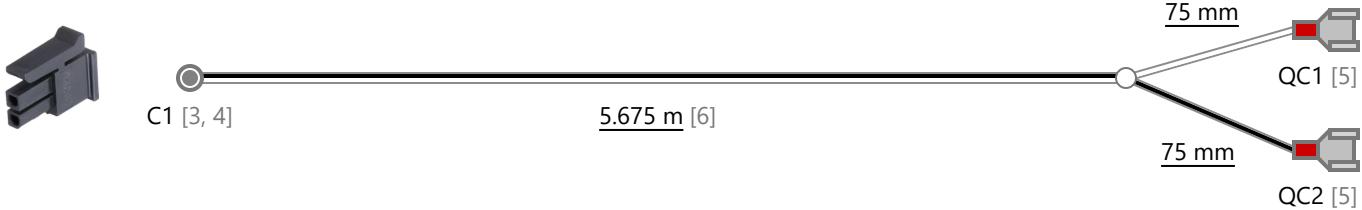
PURCHASED COMPONENT KEY FEATURES	
DESCRIPTION OF REQUIREMENTS	
DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)	
N/A	
LOAD/RATING REQUIREMENT	
N/A	
MATERIAL REQUIREMENT	
N/A	
PACKAGING REQUIREMENT	
N/A	
OTHER REQUIREMENTS	



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			Sheet 1 of 1		
TOLERANCES & INSPECTION			PART / PRODUCT IDENTIFICATION					
UNLESS OTHERWISE SPECIFIED			AS ADRIAN STEEL® ADRIAN STEEL COMPANY 906 JAMES STREET, ADRIAN, MI 49221				REVISION LEVEL	
ALL BEND ANGLES ARE 90 DEGREES							A	
ALL DIMENSIONS ARE IN INCHES.								
REFERENCE DIMENSIONS (X.XXX) DO NOT REQUIRE INSPECTION								
FEATURES			MAT'L USED: PURCHASED				DESIGNED BY: E.BURKE	
HOLES/SLOTS			DESCRIPTION: SWITCH 2 HARNESS FOR VTM				PART NUMBER: 65788	
ANGLES								
0.0 = ± .125			WEIGHT (Lbs.): 0.2		SEGMENT CODE: ELE			
0.00 = ± .062								
0.000 = ± .031								
0.0 = ± .062								
0.00 = ± .031								
0.000 = ± .015								
Material Thickness: per ASTM Std. Weld Callouts per AWS								
RELEASE & REVISIONS			PURCHASED COMPONENT					
INITIAL ECN: 25377			REFERENCED SUPPLIER AND/OR MANUFACTURER AAMP GLOBAL					
CURRENT ECN: 25377			REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER VTM-SW2 OR 65788					
ECN DESCRIPTION: RELEASE FOR PRODUCTION			COLOR (ONLY LIST IF COLOR SPECIFIC) NO					
REVISED BY:			COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERENCE) (NOTE: DIMENSIONS AND FEATURES MAY VARY FOR A COMODITY ITEM.) NO					

Coverings	
Id	Assembly
[6]	

From	To	Color	Gauge
C1.1	QC1		20 AWG
C1.2	QC2		20 AWG



From	To	Color	Gauge
QC1	C1.1		20 AWG

From	To	Color	Gauge
QC2	C1.2		20 AWG



Revisions			
Rev.	Date	Author	Description
1	6/10/21	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	 — ADVANCING VEHICLE TECHNOLOGY —	
	Designed By	Bennet Fisher	6/10/2021		
	Engineering Approval				
	Manufacturing Approval				
	Revision Approval			Part Number: VTM-SW2	
	Quality Assurance			Description: 5.675 Meter Switch Harness	
				Revision: 1	
				Sheet: ----	

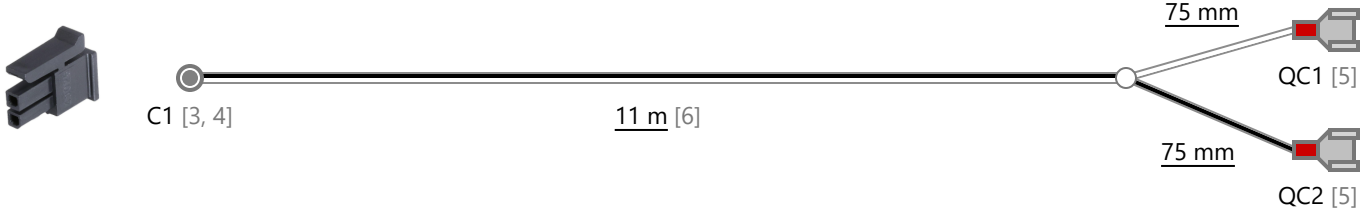
PURCHASED COMPONENT KEY FEATURES	
DESCRIPTION OF REQUIREMENTS	
DIMENSIONAL REQUIREMENTS (AS SHOWN ON DRAWING)	
N/A	
LOAD/RATING REQUIREMENT	
N/A	
MATERIAL REQUIREMENT	
N/A	
PACKAGING REQUIREMENT	
N/A	
OTHER REQUIREMENTS	



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		Sheet 1 of 1	
TOLERANCES & INSPECTION		PART / PRODUCT IDENTIFICATION			
UNLESS OTHERWISE SPECIFIED		AS ADRIAN STEEL® ADRIAN STEEL COMPANY 906 JAMES STREET, ADRIAN, MI 49221			REVISION LEVEL A
ALL BEND ANGLES ARE 90 DEGREES					
ALL DIMENSIONS ARE IN INCHES.		DESIGNED BY: E.BURKE			
REFERENCE DIMENSIONS (X.XXX) DO NOT REQUIRE INSPECTION		DESCRIPTION: SWITCH 4 HARNESS FOR VTM			
FEATURES		MAT'L USED: PURCHASED	WEIGHT (Lbs.): 0.2	SEGMENT CODE: ELE	PART NUMBER: 65790
HOLES/SLOTS					
ANGLES					
0.0 = ± .125					
0.00 = ± .062					
0.000 = ± .031					
0.0 = ± .062					
0.00 = ± .031					
0.0° = ± 2°					
0.0° = ± 1°					
Material Thickness: per ASTM Std. Weld Callouts per AWS					
RELEASE & REVISIONS		PURCHASED COMPONENT			
INITIAL ECN: 25377		REFERENCE SUPPLIER AND/OR MANUFACTURER AAMP GLOBAL			
CURRENT ECN: 25377		REFERENCE SUPPLIER AND/OR MANUFACTURER PART NUMBER VTM-SW4 OR 65790			
ECN DESCRIPTION: RELEASE FOR PRODUCTION		COLOR (ONLY LIST IF COLOR SPECIFIC) NO			
REVISED BY:		COMODITY ITEM (Y/N) (YES = ALL DIMENSIONS AND NOTES ARE REFERENCE) (NOTE: DIMENSIONS AND FEATURES MAY VARY FOR A COMODITY ITEM.) NO			

Coverings	
Id	Assembly
[6]	

From	To	Color	Gauge
C1.1	QC1		20 AWG
C1.2	QC2		20 AWG



From	To	Color	Gauge
QC1	C1.1		20 AWG

From	To	Color	Gauge
QC2	C1.2		20 AWG



Revisions			
Rev.	Date	Author	Description
1	6/10/21	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	 — ADVANCING VEHICLE TECHNOLOGY —	
	Designed By	Bennet Fisher	6/10/2021		
	Engineering Approval				
	Manufacturing Approval				
	Revision Approval			Part Number: VTM-SW4	
	Quality Assurance			Description: 11 Meter Switch Harness	
				Revision: 1 Sheet: ----	

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 POWER HARNESS FOR TOPPER SILVERADO AND RAM KITS
POWER FROM BATTERY TO TLM MODULE



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

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: 26830
CURRENT ECN: 26830
ECN DESCRIPTION:
RELEASE FOR MARKET FILL
REVISED BY: FMB

PURCHASED
COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
AAMP
REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
71903
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

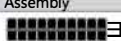
PRINTED DOCUMENT IS UNCONTROLLED

Sheet 1 of 1

PART / PRODUCT IDENTIFICATION

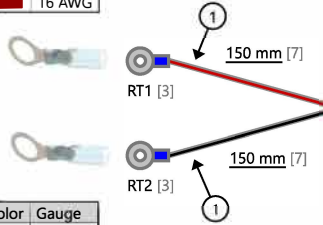
 ADRIAN STEEL®		ADRIAN STEEL COMPANY 906 JAMES STREET, ADRIAN, MI 49221	REVISION LEVEL A
MAT'L USED: PURCHASED		DESIGNED BY: E.BURKE	
DESCRIPTION: HARN,POWER TLM BATTERY 4'			
WEIGHT (Lbs.): 0.2	SEGMENT CODE: ELE	PART NUMBER: 71903	

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Wire		16 AWG Red GXL	1220 mm
2	Wire		16 AWG Black GXL	1220 mm
3	Ring Terminal	Molex	19164-0027	2
4	Connector	Molex	46993-0211	1
5	Contact	Molex	39-00-0081	2
6	Splice		ATM Fuse Holder	1
7	Corrugated Tubing		0.25" Nylon Split Wall	1370 mm
8	Fuse	Littelfuse	297010.WXNV	1
9	Cable Tie	Hellerman nTyton	T30LL0M4	5
10	Label		Heat Shrink Style Label	1

Coverings	
Id	Assembly
[7]	

Notes	
①	Lock tape loom behind connector with Tesa 51036
②	Tape knuckle with Tesa 51036
③	Install 10A Mini Fuse

From	To	Color	Gauge
RT1	Fuse_Holder1	Red	16 AWG



From	To	Color	Gauge
RT2	C1.2	Black	16 AWG

From	To	Conductor	Color	Gauge
Fuse_Holder1	C1.1	W2.Red	Red	16 AWG
Fuse_Holder1	RT1	W1.Red	Red	16 AWG

From	To	Color	Gauge	From Contact PN
C1.1	Fuse_Holder1	Red	16 AWG	39-00-0081
C1.2	RT2	Black	16 AWG	39-00-0081

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	 Part Number: 71903-A Revision: A Description: HARN, PWR TLM BATTERY 4' Sheet: 1
	Designed By		Bennet Fisher	10/29/2023
	Engineering Approval			
	Manufacturing Approval			
	Revision Approval			
	Quality Assurance			

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
TIMER LIGHTING MODULE REV A - FOR INTERIOR PLUG AND PLAY LIGHTING



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

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: 27974
CURRENT ECN: 27974
ECN DESCRIPTION:
RELEASE TO PRODUCTION
REVISED BY: EMB

PURCHASED
COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
AAMP
REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
71902 REV A
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: TIMER LIGHT MODULE REV A			
WEIGHT (Lbs.): 0.2	SEGMENT CODE: ELE	PART NUMBER: 76654	