

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)

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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

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!

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**CAUTION**

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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
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 EQUIVILENT
SELF PIERCING CAP

SPECIAL NOTES:

SUPPLIED BY: THIS ITEM IS ADRIAN AVAILABLE!

PURCHASED PRODUCT DATA SHEET (PPDS)

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ADRIAN STEEL
VAN AND PICKUP EQUIPMENT

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517-265-6194
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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
JLC

DATE DRAWN
7/21/2001

ECN NUMBER
16551

ECN DATE
7/22/2014

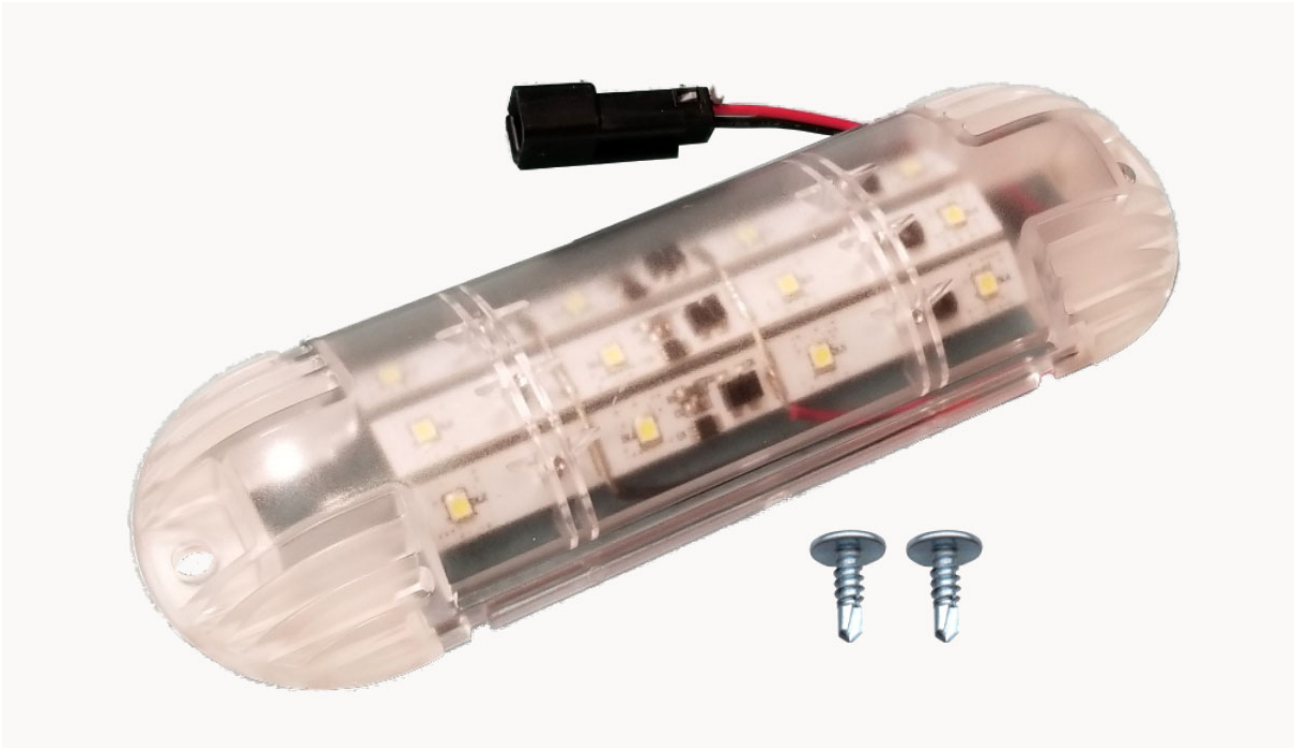
PART WEIGHT
0.02 LBS.

REV. LEVEL
C

PART NUMBER
26618-0

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
(1) LED LIGHT WITH 12 LED GROUPED IN THREE ROWS
(2) TEK SCREWS INCLUDED



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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: 24359
CURRENT ECN: 25886
ECN DESCRIPTION:
UPDATE SUPPLIER PART #
REVISED BY: A. ELLISON

PURCHASED
COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
OBERTON ELECTRONICS / ECHOMASTER FLEET SOLUTIONS
REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
8018-6000 / STL40489-3
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.)

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Sheet 1 of 1

PART / PRODUCT IDENTIFICATION		
	ADRIAN STEEL®	
	ADRIAN STEEL COMPANY 906 JAMES STREET, ADRIAN, MI 49221	
MAT'L USED:	PURCHASED	DESIGNED BY: A. ELLISON
DESCRIPTION: MODULE DOME LED LIGHT		
WEIGHT (Lbs.): .50	SEGMENT CODE: EAU	PART NUMBER: 63480

REVISION LEVEL
B

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

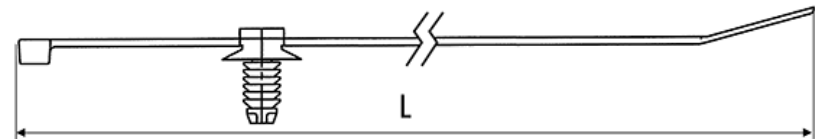
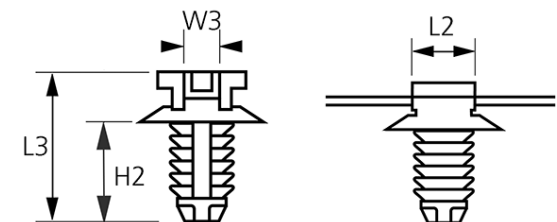
- **Roof Bow #1 (Cargo area, first Roof bow after partition)**
- **(5x) WIRE TIE W/CHRISTMAS TREE**
- **1100mm Length**



P-HARRB1



(5x)



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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: 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-HARRB1

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

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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: **MJF**

DESCRIPTION: **ROOF BOW HARNESS #1**

WEIGHT
(Lbs.):

.50

SEGMENT
CODE: **EAU**

PART NUMBER: **63481**

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

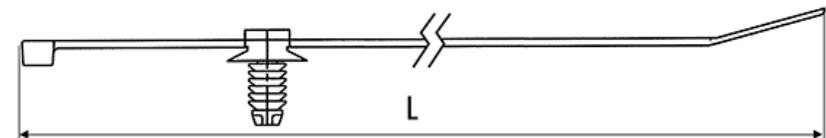
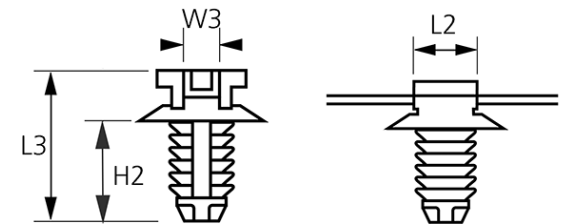
OTHER REQUIREMENTS

- **Roof Bow #2**
- **(5x) WIRE TIE W/CHRISTMAS TREE**
- **1570mm Length**



P-HARRB2

(5x)



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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: 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-HARRB2

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

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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: **MJF**

DESCRIPTION: **ROOF BOW HARNESS #2**

WEIGHT
(Lbs.):

.50

SEGMENT
CODE: **EAU**

PART NUMBER: **63482**

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													



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TOLERANCES & INSPECTION

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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:	24697
CURRENT ECN:	25778
ECN DESCRIPTION:	
Revise Modular Lights With New 3M Adhesive	
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

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Sheet 1 of 1

PART / PRODUCT IDENTIFICATION

AS

ADRIAN STEEL®

ADRIAN STEEL COMPANY
906 JAMES STREET, ADRIAN, MI 49221

REVISION LEVEL
B

MAT'L USED:

DESIGNED BY: J. TYNER

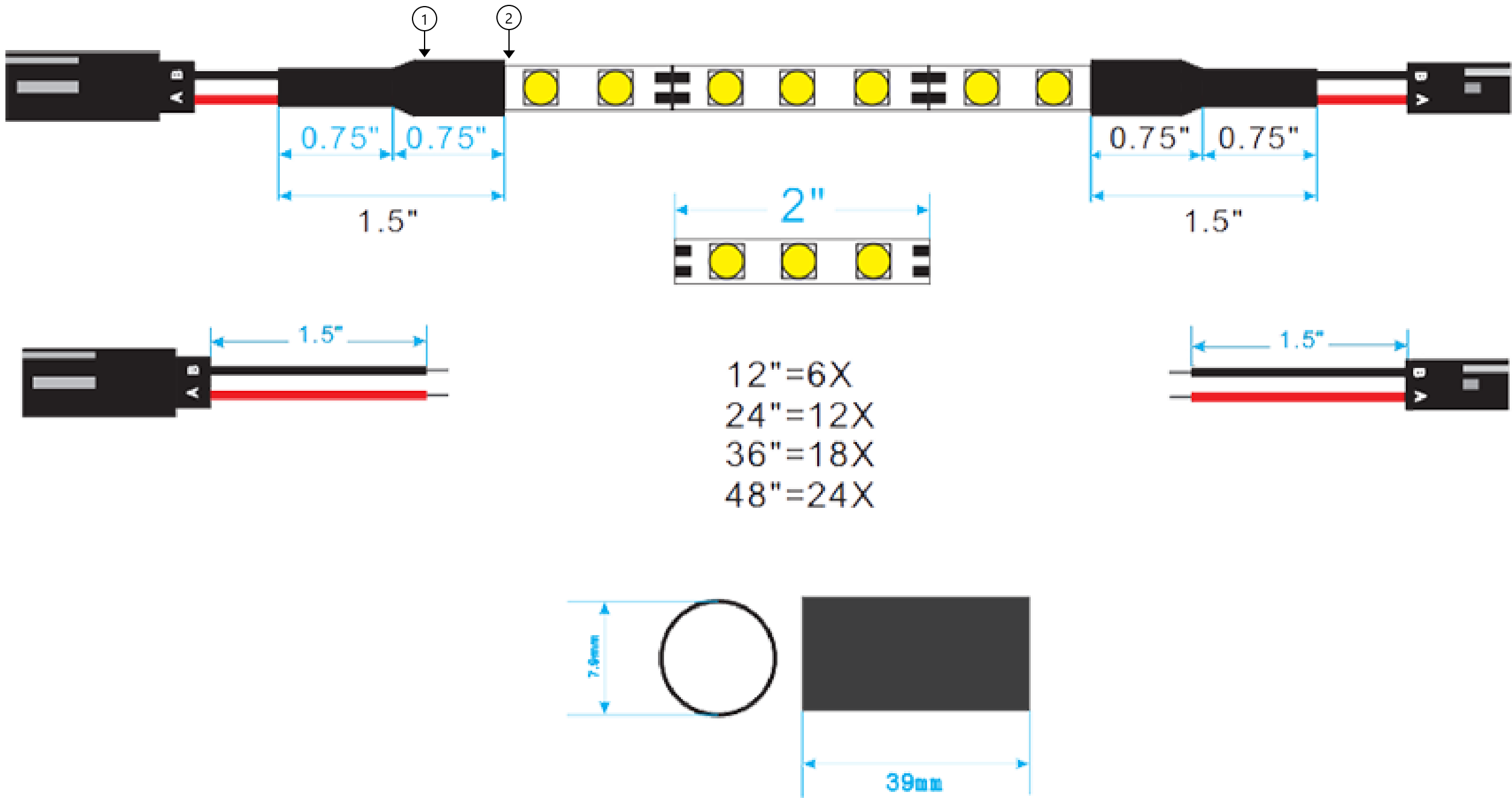
DESCRIPTION: MODULE DOME LED STRIP 36"

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

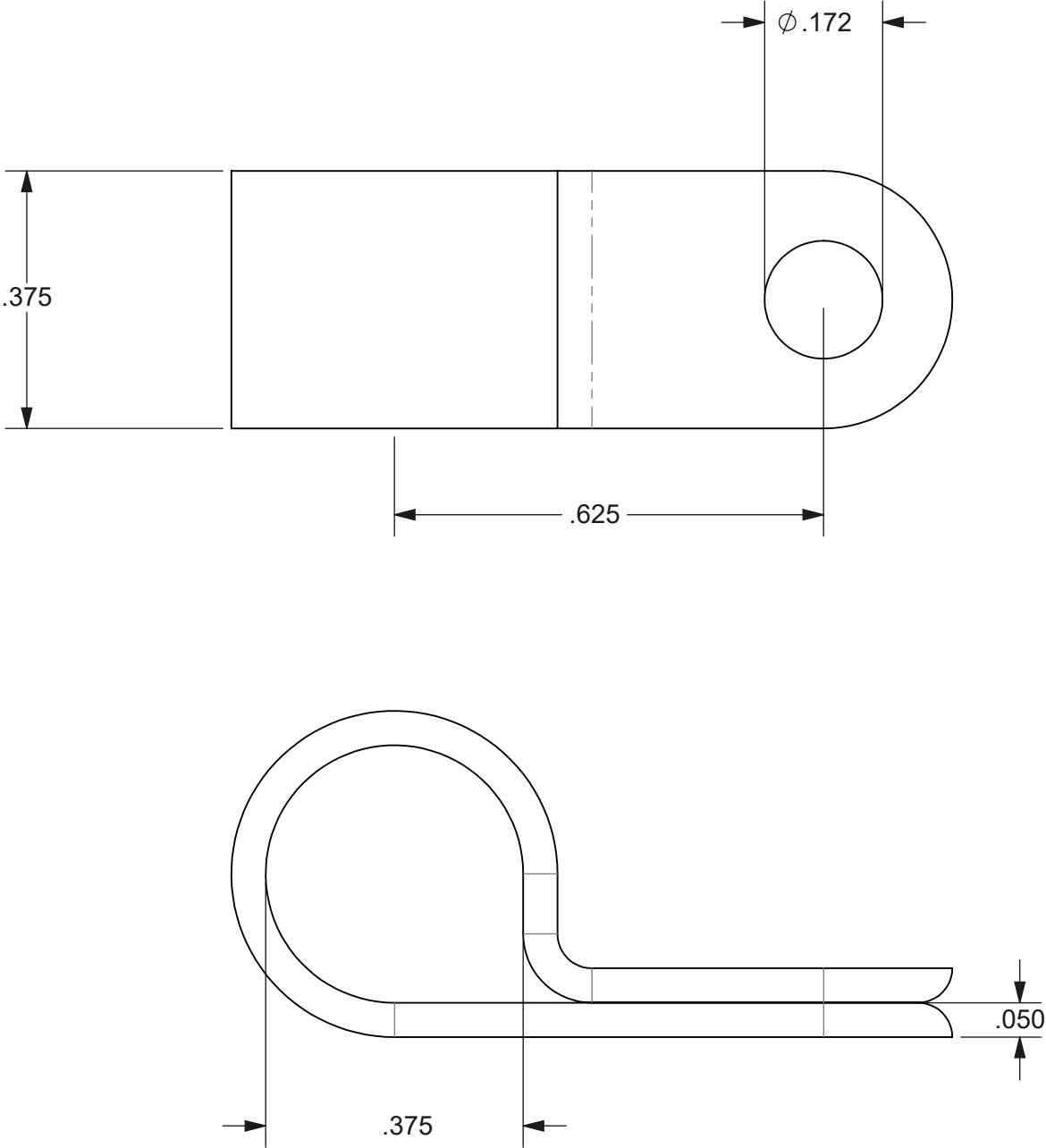


Revisions			
Rev.	Date	Author	Description
A	11/1/21	Bennet Fisher	Initial Drawing
B	7/27/2022	Bennet Fisher	Adhesive changed to VHB 5925

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
N/A



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TOLERANCES & INSPECTION

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REFERENCE DIMENSIONS (X.XXX) DO NOT REQUIRE INSPECTION		
FEATURES	HOLES/SLOTS	ANGLES
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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 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 B	
MAT'L USED:				DESIGNED BY: E.BURKE			
DESCRIPTION: Nylon Plastic Loop Clamp							
WEIGHT (Lbs.): 0.001		SEGMENT CODE: HDW			PART NUMBER: 66843		

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 FOR INTERIOR PLUG AND PLAY LIGHTING ON TOPPERS



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TOLERANCES & INSPECTION		
UNLESS OTHERWISE SPECIFIED		
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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: 27950
ECN DESCRIPTION:
Update to Rev B
REVISED BY: JJC

PURCHASED COMPONENT
REFERENCED SUPPLIER AND/OR MANUFACTURER
AAMP
REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
71902
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	
MAT'L USED: PURCHASED		DESIGNED BY: E.BURKE	
DESCRIPTION: TIMER LIGHTING MODULE			
WEIGHT (Lbs.): 0.2	SEGMENT CODE: ELE		PART NUMBER: 71902



TLM

Timer/Low Voltage Module

INSTALLATION MANUAL

Stinger[®]



Thank you for purchasing the
TLM



WHAT'S INCLUDED:



- Timer/Low Voltage Module
- Module Harness
- Cable Ties

COMPATIBLE ACCESSORIES:



- Vehicle-specific harness (P-VTM-xxx)
- Switch harness (VTM-SWx)
- High current harness (VTM-RLY)

FEATURES:



- Selectable timer durations - 30, 60, 90, and 120 minutes
- Selectable Low Voltage Sense shut off - 11.8V, 11.5V, and 11.2V
- Timer and Low Voltage sense work independently of each other
- Inputs for 2 momentary switches or a steady ground input
- 10A max current output





OPERATING INSTRUCTIONS:

DIP 1	DIP 2	V-Sense	DIP 3	DIP 4	DIP 5	Minutes	DIP 6
Up	Up	OFF	Timer ON (Down) OFF (Up)	Up	Up	30	ON (Down) Steady Ground Input
Up	Down	11.2V		Up	Down	60	
Down	Up	11.5V		Down	Up	90	OFF (Up) Momentary Ground Input
Down	Down	11.8V		Down	Down	120	

DIP 1-2

If Voltage Sense feature is turned ON, low voltage shut down will occur when the input voltage to the TLM module drops below the V-Sense setting. To eliminate false triggers, there is a 20 second delay before shut down.

If Voltage Sense is turned OFF, input voltage level will not be monitored.

NOTE: Voltage Sense takes precedence over Timer.

DIP 3

If the Timer feature is turned ON and switch input is activated, output voltage will be provided for specified timer duration.

DIP 4-5

Switch settings will determine how long output will be active after the switch input is activated.

NOTE: If an invalid time is selected (e.g. Up, Up, Up or Down, Down, Down) the output will turn off 10 seconds after the switch input is activated.

DIP 6

Steady Ground Input Applications:

Applying ground to the switch input will activate the output, removing ground from switch input will disable the output. If ground is applied once again, the output will be re-activated, and the timer will reset/start over.

Momentary Ground Input Applications:

Applying a pulsed ground to the switch input will activate the output, a second pulsed ground to the switch input will disable the output. If a pulsed ground is applied once again, the output will be re-activated, and the timer will reset/start over.



Steady Ground Input Applications

Trigger Input	Switch Input	Output	Voltage Sense (ON)	Timer (ON)
Active	N/A	ON	Monitoring Input Voltage	N/A
Not Active	N/A	OFF	N/A	N/A
Not Active	Activated (Input Grounded)	ON	Monitoring Input Voltage	Timer Starts
Not Active	Deactivated (Ground Removed)	OFF	N/A	Timer Off
Not Active	Activated (Input Grounded)	ON	Monitoring Input Voltage	Timer Starts

Momentary Ground Input Applications

Trigger Input	Switch Input	Output	Voltage Sense (ON)	Timer (ON)
Active	N/A	ON	Monitoring Input Voltage	N/A
Not Active	N/A	OFF	N/A	N/A
Not Active	Activated (Pulsed)	ON	Monitoring Input Voltage	Timer Starts
Not Active	Activated (Pulsed)	OFF	N/A	Timer Off
Not Active	Activated (Pulsed)	ON	Monitoring Input Voltage	Timer Starts

In the tables above "Trigger Input" refers to the Positive Trigger Input and Negative Trigger Input of the module.

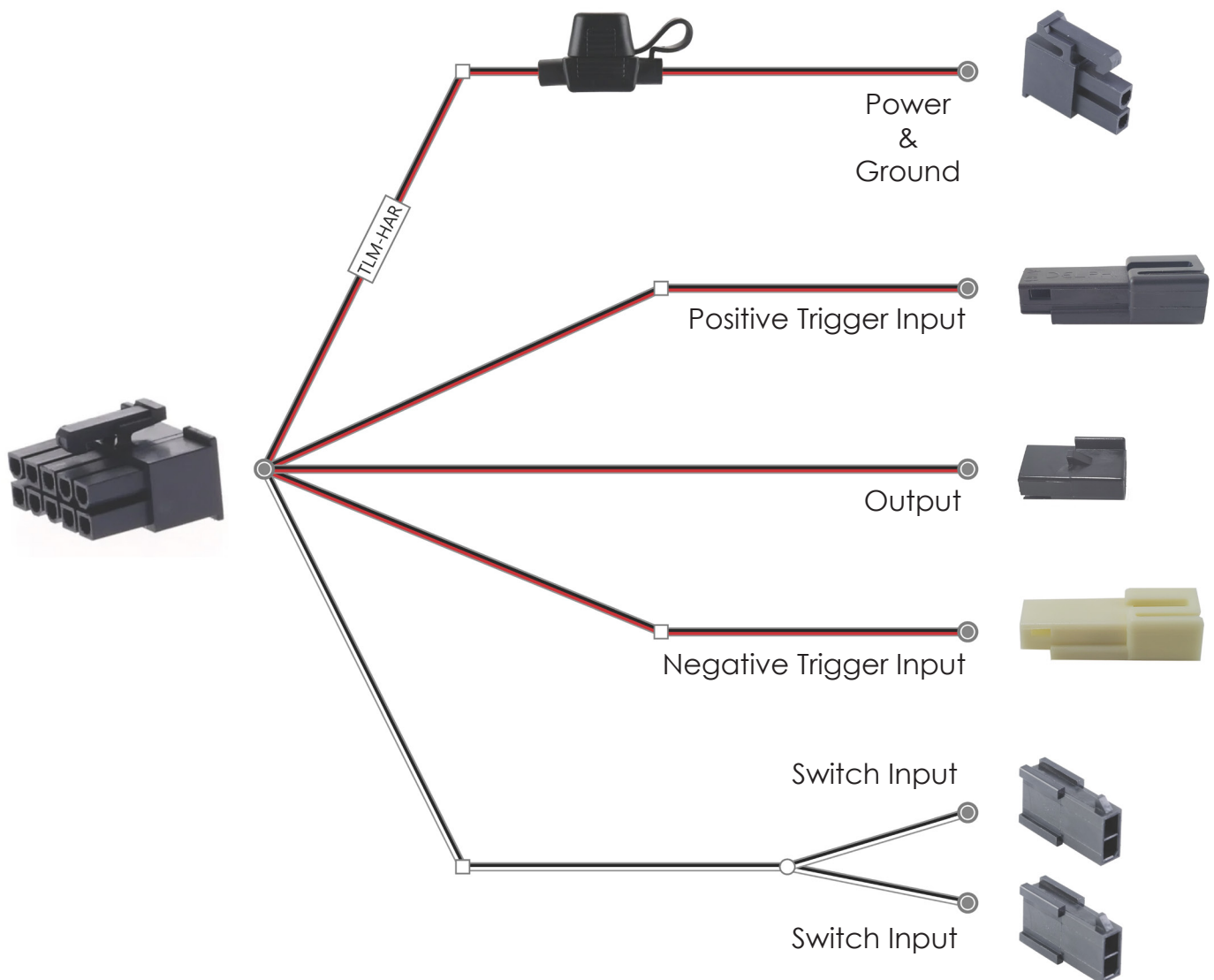
If a Trigger Input is active, its function takes precedence. Attempting to activate the Switch Input while a Trigger Input is active will have no effect on the modules output.





WIRING DIAGRAMS:

TLM Harness



If necessary, connectors may be removed for hardwire applications.

Positive Trigger Input: Applying 12V to Red wire will activate output

Negative Trigger Input: Applying ground to Black wire will activate output

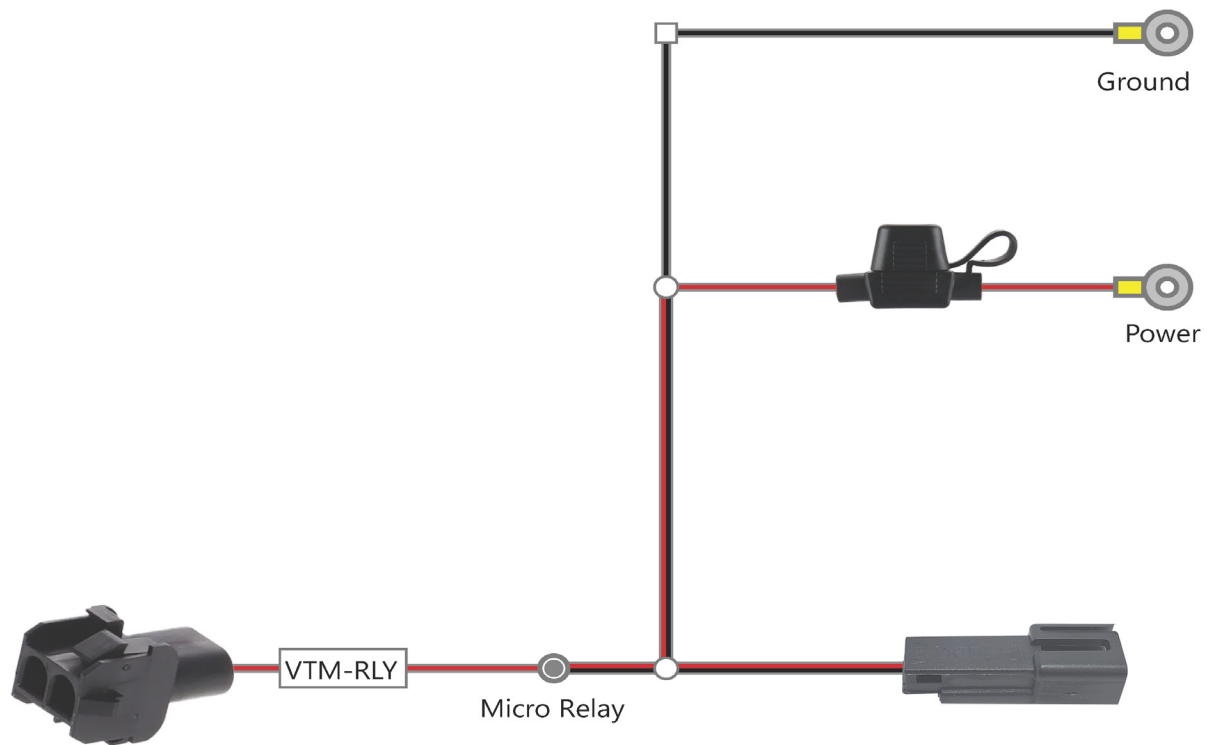
Switch Input: Closing loop between switch input wire leads will activate output





VTM-RLY (Optional Harness)

For larger current demands, use the optional VTM-RLY and connect to power and ground, along with the TLM harness. VTM-RLY supports up to 15A.



VTM-RLY Output connects to P-VTMxxx harness for vehicle lighting

VTM-RLY Input connects to the output from the TLM harness





Troubleshooting Table:

Output does not activate when Positive or Negative Trigger Input is activated	Check fuse on TLM harness	Replace fuse if it is bad
	Check power and ground connections	Fix loose or bad wire connection
	Confirm module has power and ground at its input	Replace module or damaged harness if necessary
Output does not activate when Switch Input is activated	Confirm DIP 6 on module matches switch type being used	Change DIP 6 setting to match switch type
	Confirm switch being used is not defective	Replace bad switch if necessary
Switch Input - Irregular behavior	Output does not turn off with switch	Check DIP 6 and confirm it matches switch type
		Confirm switch is not damaged or defective; replace if necessary
	Output activates for 5 seconds then turns off	Input voltage to module is below Voltage Sense setting





Stinger[®]

Phone – 866-931-8021 (option 3)

E-Mail – support@stingersolutions.com

StingerSolutions.com

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



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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: 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

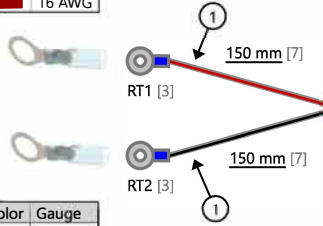
PART / PRODUCT IDENTIFICATION		
 ADRIAN STEEL®		ADRIAN STEEL COMPANY 906 JAMES STREET, ADRIAN, MI 49221
MAT'L USED: PURCHASED	DESIGNED BY: E.BURKE	REVISION LEVEL A
DESCRIPTION: HARN,POWER TLM BATTERY 4'		
WEIGHT (Lbs.): 0.2	SEGMENT CODE: ELE	PART NUMBER: 71903

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

Revisions			
Rev.	Date	Author	Description
A	10/29/2023	Bennet Fisher	Initial Drawing

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 MAGNETIC SWITCHES FOR TOPPER INTERIOR LIGHTING BAG INCLUDES: 3 MAGNETIC SWITCH SETS WITH WIRE LEADS AND CONNECTORS



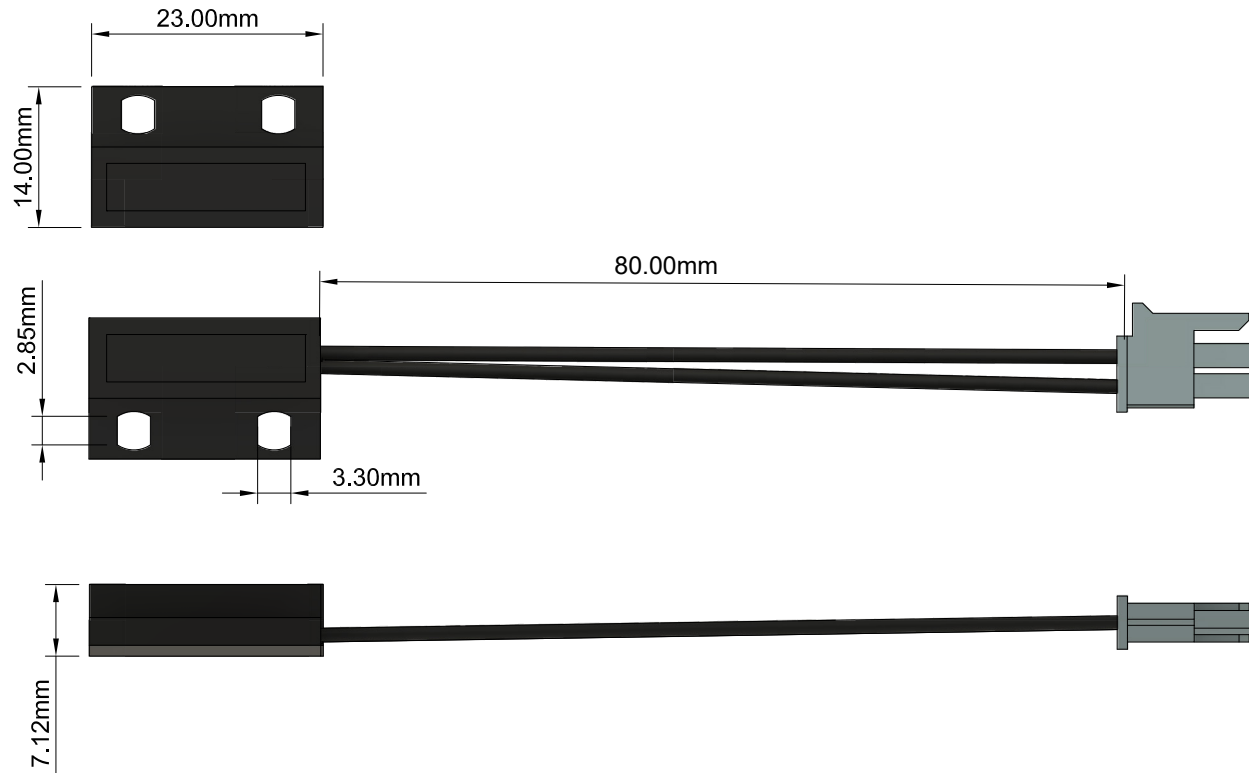
THIS DRAWING IS THE PROPERTY OF ADRIAN STEEL COMPANY AND IS NOT TO BE USED IN ANY MANNER
DETRIMENTAL TO THE INTERESTS OF ADRIAN STEEL COMPANY

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: EMB

PURCHASED COMPONENT
REFERENCED SUPPLIER AND/OR MANUFACTURER AAMP
REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER 71907
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 A
	MAT'L USED: PURCHASED	DESIGNED BY: E.BURKE	
DESCRIPTION: TLM MAGNETIC SWITCH P&P			
WEIGHT (Lbs.): 0.02	SEGMENT CODE: ELE	PART NUMBER: 71907	



Magnetic Switch Type: N.O. (Normally Open)
 Housing: Black ABS 15E1
 Wire: 22AWG Black
 Operating Distance: 15-20mm
 Working Current: 0.5A
 Operating Voltage: 0-110Vdc
 IP Rating: IP67
 Operating Temperature: -40 ~ 110°C
 Reed Operating Temperature: -40 ~ 125°C
 ABS Operating Temperature: -40 ~ 110°C
 Package: 3pcs/kitted set

Dept.	Technical reference	Created by Bennet Fisher 4/12/2024	Approved by		
		Document type	Document status		
		Title Magnetic Switch Part # 71907	DWG No.		
			Rev.	Date of Issue	Sheet 1/1

Reed Switch

ORD324

Issue Date: Mar. 25, 2008

■ Features

- In order to achieve high electrical capacity and long, uses iridium with high harness and high melting point.
- When power is turned on maximum voltage can reach 200V.
- To maintain the contact stability of the contacts, the contacts are sealed in a glass tube filled with inert gas.

■ Applications

- Position detection machine
- Rotation detection machine
- Vehicle electrical equipment
- Civil products

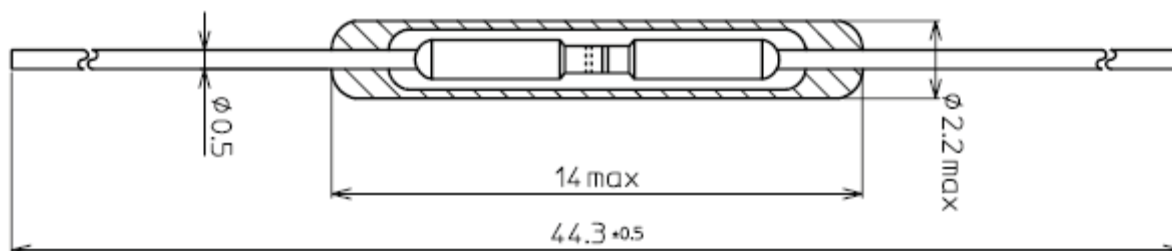
■ Appearance



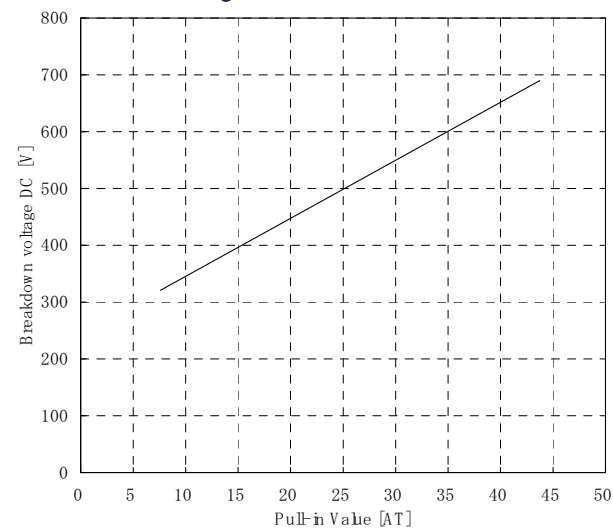
■ Features

Contact material / contact form	Iridium / 1A	Unit
Pull in value (PI)	10 ~ 40	AT
Disconnect value (DO)	5 min	AT
Contact resistance value (CR)	100max	mΩ
Withstand voltage between contacts	250min	Vdc
Insulation resistance	1×10^{10} min	Ω
Electrostatic capacity between contacts	0.3max	pF
Contact rating	10	W
Maximum switching voltage	200	Vdc
Maximum switching current	0.5	A
Maximum power current	1	A
Release time	0.4max	ms
Bounce time	0.3max	ms
Recovery time	0.05max	ms
Shock proof	100G-6ms	---
Vibration resistance	50G (10 ~ 2kHz)	---
Operating temperature range	-40 ~ +125	°C
Life (5Vdc-1mA, impedance load)	1×10^8	---

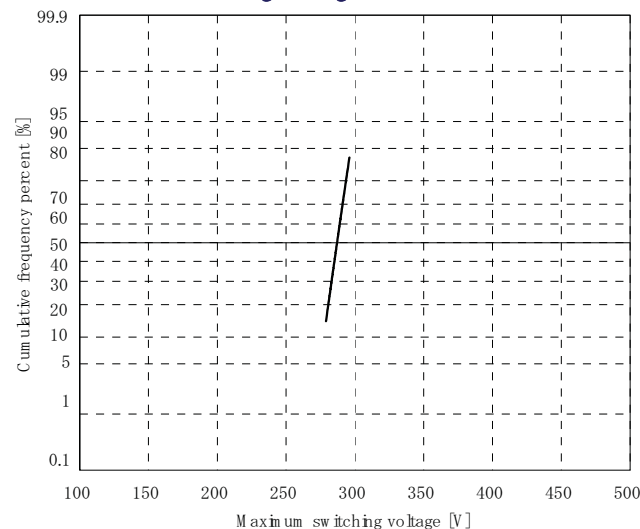
■ Dimensions (unit: mm)



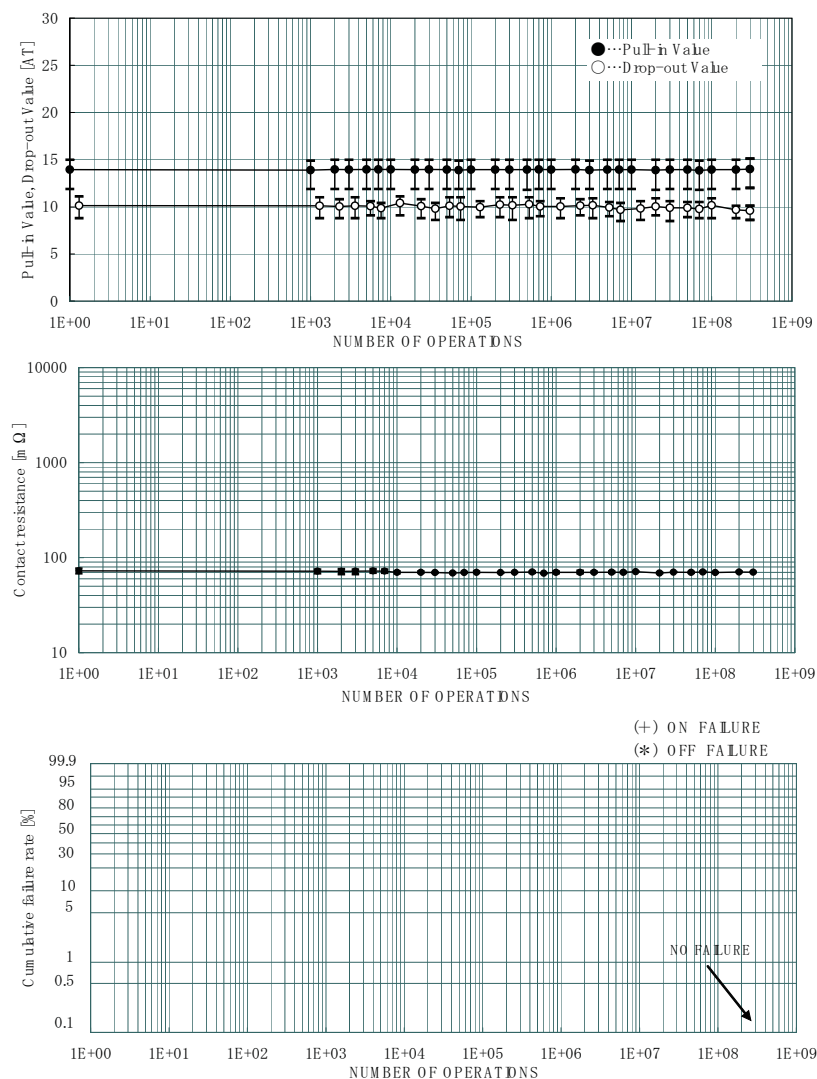
■ Withstand voltage between contacts



■ Maximum switching voltage

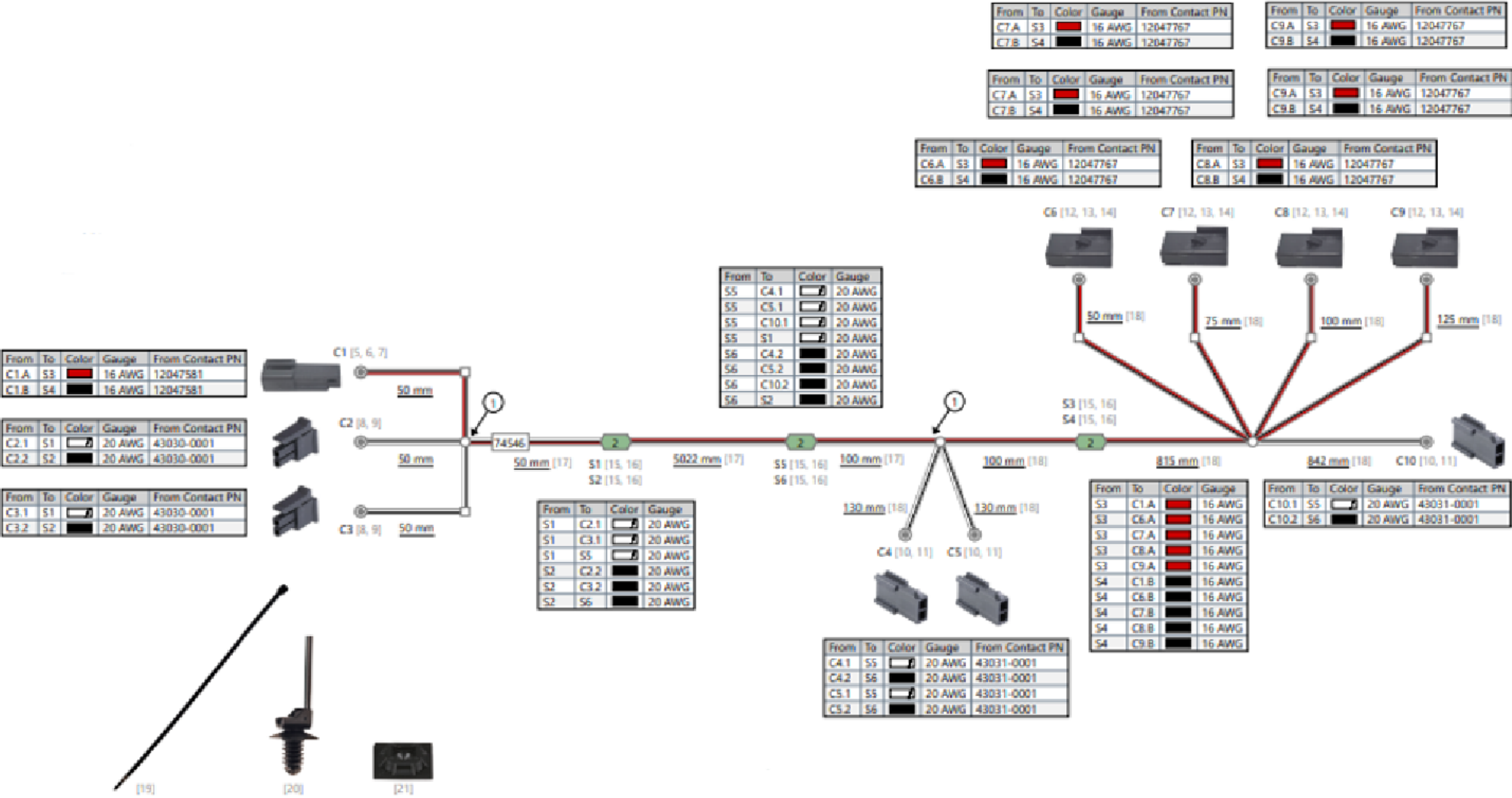


■ Life test data: 5Vdc-1mA



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



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: 27529 CURRENT ECN: 27529 ECN DESCRIPTION: RELEASE. REVISED BY: N/A
FEATURES 0.0 = ± .125 0.00 = ± .062 0.000 = ± .031 Material Thickness: per ASTM Std. Weld Callouts per AWS	
HOLES/SLOTS 0.0 = ± .062 0.00 = ± .031 0.000 = ± .015	
ANGLES 0° = ± 2° 0.0° = ± 1°	

PURCHASED
COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
STINGER

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER

COLOR (ONLY LIST IF COLOR SPECIFIC)

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

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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: \$PRPSHEET:{Mat'l Used} DESIGNED BY: JJC

DESCRIPTION:
POWER FROM TLM TO LIGHTS HARNESS4.5 & 5 FT BEDS

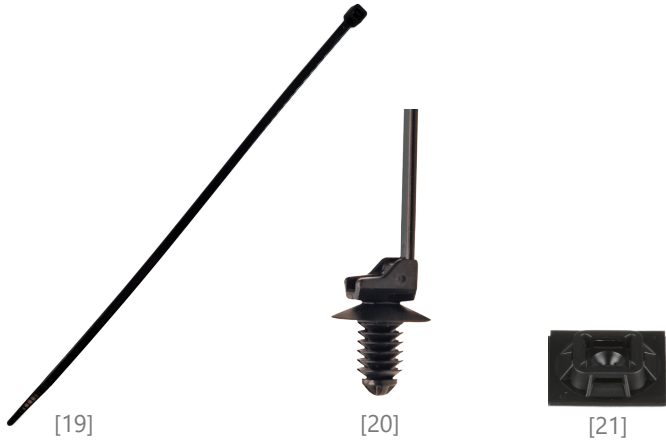
WEIGHT (Lbs.): 0.2 SEGMENT CODE: ELE PART NUMBER: 74546

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Wire		20 AWG White-Black	7539 mm
2	Wire		20 AWG Black	7539 mm
3	Wire		16 AWG Red GXL	8932 mm
4	Wire		16 AWG Black GXL	8932 mm
5	Connector	Aptiv	12047663	1
6	Contact	Aptiv	12047581	2
7	Lock	Aptiv	12047665	1
8	Connector	Molex	43025-0210	2
9	Contact	Molex	43030-0001	4
10	Connector	Molex	43020-0201	3
11	Contact	Molex	43031-0001	6
12	Connector	Aptiv	12047662	4
13	Contact	Aptiv	12047767	8
14	Lock	Aptiv	12047664	4
15	Splice		Generic Splice	6
16	Heat Shrink	CYG	CB-DWT-3/16	6
17	Corrugated Tubing		0.375" Nylon Loom	5172 mm
18	Tape	Tesa	51608	
19	Cable Tie	HellermannTyton	T30LL0M4	35
20	Cable Tie with Mount	Hellermann Tyton	T50RTM250HSM4	10
21	Cable Tie Mount	Panduit	SGABM25-AV-C300	10
22	Label		Heat Shrink Style Label	1

From	To	Color	Gauge	From Contact PN
C1.A	S3	Red	16 AWG	12047581
C1.B	S4	Black	16 AWG	12047581

From	To	Color	Gauge	From Contact PN
C2.1	S1	White	20 AWG	43030-0001
C2.2	S2	Black	20 AWG	43030-0001

From	To	Color	Gauge	From Contact PN
C3.1	S1	White	20 AWG	43030-0001
C3.2	S2	Black	20 AWG	43030-0001



Revisions			
Rev.	Date	Author	Description
A	07/09/2024	Bennet Fisher	Initial Drawing

Coverings	
Id	Assembly
[17]	
[18]	

Notes	
①	Lock tape end of loom with 51608

From	To	Color	Gauge	From Contact PN
C7.A	S3	Red	16 AWG	12047767
C7.B	S4	Black	16 AWG	12047767

From	To	Color	Gauge	From Contact PN
C9.A	S3	Red	16 AWG	12047767
C9.B	S4	Black	16 AWG	12047767

From	To	Color	Gauge	From Contact PN
C6.A	S3	Red	16 AWG	12047767
C6.B	S4	Black	16 AWG	12047767

From	To	Color	Gauge	From Contact PN
C8.A	S3	Red	16 AWG	12047767
C8.B	S4	Black	16 AWG	12047767

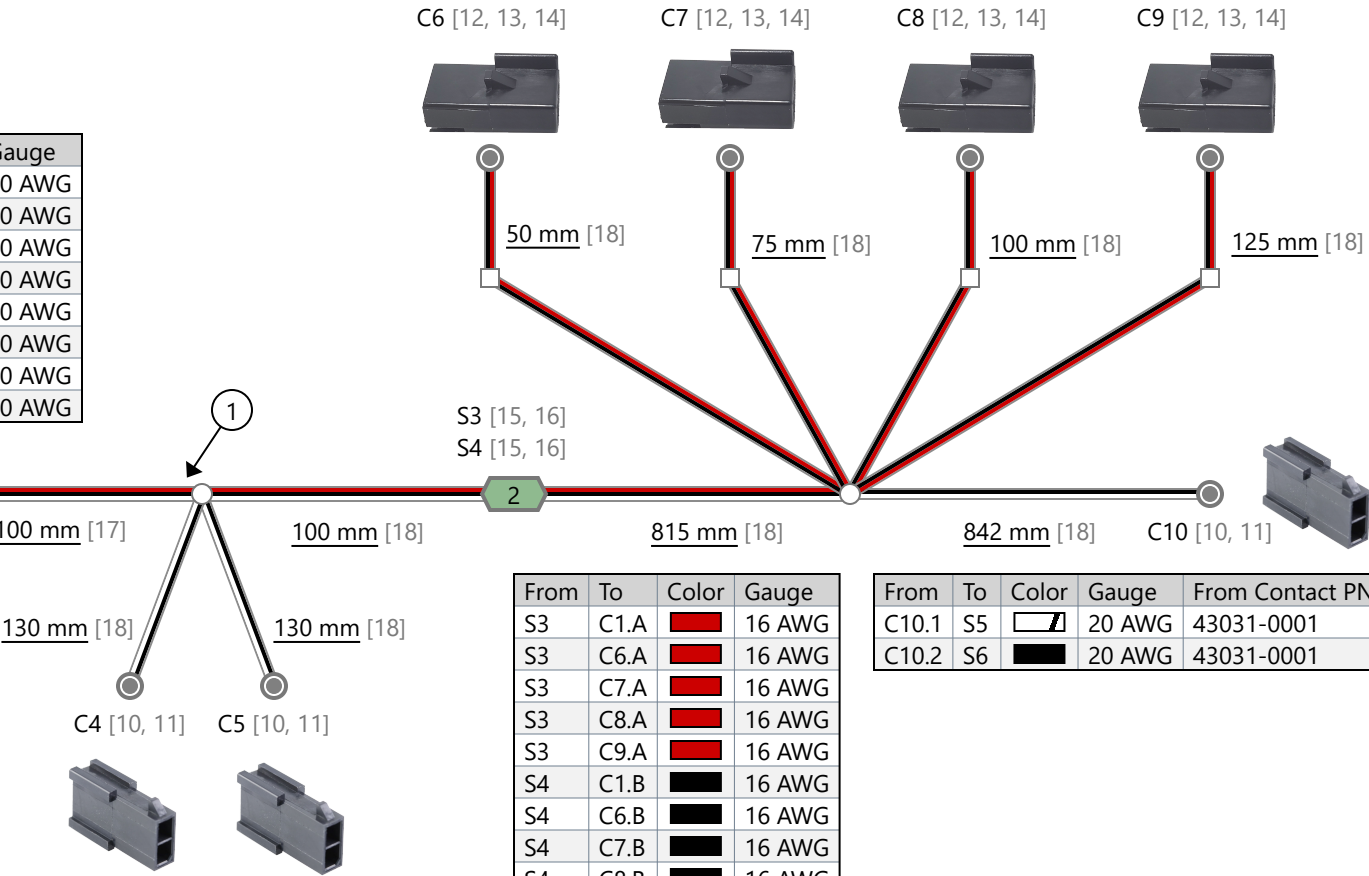
From	To	Color	Gauge
S5	C4.1	White	20 AWG
S5	C5.1	White	20 AWG
S5	C10.1	White	20 AWG
S5	S1	White	20 AWG
S6	C4.2	Black	20 AWG
S6	C5.2	Black	20 AWG
S6	C10.2	Black	20 AWG
S6	S2	Black	20 AWG

From	To	Color	Gauge
S1	C2.1	White	20 AWG
S1	C3.1	White	20 AWG
S1	S5	White	20 AWG
S2	C2.2	Black	20 AWG
S2	C3.2	Black	20 AWG
S2	S6	Black	20 AWG

From	To	Color	Gauge	From Contact PN
C4.1	S5	White	20 AWG	43031-0001
C4.2	S6	Black	20 AWG	43031-0001
C5.1	S5	White	20 AWG	43031-0001
C5.2	S6	Black	20 AWG	43031-0001

From	To	Color	Gauge
S3	C1.A	Red	16 AWG
S3	C6.A	Red	16 AWG
S3	C7.A	Red	16 AWG
S3	C8.A	Red	16 AWG
S3	C9.A	Red	16 AWG
S4	C1.B	Black	16 AWG
S4	C6.B	Black	16 AWG
S4	C7.B	Black	16 AWG
S4	C8.B	Black	16 AWG
S4	C9.B	Black	16 AWG

From	To	Color	Gauge	From Contact PN
C10.1	S5	White	20 AWG	43031-0001
C10.2	S6	Black	20 AWG	43031-0001



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	Designed By	Bennet Fisher	07/09/2024		
	Engineering Approval				
	Manufacturing Approval				
	Revision Approval			Part Number: 74546	
	Quality Assurance			Description: 4.5'-5' Bed Hood Latch Security Harness	
				Revision: A	
				Sheet: 1	

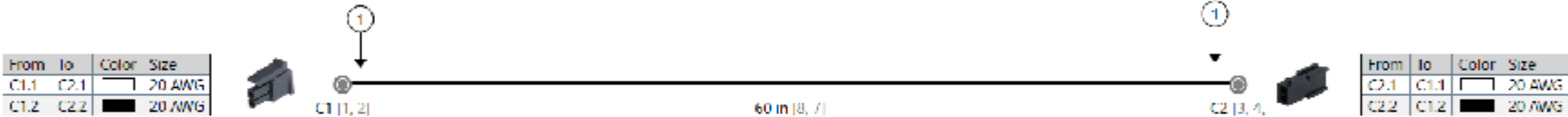
PURCHASED
COMPONENT
KEY FEATURES

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
N/A

Bill of Materials				
Id	Type	Manufacturer	Part Number	Quantity
1	Connector	Molex	43025-0210	1
2	Contact	Molex	43030-0001	2
3	Connector	Molex	43070-1001	1
4	Contact	Molex	43031-0001	2
5	Wire	Alpha Wire	2027 W1005	60 in
6	Wire	Alpha Wire	1635 BK005	60 in
7	Corrugated Tubing		0.25" Black Corrugated Tubing	60 in
8	Isape	Iesa	51036	

Coverings	
Id	Assembly
[8, 7]	

Notes	
1	Lock tape End of 1 conn with Iesa 51036



Revisions			
Rev.	Date	Author	Description
A	3/9/2026	Alex Garavalia	Initial Release

Part Number	80769	Revision	
Description	RUD MAG SW1 HARN		
All dimensions in inches. All dimensions tolerances = 0.07"	Drawn By	Sheet	1 of 1
	Size	Scale	

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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: 29303
CURRENT ECN: 29303
ECN DESCRIPTION:
Release for Market Fill
REVISED BY: AJG

PURCHASED
COMPONENT

REFERENCED SUPPLIER AND/OR MANUFACTURER
STINGER

REFERENCED SUPPLIER AND/OR MANUFACTURER PART NUMBER
80769

COLOR (ONLY LIST IF COLOR SPECIFIC)

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

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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: A. GARAVALIA

DESCRIPTION: HARN, RUD MAG SWITCH EXT

WEIGHT (Lbs.): 0.5 LBS

SEGMENT CODE: ELE

PART NUMBER: 80769

Introduction / Comments:

Install Instructions For Topper Interior Lighting for Maverick

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 Lighting in Roll up Door Topper - Ford Maverick

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

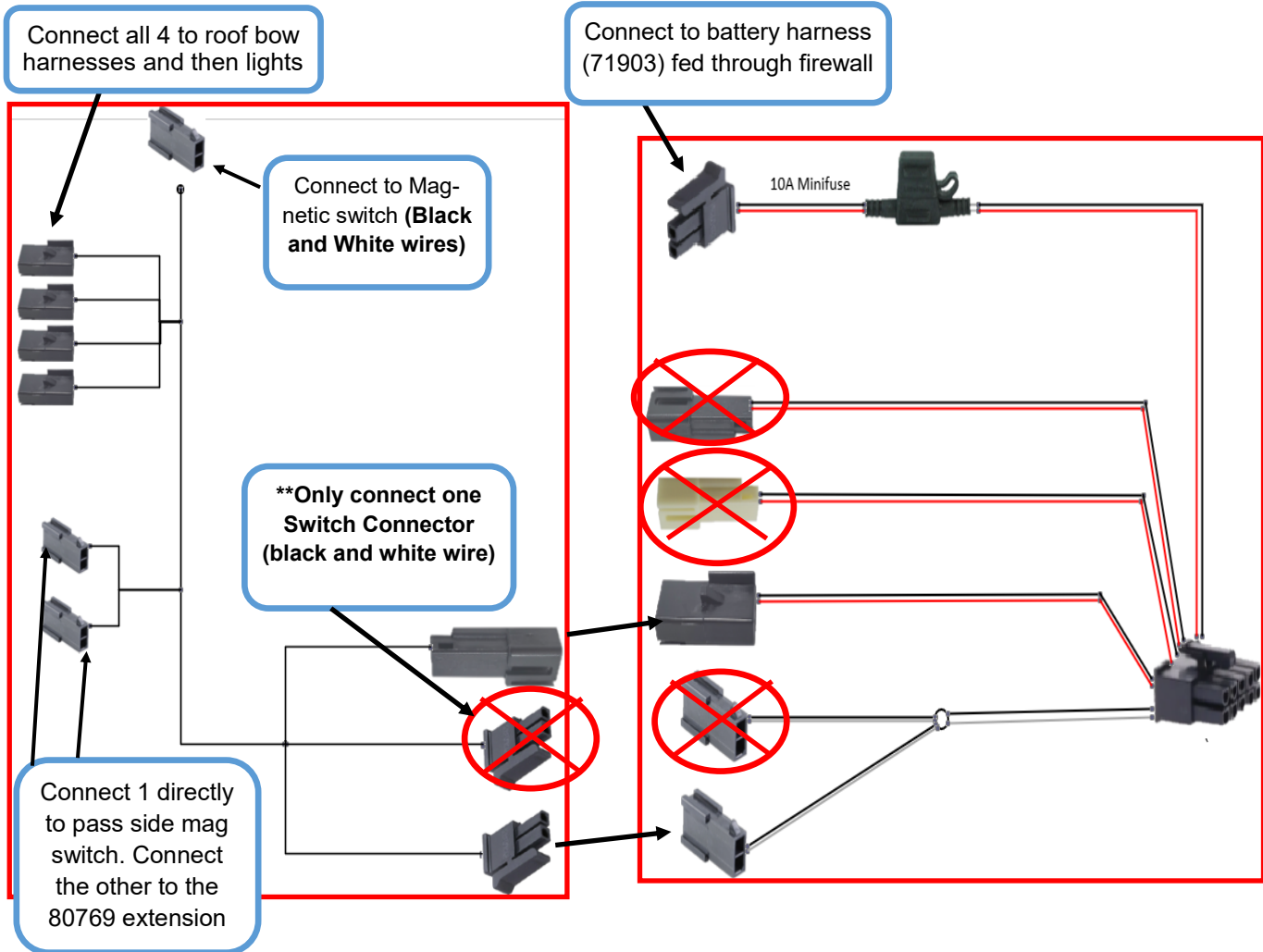
These plug and play kits are completely modular and can be configured in many different ways. Placement of lights will be determined by sales order drawings/customer ask.

Therefore, these instructions are for the most standard configurations, and for reference only.

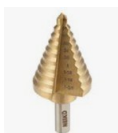
Overall Harness Diagram

74546 Harness

71902 TLM Harness



Tools Required:



Screwdriver

Power drill, 3/8" step
drill bit

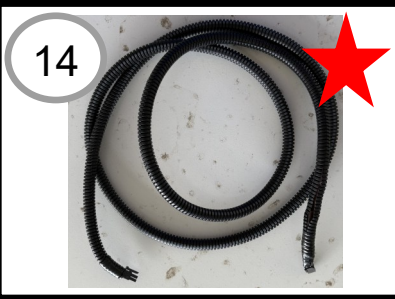
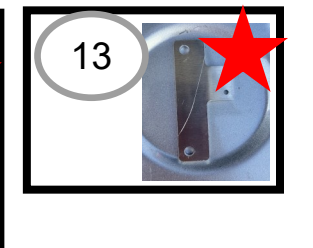
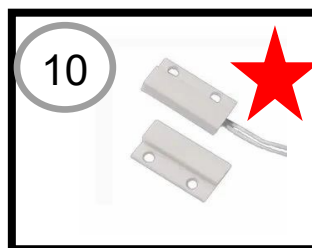
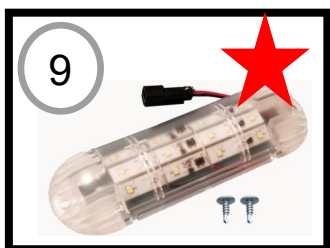
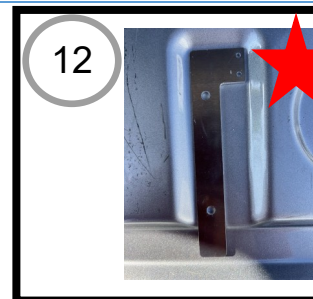
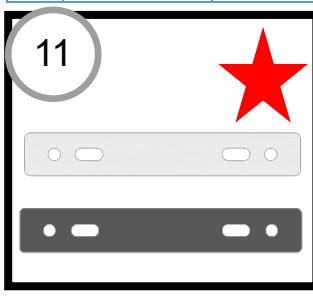


Components:

Please note all these components may not be used in every install. Only install what you have. Refer to the order drawing. Integrated Truck Solution Kit 74632 components are denoted with a red star.



#	Part Number	Description	Qty
1	71902	TLM Module/Harness	1
2	71903	TLM To Battery Harness 4 ft	1
3	74546	TLM To Lights Harness	1
4	63481	Roof Bow Harness #1	3
5	63482	Roof Bow Harness #2	1
6	65346	24" Strip Light	
7	65347	36" Strip Light	2
8	65348	48" Strip Light	
9	63480	Dome Light	2
10	71907	Magnetic Switches	3
11	73414-W	Magnetic Switch Bracket Spacer	3
12	73415-W	Magnetic Switch Rear Bracket	1
13	73416-W	Magnetic Switch Side Bracket	2
14	80769	RUD Mag Switch Ext Harn	1



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. Reference the instructions for only what you are installing.

Harness pictures are for reference only.

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.

Light Kit's Offered (4.5 & 5 ft):

Part Numbers/Kit Contents:

80944 Integrated Truck Solution: ★

Includes: (1) 36" strip light on each side of the side doors and 2 dome lights in the top, on the roof bows. Refer to all components denoted with a ★ and quantity in the blue parenthesis on page 3

80945 (1) 36" Strip light on the passenger side door only

Includes: (1) 36" strip light, (1) roof bow harness #1, (1) TLM Module, (1) TLM to Battery Harness, (1) TLM to Lights Harness, (1) Magnetic Switches Bag

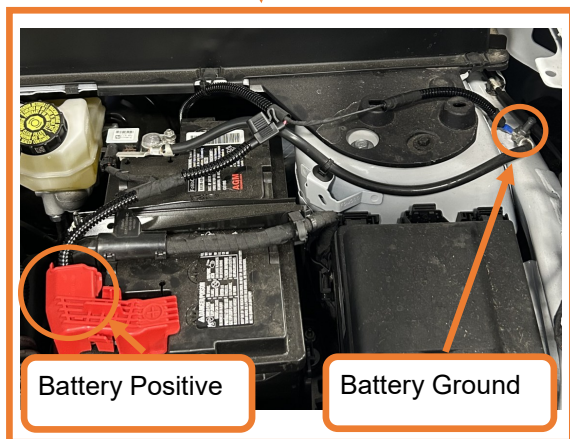
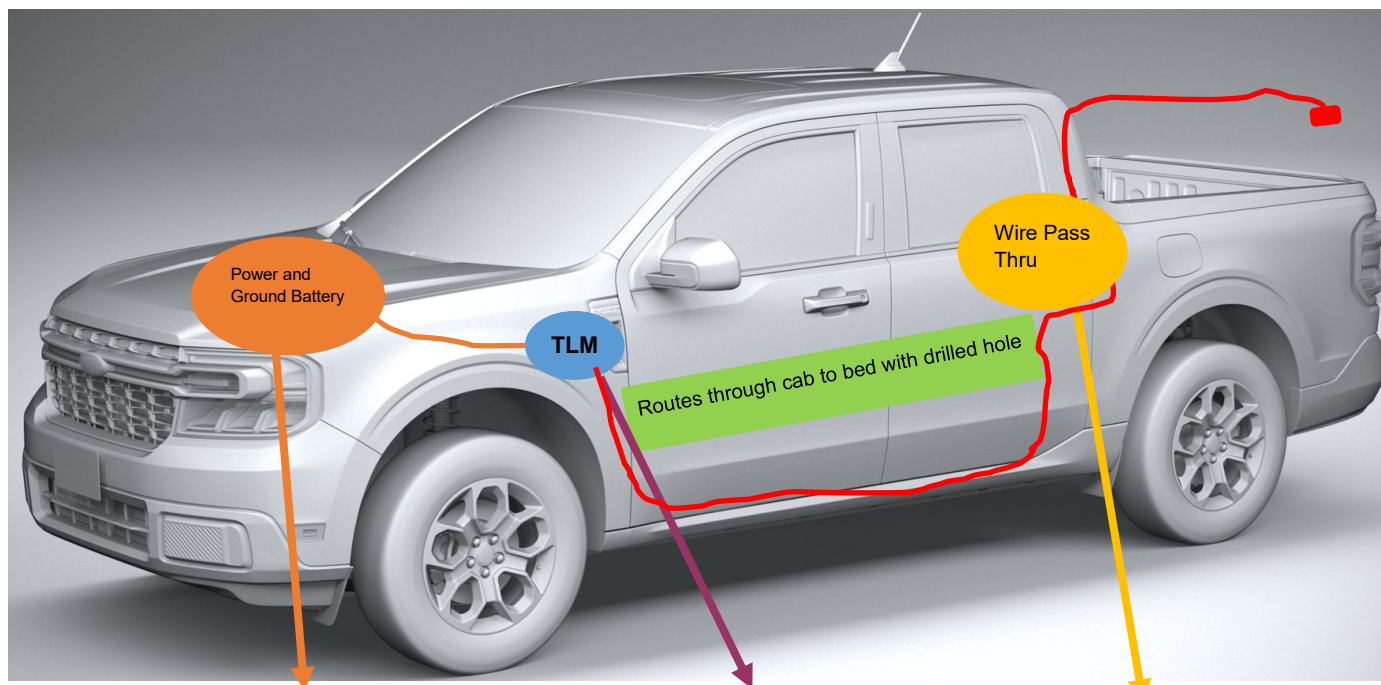
80946 (1) 36" Strip light on the driver side door only

Includes: (1) 36" strip light, (1) roof bow harness #1, (1) TLM Module, (1) TLM to Battery Harness, (1) TLM to Lights Harness, (1) Magnetic Switches Bag

80947 (1) 36" Strip light on the both side doors

Includes: (2) 36" strip light, (1) roof bow harness #2, (1) TLM Module, (1) TLM to Battery Harness, (1) TLM to Lights Harness, (1) Magnetic Switches Bag

Routing Overview: Maverick ICE



Color	Key - Items
Orange	Power and Ground Location
Blue	Harness Routing From TLM To Topper
Purple	Switches And Switch Harness
Yellow	Bed Wire Pass Thru

Light Placements

Please refer to the order drawing—not all lights will be used every install.
These are modular and created to work depending on customer needs.

Driver's Side



36" Strip

Passenger's Side



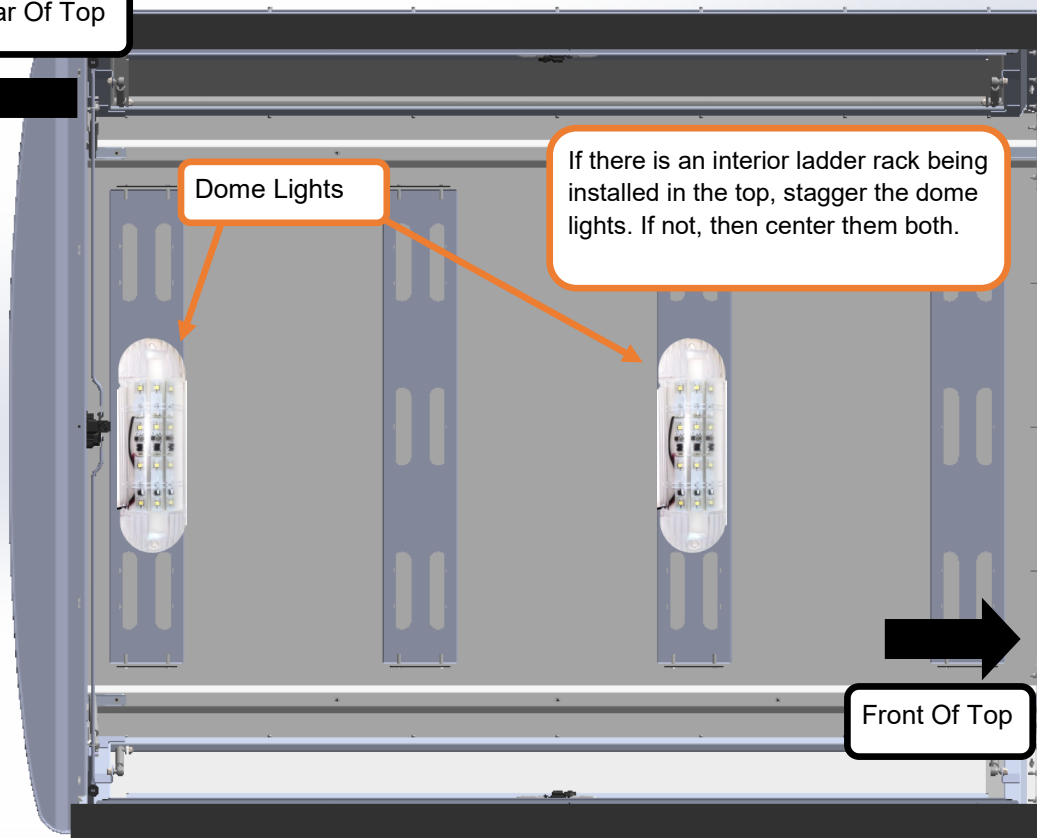
36" Strip

Rear Of Top



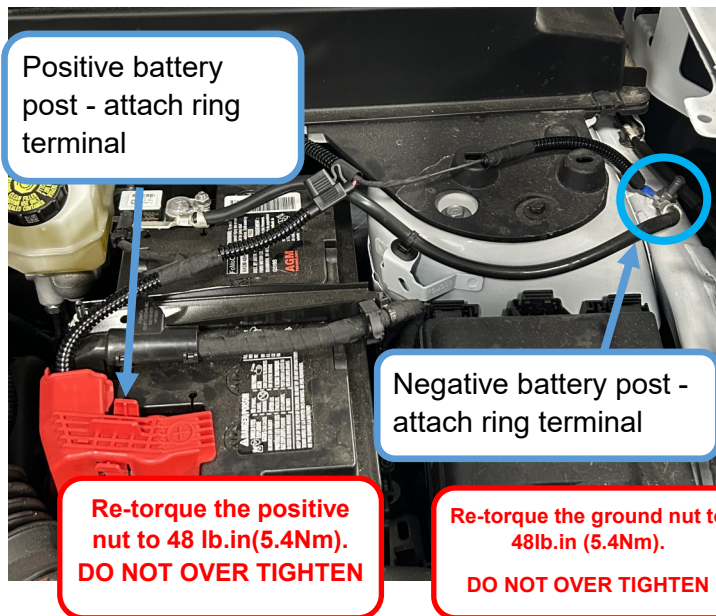
Dome Lights

If there is an interior ladder rack being installed in the top, stagger the dome lights. If not, then center them both.



Front Of Top





Pull negative ring terminal end some to reach ground stud. This will move the connected loom, as shown in the image. Once you ensure the negative harness is the proper lengths, then wrap the exposed wire in loom, and secure with electrical tape.

Step 1: MAVERICK ICE ONLY

Battery-

Open the hood and locate the battery.

Locate the power harness 71903.

Remove the inline fuse in the fuse holder. Do not place fuse back into holder until after the install is complete.

Connect the red wire ring terminal to the positive battery post shown in the picture to the left. Torque the nut. Do not over tighten.

Connect the black wire ring terminal to the negative battery post shown in the picture to the left. Torque the nut. Do not over tighten.

Do not un-bolt the battery terminal clamps from the battery.

Step 2:

Route the power harness connector end through the engine bay grommet (circled in Green). Make sure to have a drip loop with the harness.

Locate the driver's side door sill area.

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

Once harness 74546 has been connected to TLM, continue to route towards the backseat underneath the removed trim pieces shown to the left.

Silicone Grommet when harness has been routed to secure.



Reference pg. 5 for routing through the firewall.

TLM Information:

Please note there is currently a REV A TLM and a REV B TLM. Please view the TLM top right corner to confirm which REV you have . Then follow the next instructions.

REV A:



REV A DIP SWITCHES:

1	2	3	4	5	6
Down	Down	Down	Up	Up	Down

REV B:

Stinger Part #: TLM Rev B

DIP 1	DIP 2	V-Sense	DIP 3	DIP 4	DIP 5	Minutes	DIP 6
Up	Up	OFF	Timer ON (Down) OFF (Up)	Up	Up	30	ON (Down) Steady Ground Input
Up	Down	11.2V		Up	Down	60	
Down	Up	11.5V		Down	Up	90	OFF (Up) Momentary Ground Input
Down	Down	11.8V		Down	Down	120	

Dip Switches 1 & 2 determine Voltage Sense Threshold
 Dip Switch 3 sets option to ON or OFF
 Dip Switches 4 & 5 set Timer Duration

REV B DIP SWITCHES:

1	2	V-Sense	3	4	5	6
Down	Down	11.8	Down	Down	Up	Down

For Rev A follow steps below:



Step 3: Locate the Timer Low-Voltage Module (TLM) and harness — Part number: 71902

First, plug the harness into the module.

Note:

You will NOT use the cream colored connector or the matching black connector. You will be using the smaller black module output connector, one(1) switch harness connectors (black and white wires), and the black power supply connector.

*** Ensure that the fuse from the inline fuse holder has been removed until the end of the install.



74546 fed through firewall, connected to TLM



74546 and 71902 Connections

Bring TLM to driver side, where power harness is fed through.

Please reference page 2 for the following connection information.

Locate the TLM to battery harness (71903) that has been routed through the firewall grommet and TLM power to light harness (74546).

On the 71903 harness, connect the black connector to the blunt red wire on the TLM. (Circled in red in first image, on top).

Plug the red and black connector on the 74546 to the mating connector on the 71902 (TLM), shown in the blue circle. Next, connect one of the switch connections (black and white wires) to one of the mating connections on TLM. Circled in yellow. The rest of the connectors will not be used.

*** **You do NOT need to connect both switch connections.** To set the dip switch to 90 minutes (default) follow the chart below:

If customer would like a time different that 90 minutes, use the dip switches to set the time. Chart is as follows:

1	2	3	4	5	6
Down	Down	Down	Up	Up	Down

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	

TLM REV B



Part #: TLM Rev B

DIP 1	DIP 2	V-Sense	DIP 3	DIP 4	DIP 5	Minutes	DIP 6
Up	Up	OFF	Timer ON (Down) OFF (Up)	Up	Up	30	ON (Down) Steady Ground Input OFF (Up) Momentary Ground Input
Up	Down	11.2V		Up	Down	60	
Down	Up	11.5V		Down	Up	90	
Down	Down	11.8V		Down	Down	120	

Dip Switches 1 & 2 determine Voltage Sense Threshold

Dip Switch 3 sets option to ON or OFF

Dip Switches 4 & 5 set Timer Duration

Please set dip switches in the following order:

(This is set for 90 minutes, if customer would like 30,60, or 120 minutes please refer to the chart above to set dip switches accordingly)

1	2	V-Sense	3	4	5	6
Down	Down	11.8	Down	Down	Up	Down



Stick to Plastic Module
Underneath TLM

Step 4:

Use the adhesive tape supplied in the kit to stick the TLM to the side of the module up under the kick panel. Refer to the picture to the left for the TLM placement.

Secure the TLM and wires with zip ties.

Be sure the TLM is secured.

*** Picture is for location reference only.



Step 5:

Locate 74546 harness.

To remove backseat trim piece near door, backseat needs to be lifted as shown to the left.

Connect to TLM and route along driver side trim towards back seat of vehicle. Pull taught and secure. Use circuit diagram to ensure proper connection of TLM and 74546.

Pull down back seat bench

Use a step bit and drill a 3/8" hole to reach bed in location marked on picture. **Be sure to silicon seal after everything has been routed, secured, and coiled up**



****CHECK BEHIND ALL
DRILL LOCATIONS****



Step 6:

Route connector end through, towards the driver side topper pillar, then towards the driver side rear topper pillar along top of topper

Silicone drill hole to secure harness.
Secure with zip ties



All Maverick Vehicles

BAG71907 Includes:

FAS0554 X 6
FAS0674 X 6
FAS0942 X 20
FAS0943 X 20
BAG0406-A X 1

Step 7:

Locate BAG71907, magnetic switches PN 71907 and magnetic switch brackets PN: 73414-W, 73415-W, 73416-W.

Two small mounting brackets with two switch mounting points, will be used for exterior doors.

71907 will have 3 magnets and 3 magnetic sensors. Use the image as reference.

Insert FAS0674 into the topper door brackets and secure all brackets to topper door using FAS0674.

To secure magnetic switches to bracket and gas shock brackets, use FAS0942 on all magnets and magnetic switches. then secure with FAS0943



Bracket Used for
Two Exterior Doors
(Drivers/Passenger)

MAGNET



MAGNETIC
SENSOR





Step 8: Install Magnetic Switch Brackets

Using an alcohol wipe, clean brackets. After they are dry, locate one bracket for an exterior door. This first bracket will be for the driver side.

Peel off plastic on backside of magnet. Place fasteners in magnet and secure magnet on bracket using both fasteners provided.

For the driver side, the tab of the bracket will be on the left side for proper alignment.

Place spacer bracket behind bracket with mounted magnet. Secure spacer and bracket to outside edge of topper.

Line bracket up with first two holes after metal brace.

Use the image to the left as reference.



Step 9:

For the passenger side, the tab of the bracket will be on the right side for proper alignment.

Place spacer bracket behind bracket with mounted magnet. Secure spacer and bracket to outside edge of topper. Line bracket up with first two holes after metal brace.

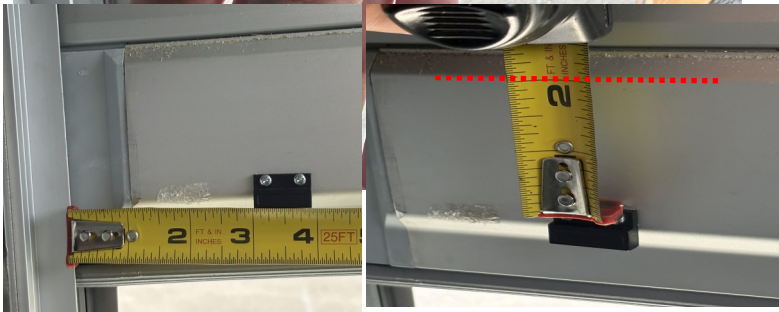
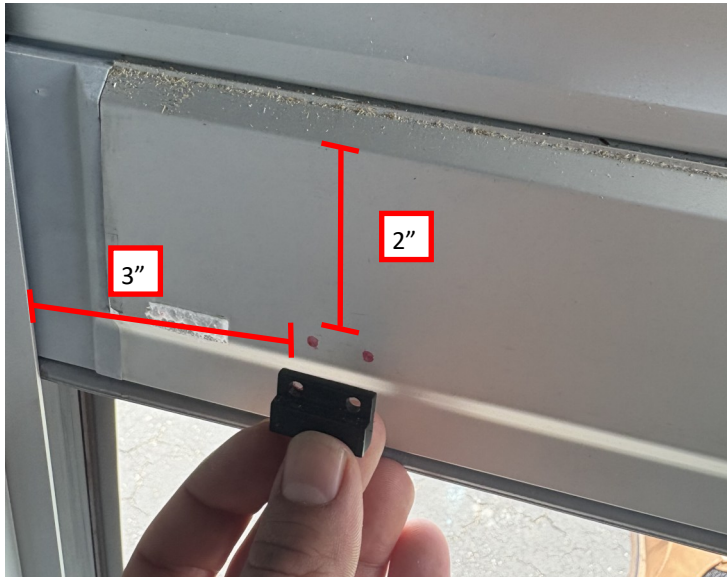
Use the image to the left as reference.

Step 10:

Move to the Roll Up Door on the passenger side. Moving to the inside of the topper on the inside face of the door, wipe down the area with an alcohol wipe. Using the magnet as a template measure 3" from the side of the door and 2" down from the top seam, and mark the two mounting locations to be drilled.

Using a 3/32" Drill bit drill two small pilot holes. **BE SURE TO NOT DRILL HOLE TOO DEEP AS TO POKE THROUGH THE DOOR.**

Using the provided self tapping screws from the magnetic switches mount the mag switch as shown.



Step 11:

For the passenger side, the tab of the bracket will be on the right side for proper alignment.

Place spacer bracket behind bracket with mounted magnet. Secure spacer and bracket to outside edge of topper. Line bracket up with first two holes after metal brace.

Use the image to the left as reference.





Step 12:

Identify the door shocks on the topper doors. Both the driver and passenger sides should have pre-existing holes on the shock mounts for placing the magnetic switch.

Start by cleaning the shock mount using an alcohol pad and remove any plastic film covering the back of switch.



Step 13:

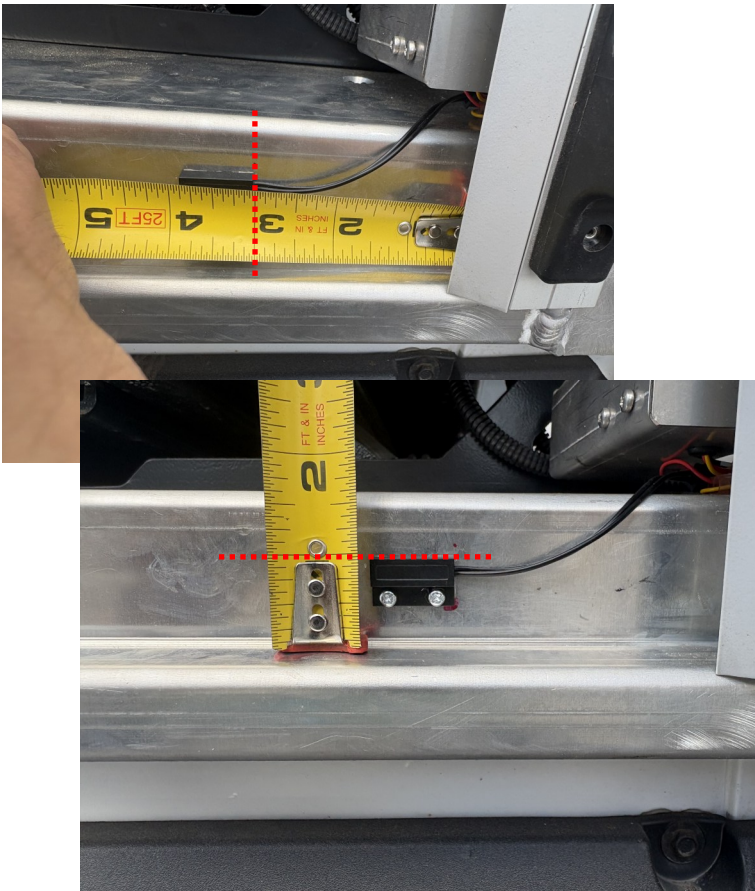
Locate driver's side door shock mounts. There will be two magnetic switches mounted to each side of the driver's side door shock mount.

Position the magnetic switch along with its wires and connector.

Place switch flush with edge of door shock mount as shown in the image. The driver side switch will have wires facing downward. The rear side switch will have wires facing upward.

Using a screw driver secure the magnetic switches are in proper position.

Use the provided image as reference.



Step 14:

Move to the bottom side of the rear door near the passenger side.

Clean the area with an alcohol pad.

Using the mag switch as a template, mark the mounting holes as shown.

3" from the side to the edge of the mag switch, 1" from the "floor" to the top edge of the mag switch as shown

Using a 3/32" drill bit, drill two pilot holes.

Using the self tapping screws provided, mount the magnetic switch.

Ensure that the mounting holes are on the bottom side.



Step 15:

Locate passenger side door shock mount. Secure magnetic switch on passenger side mount with wires facing upward.

Make sure magnetic switches are face to face with one another! If they are not aligned they will not function properly. Refer to image for proper alignment.



PASSENGER SIDE UPWARD



Step 16:

After mounting magnetic switches, begin to pull harness through grommet in truck bed. Connect magnetic switches to harness.

Pull the wiring upward to secure along the inside with zip ties.

Using zip-tie sticky backs, secure harness along inside of topper. Continue routing the harnesses in the corner of the topper, to the top front of the first roof bow. (Shown in red)

Use stud mounted zip ties to secure harness 71905 from door shock upward.

Step 17:

The harness end with connectors should end up between the first roof bow and the door frame on the driver side. See picture below for reference. Use the holes in the roof bows to secure wiring with zip ties.

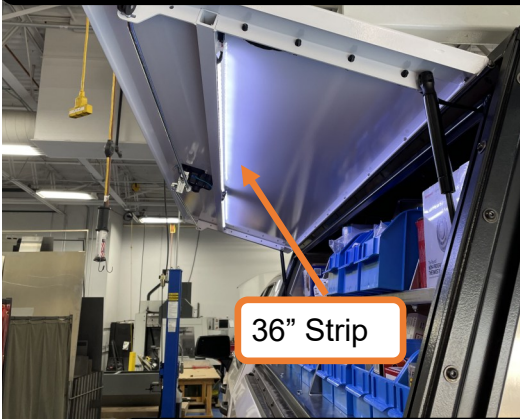
Be sure to not route any wires through holes in roof bows.

Be sure to clean all surfaces with alcohol wipes before placing sticky backs.

Can use stud mounted zip ties on inner channel near door shocks to secure harness.



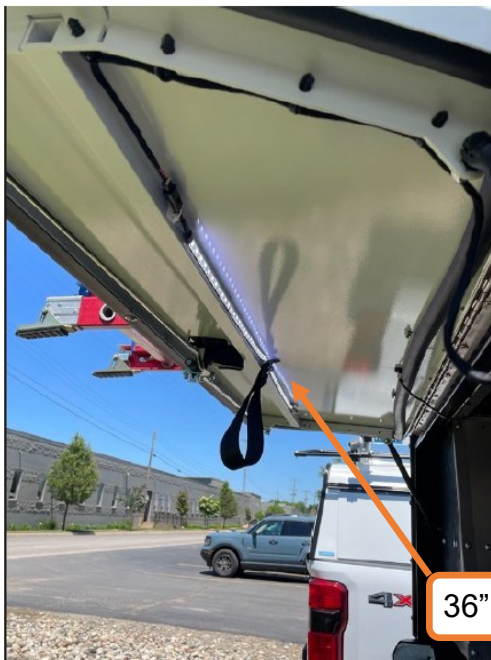
Driver's Side: Integrated Truck Solution Kit



Passenger's Side: Integrated Truck Solution Kit



Driver's, Passenger, or Rear Door: Other Interior Light Kits



Step 18:

Install the lights.

Open the topper doors that are requiring lights.

Locate the square tube running horizontal across the door. The side facing the interior of the top will be the side you will secure the lights to.

Using the alcohol pads provided in the boxes, clean the entire inside wall of the square tube where the lights will stick to before installing. Be sure to let the tube dry.

Be sure to have the larger connector end of the lights towards the rear for connecting into the roof bow harnesses.

On the drivers side, install (1) 36" strip lights as center as possible between the front and rear sides of the door.

For the passenger side, install (1) 36" strips, following the same instructions as above.

Only install the lights on the sides that are needed. Not every door will always have lights. These will vary on customer asks. Refer to page 4 for kit part numbers and components.

Be sure to have the larger connector end of the lights towards the rear for connecting into the roof bow harnesses.

Place a small sticky back square zip tie mount at each end of the strips to secure the connector to the topper.

Step 19:

Locate the (2) dome lights.

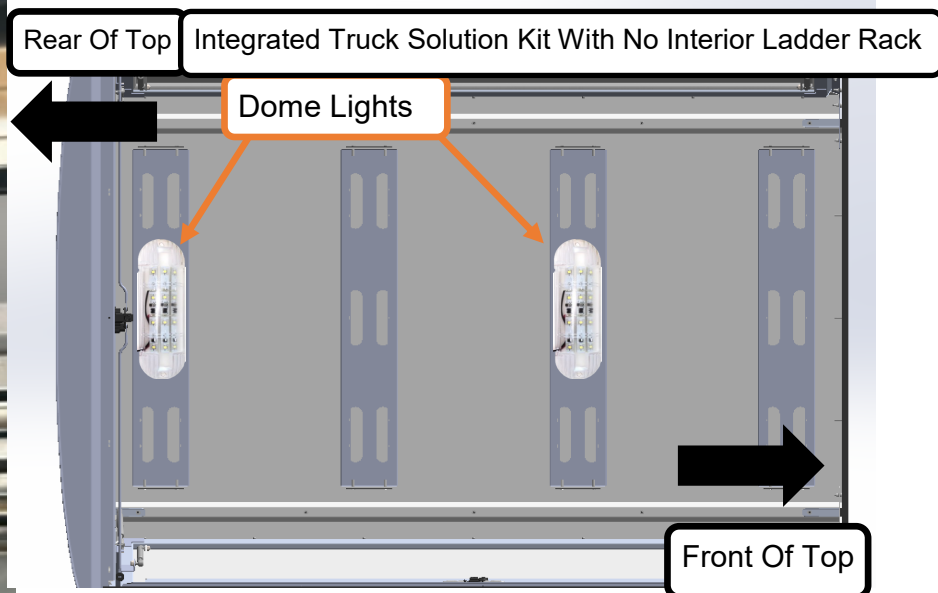
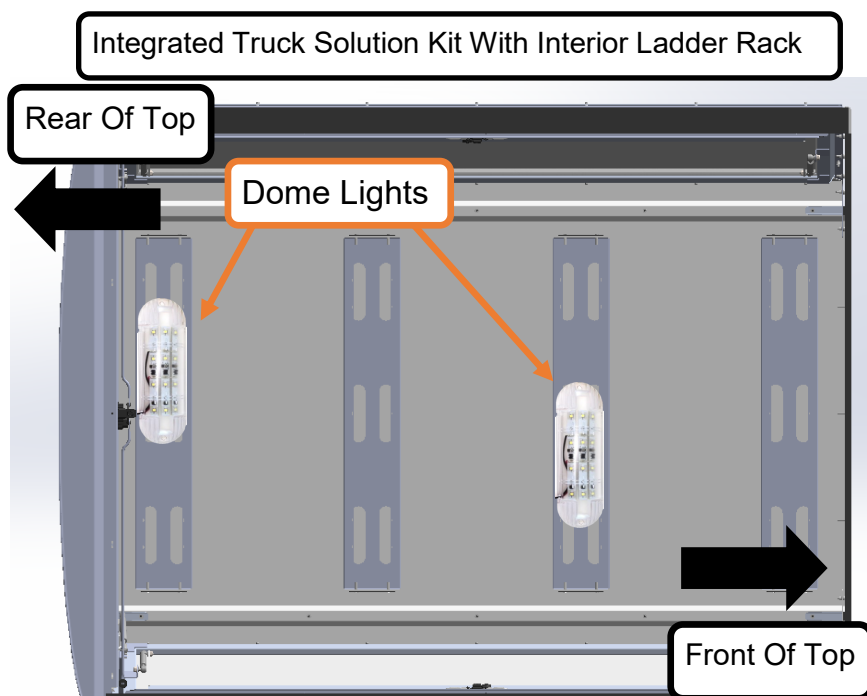
Be sure to clean the area that the lights will stick to carefully before installing. Use the alcohol pad provided in the boxes and let it dry before installing.

If there will be an interior ladder rack installed, stagger the dome lights on the roof bows like shown. If not then please center the lights.

Note: Don't use the self taper screws. Drill 2 holes and use nuts and bolts to secure Dome lights.



Please secure dome lights with (FAS-0022 10-24X0.75) screw, (FAS-0029 10-24) nut, and (FAS-0027) washer on roof bow.



Step 20: Roof Bow Harness Routing

Use roof bow harness #1 (63481) for routing the 1 of the 2 dome lights and the strip lights on the driver, passenger, and rear side door.

Use roof bow harness #2 (63482) for routing to 1 of the 2 dome lights

Utilize the existing holes in the doors and roof bows for securing the zip ties to. Clean topper surface in corner areas with alcohol pads. Begin to secure the harness using provided self adhesive tie mounts where necessary.

***IMPORTANT:

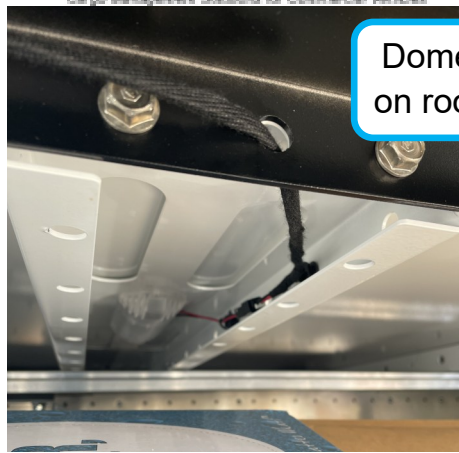
Ensure while securing wiring to avoid all sharp edges. (Shown in image 3, circled in red). When wiring from the light strips to the roof bow, avoid sharp edges at the ends.

When both side doors are open, allow very little slack on the wire, ensuring it is taut. However, while pulling wiring taut on the strip lights ensure the doors open and close without damaging the wires.

Route the harnesses to the TLM harness (74546) and plug them in.

Secure all the wires with zip ties and tuck neatly as possible between the first roof bow and the rear door edge.

Be sure all wiring is secured with zip ties.



Dome light
on roof bow



Dome light
on roof bow



Strip light on doors—
use existing holes for
zip ties

Watch for
Edge



Leave extra wiring
for opening the door

Step 21:

Continue to route power to light harness PN 74546 to magnetic switches mounted on door shock mounts.

Rear Door Routing:

Connect the magnetic switch extension harness to the 3rd mag switch connector in order to route down to the Roll Up Door Mag Switch

After plugging in the magnetic switches, be sure to secure the excess wiring using provided cable ties.

Once magnetic switches and all lights are plugged in, lights should be on.

To test and see if the magnetic switches are close enough to one another, open the tailgate of the truck and shut all of the topper doors.

Once all of the topper doors are shut, all of the lights should be off. If one topper door is open, the lights will remain on. In order for the lights to turn off, all of the topper doors must be shut.

Magnetic switches should be no more than 1/4" of an inch away from one another.

*** If the lights do NOT turn off when all of the doors are shut, preform next step below.

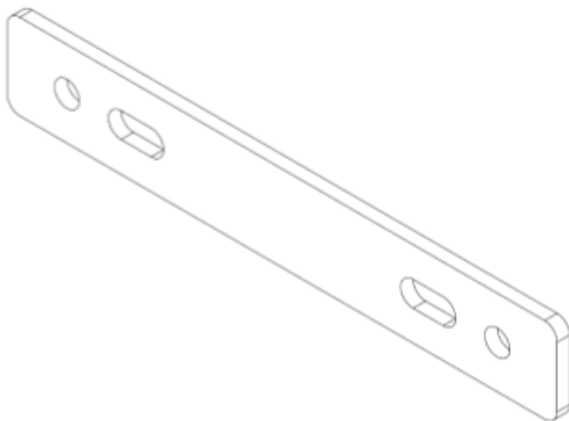
Locate magnetic switch bracket spacer PN 73414-W.

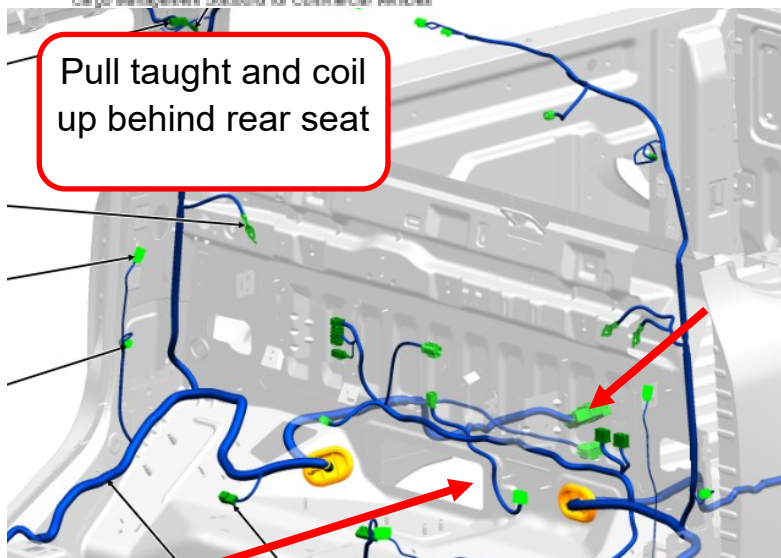
Place one or **two bracket(s)** behind the pre-existing bracket on the topper door. This can be placed behind one bracket and then tested again.

Utilizing hardware provided, secure bracket behind magnetic switch bracket. This is ensure the magnetic switches are close enough for connectivity.

A spacer may be placed behind all magnetic switch brackets on the rear door and two side doors if deemed necessary.

Magnetic switches mounted on topper door must be **NO MORE** than 0.3" apart from each when the door is shut.





Step 22:

Once all harnesses are connected, pull taught and secure from rear of topper towards cab

Coil up harness behind rear seat of cab where drill location was



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.

Be sure the lights turn on with the switch.

