

Introduction / Comments:

Install Instructions For Brake Light On Topper For Silverado

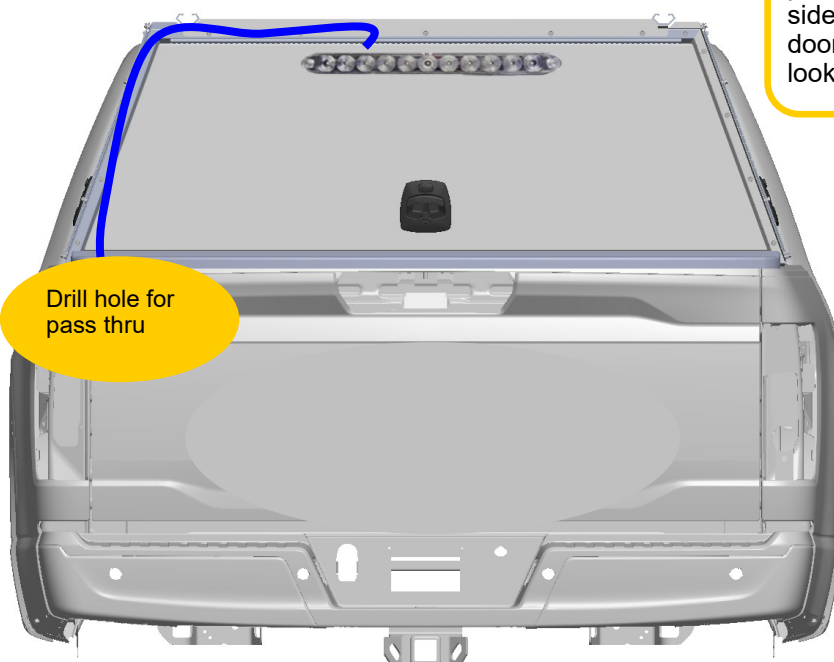
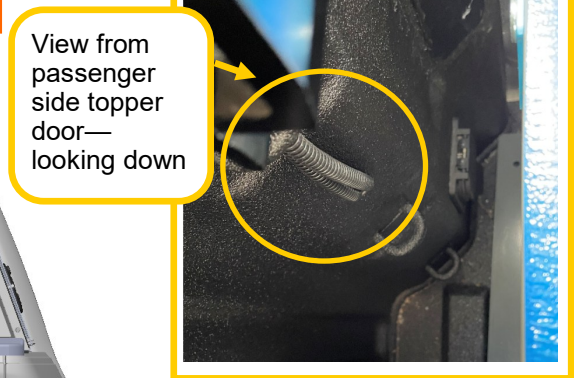
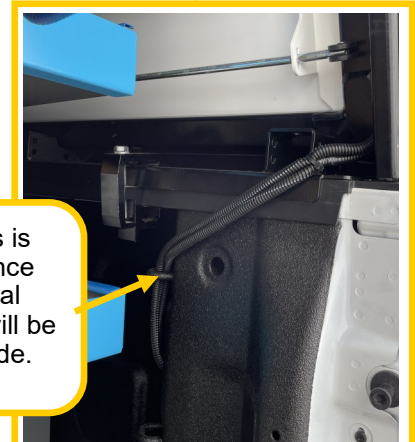
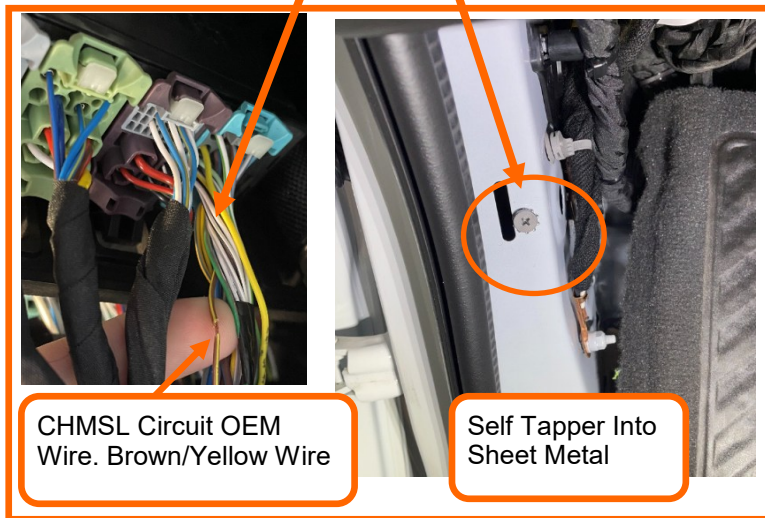
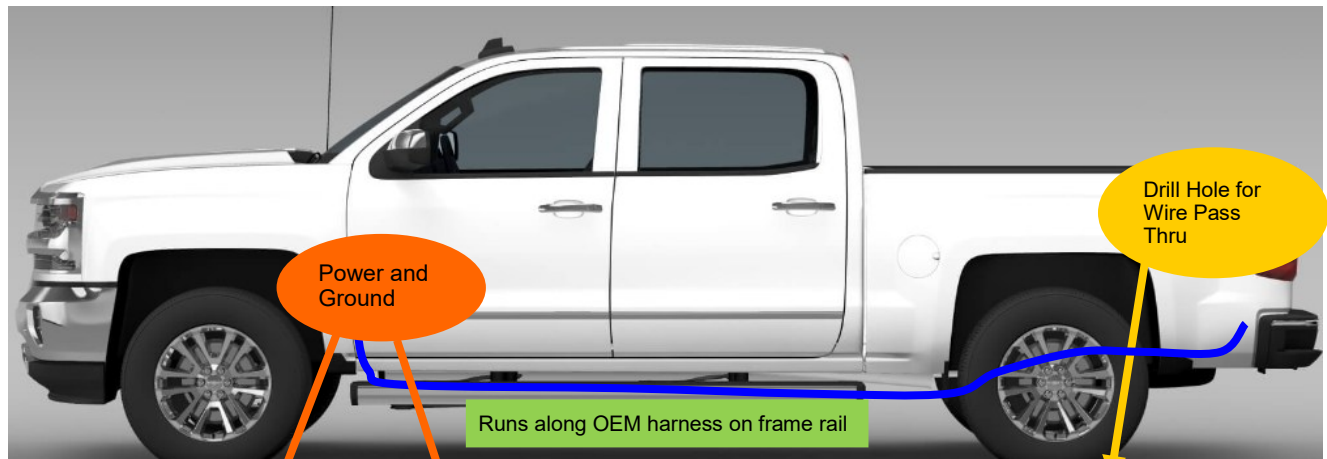
Note:

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 Brake Light On Topper For Silverado 1500 / 2500 / 3500

Routing Overview



Color	Key - Items
Orange	Power and Ground Location
Blue	Harness Routing
Yellow	Bed Wire Pass Thru



Step 1: Locate the brake light harness 71680.

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

Open the driver's side door. Remove the trim panels circled in red.



Step 2:

Locate the body control module on the lefthand side of the vehicle body, behind the OBDII port. There will be 5 colorful connectors with wire harnesses plugged into the bottom of the module.

For 2023 and 2024 Silverado 1500 and for the 2024 ONLY Silverado HD Series:

Locate the light blue connector (X5), pin 25. This wire will be Yellow/Brown. This is the OEM CHMSL circuit wire for the brake light. Use a meter to be sure this is the correct wire (OEM's tend to change wire colors).

For 2023 Silverado HD Series:

Locate the black connector (X4), pin 11. This wire will be Violet/White. This is the OEM CHMSL circuit wire for the brake light. **Use a meter to be sure this is the correct wire (OEM's tend to change wire colors).**

Separate the wire from the bundle (by your finger or a trim tool) to prepare it to be connected with the brake light harness.

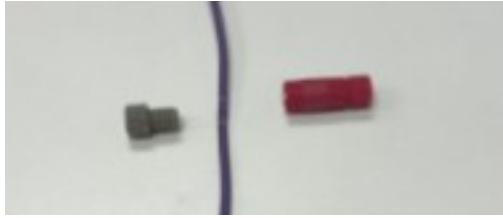
Locate the posi-tap in the brake light harness bag.



Posi-tap

The red wire in the pictures is referencing the brake light harness.

The purple wire in the picture is referencing the OEM brake light signal wire.

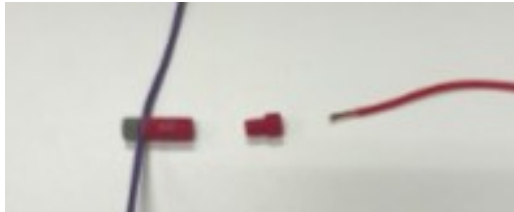


Step 3: Remove the grey cap on the posi-tap.

Push the OEM brake signal wire into the insert on the grey cap.



Twist the grey cap back onto the posi-tap with the OEM wire secured. The pin point on the posi-tap will puncture the OEM wire and obtain the signal.

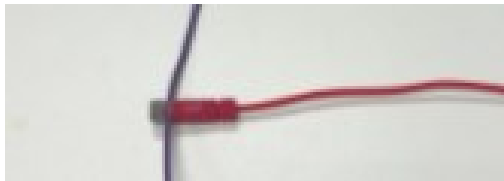


Remove the red cap on the posi-tap.

Insert the blunt cut end of the brake light harness through the red cap.

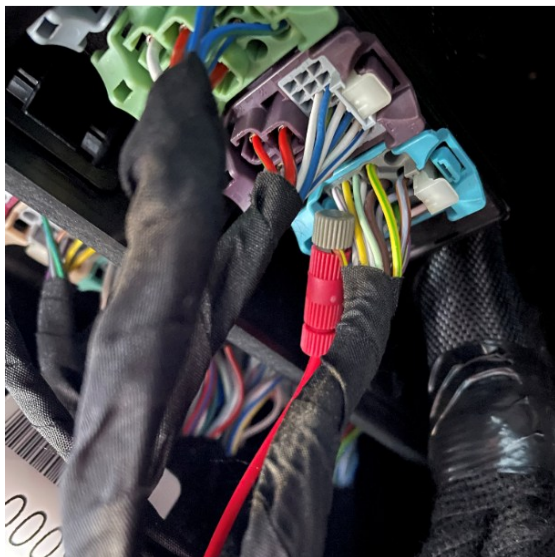


Twist the cap back onto the posi-tap with the brake light harness secured.



The picture to the left is the actual installed posi-tap onto the OEM wire.

Be sure the connection is secure.





Step 4: On the driver's side: locate the cut outs for the trim panels in the sheet metal near the OEM chassis ground. This is located to the left of the OBDII port on the vehicle body.

Locate the cut out that is higher on the frame than the OEM ground, shown in the picture to the left.

Locate the fastener bag BAG71800 and find the small tek screw and the star washer.

Insert the ring terminal through the star washer then through the ground ring terminal on the brake light harness.

Screw the tek screw into the frame like shown in the picture to the left.

Be sure not to over tighten or under tighten the screw. Be sure there is a good connection by checking the connectivity of the ground with a multimeter. You can do this seeing if there is a resistance (Setting "Ω" on meter) between the OEM copper ground and the new ring terminal.

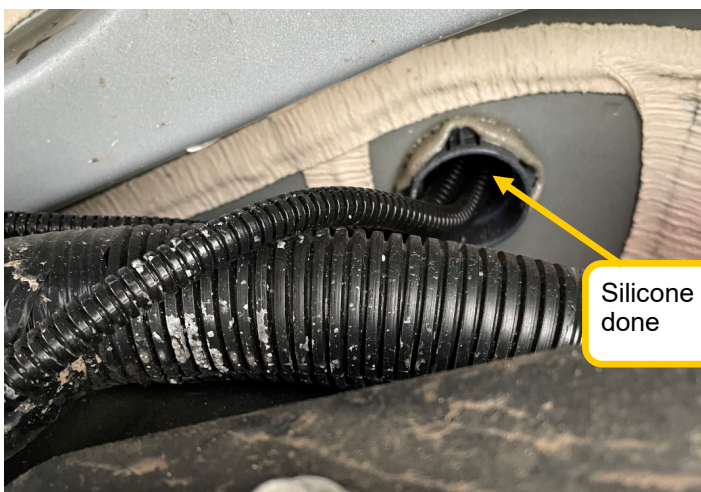


Step 4: Locate the OEM floor grommet by lifting up the carpet on the driver's side.

If installing the interior lighting kit as well as the brake light kit, utilize the larger grommet supplied in the brake light harness bag.

If only installing the brake light harness, utilize the smaller grommet supplied in the brake light harness kit.

Drill (for larger grommet a 1" hole and 0.625" (5/8) hole for the smaller grommet) then route the wire harness through the grommet, to the underbody of the truck.



Silicone when done.



Step 5: Routing (Refer to routing diagrams at the beginning of the instructions)

Route the brake light harness rearward following the OEM wire harness on the frame. Continue routing the harness rearward until you reach the bumper.

Continue routing the harness upward in the bed cavity, to the bed wire pass thru area.

Drill a hole above the 2 rings on the passenger side of the bed. Be sure the area is clear for a pass thru before drilling.

Tuck any excess wiring into the empty cavity underneath the bed frame. Bundle the excess wire in the cavity using zip ties. Use the tek screw and p-clip to secure the bundle to the frame.

Secure the wiring with zip ties.

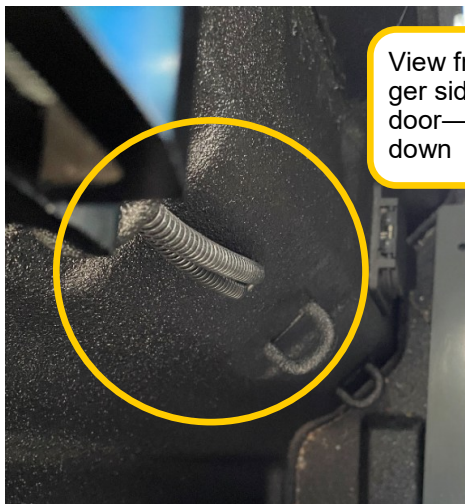
DO NOT secure wiring to any brake lines.

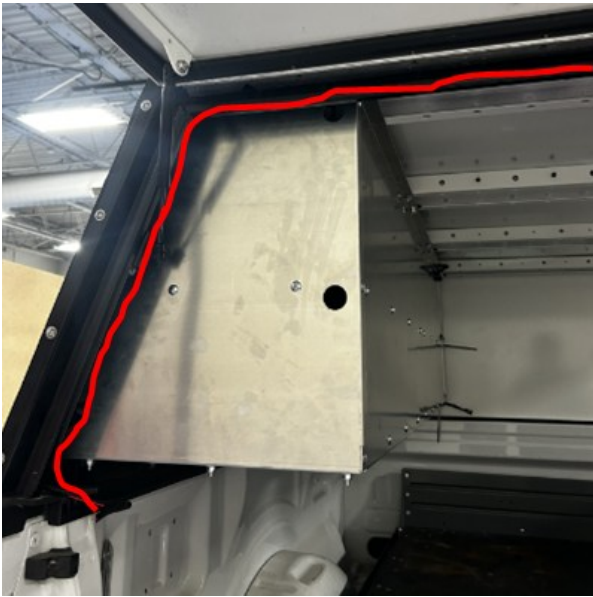
Excess Wire Under Body. Use the provided tek screw and p-clip to secure wiring to the frame



Note: This is for reference only. Actual location will be driver's side.

View from passenger side topper door—looking down





Step 6: Routing continued

Continue routing the brake light harness inside the topper, to the light.

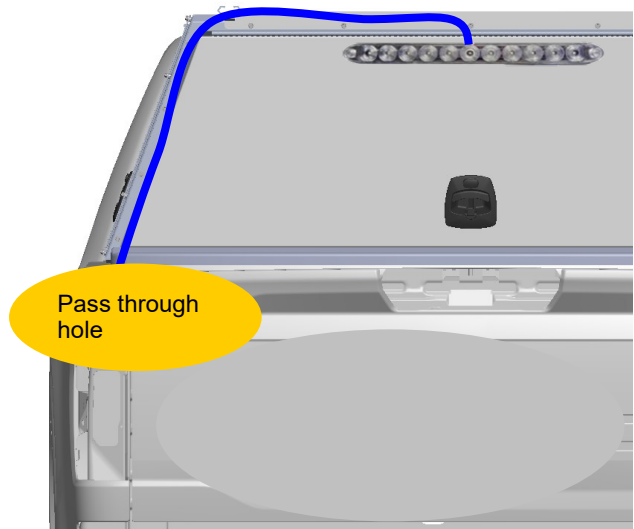
The harness should run along the driver's side rear cavity, then across the top cavity to the light (Red and blue lines shown in pictures).

Be sure to leave extra wire from the brake light to the topper rails before securing. This ensures the wires won't break when the topper door opens and closes.

Secure harness using stud mount zip ties.

Connect the harness to the light:
Plug the connectors together. Pull connectors lightly to ensure they do not come apart.

Be sure the red wire on the harness connects to the black wire on the light. Then the black wire on the harness connects to the white wire on the light.



Insert the fuse into the inline-fuse holder on the brake light harness.

The install is now complete.

Check that the brake light comes on when the brake pedal is pushed, then back off once pedal is released.

Introduction / Comments:

Install Instructions For Brake Light On Topper For RAM 1500/2500/3500 (5.6' - 8')

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.



Install Instructions For Brake Light On Topper
For RAM 1500/2500/3500 (5.6'-8')

Section 1: Table of Contents

Table of Contents:

Page 1: Cover Page/Introduction.....	1
Section 1: TOC & Safety Precautions Information	2
Section 2: Cable Kit Part Identification	3
Section 3: Tools Needed & Fastener ID/Torque Table	4
Section 4: General Vehicle Layout	6
Section 5: General Wiring Diagram	7
Section 6: Vehicle Integration	8-16
Section 7: Test and Check	17

These symbols are used in the document to warn installer to make sure there is understanding beyond general precautions used when working on electrical installations.

	ANSI Z535.6-2006 refers to the use of blue when “addresses practices not related to personal injury”.
	Yellow labelling level of personal injury = could result in minor injury.
	Red labelling level of personal injury = could / will result in death.

Section 2: Cable Kit Part Identification [PART# 72914]:

Pre-Assembly Picture of All Parts



Parts Included:

- (173") Nylon Harness Loom
- (1) P-Clip, Philips self tapping screw
- (4) Self-Adhesive tie mounts
- (2) Alcohol pads
- (1) Grommet
- (7) Tree mount cable ties
- (10) Cable ties
- (1) Fastener



Section 3: Tools Needed & Fastener ID/Torque Table:



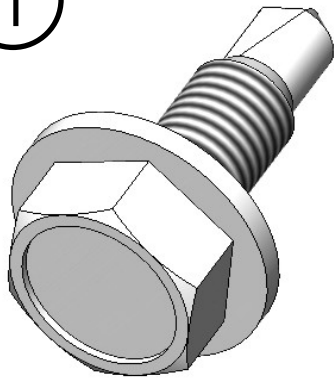
Figure 4-1: Tools Needed for Installation

Section 3: Tools Needed & Fastener ID/Torque Table:

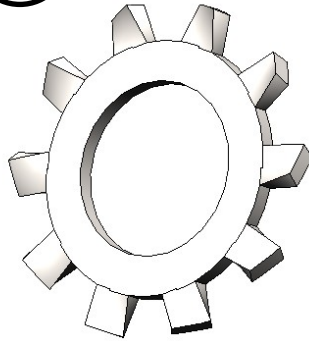
Torque Table for KIT 67342 [HYB]: 700/1000W

ITEM NO.	ASC PN	Description	PCS	Torque Range	Use Wrench or Size
1	FAS0641	1/4" HH Self tapper	1		7/16"
2	FAS0066	1/4"Star tooth Washer Galv.	1	—	—
3	Ground Stud Fastener (Used for RAM 1500 only)	10mm Nut	1	12Nm [+/- 1.2Nm] (106 lb.in).	10mm NUT

1



2

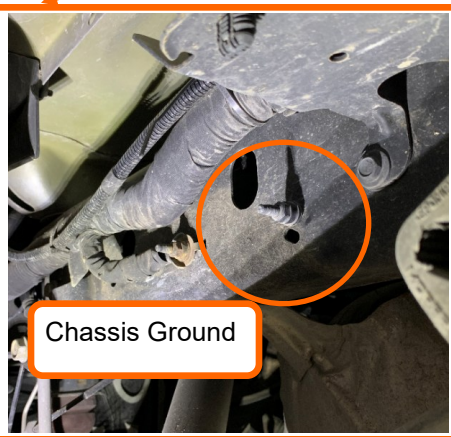
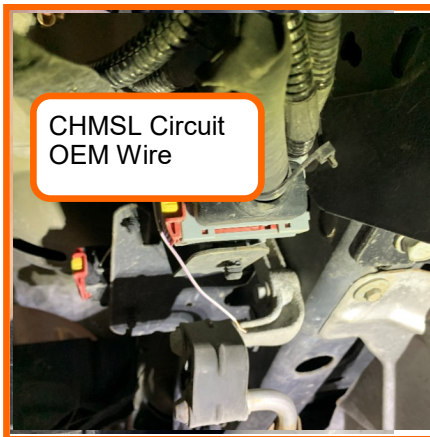
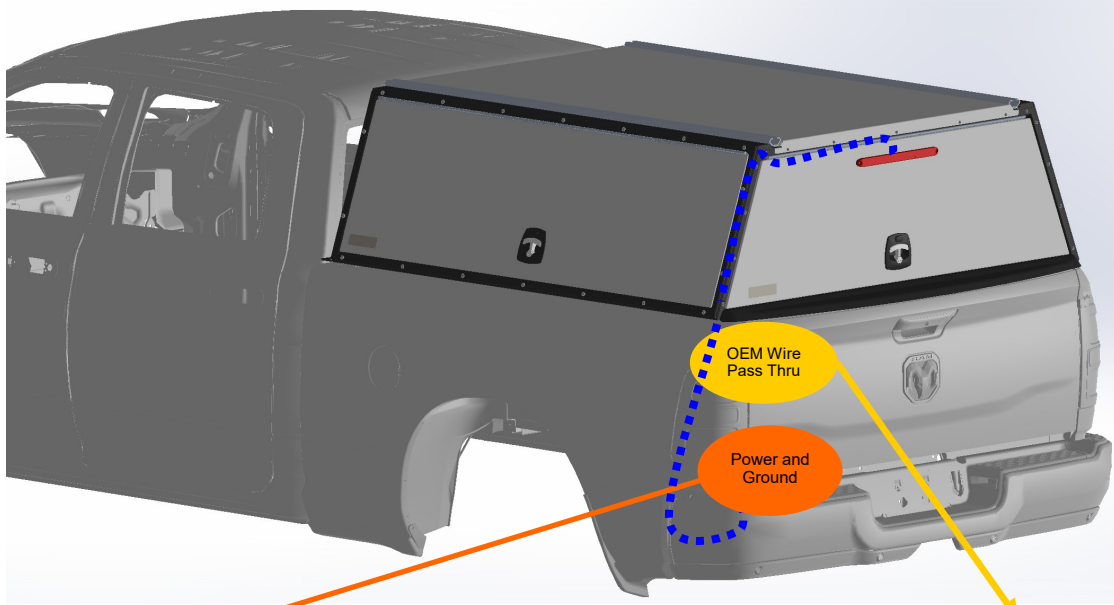


Used for 2500/3500 Only

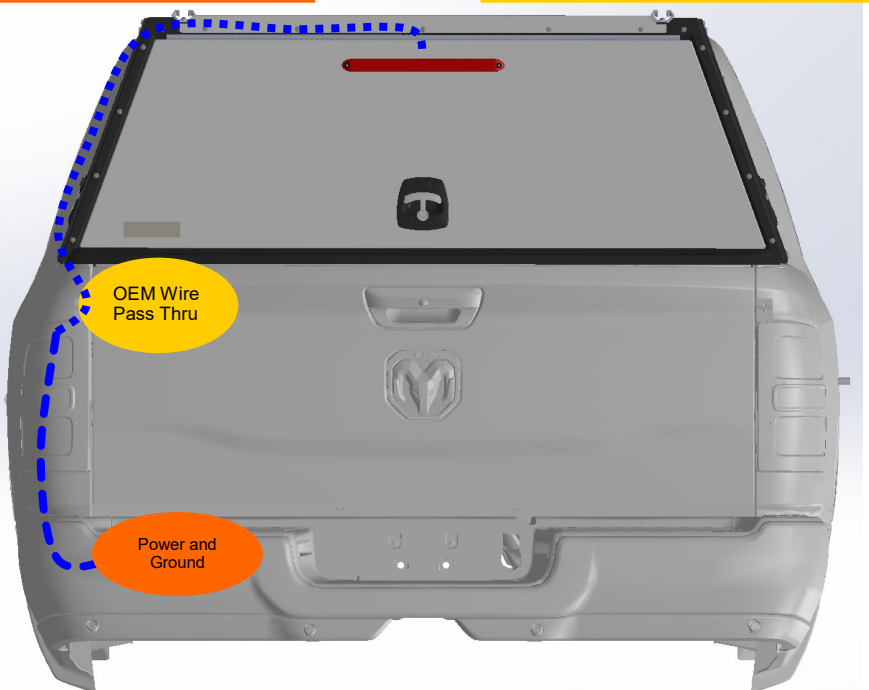
Used for Grounding to Chassis

RAM 1500 Only

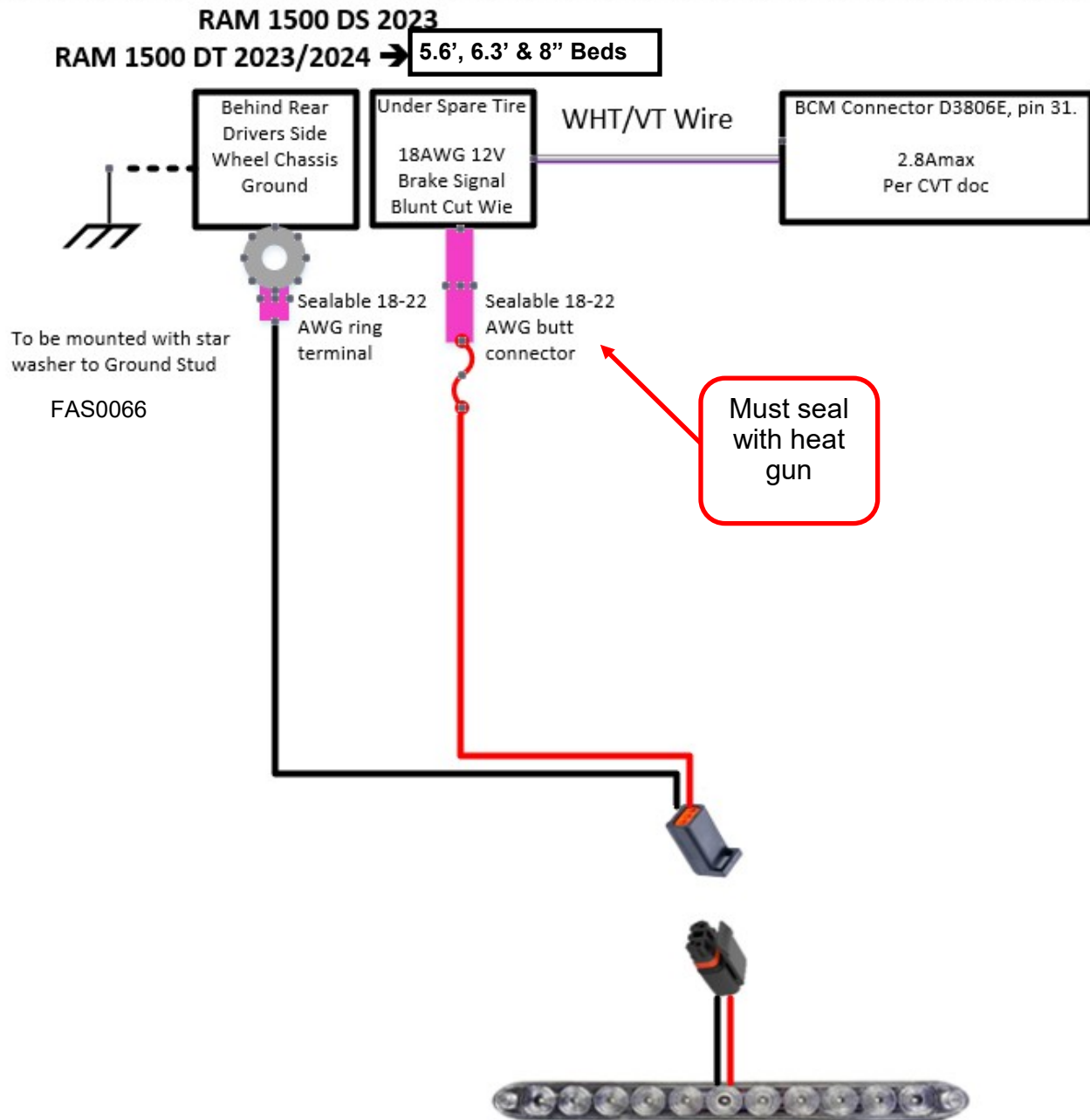
Section 4: General Vehicle Layout:



Color	Key - Items
Orange	Power and Ground Location
Blue	Harness Routing
Yellow	Bed Wire Pass Thru



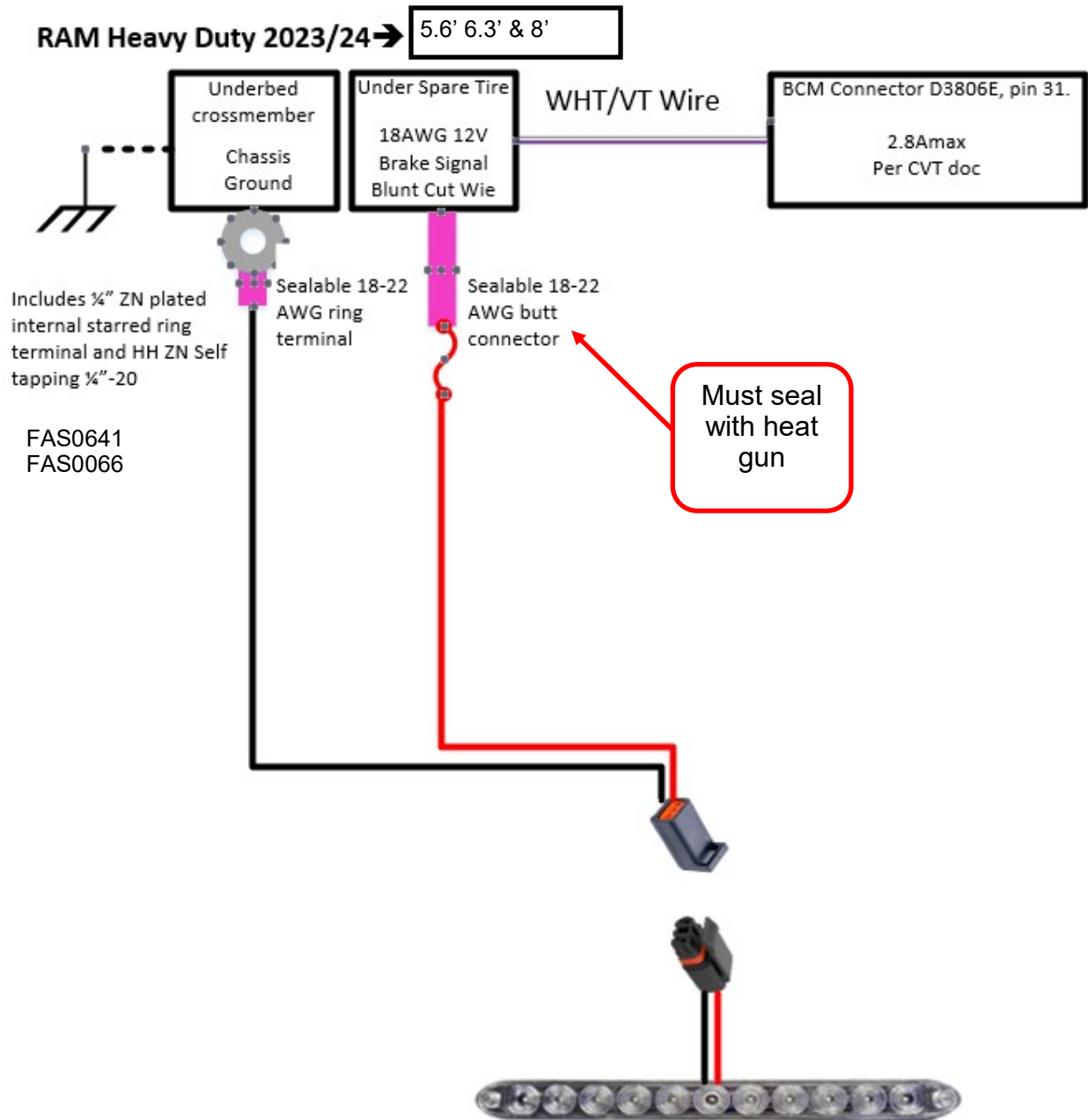
Section 5: General Wiring Diagram:



RAM 1500 DS 2023
RAM 1500 DT 2023/2024 → 5.6' 6.3 & 8' Beds
White/Violet blunt cut wire located on rear driver side frame

Figure 5-1: Wiring Diagram

Section 5: General Wiring Diagram:



RAM 2500/3500 DS 2023

RAM 2500/3500 DT 2023/2024 → 5.6' 6.3 & 8' Beds

White/Violet blunt cut wire located on rear driver side frame

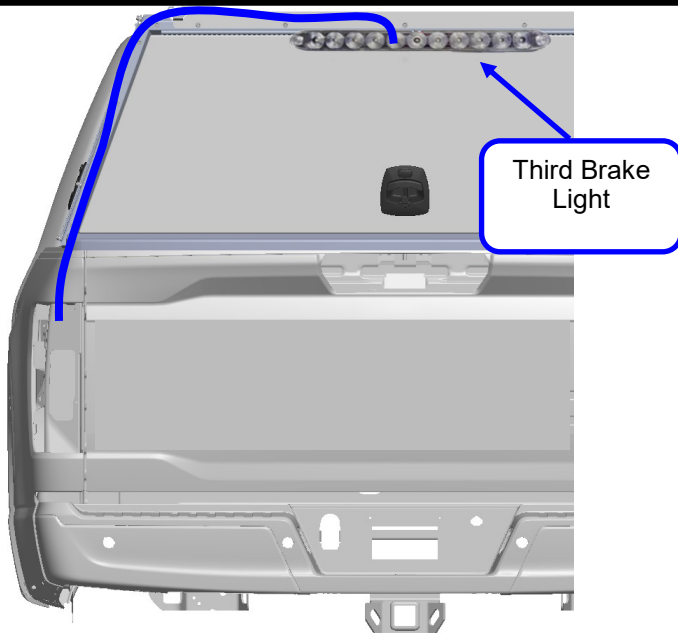
Figure 5-1: Wiring Diagram

Section 6: Vehicle Integration



Step 1: Locate the brake light harness 72914.

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



Step 2: Locate the 3rd brake light located in the middle rear of the topper. Plug mating end of brake light harness (72914) into pre-existing connector for the brake light.



RAM 1500



RAM
2500/3500

Step 3: Locate OEM grommet cover located in the truck bed wall on the driver side.

Using a drill and a 9/16" drill bit, drill a 9/16" hole in the center of the cover. Use the image to the left as reference. This hole will allow for the harness to be inserted into until. The grommet will then be in place around the harness, in the drilled hole.

The RAM 2500/3500 will route the wiring through the hole indicated in the 2nd image. The grommet on the harness will meet with the opening and fit accordingly. The existing grommet on the harness can be cut off and is not needed. However, be sure to add provided grommet in kit to harness.



Step 4: Routing (refer to routing diagram at beginning of instructions).

Once connection of the brake light and harness are made, use the push-click-pull method to ensure positive locking of the connector.

Following the images to the left, begin to route the harness towards the grommet cover. Continue routing the brake light harness inside the topper. The harness will be roughly routed from the brake light directly towards the driver side door of the topper and routed down as shown in the image.

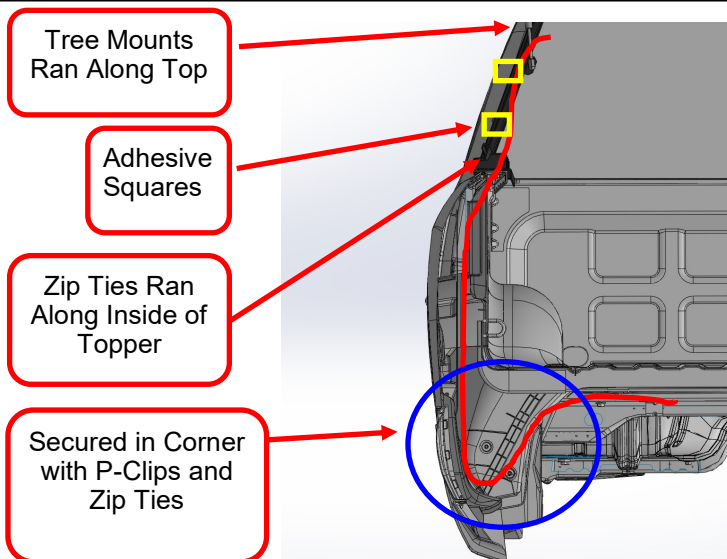
Be sure to leave extra wire from the brake light to the topper rails before securing. This ensures the wires won't break when the topper door opens and close.

*****IMPORTANT:**

Ensure while securing wiring to avoid all sharp edges. (Shown in image 2, circled in red).



Watch for Sharp Edge

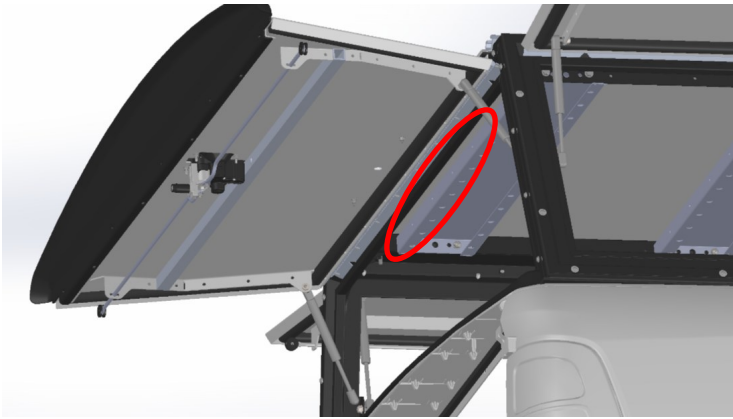


Step 5: Begin to secure the harness using provided zip ties and stud mount zip ties where necessary. Ensure the harness is taut. Once the harness is secured running along the inside of the driver side, drop the harness down the D-pillar of the vehicle, through the grommet cover.

Pull the harness and ensure the grommet on the harness is in proper position with the cover.

The harness down the D-pillar shall be tightened to the rail using p-clips to hold the harness in the corner as it goes towards the bed wire pass through cover.

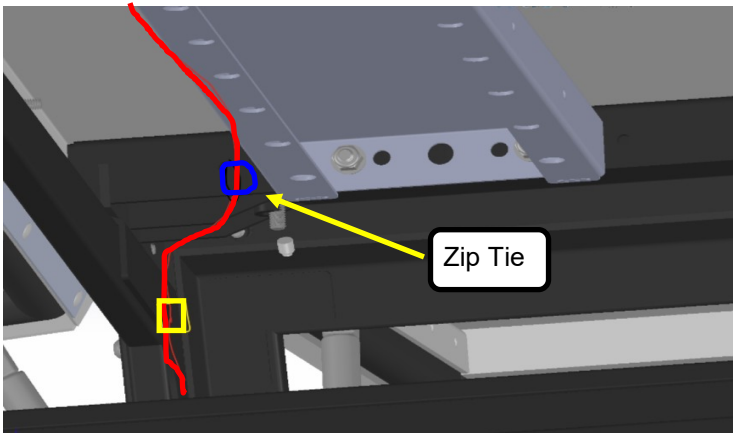
*** Use image as reference only. Drill p-clip into bed crossmember and do not drill into bed floor.



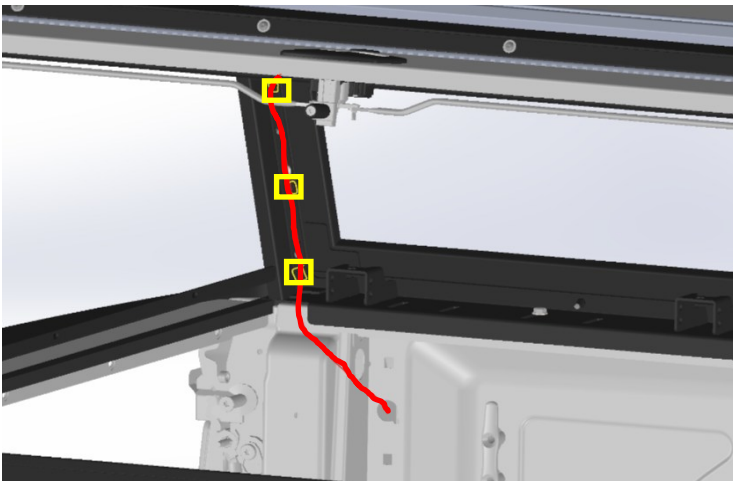
Step 5 Cont. :

***** Note: Routing explained more below.**

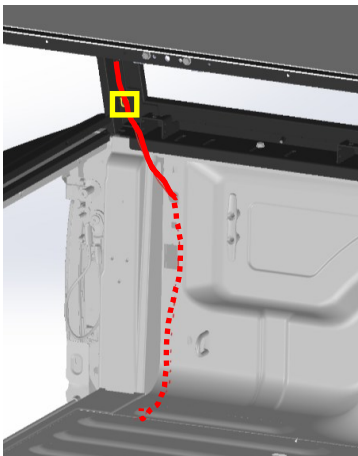
As shown in the first image to the left, route wire harness along first roof bow utilizing tree mounts and zip ties.



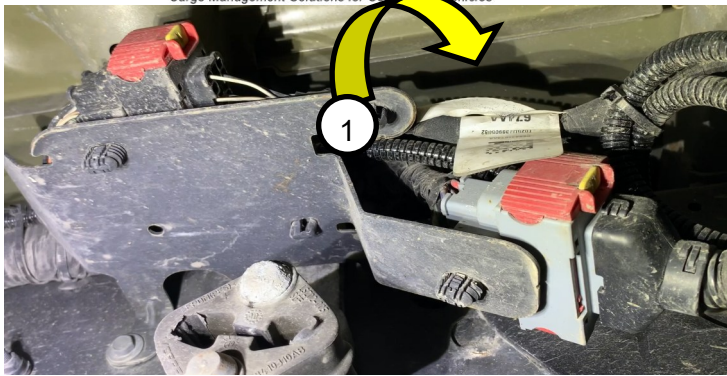
Once harness is secured along first roof bow, locate the first hole running along the driver's side wall, indicated in the 2nd image. Using a zip tie, secure the harness in the first hole. Ensure the harness is avoiding all sharp edges, as well as not too taut to damage the harness.



Install stud-mount zip ties along the inside edge of the topper, as shown in the third image. Route the harness along the inside edge and secure it to the stud-mount zip ties.



Lastly, once the harness is entirely secured, route the harness downward through the D-pillar as shown in the last image on the left.



FOLLOW INSTRUCTIONS FOR RAM 1500

Step 6: MOVE TO REAR UNDERSIDE OF VEHICLE.

Locate the brake light harness 72914 that is dropped through the D-pillar and ensure that the fuse from the inline fuse holder is removed until the end of the install.

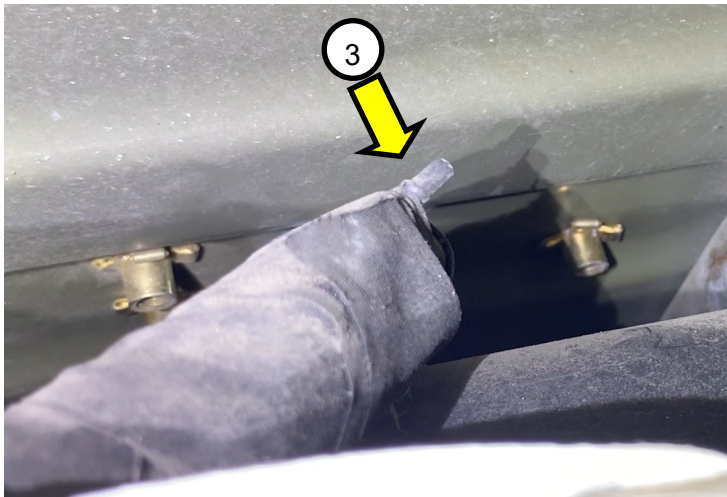
Step 7:

On the street side, rearward of the vehicle tire is access to the harnessing for the rear electrical. Locate OEM red and gray connector.

Look around the topside of the harness connections and follow the part of the harness that goes toward the center of the vehicle (towards the curb side) [See yellow arrow 1].

There will be a small tape covered wire separate from the OEM harness. It will have a black covering on the end [See yellow arrow 2].

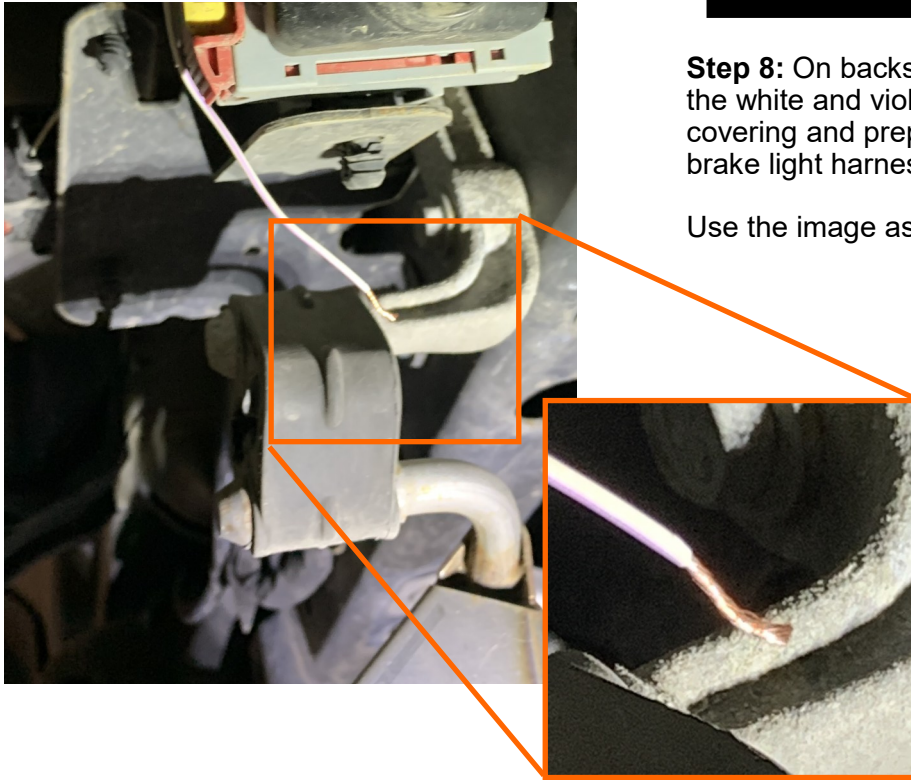
This is the OEM CHMSL circuit wire for the brake light. Its color is White with a Violet stripe



FOLLOW INSTRUCTIONS FOR RAM 1500

Step 8: On backside of the OEM harness, locate the white and violet wire. Begin to strip the wire covering and prepare it to be connected to the brake light harness.

Use the image as reference.



Step 9: Locate the end of the harness (PN72914) with the ring terminal and butt connector.

Use the butt connector to connect to the OEM CHMSL wire. Use a heat gun to shrink the butt connector once crimped on. **It must be completely sealed.**



FOLLOW INSTRUCTIONS FOR RAM 1500

Step 10:

Along side of the OEM harness, locate the OEM chassis ground located on the frame—forward of the CHMSL connection, but still aft of the street side rear wheel. Shown circled in red in the image to the left.

Using a 10mm socket wrench, firmly secure the ring terminal on the brake light harness to the chassis ground. Be sure to place a 1/4" star tooth washer (FAS0066) in proper position, in front of ring terminal before securing back in place.

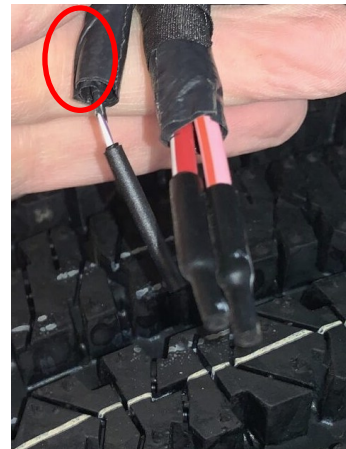


FOLLOW INSTRUCTIONS FOR RAM 2500/3500

Step 11:

Locate the underside of the vehicle. Near the spare tire, closer to passenger side, locate OEM harness shown in the image to the left. Cut white tape wrapped around harness.

Begin to pull OEM harness out from behind truck tire until you can visually see the blunt cut wire end wrapped in black tape.

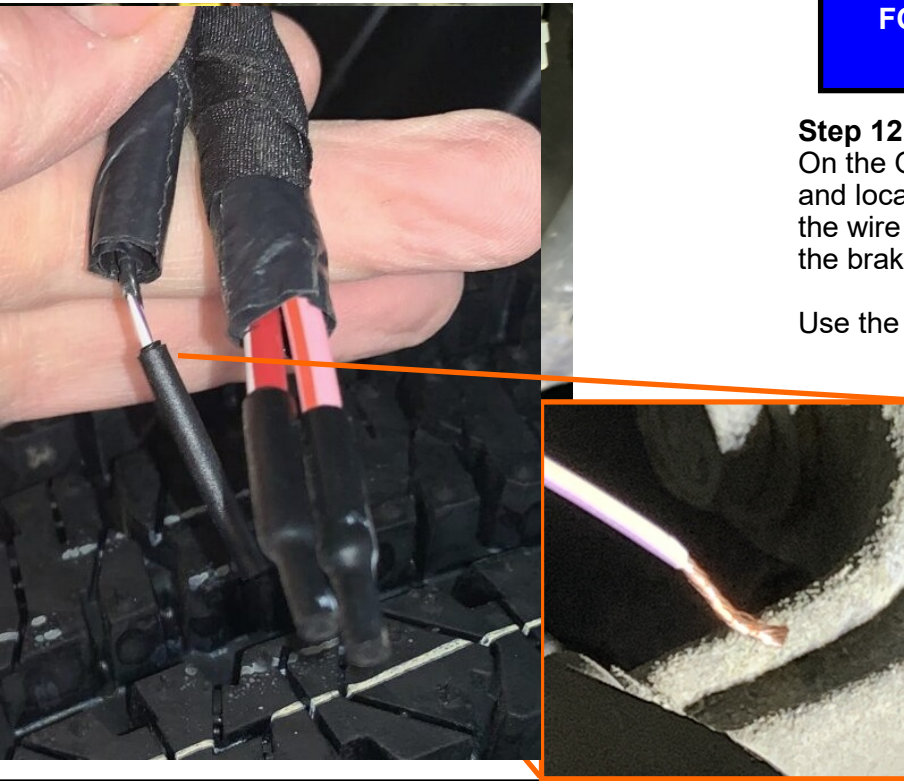


**FOLLOW INSTRUCTIONS FOR RAM
2500/3500**

Step 12:

On the OEM harness, remove tape on wire end and locate the white and violet wire. Begin to strip the wire covering and prepare it to be connected to the brake light harness.

Use the image as reference only.



Step 13:

Locate the end of the harness (PN72914) with the ring terminal and butt connector.

Use the butt connector to connect to the OEM CHMSL wire. Use a heat gun to shrink the butt connector once crimped on. **It must be completely sealed.**



Step 14:

Route the other end over the underbody frame rail to the white underbed crossmember. Follow the image as reference.

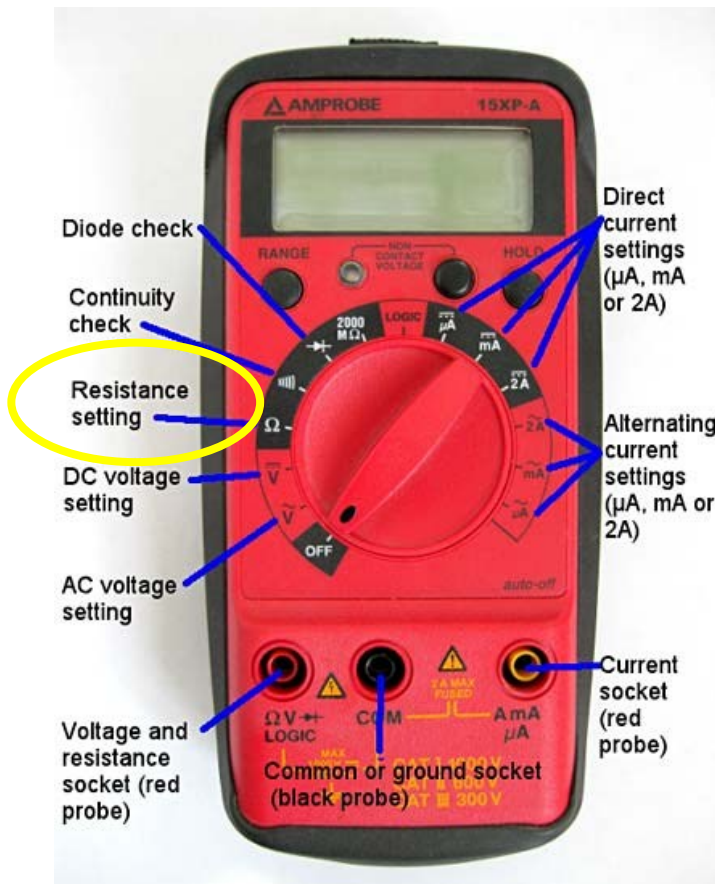
Using a self tapping screw, begin to screw the other end wire terminal to the vehicle.

1pc - 1/4" HH Self tapper FAS0641
1 pc - 1/4" Star tooth Washer Galv. FAS0066

**FOLLOW INSTRUCTIONS FOR RAM
2500/3500**

TEST AND CHECK GROUND

Once securing ground on vehicle chassis, please use multimeter to ensure there is a good ground connection.



How to check for good ground:

- Put multimeter on "ohms" setting.
RESISTANCE SETTING

- Place one probe on back end of the screw that was drilled into vehicle chassis.
Place other probe on chassis body. This location must be an unpainted surface.

- Depending on the multimeter, if there is a good ground, there will be a beep sound made. Also, the screen should display any numerical amount of resistance, which will verify it is a good ground.

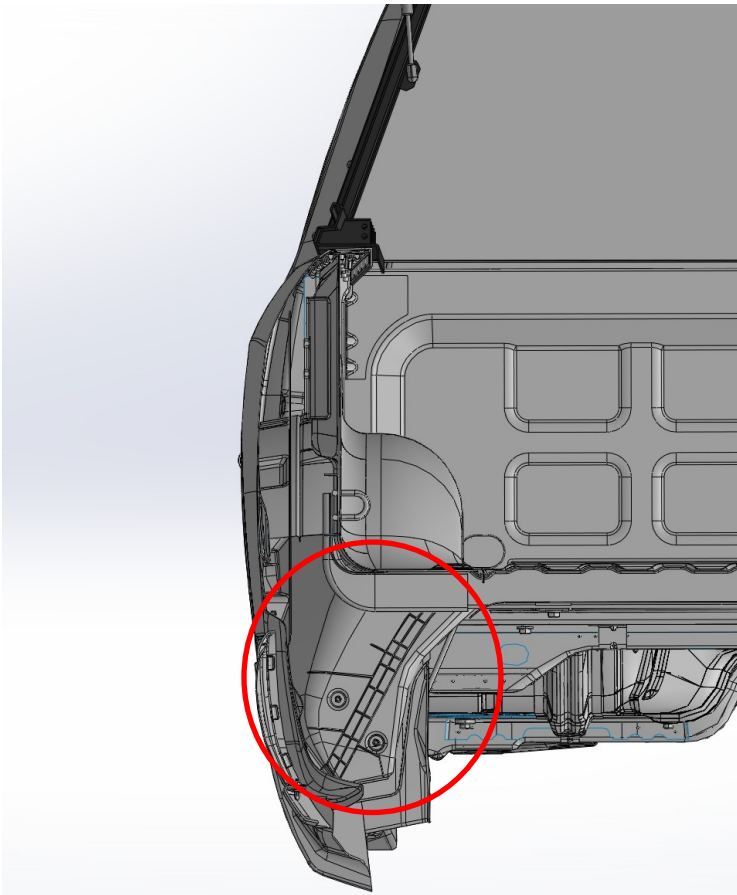
Step 15:

Loop and tie up any extra harness high as possible.

There can be no extra harness beneath the vehicle where snow and ice can pull down. All harness on the bottom of the vehicle should be cable tied in 6-8 " increments along the existing harness in that area.

Be sure to secure the harness using zip ties and p-clips where necessary. Be sure to mount p-clips in a proper location to not damage the vehicle.

If needed, harness can be routed and secured following existing harnesses. Be sure to secure harness directly in the area circled in red.



Step 16:

Place removed fuse back into proper fuse holder position.



Section 7: Test and Check

***** Once the entire install is complete, place fuse back into harness fuse holder. With the vehicle off, press brake pedal. Once brake pedal is pressed, the OEM brake lights as well as 3rd brake light shall light up.**

If the vehicle does not display brake lights when brake pedal is pushed and the vehicle is off, try again while the vehicle is on.

Ensure fuse is placed properly in fuse holder, all connections are correct, and ground has a good connection.

Lastly, ensure all harness is secured inside topper as well as under vehicle.

The install is now complete! ***