Installation Instructions

MME Illuminated Pony

For All Models

About Zener Diode: PLEASE READ

- When the Pony was initially developed, the voltage on the low voltage service circuit was consistently measured at 12.2 – 12.6 volts. This voltage was factored into the design.
- Beginning late summer 2022, some failures occurred. In each confirmable case, the voltage was observed to be over 13.4v and commonly as high as 14.6v.
- Voltages over 12.6v can cause overheating. Over 13v can cause immediate failure.
- It is impossible to foresee the changes that may be implemented on a connected/electric vehicle.
- As of October, the design was revised to include a voltage regulator on the input.
- Ponies shipped before October 2022 should install a Zener diode or risk imminent failure. Every backer this applied to was sent a Zener diode for free. The Zener diode will limit the voltage to no more than 12v.
- Ponies shipped from October either include the diode or have built-in protection.

If your Pony was shipped on October 1 or later and arrives without a Zener diode, do not add one!

Which headlights do you have?

LOW SERIES

California Route 1 (CR1) and Select models

These lights have 5 little square lights when looking at them from the front. They include all wires needed at the headlights making installation **faster and easier**.

~45 - 90 Minutes

HIGH SERIES

Premium models

These lights feature two wide, rectangular lights. One wire must be run to the BCM. This could take another 30-60 minutes. It isn't hard but requires some patience. *There is still a shortcut*.

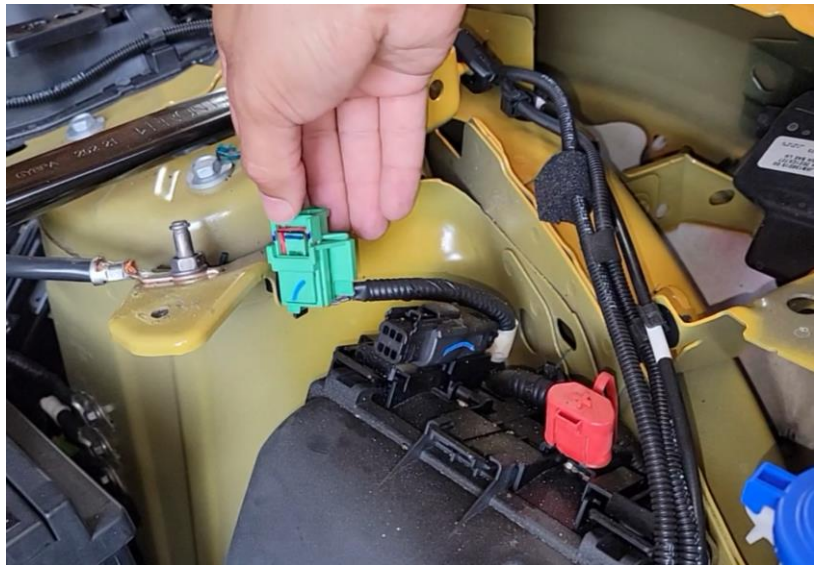
~45 - 120 Minutes

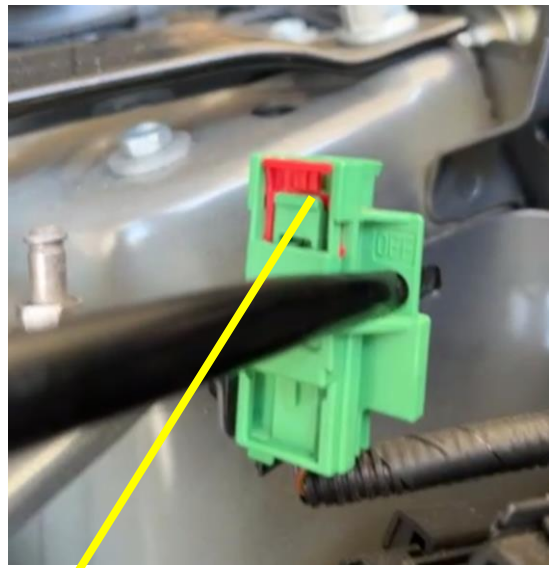
Frunk Removal

- Ben the EV Guy has a great video
- https://youtu.be/X-jmW4sYQU8

Open LVDC

Tip: LVSD stands for Low Voltage Service Disconnect. It will remove the 12-volt power.





Pull up the red tab.
Pinch the spring clip as you pull the disconnect up.
Stick something in the hole to secure it.

LOW SERIES INSTRUCTIONS

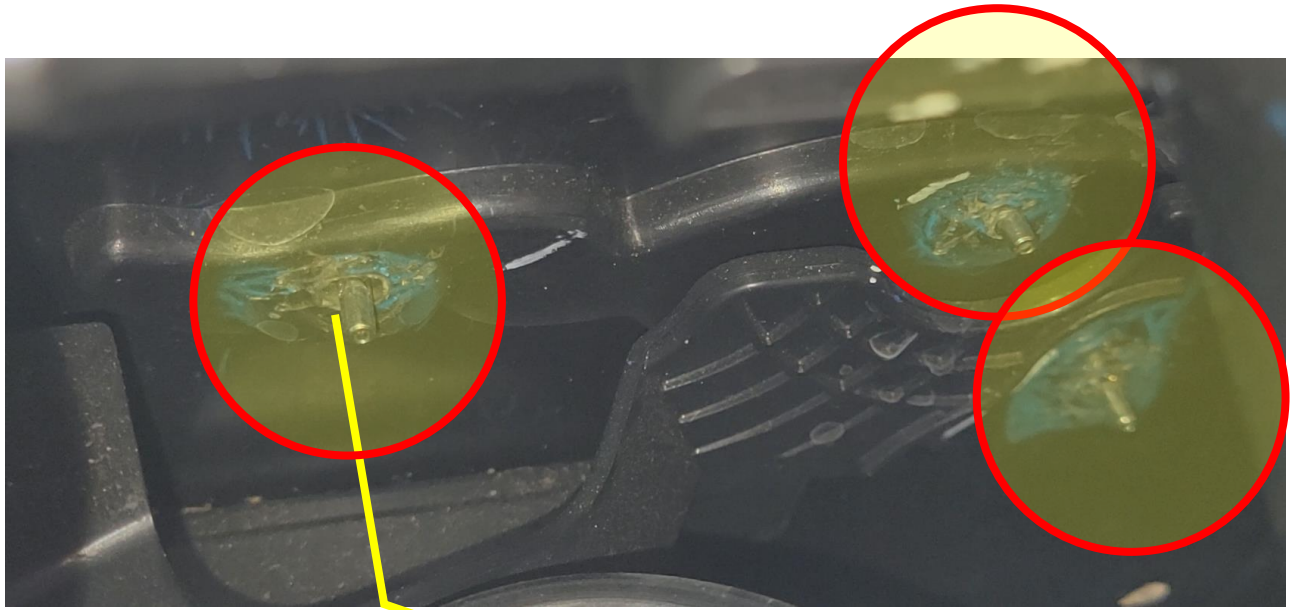
(skip to page -- for High Series Instructions)

Remove Stock Emblem

Tip: You can use a magnetic pick-up tool to catch the (4) lock washers so they do not fall.

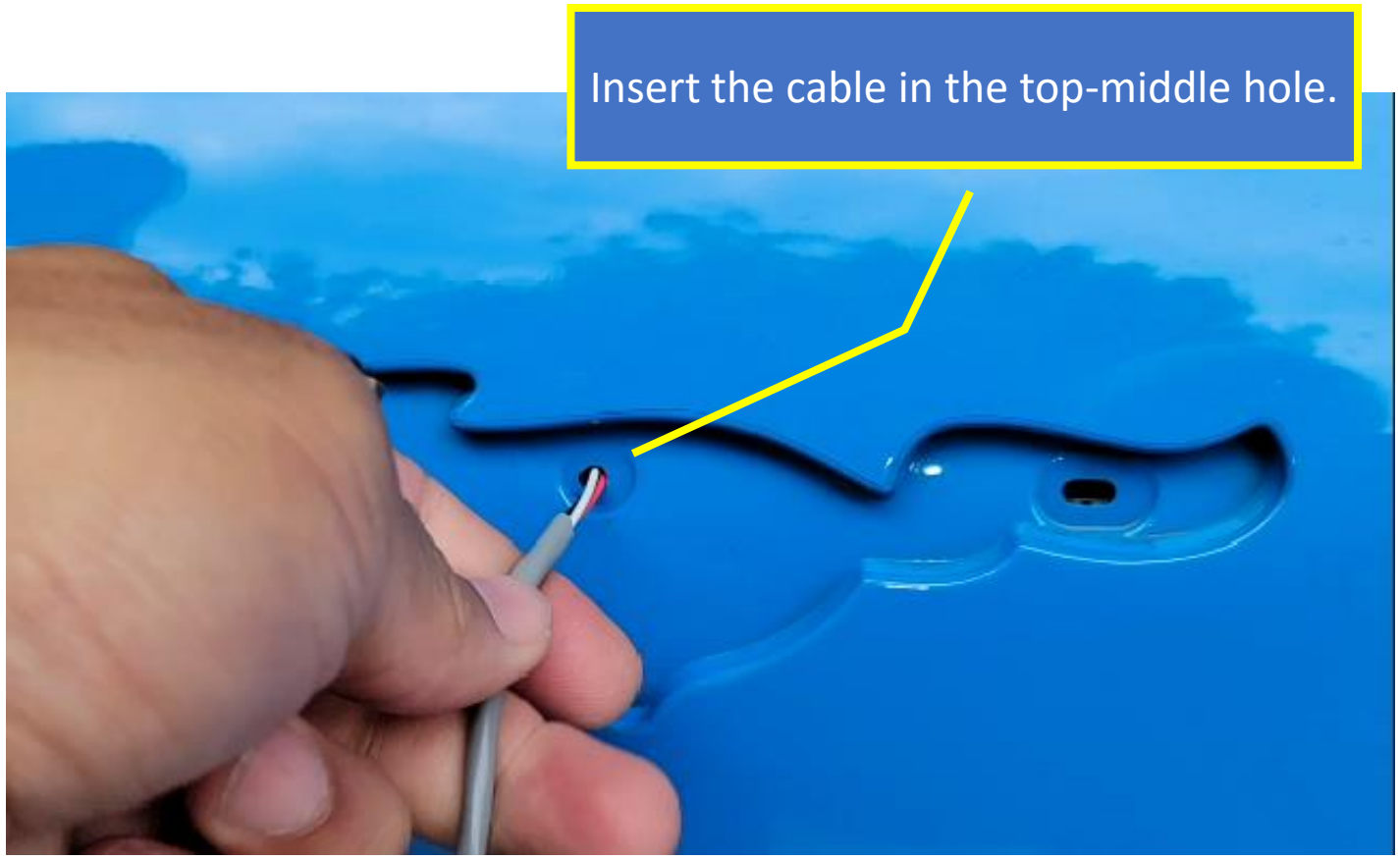
The washers have been removed in these pics.

Take your time here. Once removed, the emblem slides out from the front

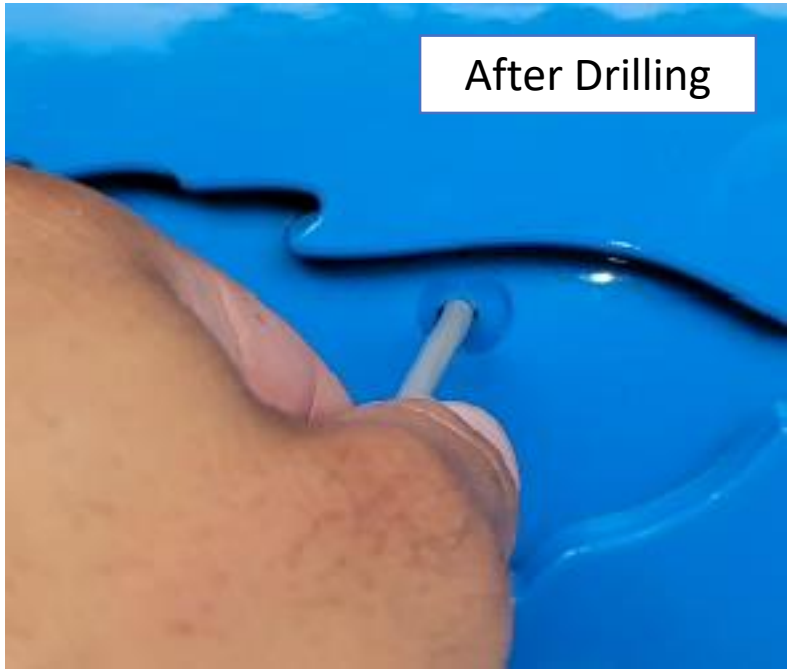


Wedge a screwdriver or pry bar behind the lock washer to loosen it. Then pry between the back of the bumper cover and the washer to remove it.

Install Illuminated Pony



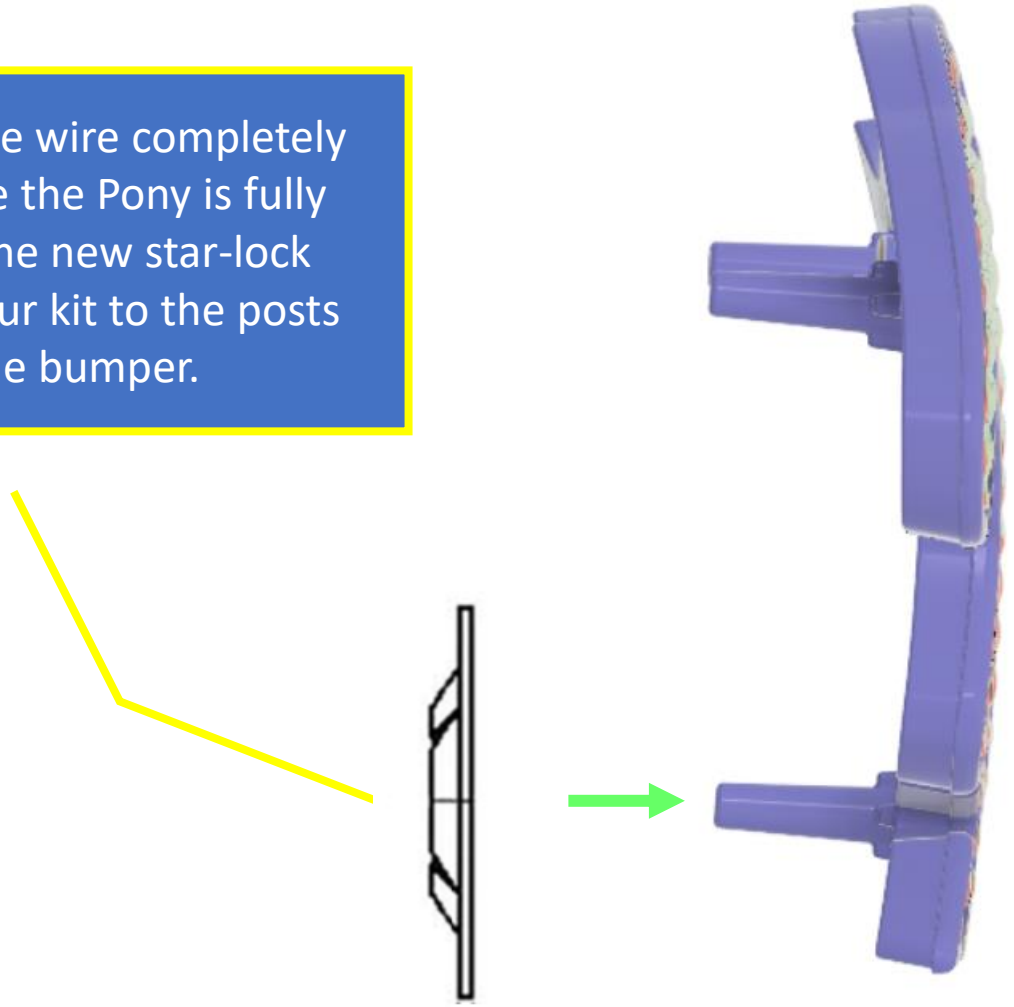
Tip: Use wire lube to make it easier to insert the wire. The fit is very tight. I highly recommend using a **1/4” drill bit** to open up the hole carefully.



Install Illuminated Pony

Tip Inner teeth face back and away from the bumper/emblem. Smooth face of the washer is towards the bumper/emblem.

After inserting the wire completely and making sure the Pony is fully seated, apply the new star-lock washers from your kit to the posts behind the bumper.



Meu

Route Wiring

Tip: This is the **Driver's Side Headlight**. Route the Pony Emblem cable around to the headlight harness. Peel back some of the wire loom on the headlight harness to have room for wire taps.

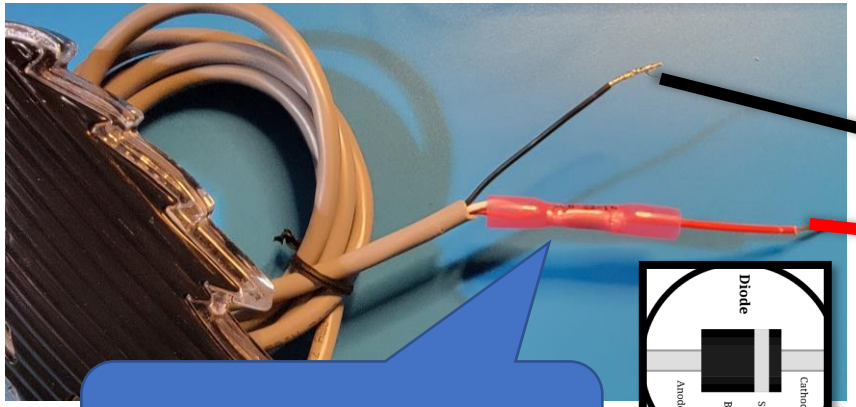
Route the wiring behind the bumper to the driver side headlight.

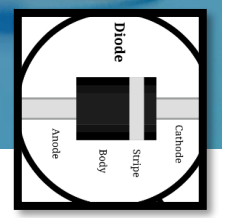
Connect Wires

Tip: Peel back some of the wire loom on the headlight harness to make room for wire taps, if needed.

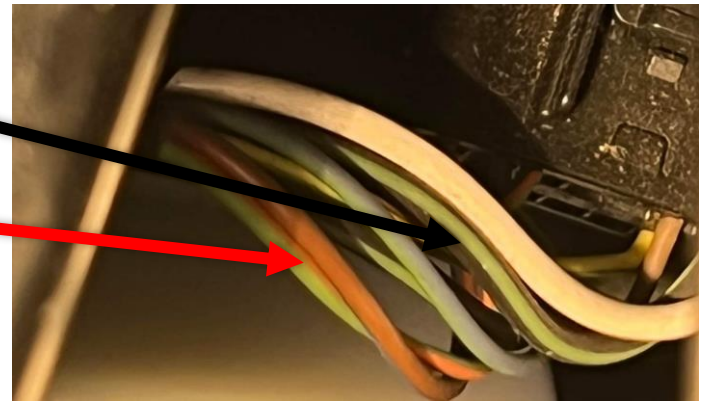
Note 1: if the white Pony wire is cut flush with the grey insulation, this wire is not needed any longer.

Note 2: Ponies shipped beginning in October either include a diode or do not need one.





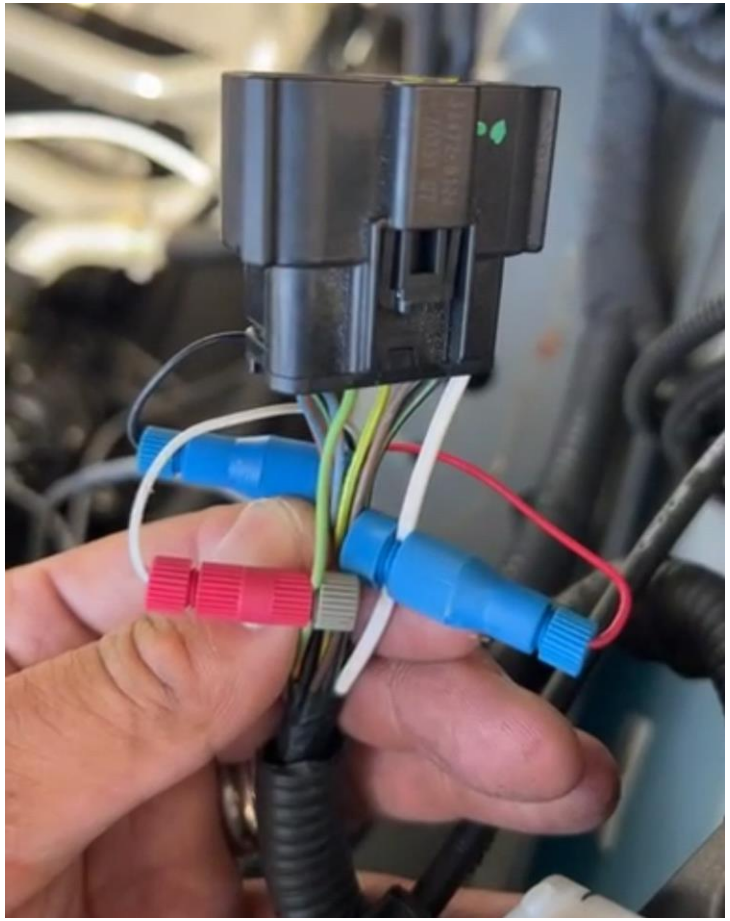
A 12v Zener Diode *may* be required!



Q. What if I have no green/orange wire?
A. You must run the extra wire supplied through the firewall to the ambient light below the glove box. Use the other instructions for this part. Skip to page --.

Pony Emblem	Headlight Harness	Function
White[1]	Green/Orange	Welcome on + on w/Headlights (night-time mostly)
Black	Black/Green	All
Red	Green/Orange	Welcome on + on w/Headlights (night-time mostly)

Route Wiring



Great Job!

You can plug the harness back into the headlight. It’s up to you if you want to tape it up, but this is fine as well.

Re-assembly

- All Done. Congratulations!
- Test before you put everything back together.
- Remember to close the LVSD

HIGH SERIES INSTRUCTIONS

Route Wiring

- Routing the wire through the firewall may take you about 30 minutes longer.
- The hardest part is getting the wire through the rubber grommet in the firewall.
- You can do it!
- Or you can choose the “Always-On Shortcut”

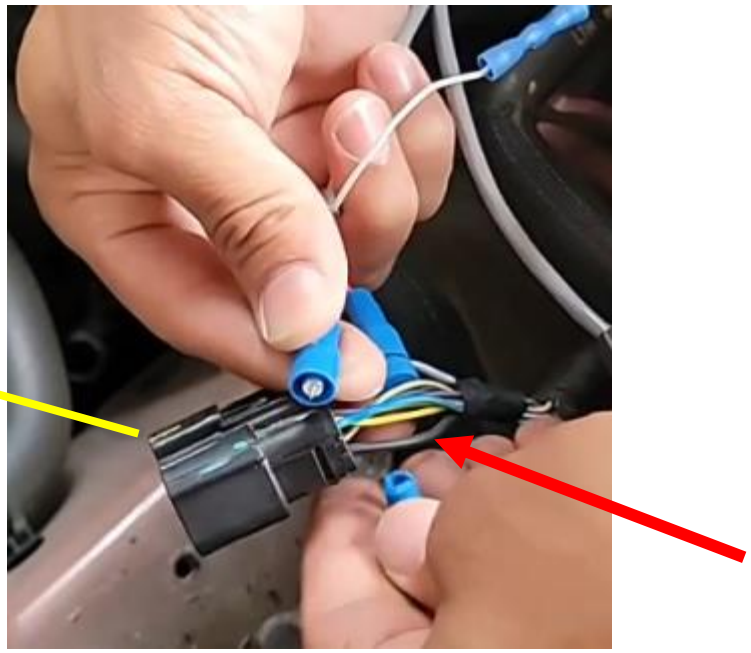
Route Wiring

Tip: Put the top (large-slotted) cap of the Posi-Tap onto the Top of the wire you are tapping first. Screw the body to it. Then, loosen the bottom collar. Insert the Pony wire (about ¼” stripped). Tighten the collar.

Black Pony

to

Black/Grey Headlight

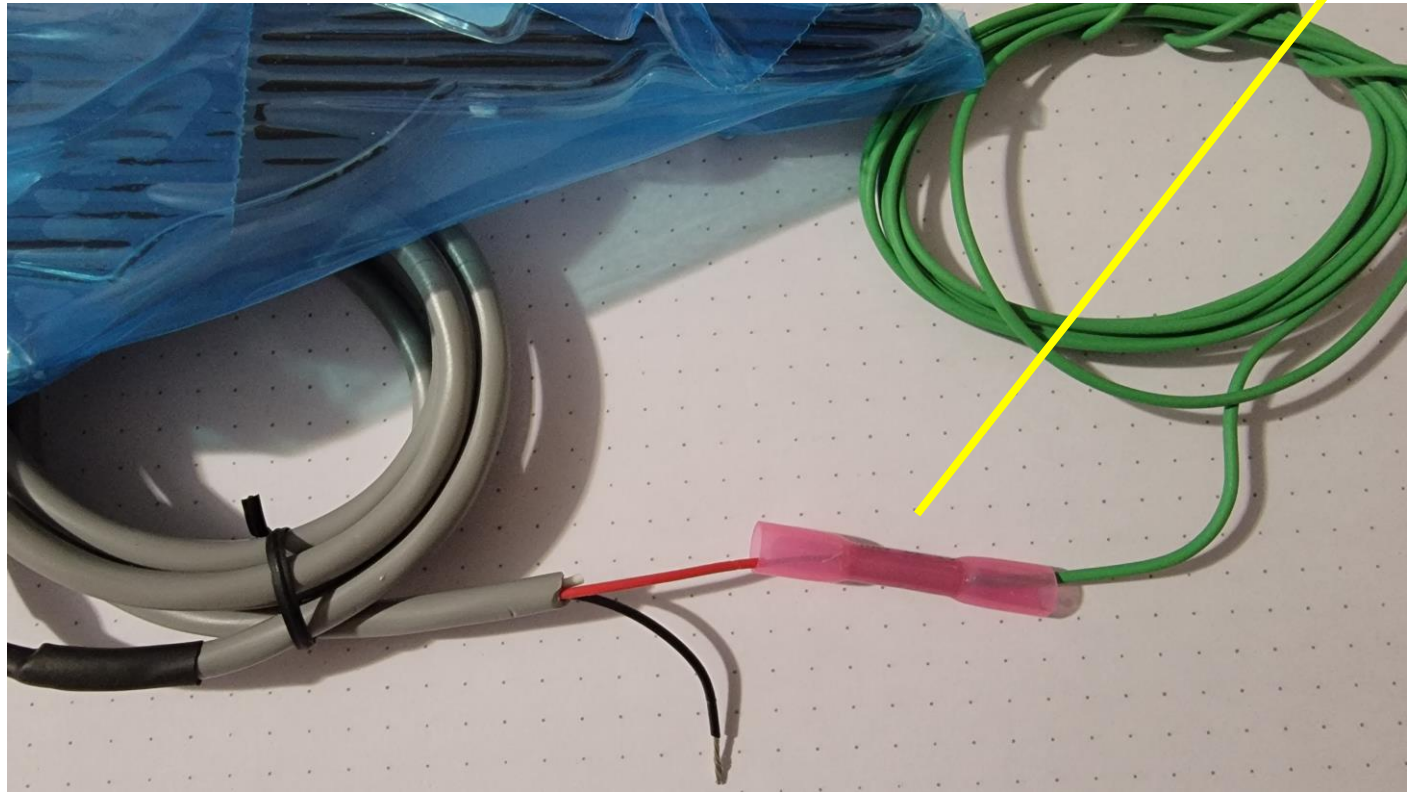


Route the Pony Emblem cable around to the passenger headlight. You can make the ground connection at the headlight.

Route Wiring

Tip: The extra wire you receive may be green, red, or black. The butt connector may have a shrink sleeve. You may use a heat gun or a lighter to shrink the ends if desired. Be careful for the surroundings.

Note 1: if only the red and black Pony wires are exposed (the white wire is cut at the grey insulation), you do not need the third white wire.

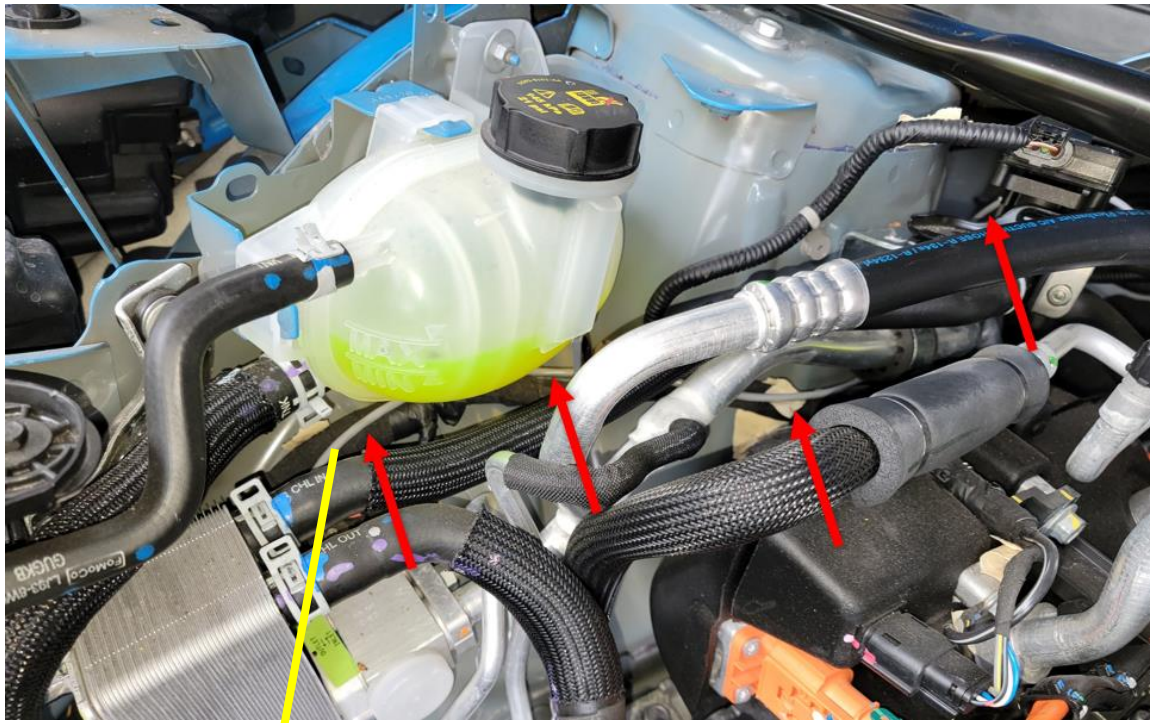


Connect the Red Pony wire to the extra wire in your kit using the supplied butt connector.

Note 2: if you have a firewall insertion tool, route the wire through the firewall first as described in the following steps. Next, remove the tool by sliding it back over this wire. If the connection is made, you cannot remove the tool. Remove the tool, then make the connection.

Route Wiring

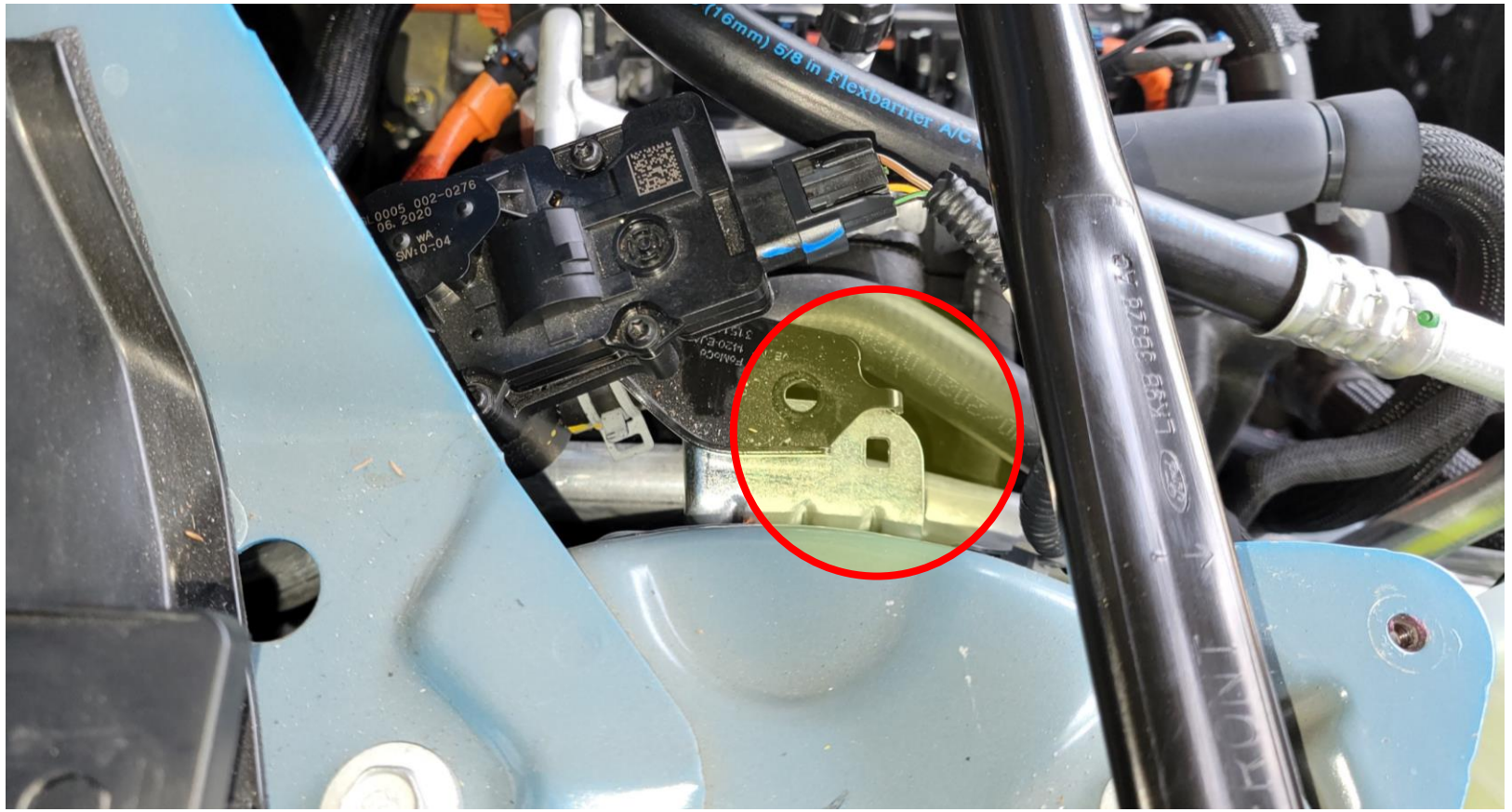
Tip: use the supplied cable ties to secure the wire along the path. If you are using a firewall insertion tool, wait to secure until the tool is removed.



Route the extra wire to the firewall and through to the passenger floorboard (BCM Fusebox). You will need to pass the wire through the rubber grommet to the passenger floorboard. Route the wire as shown.

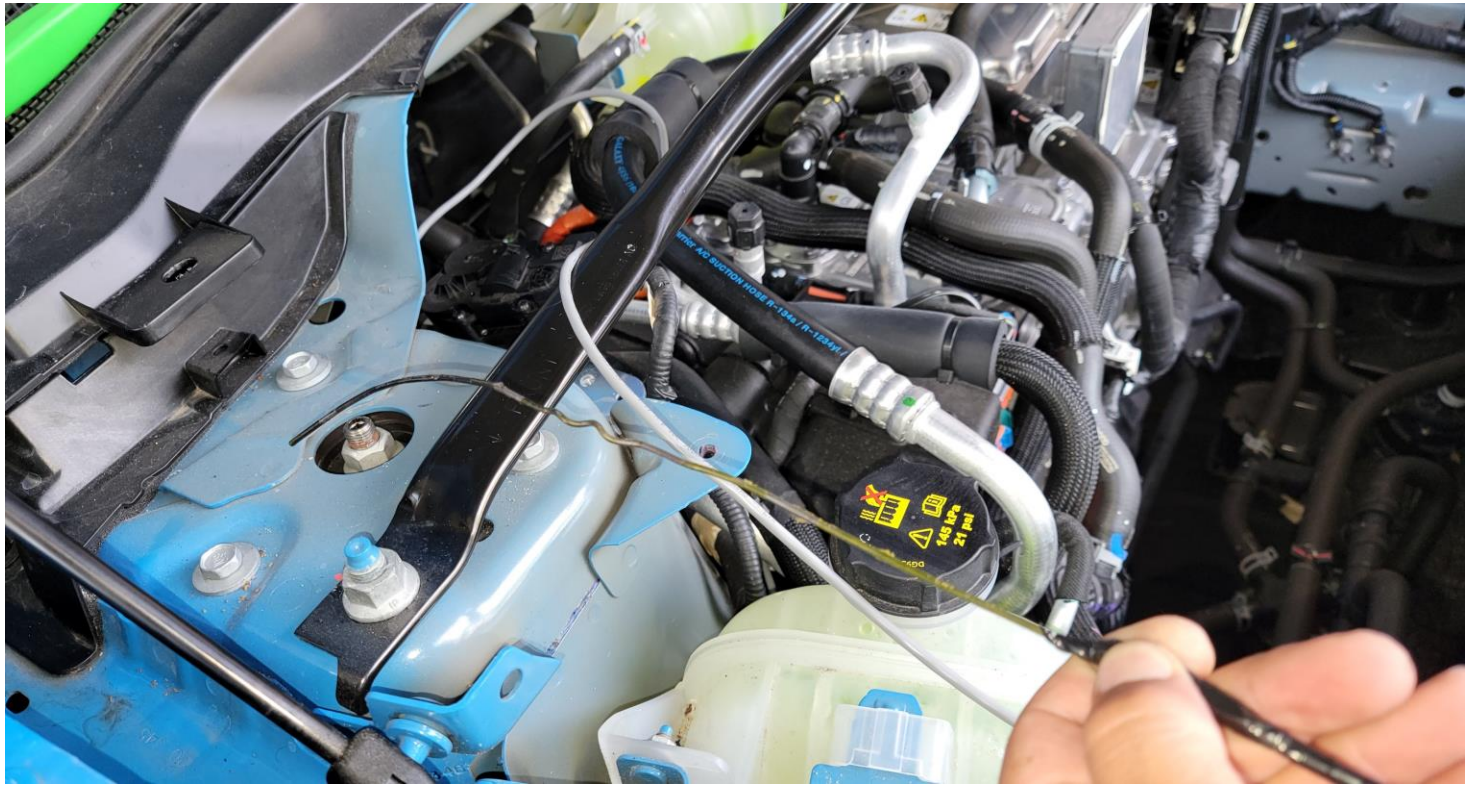
Route Wiring

Tip: Remove this bracket to get a little more room to work. It is an 8mm socket and only takes a few moments.



Route Wiring

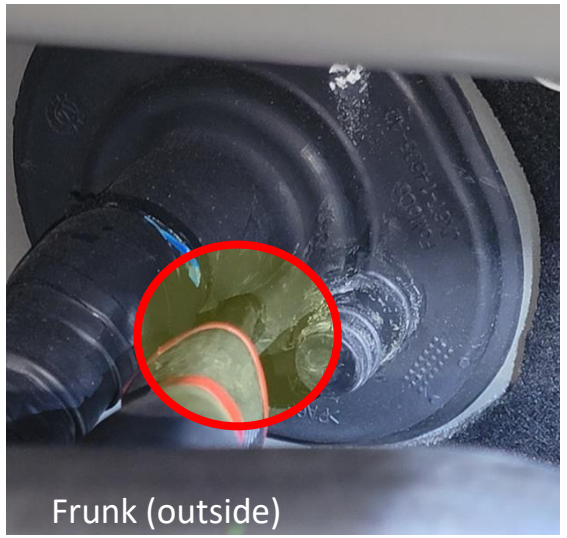
Tip: Use a metal hanger, wire fish, or firewall insertion tool to get the cable through. Wire lube could help here too. I've taped about 4 inches of wire to my hanger with electrical tape here. I've already poked a hole.



Route Wiring

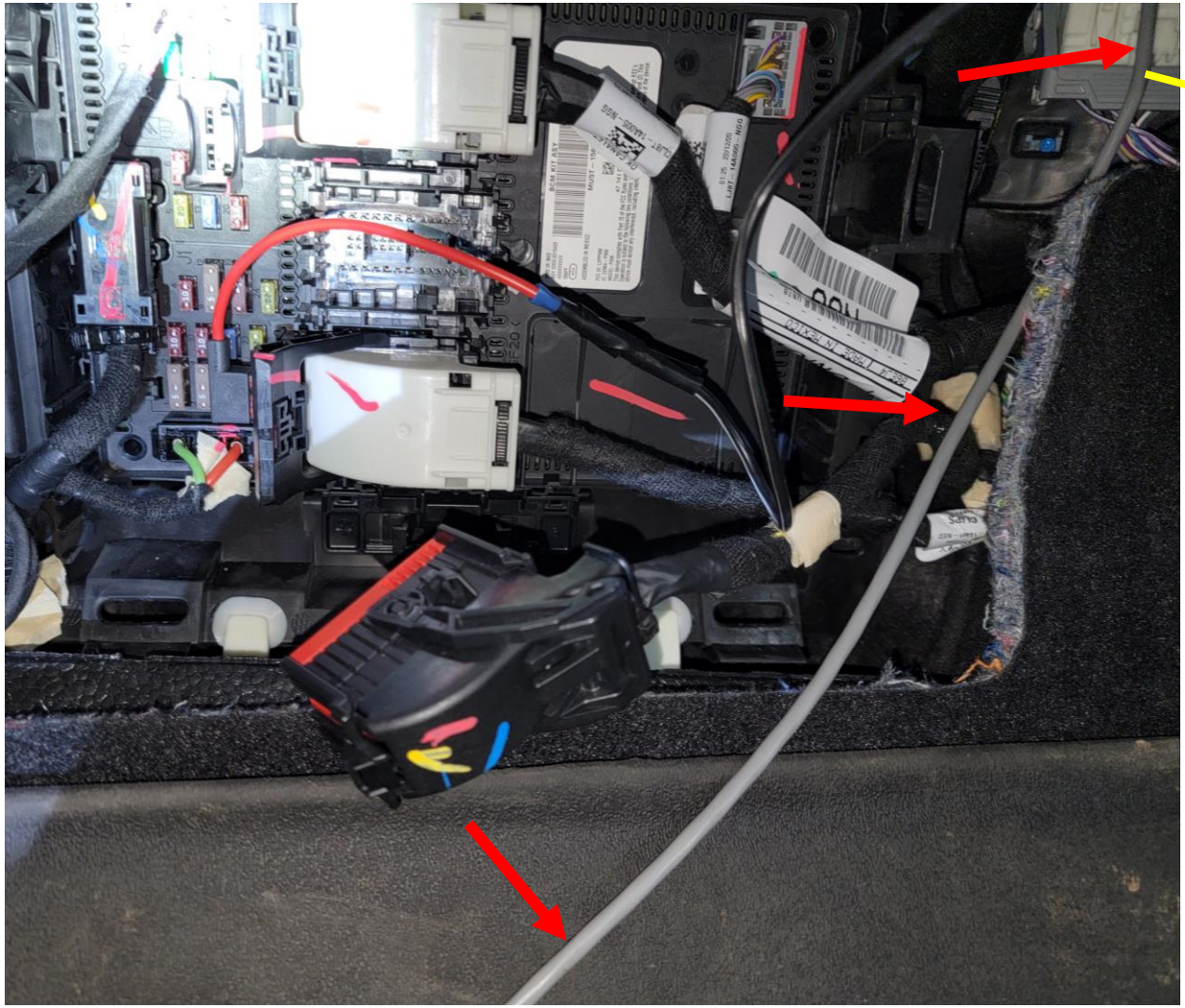
Tip: Here, the firewall insertion tool is used. Note the position of the penetration. This is the best spot to insert the wire.

You can find this rubber grommet on the passenger side, under the windshield.



Route Wiring

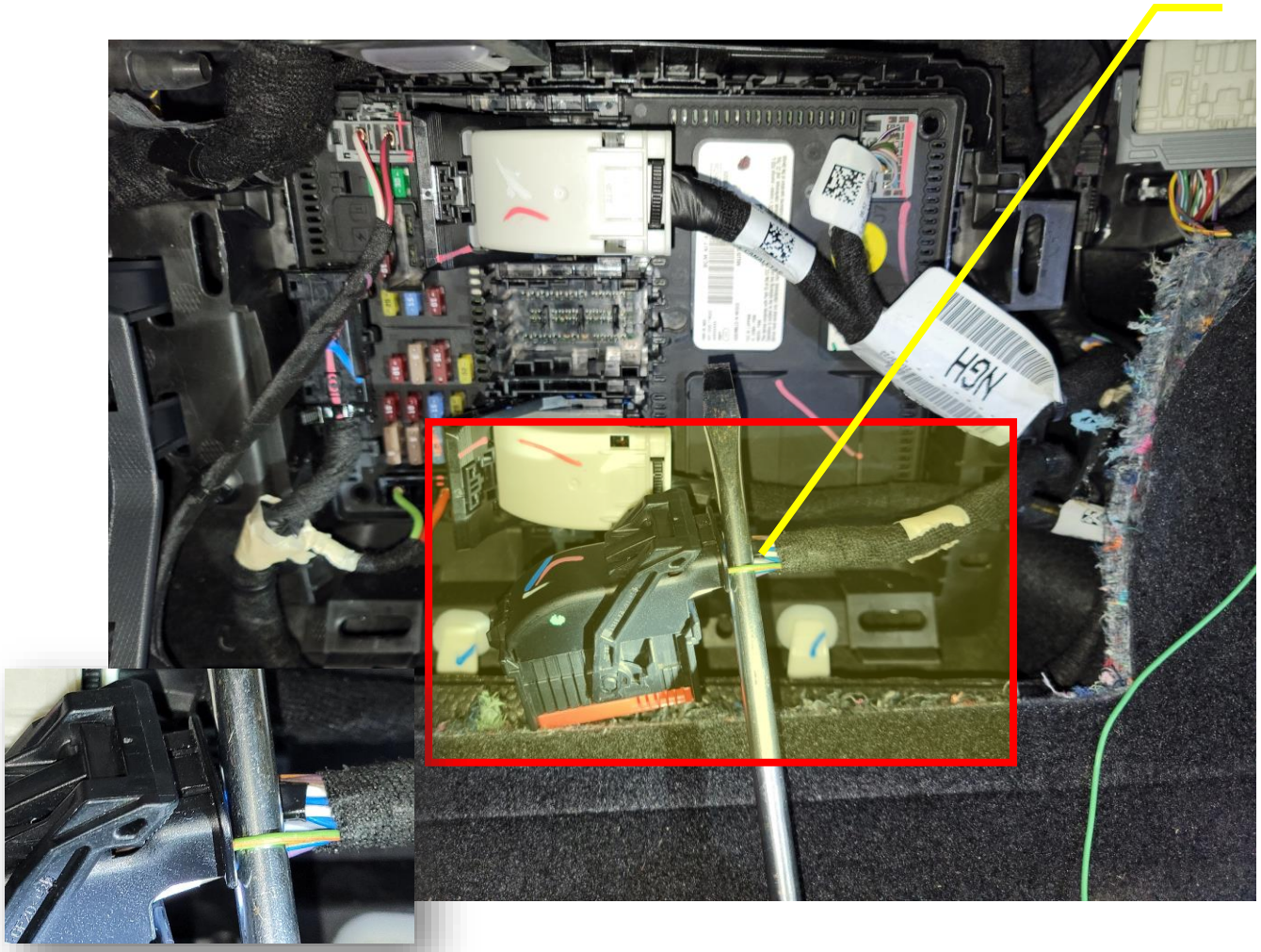
Tip: You might need two people. One pushing outside, and one pulling inside. I lay backwards with my back on the floor and head near the fuse box.



Reach your hand up behind the glove box to find the rubber grommet. Feel for the cable/hanger and pull it through and down.

Route Wiring

Tip: Peel back some of the fabric tape to find the wire on the middle black connector. Connect the wire you just routed here.



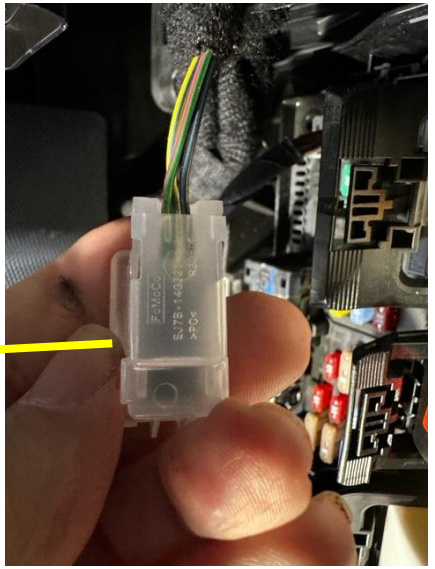
- Find the Green/Orange wire.
- Connect it to the wire you routed through the firewall using a wire tap.
- Tape it back up and reconnect it.

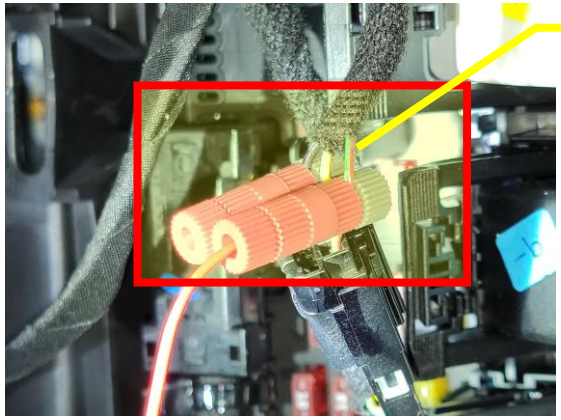
Q. What if I have no green/orange wire?
A. Next page.

Route Wiring

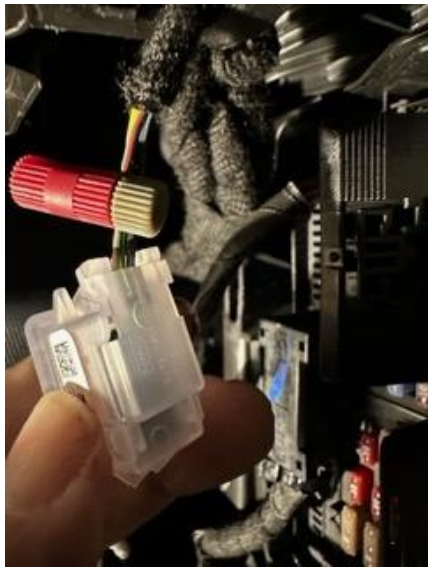
Tip: Some Canadian and European models may not have a green/orange wire. This circuit does not exist. In that case, the ambient light power can be used instead and works the same. This also applies to US models.

- Find the footwell lamp above the BCM fuse box (behind the glove box).
- Disconnect the plug on the back.
- Pull it down and reveal the wires.
- The connector may be black or clear.





- Find the Green/Red wire.
- Connect it to the wire you routed through the firewall using a wire tap.
- Tape it back up and reconnect it.



Re-assembly

- All Done. Congratulations!
- Test before you put everything back together.
- Remember to close the LVSD