



# Super Duty Rear Bumper Harness Kit

## Ford Super Duty 2023+

### NEW PRODUCT

Please visit [www.aev-conversions.com](http://www.aev-conversions.com) to view the most current installation guide for this product.

This is a new product and we want to make sure that you receive the latest and most accurate information based on customer feedback, product revisions, and/or model year updates. We value customer feedback, so we encourage you to contact our Technical Support department if you have any suggestions on how to make the installation of this product easier or if you have any questions regarding the installation of this product. AEV's Technical Support can be reached by email at [tech@aev-conversions.com](mailto:tech@aev-conversions.com) or by giving us a call at (248)-926-0256.



### PLEASE READ BEFORE YOU START

To guarantee a quality installation, we recommend reading these instructions thoroughly before beginning any work. These instructions assume a certain amount of mechanical ability and are not written nor intended for someone not familiar with auto repair.

#### INCLUDED PARTS

#### QTY

#### REQUIRED TOOLS

Rear Bumper Harness Kit

1

Common Hand Tools



## I. 30302097AA Rear Bumper Harness

- a. Lay the rear bumper center weldment on a flat table, take the 30302097AA rear bumper harness and lay it across the center weldment near the provided slots for zip ties.
- b. Make sure to have the correct orientation before zip tying. The black and white pig tail wiring should be located near the trailer plug (Fig 1). The connector for the rear parking sensor wiring should be located on the RH side of the weldment (Fig 2).

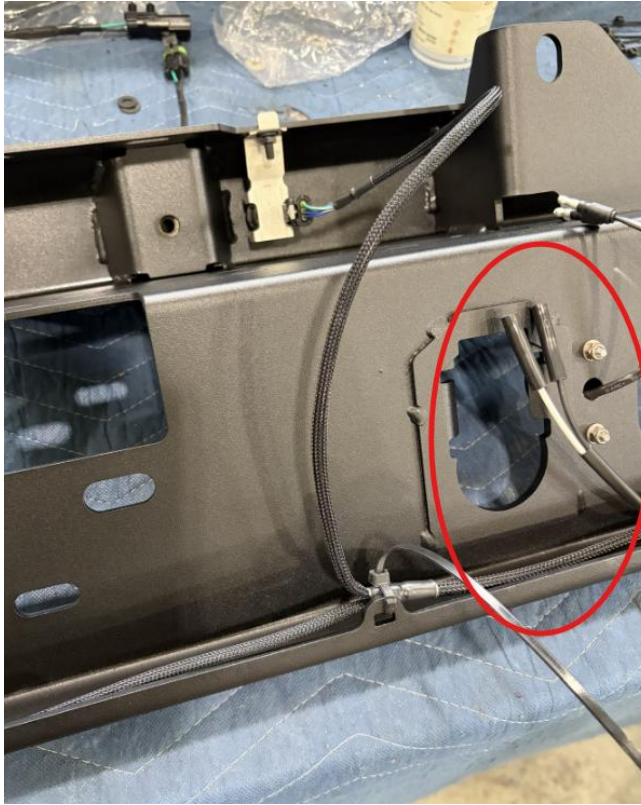


Figure 1

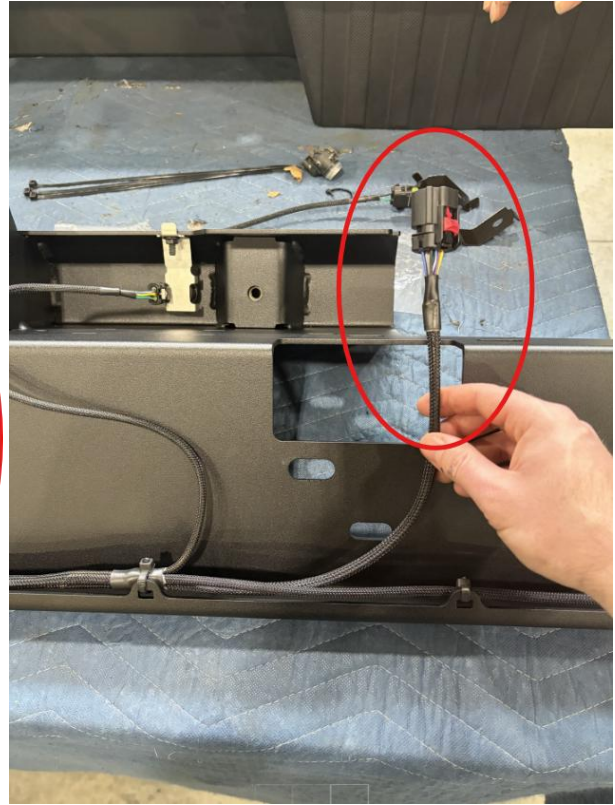


Figure 2

- c. Install the inner ARMB3049AA stainless steel parking sensor brackets. Use the AEV91055AA M6x20 bolt and AEV93027AA M6 nut to fasten the bracket to the center weldment. Make sure to have proper orientation of the sensors before fully fastening. The connectors of the sensors should point inboard of vehicle (Fig 3 & 4).



Figure 3

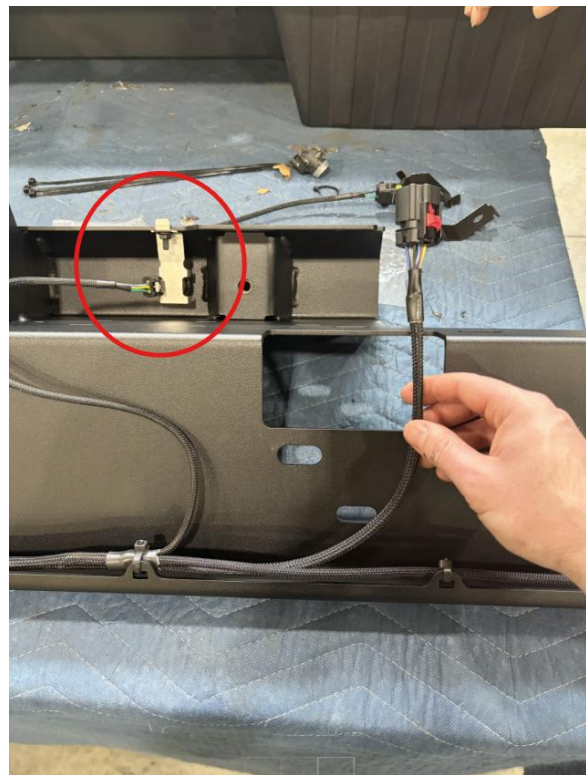


Figure 4

- d. If you do not have the rear aux lights, use the provided zip ties to fasten the harness in all center weldment locations. If you do have the rear aux lights, wait until the rear aux light harness is installed to zip tie the harnesses together (Fig 5).



Figure 5



## II. 30302099AA Rear Aux Light Bumper Harness

- a. Lay the 30302099AA rear aux light bumper harness across the center weldment. Make sure the two identical connectors are located near the wiring passthrough holes on both LH & RH sides of the center weldment (Fig 6). The remaining connector will tie into the 30302098AA rear aux light chassis harness in later steps.
- b. Use the provided zip ties to fasten the harness to the center weldment on the provided locations (Fig 5).
- c. Once these steps are completed, use the “AEV Rear Bumper Auxiliary Light Mounting Kit” I-sheet to finish installing the rear aux lights.

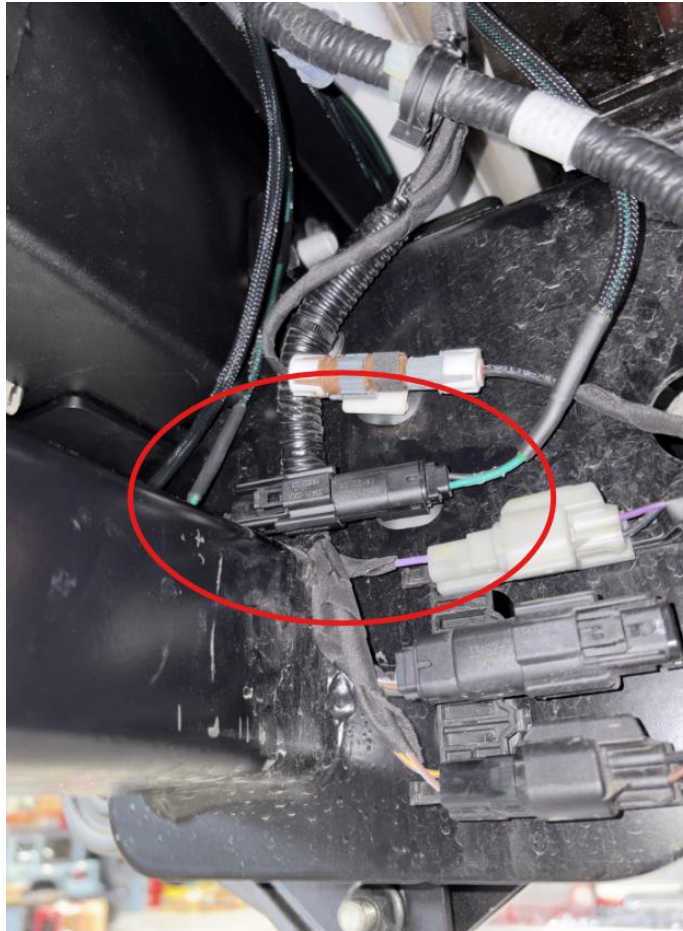


Figure 6



### III. 30302098AA Rear Aux Light Chassis Harness

- a. Snap the connector into the frame via provided fir-tree fastener (Fig 7). This is located on the inner driver side of the frame. Install the connector from the 30302099AA rear bumper aux light harness.



*Figure 7*

- b. Run the 30302098AA chassis harness along side the orange factory harness up to the cross member. Use the provided zip ties to fasten the 30302098AA harness to the factory orange harness (Fig. 8).

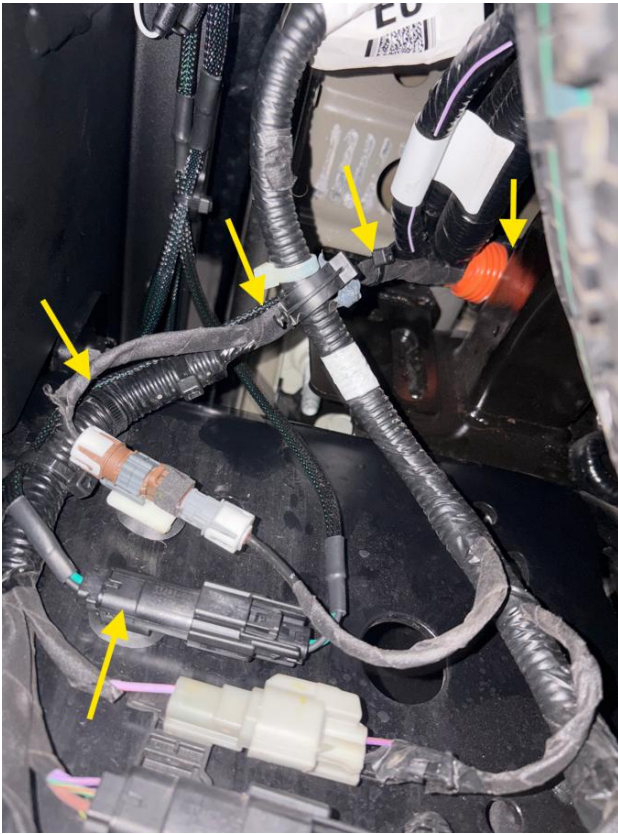


Figure 8

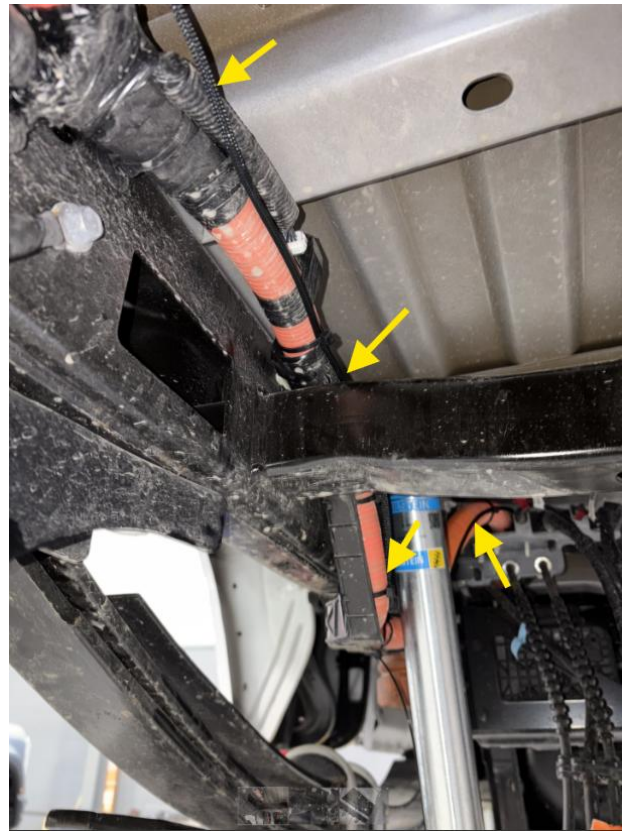


Figure 9

- c. Run the harness and ground leader up and over the cross member. Install the ground to the existing connection on the frame (Fig. 10 &11).



Figure 10

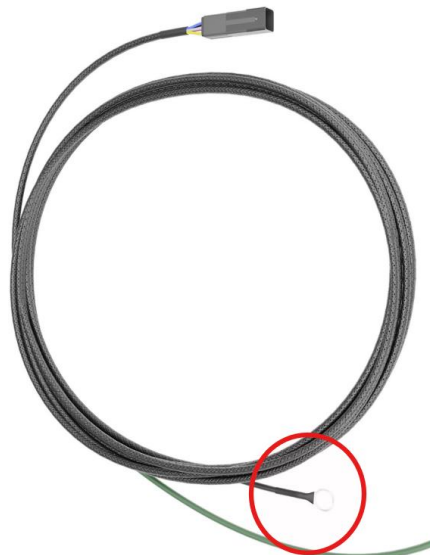


Figure 11



- d. Continue to run the 30302098AA harness up to the second crossmember in front of the axle. Run the 30302098AA harness over top the crossmember from driver side to the outer passenger side of the vehicle frame.
- e. Zip tie the 30302098AA harness to the black factory harness on the frame running up to the front passenger wheel well (Fig. 12).

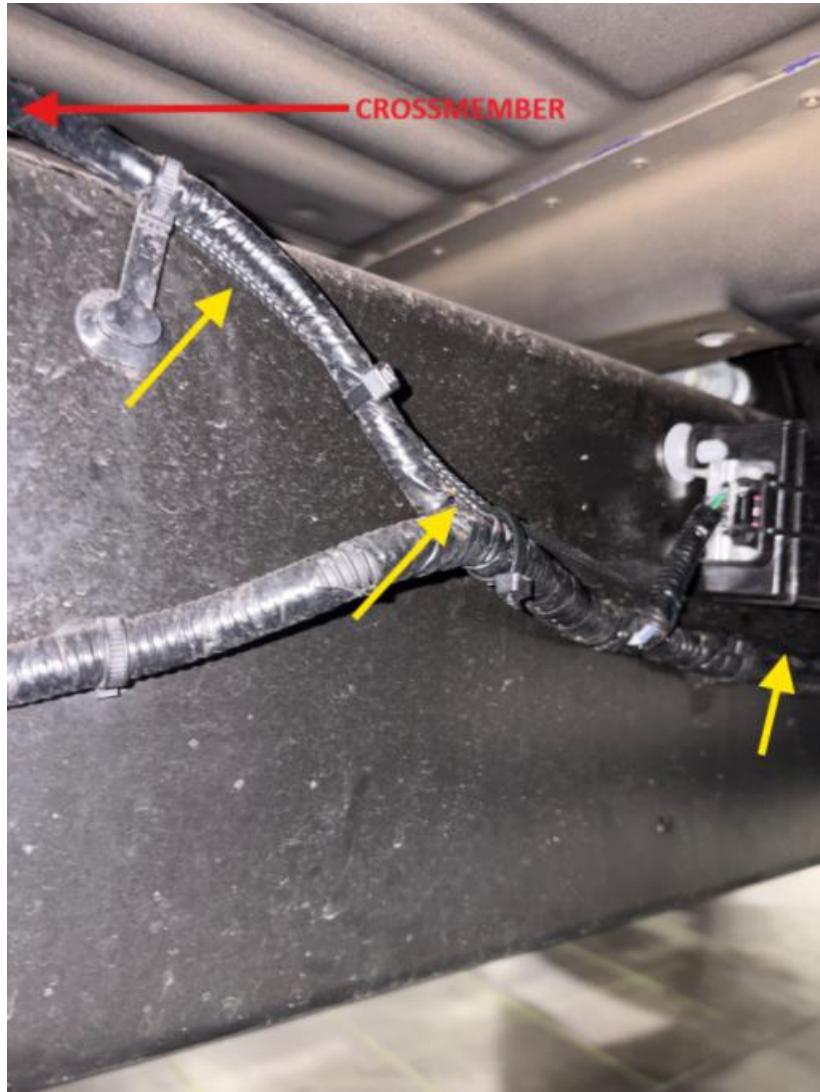


Figure 12

- f. Remove the wheel liner and run the 30302098AA harness up into the engine bay (Fig. 13 & 14).



Figure 13

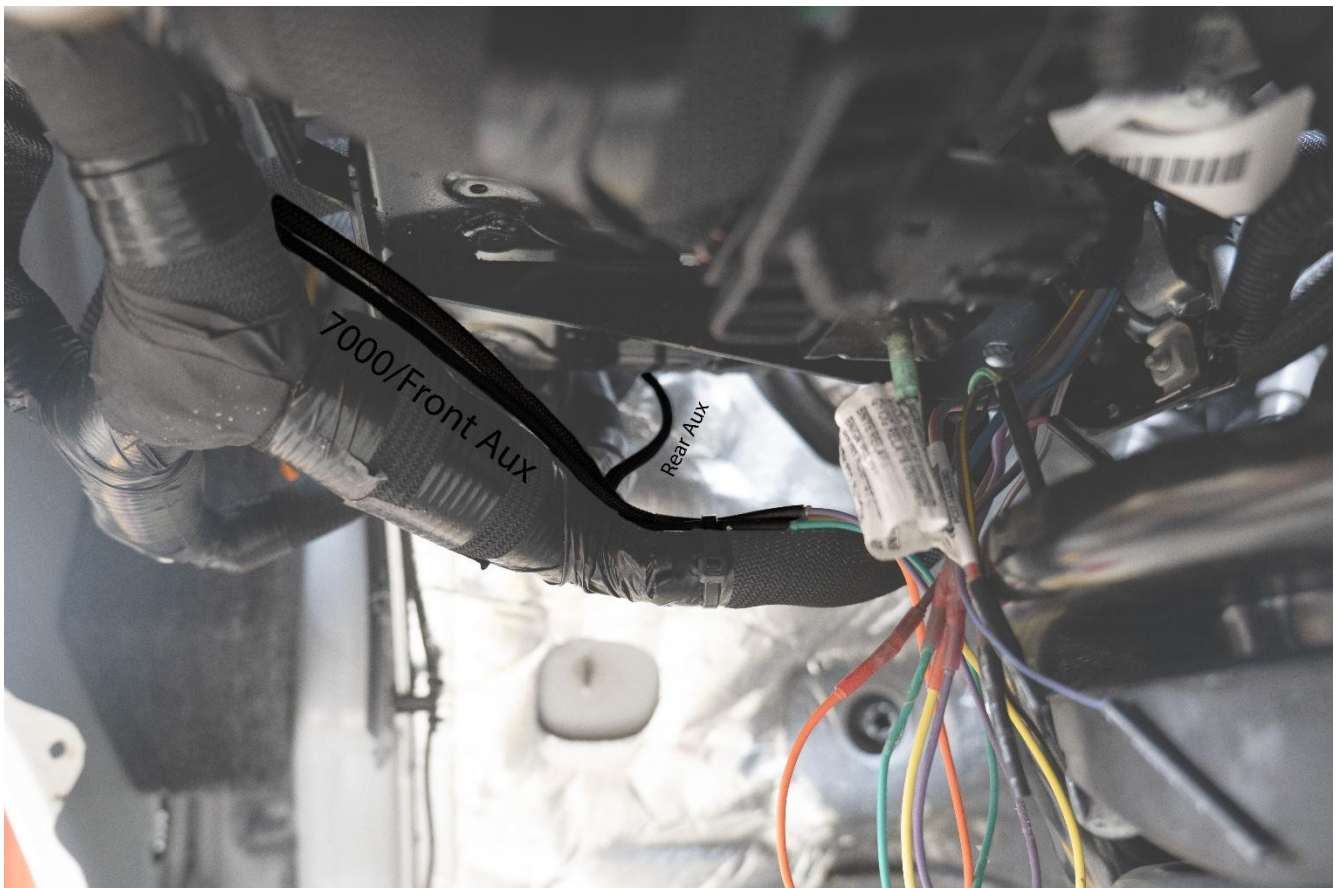
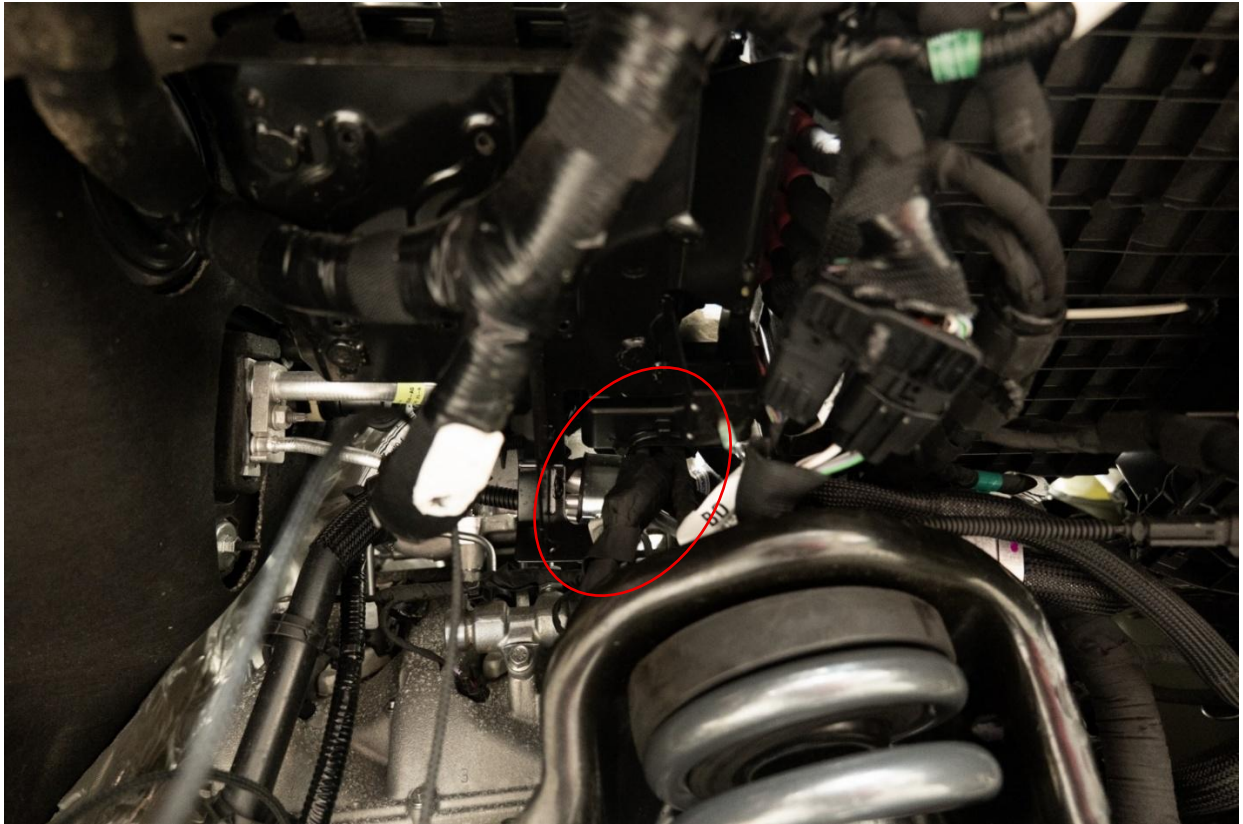


Figure 14



- g. To connect the newly installed harness to the factory switches, locate the wire sheath that includes connection points (Fig. 15).



*Figure 15*

- h. Remove the tape from the wires. Figure 16 shows the diagram for connection of AEV Super Duty Harnesses. These are the standard layout for AEV upfitting for OEM switches, if you would like a different order, please refer to the OEM diagram to place in the order on your aux switches of your choosing.

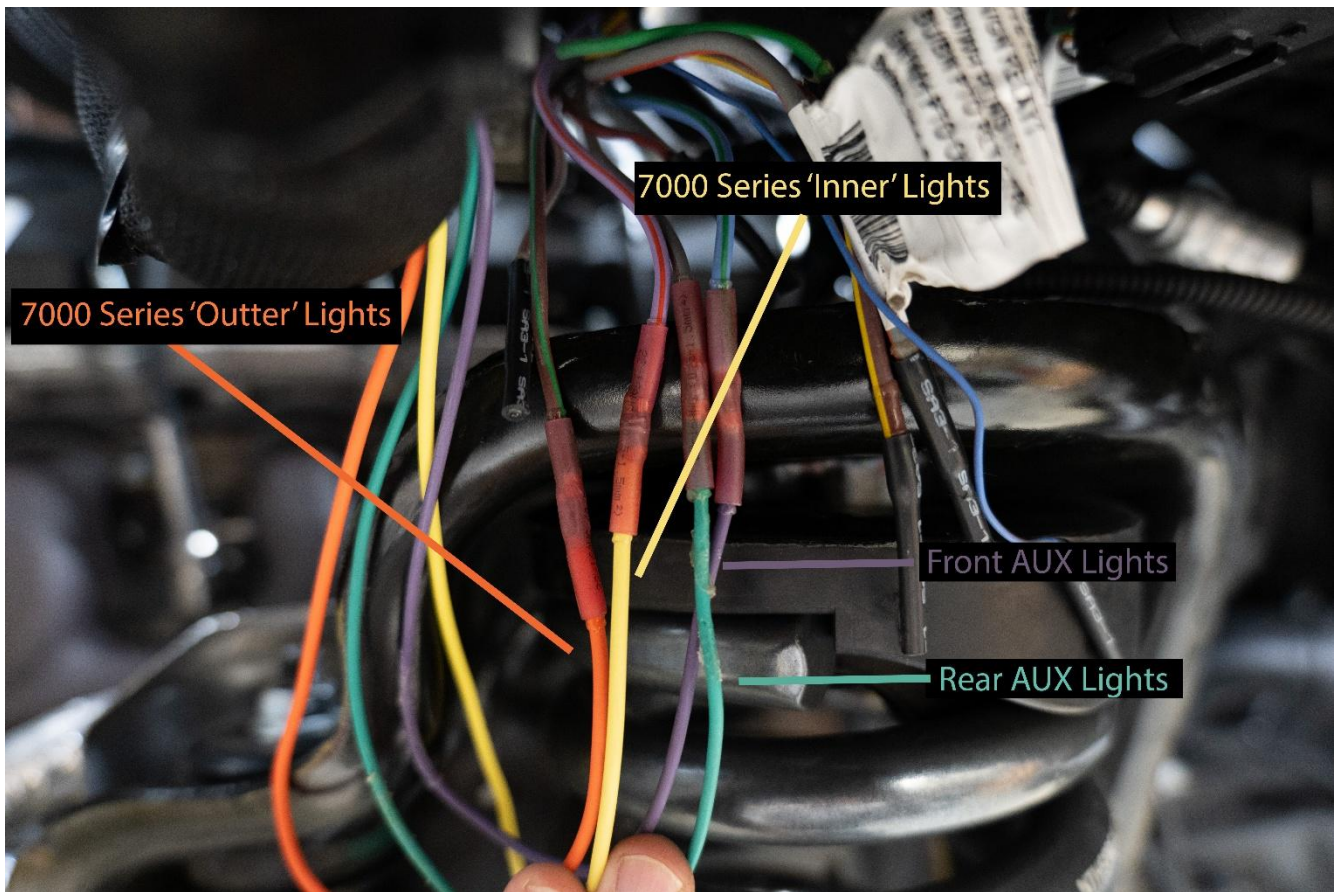


Figure 16

- i. To connect, expose the factory wires, and AEV harness wires and crimp together. AEV recommends testing the lights before putting the truck 100% back together in case any trouble shooting is required
- j. Once testing is completed and the lights function properly, tuck the wiring connections and tape off with electrical tape.
- k. Reinstall the wheel liner.