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Rough Country 51091 Installation Instructions

Rear Bumper with 6 Inch Slimline LEDs for Ford Bronco 4WD

Part number: 51091

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Scan for fitment, price and install help

ROUGH COUNTRY
SUSPENSION SYSTEMS®

21 Bronco Rear Fabricated Bumper

Thank you for choosing Rough Country for all of your accessory needs.

Rough Country recommends that a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle. Please read all the instructions before beginning the installation.

Check the kit hardware against the ‘’Kit Contents’’ list below. If question exist, please call us @1-800-222-7023. We will be happy to answer any questions concerning this product. Check all fasteners for proper torque. Check to ensure for adequate clearance between all components. **Periodically check all hardware for tightness.**

Be sure you have all the needed parts and understand where they go. Also, please review the “Tools Needed” list to be certain you have the necessary tools to complete the installation.



RC ROUGH COUNTRY

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21 Bronco Rear Fabricated Bumper

TOOLS NEEDED:

4mm Hex Wrench
8mm Hex Wrench
Wire Cutters
Wire Crimper

Metric Wrench/Socket
10mm
13mm
18mm

KIT CONTENTS:
Rear Bumper
Shim
Middle Mount
Top Step Plate
Middle Step Plate
Driver Inner Step Bucket
Pass Inner Step Bucket
6” Light Block Off Panel (2)
Sensor Mount Kit

HARDWARE INCLUDED:
M6 Black Button Head Bolt (21)
M6 Hex Head Bolt (4)
M6 Washer (8)
M6 Nut (25)
M12 Black Button Head Bolt (4)
M12 Hex Head Bolt (4)
M12 Washer (8)
M12 Flange Nut (4)
Plastic Adel Clamps (6)



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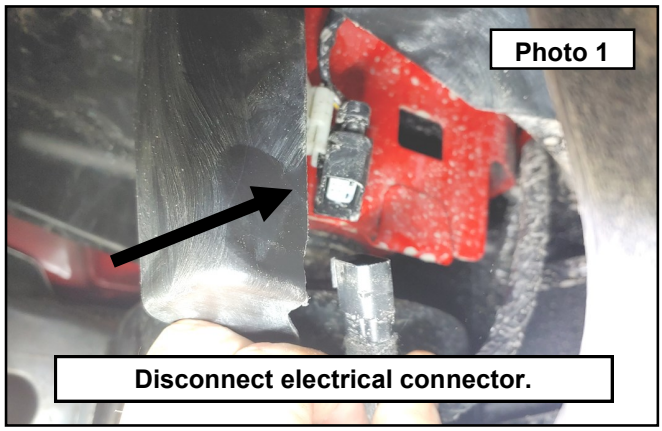
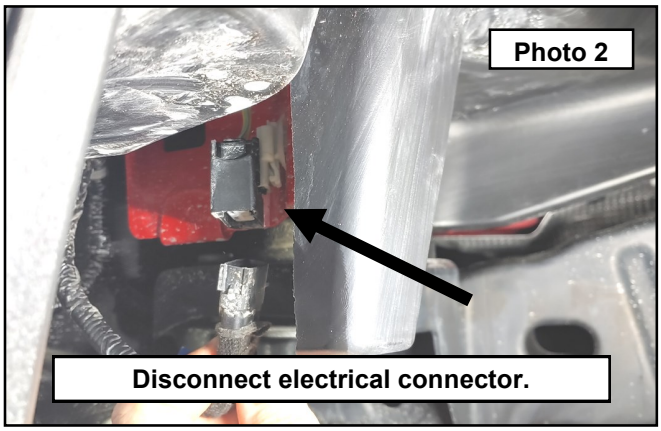
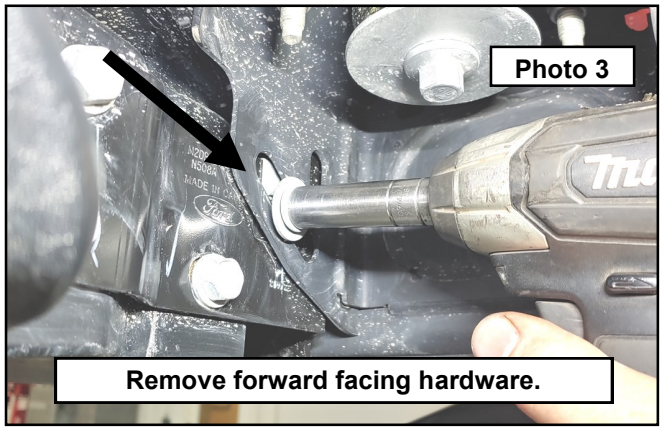
Rear Bumper Installation

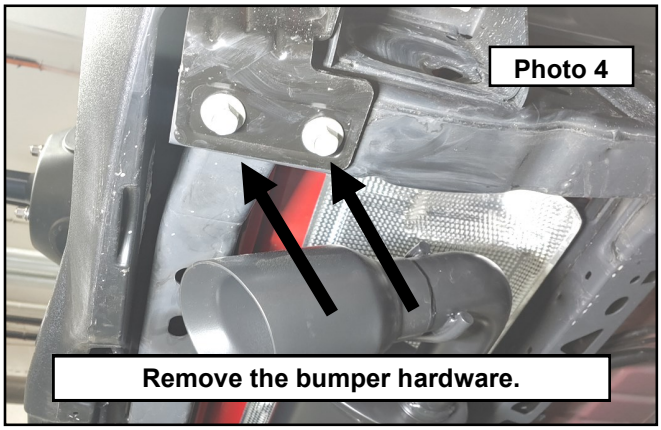
1. Park your vehicle on a clean flat surface, engage the parking brake and block the rear tires.
2. **Save all hardware removed from the vehicle unless otherwise noted.**
3. Open the hood and disconnect the negative terminal on the battery.
4. Disconnect the electrical connectors for the license plate light on the driver side behind the wheel well. **Photo 1**
5. If you have the parking sensor option, disconnect the electrical connector on the passenger side behind the wheel well. **Photo 2**



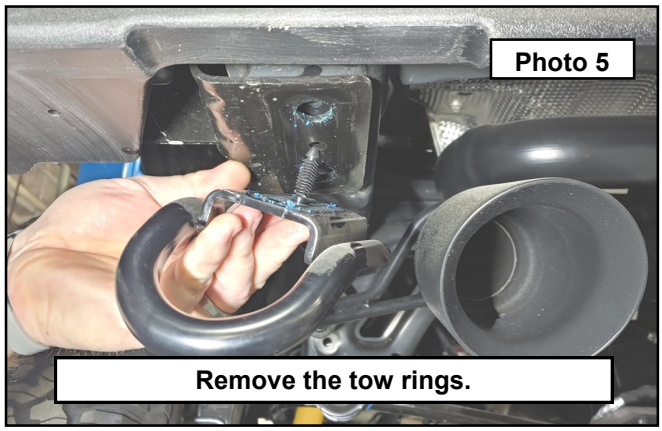


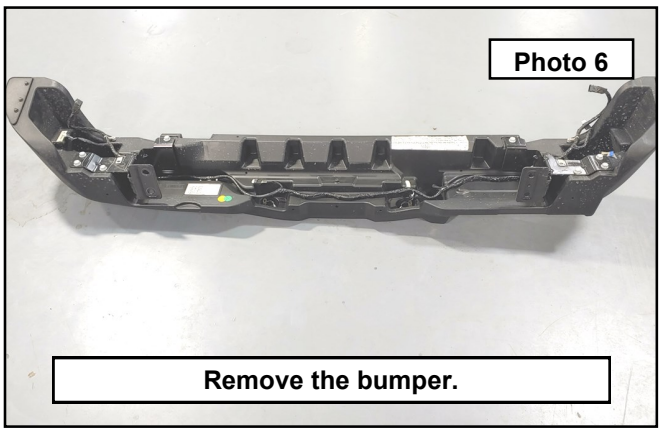
6. Under the vehicle, remove the two 10mm bolts attaching the bumper to the body mounts using a 13mm socket. **Photo 3**
7. With the help of an assistant or floor jack to hold the bumper, remove the lower 12mm mounting hardware using a 18mm socket. **Photo 4**





8. To remove the factory tow rings, pull down from the frame as it will be held in place with a plastic push pin after removing the 12mm hardware. Make sure your assistant or jack is holding the bumper while you remove the hardware. **Photo 5**
9. Pull the bumper down and out of the way and set aside. **Photo 6**





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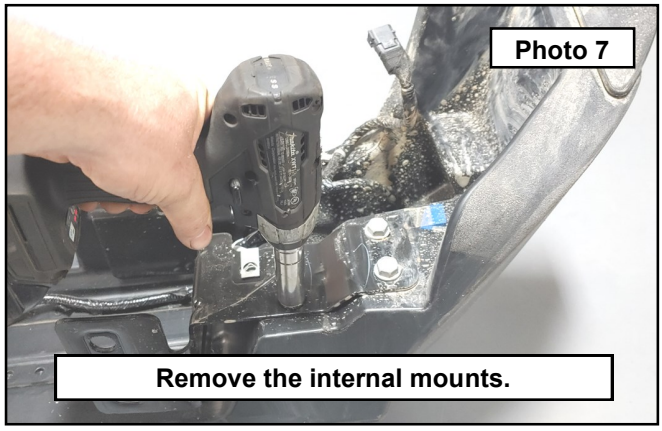
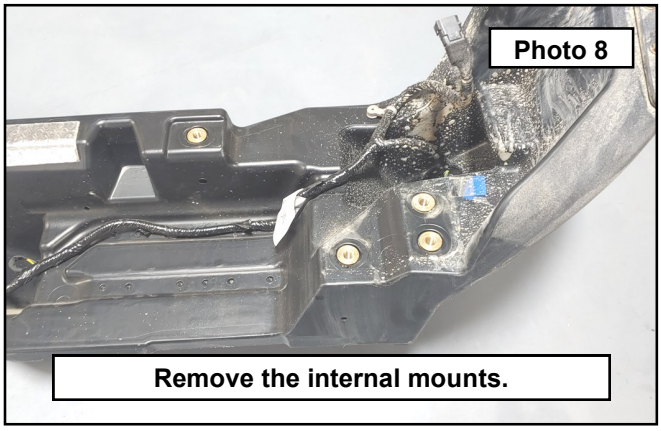
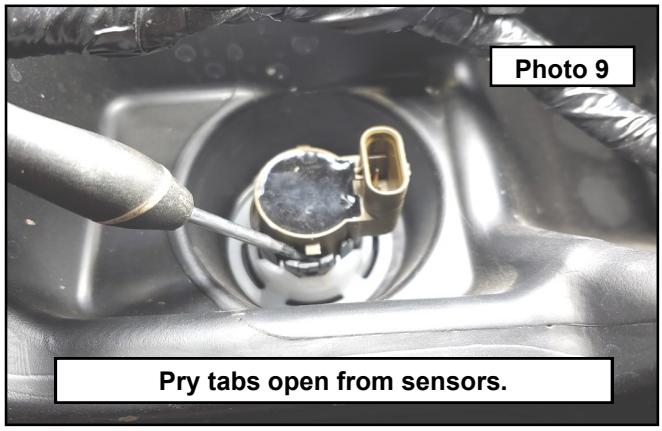
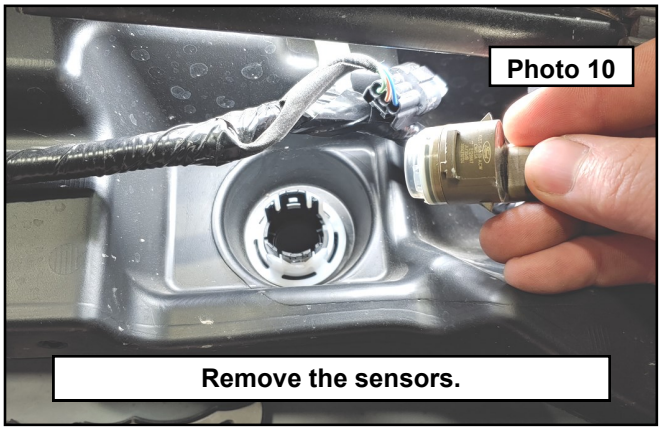
10. If your bumper came with parking sensors follow the removal and installation steps. If you do not have parking sensors, skip ahead to the bumper installation. Start by disconnecting the parking sensors connectors. Remove the internal brackets from the bumper using a 15mm socket. **Photo 7 / 8**



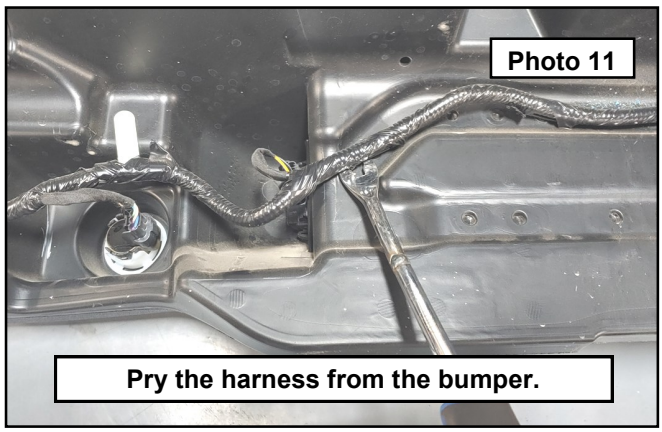


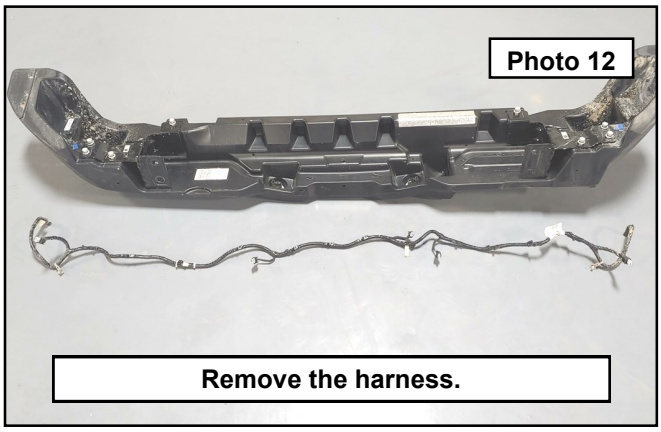
11. Use a pry tool or small flat blade screwdriver to open the tabs holding the sensor in place and pull the sensor out of its mount. **Photo 9 / 10**





12. Remove the harness from the bumper by prying all the plastic push pins from the bumper housing. **NOTE:** Label where each sensor was. The sensors will be reinstalled in the same location in the new bumper. **Photo 11 / 12**





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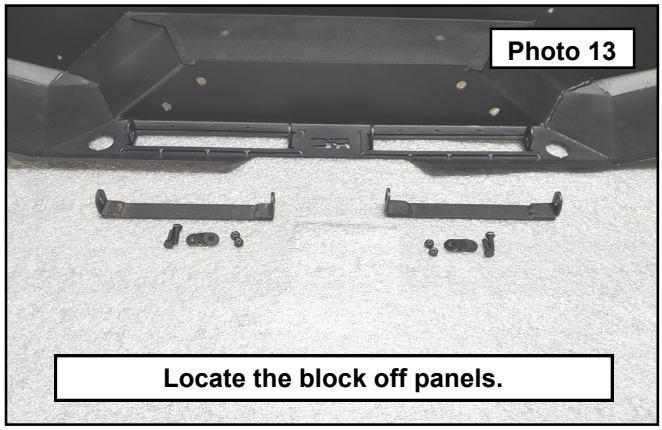
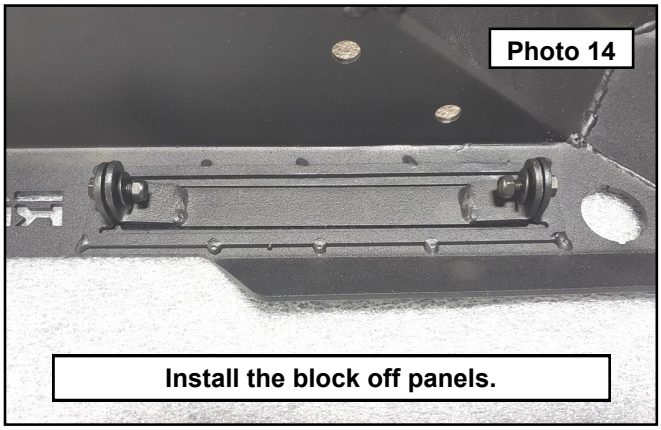
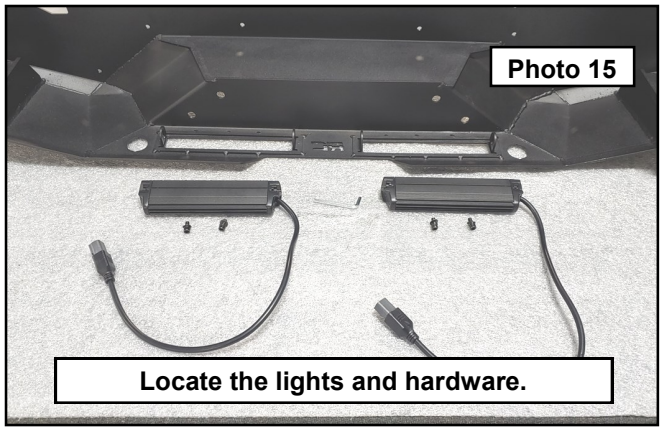
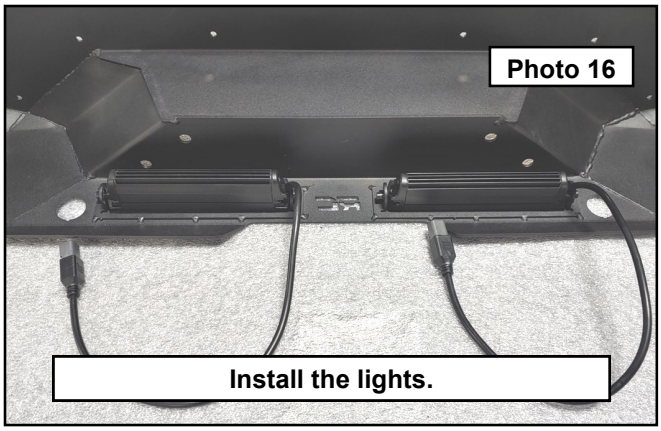
13. **Non light option bumpers:** Install the block off panels to the bumper using the provided 6mm bolts, washers and nuts. **Photo 13 / 14**



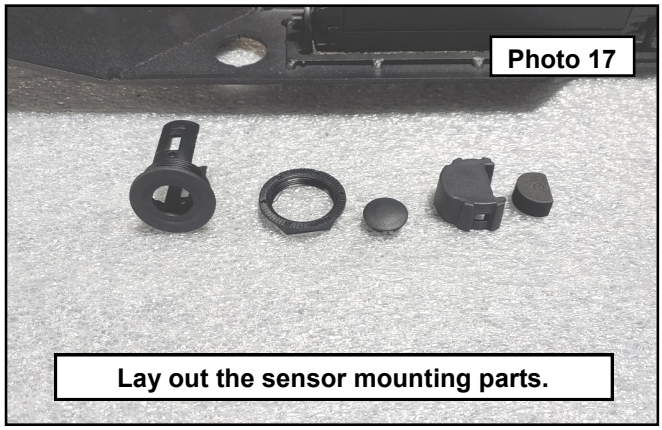


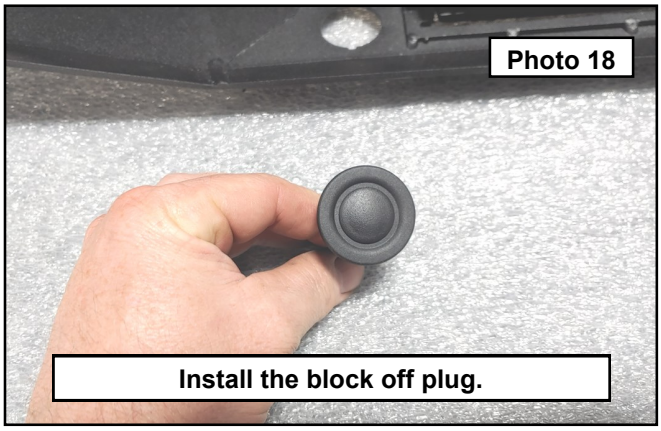
14. **Light optioned kits:** Install the lights to the mounts using the provided hardware with the lights. **Photo 15 / 16**





15. **Sensor and non sensor option kits:** Locate the sensor mounting kit and lay out the parts needed for each location as shown. There is the sensor mount, nut, block off plug, locking cap and foam insert. **Photo 17**
16. Non sensor options: install the block off plug into the sensor mount. **Photo 18**





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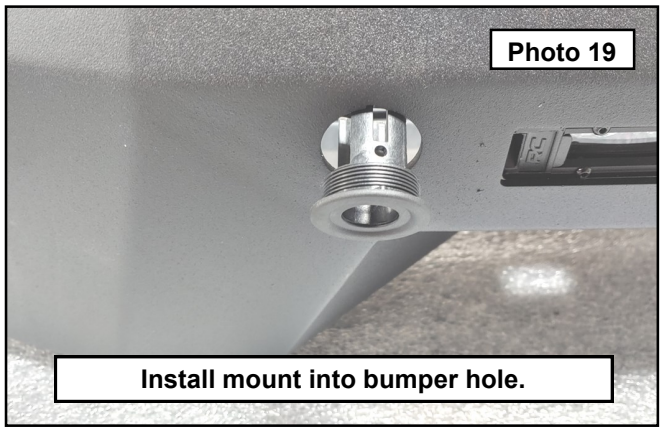
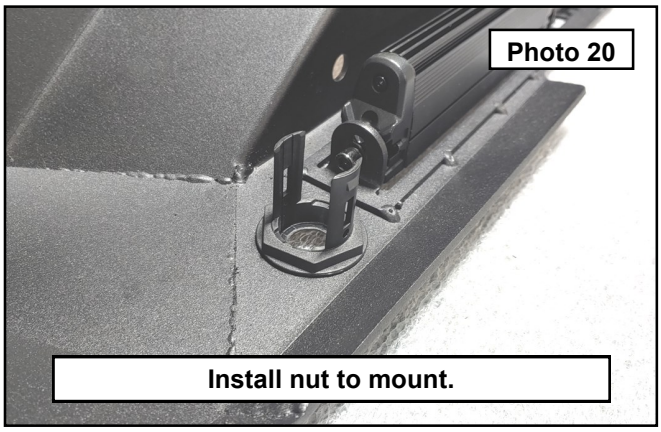
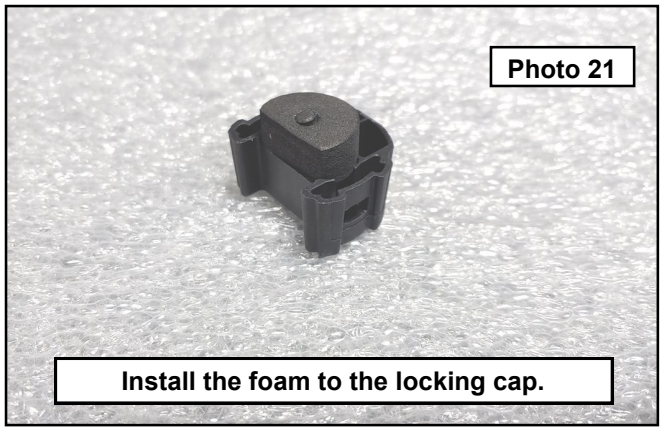
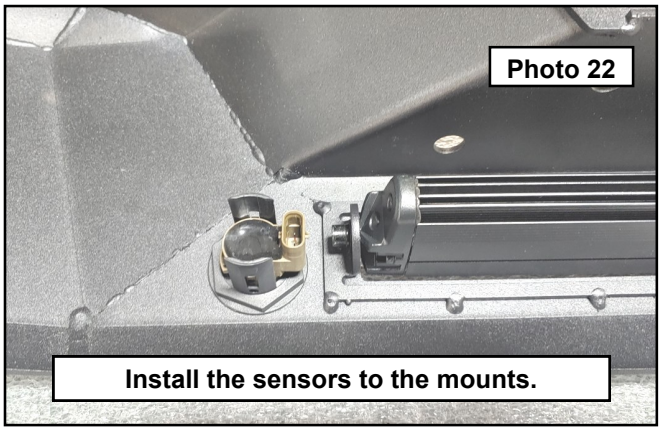
17. Install the mount into the bumper holes making sure to line up the locating tabs with the cut out on the bumper. **Photo 19**
18. Install the plastic mounting nut until fully seated. **Photo 20**



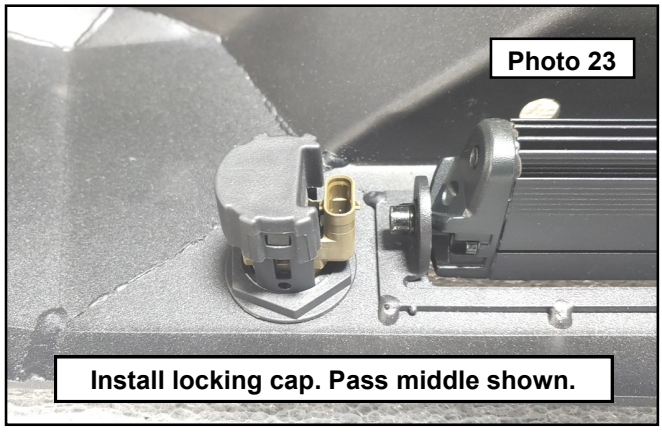


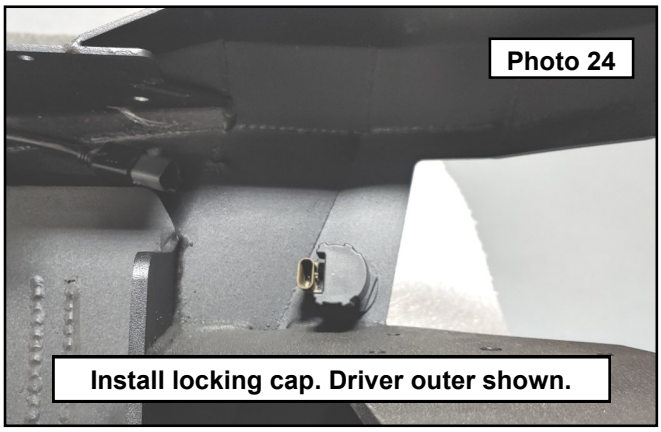
19. **Sensor option vehicles:** Install the foam to the cap as shown. **Photo 21**
20. Install the sensors into the mounts with the electrical connectors to the middle of the bumper as shown. Do this with all the sensors. **Photo 22**





21. Install the locking cap to the sensor mount until the tabs lock as shown. The foam will put pressure on the sensor to hold it in place. **Photo 23 / 24**





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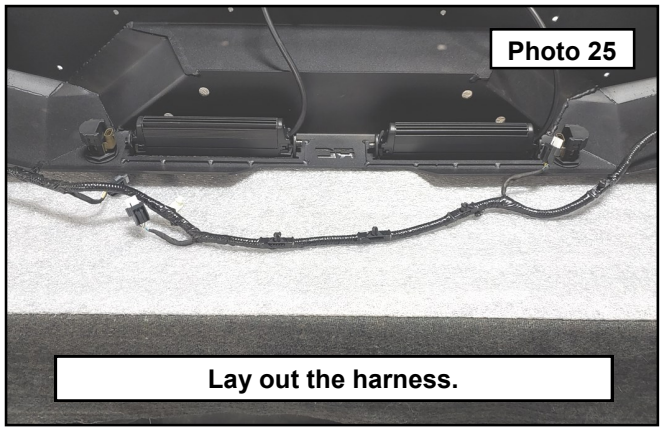
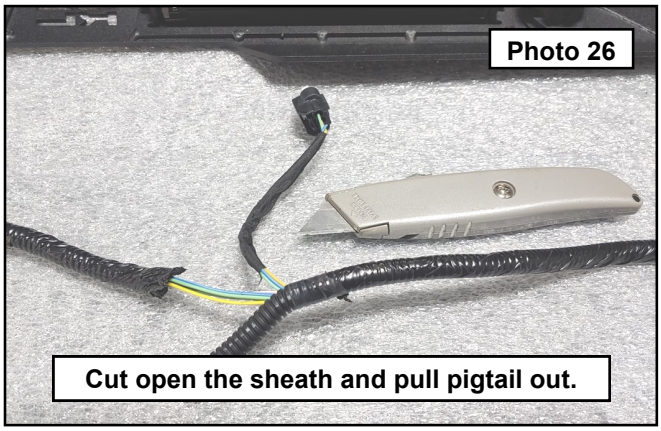
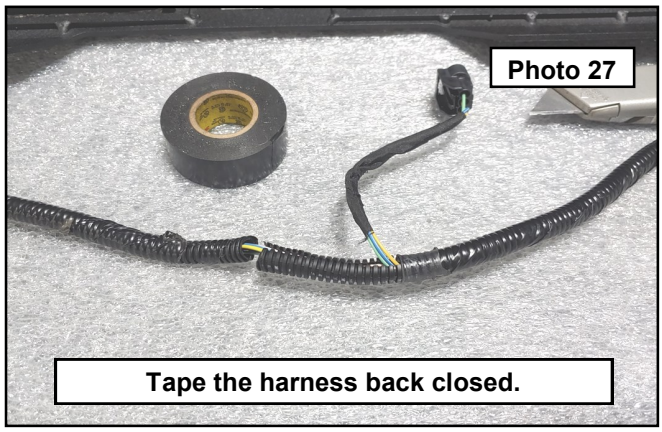
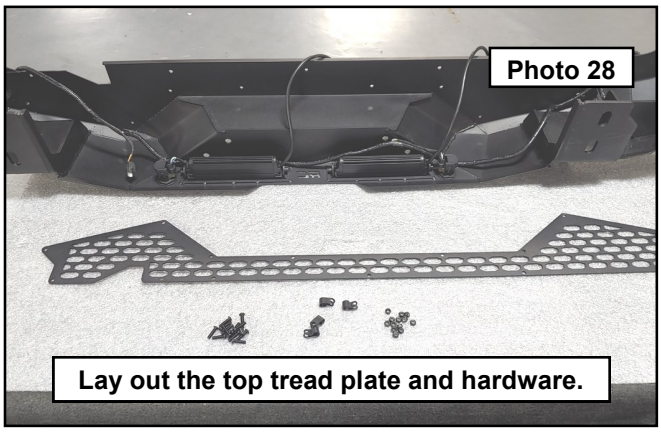
22. Lay the harness out as it was when removed from the stock bumper. **Photo 25**
23. Use a razor knife to cut the electrical tape off the junction where the passenger side middle sensor electrical connector pigtail meets the protective sheath. Once the tape is cut through, open the sheath and pull the pigtail out of the harness about 1.5” as shown. DO NOT cut through the wires. This is done so that the harness will reach the new location of the sensors. It is suggested to cut off all of the plastic mounting tabs and excess tape from the harness to make it more pliable when installing to the new bumper. **Photo 26**



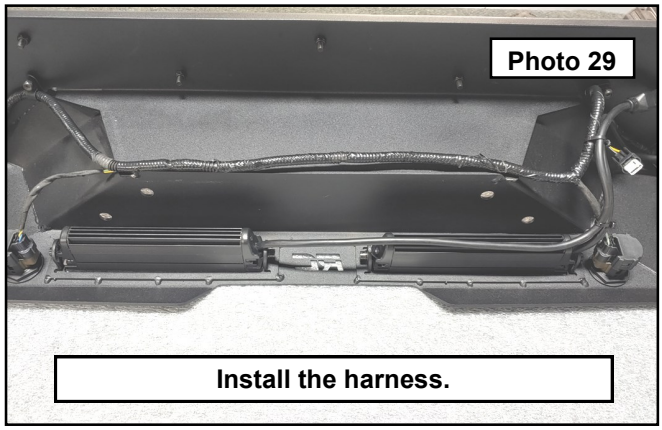


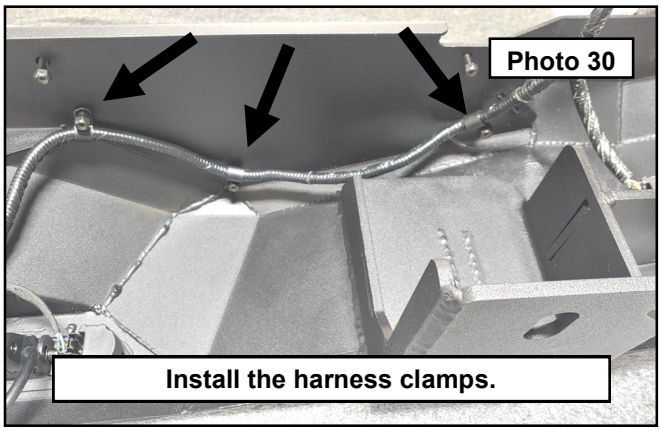
24. Once you have the pigtail pulled out of the sheath, put the exposed wire back into the sheath and wrap closed with electrical tape. **Photo 27**
25. With the harness laid out in position, locate the top tread plate and 6mm button head bolts, nuts, and plastic wire clamps. **Photo 28**





26. Install the tread plate to the bumper using the button head bolts to the center mounting locations. Connect the sensor electrical connections. Lay the sensor harness over the top of the center step recess as shown. Zip tie the light harness as shown below the center step. You will need this area open to slide onto the middle mount. **Photo 29**
27. At the ends of the bumper, install the provided plastic wire connectors around the harness and to the tread plate mounting bolts where shown. Tighten all hardware once installed. **Photo 30**





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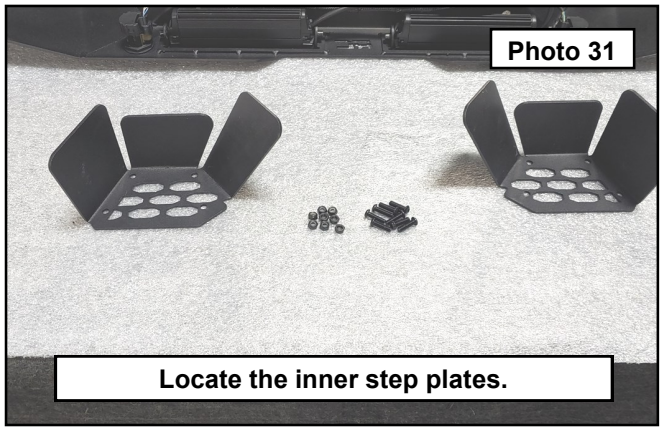
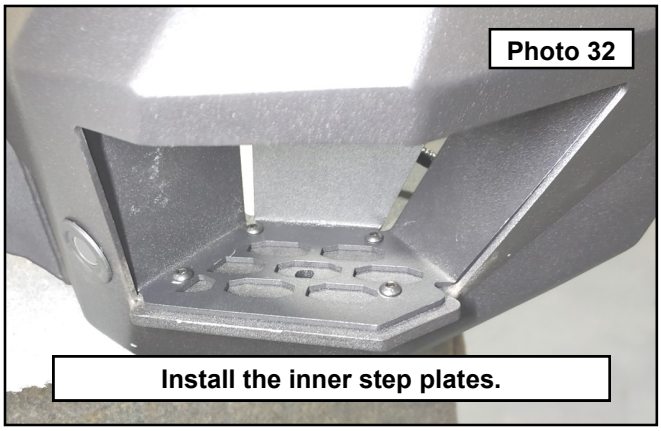
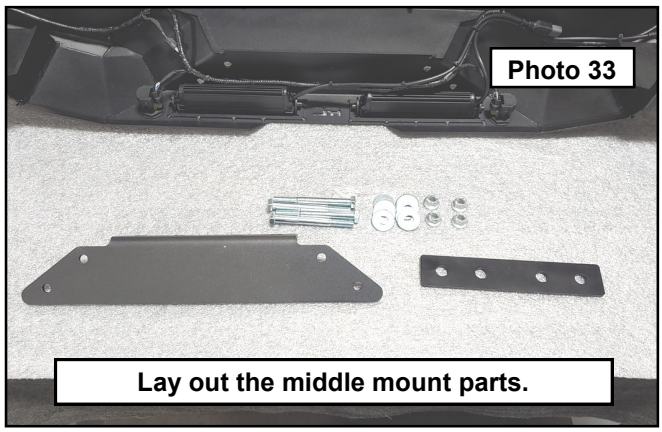
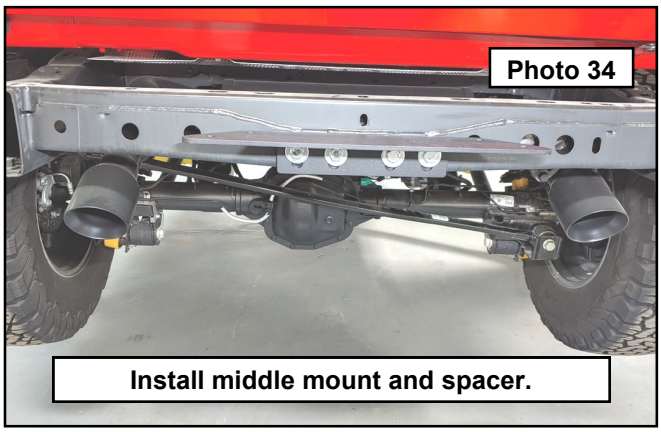
28. Locate the inner step plates, 6mm button head bolts and nuts. **Photo 31**
29. Install the inner step plates to the bumper using the provided hardware. Pass side shown. **Photo 32**



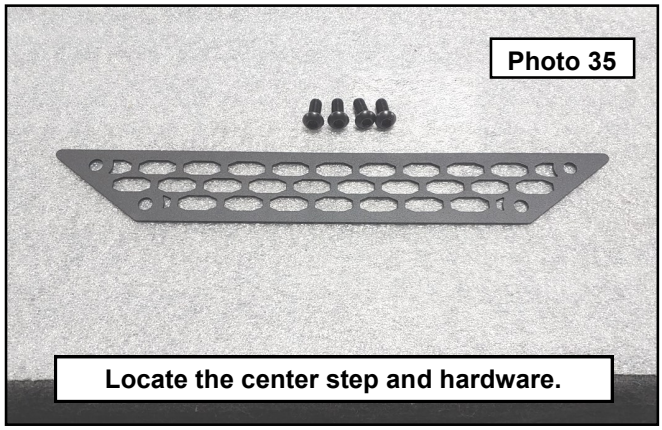


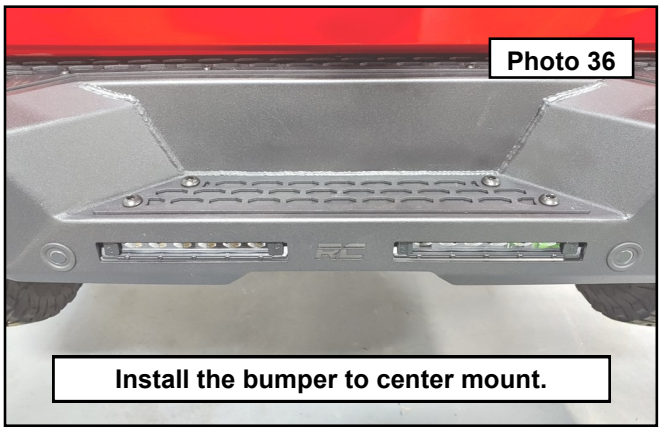
30. Locate the middle mount, 12mm hardware and 1/4” thick spacer plate. **Photo 33**
31. Vehicles without a hitch: Install the spacer plate between the frame and middle mount using the provided 12mm bolts, washers, and flange nuts. Snug the hardware up but do not fully tighten. Vehicles with a factory or Rough Country hitch: Remove the hardware holding the hitch in place and install the middle mount to the outside of the hitch. DO NOT use the spacer plate. Reinstall the removed hardware and snug up but leave loose. **Photo 34**





32. Have an assistant help install the bumper to the vehicle. Set onto the middle mount. Locate the center step plate and 12 mm button head bolts. Install the hardware to the middle mount. **Photo 35 / 36**





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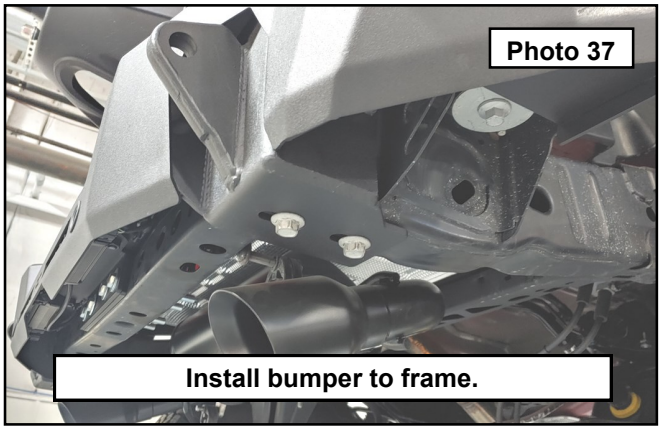
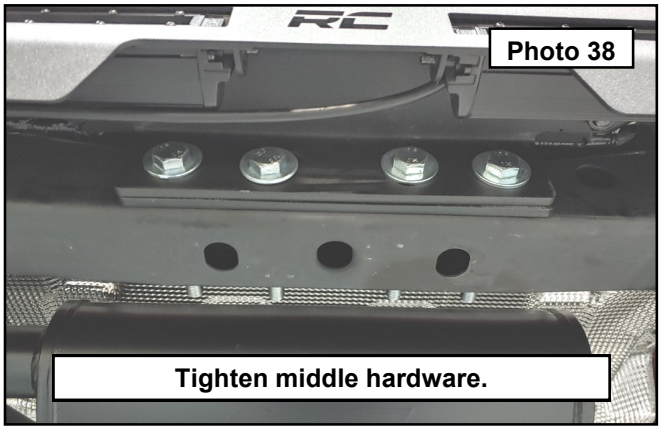
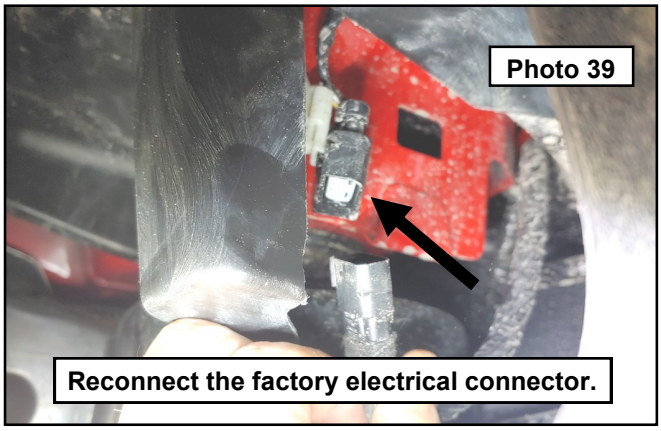
33. Install the bumper to the frame rails using the stock hardware. **Photo 37**
34. Once these are tight, fully tighten the middle mount to frame hardware. **Photo 38**



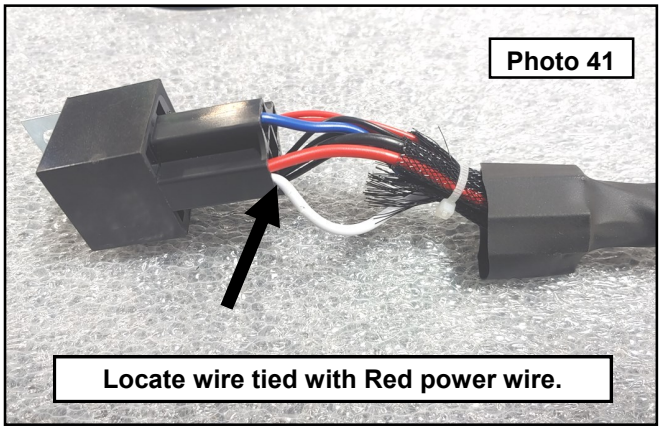


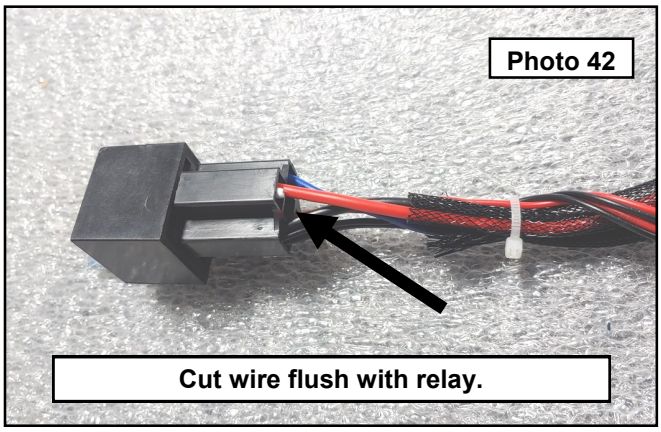
35. Reconnect the electrical connectors. If you have the light option kit, run the light harness to the front of the vehicle making sure to keep out of the way of moving and/or hot components. **Photo 39**
36. **Light option bumpers:** It is suggested for a clean installation to purchase the MLC6 controller box which can control six 30 amp circuits and attaches to the factory AUX switch panel inside the cab of the vehicle. **Photo 40**





37. If you do not use the MLC6 unit, you can attach the light bar and cube harnesses to the aux switch wires under the hood. You will need to cut the switch end of the harness and use the trigger wire to attach to the AUX wires coming from the vehicle. In this you will find a blue, black and white wire. Pull the protective sleeve cover from the relay to access the wires. Find the color wire that is doubled up with the Red power wire going to the relay. **Photo 41**
38. This wire should be white but can be blue. Cut this wire flush with the relay. This gave power to the switch that you are about to remove. **Photo 42**





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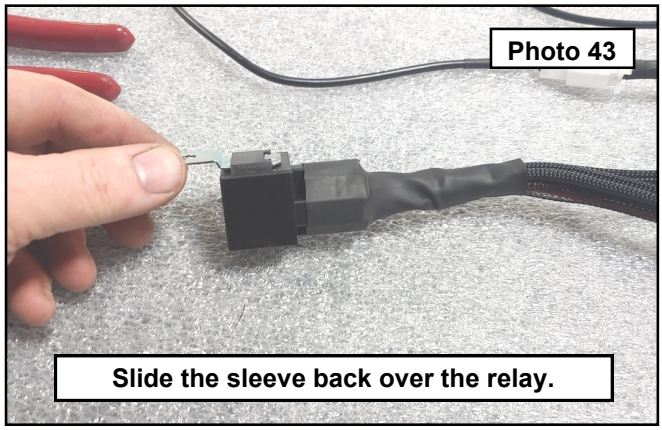
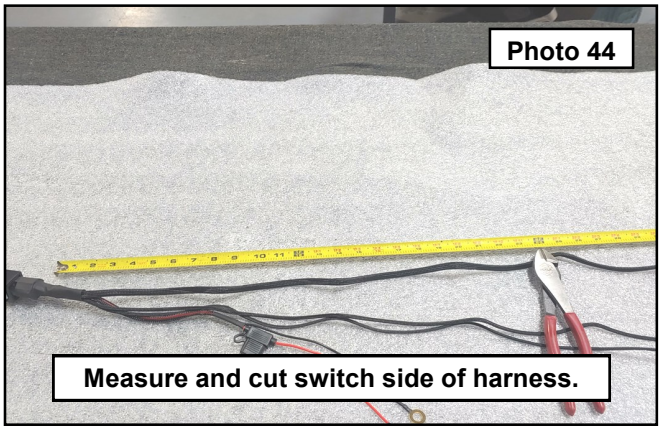
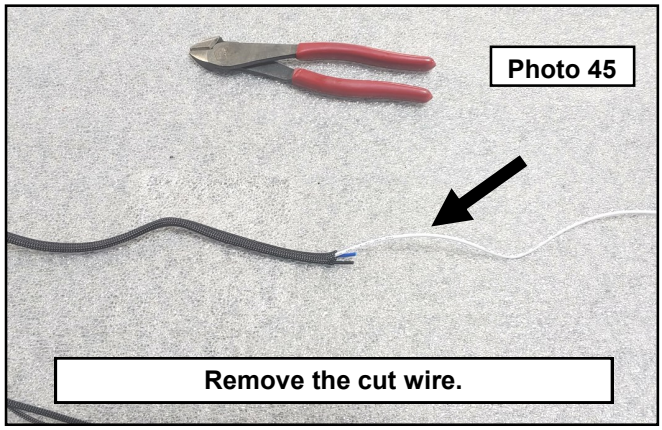
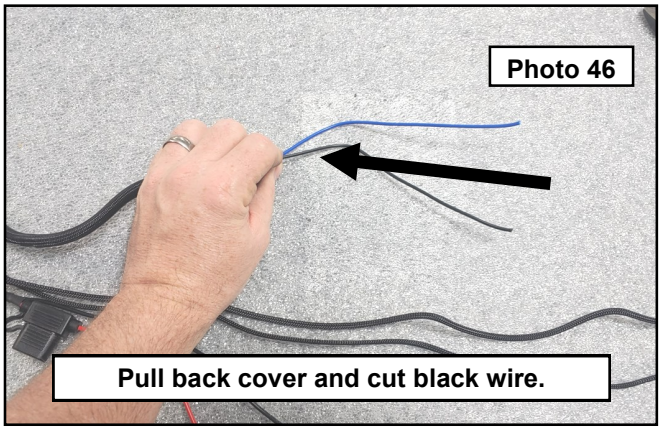
39. Slide the protective sleeve back over the relay. **Photo 43**
40. Measure 24” from the relay end down the switch side of the harness and cut using a pair of wire cutters. You will be cutting through 3 wires and the sleeve. **Photo 44**



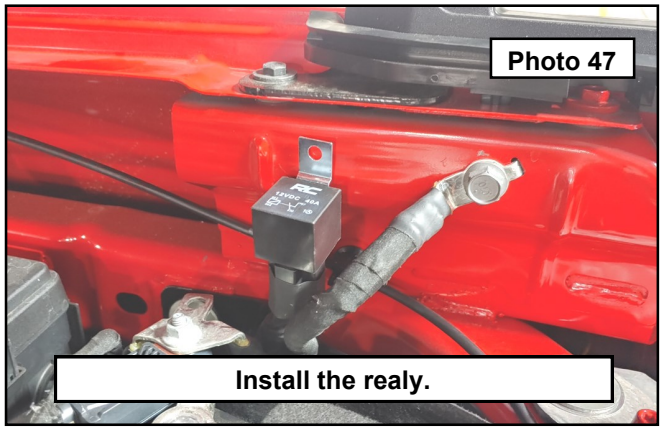


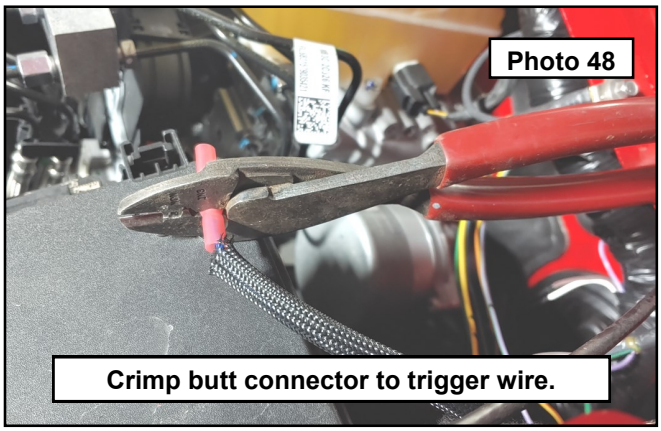
41. Once you have cut the harness, dispose of the side that is attached to the switch. On the relay side, pull back the protective sleeve to reveal the three wires. Pull out the wire that you previously cut at the relay and discard. **Photo 45**
42. Pull the protective sleeve back about 5” and cut the black wire. This is the ground for the switch that has been removed and is no longer needed. **Photo 46**





43. Find a spot close to the battery to mount your relay. Use a self tapping screw or drill a hole to mount the relay. You can also use a zip tie to hold it out of the way. **Photo 47**
44. Run the trigger wire side of the harness down the fender next to the fuse panel. Strip the wire back and add a butt connector. Crimp the connector in preparation for attaching to the AUX wires. **Photo 48**





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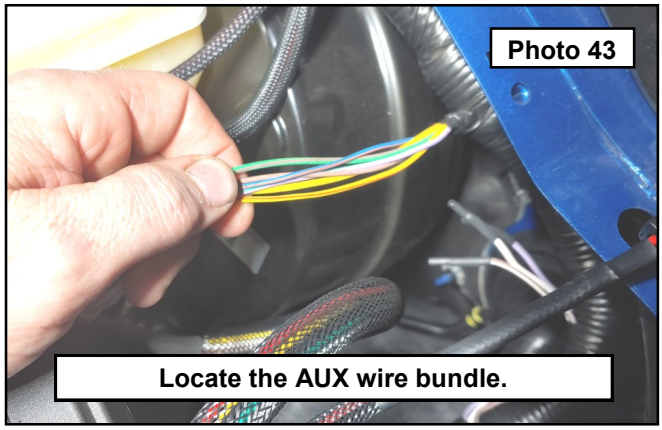
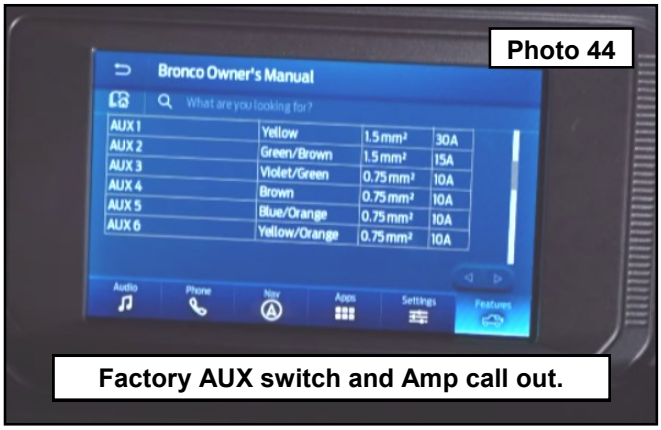
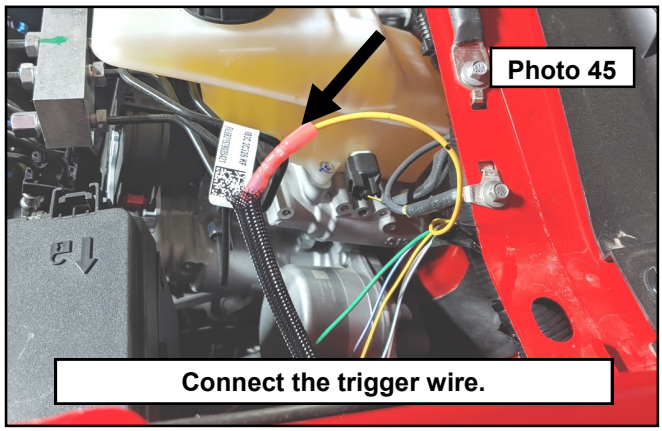
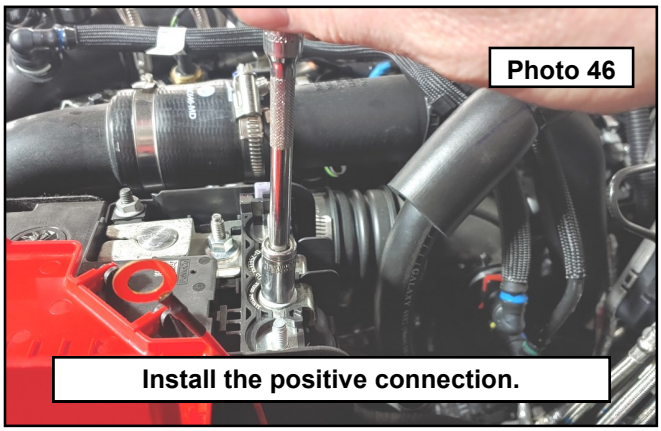
45. Under the cowl next to the brake booster you will find the AUX switch panel wires. These circuits from the factory are rated at #1 at 30 amp, #2 at 15 amp, #3, #4, #5, and #6 at 10 amps. #2 through #6 are only large enough to be trigger wires for lighting options included with this bumper. **Photo 43 / 44**



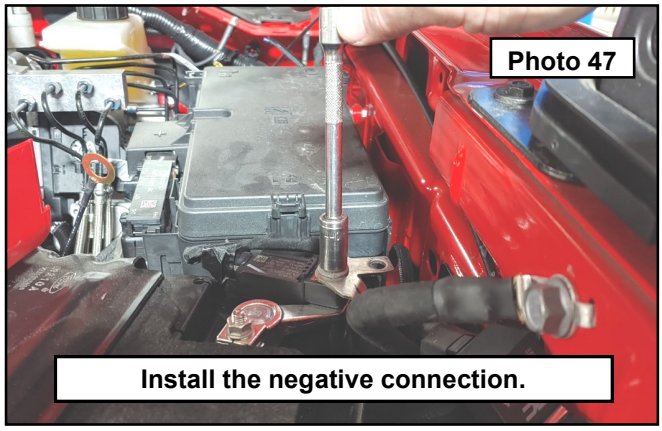


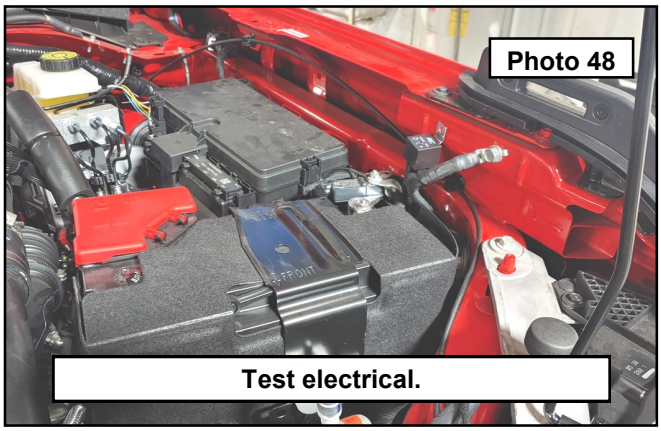
46. Connect the trigger wire to the AUX wire of choice. See photo 44 for mapping of the factory AUX switch panel. **Photo 45**
47. Attach the harness positive wire to the battery positive terminal using a 10mm socket. **Photo 46**





48. Attach the harness negative wire to the battery negative terminal using a 10mm socket. **Photo 47**
49. Test the electrical by starting the vehicle and turning on the switch that you tied to. Close up the battery covers and enjoy your new bumper. **Photo 48**





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