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Rough Country 51075 Installation Instructions

Front Bumper with 20 Inch LED Bar and Amber DRL Pods for Bronco

Part number: 51075

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Scan for fitment, price and install help

ROUGH COUNTRY
SUSPENSION SYSTEMS®

21 and UP Bronco Modular 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. 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.





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21 and UP Bronco Modular Bumper

TOOLS NEEDED:
Jack
Safety Stands
Wheel Chocks
Wire Cutters
Wire Crimpers
Small Pry Tool
T-35 Torx Driver
Pliers
Metric Wrench/Socket
10mm
13mm
14mm
15mm
18mm

KIT CONTENTS:
Bumper Center
Driver Full Wing
Passenger Full Wing
Driver Stubby Wing
Passenger Stubby Wing
Driver Frame Bolt Plate
Passenger Bolt Plate
20” Light Bar Block Off Grill
Sensor Mounting Kit

HARDWARE INCLUDED:
12mm Flange Nut (6)
12mm Heavy Washer (6)
8mm Bolt (14)
8mm Washer (26)
8mm Flange Nut (14)
Zip Tie (6)
12mm Plastic Bolt Retainers (6)





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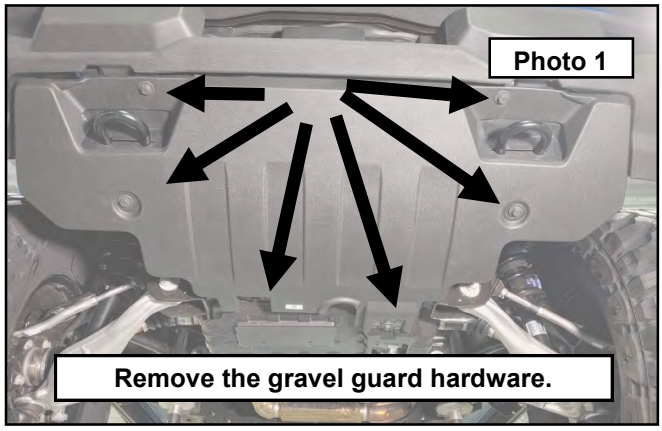
There are TWO different installations based on the factory bumper on the Bronco. One for the plastic bumper (top picture) and one for the steel modular bumper (bottom picture). Follow the steps for the particular bumper that is on your vehicle.





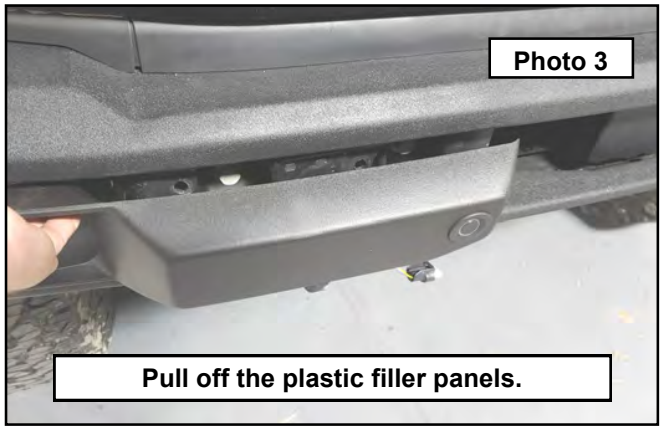
Front Bumper Installation:

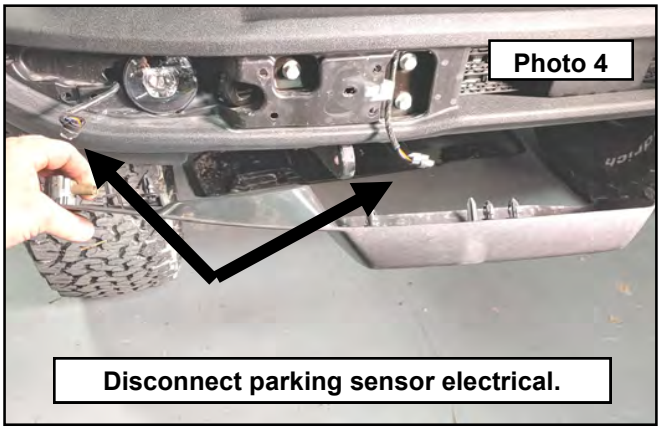
1. Park your vehicle on a clean flat surface, engage the parking brake and block the rear tires.
2. **Save all hardware removed from the vehicle unless otherwise noted.**
3. Open the hood and disconnect the negative terminal on the battery.
4. There are two types of factory bumpers, Plastic molded and Steel Modular. Follow along for your particular bumper. **Plastic bumper vehicles:** Remove the gravel guard using a 15mm socket. **Photo 1**
5. If your vehicle has fog lights and/or parking sensors, on the driver side of the vehicle, trace the wire harness up into the wheel well. Disconnect the connector and pull down out of the way. **Photo 2**



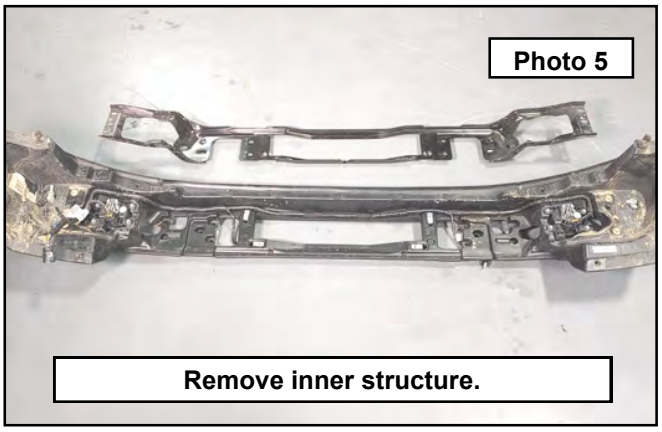


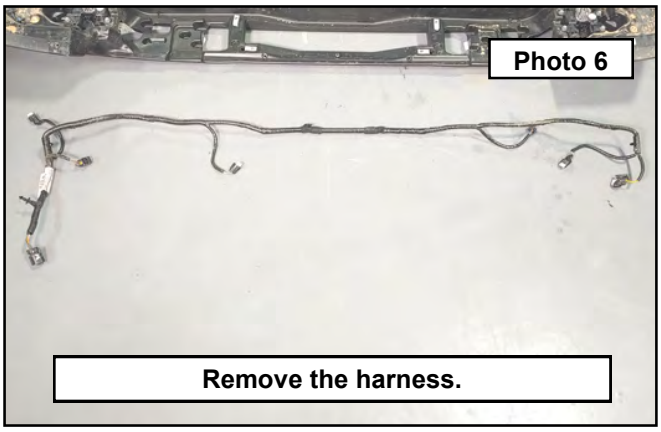
6. Remove the plastic filler panels on either side of the bumper by pulling out and away from the bumper. **Photo 3**
7. If your bumper is equipped with the parking assist sensors, disconnect the electrical connectors. **Photo 4**





8. Behind the plastic filler panels are the main mounting bolts for the bumper. Have an assistant hold the bumper, remove the bumper mounting bolts using a 15mm socket and remove the bumper from the frame. **Sensor equipped vehicles:** Remove the inner metal structure using a 15mm socket. **Photo 5**
9. Disconnect the sensors and/or fog light electrical connectors then use a pry tool to remove the harness. **Photo 6**





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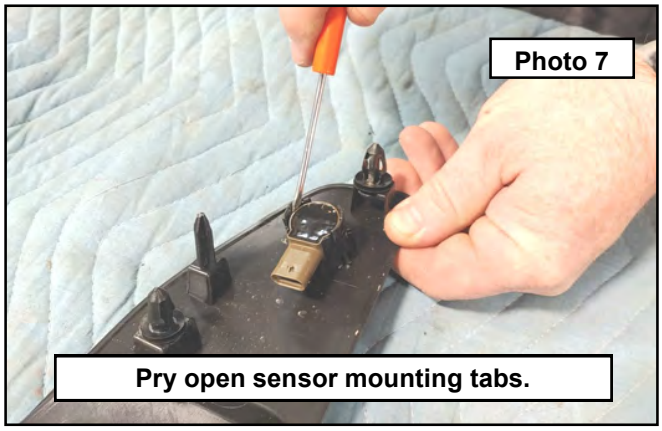
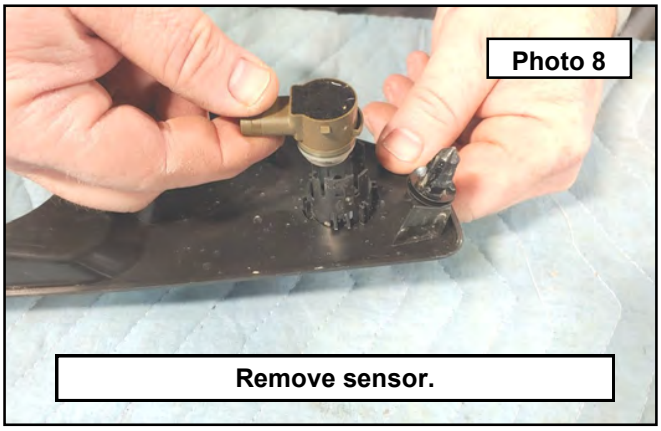
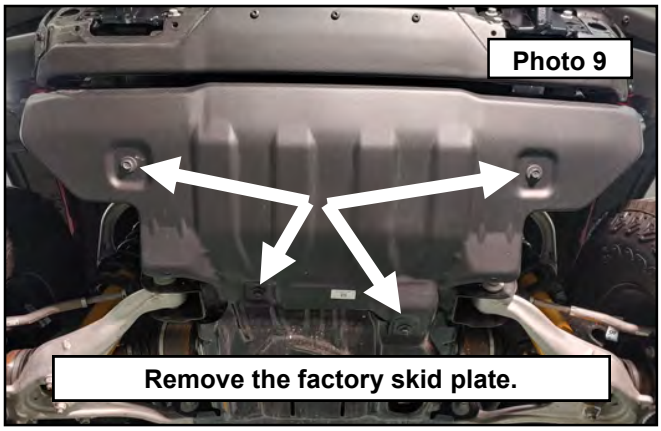
10. Remove the sensors by prying out on the mounting tabs and pulling the sensor from their mounts. Pay attention to their orientation and how they mount to the bumper as they will need to be reinstalled in the same fashion on the new bumper. Skip steps for the Steel Modular Bumper 11 through 27. **Photo 7 / 8**



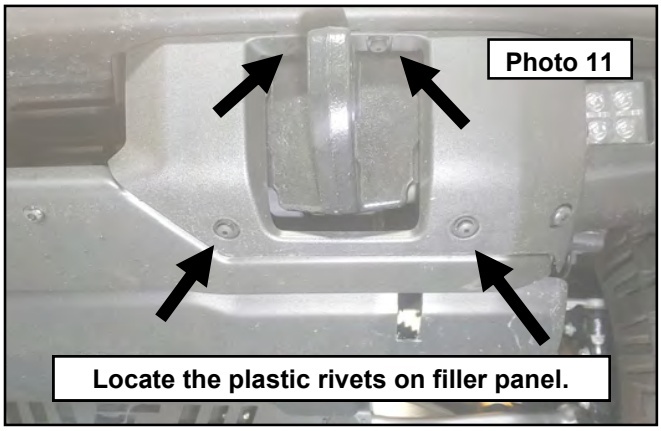


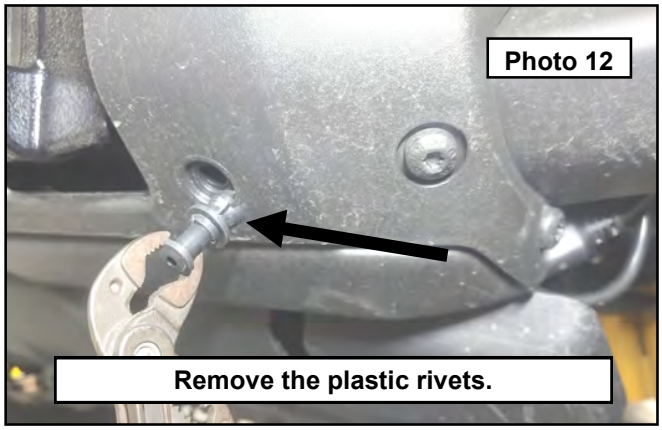
11. **Steel Modular bumper:** Remove the factory skid plate using a 15mm socket. **Photo 9**
12. If your vehicle has fog lights and/or parking sensors, on the driver side of the vehicle, trace the wire harness up into the wheel well. Disconnect the connector and pull down out of the way. **Photo 10**





13. Locate the plastic rivets around the plastic filler panel. You will find two on the bottom edge and one on either side of the tow hook. **Photo 11**
14. Remove the factory plastic filler panels by pulling out the center of the plastic rivet, then pulling the body of the plastic rivet out of the holes. **Photo 12**





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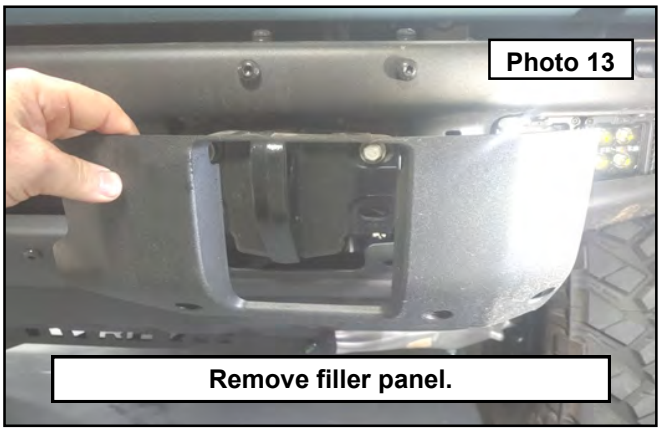
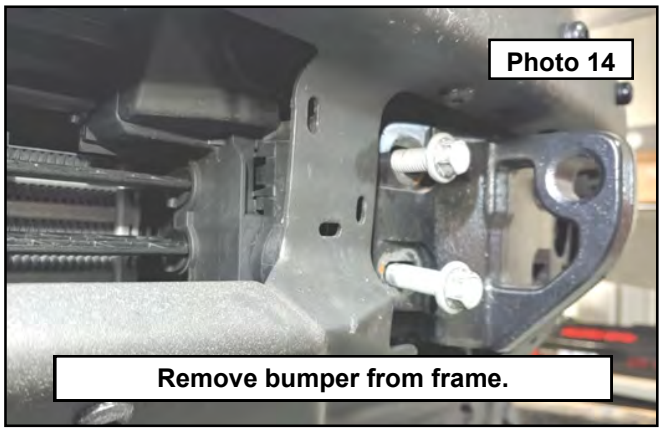
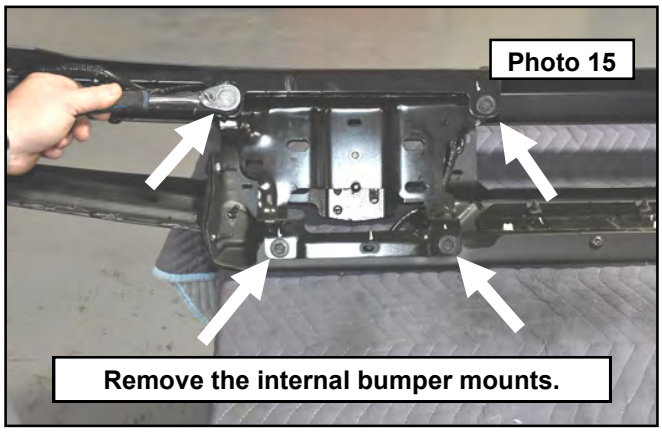
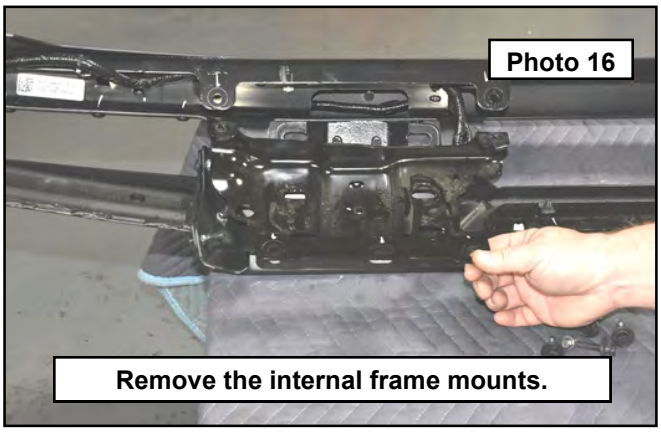
15. Once the plastic rivets are removed, pull the filler panel out and away from the bumper to release the remaining hidden clips behind the panel. **Photo 13**
16. Have an assistant hold the bumper, remove the 6 bumper mounting bolts using a 15mm socket and remove the bumper from the frame and set aside. If you have the Rough Country hidden winch kit, there will be two 1/4" thick spacers on either side between the bumper and frame. These will not be reused. **Photo 14**



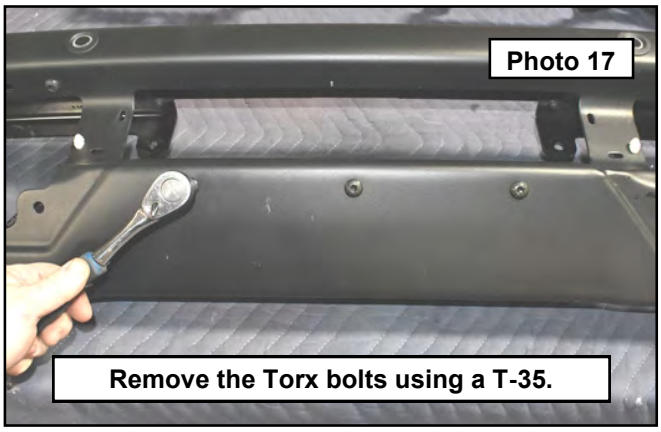


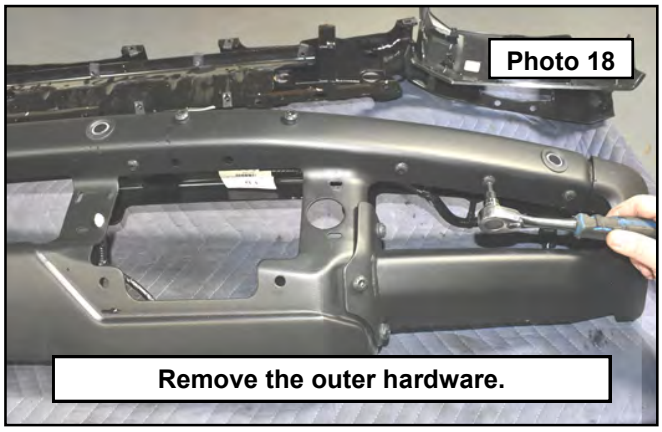
17. **Sensor equipped bumpers:** You will need to disassemble the inner structure to access the harness. Set the bumper onto a work bench face down. Start by removing the internal bumper mounts using a 15mm socket. **Photo 15**
18. Remove the internal frame mount and set aside. **Photo 16**





19. Flip the bumper over and start removing the rest of the internal bracket hardware using a T-35 Torx bit. Only remove the hardware holding the brackets that block the wire harness and sensors. Do not remove the outer wing mounting hardware. Once you have all the internal bracket hardware removed from the front of the bumper, flip it over and remove the inner hardware. **Photo 17 / 18**





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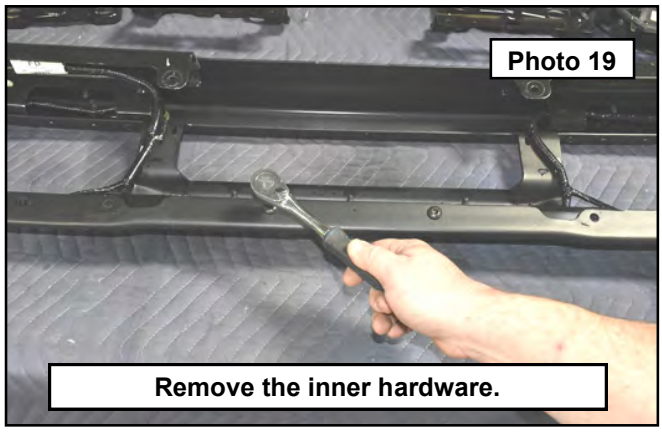
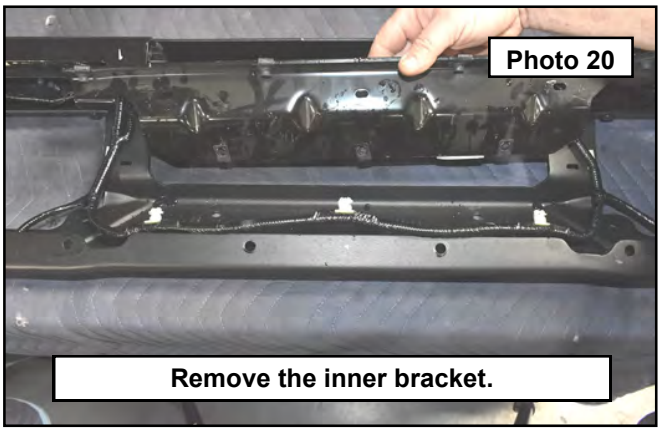
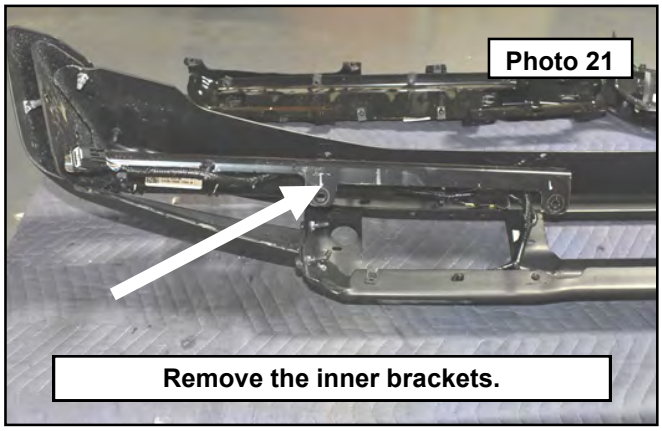
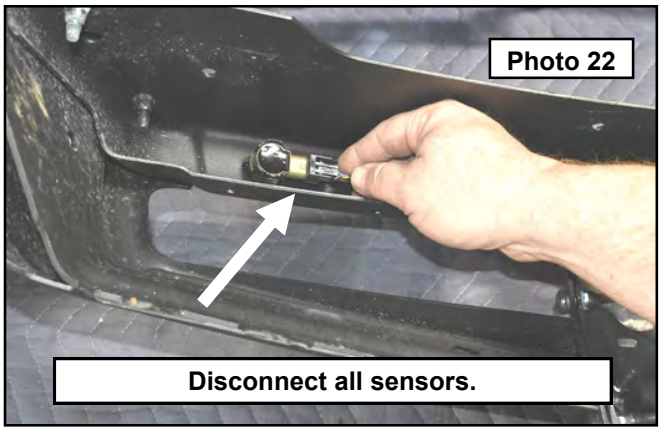
20. Remove the internal center bracket blocking access to the wire harness and sensors. **Photo 19 / 20**



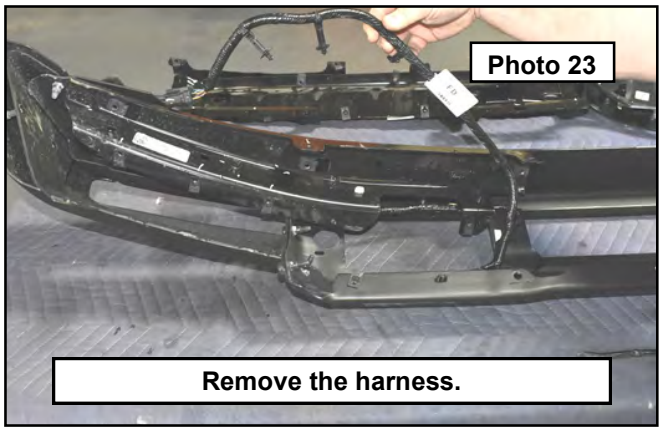


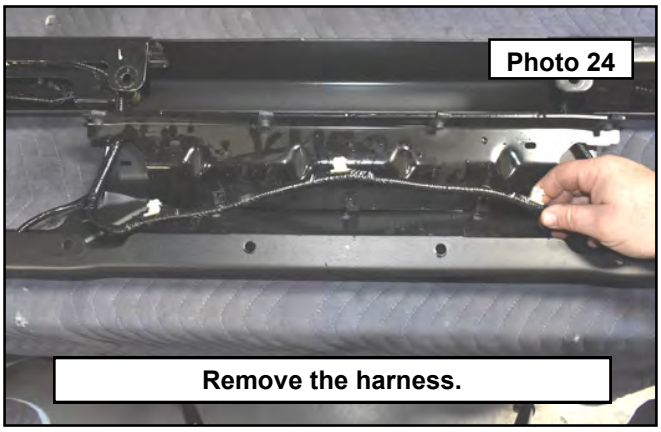
21. Remove the bumper wing internal inner bracket blocking access to the wire harness and sensors **Photo 21**
22. Disconnect the sensor electrical connectors. **Photo 22**





23. Use a pry tool to remove the harness plastic clips from the bumper. **Photo 23 / 24**





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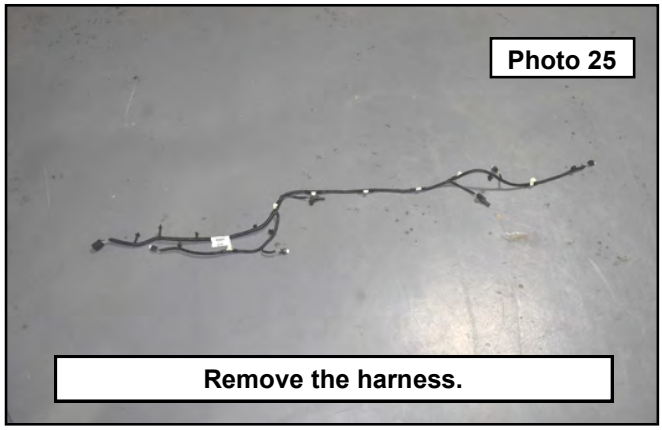
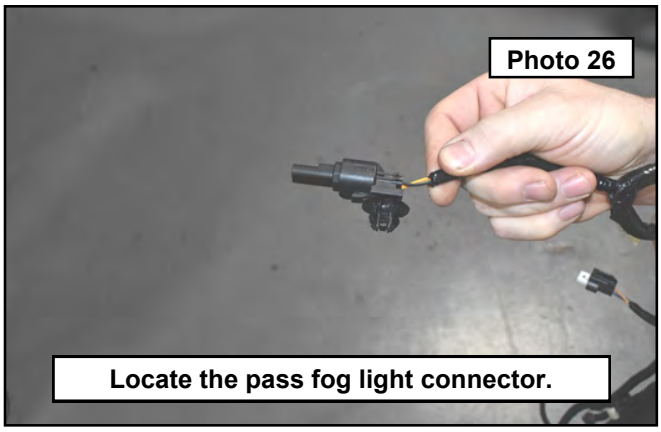
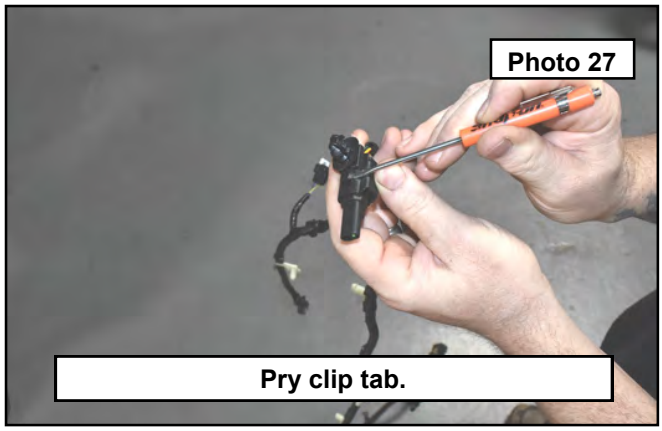
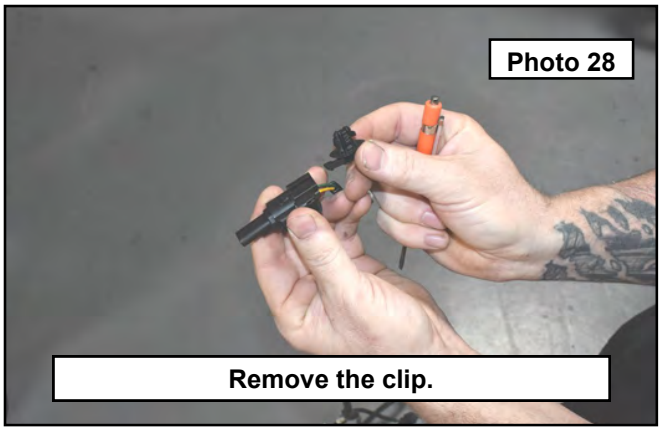
24. Remove the harness from the bumper and set aside. **Photo 25**
25. On the passenger side of the harness, you will find the fog light connector (if no fog lights are installed, then there will be a block off connector installed). **Photo 26**



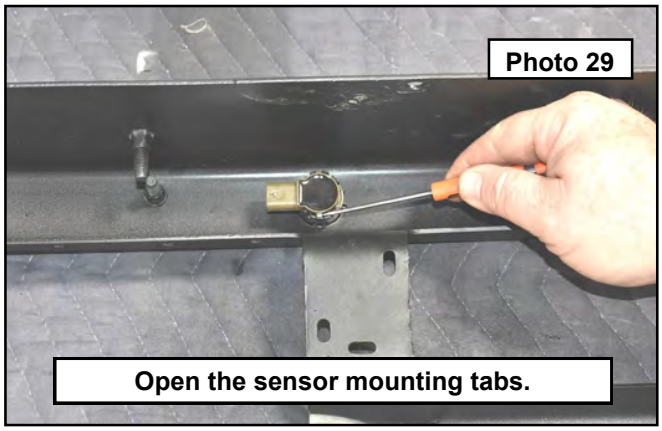


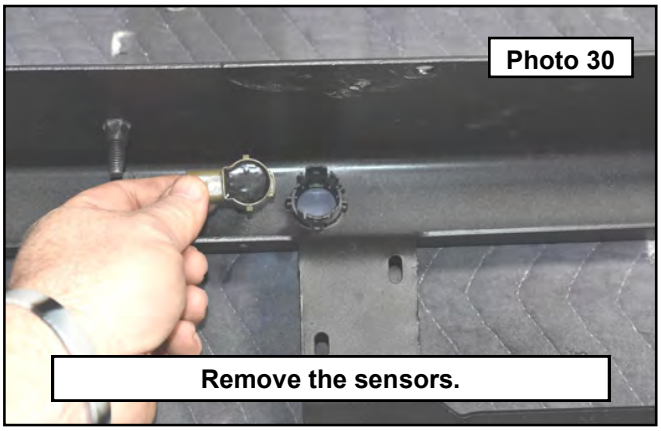
26. Remove the plastic mounting clip using a small pry tool. This needs to be done so that the harness will pass through the openings in the new bumper easily. **Photo 27 / 28**





27. Remove the sensors from their mounts by using a small pry tool to open the clips out of the way and pulling the sensors out of their mounts. Make sure to pay attention to their orientation for reinstallation into the new bumper. **Photo 29 / 30**





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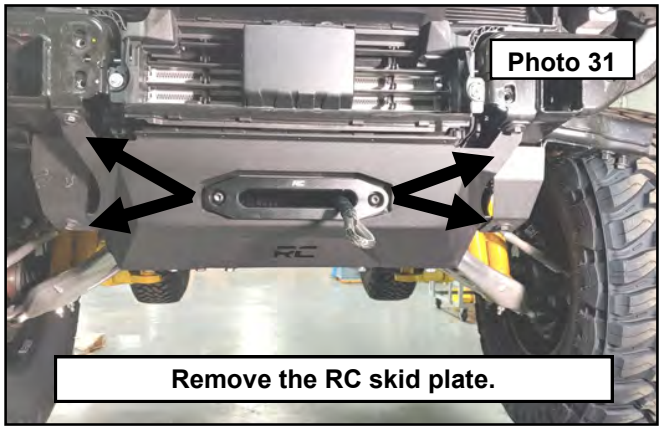
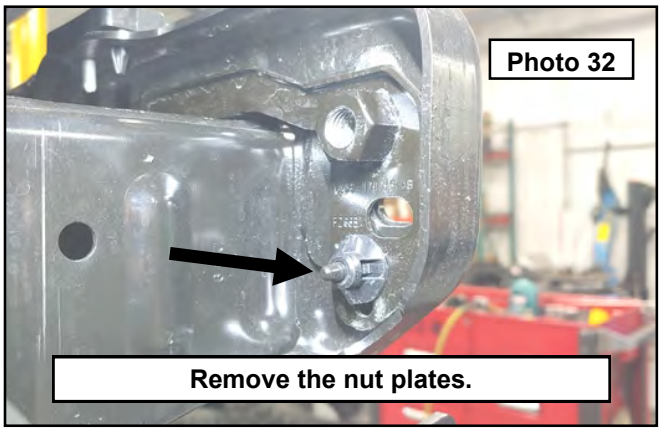
28. If you have the Rough Country hidden winch kit installed, let about a foot of rope out of the winch or remove the hook. Then remove the skid plate using a 15mm socket and set aside. This is done for installation of the new bumper hardware. **Photo 31**
29. Behind the frame horns are the factory nut plates. Remove these by twisting off the plastic nuts holding them in place. **Photo 32**



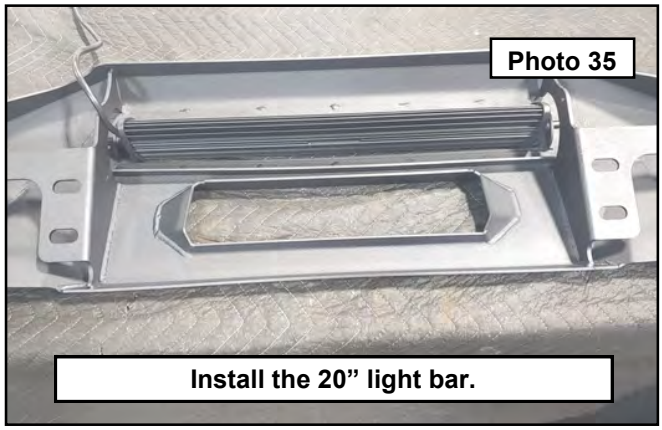


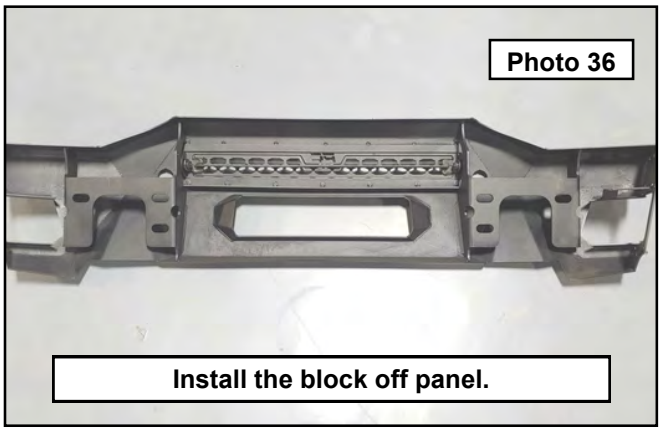
30. Assemble your Rough Country bumper. Install the wing type that you want to run at this time using the provided 8mm bolts, washers and flange nuts. Line the outer profile to the inner profile and tighten all the hardware. If you are installing the stubby wings, install the hardware in the lower holes as a place holder should you want to toss the ful wings on later. Shown on vehicle for reference. **Photo 33 / 34**





31. **Light option kits:** Install the 20” light bar using the provided hardware with the light kit. Depending on which style light you have, you may need to use the provided spacers and longer bolts from the light kit. **Photo 35**
32. **Non Light option kits:** Install the 20” light bar block off grill using the provided 8mm bolts, washers and flange nuts from the bumper kit. **Photo 36**





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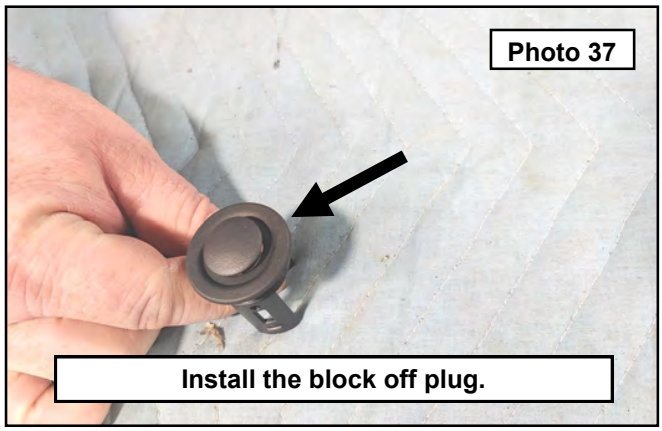
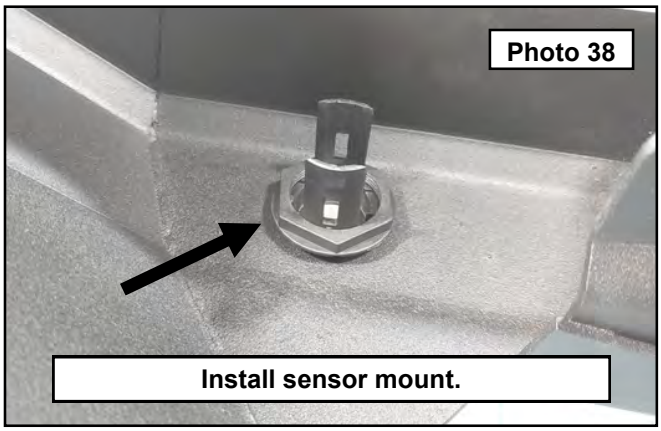
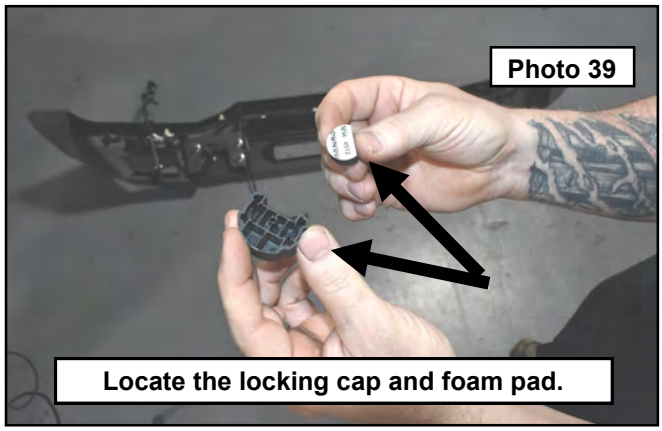
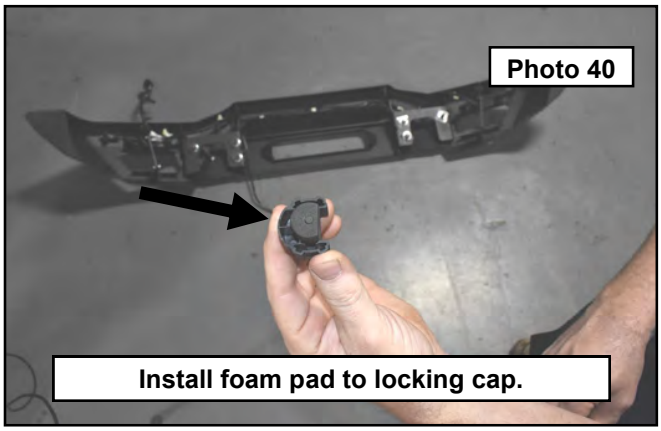
33. **Non Sensor option bumpers:** Open the sensor mount kit box and install the provided block off plug into the sensor mount. **Photo 37**
34. **Sensor and non sensor options:** All the following steps are the same for both the stubby wings as well. Install the provided sensor mount to the bumper using the provided plastic nut from the kit. These are keyed into the bumper using a notch in the bumper and tab on the housing. Non sensor option vehicles, skip steps 35 through 41. **Photo 38**



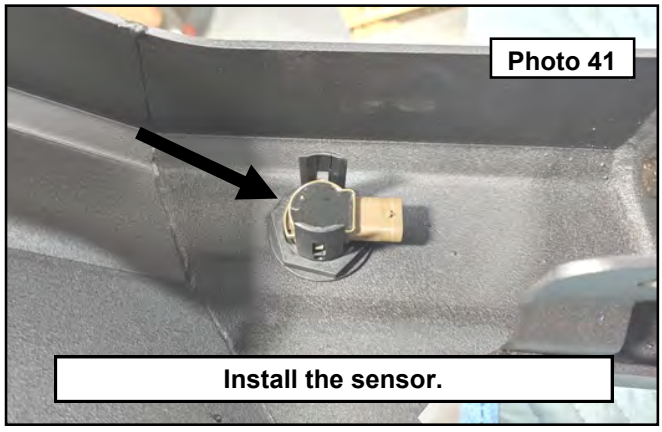


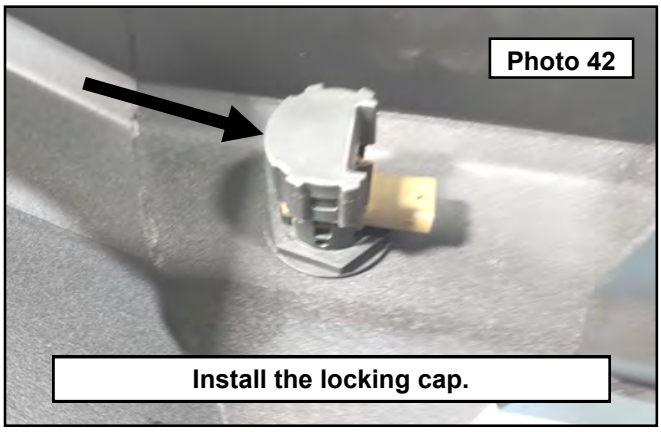
35. **Sensor option bumpers:** Locate the sensor locking cap and foam semi-circle pad. **Photo 39**
36. Remove the adhesive tape cover and stick to the locking cap as shown. **Photo 40**





37. Install the sensor in the same orientation as removed from the factory bumper into the mounts. The sensors will seat down into the clip slots in the mount. **Photo 41**
38. Install the locking cap with foam pad onto the end of the sensor mount until you feel it click into place as shown. **Photo 42**





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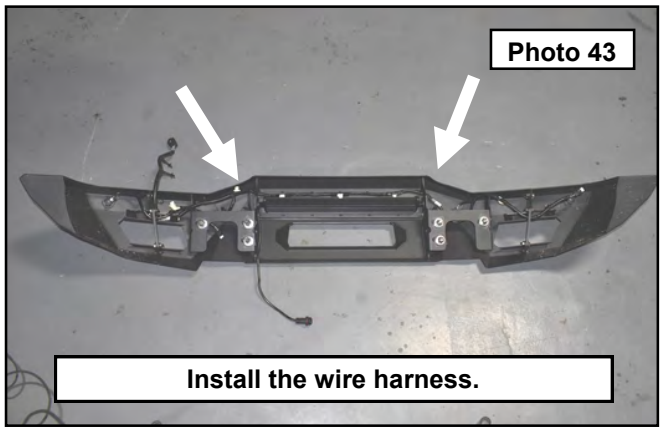
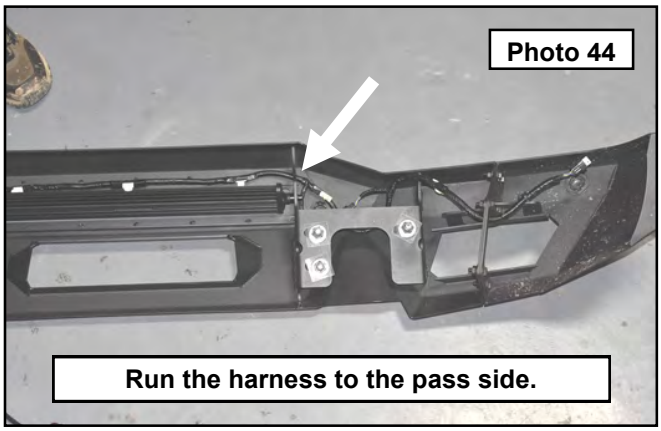
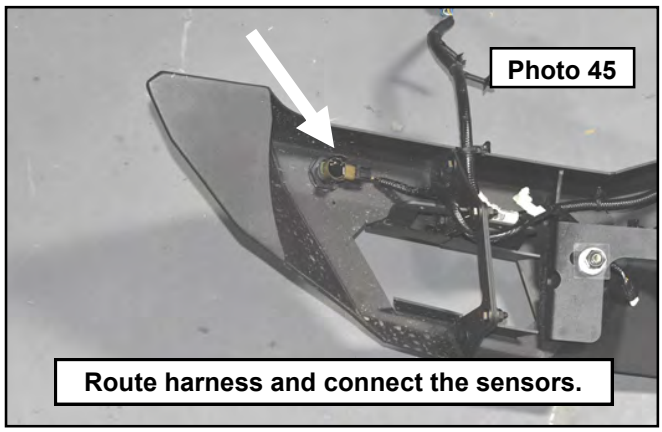
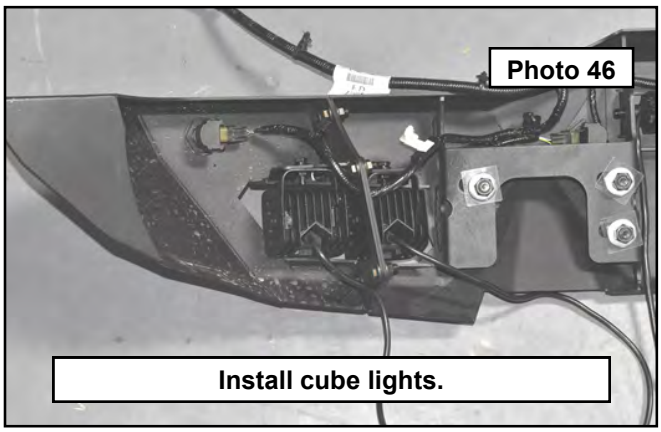
39. Start with the passenger end of the wire harness and feed it through the holes in the frame mounts next to the 20” light bar mounts. **Photo 43 / 44**



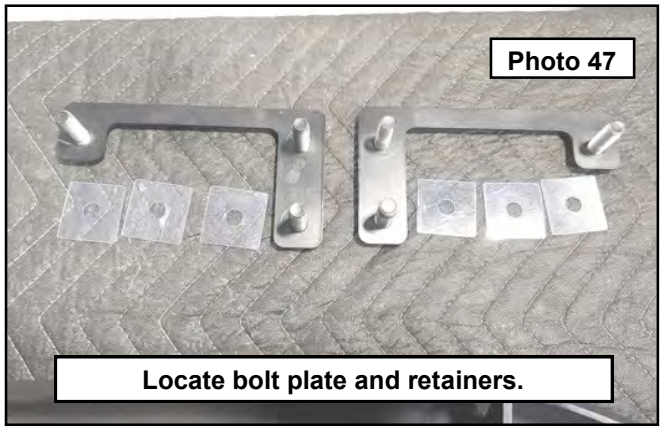


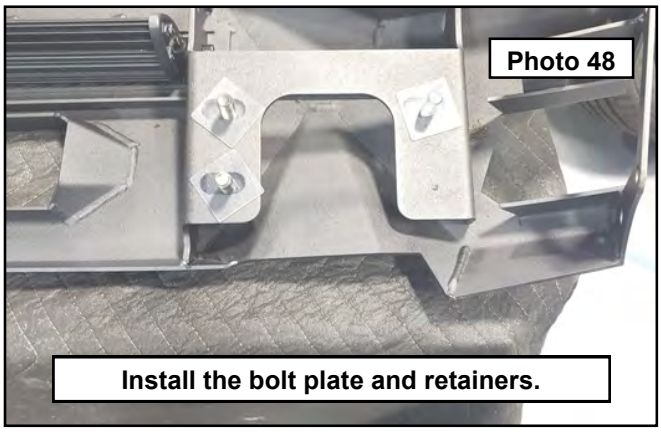
40. Route the outer sensor harness under the outside light mounts but in front of the bolt plate. Connect the sensors and tuck the fog light ends down in front of the frame mounts. The main connector for the bumper harness should be on the driver side and ready to plug back in once the bumper is installed. **Photo 45**
41. Install the 2” cube of choice to the mounting tabs on the bumper using the hardware from the light kit. If running the stubby wing, you still have the ability to use two cubes. If no lights are installed, zip tie sensor harness to the mounting tabs to keep it up and out of the way. **Photo 46**





42. Locate the driver and passenger side frame bolt plate from the bumper kit and the plastic bolt retainers. **Photo 47**
43. Install into the bumper on their appropriate sides. Use the provided bolt keepers to hold the bolt plates in place. **Photo 48**





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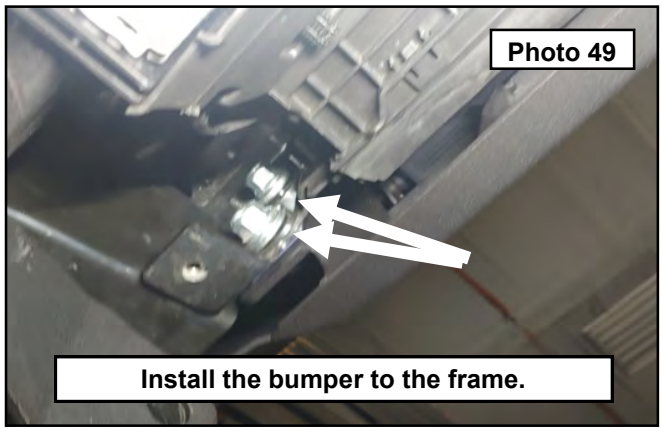
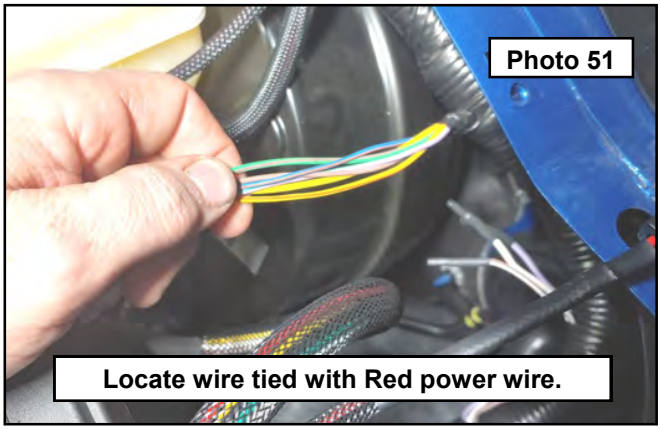
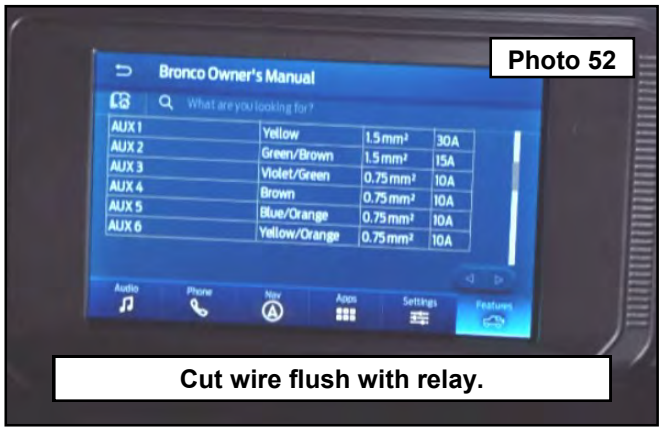
44. With the help of an assistant, place the bumper onto the frame rails with the bolt plates passing through the stock frame horn holes. Attach using the provided 12mm heavy washers and flange nuts. Center and level the bumper side to side then torque the hardware to 45 ft-lbs. **Photo 49**
45. **Sensor bumpers:** Reconnect the factory harness on the driver side. **Photo 50**





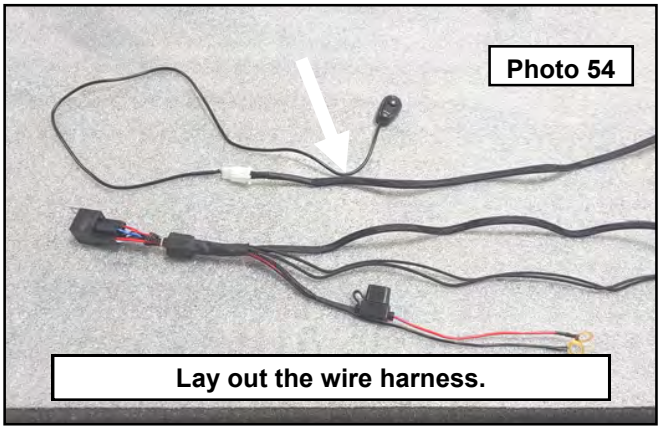
46. **<u>Factory AUX Panel Vehicles Only</u>:** Under the cowl next to the brake booster you will find the AUX switch panel wires. These circuits from the factory are rated at #1 at 30 amp, #2 at 15 amp, #3, #4, #5, and #6 at 10 amps. #2 through #6 are only large enough to be trigger wires for lighting options included with this bumper. We still suggest using the relay and fuse section of the light bar harness for protection of the factory wiring. **Photo 51 / 52**





47. Route the light bar and/or cube harnesses up between the grill and core support into the engine bay. 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 53**
48. If you do not use the MLC6 unit, you can attach the light bar and/or 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. Lay out the light bar harness. **Photo 54**





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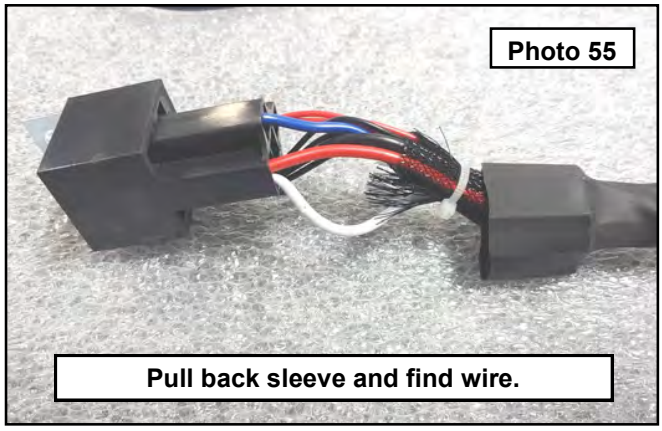
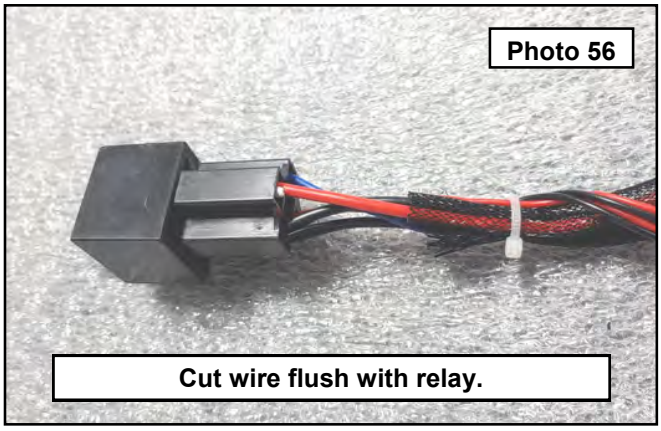
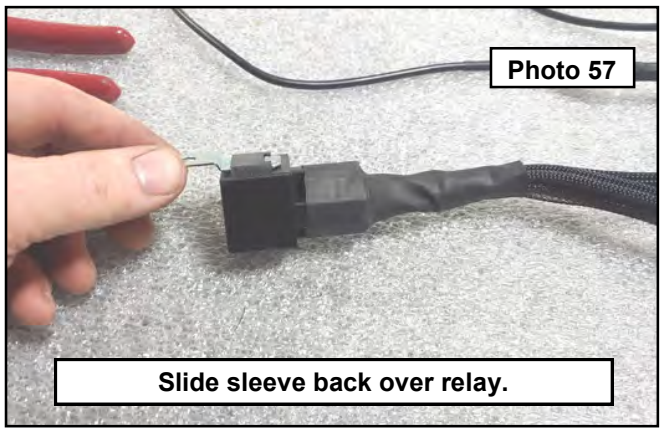
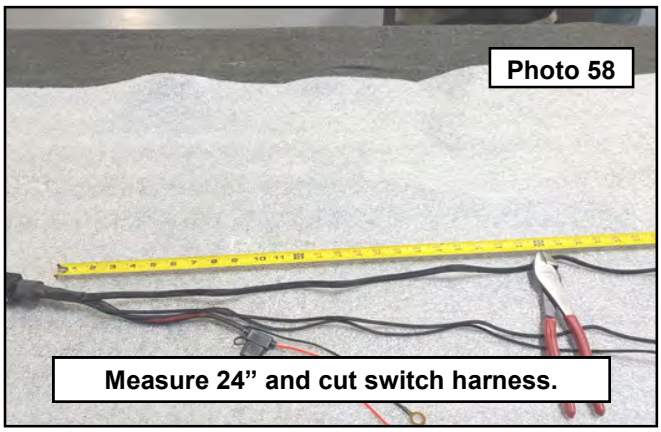
49. Pull the protective sleeve cover from the relay to access the wires. Find the color wire that is doubled up with the Red power wire going to the relay. **Photo 55**
50. This wire should be white but could be blue. Cut this wire flush with the relay. This gave power to the switch that you are about to remove. **Photo 56**



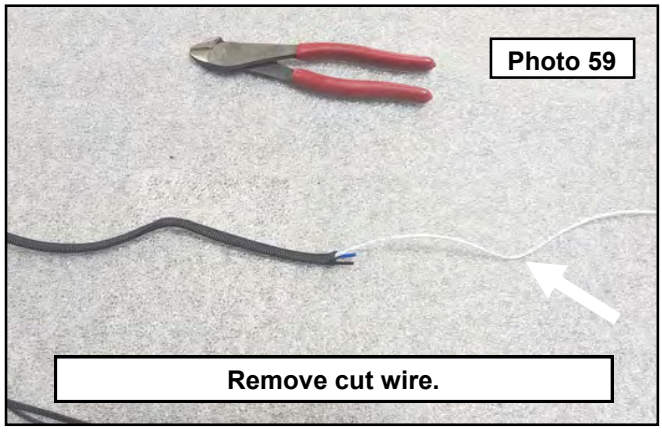


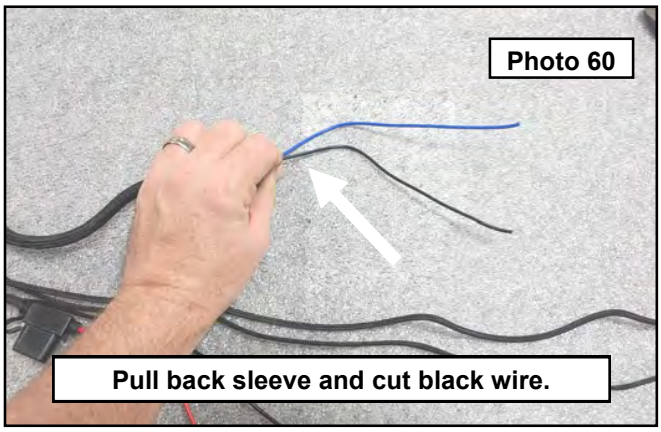
51. Slide the protective sleeve back over the relay. **Photo 57**
52. Measure 24” from the relay end down the switch side of the harness and cut using a pair of wire cutters. You will be cutting through 3 wires and the sleeve. **Photo 58**





53. 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 59**
54. 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 60**





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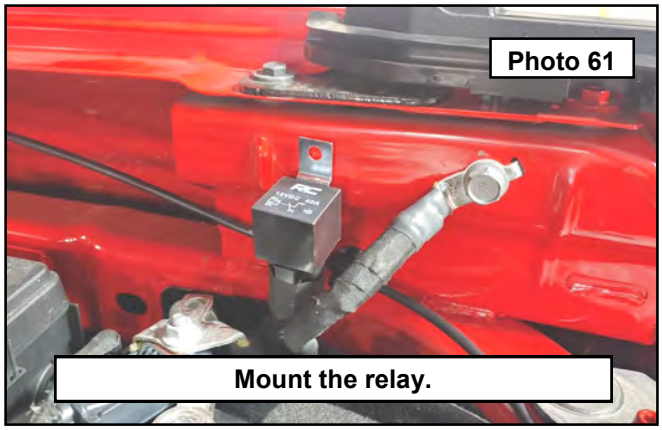
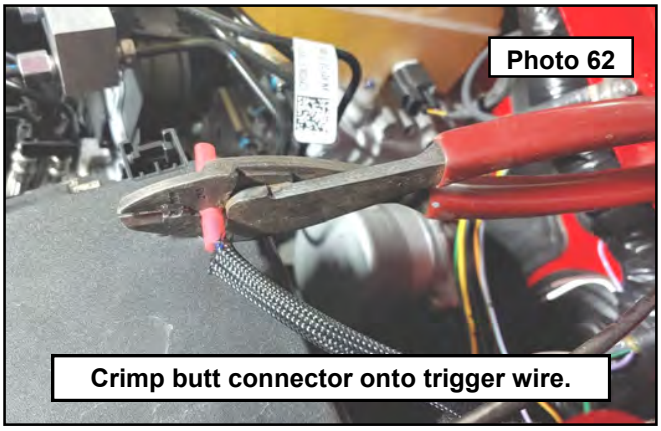
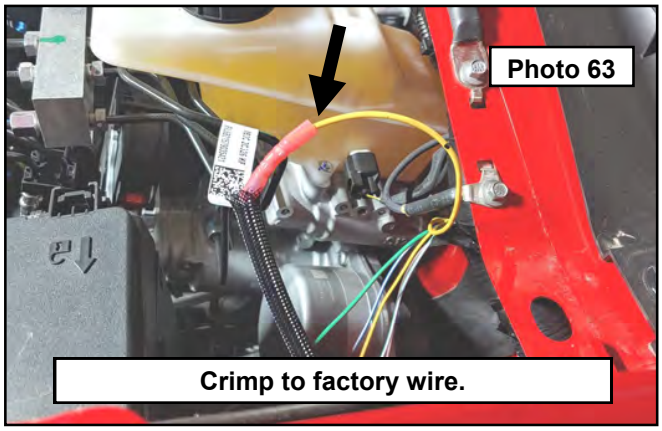
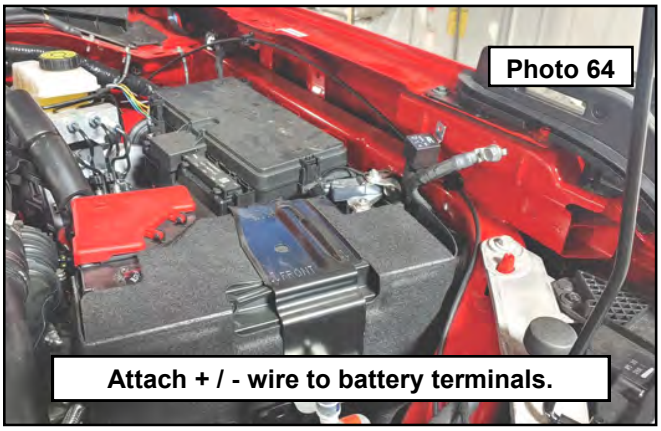
55. Find a spot close to the battery to mount your relay. Use a self tapping screw or drill a hole to mount the relay. You can also use a zip tie to hold it out of the way. **Photo 61**
56. Run the trigger wire side of the harness down the fender next to the fuse panel. Strip the wire back and add a butt connector. Crimp the connector in preparation for attaching to the AUX wires. **Photo 62**





57. Strip the AUX wire of choice and connect the butt connector. **Photo 63**
58. Attach the positive and negative connections to the battery terminals using a 10mm socket. **Photo 64**





59. **DRL optioned kits:** You can take the DRL side of the harness and cut off the relay. Use the power wire for the DRL and tap into the factory headlight harness DRL wire. This can be done a couple different ways, you can tap into the turn signal circuit which will make them blink with the signal, or you can tap into the DRL circuit which will have them operate anytime the vehicle is on. Of course if you do not want to tap into the factory harness, you can hook up the trigger wire to the AUX switch panel. Shown with the amber DRL option cubes tied to the factory DRL harness. **Photo 65**



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