

Disclaimer:

The products sold by RCI Metalworks are intended for off-road use only, should not be modified, and are for use only on the vehicle(s) specifically stated. RCI Metalworks makes no warranties express or implied, including of fitness for a particular purpose or merchantability. RCI Metalworks will not be liable for any damages arising out of the use or misuse of its products. It is the customers' responsibility to ensure the products are safely and properly attached to the vehicle, and all products should be installed by trained professionals. We strive to maintain extremely high-quality standards; however, all RCI Metalworks products are individually handcrafted, may vary slightly, and may contain minor imperfections. Due to the nature of raw aluminum, the material may have minor scratches and other blemishes caused by the manufacturing process, especially on the back side of the product. RCI Metalworks is constantly seeking to improve its products and reserves the right to make changes to any product.

Installation of an RCI bumper requires removal of factory-installed components such as crash bars and foam impact absorbers. These components are designed for vehicle safety and impact absorption, and their removal may negatively impact occupant protection in a crash. RCI is not responsible for the removal of these components, and the owner/installer assumes all risks associated with their removal and any resulting consequences. It is the owner/installer's sole responsibility to understand the implications of removing these components before proceeding with installation. The installation of this RCI bumper, improper installation of this RCI bumper, and use or misuse of this RCI bumper with other components or failure to use it in conjunction with other components, could result in or cause serious personal injury, property damage or death.

RCI bumpers are not crash-tested and are intended for off-road use only. Vehicle owners are responsible for testing and recalibrating any affected sensors after bumper installation. While RCI may conduct preliminary sensor functionality checks during product development, this does not constitute testing to Original Equipment Manufacturer (OEM) specifications. RCI is not responsible and does not accept liability, for breakage or failure of parts as a result of rugged off-road use or reckless and/or improper installation. Modifications to your vehicle are done at your own risk and RCI does not accept liability or responsibility arising from damage caused by installing parts or doing modifications.

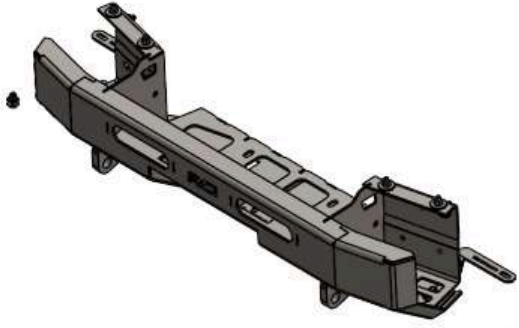
RCI performs off-road testing on its bumpers, including winch pulls, static and dynamic recovery pulls, and general off-road use. However, RCI is not liable for any damages arising from the use or misuse of its products. Customers are responsible for ensuring products are safely and properly attached to their vehicle, and professional installation is strongly recommended. After installing any off-road product, customers should test and recalibrate all safety sensors to ensure proper functionality. Do not rely on any safety sensor functionality until this verification is complete.

RCI Offroad bumpers with receiver hitches are not load rated. Using a receiver hitch for towing or other heavy-duty tasks is not recommended unless explicitly stated by the manufacturer. The bumper and receiver hitch are intended for off-road recovery use and not designed for sustained towing or load-bearing applications. Any misuse, such as towing or overloading, may result in bumper failure, vehicle damage, or personal injury. RCI is not responsible for any damages or injuries resulting from the use of the bumper with a receiver hitch beyond its intended purpose.

If an RCI product is purchased by a third party, such as a dealer, wholesaler, or installer, it is the third party's responsibility to inform the end customer of this disclaimer.

2022 Tundra Pike Bumper Installation Guide

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SM-00821	22+ Tundra Pike Center Section	1
13	SM-00830	22 TUNDRA PIKE TRIM SUPPORT BRACKET - DRIVER	1
14	SM-00830	22 TUNDRA PIKE TRIM SUPPORT BRACKET - Passenger	1
15	HK-00137	22+ Tundra Pike Bumper Hardware Kit	1
16	BX-00065	48x24x20 (4Runner Pike Box)	1



UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN	KL	7/5/24
TOLERANCES:	SOURCE	HiTech	
FRACTIONAL: ±0.010			
ANGULAR: BEND ±0.5			
TWO PLACE DECIMAL ±0.015			
THREE PLACE DECIMAL ±0.010			
PROPRIETARY AND CONFIDENTIAL	Export Date		
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RCI OFFROAD	
TITLE:	
22 Tundra Pike SHIP	
Item Number	Sku
BOM	
	REV 1
DO NOT SCALE DRAWING	SCALE: 1:12 WFIGHT: SHEET 1 OF 1:

Figure 1: BOM

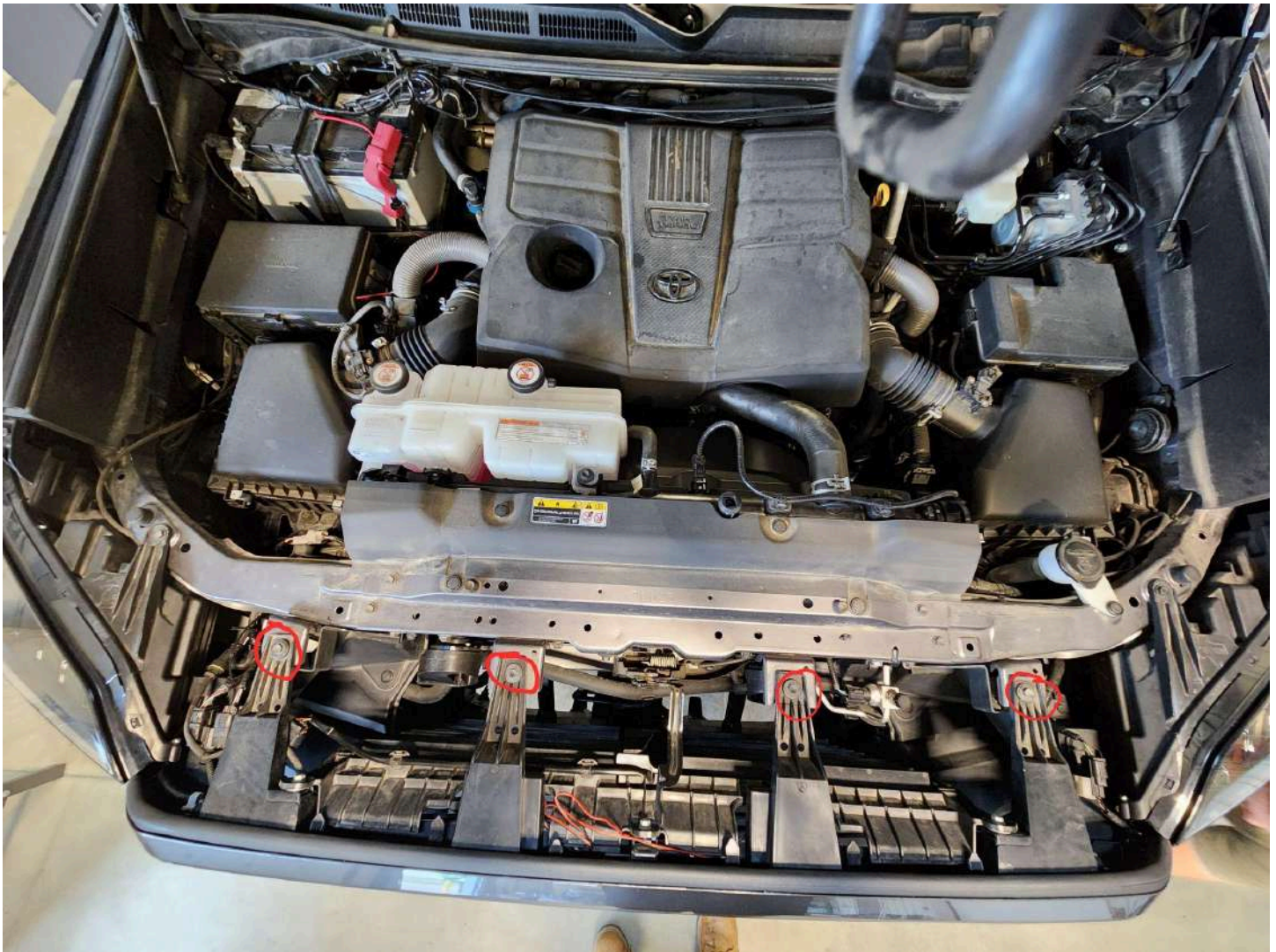
INSTALLATION STEPS

****Use hand tools, impact wrenches may cause damage if over torqued****

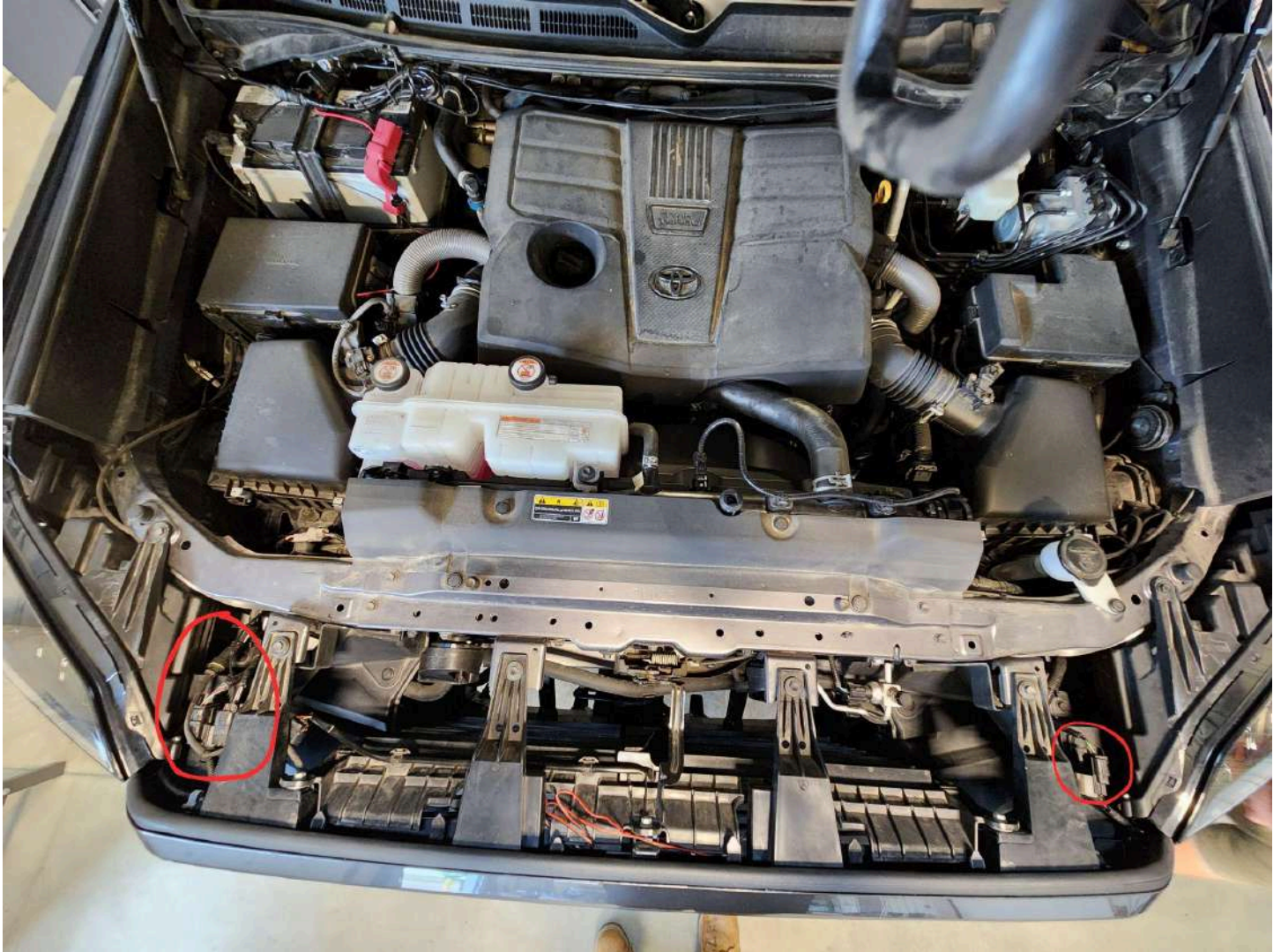
1. Begin by unpacking and removing all components and hardware. Please verify that all hardware and mounting components are present. Reference your original order invoice and verify all items are accounted for.

FACTORY BUMPER REMOVAL

2. Remove the factory plastic bumper from the vehicle.
3. Start by opening the hood. Remove the 4 bolts securing the top of the grille.



4. Disconnect the electrical connections and remove the plastic clips on either side of the vehicle.



5. Remove the front 7 bolts securing the fender liner to the fender and bumper on either side of the vehicle.



6. From the bottom front corner of the fender, pull away from the vehicle to release the fender from the bumper. Disconnect the side marker if present



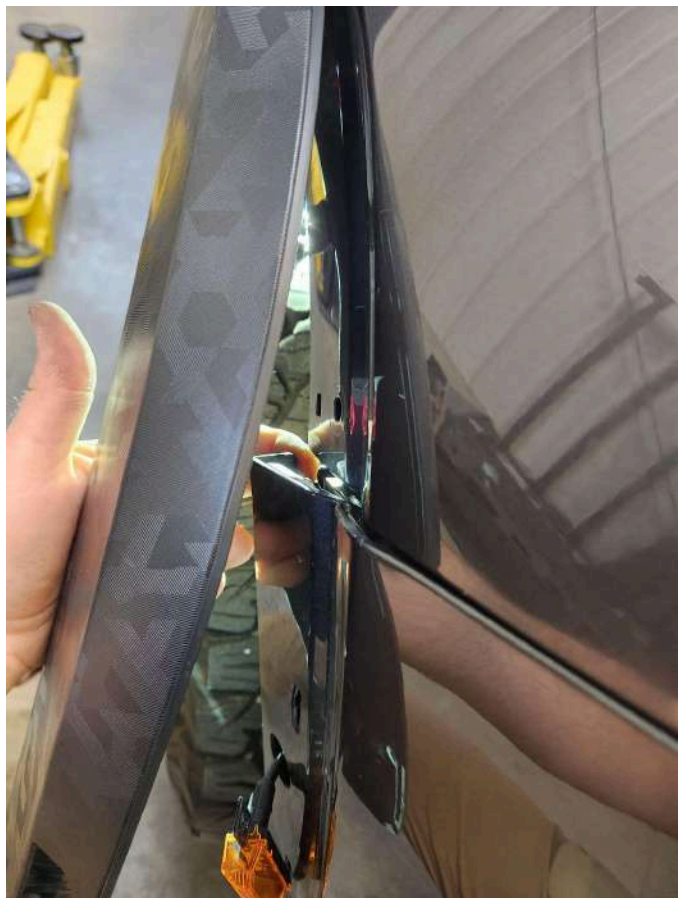
7. From below the bumper, remove the 4 black bolts securing the bottom of the bumper to the aluminum crash bar.



- Using an extension, remove the 4 silver bolts securing the pair of black brackets to the crossmember behind the grille.



- From the inside of the wheel well, grab the inner lip of the bumper towards the top. Pull the lip out and towards the rear. Continue to pull until the side of the bumper separates from the vehicle. Repeat this process on both sides of the vehicle.



10. Remove the OEM bumper.

11. If present, disconnect the wire harness connected to the air dam (also referred to as the “front spoiler”, “front active aero”, and “active front spoiler”) motor module.



12. Remove the 4 purple bolts along the top side of the aluminum crash bar securing it to the frame of the vehicle



13. Remove the 4 purple bolts along the bottom side of the aluminum crash bar securing it to the frame of the vehicle

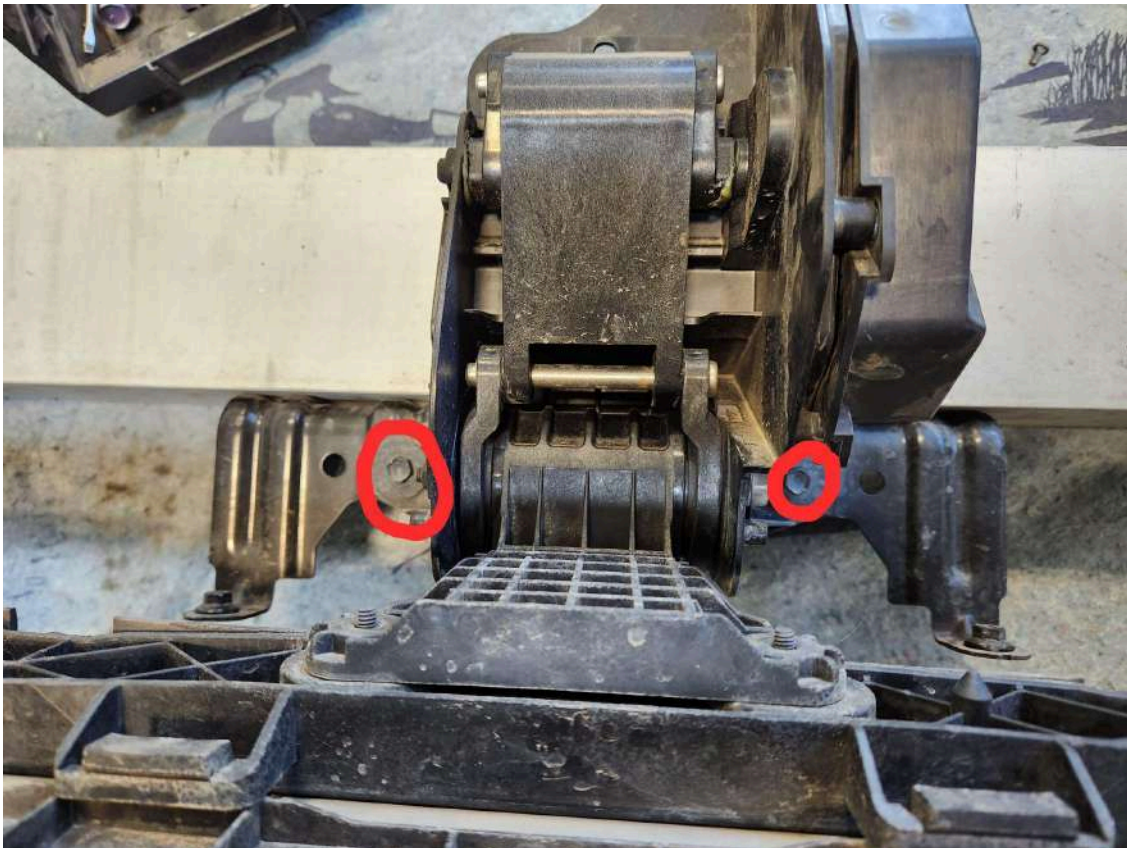


14. Remove the aluminum crash bar from the vehicle.
15. If applicable, remove the air dam motor module from the aluminum crash bar and prep for relocation.
 - a. This step is NOT necessary if the RCI Pike bumper is being installed with an air dam delete module. Proceed to page 13 to skip this step.
 - i. RCI's delete module is currently in development.
 - ii. In our testing, relocating just the electronics from the motor module resulted in a persistent error message from the vehicle. The entirety of the motor module must be relocated.

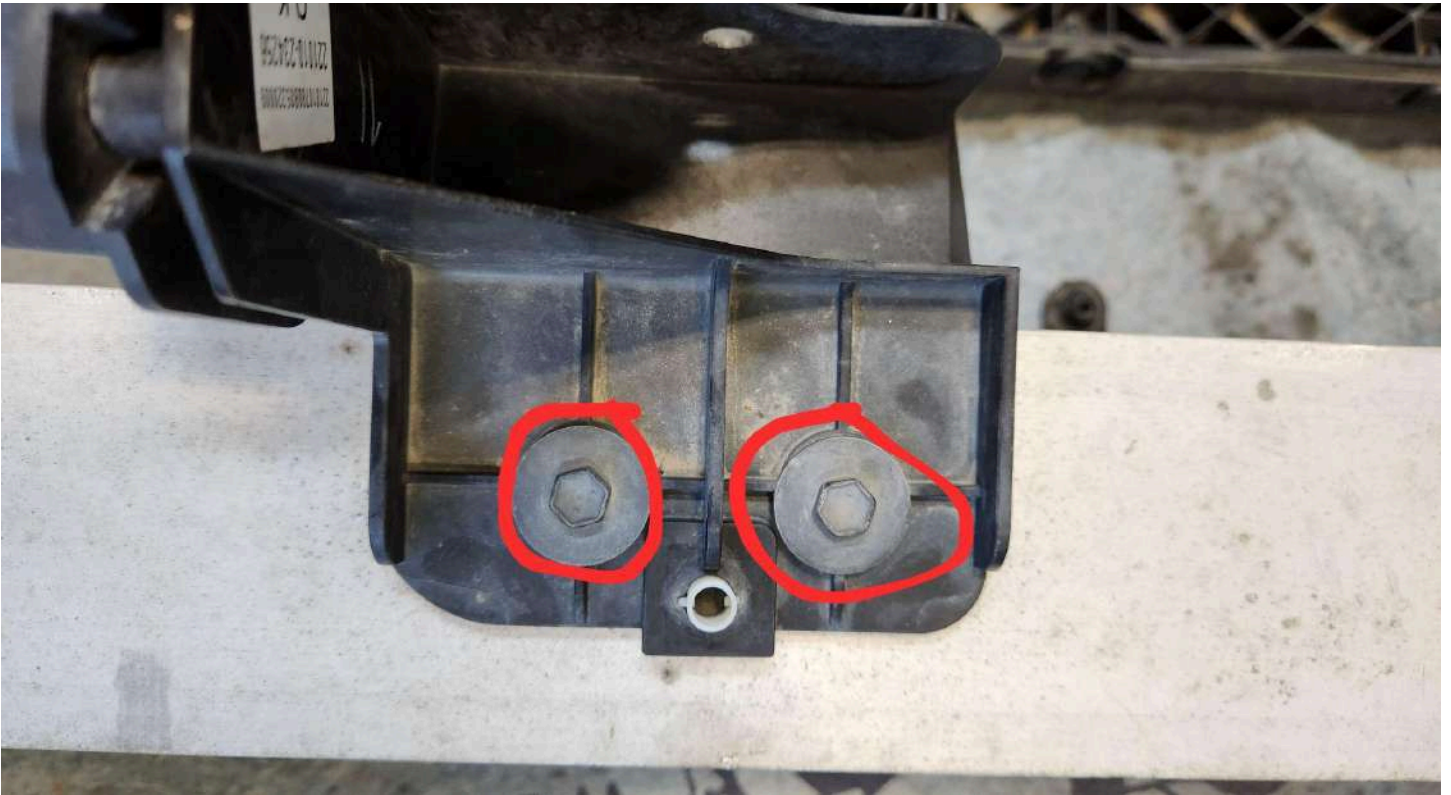
- b. Remove the 2 bolts securing the arm of the air dam motor module to the air dam.



- c. Remove the 2 bolts securing the air dam motor module to the bottom of the aluminum crash bar.



- d. Remove the 2 bolts securing the air dam motor module to the top of the aluminum crash bar.



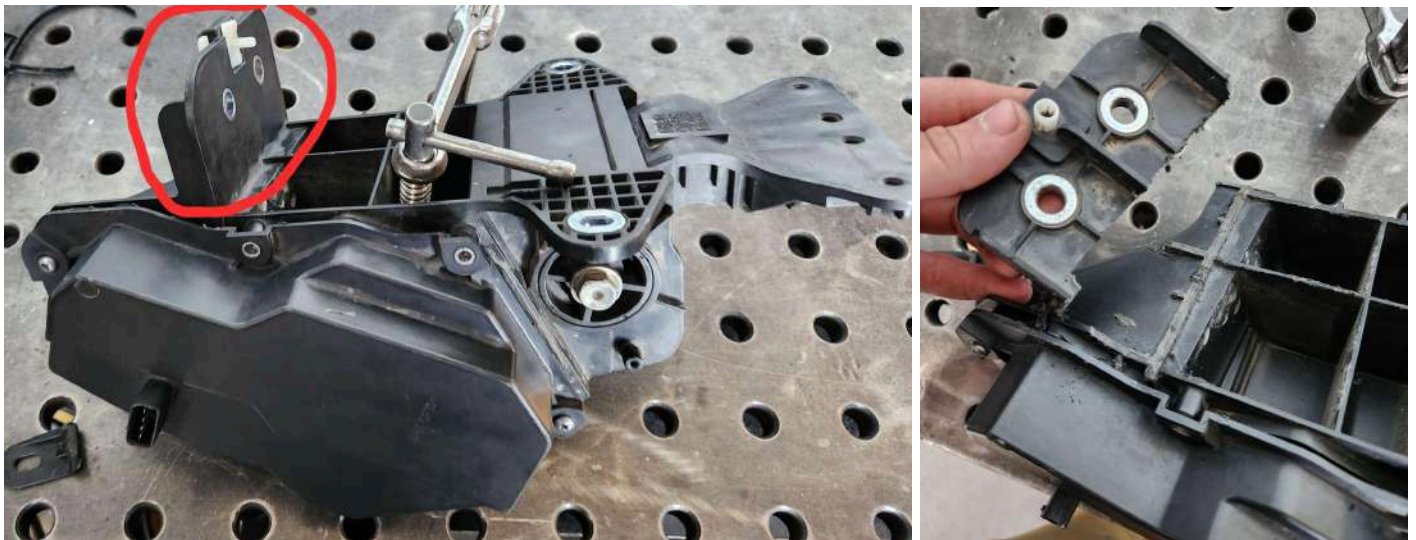
- e. Remove the 7 screws securing the motor cover to the housing.



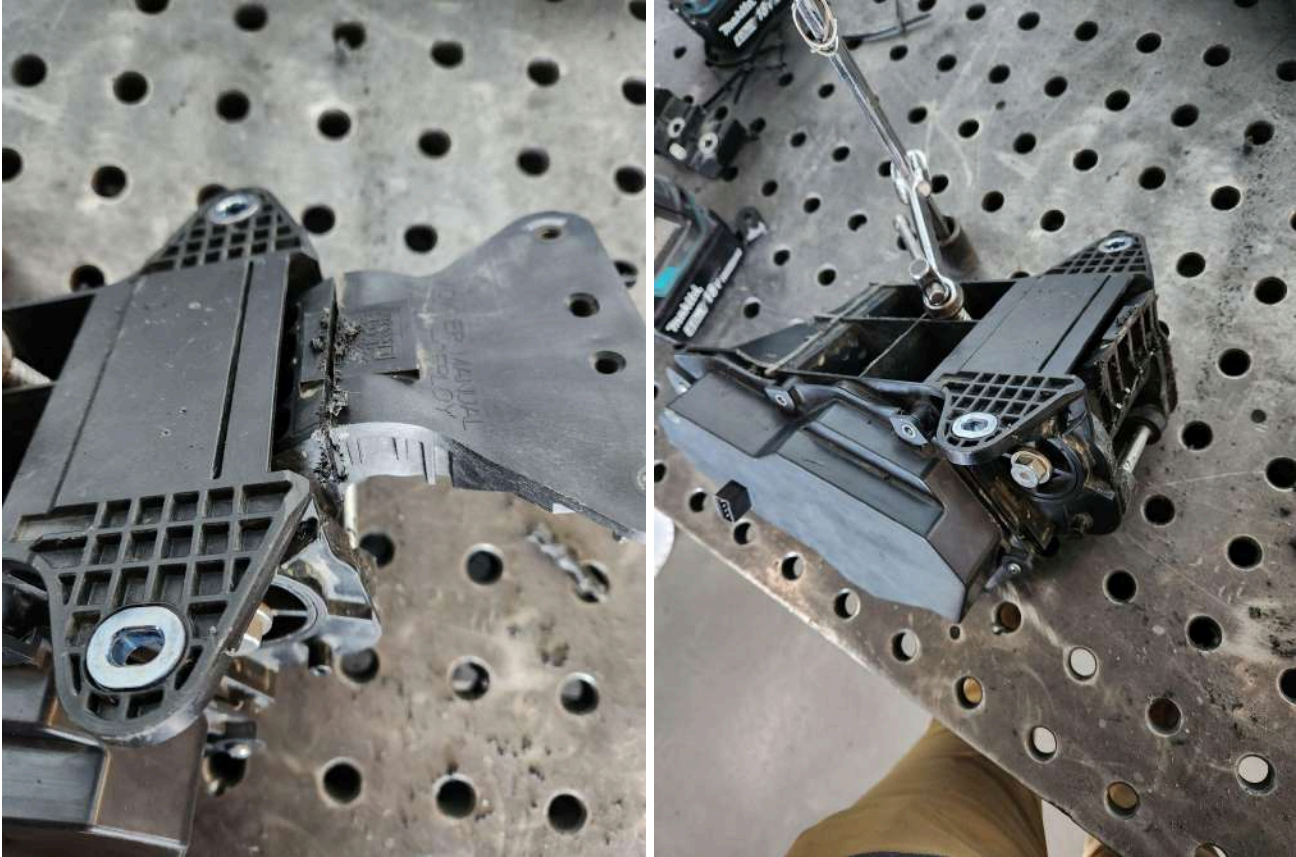
- f. Remove the internal bolts and screws to remove the motor and electronics from the housing. This will allow the air dam arm to move freely.
- g. Rotate the air dam arm to its extended position.
- h. Temporarily reinstall the motor and electronics to prevent the arm from rotating.
- i. Remove the small tab at the top of the air dam housing.



- j. Remove the large flange originally used to attach the module to the aluminum crash bar

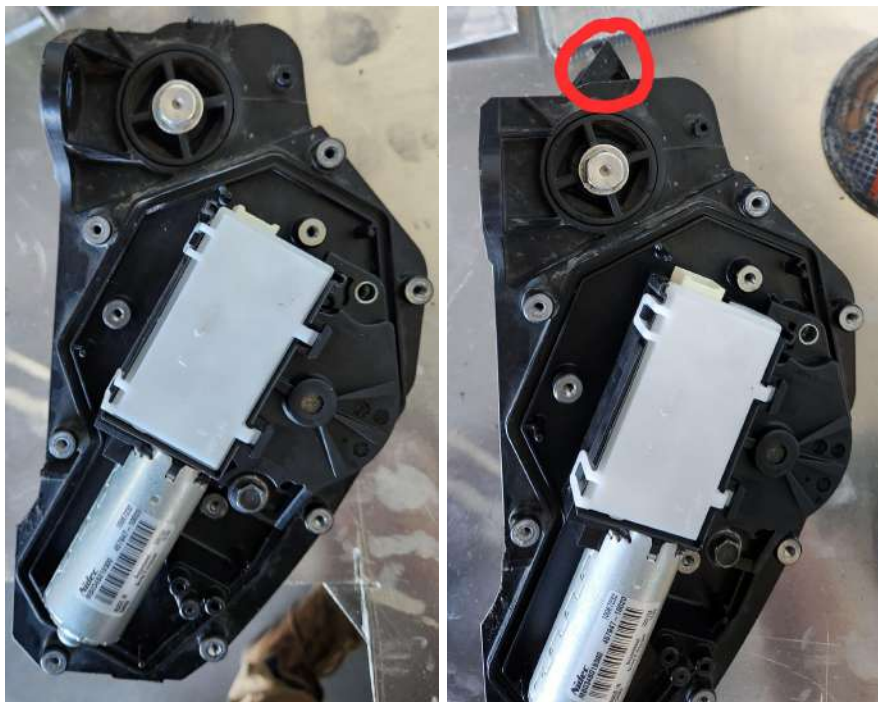


k. Remove the air dam arm.



l. Remove the motor and electronics to allow the air dam arm to move again.

m. Move the air dam arm through its entire range of motion and remove any material extending past the module's housing.



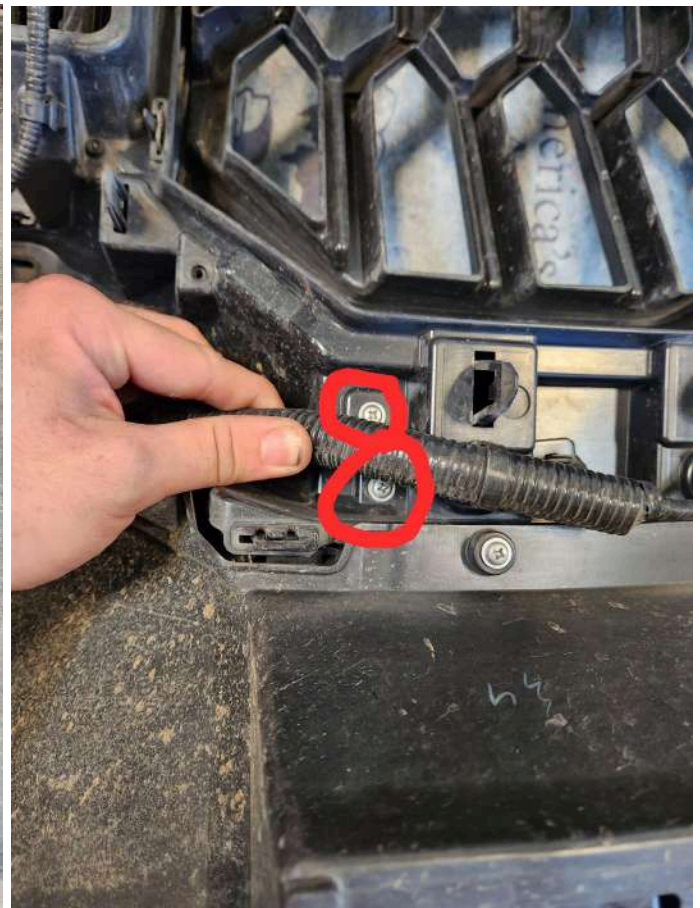
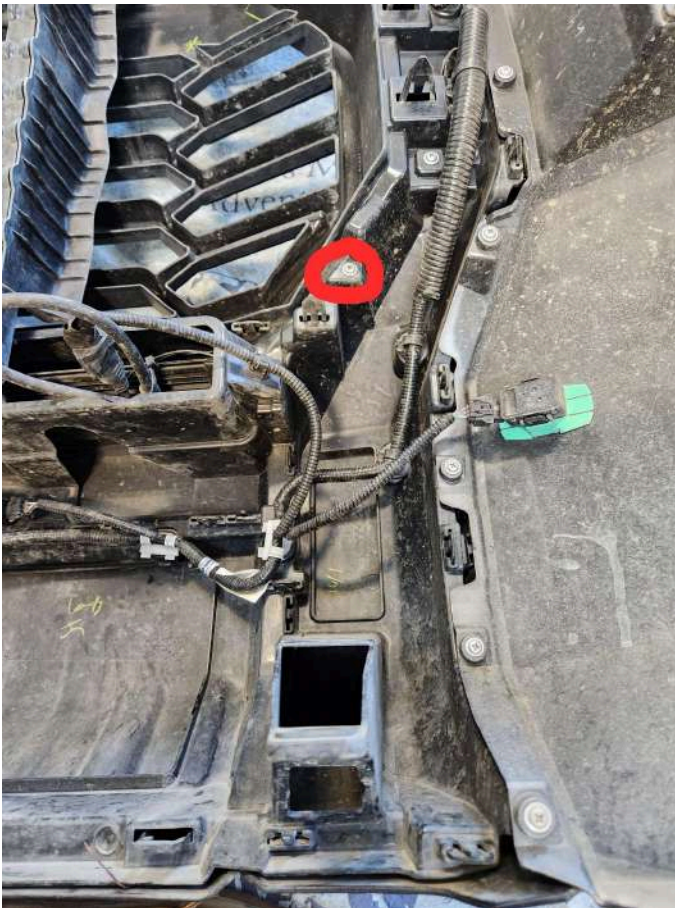
n. Reinstall the motor, electronics, and motor cover to reassemble the air dam module.

FACTORY BUMPER PREP AND CUT

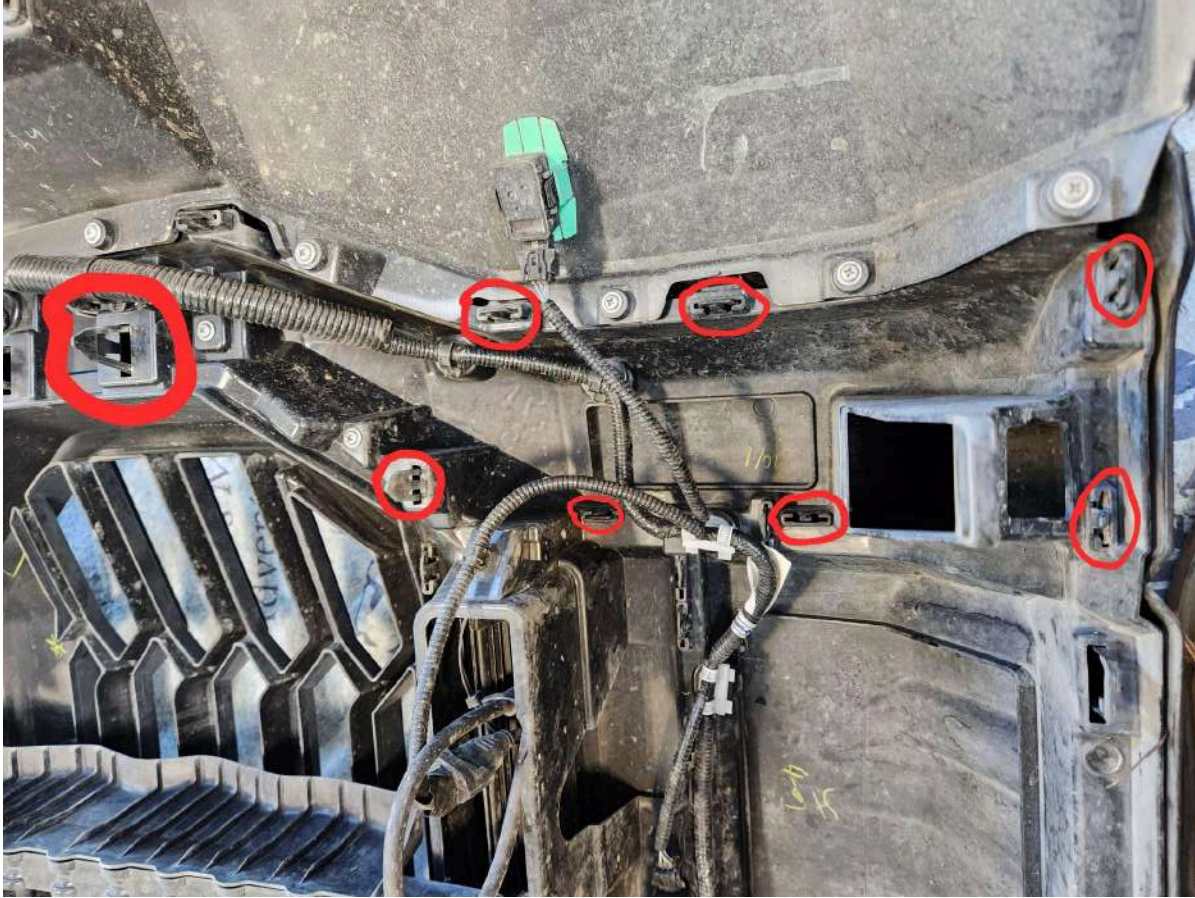
16. Remove the black bracket from the inside of the bumper.



17. On the inside of the bumper, remove the 3 screws shown on either side of the grille.



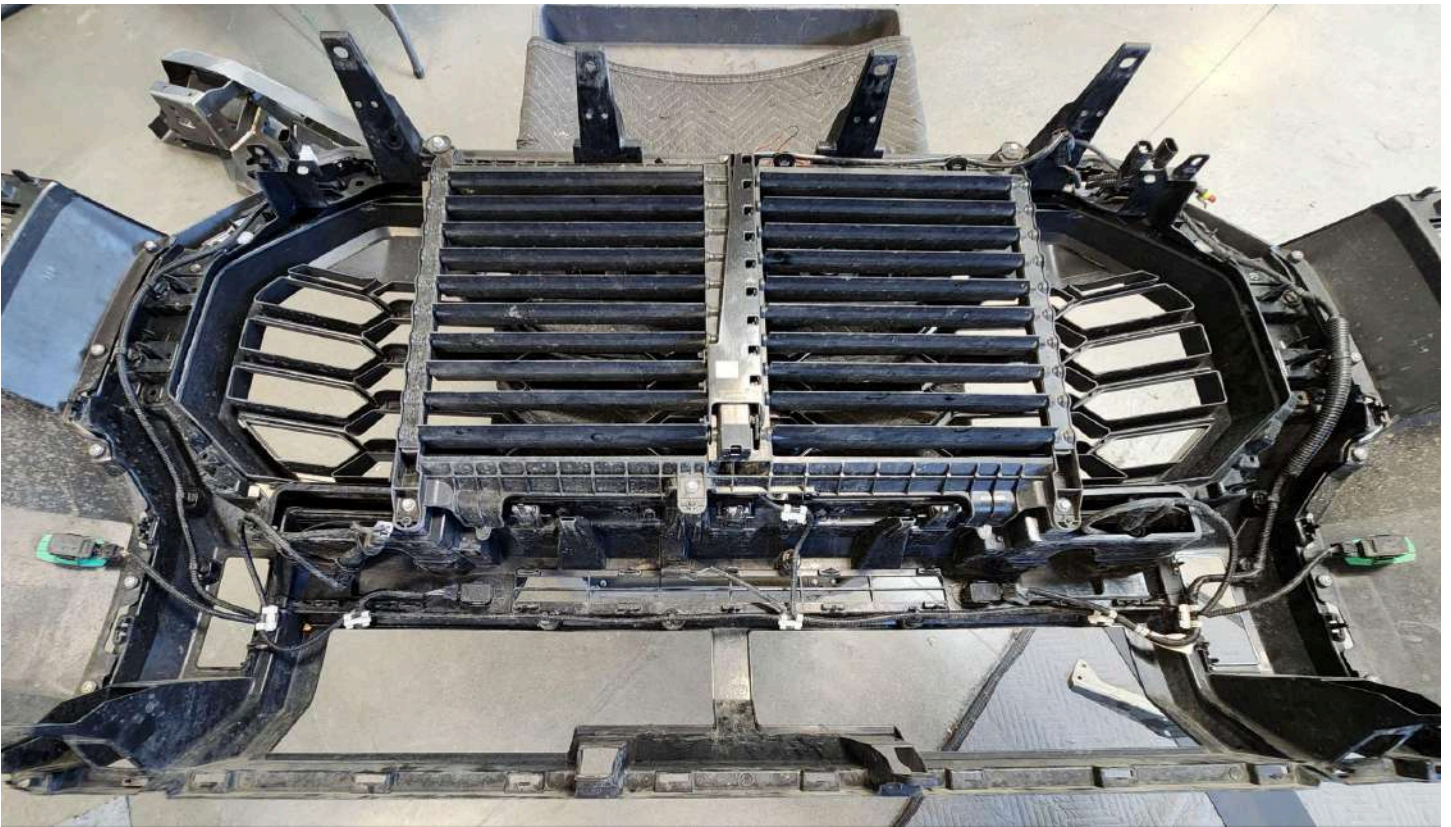
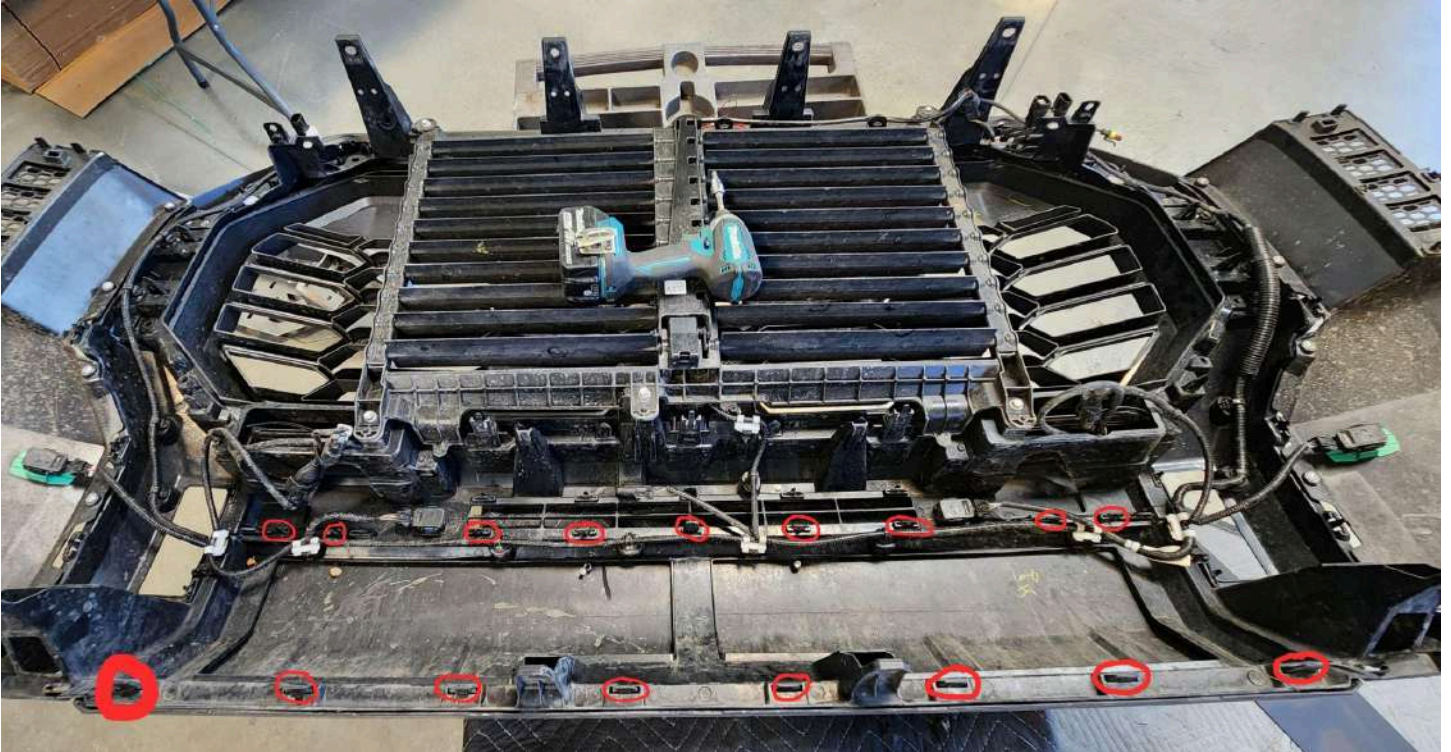
18. Release the clips shown to remove the body colored caps from either side of the bumper.



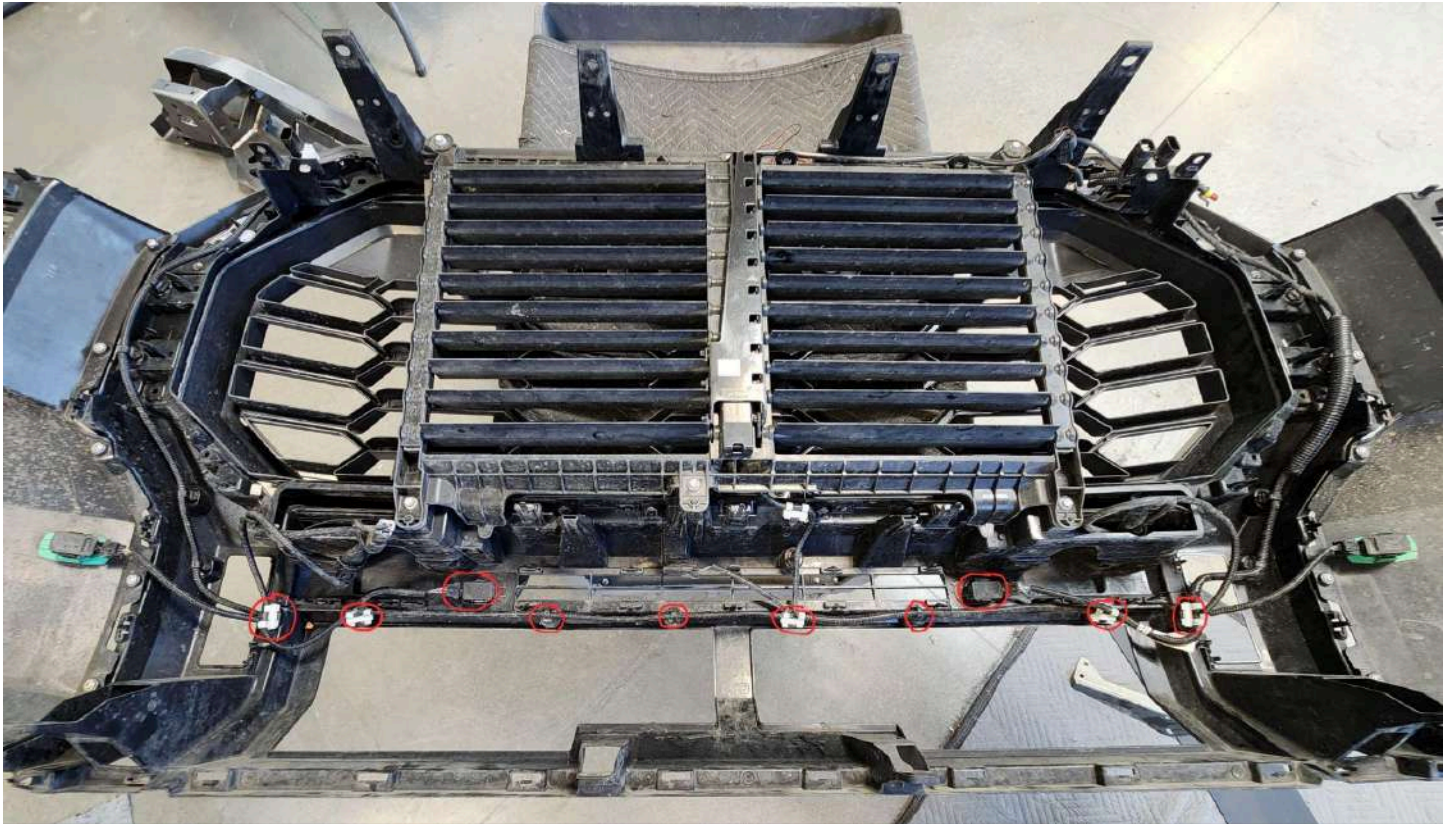
19. Remove these caps from the bumper.



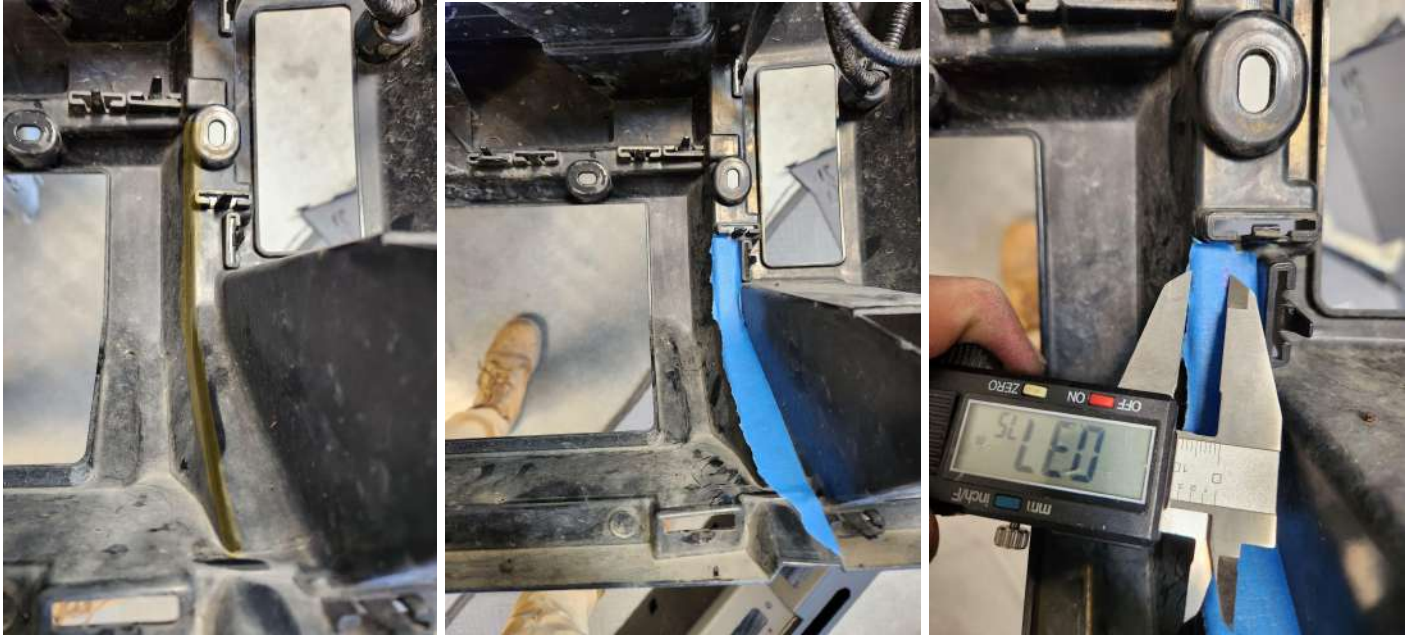
20. Cut the tabs shown to remove the center cap of the bumper.



21. Disconnect the wiring harness and parking sensors from the bumper in the locations shown.



22. Mark a cut line 3/8" from the corner shown on both sides.



23. Cut the line as shown and cut across to remove the excess material





24. Follow the cut line up to match the inner flat of the slot



25. Cut a line as close to the clips shown as possible.
 - a. Cutting the corner below the clips and grinding, sanding, or filing up to the clips is a much safer approach if you have any reservations about following this cut line
 - b. This will be the most visible cut on the bumper; Take your time.
 - c. Take care not to cut through the cap on the front of the bumper.

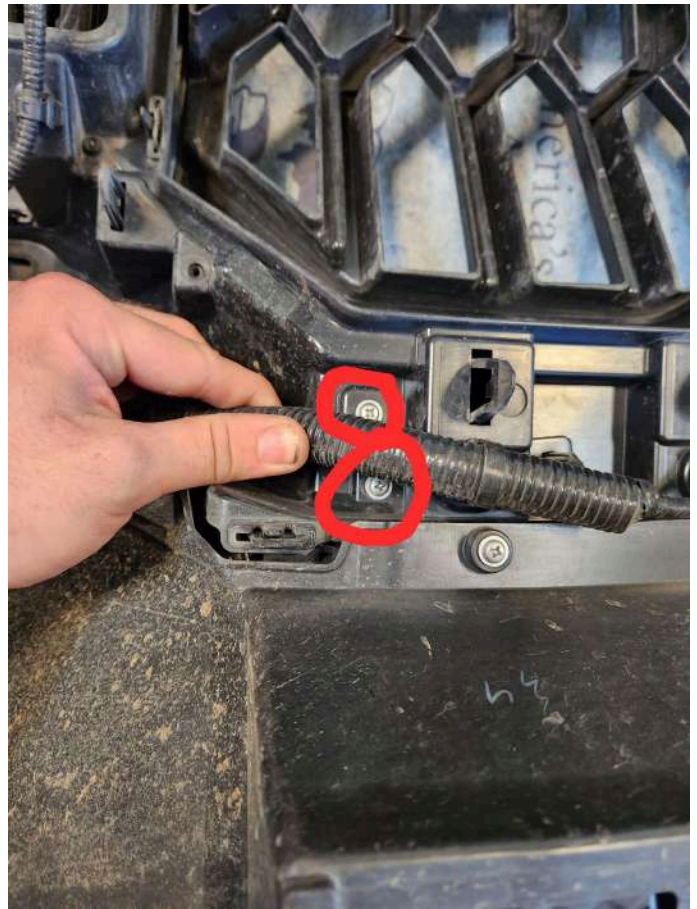
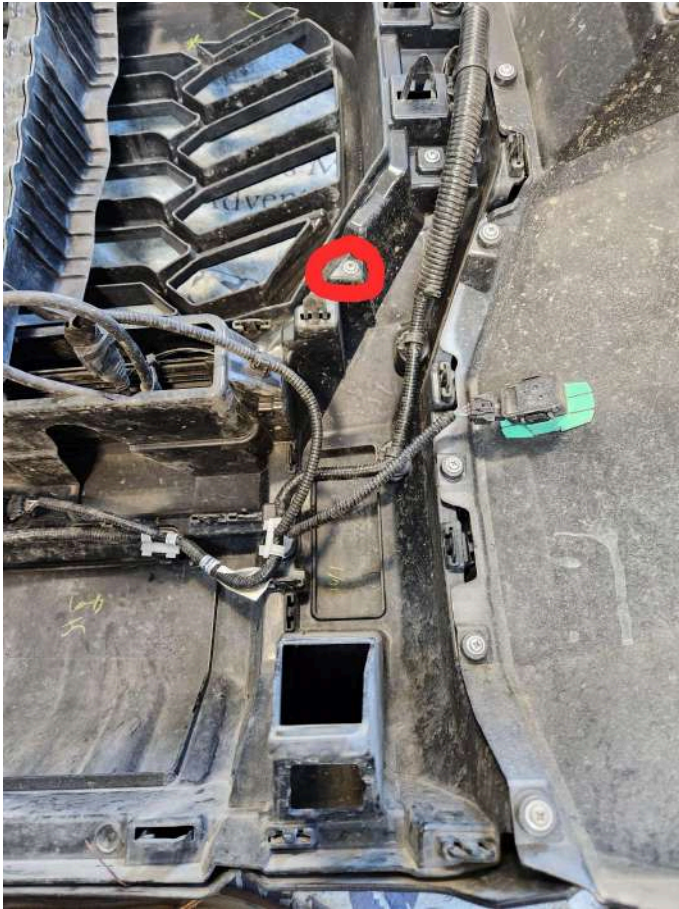


26. In the center section of the bumper, cut just below the lowest horizontal rib. Cut the edges to remove the material.



27. Use a flap disk, sand paper, and/or a file to clean up all of the cut lines

28. Reinstall the OEM bumper caps and secure them with the OEM hardware.



29. Reinstall the parking sensors and secure the wiring harness to the rear of the bumper.



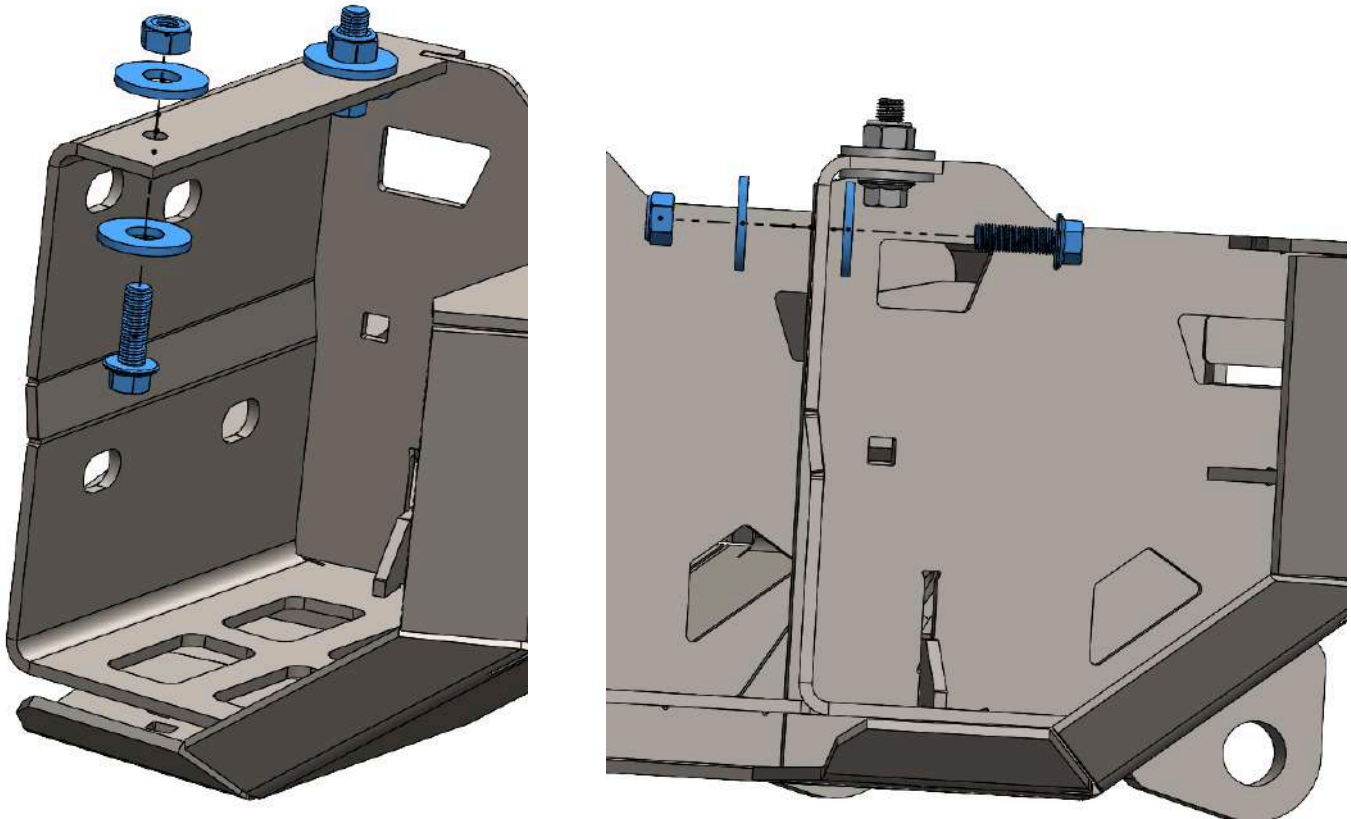
RCI BUMPER INSTALL

30. Install the bumper as shown. (I did not take pictures of each step. Sorry)



- a. Align the slots in the mounting faces of the RCI 22+ Tundra Pike bumper with the studs present on the mounting faces of the vehicle frame.
- b. Loosely secure the RCI bumper to the vehicle frame using 4 of the purple factory bolts to bolt through the lowest mounting slots

- c. Loosely install 6 sets of M10 bolts, washers, and lock nuts in the remaining 3 slots on each mounting surface of the RCI Pike bumper as shown:

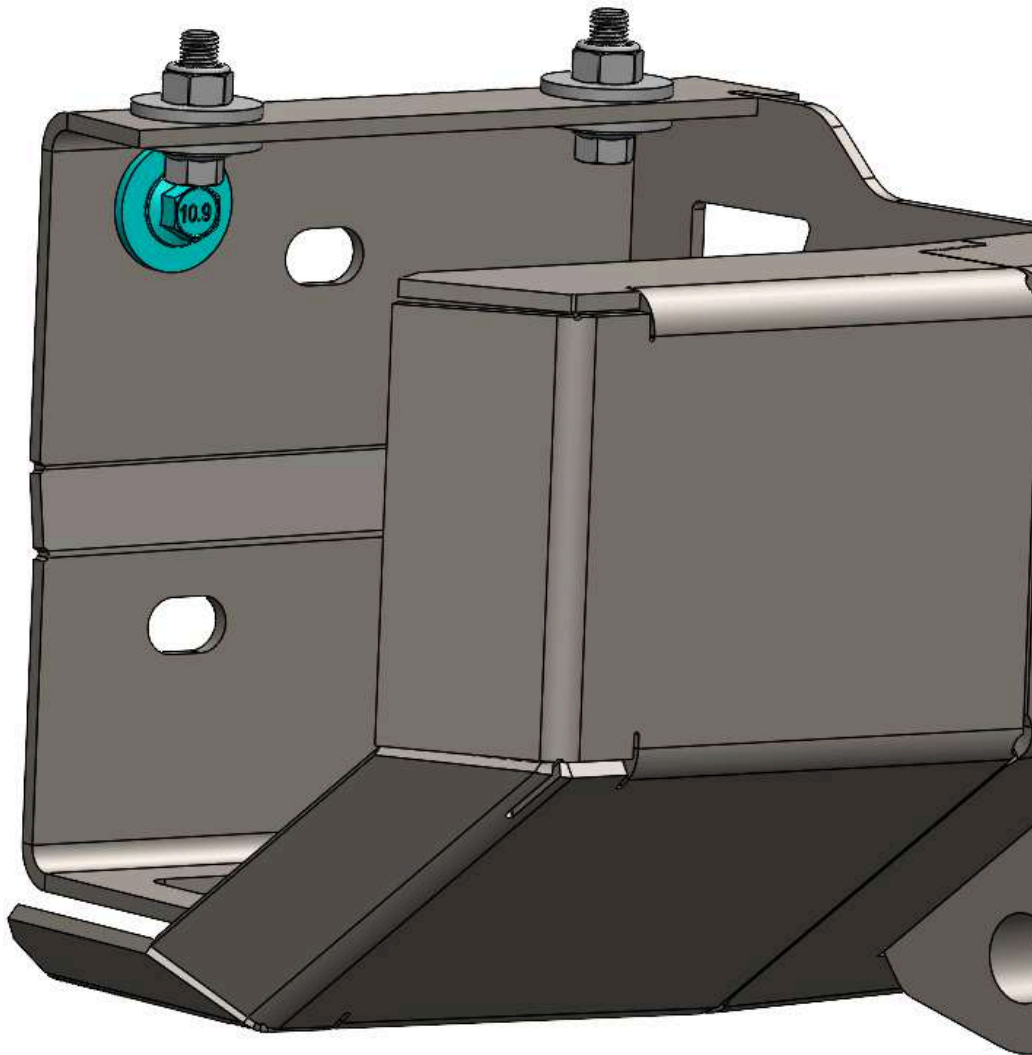


- 31. Tighten the upper 4 bolts until the upper mounting surface of the RCI Pike bumper contacts the upper mounting surface of the vehicle frame. Then back them off until the bumper can be adjusted side to side with minimal resistance.
 - a. These highlighted bolts:



- 32. Measure as necessary to ensure that the RCI Pike bumper is centered within the vehicle frame.

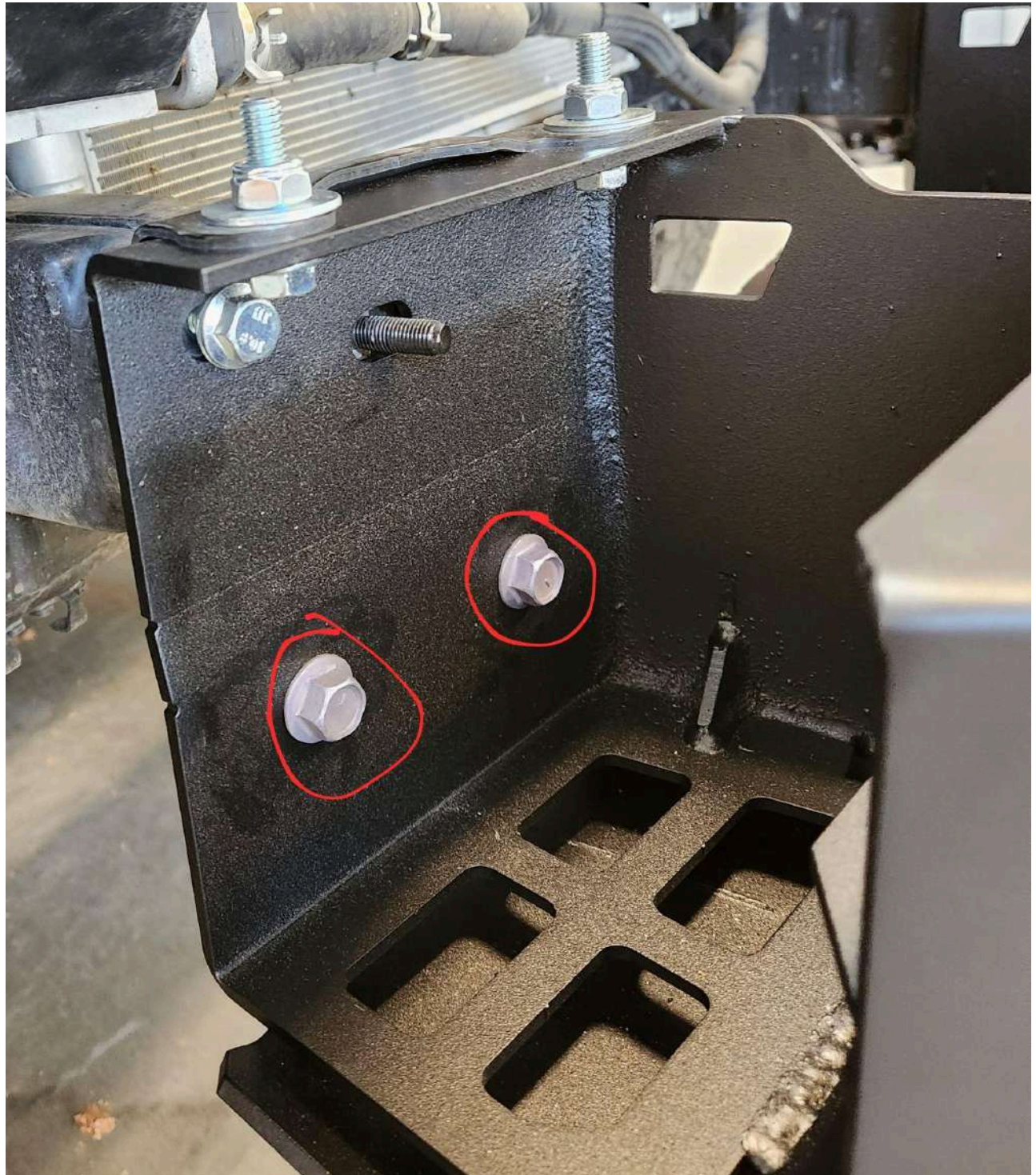
33. Tighten the pair of bolts towards the top of the vertical mounting surface of the RCI Pike bumper.
- a. These highlighted bolts:



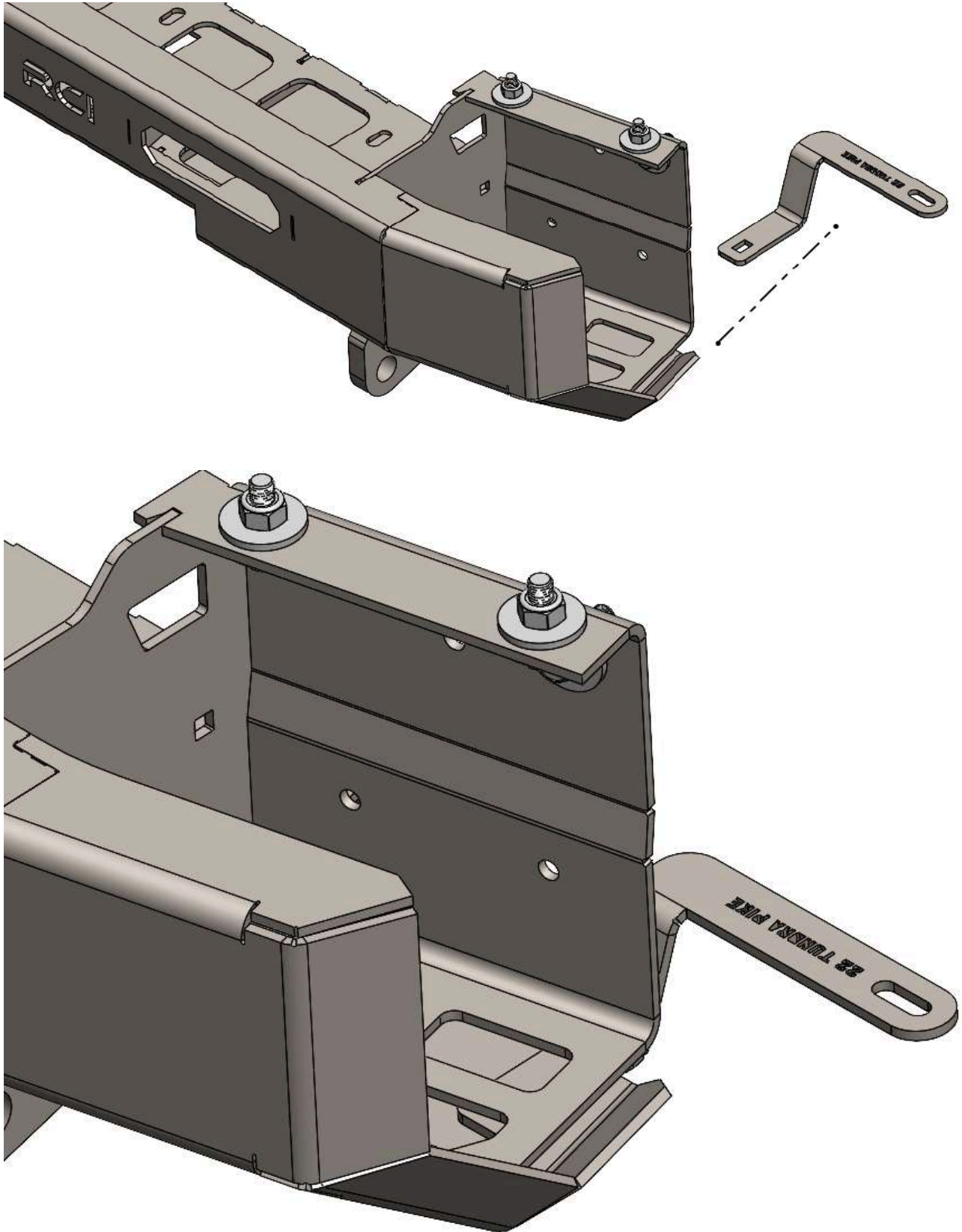
34. Tighten the upper 4 bolts.
- a. These highlighted bolts:

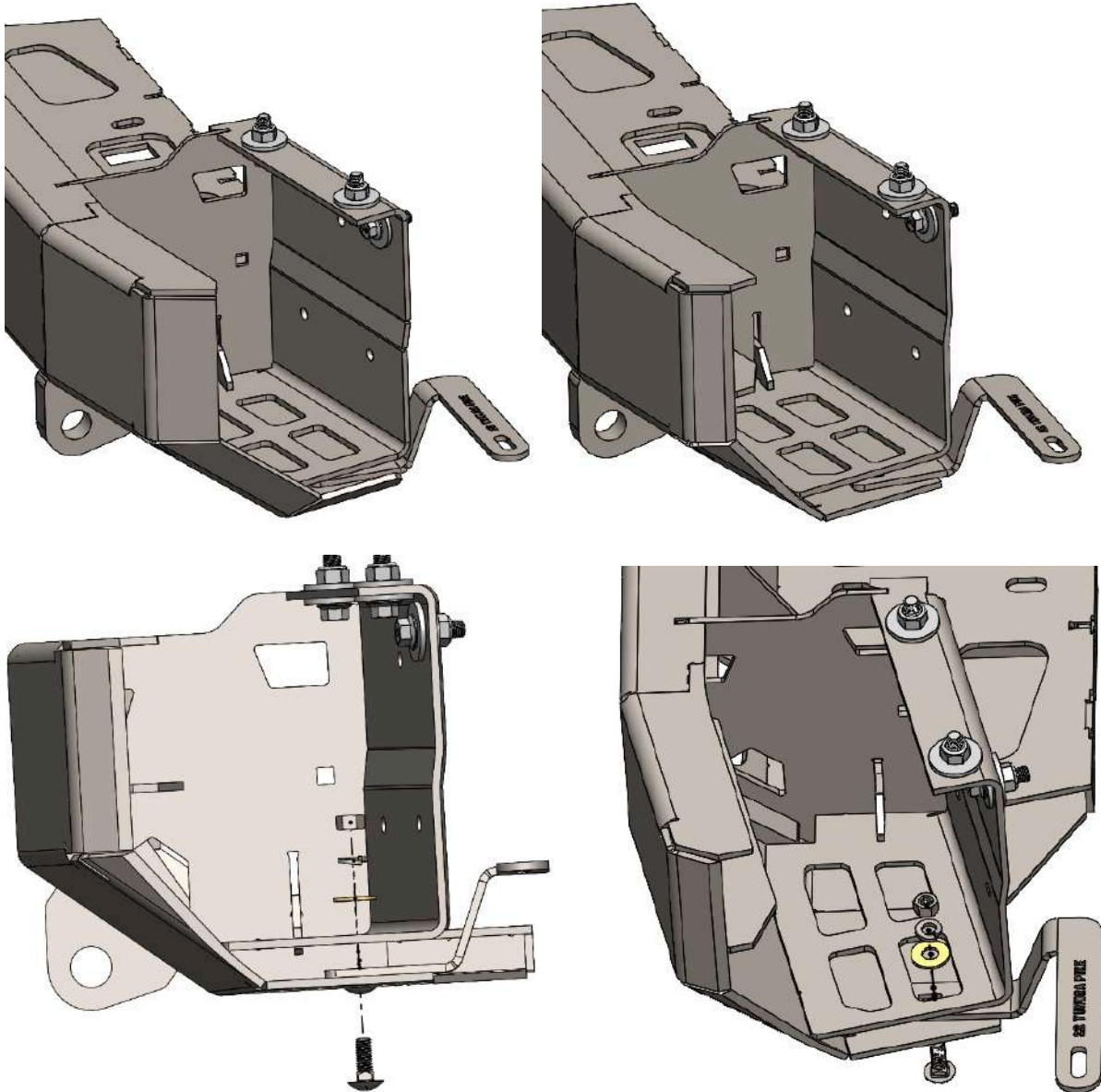


35. Tighten the 4 factory M12 bolts to finish securing the RCI Pike bumper to the vehicle frame.
 - a. These bolts:



36. Loosely install the included brackets on either side of the bumper using the included 3/8" carriage bolts, washers, and nuts as shown.

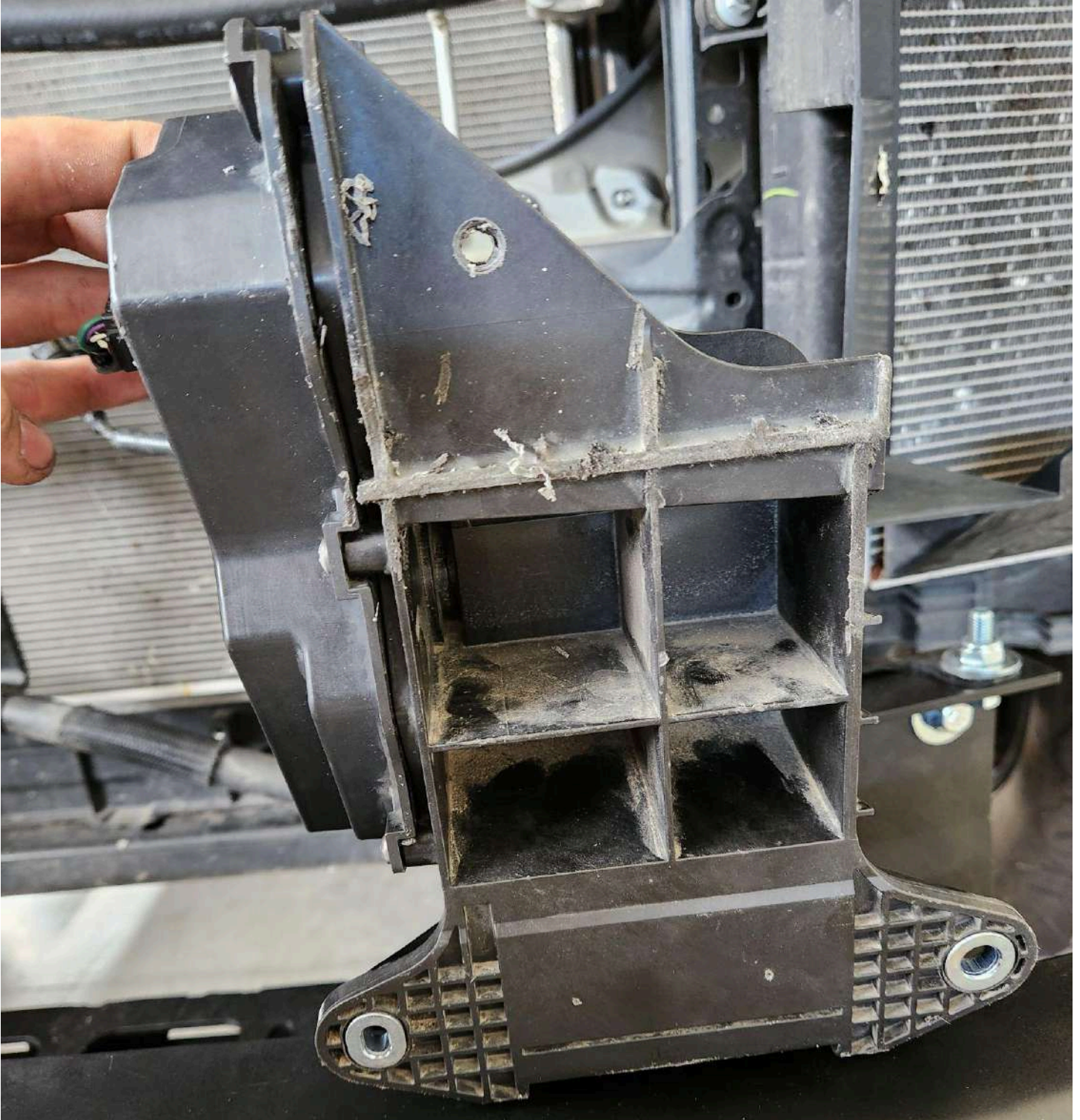




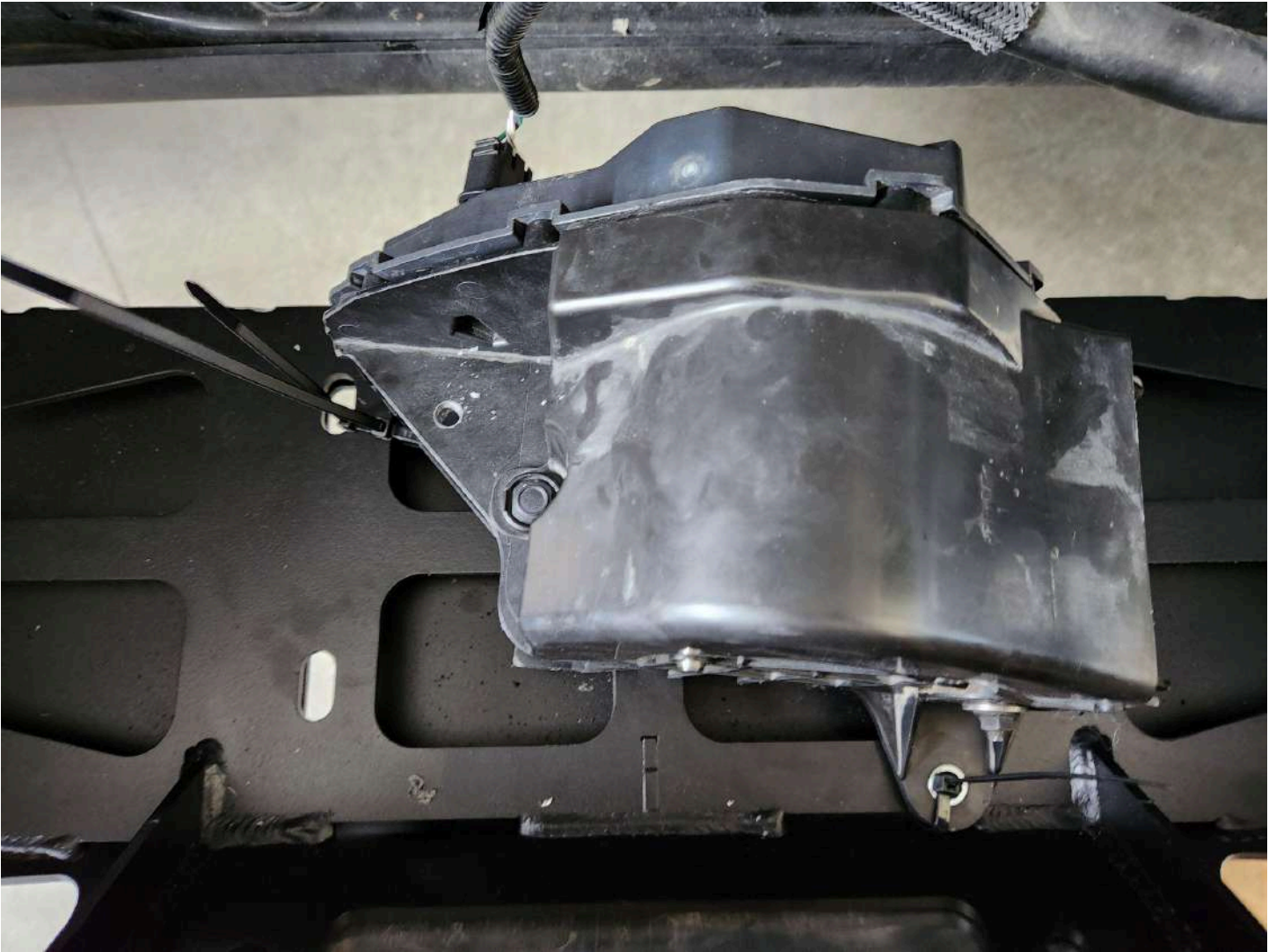
37. If installing a light bar, winch, or any other accessories, take the time to do so now. Accessibility to the inside of the bumper will be limited moving forward.
38. Tighten all RCI Pike bumper installation hardware.

AIR DAM MODULE RELOCATION

39. Drill a hole in the air dam module flange shown



40. Using cable ties, secure the module to the winch plate of the RCI Pike bumper as shown.
 - a. Optionally, use a 1/4" bolt through the winch plate and the mounting flange of the module to secure the module.



41. Plug the module in.
42. Now is a great time to test drive your vehicle with the Pike bumper installed to verify the air dam module relocation has been successful.
 - a. The vehicle will display many error messages as the ACC and parking sensors are disconnected. Keep an eye out for an "Active Spoiler Malfunction" error message as the vehicle accelerates past 10mph.



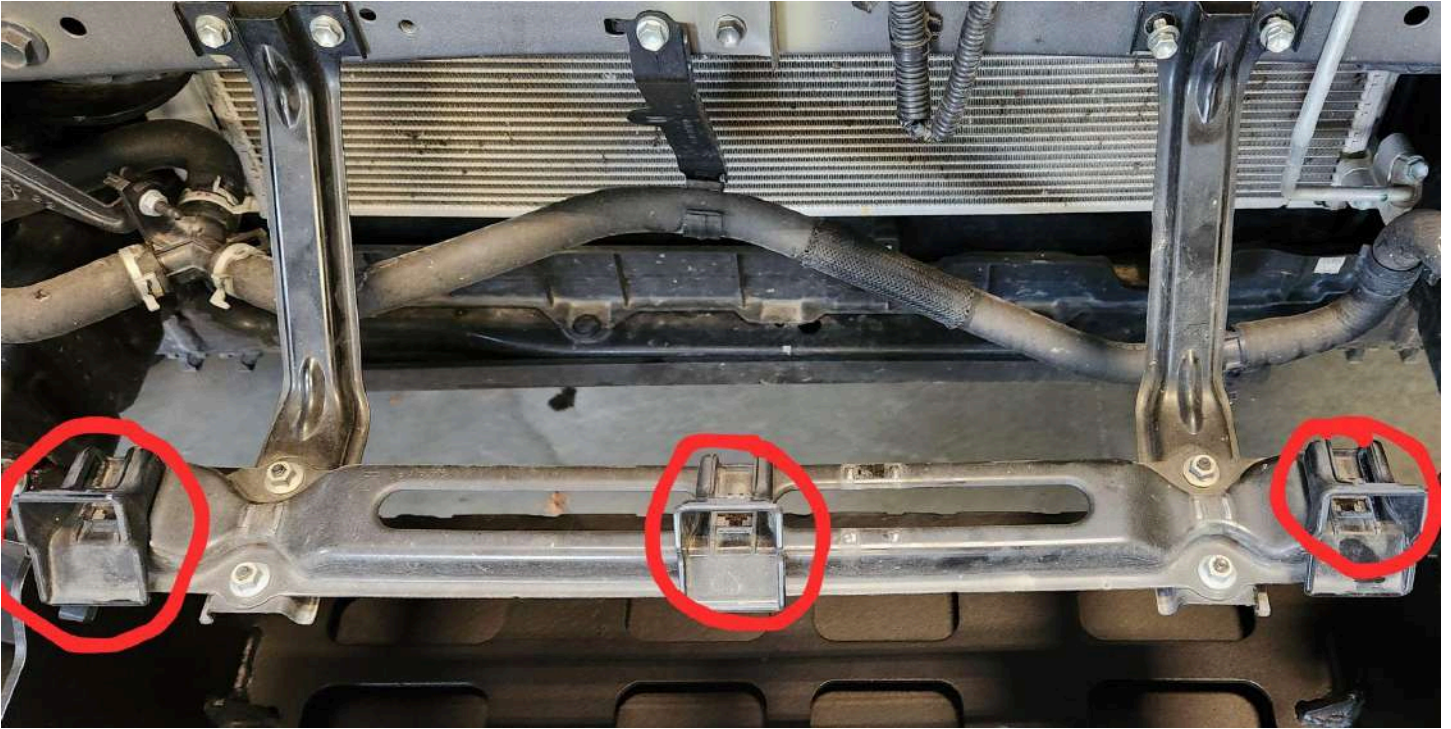
FACTORY BUMPER REINSTALLATION

43. Reinstall the black bracket on the crossmember directly above the RCI Pike bumper using the silver bolts removed earlier.

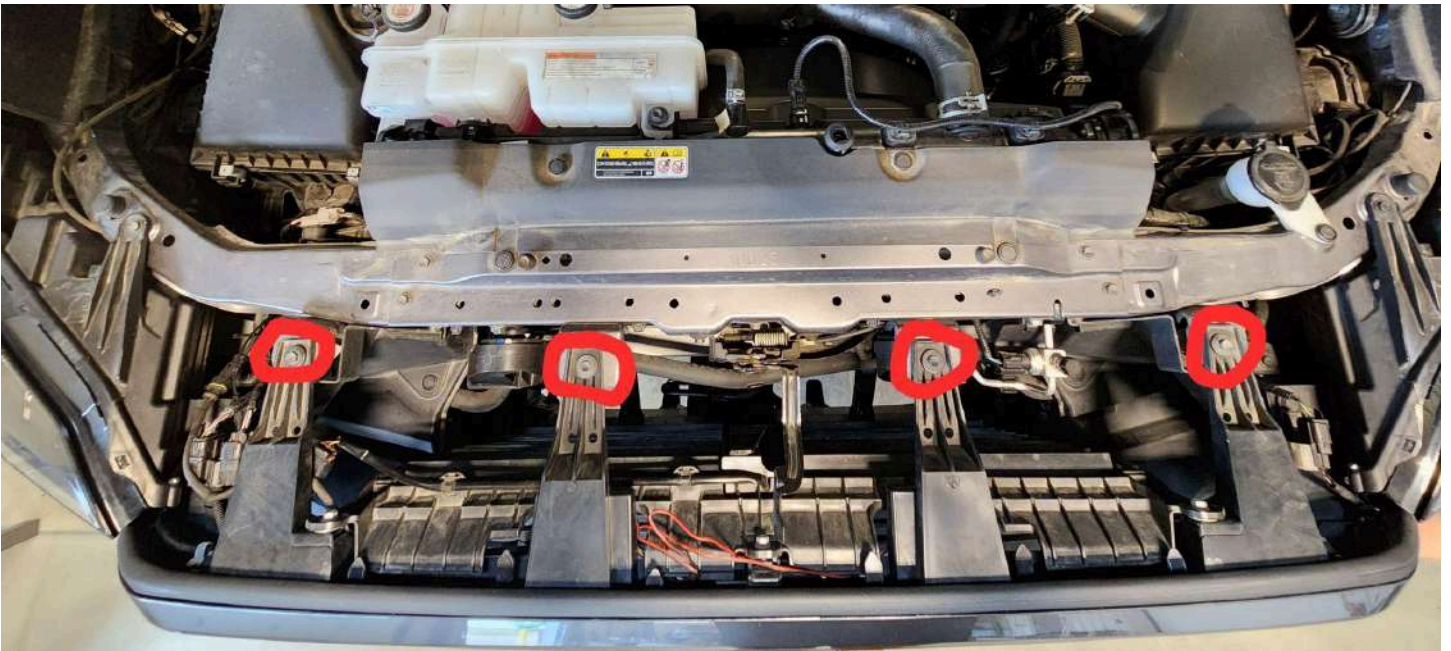


44. Lift the OEM bumper with the plastic tabs on the OEM bumper with the slots in the black bracket installed in the previous step. Push the OEM bumper backwards and into the vehicle.





45. With the bracket supporting the center of the bumper, ensure that the black plastic tabs at the top of the bumper are aligned with the mounting locations present at the front of the engine bay. Reinstall the 4 bolts at the top of the OEM bumper to secure the bumper to the front of the engine bay.

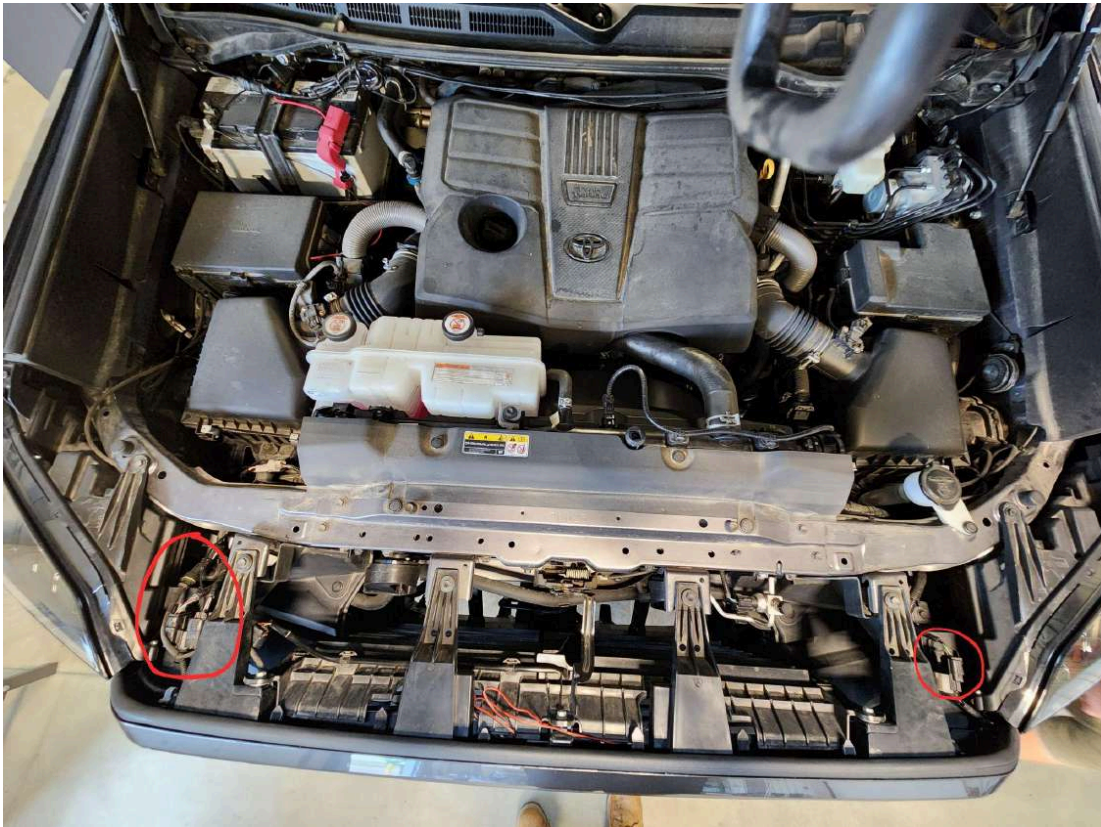


46. Carefully wrap the sides of the OEM bumper around the front of the vehicle, aligning the bumper with the headlights and the front quarter panels of the vehicle. Carefully, but firmly, apply pressure to the bumper to seat it.
47. Align the fender flares with the fender and front bumper. Push firmly into place.

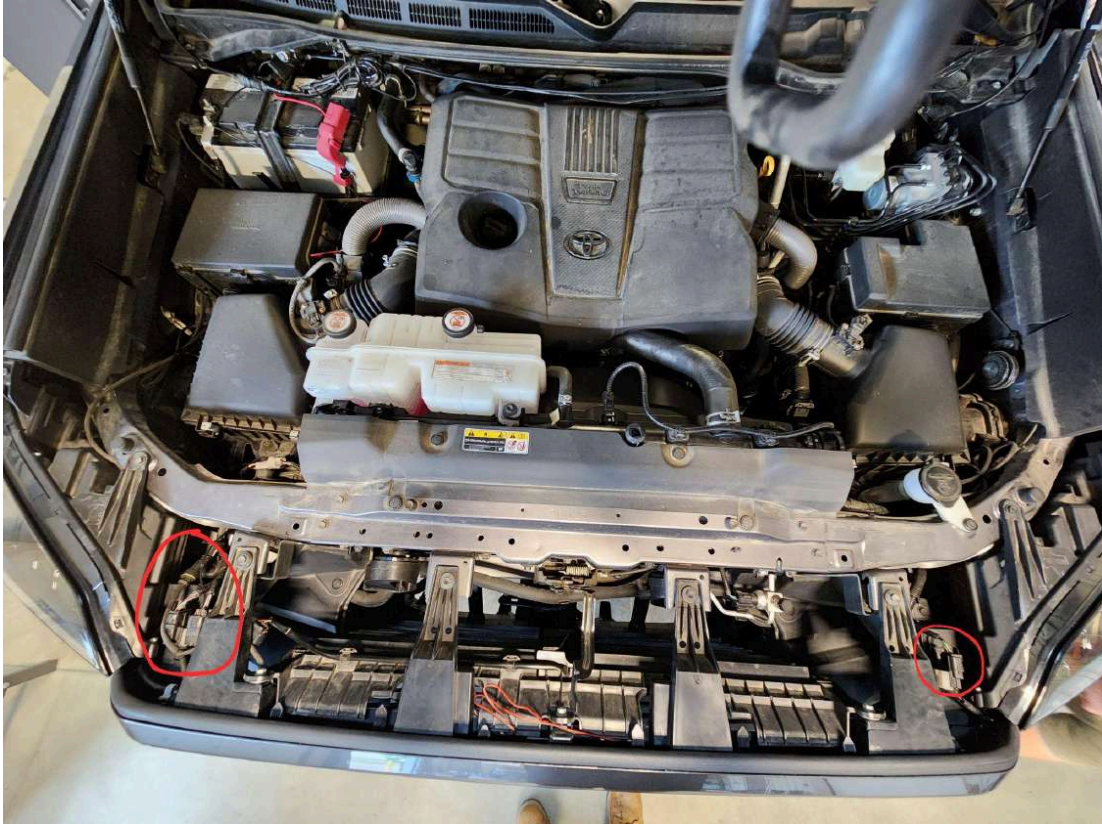
48. Reinstall the 7 bolts in each wheel well to secure the bumper, fender, and fender liner to the vehicle.



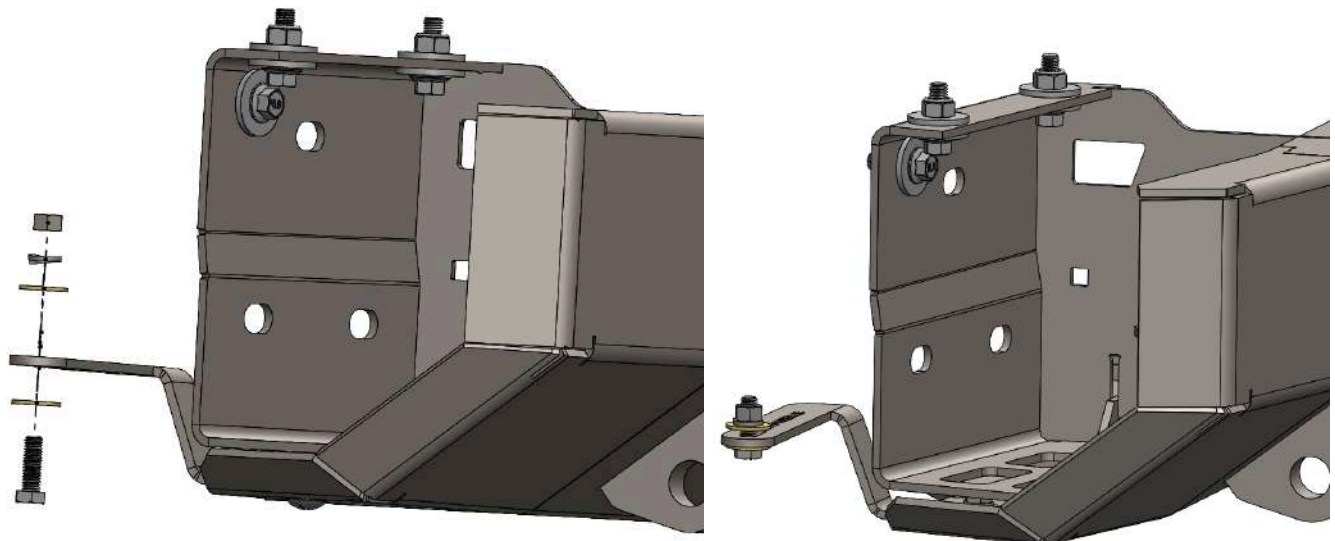
49. Reinstall the pair of plastic clips on either side of the top of the bumper. These will be installed just inside of the headlight.

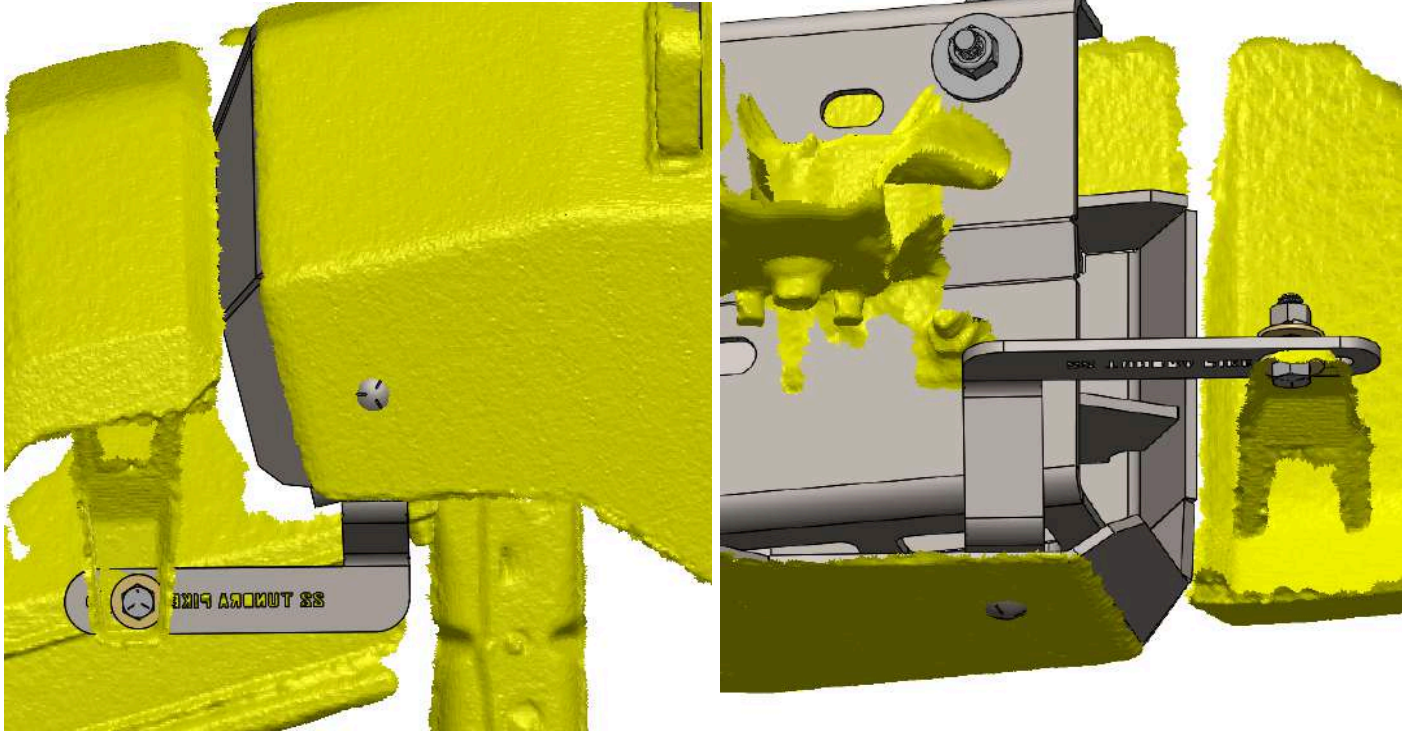


50. Reconnect the wiring harnesses on either side of the top of the bumper.



51. Using the included 3/8" bolt, washers, and nuts to secure the plastic mounting tabs located at the bottom of the OEM bumper to the mounting brackets installed on the RCI Pike bumper.





52. With the brackets aligned and secured to the OEM bumper, tighten the carriage bolt hardware securing the brackets to the RCI Pike Bumper.
53. Tighten all hardware.

Enjoy your new RCI protection!



Share your new install with us on social media!

We love seeing our products out in the wild!

www.rcimetalworks.com

sales@rcioffroad.com

970-797-3089



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