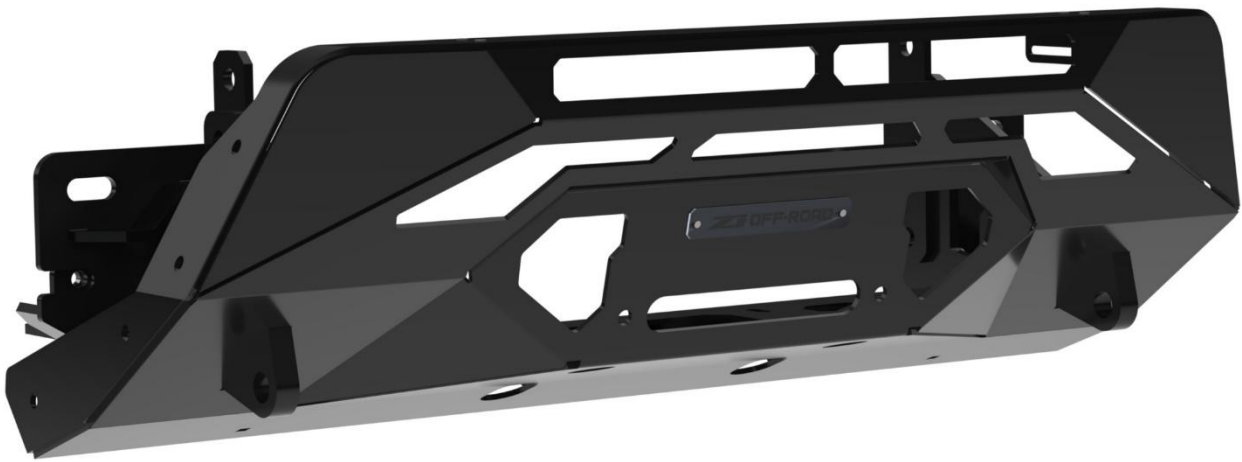


# Z1 25+ D41 FRONTIER RECON FRONT BUMPER INSTALLATION MANUAL



This Installation Manual is intended for the following models:

2025+

Nissan Frontier (D41)

## PROLOGUE:

Study these instructions completely before proceeding to assembly. The installer must have a thorough knowledge of automotive systems operation. If unfamiliar with any of the concepts outlined in this instruction, we recommend the installation be completed by a qualified professional.

## WARNING!

Extreme caution should be taken when performing maintenance or performance upgrades to your vehicle. Please observe and abide by any Warning or Caution labels placed on the various components and tools used when servicing your vehicle. If you have any questions regarding installation or the various components included with the Z1 Off-Road 25+ D41 Frontier Recon Front Bumper, consult with a Professional Mechanic, or contact Z1 Off-Road for more information.

## **PARTS INCLUDED:**

Item	Quantity	Description
1	1	Main Bumper
2	1	RH Lower Support
3	1	LH Lower Support
4	1	RH Adjustable Mount
5	1	LH Adjustable Mount
6	4	M16 x 2.0 Nylon Locknut
7	4	M16 x 2.0 Hex Head Bolt, 50mm
8	10	M12 x 2.0 Hex Head Bolt, 35mm
9	4	M12 x 1.25 Hex Head Bolt, 45mm
10	8	M16 Oversized Washer
11	10	M12 Oversized Washer
12	1	RH Light Bracket
13	1	LH Light Bracket
14	2	M5 x 0.8 Flanged Nut
15	4	M6 x 1.0 Flanged Nut
16	1	Edge Guard
Radar Relocation Bracket		
17	1	Sensor Mounting Plate
18	1	Base Bracket
19	1	M8 Nylon Plastic Washer
20	2	M8 x 1.25 Flanged Button Head Screw, 20mm
21	2	M8 x 1.25 Flanged Locknut
22	3	M6 x 1.0 Serrated Flanged Locknut

## **TOOLS REQUIRED:**

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- Assorted Metric Sockets
- Assorted Metric Wrenches
- Torque Wrench
- Air Saw/Cutting Wheel
- Die Grinder
- Painters Tape
- Screwdrivers
- Trim Removal Tool
- Scissors

## **SAFETY REQUIREMENTS:**

- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- Always use properly rated jack stands when working under your vehicle.
- Always keep limbs and parts away from moving drivetrain parts.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Only operate drivetrain in safe space and well-ventilated areas.

## **BEFORE YOU BEGIN:**

Remove contents from the Z1 Off-Road 25+ D41 Frontier Recon Front Bumper and verify that ALL necessary hardware is present.

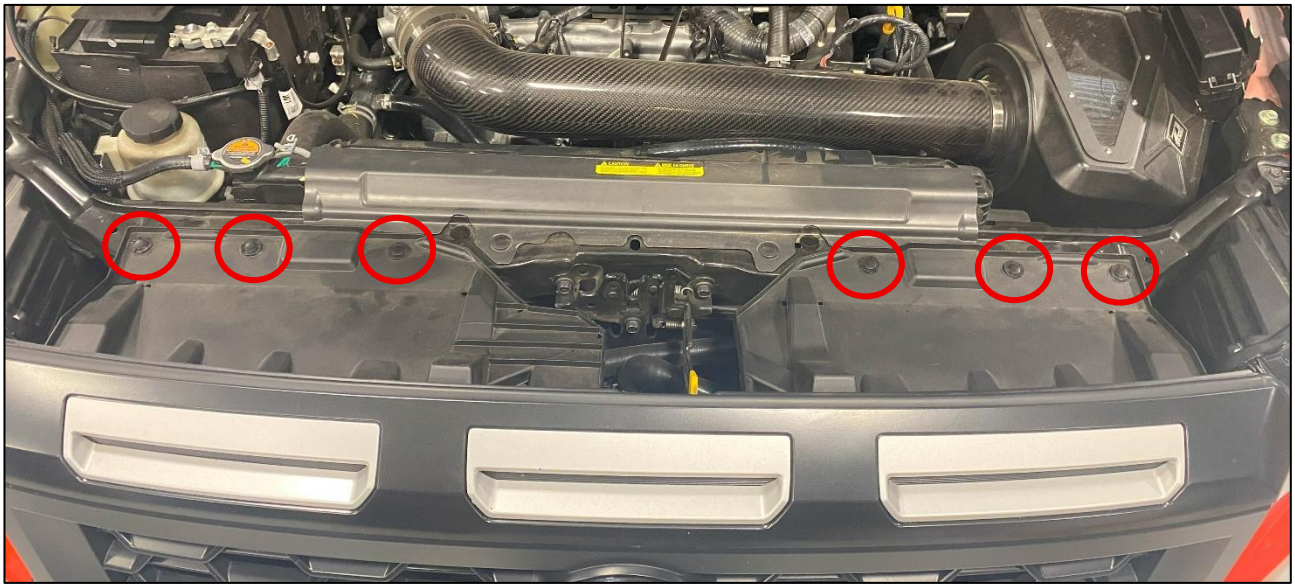
**PERMANENT MODIFICATIONS MUST BE PERFORMED TO THE OEM FRONT BUMPER TO CLEAR THE NEW Z1 OFF-ROAD FRONT BUMPER. TAKE YOUR TIME WHEN CUTTING TO ENSURE A PROPER FITMENT AND TO PREVENT RUINING THE OEM BUMPER.**

## **PROCEDURE:**

1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.

**NOTE:** Steps 2-4 are optional. This installation can be done on the ground, but it will be easier if the truck is raised and the front wheels are removed.

2. Loosen lug nuts on the front wheels.
3. Raise and support the truck using a jack and jack stands.
4. Remove the front wheels from the truck.
5. Open and support the hood of the vehicle.
6. Remove the (6) six Plastic Tabs securing the cover on top of the Radiator. *Figure 1.*



*Figure 1*

7. Remove the (3) three screws connecting the front of the Radiator Cover to the Front Grille. *Figure 2.*



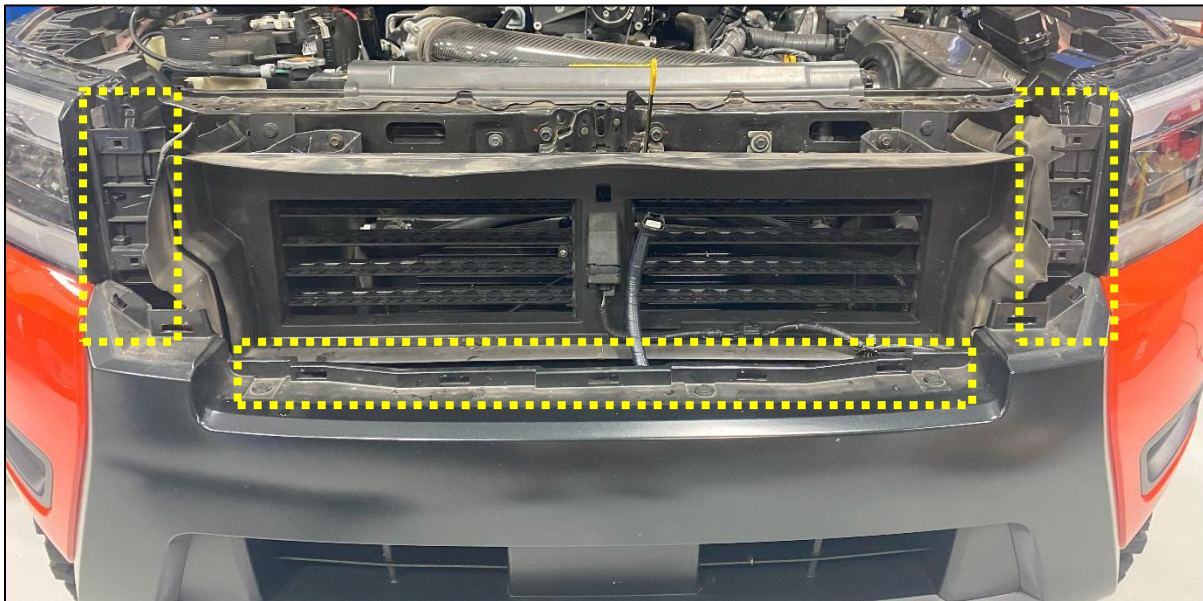
*Figure 2*

8. Remove the Radiator Cover from the vehicle. You may need to disconnect the top clips of the Front Grille to have enough clearance to remove the Cover. *Figure 3.*



*Figure 3*

9. Unclip and remove the Front Grille from the vehicle. There are clips on both sides and the bottom. Some vehicles will need to unclip the Front Camera to remove the Grille. *Figure 4.*



*Figure 4*

10. Remove the (4) four bolts securing the OE Radiator Skid Plate and set the Plate aside if applicable.
11. On the bottom of each corner of the Bumper, remove the (1) one bolt securing the Bumper to the Fender Liner. *Figure 5.*



*Figure 5*

12. Remove the (4) four Bolts on the underside of the Front Bumper securing it to the Splash Guard. *Figure 6.*



*Figure 6*

13. Remove all screws on the front side of the Fender Flare securing the Flare to the Front Bumper/Fender Liner.
14. Pull the Front Half of the Fender Flare away from the vehicle to release it. *Figure 7.*
15. Place Painters Tape on the Front Fender underneath the Fender Flare to prevent the Flare from scratching the paint. *Figure 7.*



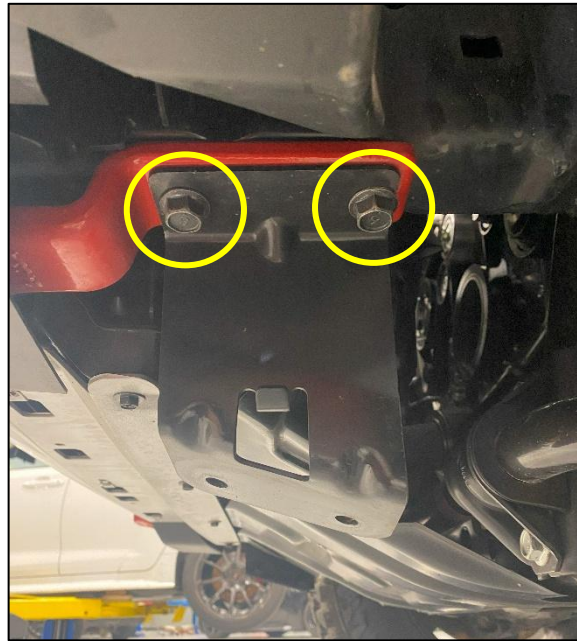
*Figure 7*

16. Remove the Screws hidden behind the Fender Flare securing the Front Bumper to the Fender Liner.
17. Remove any plastic clips securing the front of the Fender Liner to the vehicle. *Figure 8.*



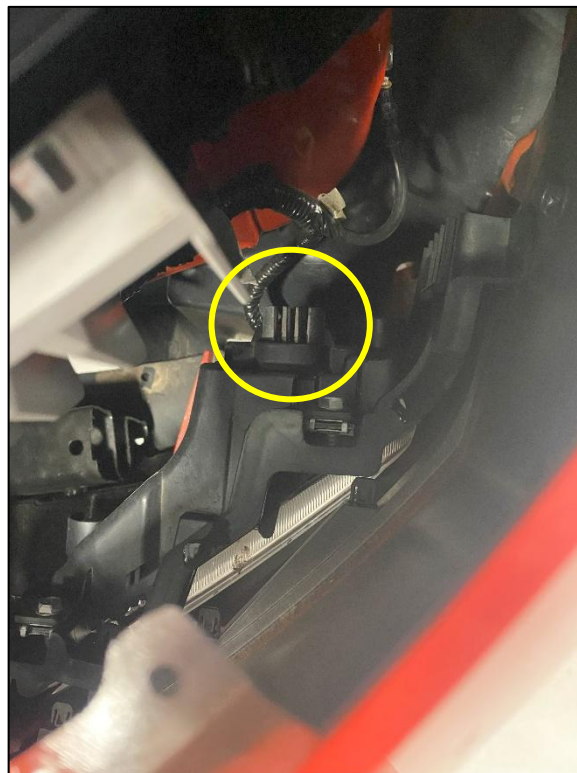
*Figure 8*

18. Remove the (2) two bolts on each side of the vehicle securing the Skid Plate Bracket and Tow Hook. *Figure 9.*



*Figure 9*

19. Reach down on each corner of the vehicle and disconnect the Fog Light Harnesses. *Figure 10.*



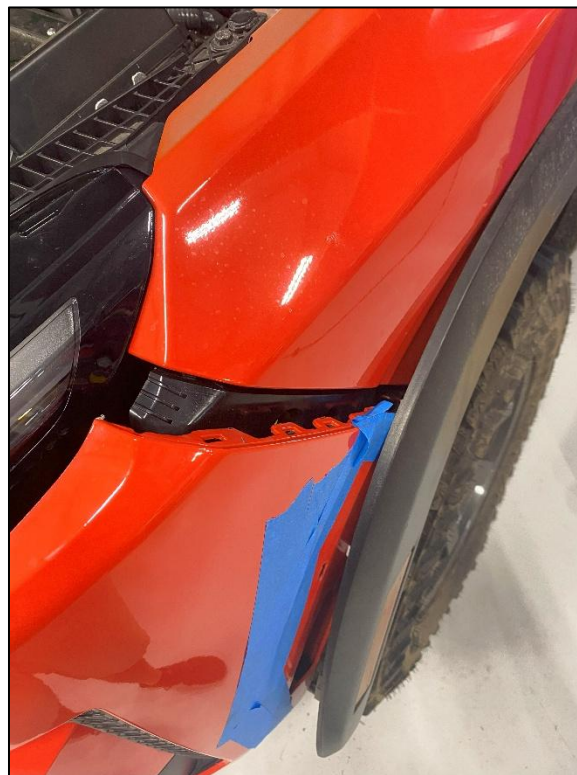
*Figure 10*

20. Remove the (1) one screw in the top corner of the Front Bumper that connects it to the Front Fender on each side. *Figure 11.*



*Figure 11*

21. On each side of the vehicle, pull the top corner of the Front Bumper away from the vehicle to release the clips. The Fender Flare may need to be unclipped more to provide necessary access. *Figure 12.*



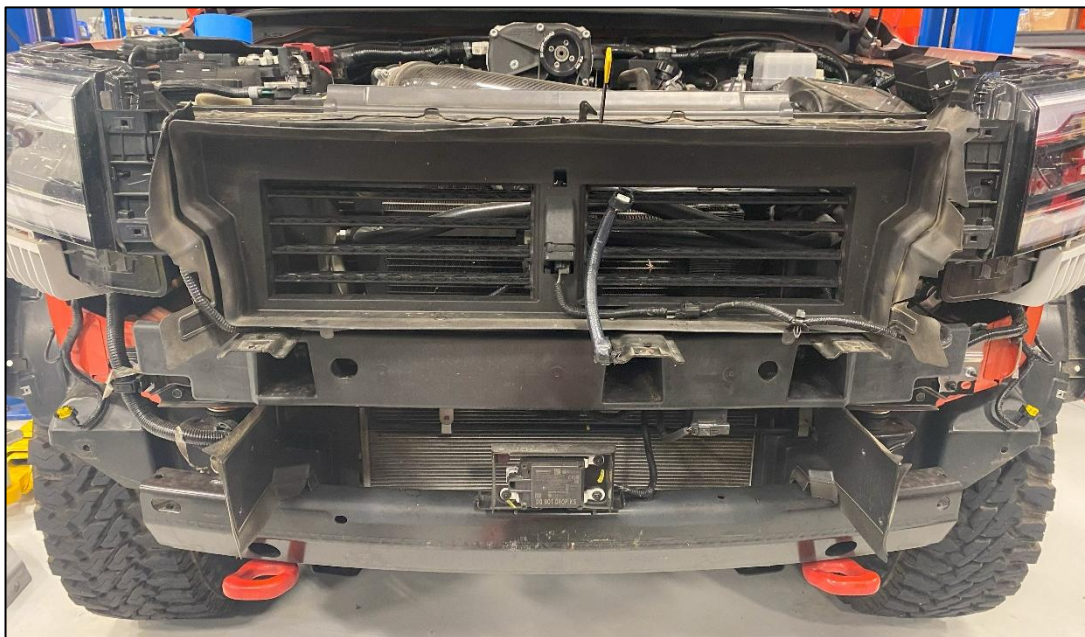
*Figure 12*

22. Fully remove the Front Bumper from the vehicle. A partner will help with this step to prevent the Bumper from falling. *Figure 13.*



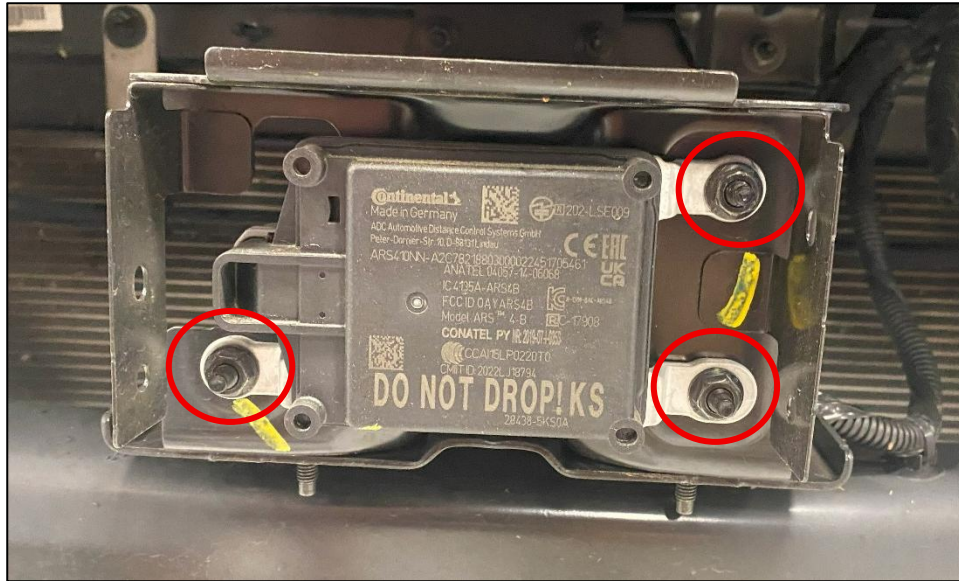
*Figure 13*

23. Remove the (2) two Foam Impact Absorbers from the front of the vehicle. *Figure 14.*



*Figure 14*

24. Disconnect the connector on the back of the Radar Sensor.
25. Remove the (3) three nuts securing the Radar Sensor to the Bracket and set the Sensor Aside. Retain these nuts as they will be reused. *Figure 15.*



*Figure 15*

26. Remove the plastic Mount surface by pulling down on it to release it from the (2) two clips. *Figure 16.*



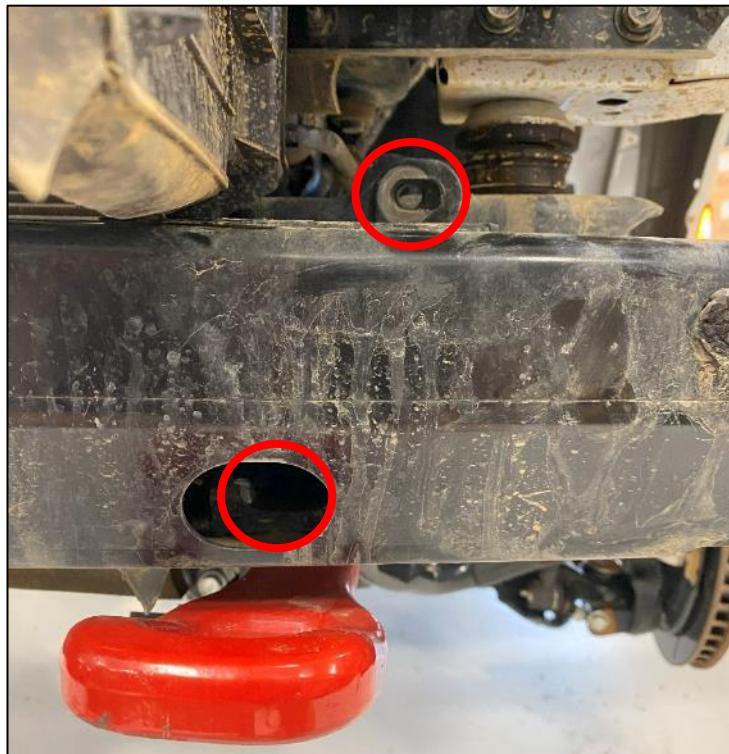
*Figure 16*

27. Undo the clip and remove the Wiring Harness from the OE Crash Bar on the passenger side of the vehicle.  
*Figure 17.*



*Figure 17*

28. Remove the (2) two bolts and (2) two nuts securing the OE Crash Bar to the vehicle. The Crash Bar is relatively heavy and will fall once the hardware is removed. *Figure 18.*



*Figure 18*

29. Trim the Radiator Air Guides as shown. A nice pair of scissors should be enough to cut the plastic. *Figure 19.*



*Figure 19*

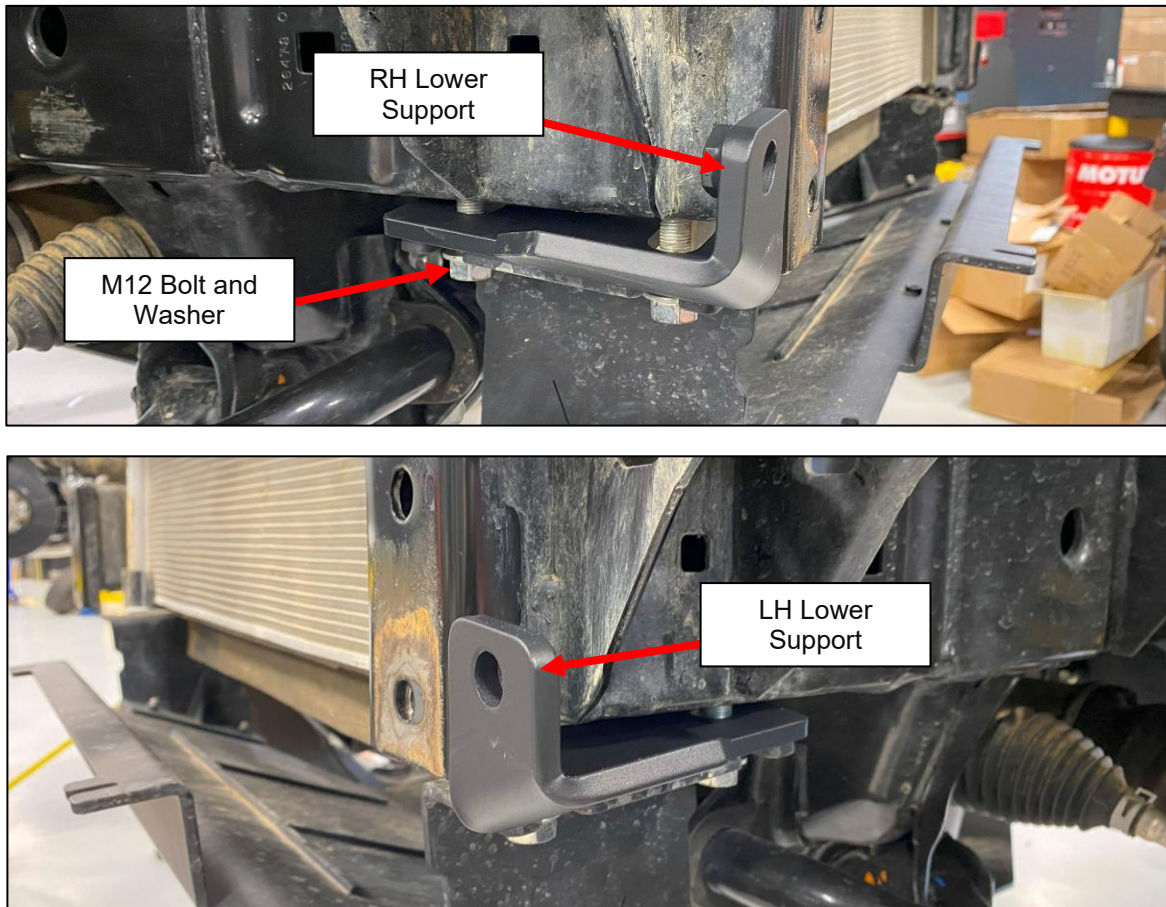
30. Clean the Front Crash Bar mounting surface of any debris. Optionally you can sand any rust and repaint to prevent future corrosion. *Figure 20.*



*Figure 20*

31. Locate the RH Lower Support. LH Lower Support, (4) four M12 x 1.25 Hex Head Bolts, 35mm, and (4) four M12 Washers. Position the Lower Supports on the OE Tow Hook mounts as shown below and loosely secure them with the M12 Bolts and Washers. *Figure 21.*

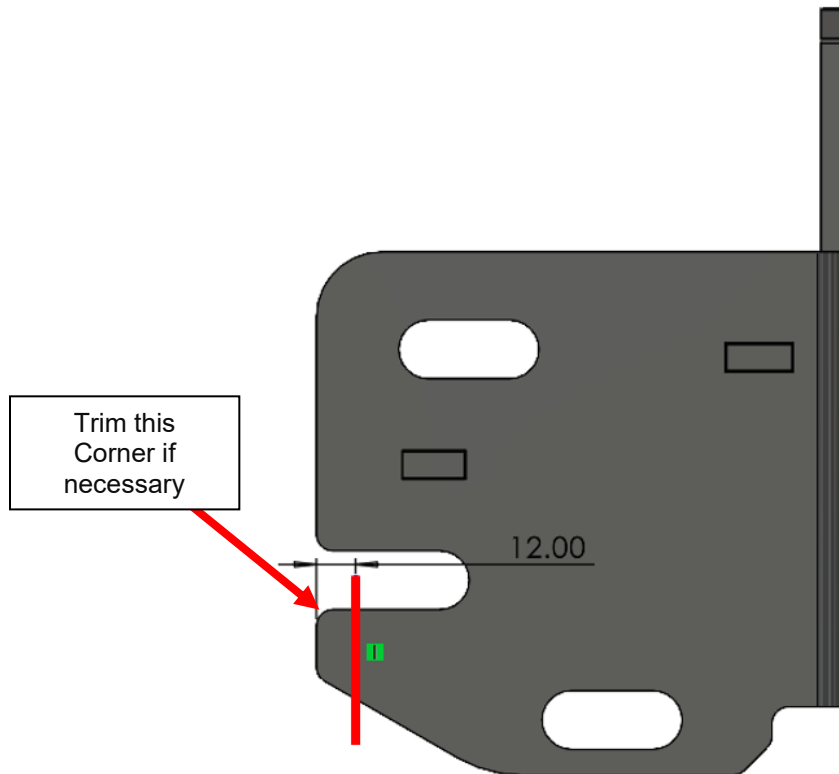
**NOTE:** If you are using a Skid Plate, use the (4) four 45mm M12 x 1.25 Hex Head Bolts instead of the 35mm M12 x 1.25 Bolts. The 35mm bolts will not have enough thread engagement with a Skid Plate.



*Figure 21*

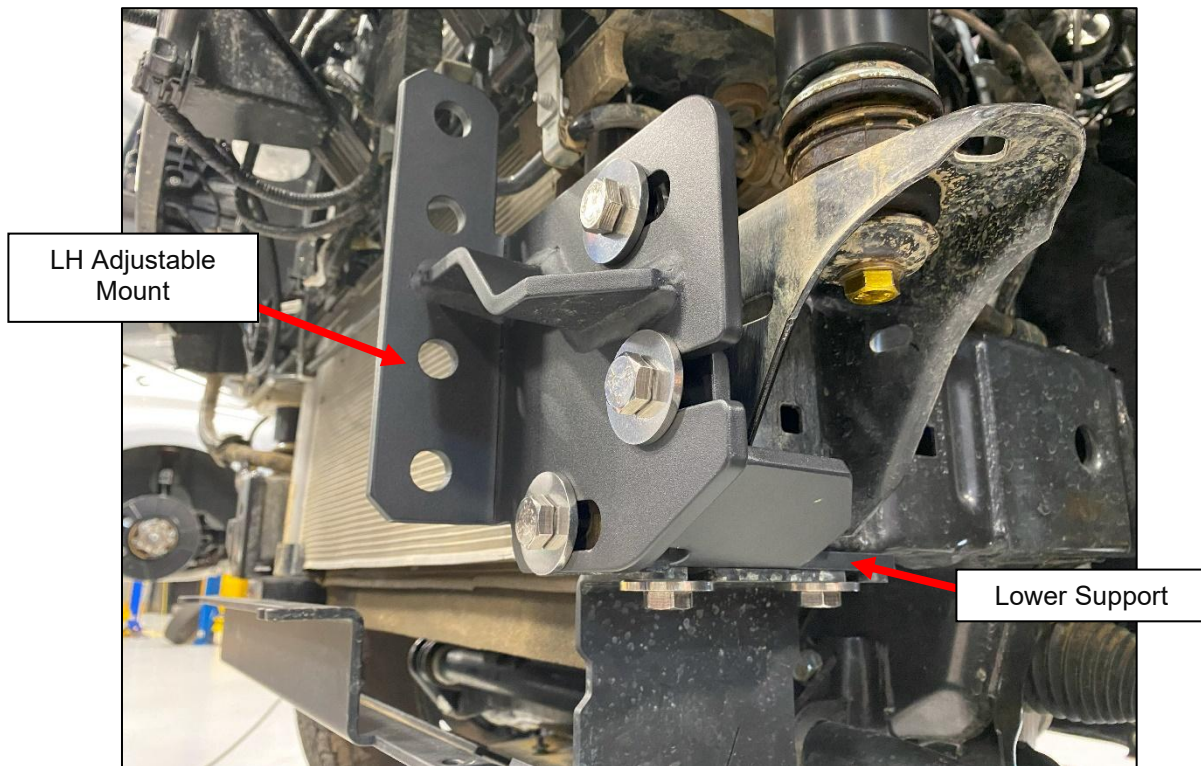
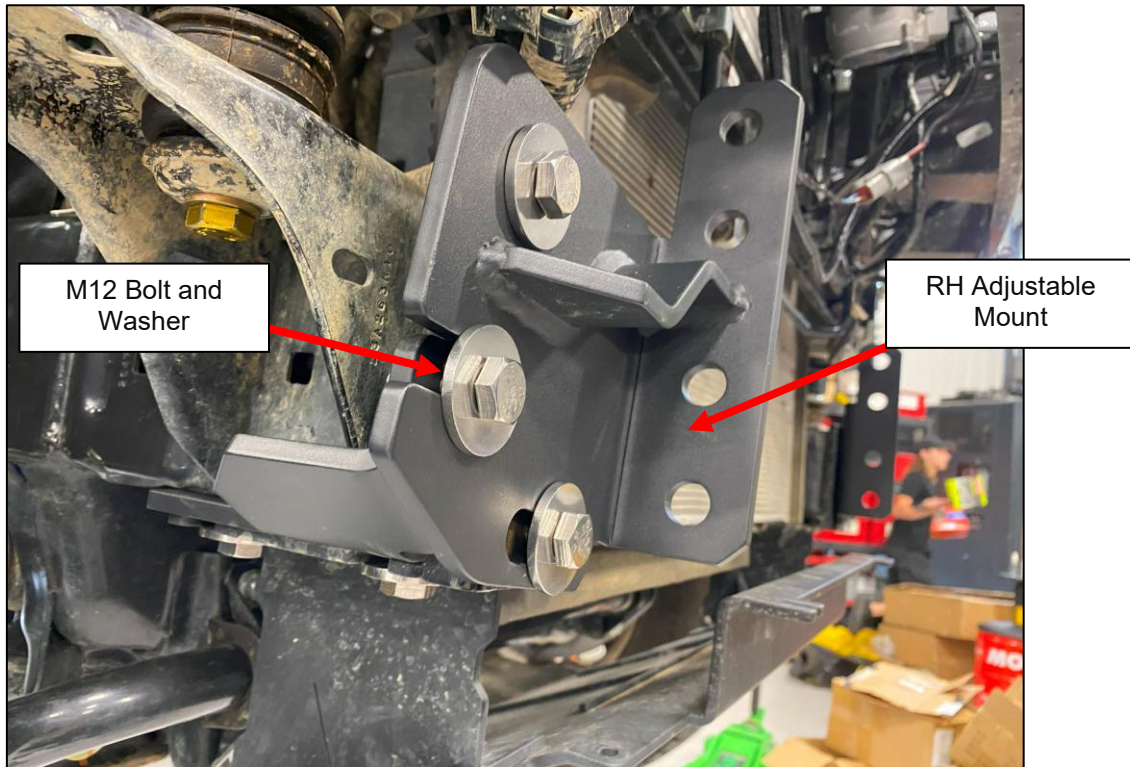
## **IF YOU HAVE A 2" BODY LIFT:**

Locate the LH and RH Adjustable Mounts. The 25+ Mounts retain the same Mounts from the wider 2022-2024 Recon bumper. Because the 25+ Bumper is narrower from outer edge to outer edge, the frame plates may need minor trimming to fit 25+ trucks running a 2" body lift. This modification will not affect the integrity of the frame plate. Use a Cutoff Wheel to trim ~12mm/1/2" off the corner of the Mount as shown below. *Figure 22.*



*Figure 22*

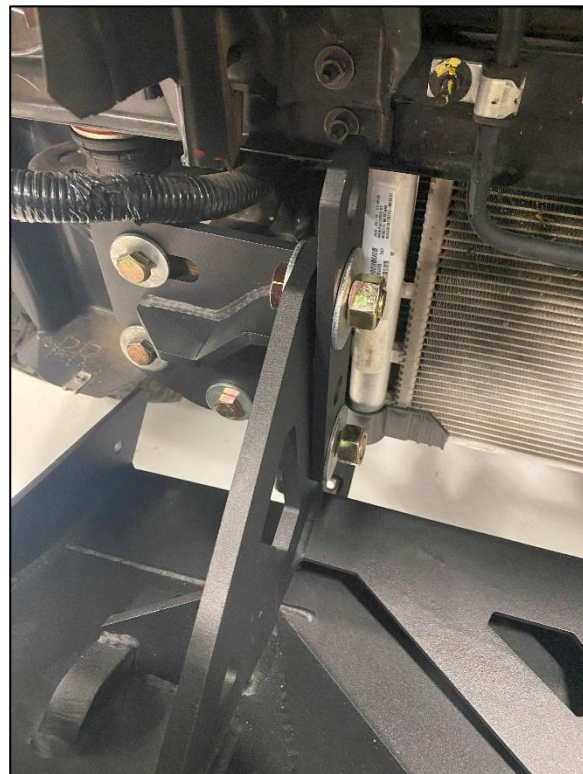
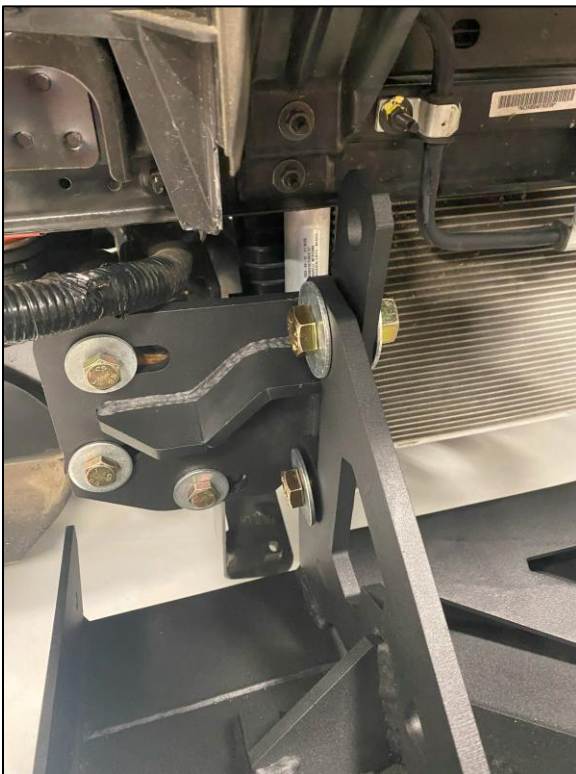
32. Locate the RH Adjustable Mount, LH Adjustable Mount, (6) six M12 x 1.25 Hex Head Bolts, 35mm and (6) six M12 Washers. Position the Adjustable Mounts on the OE Front Crash Bar Mount and sandwich the lower tab between the Lower Supports installed in *Step 31* and the Frame Rail. Loosely secure each mount with (3) three M12 Bolts and Washers. *Figure 23*.



*Figure 23*

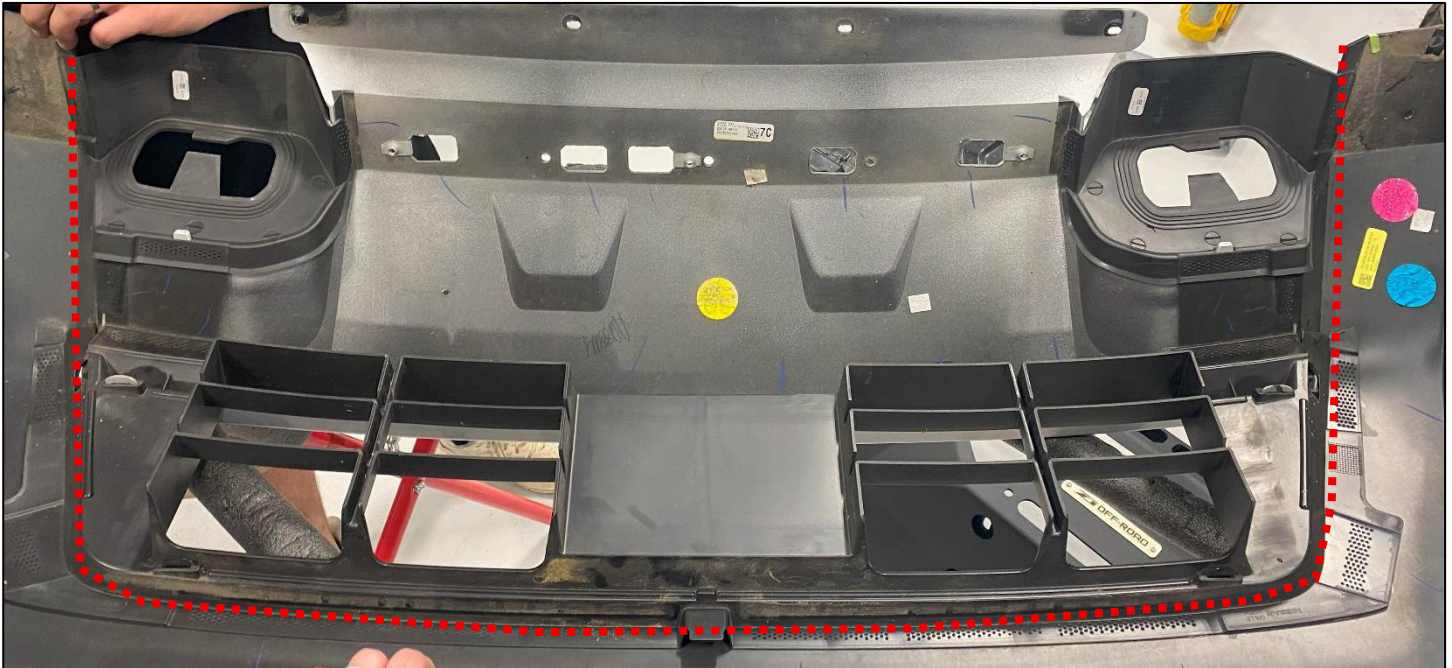
33. Locate the Main Bumper, (4) four M16 x 2.0 Hex Head Bolts, 50mm, (4) four M16 Nylon Locknuts and (8) eight M16 Washers. With the help of at least one other person, raise the Main Bumper to the front of the truck. Position it so that the mounting tabs or are on the outside of the Adjustable Mounts. Loosely secure the bumper with the M16 Hardware and Washer on each side. *Figure 24.*

**NOTE:** There are (2) two different mounting points to use for the Bumper depending on if you have a body lift or not. The higher mounting points are for a Body Lift, the points are for trucks without a Body Lift. **Body Lifted Trucks will also have to mount the Bumper to the Inboard Side of the Mounting Plates, not the Outboard as shown below.**



*Figure 24*

34. On the backside of the Front Bumper, use a Screwdriver or pry tool to pry the center section away. The plastic is bonded together but will separate. *Figure 25.*



*Figure 25*

35. Using Painters tape, mark the outside fold line of the Front Bumper. This will be your cut line and should be as straight as possible. *Figure 26.*



*Figure 26*

36. Using an Air Saw or equivalent tool to trim on the inside of the taped line. Go slowly and be careful not to overcut. *Figure 27.*



*Figure 27*

37. Clean up the edges with a file, deburring tool or Die Grinder. The edges must be smooth with no build up on the back side, so the Edge Guard seats properly.

38. Locate the Edge Guard. Place it on the cut lip of the Front Bumper. Ensure it is fully seated and trim any excess Edge Guard off. *Figure 28.*



*Figure 28*

39. Loosely reinstall the OE Front Bumper onto the vehicle. *Figure 29.*



*Figure 29*

40. Adjust the Z1 Front Bumper to the desired position. Have another person or a jack hold the Bumper in place. *Figure 30.*



*Figure 30*

41. Remove the OE Front Bumper.

42. Torque the M12 Mounting bolts to **65 ft-lbs** and the M16 Mounting Bolts to **156 ft-lbs**.

43. If you plan on using a Light Bar, install the (2) two Light Bar Brackets to the studs on the underside of the Front Bumper. Secure each Bracket with (2) two M6 x 1.0 Nuts. The Brackets can adjust side to side to fit an assortment of Light Bars. Use hardware included with the Light Bar to mount it to the Brackets. *Figure 31.*

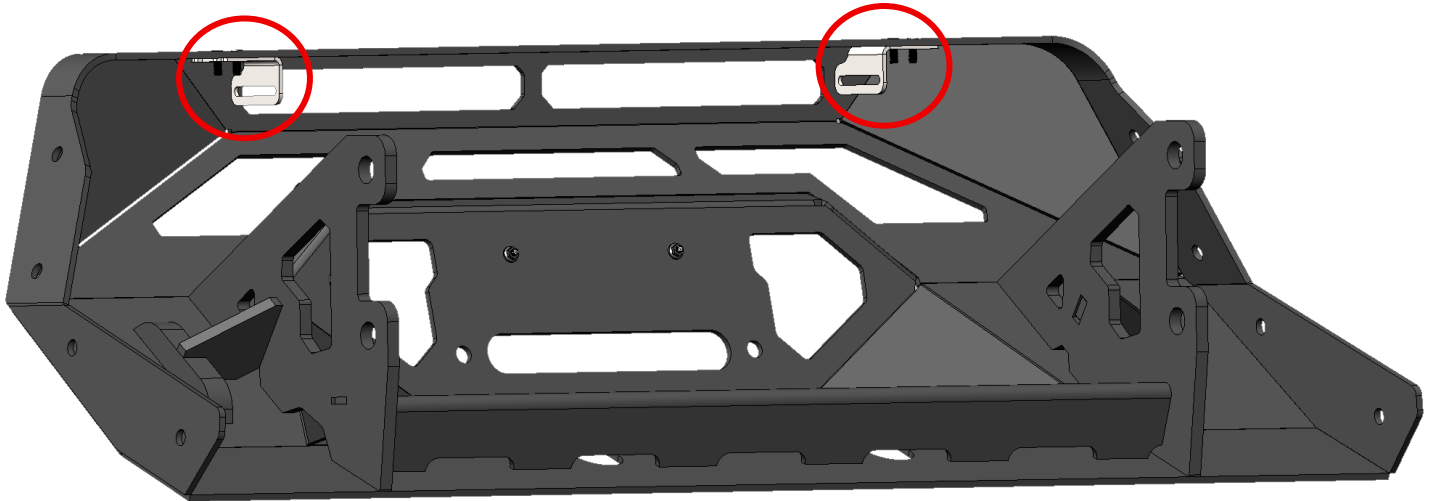


Figure 31

44. Locate all Radar Relocation Hardware. Assemble the Radar Relocation Bracket as shown below in *Figure 32*.

ITEM NO.	DESCRIPTION
1	SENSOR MOUNTING PLATE
2	BASE BRACKET
3	M8 NYLON PLASTIC WASHER
4	M8 X 1.25, 20mm LONG, 18-8 STAINLESS STEEL FLANGED BUTTON HEAD SCREW
5	M8 X 1.25 18-8 STAINLESS STEEL NYLON-INSERT FLANGE LOCKNUT

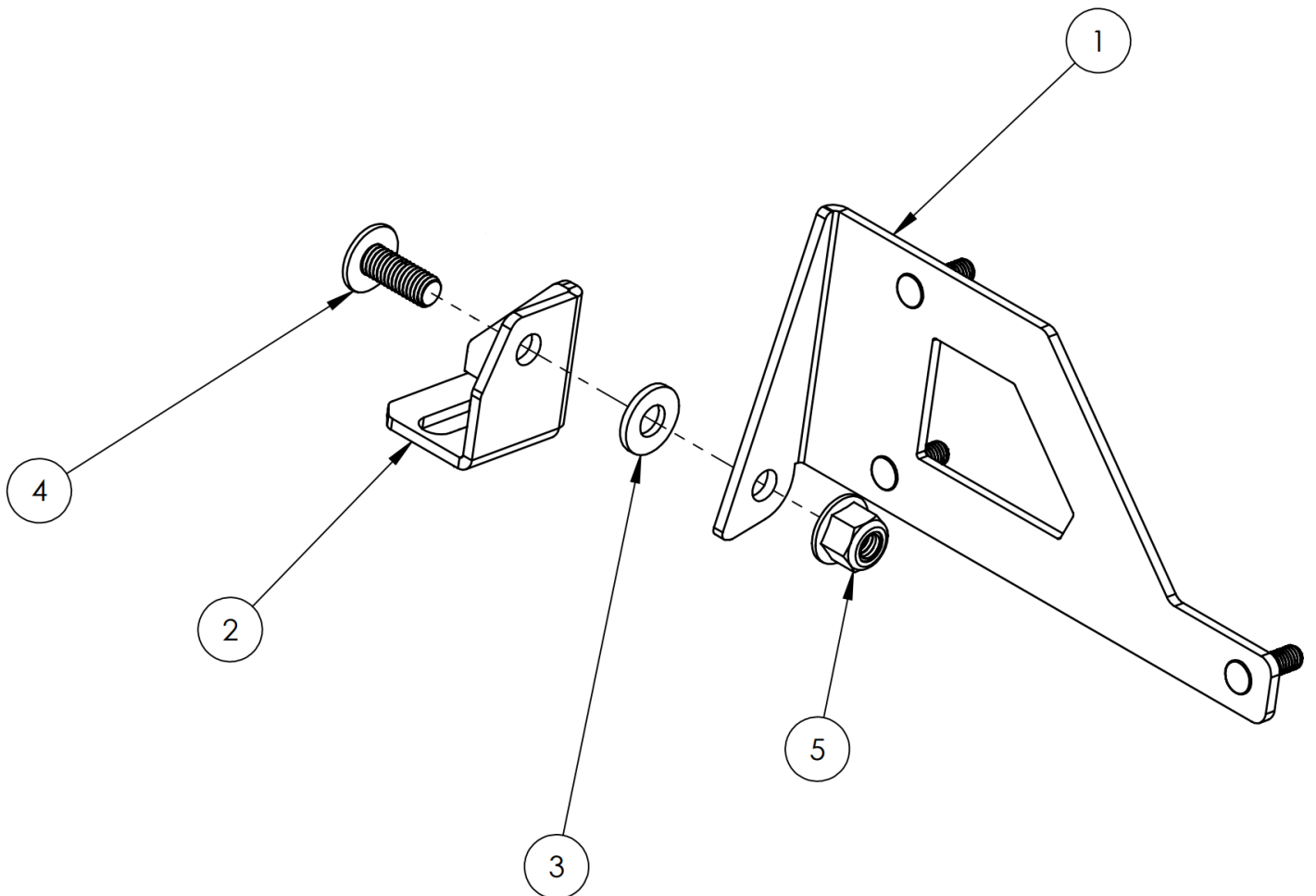


Figure 32

45. Install the Radar Relocation Bracket on the Bumper using (1) one M8 x 1.25 Flanged Button Head Screw on top and (1) one M8 x 1.25 Flanged Locknut on the bottom. *Figure 33.*



*Figure 33*

46. Install the Radar to the Relocation Bracket with the (3) three M6 x 1.0 Serrated Flanged Nuts. Reconnect the Radar Harness.
47. Reinstall the OE Front Bumper fully.
48. Follow *Steps 2-23* in reverse order to reinstall the Radiator Skids and Front Grille/Trim. *Figure 34.*



*Figure 34*

**END**

**Additional Technical Support:**  
Contact Z1 Off-Road at [info@z1offroad.com](mailto:info@z1offroad.com)  
Or call 678-839-8019 between 9am and 6pm ET