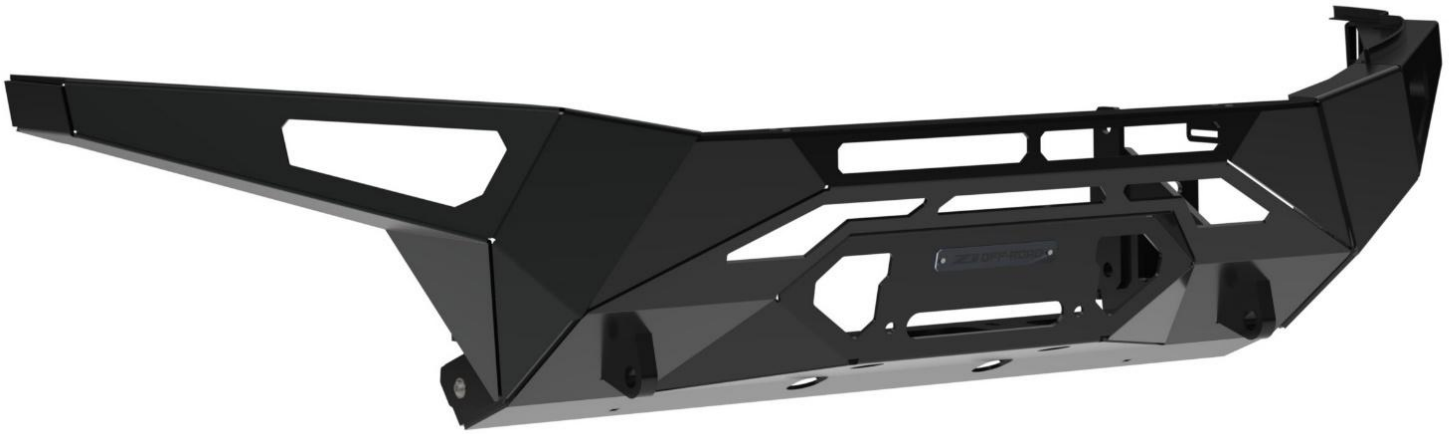


Z1 25+ D41 FRONTIER ASSAULT FRONT BUMPER INSTALLATION MANUAL



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 Wing
3	1	LH Wing
4	1	RH Lower Support
5	1	LH Lower Support
6	1	RH Adjustable Mount
7	1	LH Adjustable Mount
8	4	M16 x 2.0 Nylon Locknut
9	4	M16 x 2.0 Hex Head Bolt, 50mm
10	10	M12 x 2.0 Hex Head Bolt, 35mm
11	4	M12 x 1.25 Hex Head Bolt, 45mm
12	8	M16 Oversized Washer
13	10	M12 Oversized Washer
14	6	M10 x 1.25 Flanged Hex Head Screw, 25mm
15	2	M10 x 1.25 Button Head Screw, 25mm
16	9	M10 x 1.5 Flanged Nut
17	1	RH Light Bracket
18	1	LH Light Bracket
19	2	M5 x 0.8 Flanged Nut
20	4	M6 x 1.0 Flanged Nut
21	1	Edge Guard
Radar Relocation Bracket		
22	1	Sensor Mounting Plate
23	1	Base Bracket
24	1	M8 Nylon Plastic Washer
25	2	M8 x 1.25 Flanged Button Head Screw, 20mm
26	2	M8 x 1.25 Flanged Locknut
27	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
- Oscillating Multi-Tool (Recommended)
- Die Grinder
- Painters Tape
- Screwdrivers
- Trim Removal Tool
- Scissors
- Laser Leveler/Plumb Bob

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.*

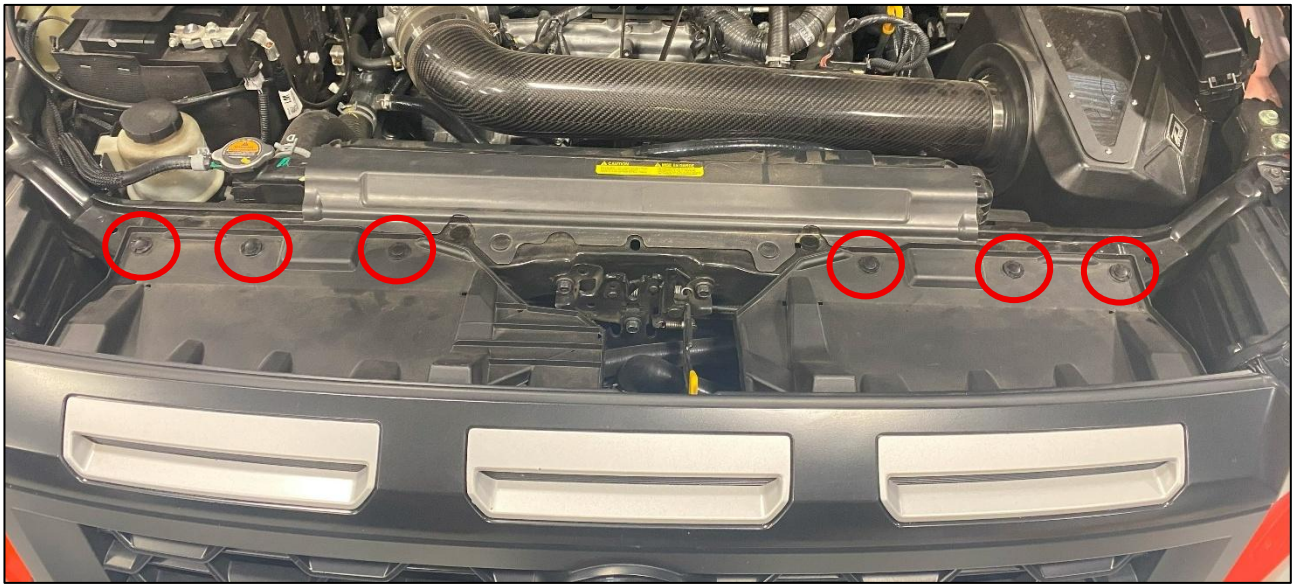


Figure 1

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. The top clips of the Front Grille may need to be disconnected to be able to fully 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.*

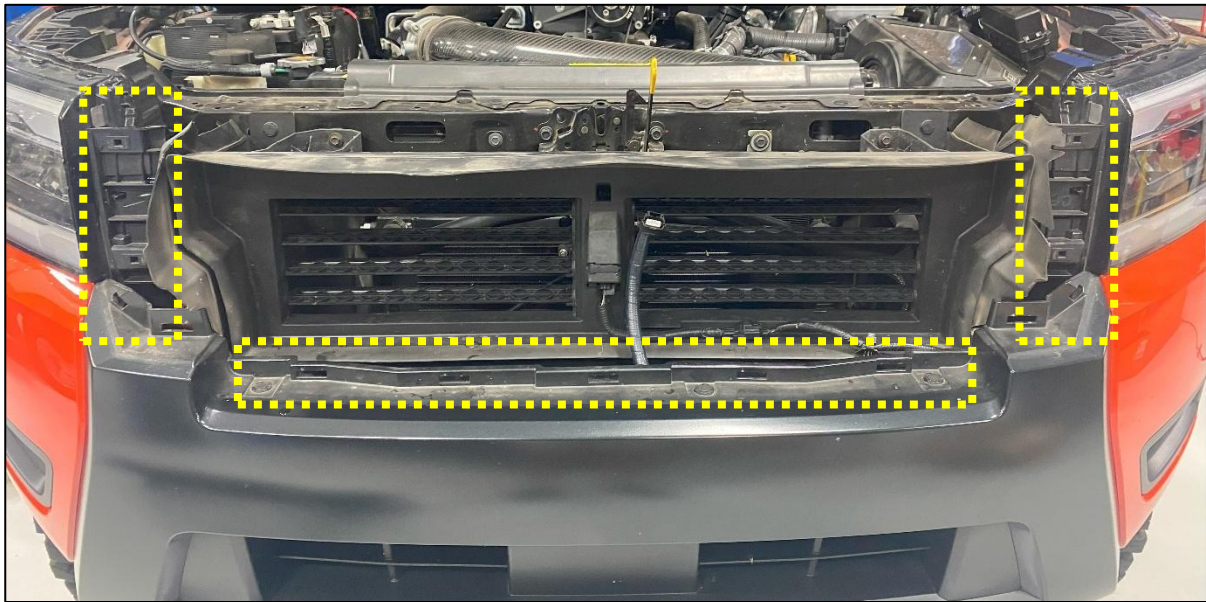


Figure 4

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.*

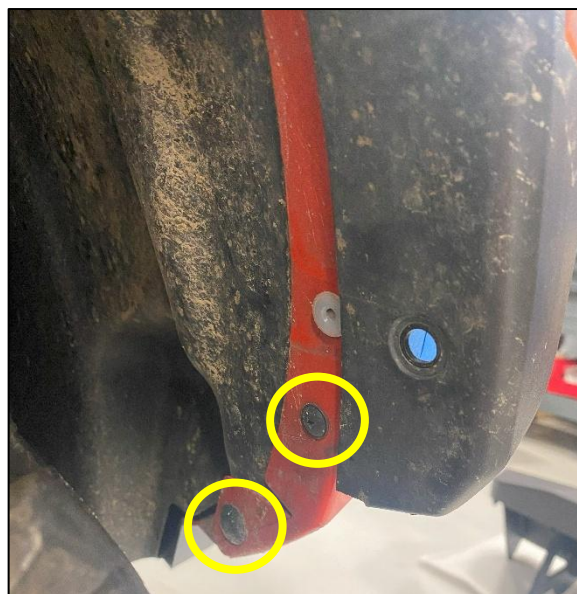


Figure 8

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

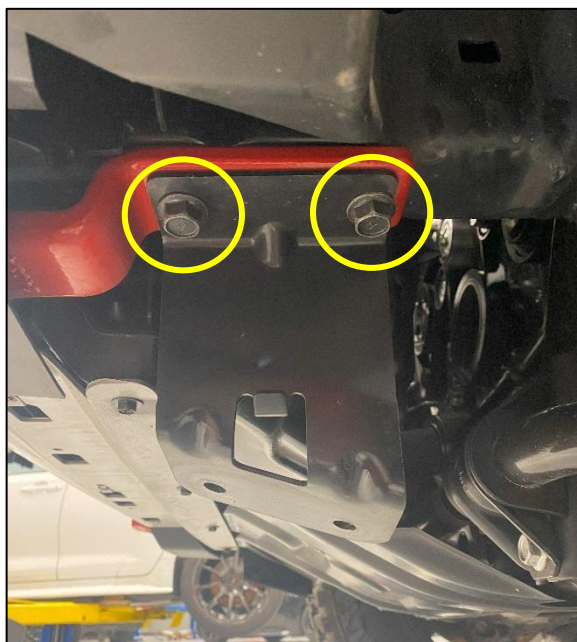


Figure 9

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

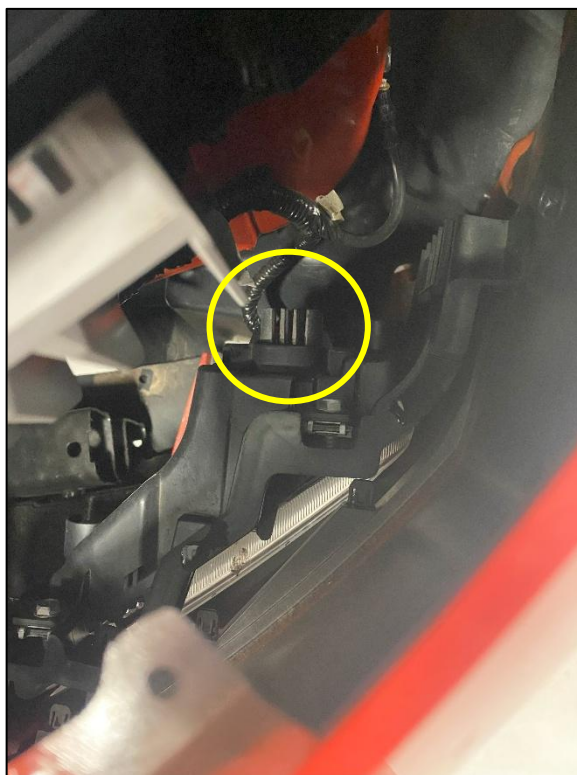


Figure 10

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.*

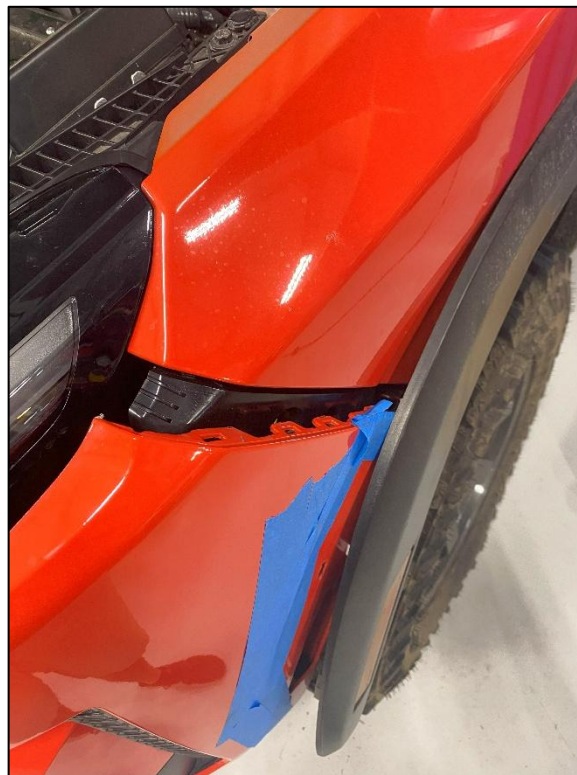


Figure 12

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.*

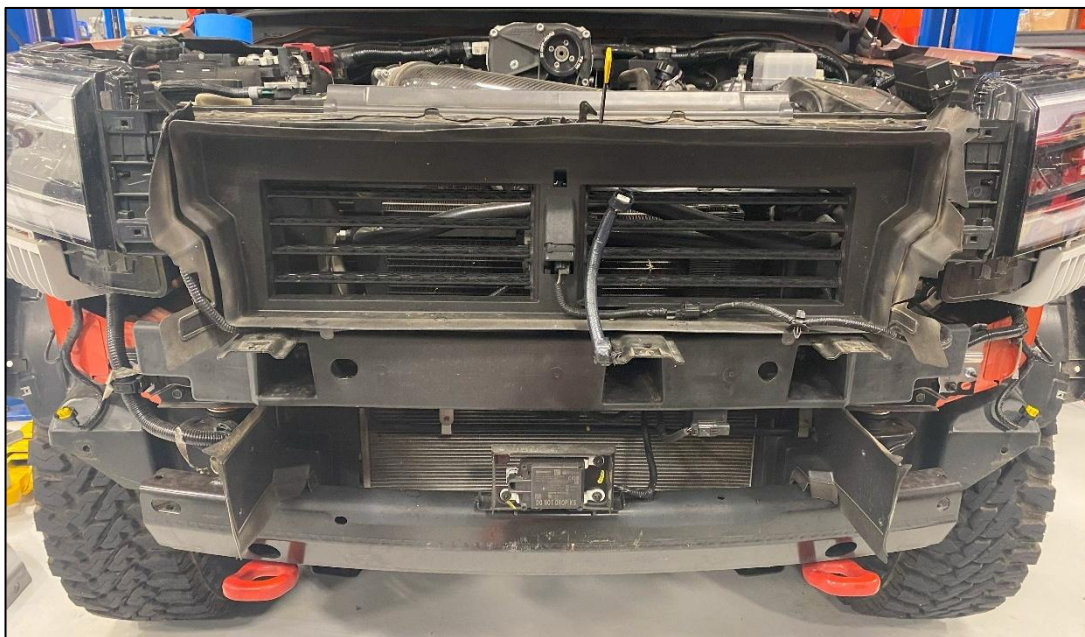


Figure 14

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. *Figure 15.*

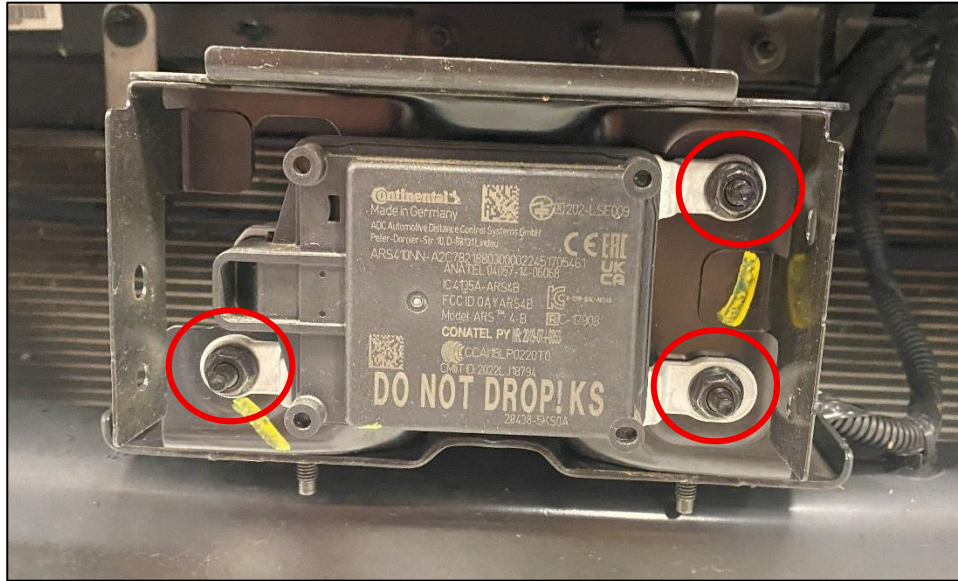


Figure 15

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.*

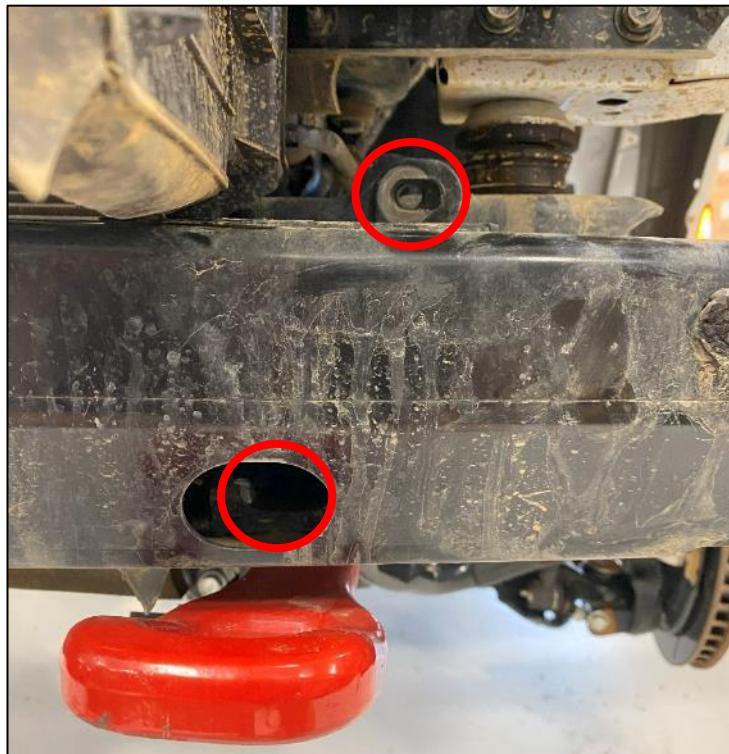


Figure 18

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.

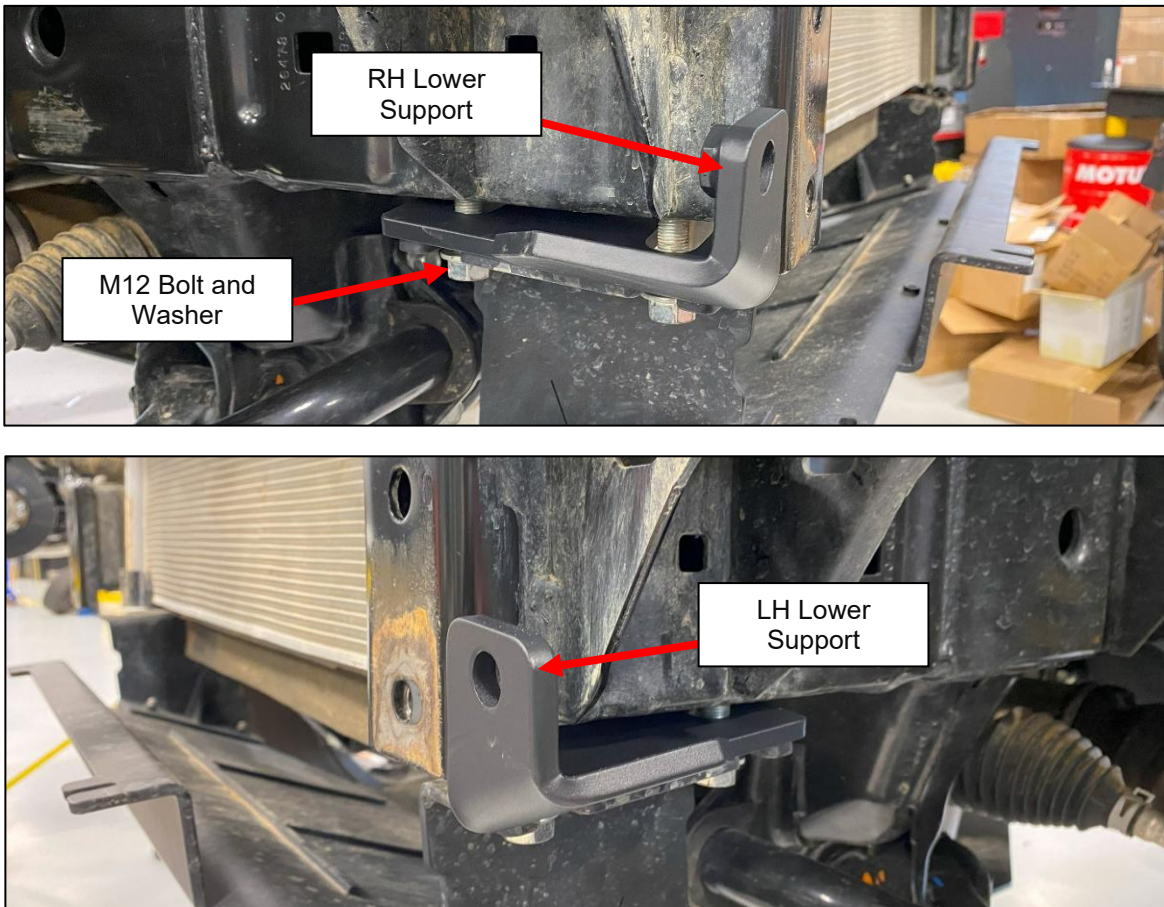


Figure 21

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.*

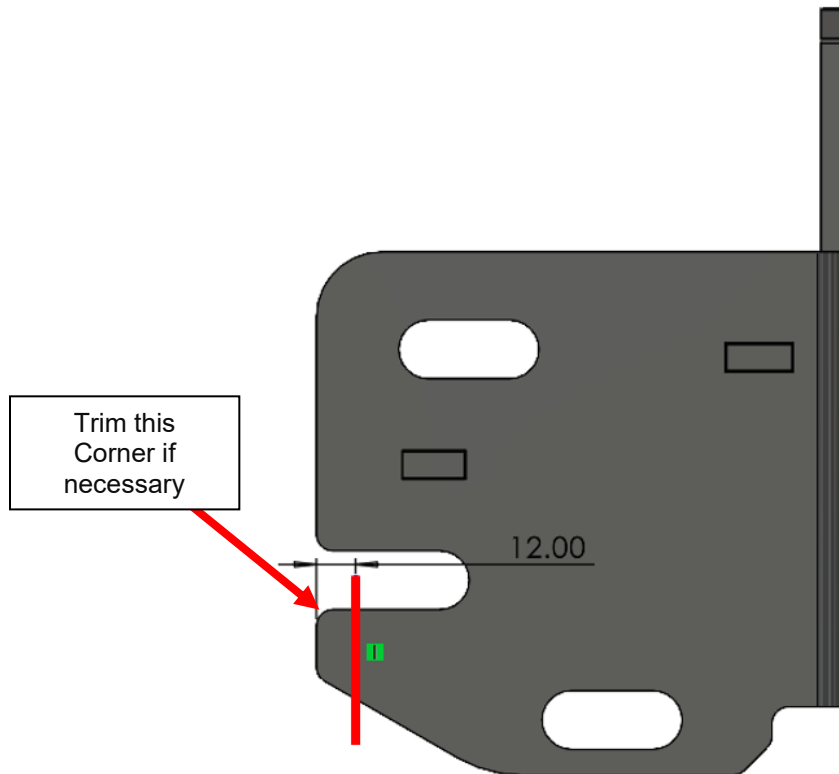


Figure 22

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*.

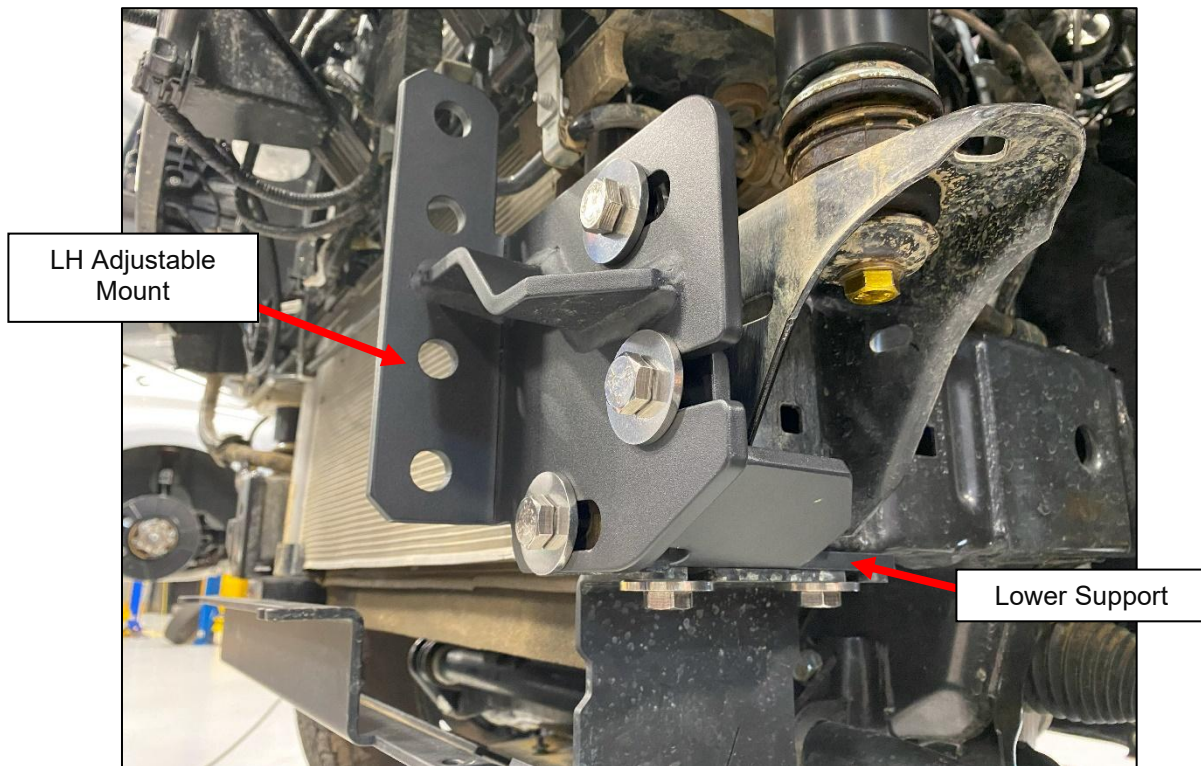
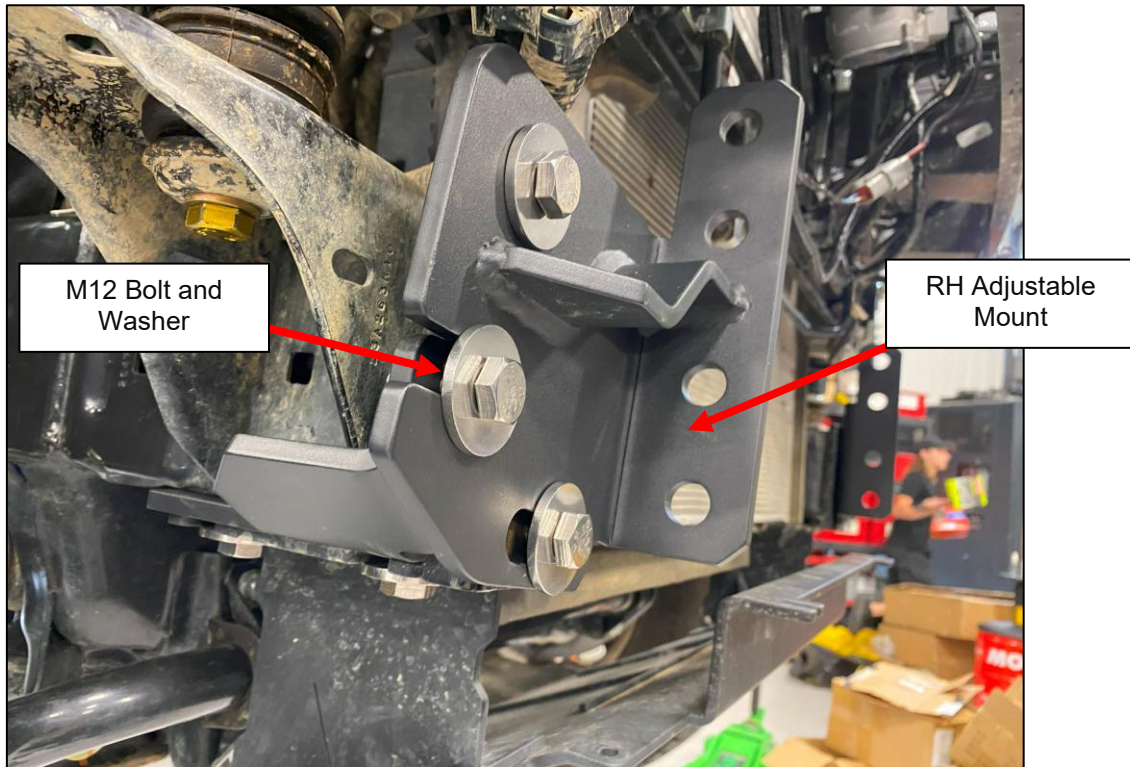


Figure 23

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 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.**

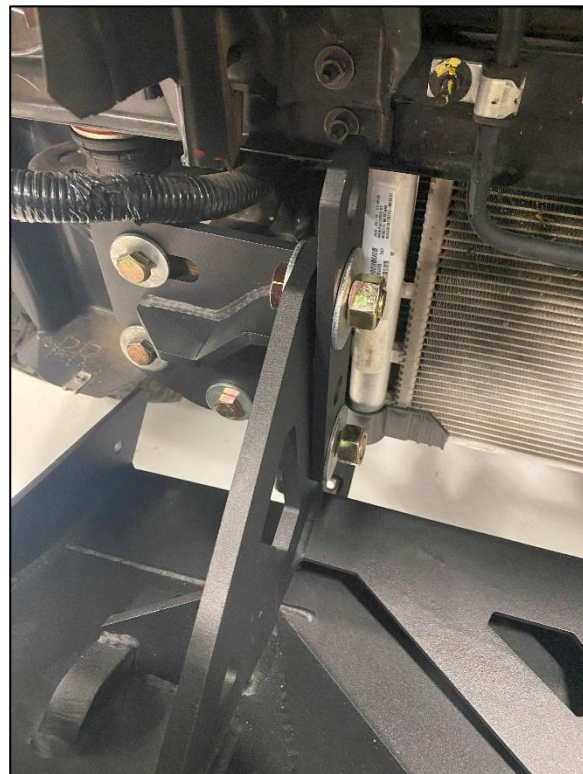
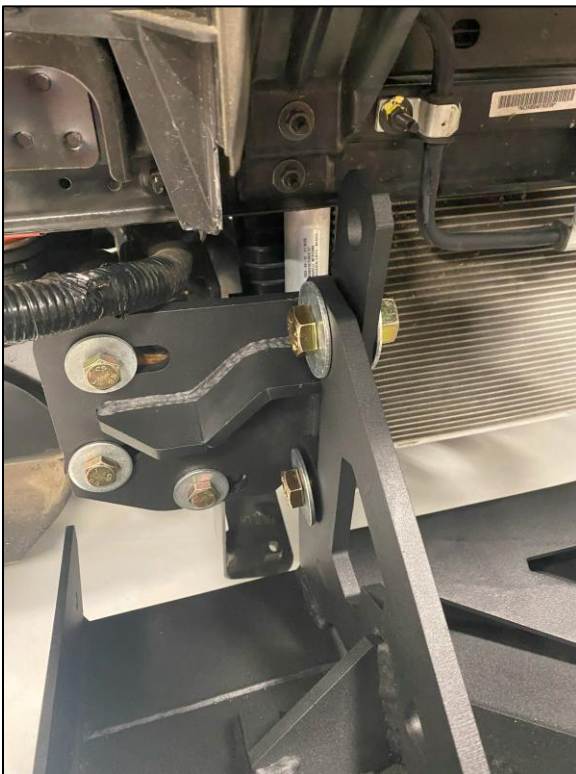


Figure 24

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.*

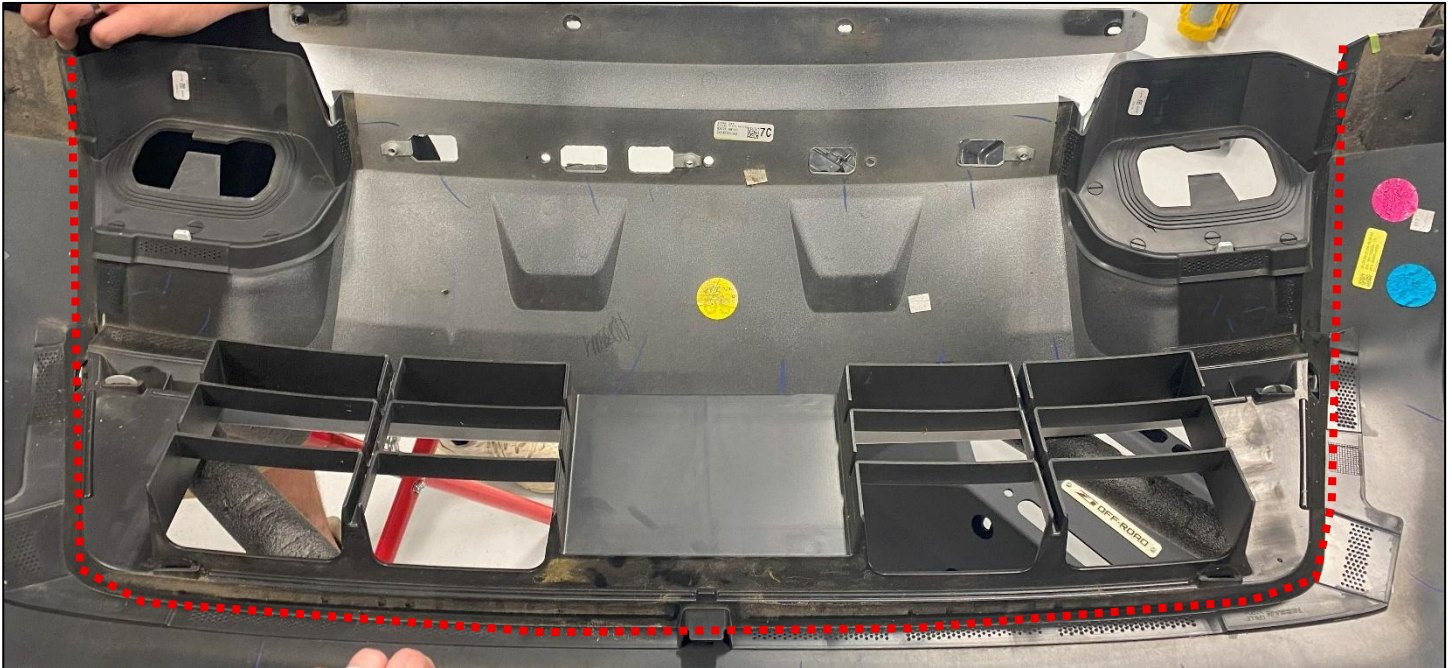


Figure 25

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. Loosely reinstall the OE Front Bumper onto the vehicle. *Figure 28.*



Figure 28

39. Adjust the Z1 Front Bumper to the desired position. Have another person or a jack hold the Bumper in place. *Figure 29.*



Figure 29

40. Torque the M12 Mounting bolts to **65 ft-lbs** and the M16 Mounting Bolts to **156 ft-lbs**.
41. Using Painters Tape, follow the line from the top edge of the Fog Light on both sides of the OE Bumper. This line is just a starting point and will allow you to slowly trim more of the Bumper away to fit the Wings without trimming too much. *Figure 30.*



Figure 30

42. Using either a Laser Leveler or a Plumb Bob, mark the point straight below the point marked on the bumper. Mark this point with tape. *Figure 31.*

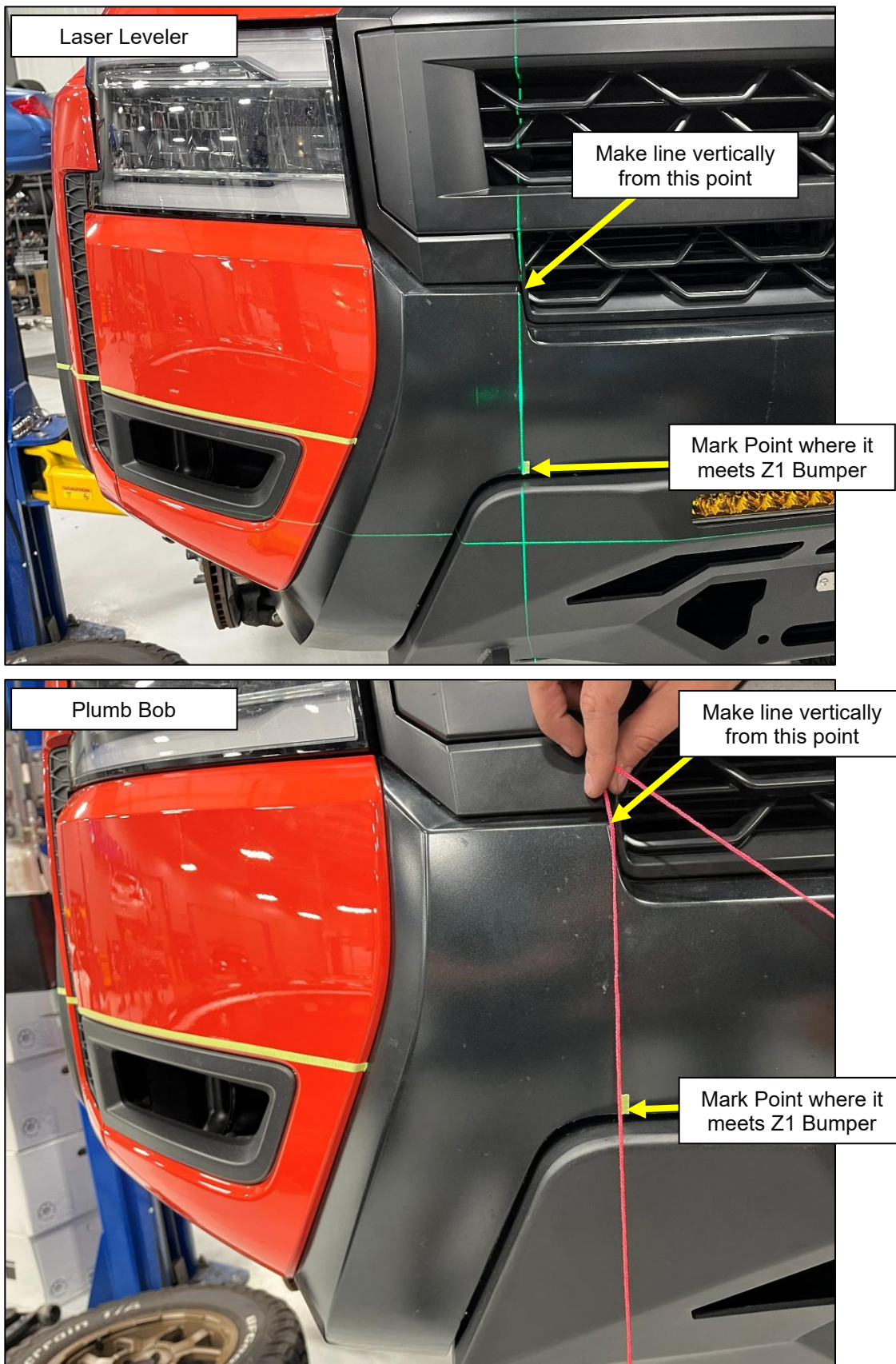


Figure 31

43. Run another straight line of tape from the end of the line from *Step 41* to the point marked in *Step 42*. This angle will allow the Bumper Wings to sit properly against the OE Bumper. *Figure 32*.

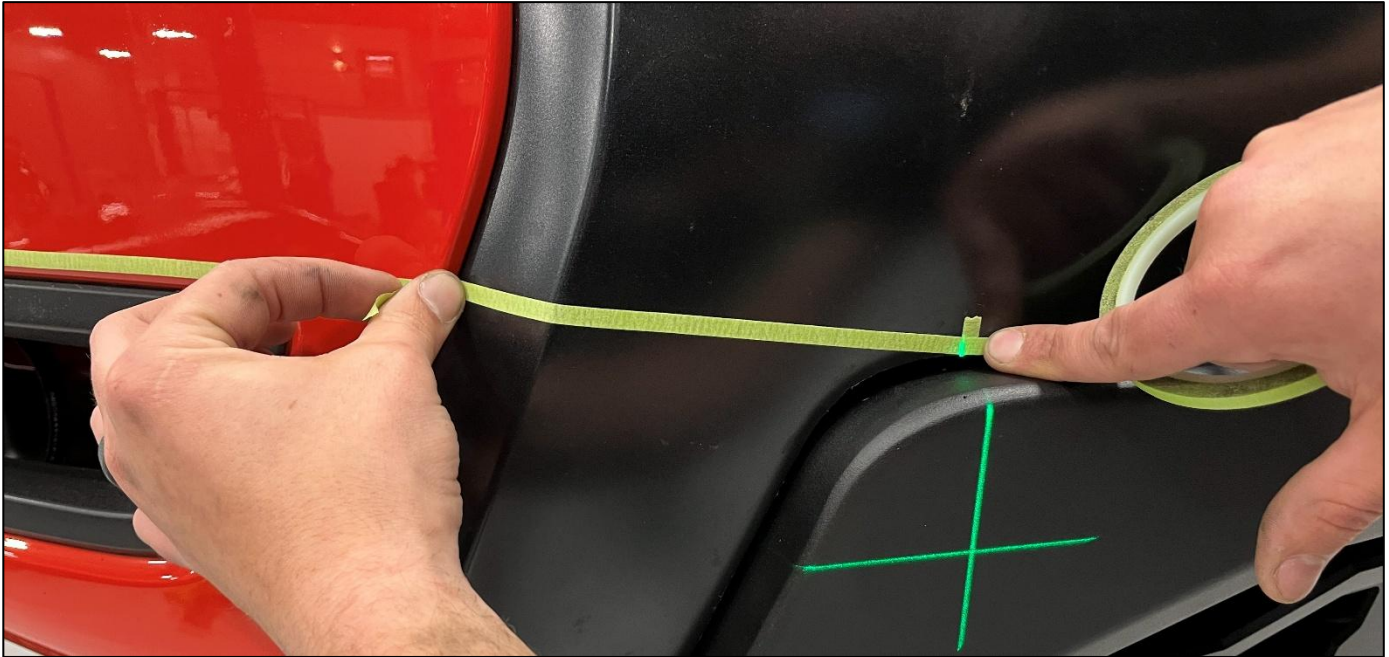


Figure 32

44. Mark a straight line with Tape 1" from the bottom of the Side Markers on each side of the vehicle. *Figure 33*.



Figure 33

NOTE: Your tape line should look similar below. *Figure 34.*



Figure 34

45. Remove the OE Bumper from the vehicle.

46. Remove the (3) three bolts securing each Fog Light to the Bumper and remove the Fog Lights. *Figure 35.*

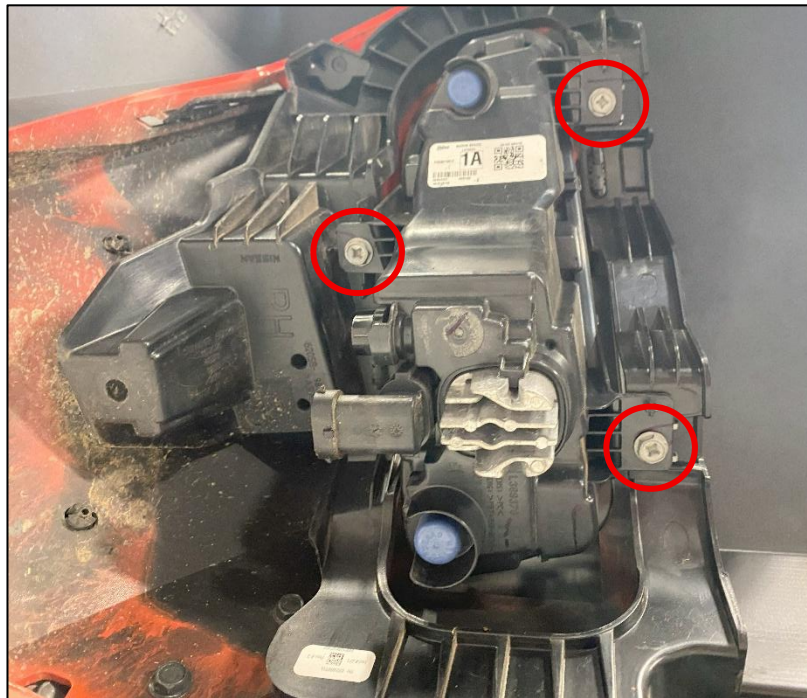


Figure 35

47. Cut the Fog Light Mounts out of the Bumper. This will help make cutting the Bumper easier. *Figure 36.*



Figure 36

48. Cut below the Tape Line made in Steps 41-44 slowly to remove the lower section of the OE Bumper. Z1 Off-Road recommends using an Oscillating Multi-Tool with a Fine Tooth Multi Material Blade to cut the Bumper, however a Dremel with a cutting wheel or equivalent tool will work as well. Cut slowly and as straight as possible. *Figure 37.*

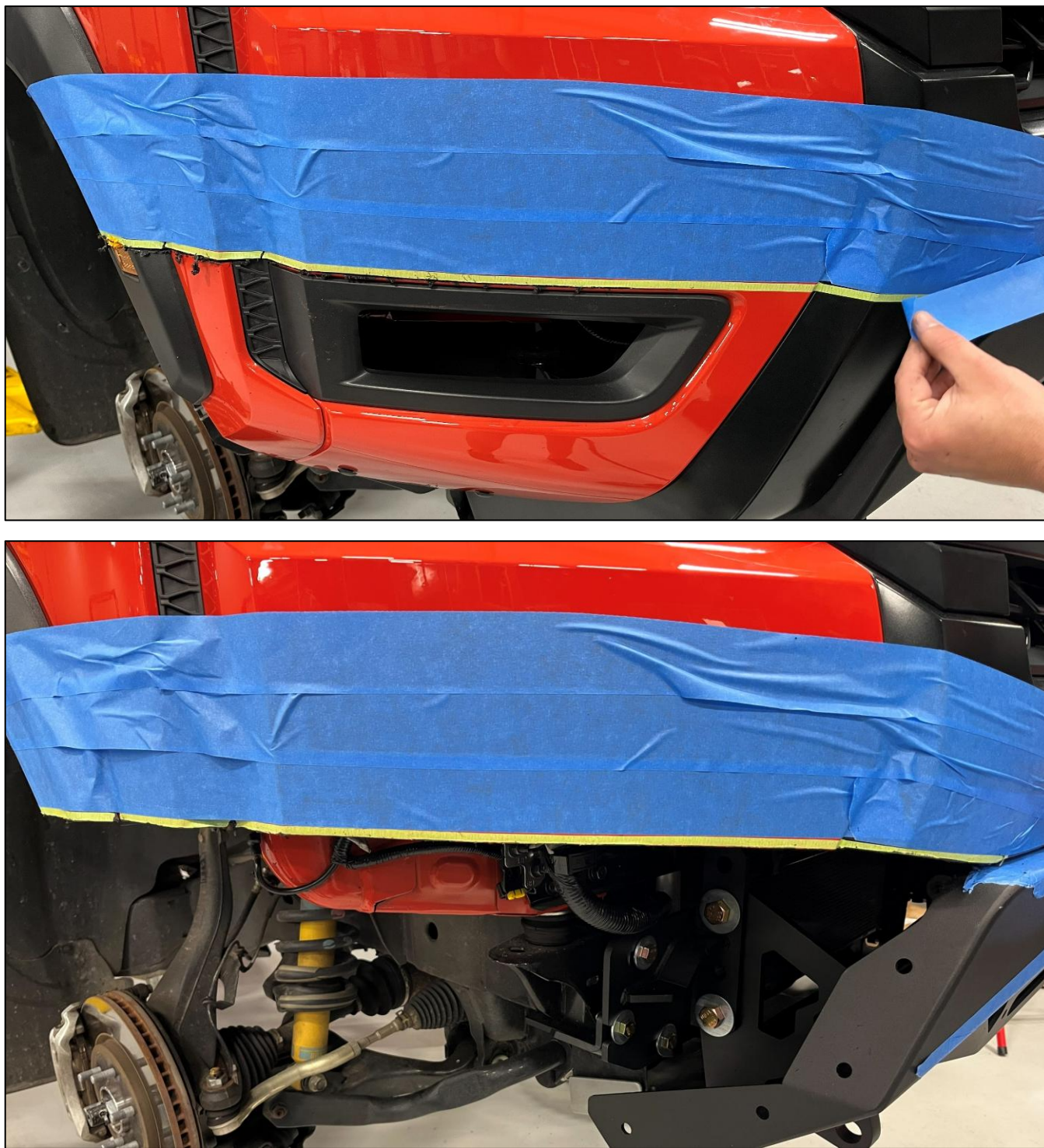


Figure 37

49. Cut the bottom of the Fender Flares off at the mark made in Step 44. *Figure 38.*

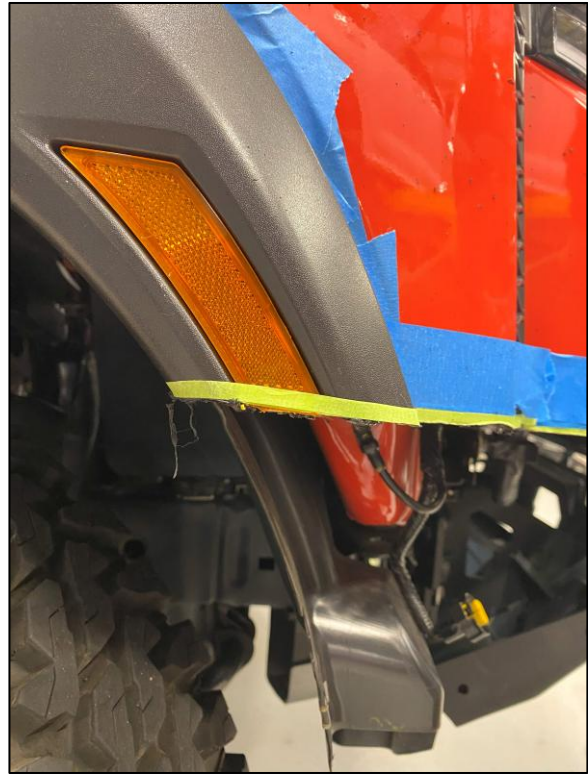
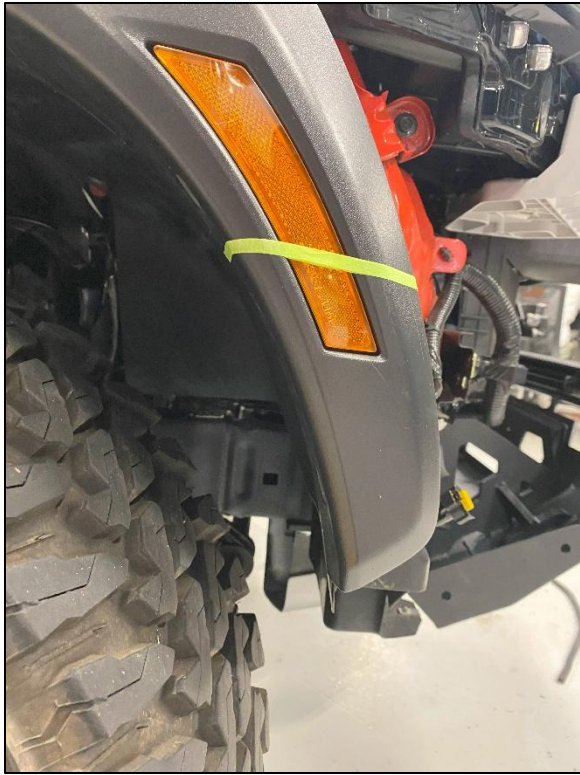


Figure 38

50. Reinstall the OE Front Bumper onto the vehicle. Placing a Rag between the Fender and Fender Flare can help ease installation as the Bumper will most likely need to be removed multiple times for trimming. *Figure 39.*



Figure 39

51. Attempt to position one of the Bumper Wings onto the vehicle. You will most likely find you can't install the Wings as the OE Bumper does not have enough clearance. Slowly trim more of the OE Bumper away to create an even gap between the OE Bumper and the Bumper wings. This is a time-consuming process but necessary to create a perfect cut/gap. We found using a Die Grinder can smoothly and quickly trim the Bumper. *Figure 40.*

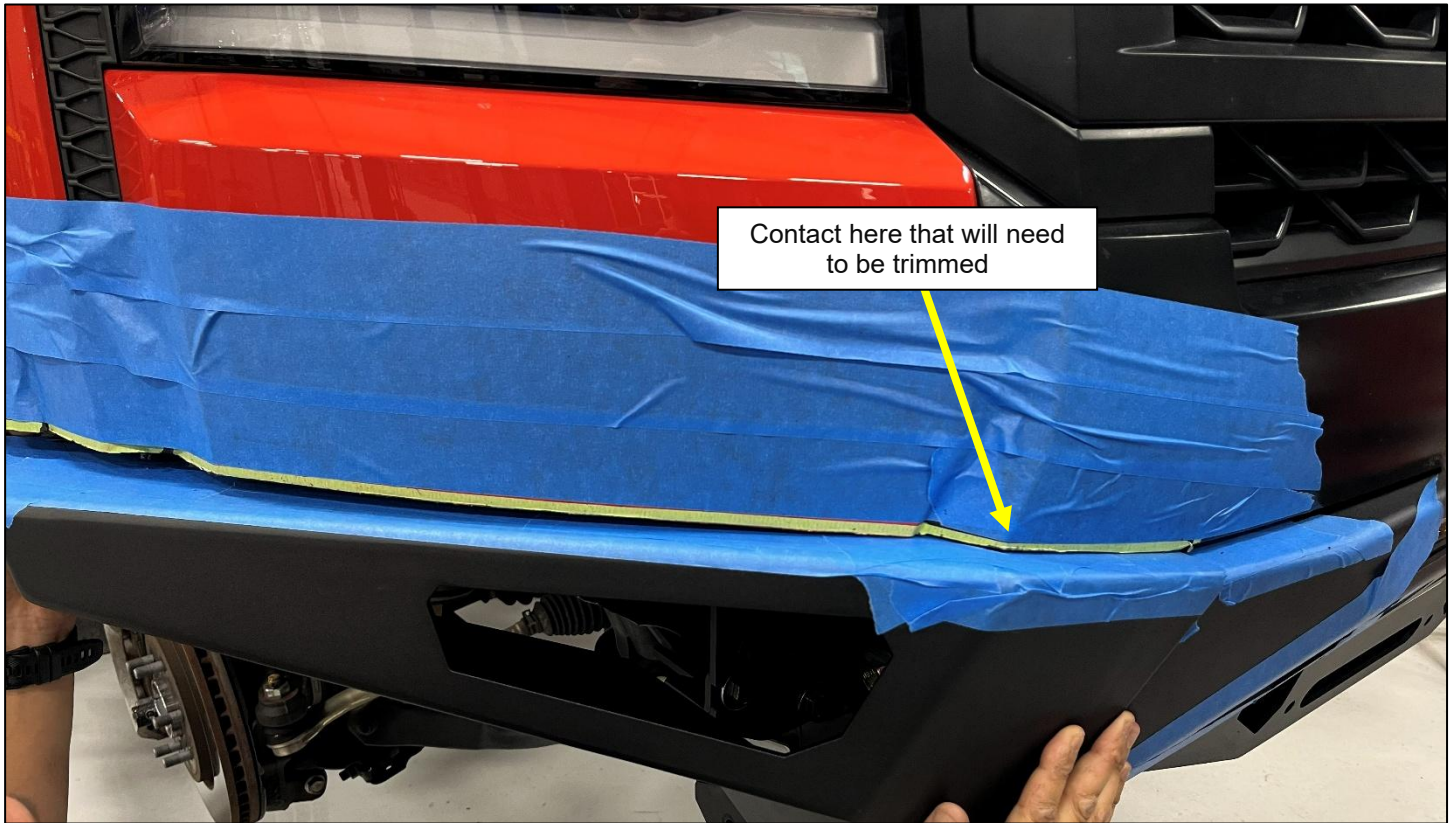


Figure 40

52. Once you are satisfied with the fitment of the OE Bumper, remove it from the vehicle.

53. Locate the Edge Guard. Install it on the underside of the OE Front Bumper where it was cut. On the bends of the cuts, the back of the Edge Guard can be marked and trimmed to make a smooth transition without cutting a new section.

- a. Mark where the bend needs to be made. *Figure 41.*



Figure 41

- b. Cut a "V" shape into the backside of the Edge Guard. *Figure 42.*



Figure 42

- c. Remove the Metal Tabs in the cut. *Figure 43.*



Figure 43

d. Press the Edge Guard onto the Bumper. *Figure 44.*

NOTE: *Figure 44* below shows the Bumper fully installed onto the vehicle with the Edge Guard.



Figure 44

54. Locate both Bumper Wings (6) six M10 x 1.25 Flanged Hex Head Screws, 25mm, (2) two M10 x 1.25 Button Head Screws, 25mm, and (8) eight M10 Flanged Nuts. Install the Wings onto the Main Bumper section and secure with the Hardware. The Button Head Screws will be used on the lowest mounting point for each Bumper Wing. *Figure 45.*

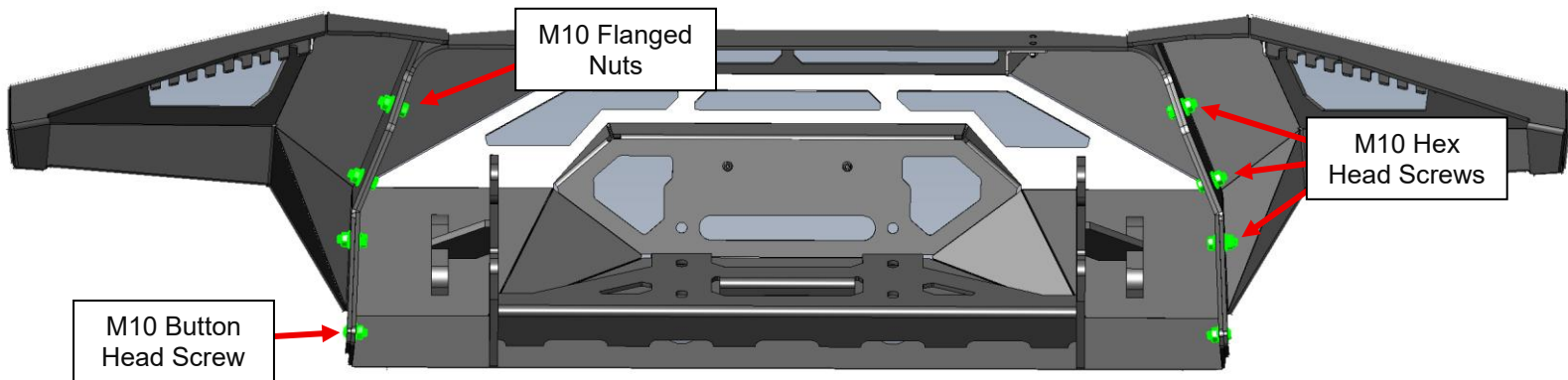


Figure 45

55. 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 46.*

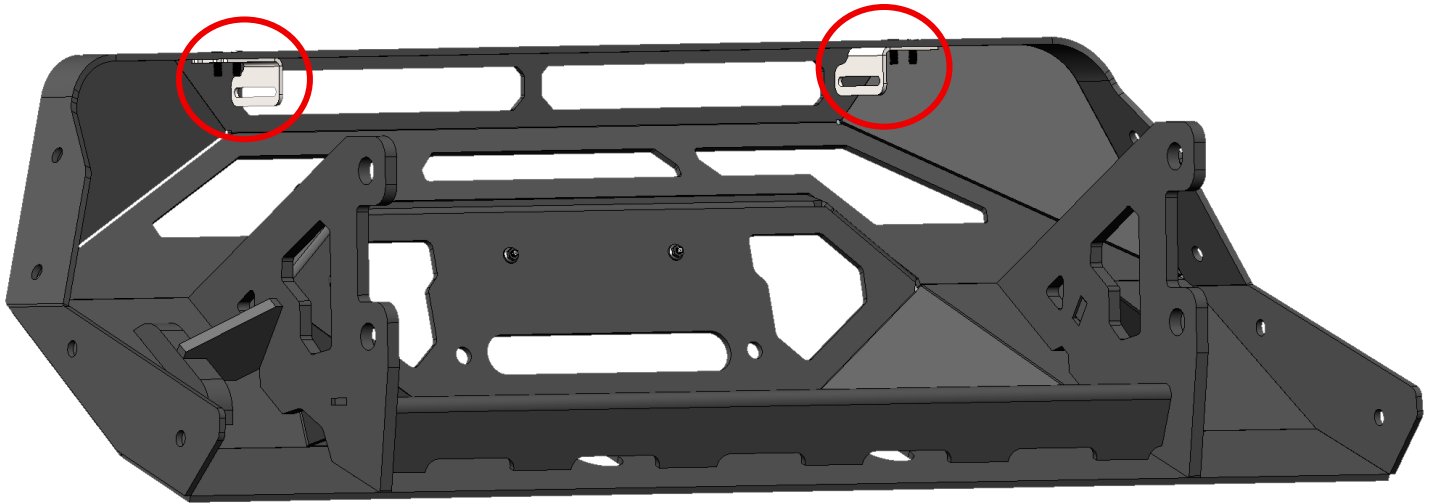


Figure 46

56. Locate all Radar Relocation Hardware. Assemble the Radar Relocation Bracket as shown in *Figure 47* below.

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

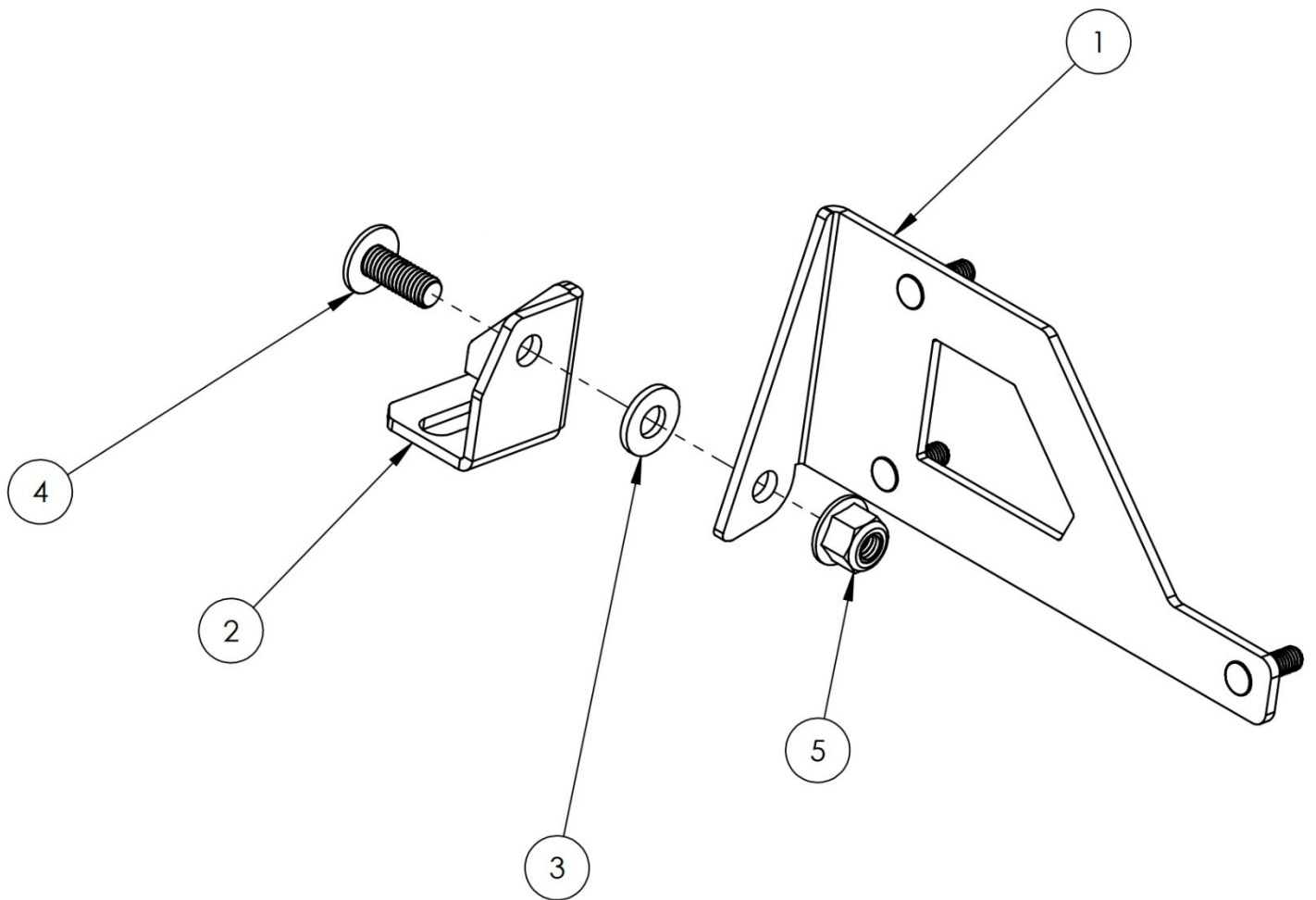


Figure 47

57. 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 48.*



Figure 48

58. Install the Radar to the Relocation Bracket with the (3) three M6 x 1.0 Serrated Flanged Nuts. Reconnect the Radar Harness.

59. Angle the Radar Sensor so it is as vertical as possible.

61. Trim any excess Fender Liner away to match up to the new Bumper. *Figure 49.*

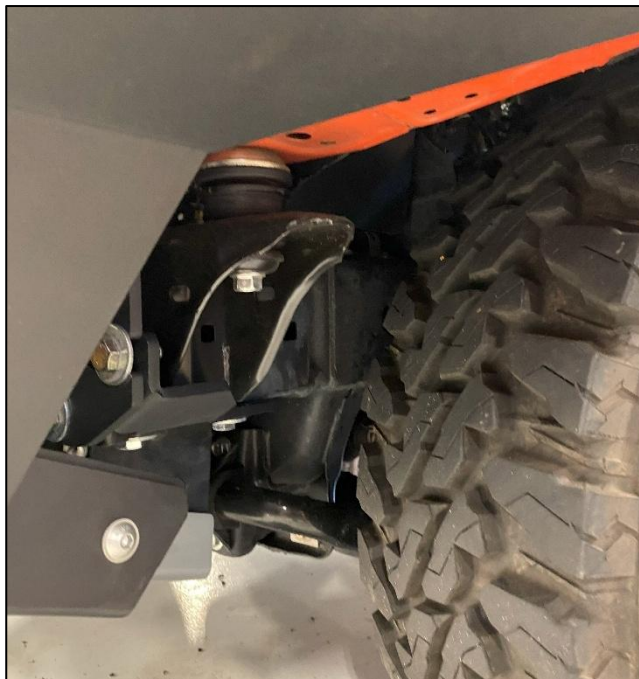


Figure 49

62. Reinstall the OE Front Bumper fully. *Figure 50.*



Figure 50

63. Adjust the Radar Sensor Bracket so that the Radar Sensor is as close to the OE Bumper as possible.

64. Follow *Steps 2-10* in reverse order to reinstall the Radiator Skids and the Front Grille/Trim.

END

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