

Z1 XTERRA BODY LIFT KIT INSTALLATION MANUAL



This Installation Manual is intended for the following models:	
2005-2015	Nissan Xterra

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 Xterra Body Lift, consult with a Professional Mechanic, or contact Z1 Off-Road for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	10	50mm Spacer
2	10	M12 x 1.25 Bolt, 170mm
3	10	M12 Washer
4	1	Extended Radiator Hose
5	1	Extended Power Steering Hose
6	4	M12 x 1.5 Bolt
7	2	Crash Bar Lift Brackets

TOOLS REQUIRED:

- Hydraulic Jack
- (4) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extensions
- Assorted Metric Sockets
- Assorted Metric Wrenches
- Torque Wrench
- Hammer
- Airsaw/Cutoff Wheel
- Paint Pen
- Drill
- Drill Bits

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 Xterra Body Lift Kit and verify that ALL necessary hardware is present.

Lifting the body off the frame is significantly easier if using a Lift, but it can be done with a hydraulic jack. Some vehicles will have different brackets and parts attached depending on modifications done to the vehicle. We cannot account for this, and you will have to check your vehicle while lifting to prevent any parts from catching or snagging.

PROCEDURE:

1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
2. Loosen lug nuts on front wheels.
3. Locate proper jacking points on vehicle's chassis (refer to vehicle's Owner Manual). We supported our Xterra on the Frame Rails. Raise and support vehicle using at least (4) four jack stands.
4. Remove front lug nuts and wheels.
5. Drain and collect engine coolant. There is a drain plug on the Passenger Side of the Radiator. Use caution as the Coolant may be hot if the car was recently driven. Properly dispose of the coolant if you do not intend on reusing it.
6. Remove the Front Fender Liners. Use *Figure 1* below for reference for fastener locations.

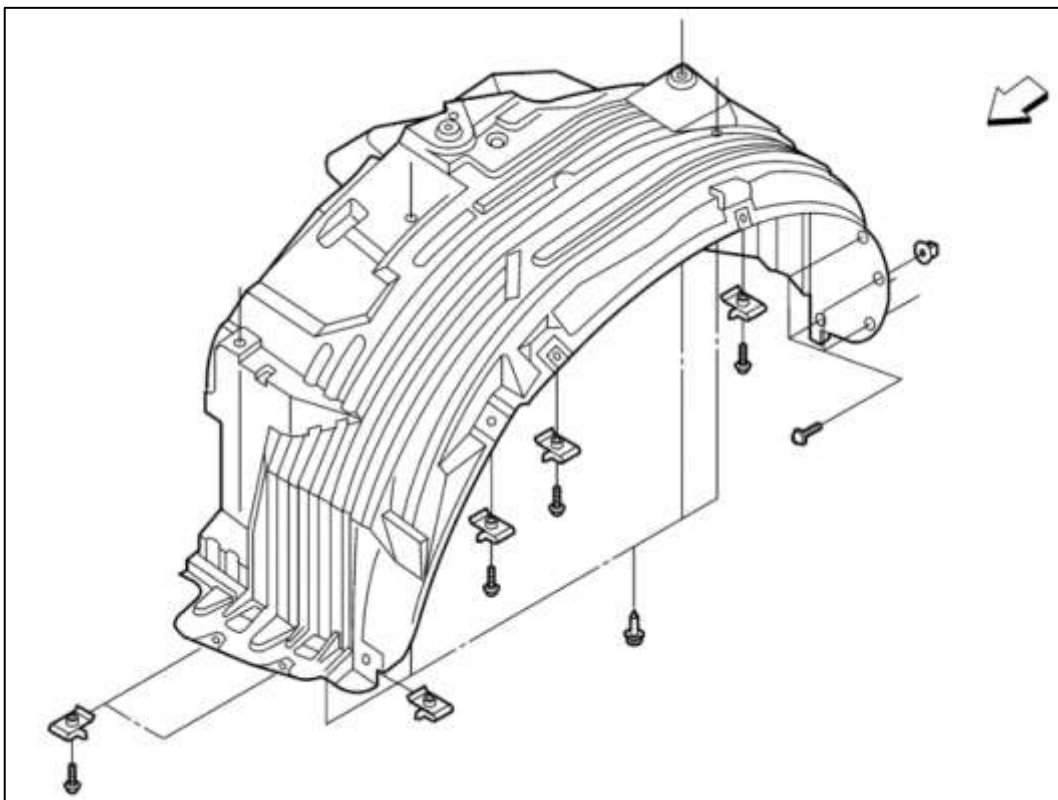


Figure 1

7. Remove the Front Bumper and OEM Crash Bar Assembly. Use *Figure 2* below to locate the mounting screws and tabs that hold these pieces on. Retain the hardware as it will be reused.

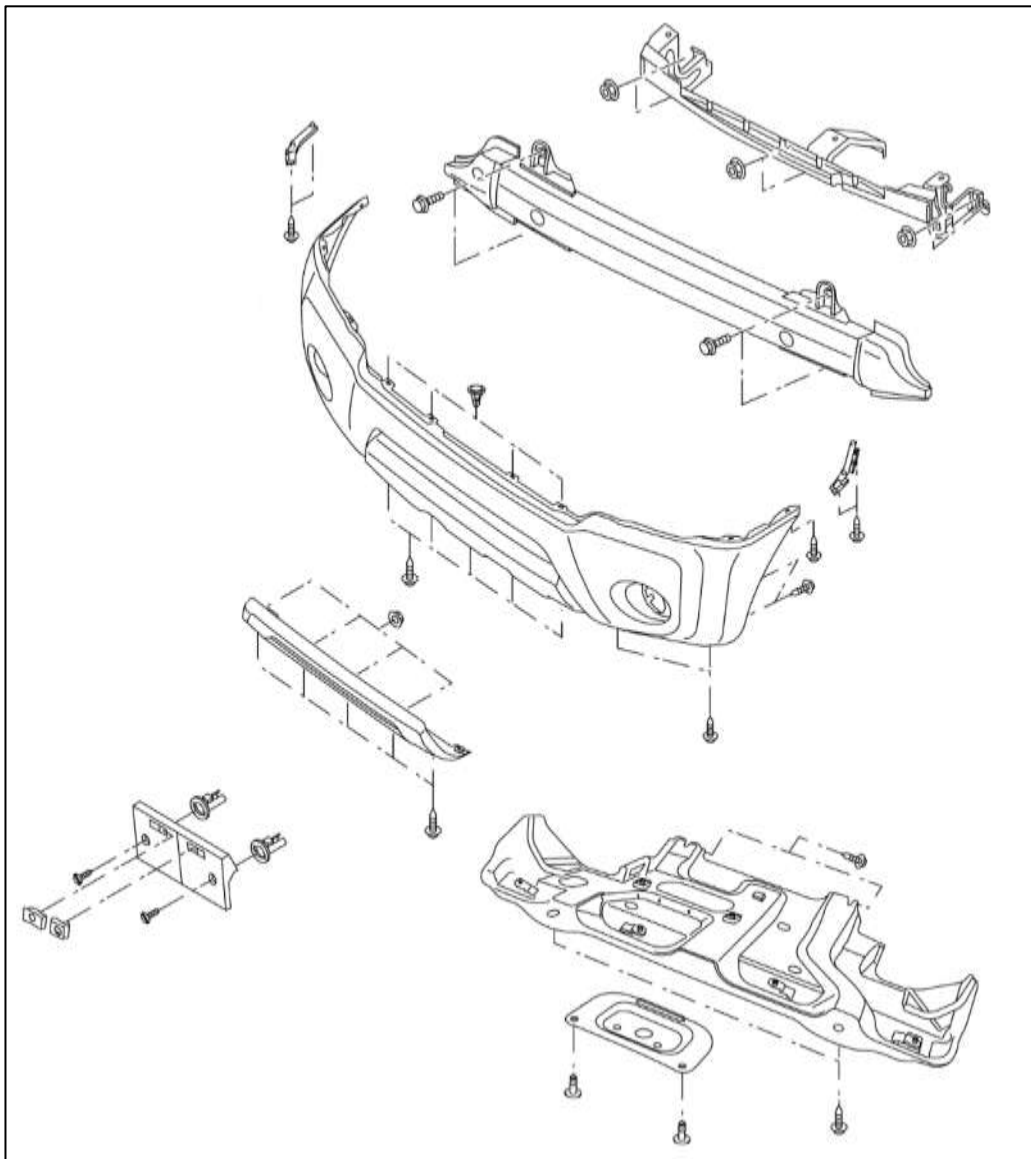


Figure 2

8. Remove the lower half of the Fan Shroud. *Figure 3.*

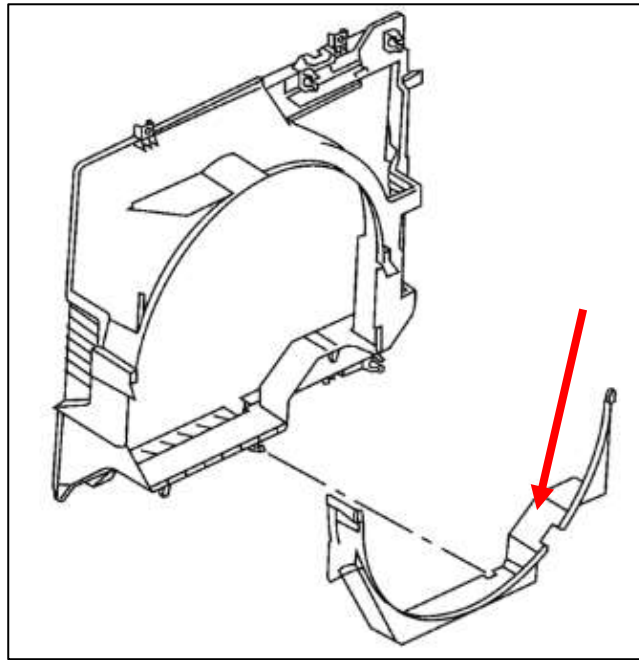


Figure 3

9. Remove Rear Bumper. Use *Figure 4* below to see mounting points. Retain this hardware as it will be reused.

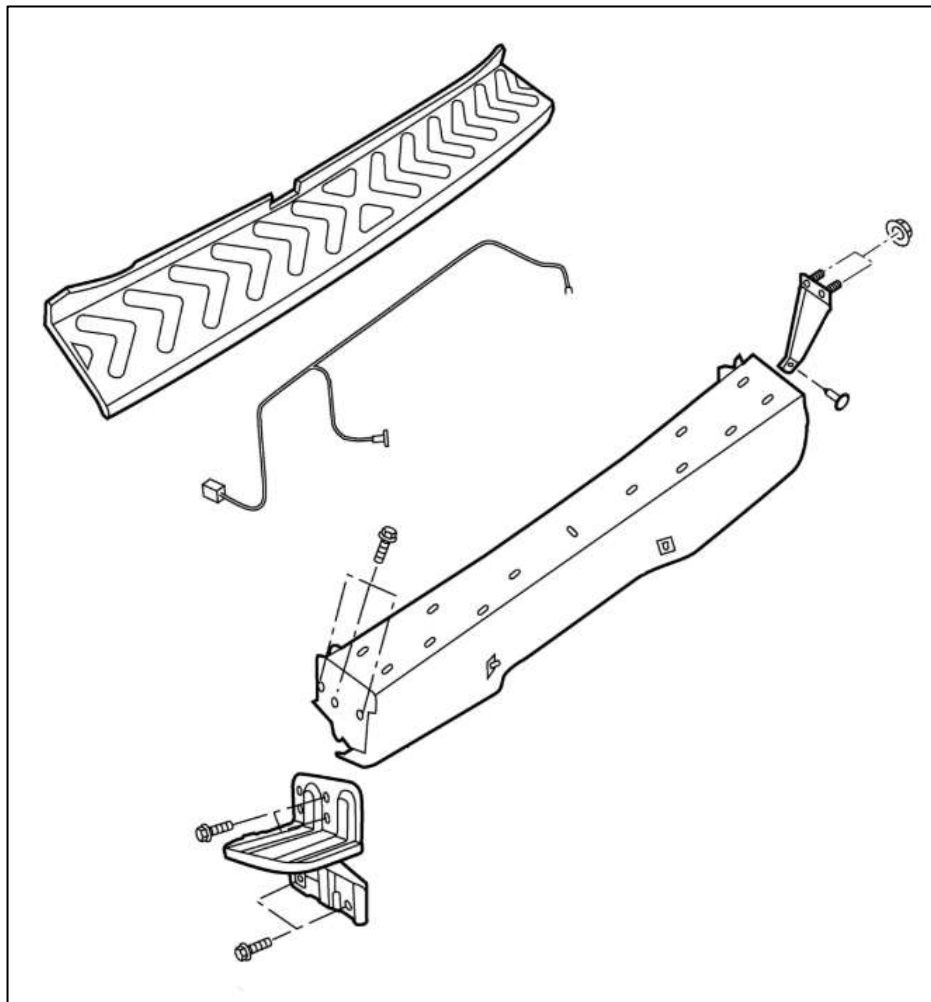


Figure 4

10. After coolant is drained, remove the OE Coolant Hose (circled in *Figure 5* below) from the radiator. Retain the Hose Clamps as they will be reused.

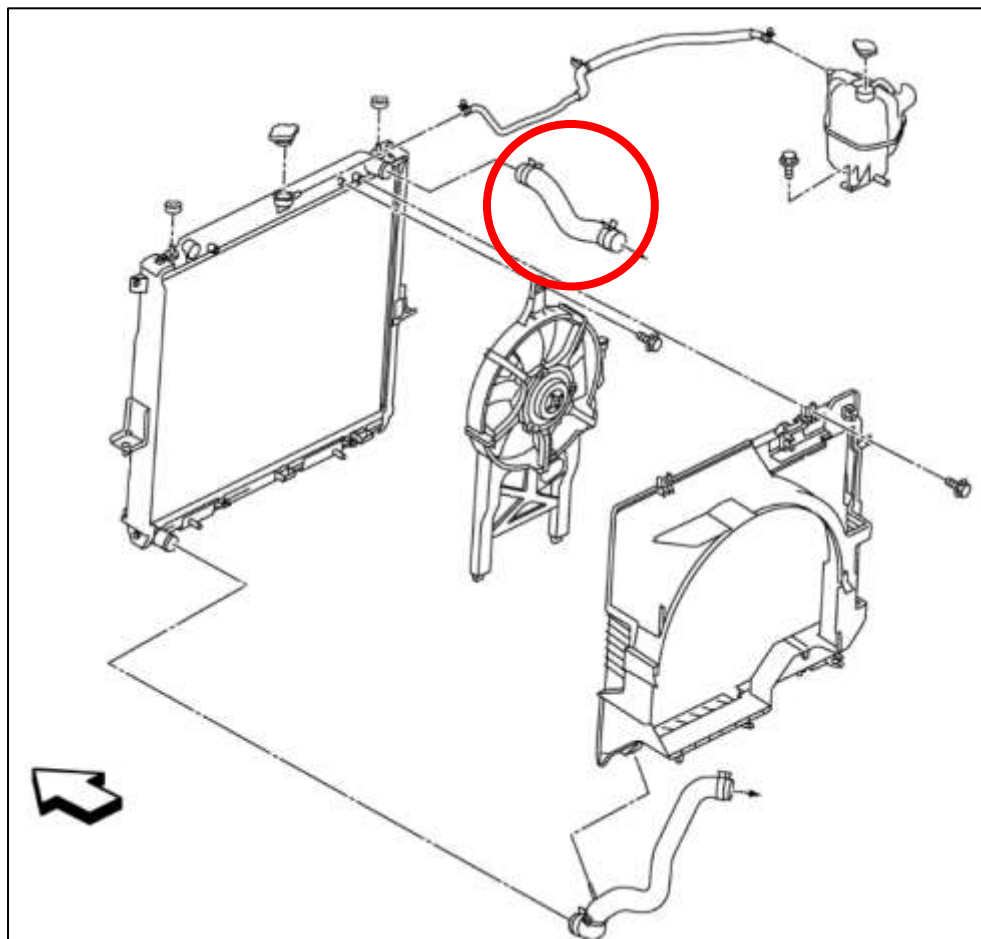


Figure 5

11. Remove the OE Power Steering Hose from the Power Steering Fluid Reservoir. Prepare a bottle or can to catch fluid upon removal of the hose. Retain the Hose Clamps as they will be reused. *Figure 6.*

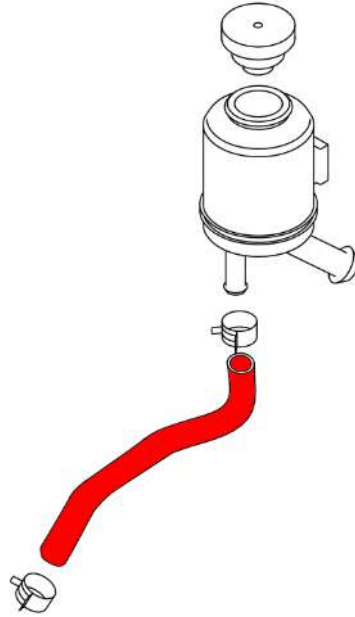


Figure 6

12. Remove the OE Running Boards if equipped. This step is not required but will ease the raising and lowering of the vehicle. Use *Figure 7* for reference for fastener locations.

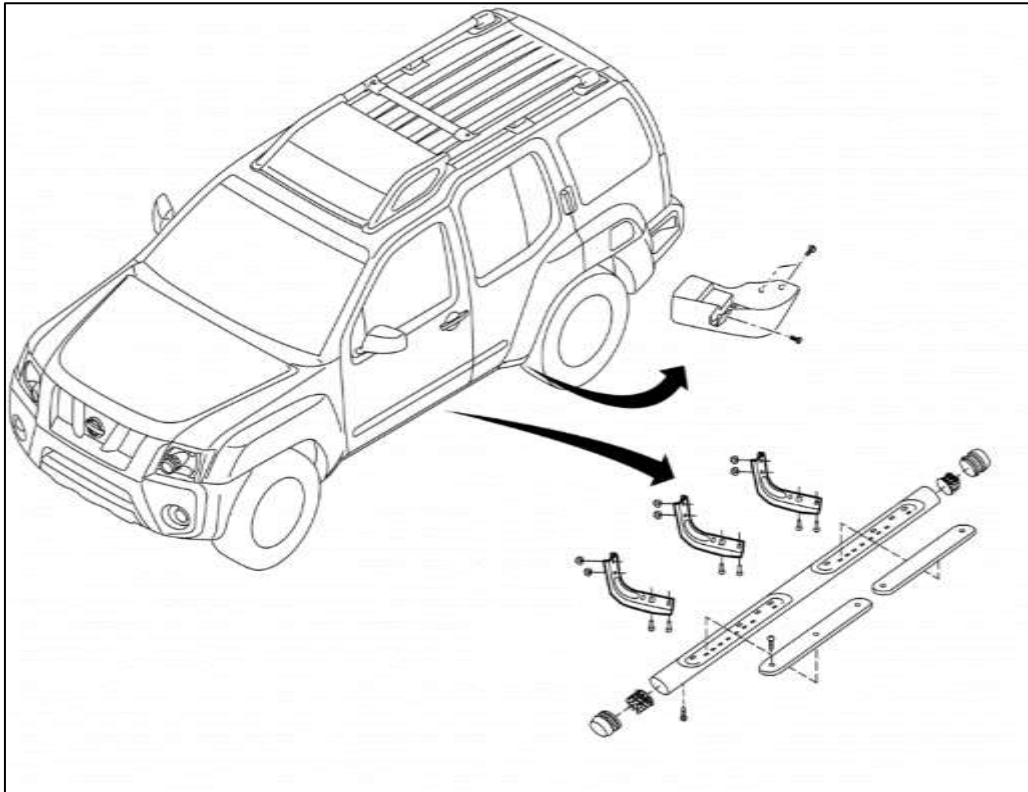


Figure 7

13. Disconnect the Wiring Harness in the Passenger Side Wheel Well. It is secured by multiple clips and bolts, circled below in *Figure 8*. Unclip the connectors from the Frame Rail as well.



Figure 8

14. Disconnect the ABS Sensor in Passenger Side Wheel Well and the Driver Side Wheel Well. *Figure 9.*



Figure 9

15. Disconnect the Fuel Line Bracket in the Driver Side Wheel Well, it is held on by (3) three bolts. *Figure 10.*



Figure 10

16. Mark the Steering Shaft using a paint pen, then disconnect the Steering Shaft. This will ensure proper alignment on reinstallation and prevent binding when the Body is lifted. *Figure 11.*

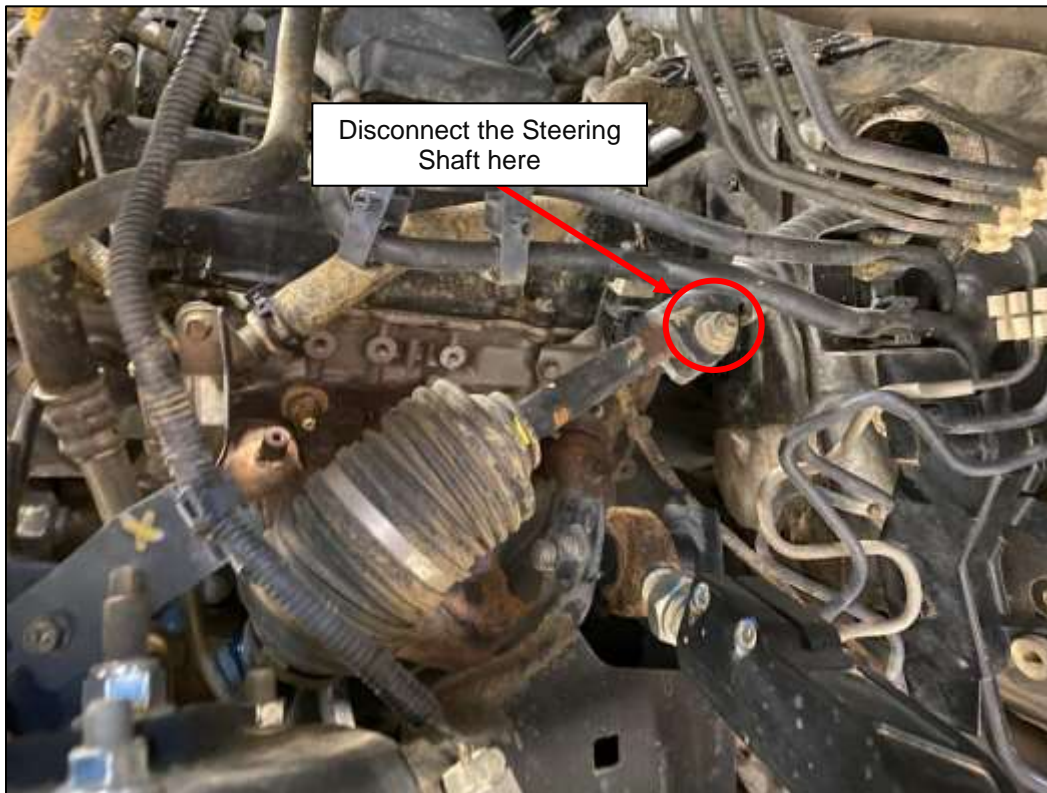


Figure 11

17. Remove the Fender Liner in the rear of the Driver Side Wheel Well. Use *Figure 12* as a reference.

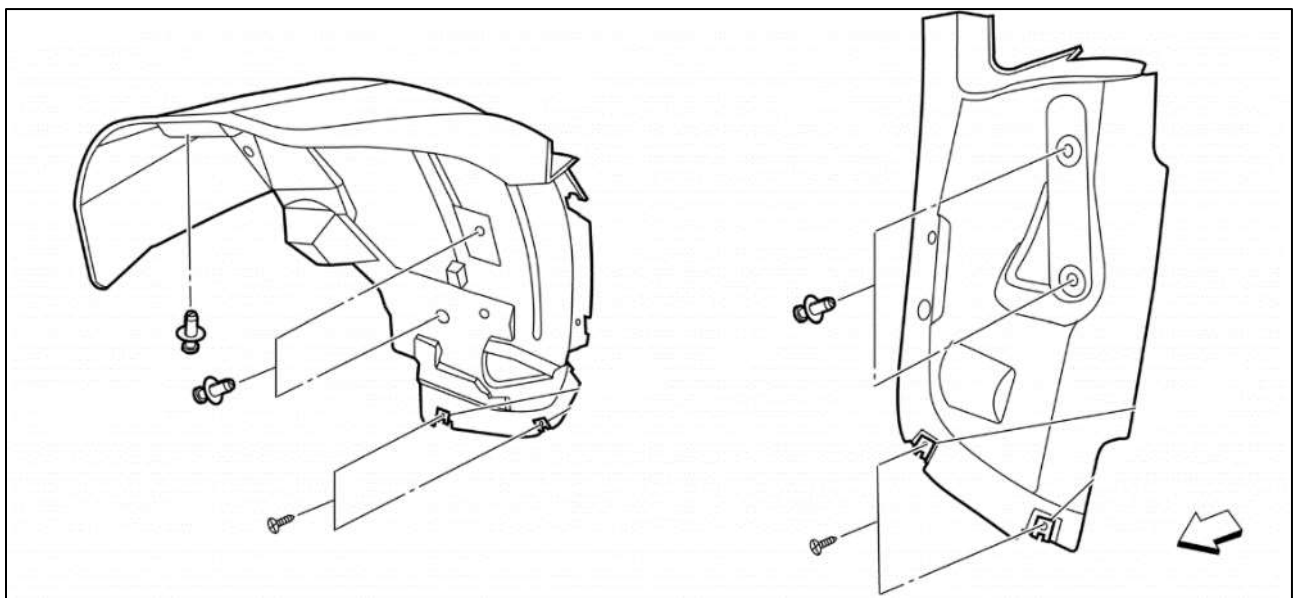


Figure 12

18. Remove Mud Guards in front of the Rear Wheels, secured by (3) three screws. This will give you access to (2) two of the Body to Frame mounting points. *Figure 13.*

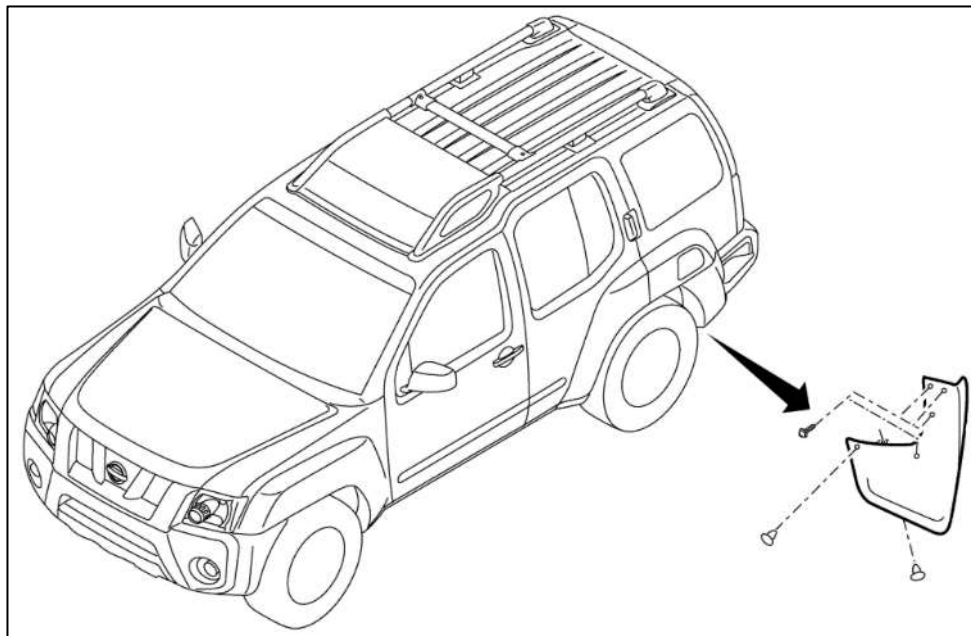


Figure 13

19. Remove the Spare Tire if installed.

20. Disconnect Fuel Filler Neck at body, it is held on by (1) one bolt. Push the Grommet around the Fuel Fill inwards after the bolt has been removed. *Figure 14.*



Figure 14

21. Crack Loose the (10) ten OE Frame to Body Bolts, there are (5) five on each side. Use *Figure 15* below and *Figure 16* on the next page for bolt locations.

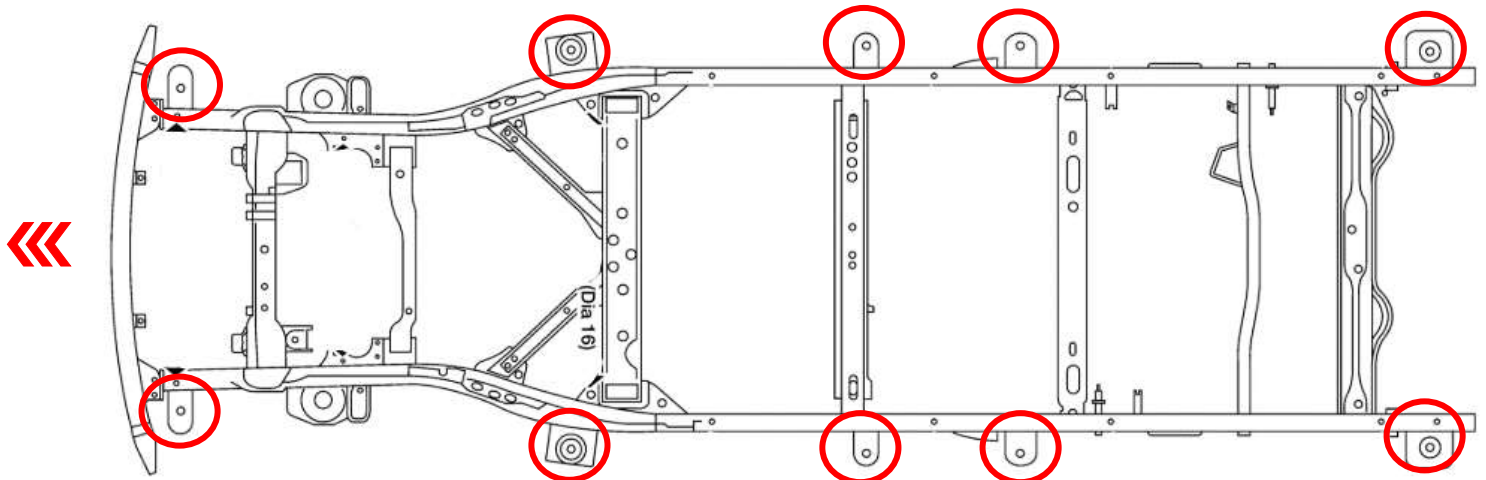


Figure 15



Figure 16

NOTE: If you have made other modifications to lift your vehicle prior to this installation, other harnesses, cables and panels may need to be removed in order to lift the vehicle properly. We cannot account for this, check while lifting for anything else that may get stretched.

22. Support Frame on Jack Stands. We supported ours under the Front Subframe and towards the rear of the frame. *Figure 17.*



Figure 17

23. Remove the (10) ten OE Frame to Body Bolts loosened in *Step 20.*
24. With the Frame of the Truck supported with Jack Stands, slowly lift the body of the truck on the pinch welds. It is recommended to do this with a Lift but can be done lifting one corner at a time with a hydraulic jack.

As you slowly lift the body of the truck, check for anything snagging or catching. Disconnect or move any catches. You will need to raise the truck about 2" to fit the lift pucks on top of the Frame.

25. Insert (1) one Spacer at each mounting point on the frame, **ON TOP** of the OE Bushing that is already located there. *Figure 18.*



Figure 18

26. Locate the (10) ten M12 Washers and (10) ten M12 x 170mm Bolts. Install (1) one Washer onto each Bolt, then loosely thread this assembly into the Frame to Body Mounts, through the new Spacers. We recommend adding anti-seize to these bolts.

NOTE: Some of the OE Body Mounts will have a bushing on the underside of the frame. Reuse these bushings with the new bolt and washer. The order should be:
BOLT→WASHER→BUSHING→FRAME→BODY MOUNT.

27. Slowly lower the Body of the vehicle back onto the frame of the car.

28. Tighten the (10) ten M12 x 170mm bolts, starting from the middle of the car outwards. After they are all tightened, torque them to **65 ft-lbs.**

29. Disconnect the clips of the Wiring Harness in the Passenger Side Wheel Well and flip the wiring harness over the Body to Frame mounting point as shown below. The Wiring Harness can be secured by using the OEM Clips, or zip ties. Using a hammer, flatten any unused tabs. *Figure 19.*

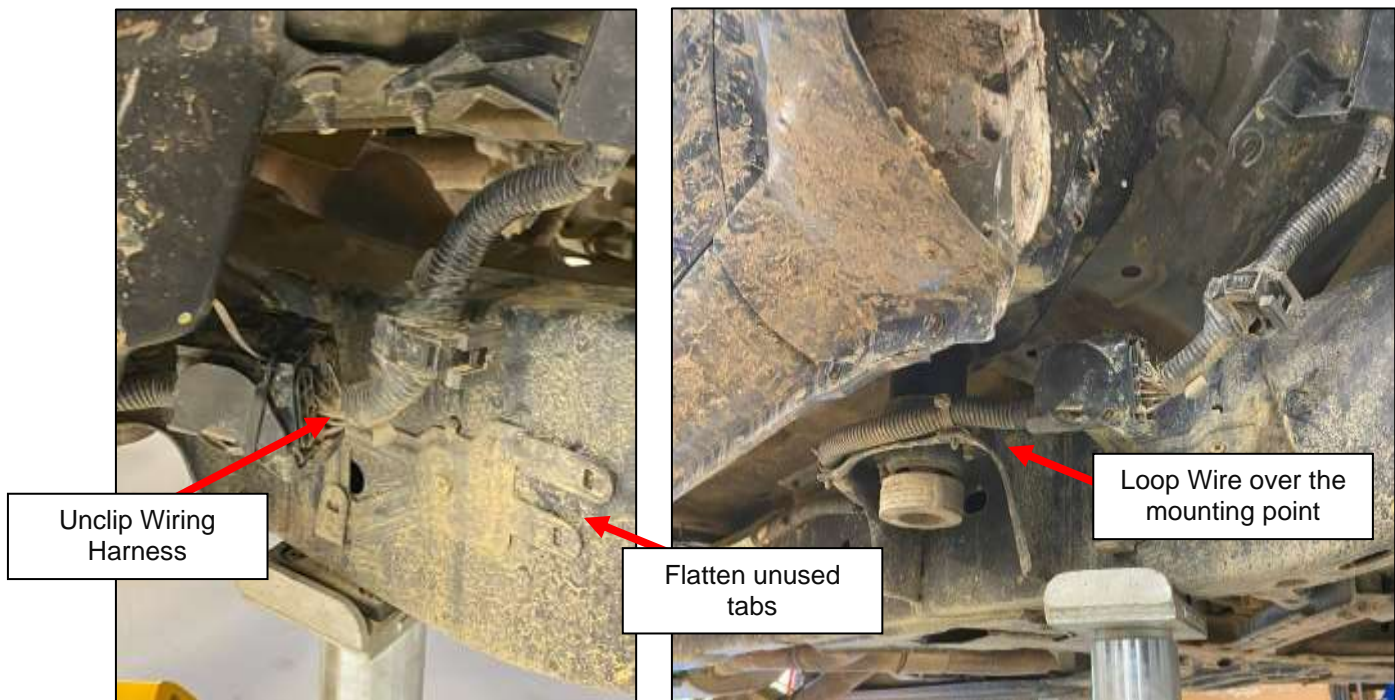


Figure 19

30. Reinstall the Brake Like Bracket in the Driver Side Wheel Well.

31. Reconnect ABS Sensors in Front Wheel Wells.

32. Reconnect the Steering Shaft. The Shaft can be extended by pulling on the section connected to the firewall. Line up the marks you made in *Step 15* and tighten the bolt to **20-33 ft-lbs.**

33. Locate and install the new Radiator Hose. Reuse the OE Hose Clamps to secure it. *Figure 20.*

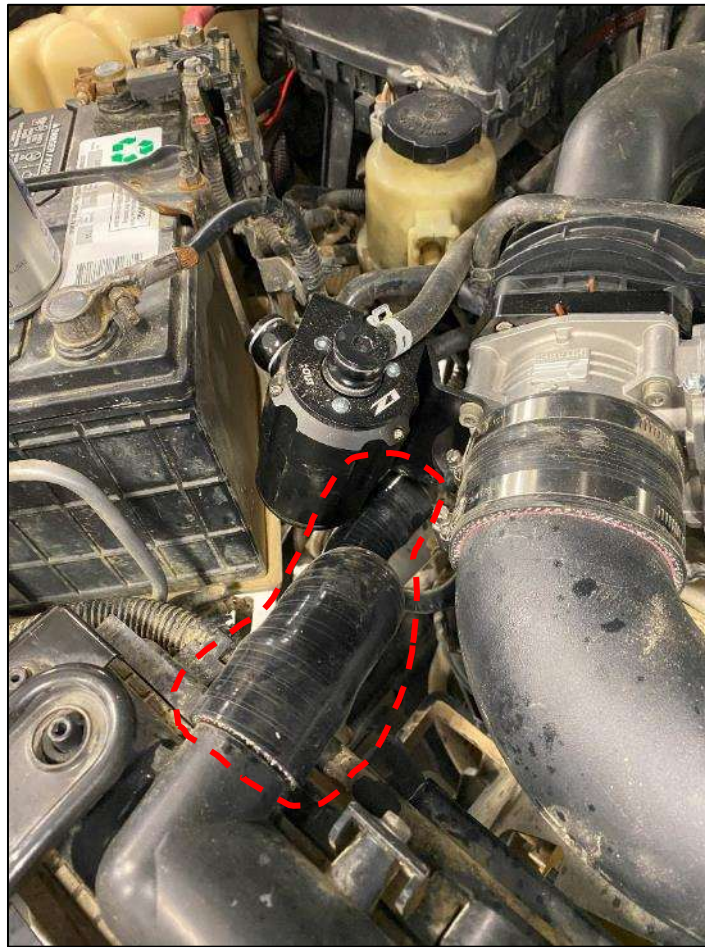


Figure 20

34. Locate the new Power Steering Hose, install it where the OE Power Steering Hose was removed in *Step 11*. Use the OE Hose Clamps to secure it to the vehicle. *Figure 21.*

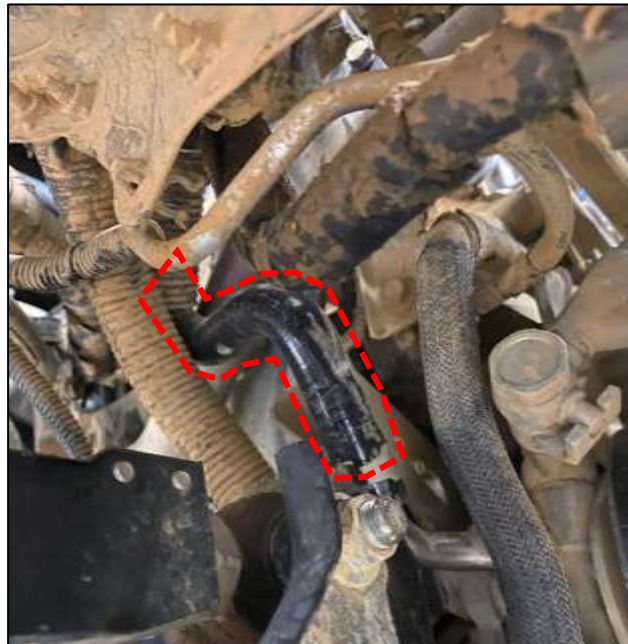


Figure 21

35. Locate the (2) two Front Bumper Mounting Brackets, (4) four M12 x 1.5 Bolts, and the OEM Crash Support Hardware. Position the Brackets onto the front mounting points and use the OEM Bolts to secure the Mounting Bracket. *Figure 22.*

NOTE: The M12 x 1.5 Bolts will be used to secure the Crash Bar to the Brackets and are shown below just to show where they will go in *Step 40.*

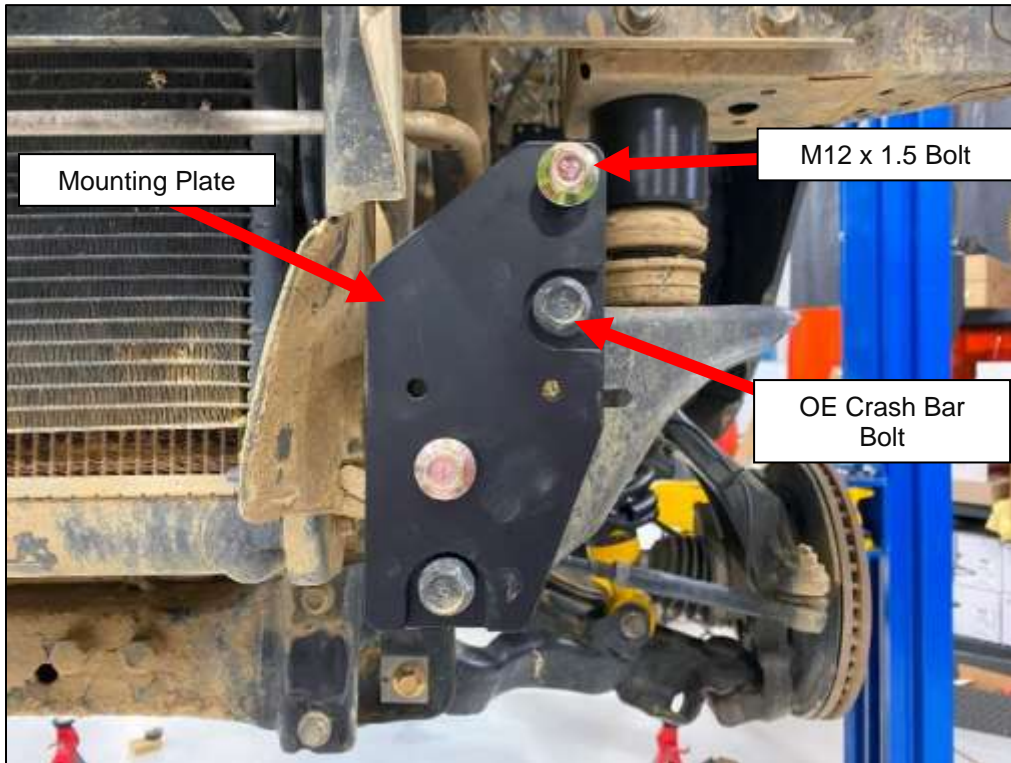


Figure 22

36. Use the (4) four BOLTS to secure the OE Crash Bar to the Mounting Brackets installed in Step 39. *Figure 23.*



Figure 23

37. The lower tabs on the Rear Bumper will have to be cut some to create clearance. New mounting holes will also need to be drilled 2" below the original holes. View *Figure 24* for a guide of where to mark and cut the bumper.

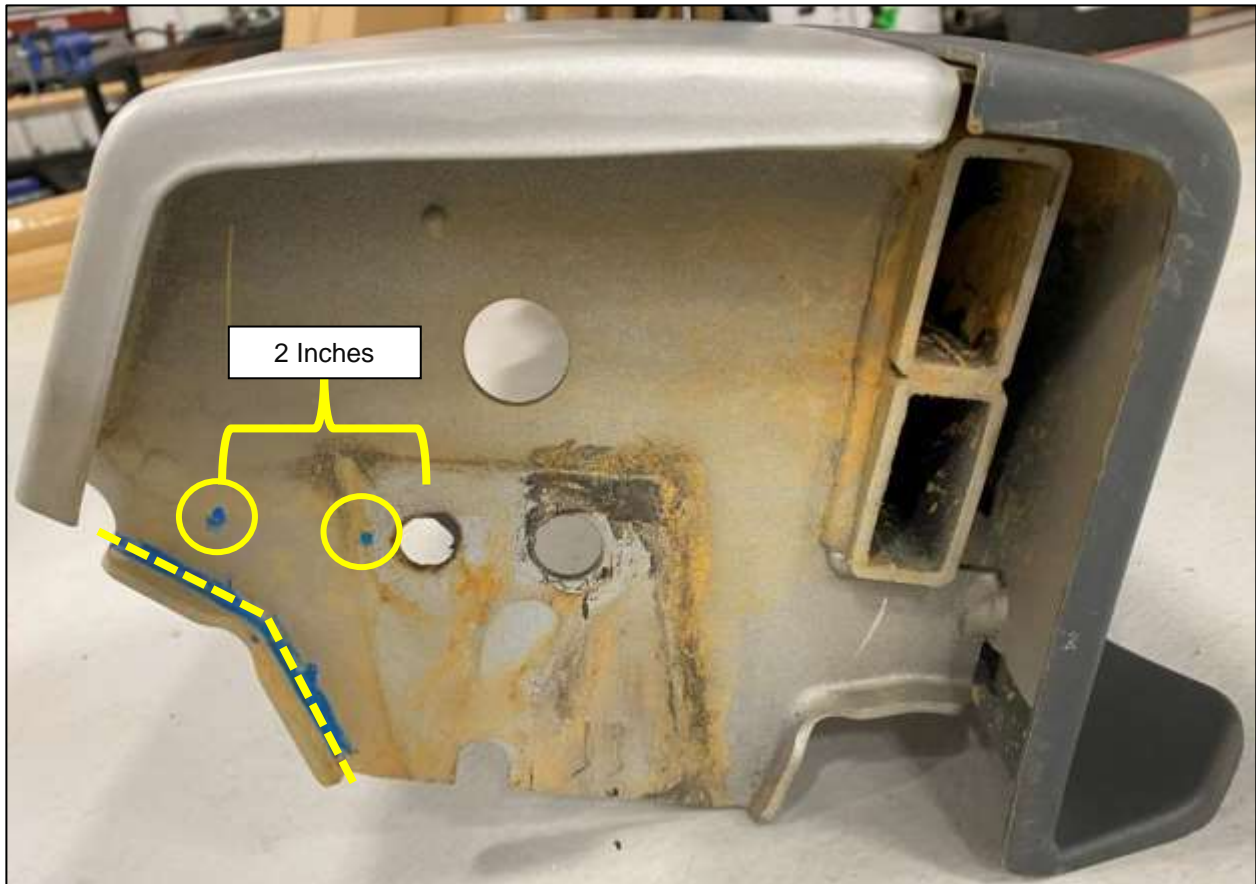
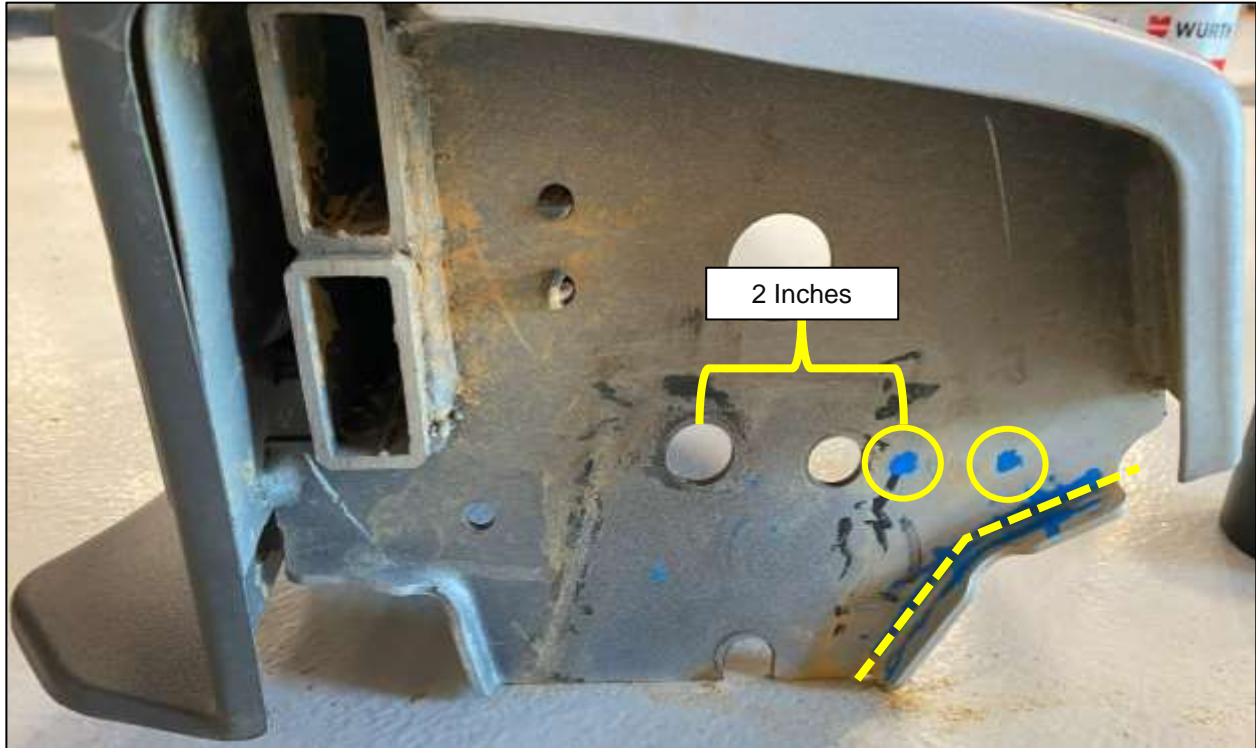


Figure 24

NOTE: *Figure 25* shows the After photos from drilling and cutting the bumper.



Figure 25

38. The outside corners of the bumper will also need to be slightly bent or cut off to clear the brackets. We decided to bend ours. *Figure 26*.



Figure 26

39. Drill a Hole under where the License Plate Mounts as an access hole for the Spare Tire. It needs to be big enough to insert and rotate the spare tire tool. *Figure 27.*

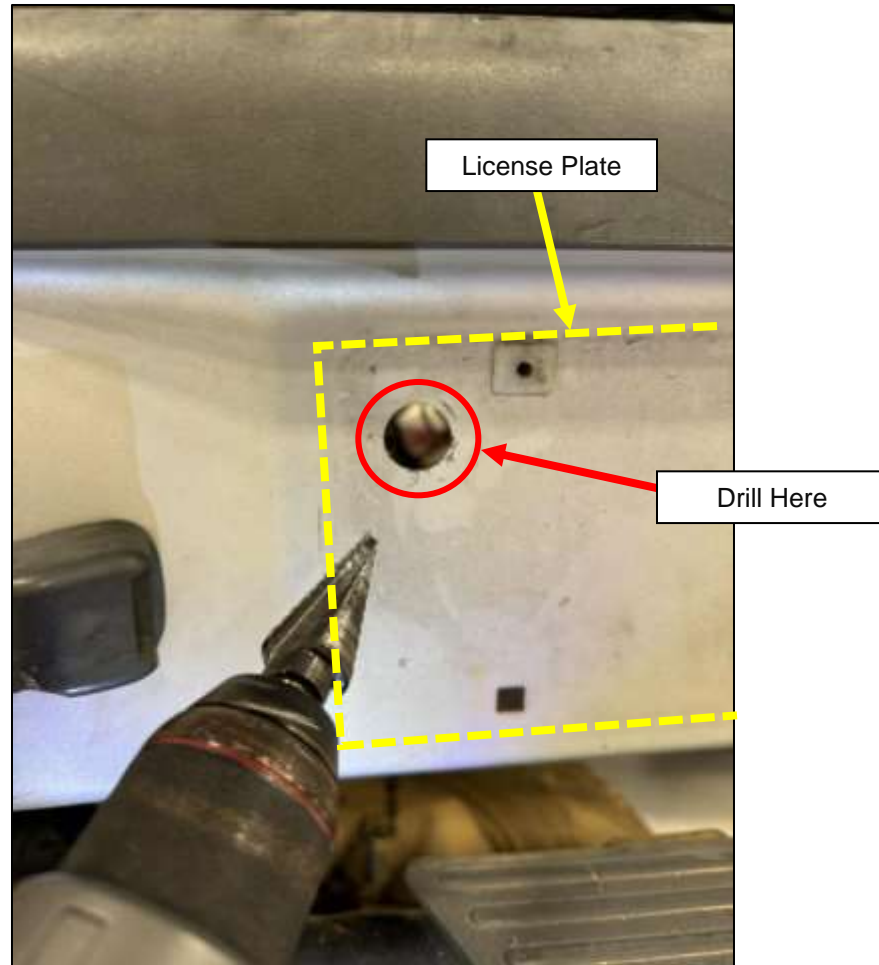


Figure 27

40. Reinstall the Rear Bumper to the Vehicle.
41. Reinstall the Front Bumper, use the diagram in *Step 6* for bolt locations.
42. Reinstall Fender Liner in rear of Driver Side Wheel Well.
43. Reinstall Mud Guards.
44. Reconnect the Fuel Filler neck and grommet.
45. Reinstall the Running Boards.
46. Reinstall any connectors that were disconnected if they have enough slack to reconnect. Some connectors will not be able to be reconnected and can optionally be zip tied out of the way.

47. Reinstall wheels and lug nuts.
48. Safely lower vehicle from jack stands.
49. Torque lug nuts.
50. Refill and bleed the coolant system according to the Factory Service Manual (FSM).
51. Refill and bleed the Power Steering System according to the Factory Service Manual (FSM). If you notice your Steering is a bit notchy, the steering shaft may need to be slightly loosened while bleeding the system. Reconnect the Steering Shaft and torque to **20-33 ft-lbs.**

END

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