



C9156 Installation Instructions 2007-2013 Chevy Avalanche 1.5" Body Lift

Read and understand all instructions and warnings prior to installation of product and operation of vehicle.

Zone Offroad Products recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

» PRODUCT SAFETY WARNING

Certain Zone Suspension Products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. Zone Offroad Products does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

Difficulty Level

easy 1 2 **3** 4 5 difficult

Estimated Installation

4-5 hours

Special Tools Required

Grinder/Cutoff Wheel

Drill w/ 5/16, 1/2" and 17/32" bits

» PRE-INSTALLATION NOTES

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

Kit Contents

Qty	Part
12	3" x 1.5" Body lift block
1	Rear bumper bracket - Drv
1	Rear bumper bracket - Pass
1	Loctite
2	1" x 1.5" Sleeve
2	14mm lock nut
2	9/16" SAE washer
4	12mm lock nut
4	1/2" SAE washer
2	10mm lock nut
2	3/8" USS Washer

Bolt Pack 282

Qty	Description
10	14mm x 140mm bolt
2	14mm x 80mm bolt
12	9/16" SAE washer
2	1/2"-13 x 6" bolt
4	1/2" SAE washer
2	1/2"-13 Prevailing torque nut
4	3/8"-16 x 1" bolt
8	3/8" SAE washer
4	3/8"-16 prevailing torque nut
2	3/8"-16 x 1" button head bolt
2	3/16"-16 Rivet Nut
1	3/8" x 1-1/2" bolt
1	3/8" SAE flat washer
1	3/8" star washer external tooth
1	7/16"-20 hex high nut

PRE-INSTALLATION NOTES

1. Once the installation is complete, the rear bumper can no longer be used for towing. This will not affect the towing capability when towing with a frame mounted hitch.
2. Save all hardware and plastic clips for reassembly.

INSTALLATION INSTRUCTIONS

3. Block wheels for safety
4. Disconnect battery, remove negative first, then positive.
5. Disconnect fog lights (if equipped), remove clip from light assembly.
6. Remove 6 bolts at the top of the grill indicated in Figure 1.



Figure 1

7. Remove 3 push plugs and 2 bolts indicated per wheel-well Figure 2.

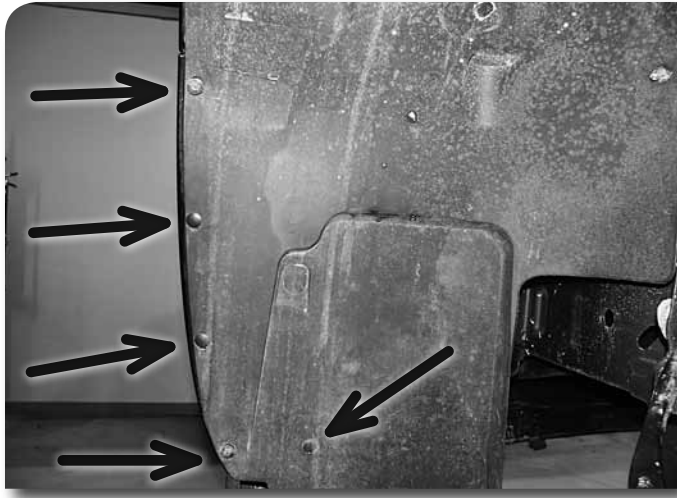


Figure 2

8. Note where the plastic bumper valence support is located below frame alignment hooks. Measure down 1.5" and mark. Figure 3. This will need to be trimmed once the bumper cover is removed.

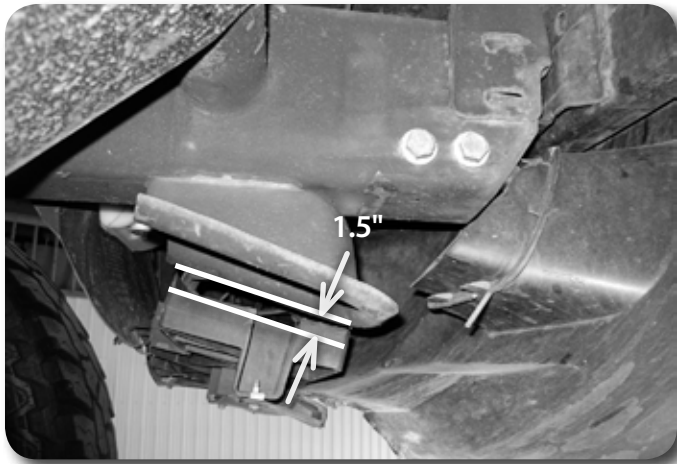


Figure 3

9. Flex the inner fender well out of the way and remove bolt as shown Figure 4. Repeat for opposite side.



Figure 4

10. Pull sides of bumper out Figure 5.



Figure 5

11. Pull bumper cover directly forward and remove from vehicle.
12. Remove tow hooks and save hardware.
13. Remove 2 bolts indicated that hold the steel bumper to frame rails Figure 6 and remove steel bumper from vehicle.

Step 12 Note:

The sides have clips that mount the bumper at the seam.

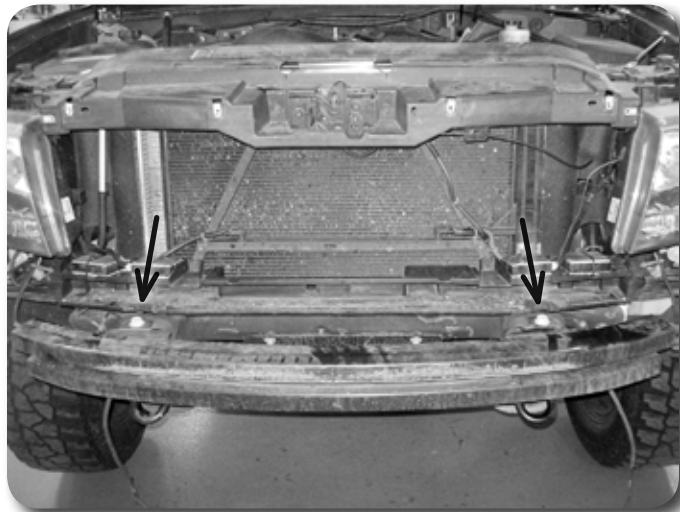


Figure 6

14. On the driver's side frame rail just below the driver's side door locate the parking brake cable where it goes through the body mount support. Cut off the tab above the parking brake cable using a cutoff wheel or plasma cutter Figures 7 & 8.

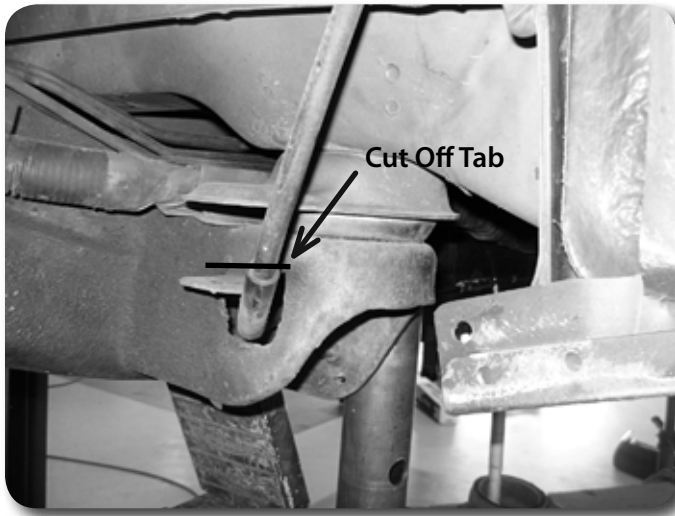


Figure 7

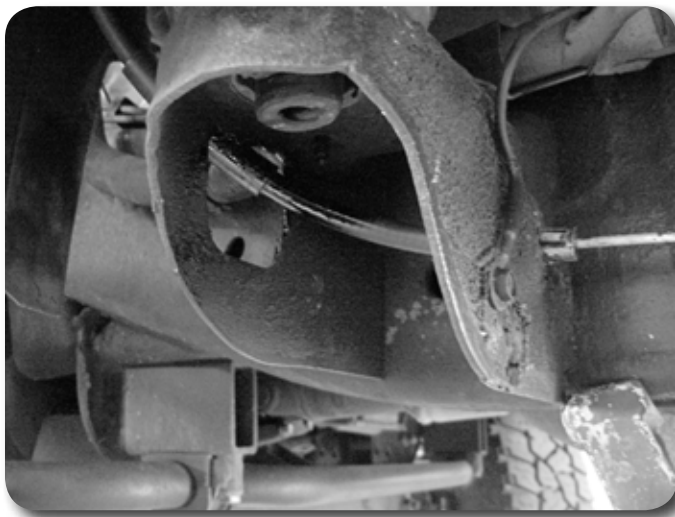


Figure 8

Step 15 Note

Use care not to cut the parking brake cable. You may need to disconnect the parking brake cable to perform this step.

» REAR BUMPER REMOVAL

15. Disconnect wire harness at the connector on top of the passenger side frame rail
Figure 9.

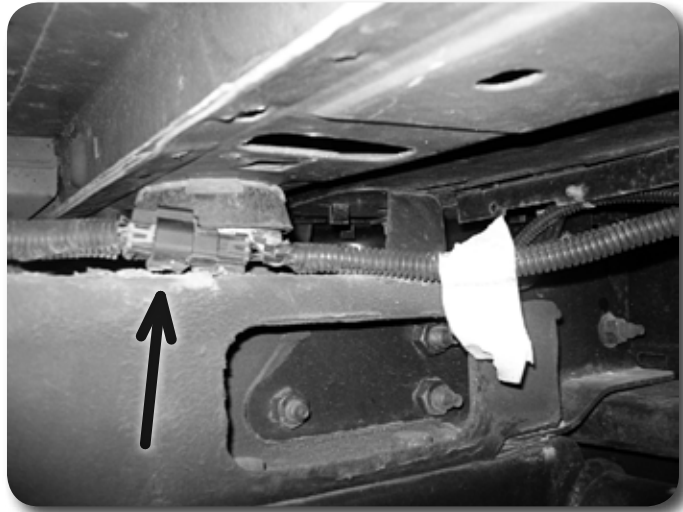


Figure 9

16. Disconnect trailer wiring harness plug from the hitch. Figure 10. Cut any wire ties that may keep the bumper from being removed.

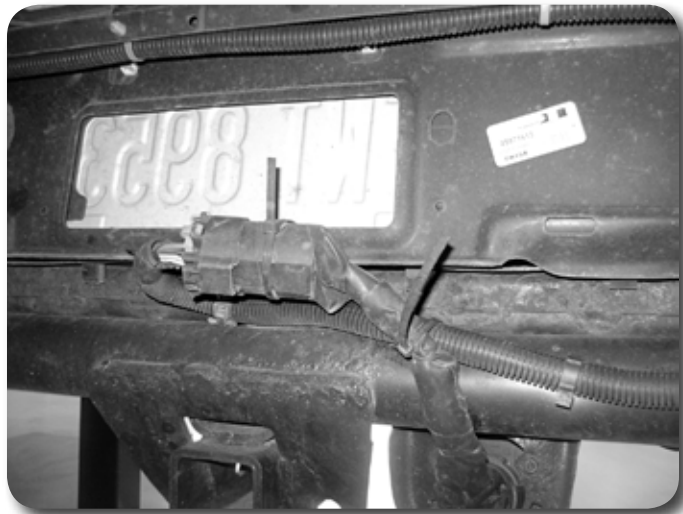


Figure 10

17. Remove the 2 bolts on each side of the receiver Figure 11.

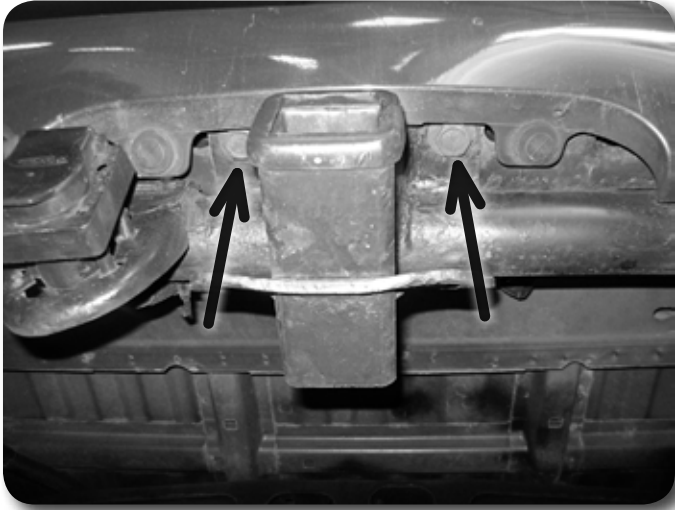


Figure 11

18. Remove 4 bolts per side that attach the bumper to frame rails. Figure 12.

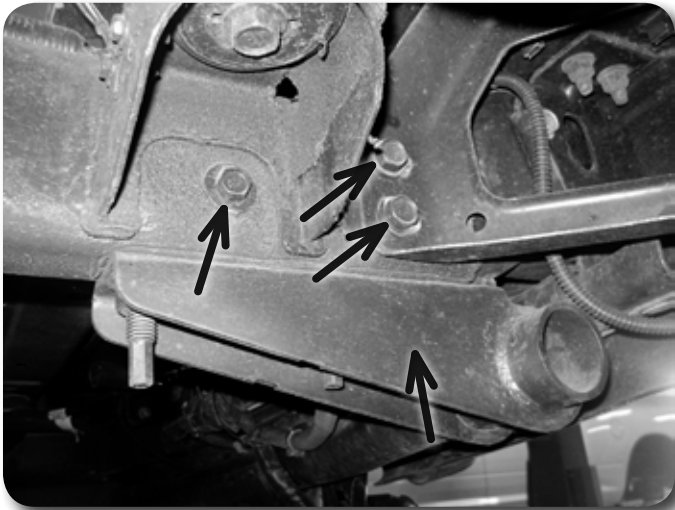


Figure 12

19. Remove rear bumper

» BODY LIFT PROCEDURE

20. Remove front 2 body mounting bolts (Driver's and Passenger's side)
21. Remove 5 bolts from passenger's side of vehicle
22. Loosen 5 bolts on Driver's side of vehicle, do NOT remove at this time.
23. Carefully raise the passenger's side of the body just high enough to insert the body lift blocks. Regularly check and make sure that no wires are being pulled tight.
24. Insert body lift blocks at 6 places shown Figure 13.

Step 24 Note

Use a jack and a block of wood to spread the load on a reinforced part of the body.



Figure 13

25. Apply supplied Loctite to threads and loosely attach the body to the frame on passenger's side with 5 new 14mm x 140mm bolts. The front mount uses a 1/2" x 6-1/2" bolt, washers and nuts. Do NOT tighten at this time.
26. Remove the 5 remaining bolts from driver's side.
27. Slowly and carefully lift driver's side until the 1.5" blocks are able to be slid in.
28. Apply supplied Loctite to threads and install new bolts in similar locations as the passenger side.
29. Tighten front body mount bolts to 55 ft-lbs and the 14mm bolts to 120 ft-lbs.

» FRONT BUMPER MODIFICATION AND INSTALLATION

30. Drill two 5/16" holes in the front steel bumper at each factory mount as shown. These holes will be used to locate the mounts and also would allow for easy re-installation if you ever decide to put the vehicle back to stock Figure 14.

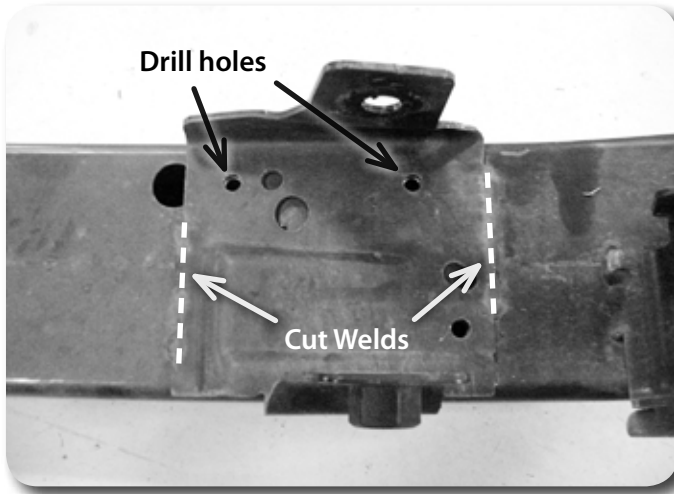


Figure 14

31. Using a cutoff wheel, make cuts at both welds, but take care not to cut through the bumper- metal.
32. Using a hammer and chisel punch, peel the brackets away from the bumper to break any remaining weld and remove both brackets. Grind the remaining weld from the bumper and clean up the bracket edges.
33. Using a square from the top edge of the bumper, measure down 1.5" from the two holes drilled earlier and make a mark. This should end up in the center of the seam. Figure 15

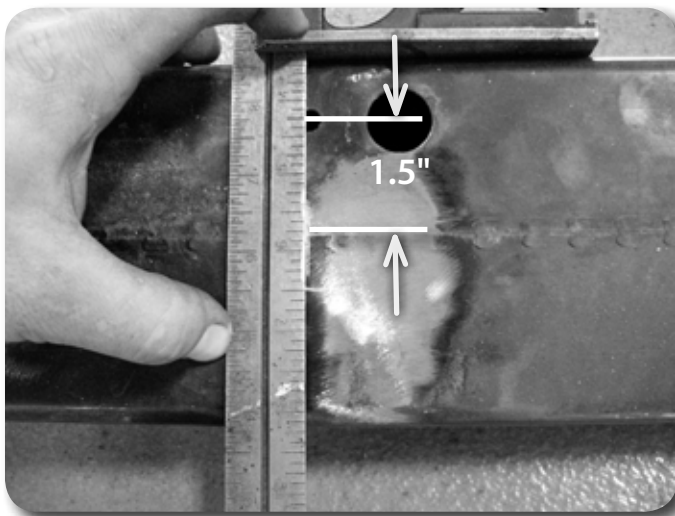


Figure 15

34. Drill a 7/16" hole at these marks.
35. Line up the bracket with the newly drilled holes to locate the 3rd mounting hole. Make a mark and drill a 17/32 hole at the mark. **Figure 16**

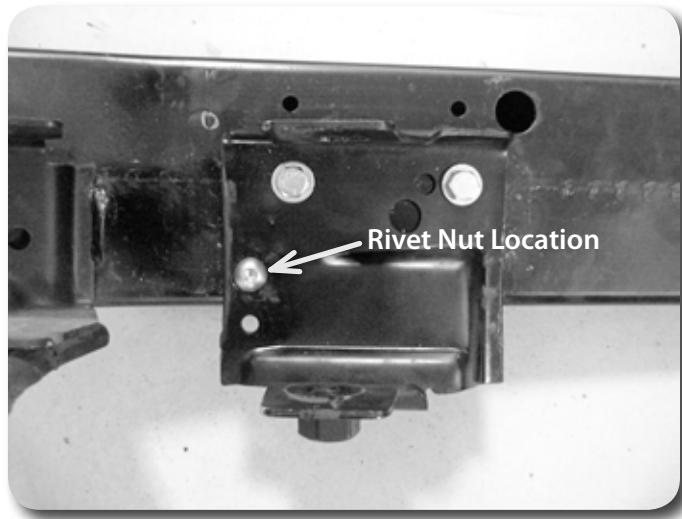


Figure 16

36. Using the supplied rivet nut installation tool, install the rivet nut at the 3rd mount location. See detailed rivet nut instructions at the end of this instruction sheet for details on the rivet nut installation.
37. Fasten the bracket to the bumper with the supplied 3/8" x 1-1/4" bolt, washers, and nuts. The button head bolts will be installed at the rivet nut location.
38. Repeat bumper bracket modification steps on other side
39. Flip the front tow hooks upside down. Align the tow hook on outside driver side frame rail to mark new hole center to be drilled. Orientate the tow hook so that is flat and mark the frame to be drilled. Drill 1/2" holes on frame sides with only 1 mounting hole as shown. This will allow the tow hooks to be flipped and reused. **Figure 17**

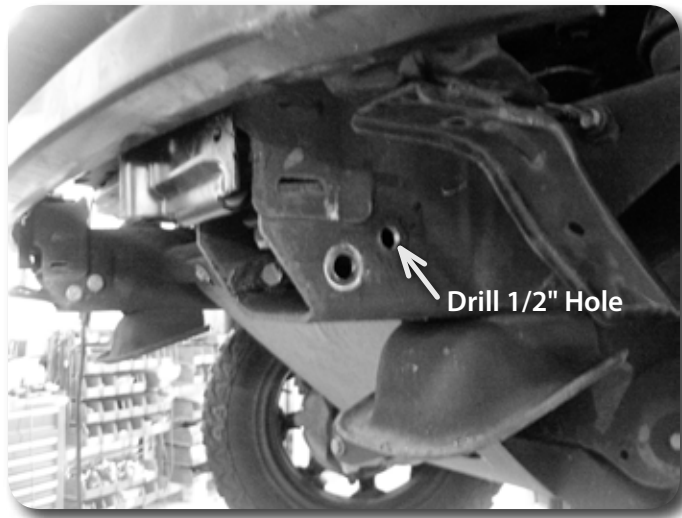


Figure 17

Steps 39-43 Note:

Hardware for the front bumper installation is located in hardware pack 282.

40. Install tow hooks with OE hardware, such that they are flipped over from the factory setup.
41. With bumper brackets relocated re-install the bumper to the factory frame mounts using the factory hardware.

42. Grind off and cut the corner braces of the plastic bumper cover for clearance. Reference Figures 18 & 19.

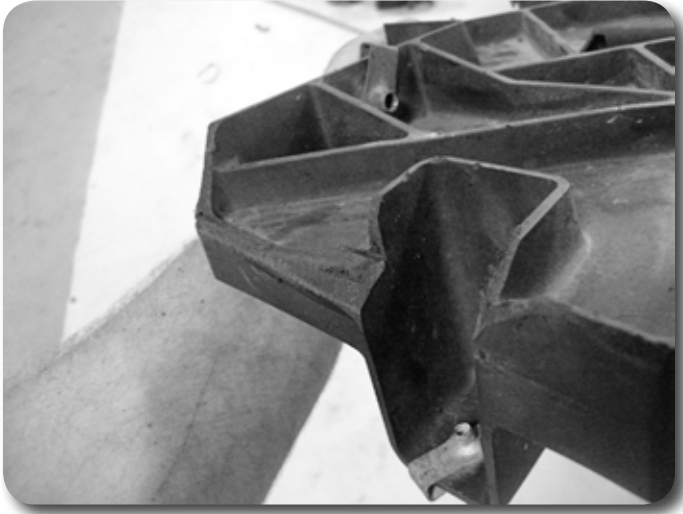


Figure 18



Figure 19

43. Reinstall front bumper cover. Reinstall all mounting hardware and clips.
44. Re-connect fog lights (if equipped).

Post-Installation Warnings

1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.
2. Perform head light check and adjustment.
3. Re-torque all fasteners after 100 miles. Always inspect fasteners and components during routine servicing.

Step 47 Note

It may be necessary to clearance grind the opening in the crossmember to line up the spare tire winch tube.

» REAR BUMPER INSTALLATION

45. Remove the factory bumper brackets from the rear bumper.
46. Install the new bumper brackets to the bumper in reverse of how the factory brackets were removed using the OE hardware. **Figure 20**

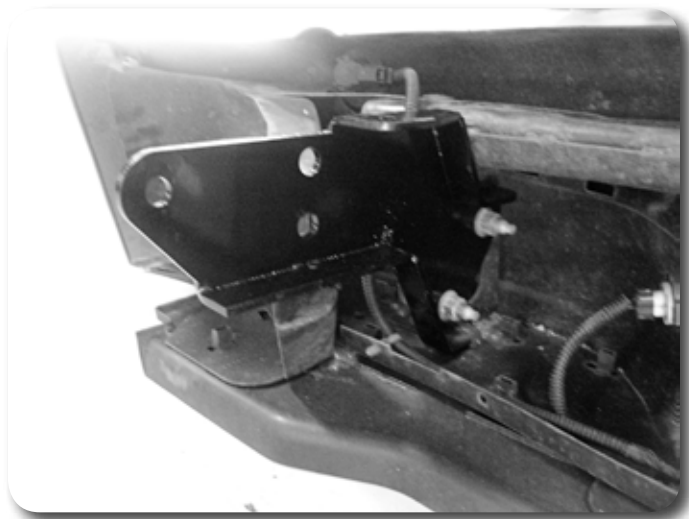


Figure 20

47. Slide the bumper on the truck until the bolt holes in the sides of the frame line up with the bracket. Line up the spare tire winch tubes as the bumper is slid on. Get the OE bolts started through the holes but do not tighten. Use the provided nuts and washers with the factory bolts. The side supports will now mount using only the lower hole. **Figure 21**

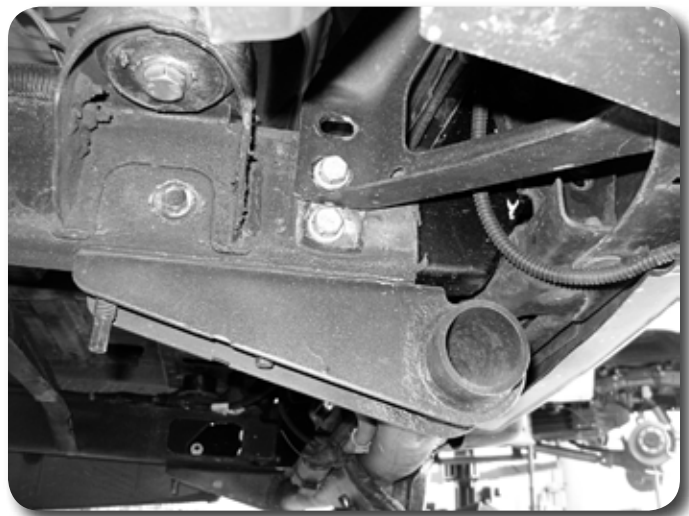


Figure 21

48. Install the 1" dia. sleeves between the hitch and center of the bumper and fasten with the provided 14mm x 80mm bolts and washers.
49. Once all bolts are started, verify the bumper is positioned correctly and tighten the bolts. Tighten 14mm hardware to 120 ft-lbs, 12mm hardware to 90 ft-lbs, and 10mm hardware to 40 ft-lbs.
50. Re-connect the wire harnesses that attached to the bumper.

»» FINAL INSTALLATION STEPS

51. Reconnect battery.
52. Recheck all fasteners after 500 miles and at regularly scheduled maintenance intervals.

Rivet Nut Installation Addendum

»» HOLE PREPARATION

1. Drill hole to appropriate size for rivet nut installation. 3/8" Rivet nuts require a 17/32" drill. It is critical that this hole is drilled to the correct size. Remove any burrs that could keep the rivet nut from seating flat against either side of the hole surface. **Figure 1**

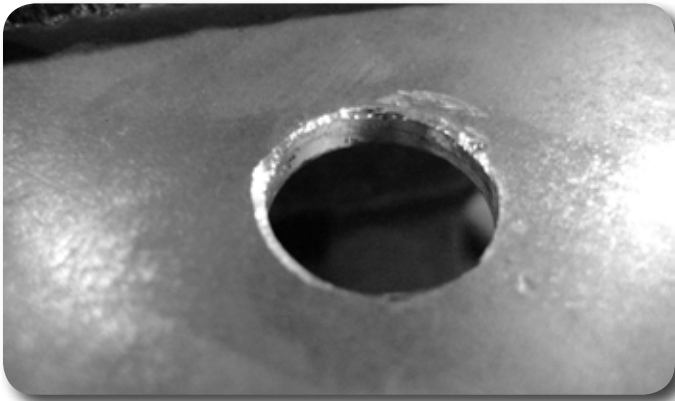


Figure 1

Step 1 Note

If the correct drill size is not available, it is possible to drill the hole to an available smaller size and slowly grind it out to until the rivet-nut fits tight.

»» RIVET NUT INSTALLATION TOOL ASSEMBLY

2. For a 3/8" rivet nut, place the provided 3/8" SAE flat washer on the 3/8" x 1-1/2" bolt, followed by 7/16" hex nut and then a 3/8" serrated washer. **Figure 2** Thread this tool assembly into the rivet nut.

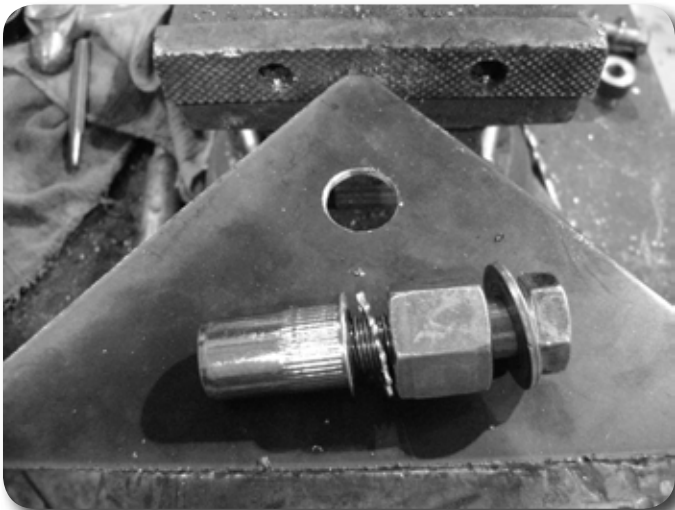


Figure 2

Step 4 Note

If available, an impact gun is recommended for tightening the bolt to ensure the rivet nut remains square to the hole and to ease holding the nut from spinning.

Step 5 Note

If using the recommended impact gun, use caution to not exceed the recommended torque specifications.

Step 6 *IMPORTANT*

It is very important to hold the nut as the bolt is loosened because the grip of the star washer will try to spin the rivet nut and ruin the installation.

» RIVET NUT INSTALLATION

3. Place the installation tool with the rivet nut threaded on the end into the appropriately sized hole.
4. For a 3/8" rivet nut, hold the nut closest to the rivet nut still with an 5/8" wrench and tighten the 3/8" bolt with a 9/16 wrench to set the rivet nut. Be sure to hold the rivet nut flush to the surface and square to the hole as it is tightened. **Figure 4**



Figure 4 - 1/2" Rivet Nut shown

» TORQUE SPECIFICATIONS

5. 3/8" rivet nuts will approach 40 ft-lbs for maximum grip strength. Do not exceed 45 ft-lbs when setting the rivet nut.

» RIVET NUT TOOL REMOVAL

6. Once the center bolt is tightened, remain holding the nut from spinning with the wrench and loosen the center bolt to remove the installation tool.
7. Verify proper installation by checking for consistent rivet nut deformation to see the threads are square and centered to the rivet nut. **Figure 5.**



Figure 5