

#D9345 Installation Instructions 2006-2008 Dodge Ram 1500 3" 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.

#### >>> TECHNICAL SUPPORT

*Live Chat* provides instant communication with Zone tech support. Anyone can access live chat through a link on www.zoneoffroad.com .

*www.zoneoffroad.com* may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to tech@zoneoffroad.com detailing your issue for a quick response.

888.998.ZONE Call to speak directly with Zone tech support.

#### » 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. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
- 5. Zone Offroad Products body lifts are designed to be used on vehicles in good operating condition. It is not recommended that body lifts be used on vehicles in poor physical shape. This includes rusted body mounts, damaged or worn frame-to-body mounting brackets, and poor mechanical condition. Perform a visual inspection of the vehicle before beginning installation.

**Difficulty Level** 

easy 1 2 (3) 4 5 difficult

Estimated installation: 6-8 hours

# **Special Tools Required**

Reciprocating saw or equiv.

**Tire/Wheel Fitment** 

33 x 12.50 Tire

#### \*Important\* Verify you have all of the kit components before beginning installation.

# **Kit Contents**

Qty	Part
14	3" x 3" Body Lift Block
1	Front Bumper Brkt (drv)
1	Front Bumper Brkt (pass)
1	Bolt Pack
2	Frame Crush Sleeve 0.750 x 0.109 x 2.188
1	Rear Bumper Outside Brkt (drv)
1	Rear Bumper Outside Brkt (pass)
1	Rear Bumper Brkt (center)
1	Rear Bumper Brkt (top)
1	Rear Bumper Brkt (top)
1	Spare Tire Crank Brkt
3	Spare Tire Winch Spacer
1	Steering Extension

Qty	Part
4	Steel Bed Spacer
2	Brake Line Junction Spacer
1	Ground Strap Extension
1	Parking Brake Cable Brkt
2	Radiator Fan Shroud Bracket
2	Radiator Fan Shroud Bracket
4	Radiator Crush Sleeve 0.500 x 0.049 x 1.563
2	PS Cooler Drop Bracket
1	Radiator Hose Extension 1-3/4" x 4"
2	#28 Hose Clamp
1	Air Intake Extension - 3.500 x 0.065 x 4.000
2	#72 Hose Clamp
1	Fuel Filler Breather Line Extension
1	Lower Overflow Bottle Bracket
2	Upper Overflow Bottle Bracket

2 Loctite



# INSTALLATION INSTRUCTIONS

- 1. Park the vehicle on a clean, flat surface and block the rear wheels for safety. Place automatic transmissions in park and manual transmissions in neutral.
- 2. Remove the negative battery cable first, then the positive battery cable. If equipped, the Supplemental Restraint System will be deactivated when the battery is disconnected.
- 3. Measure and record the space between the bumpers and the body as well as the cab to the bed for reference during the installation.

## >> FRONT

- 4. If equipped, disconnect the fog light wiring harness from the bumper (on the driver's side of the bumper).
- 5. Remove the 8 bumper-to-frame mounting nuts and remove the front bumper from the vehicle. Save nuts.
- 6. Disconnect the air intake hose from the intake. Pull up on the air filter box to release it from the rubber retainers. Remove the air filter box from the vehicle.
- 7. Drain the radiator. Remove the upper and lower coolant hoses from the radiator.
- 8. Disconnect the coolant overflow hose from the overflow bottle.
- 9. Disconnect the coolant overflow sensor and windshield washer pump wiring harness from the overflow bottle Figure 1. Disconnect the windshield washer hose at the first splice away from the bottle (near the inner fender).



Figure 1

10. Remove the two bolts mounting the overflow bottle to the radiator fan shroud and remove the bottle from the vehicle Figure 2.

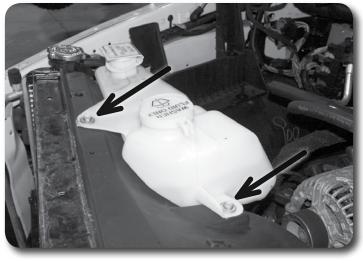


Figure 2

11. If equipped, disconnect the two bolts mounting the power steering cooler to the bottom of the radiator Figure 3. Allow the cooler to hang down below the vehicle.

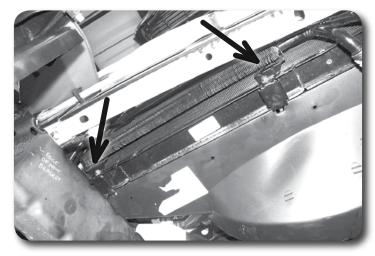


Figure 3

12. Remove the oil cooler retaining bolt **Figure 4**. Remove the cooler lines from the retaining clips on the passenger's side of the radiator. Pull the cooler free from the radiator and allow it to hang out of the way. Save bolt.

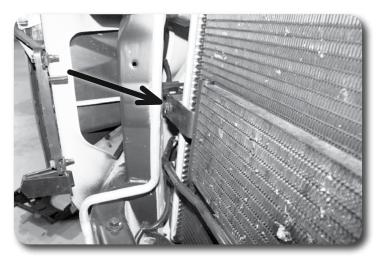


Figure 4

- 13. Remove the two fan shroud retaining bolts. Pull the shroud up and out of the bottom retainers. Allow the shroud to rest against the front of the engine. Save bolts.
- 14. Remove the two upper radiator mounting bolts and remove the radiator from the vehicle. Save bolts.
- 15. Remove the main engine wiring harness and heater hoses from the retaining clips on the passenger's side of the engine Figure 5.



Figure 5

16. Lock the steering wheel to prevent it from turning. Disconnect the steering shaft from the rack and pinion assembly by removing the coupler pinch bolt and pulling it up off of the input shaft Figure 6. Save pinch bolt.

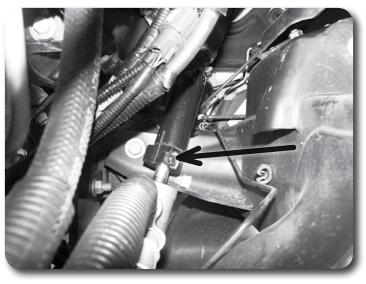


Figure 6

17. Disconnect the ground cable from the driver's side frame rail, just in front of the upper control arm Figure 7. Save bolt.

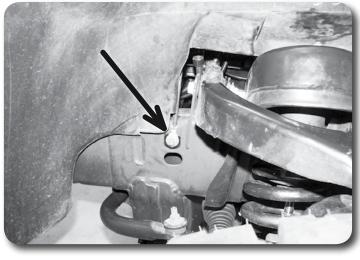


Figure 7

- 18. Disconnect the driver's side ABS line at the connector attached to the inner fender.
- 19. Remove the two bolts mounting the brake line junction block (located just behind the upper control arm) to the top of the driver's side frame rail Figure 8.

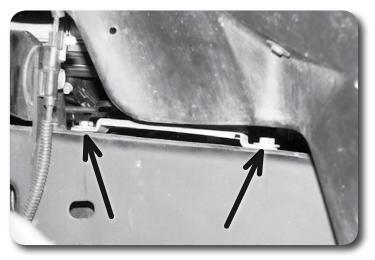


Figure 8

Step 20 Note

Bend the small retaining tab back to remove the cable end from the coupler. 20. Separate the parking brake cable at the coupler just below the driver's side door on the frame Figure 9. Loosen the parking brake adjuster to gain slack in the cable allowing for the front half of the cable to be removed from the coupler.



- 21. Remove the front half of the parking brake cable from the frame mount by compressing the retaining clips and pushing it through the mount.
- 22. Disconnect the main wiring harness retaining clip from the driver's side body mount (under drv's side floorboard).
- 23. Loosen but do not remove all of the cab mount bolts.
- 24. Remove the passenger's side cab bolts. The captive washers on the bolts must be removed so they can be reused on the new bolts. Place the washer, with the bolt head down, across the open jaws of a bench vise and pound the bolt out of the washer with a hammer. Repeat this procedure with all the cab mount bolts.
- 25. Using a hydraulic jack and block of wood, slowly lift the passenger's side of the cab. Continuously watch for lines, hoses, etc to be sure none are overextended. Lift the cab just enough to place the provided lift blocks between the body and the frame body mounts. Use the provided 3" diameter blocks.
- 26. Install 12mm x 180mm bolts with the factory oversized washers that were removed from the original bolts up through the cab mounts. Leave hardware loose.
- 27. Repeat the lift procedure on the driver's side. Pay close attention to the brake line junction block.
- 28. With that cab lifted, go back and remove each bolt and apply Loctite to the threads. Ensure the body is square on the frame. Torque all body mount hardware to 65 ft-lbs.
- 29. Install the provided machined steering extension on the steering rack with a 10mm x 30mm allen head bolt. Torque to 35 ft-lbs. Attach the steering shaft to the steering extension and fasten with the factory bolt Figure 10. Torque factory bolt to 30 ft-lbs. Install a 1/4" set screw into the provided new steering extension on the steering rack. Snug the set screw down securely.



Figure 10

30. Attach the provided ground strap extension to the original ground strap location on the driver's side frame with the factory bolt Figure 11. Position the strap so it is pointing straight up and torque bolt to 15 ft-lbs.

# Step 26 Note

All new body mount hardware is located in hardware pack #235.

## Step 29 Note

Steering extension hardware is located in hardware pack #236.

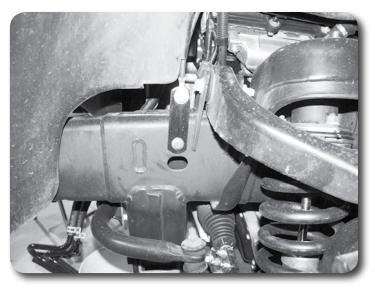
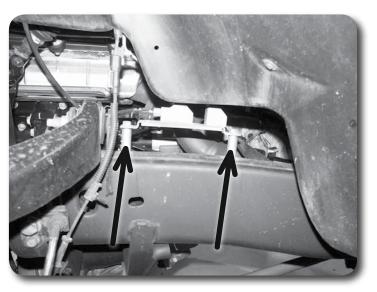


Figure 11

- 31. Attach the ground strap to the extension with a 3/8" x 1" bolt, nut and 3/8" SAE washers. Torque to 20 ft-lbs.
- 32. Position the two provided 0.625 OD x 1.625 long brake line junction spacers between the junction and the driver's side frame rail Figure 12. Fasten the junction block and spacers to the frame with 8mm x 60mm bolts and 5/16" USS washers. Use Loctite on the bolt threads and torque to 15 ft-lbs.





33. Attach the provided parking brake cable bracket to the factory cable mount and fasten with a <sup>1</sup>/<sub>2</sub>" x 1-1/4" bolt, nut and <sup>1</sup>/<sub>2</sub>" SAE washers. Torque bolt to 65 ft-lbs. The bracket will mount to the back surface of the factory mount Figure 13.

## Step 31 Note

Ground strap hardware is located in hardware pack #236.

## Step 32 Note

Brake junction spacer hardware is located in hardware pack #236.

## Step 33 Note

Parking brake cable bracket hardware is located in hardware pack #237.

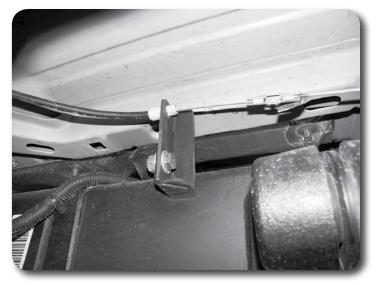


Figure 13

- 34. Run the parking brake cable through the new relocation bracket and reattach it to the coupler. Adjust the parking brake cable to the appropriate slack.
- 35. Reattach the ABS line to the driver's side inner fender.
- 36. Locate the lower radiator hose and cut the hose in half at the middle of the hose. Install the provided 1-3/4" OD x 4" long steel hose extension in both ends of the hose and fasten with the provided hose clamps Figure 14. Make sure there is adequate extension engagement in both sections of hose.

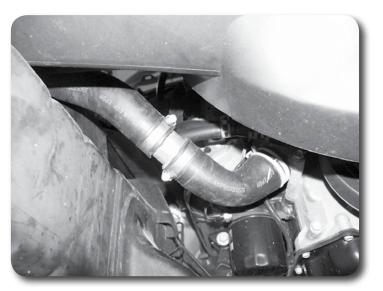


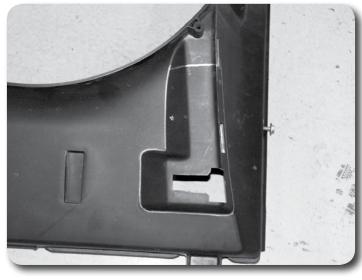
Figure 14

37. Locate and cut off the passenger's side lower fan shroud mounting tab flush with the side of the shroud Figure 15.



Figure 15

38. Mark around the perimeter of the molded overflow bottle mount on the fan shroud **Figure 16**. Stop at the edge of the upper slot and mark straight down to the bottom of the contour. Cut along the line and remove the piece from the shroud.





39. Empty the overflow/washer bottles. Install the bottle on the modified shroud at the two top mounts Figure 17 with the provided 2-1/2" tall x 1-1/2" wide rectangular spacers and 6mm x 85mm bolts with <sup>1</sup>/<sub>4</sub>" USS washers threaded in the factory nut tabs. Snug hardware.



# Step 39,40 Note

Overflow bottle mount hardware is located in hardware pack #236.

40. Position the provided long, lower overflow bottle bracket over the lower bottle mounting tabs and mark the two holes to be drilled **Figure 18**. Remove the bracket and drill <sup>1</sup>/<sub>4</sub>" holes at the marks. Attach the bracket to the shroud using the new holes and <sup>1</sup>/<sub>4</sub>" x <sup>3</sup>/<sub>4</sub>" bolts, nuts and <sup>1</sup>/<sub>4</sub>" USS washers.



Figure 18

- 41. Remove the two upper mounting bolts/spacers and remove the overflow bottle from the shroud. Set the components off to the side to be installed later.
- 42. Position the shroud so the bottom lip is accessible. Measure from the driver's side bottom corner of the shroud 3-1/8", in from the lip 5/8" and make a mark at that point. Make another mark at 17-1/8", in from the lip 5/8" Figure 19. Drill <sup>1</sup>/4" holes at each of the two marks. These holes will be used later.



Figure 19

- 43. Place the fan shroud in the vehicle and let it rest on the fan.
- 44. Attach the provided fan shroud drop brackets (flat bracket with 1/4" stud, hole to stud is 3") to the radiator using the original mounting bolts. Leave hardware loose. Thread stud will be at the bottom and pointing to the engine.
- 45. Install the radiator in the vehicle and fasten with the factory mounting hardware. Torque to 15 ft-lbs.

## Step 46, 51-55 Note

All upper and lower fan shroud relocation and power steering cooler hardware is located in hardware pack #236. 46. Attach the fan shroud to the new drop bracket studs on the radiator Figure 20 and fasten with <sup>1</sup>/<sub>4</sub>" nuts and <sup>1</sup>/<sub>4</sub>" USS washers. Torque the <sup>1</sup>/<sub>4</sub>" nuts as well as the factory shroud hardware to 15 ft-lbs.

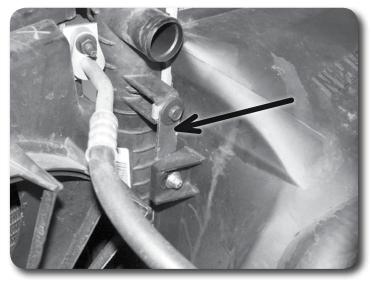
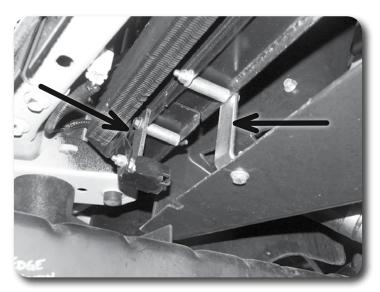


Figure 20

- 47. Attach the upper radiator hose to the radiator and tighten the hose clamp securely.
- 48. Attach the modified lower radiator hose to the radiator and tighten the hose clamp securely. Adjust the extension as needed.
- 49. Install the overflow bottle on the fan shroud with the brackets and hardware used earlier. Make sure the bottom bottle mounting tabs are in the new bracket and tighten the new upper hardware to 15 ft-lbs. Reconnect the overflow hose to the bottle.
- 50. Reconnect the coolant overflow sensor and washer pump wiring. Reconnect the washer fluid line.
- 51. Locate the holes in the bottom radiator flange. There will be a set of holes above each of the holes that were drilled in the bottom fan shroud earlier. Install a provided 'L' shaped fan shroud bracket in each drilled holes with a <sup>1</sup>/<sub>4</sub>" x <sup>3</sup>/<sub>4</sub>" bolt, nut and <sup>1</sup>/<sub>4</sub>" USS washers. Leave hardware loose. The short end of the bracket will go against the fan shroud and point toward the back of the vehicle. The long end of the bracket will run to the back side of the lower radiator flange Figure 21.



- 52. Place a <sup>1</sup>/<sub>2</sub>" OD x 1-9/16" long crush sleeve in between the front and rear radiator flanges, lined up with the appropriate existing hole and fasten the fan shroud bracket to the radiator, through the crush sleeve with a <sup>1</sup>/<sub>4</sub>" x 2-1/2" bolt, nut and <sup>1</sup>/<sub>4</sub>" USS washers. Torque hardware to 10-15 ft-lbs.
- 53. Locate the two power steering cooler drop brackets (like upper fan shroud brackets but 2" between hole and stud) and thread a <sup>1</sup>/<sub>4</sub>" nut on the thread stud. Thread the nut all the way down.
- 54. Attach the power steering cooler brackets to the front bottom radiator flange through the remaining existing holes (to the passenger's side of each fan shroud mount). Place a  $\frac{1}{2}$ " OD x 1-9/16" long crush sleeve between the flanges as before and fasten with the original cooler mounting bolts/nuts Figure 22. The bolt should run front to rear. Make sure the brackets are hanging straight down and tighten the hardware to 10-15 ft-lbs.

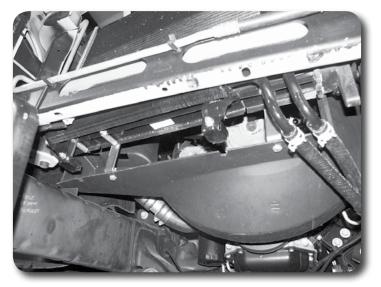


Figure 22

- 55. Install the power steering cooler on the drop brackets so that the bracket is setting inside the cooler mounting bracket Figure 21. Fasten the cooler to the drop bracket with <sup>1</sup>/<sub>4</sub>" nuts and <sup>1</sup>/<sub>4</sub>" USS flat washers. Torque hardware to 10-15 ft-lbs. Ensure the cooler lines are running away from any heated or rotating objects.
- 56. Reinstall the oil cooler to the front of the radiator with the factory bolt. Torque to 12 ft-lbs. Install the lines in the original retaining clips on the passenger's side of the radiator.
- 57. Remove the air intake tube from the intake. Locate the center rib in the middle of the intake tube. Cut the tube in half along the rib. Install the provided 3-1/2" OD x 4" long intake tube extension in each section of the tubing and fasten with the provided #72 hose clamps Figure 23.
- 58. Install the air filter box back in the vehicle. Install the modified intake tube to the intake and the air filter box with the factory hose clamps. Adjust the extension tube as necessary and tighten all four hose clamps securely.
- 59. Refill the radiator/coolant system. The vehicle will need to be run and the system topped off before driving. Check for any leaks.

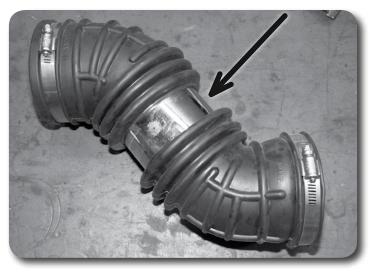


Figure 23

## **Front Bumper Installation**

- 60. Carefully measure from the back surface of the factory bumper mounts on the frame rail 2-1/4" and mark. Do this in several places all around each side of the frame rail. Carefully connect these points to form a straight, continuous cut line around the entire frame rail Figure 24. For reference, this cut line should be located just behind a bulge in the frame rail.
- 61. Carefully measure again from the back surface of the factory bumper mounts on the vertical faces of the frame rail 4-1/4" and mark. Do this in multiple locations and connect the points to form two reference lines on the vertical frame rail surfaces Figure 24. These lines will aid in positioning the new provided bumper brackets.

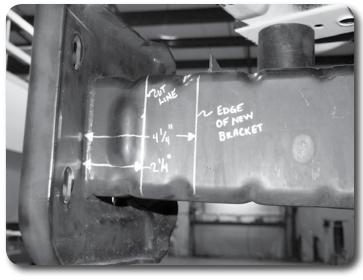


Figure 24

- 62. Double check the line dimension at several different spots to ensure they are at the appropriate location.
- 63. Cut the bumper mount off of the frame along the cut line (the one closest to the bumper mount. Use a reciprocating saw or cut-off wheels to perform this operation.
- 64. With the front bumper mounts removed, clean any burrs from the cut edge. Also check the vertical edges of the cut to be sure none of the bulged section of the frame remains. This would hinder this installation of the new brackets. If a trace

# Front Bumper Installation Note

This installation requires removal of the front frame horn bumper brackets. Take care to make good measurements and quality cuts to ensure proper fitment of the new brackets. It is recommended to use a reciprocating saw or cut-off wheel to perform the cutting operation. of the bulge remains, grind it down flush with the rest of the frame rail. Paint any bare metal.

- 65. Install the new bumper brackets on the frame by lining up the reference line with the back edge of the bracket. These brackets are side specific. The taller portion of the bracket with 4 slots goes toward the inside of the vehicle. The edge of the back plate on the new bracket will rest on the top of the frame rail to determine the vertical position.
- 66. With the bracket in place, use the slots in the bracket as a template to mark the positions to be drilled on the frame. Mark all 6 slots (3 outside, 3 inside). Each of the holes will be drilled individually.
- 67. With the slot positions marked, remove the brackets. Using a center punch, mark the center of each slot to be drilled (6 per bracket). Drill <sup>1</sup>/<sub>2</sub>" holes at each mark Figure 25.

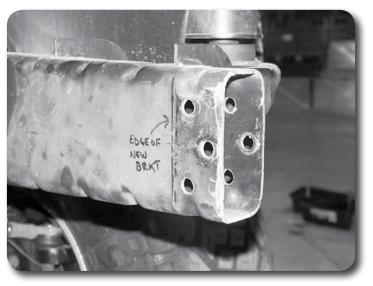
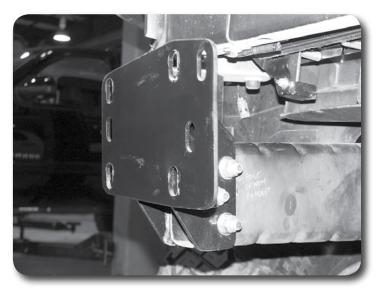


Figure 25

- 68. When all the holes are drilled, reinstall the brackets on the frame and loosely fasten through the top and bottom holes with ½" x 4" bolts, nuts and ½" SAE washers.
- 69. Place the provided frame crush sleeve (3/4 OD x 2-3/16" long) in the frame, aligned with the middle bracket hole and fasten the bracket, through the frame and sleeve with a <sup>1</sup>/<sub>2</sub>" x 4" bolt, nut and <sup>1</sup>/<sub>2</sub>" SAE washers. Leave hardware loose Figure 26.



## Step 68,69 Note

Front bumper bracket hardware is located in hardware pack #911.

- 70. Install the front bumper on the new brackets and fasten with the factory nuts. Leave hardware loose.
- 71. Adjust the bumper brackets as necessary and torque hardware to 60 ft-lbs. Adjust the bumper vertically and tighten factory nuts to 60 ft-lbs.
- 72. Reconnect the front fog lights.

#### »REAR

- 73. Loosen the hose clamp and disconnect the rubber fuel filler hose from the steel filler neck.
- 74. The plastic filler neck vent line will be extended after lifting Figure 27. Cut the line approximately 4" below the connector fitting.

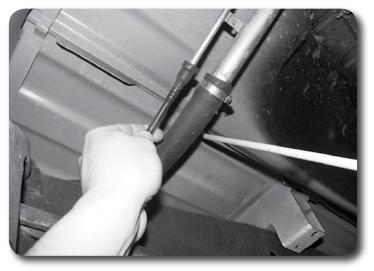


Figure 27

75. Disconnect the license plate lights from the rear bumper Figure 28.

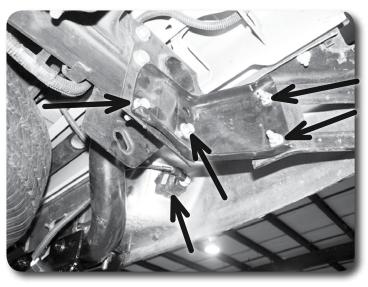


Figure 28

- 76. Remove the license plate from the rear bumper. Save hardware.
- 77. Remove the two middle bumper bolts that are located behind the license plate. Save bolts.

78. Remove the two (one per side) bolts mounting the top lip of the bumper to the frame Figure 29. Save bolts.

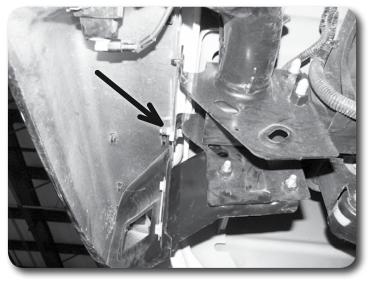
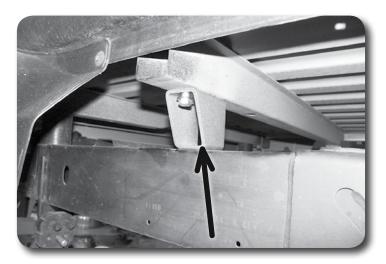


Figure 29

- 79. Remove the four main bumper mounting nuts and remove the bumper from the vehicle Figure 28. Save the nuts and bolt tabs.
- 80. Remove the two bolts mounting each of the rear bumper brackets to the frame and remove them from the vehicle Figure 28. Retain hardware and discard the factory brackets.
- 81. Lower the spare tire and remove it from the vehicle.
- 82. Loosen but do not remove the bed mounting bolts.
- 83. Remove the passenger's side bed mounting bolts. Raise the bed just high enough to place the provided body lift block between the bed and the frame. Install 12mm x 110mm bolts and 7/16" USS washers in the front mounting hole only. The remaining mountings bolts will be installed later. Leave hardware loose.
- 84. Repeat the bed lift procedure on the driver's side. With both sides lifted, remove the rubber pads from the frame where the bed rails rested. Place the provided 3" tall steel overload spacers where the pads were located. The tapered side will go to the outside and the hole will be up toward the bed and align with an existing hole in the bed frame crossmember.
- 85. Attach the steel overload spacers to the bed with 7/16" x 1" bolts, nuts, and 7/16" SAE washers. Torque bolts to 45 ft-lbs Figure 30.



## Step 83, 88-89 Note

All bed mount hardware is located in hardware pack #235.

## Step 85 Note

Overload spacer hardware is located in hardware pack #237. 86. Lift the rear of the bed up to expose the rear frame dampener. Mark the driver's side and passenger's side of the dampener as well as which way is up Figure 31a.



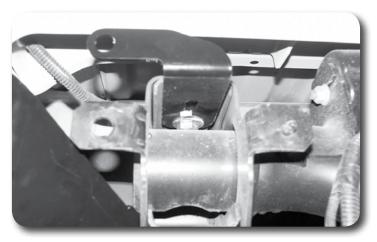
Figure 31a

87. Loose the end mounting nuts on the dampener and pull it out of the frame mounts. Flip the dampener end to end and slide it back into the mounting slots Figure 31b. The alignment tabs on each side should go into the slots first. The driver's side is now on the passenger's side and the dampener will be upside-down with the writing still visible at the back of the vehicle. Torque mounting nuts to 30 ft-lbs. Lower bed.



Figure 31b

88. With the rear dampener repositioned, install the new rear bed mounting bolts 12mm x 120mm and 7/16" USS washers (BP #235) with the new upper rear bumper brackets (pictured). The brackets mount inside the frame rail with the bed mounting bolt so that the tab goes up and to the outside of the vehicle Figure 32. Leave bolt loose.



- 89. Install the remaining bed hardware (12mm x 110mm w/7/16" USS washer from bolt pack 235). Adjust the bed using the dimension taken earlier. Remove one bolt at a time and apply Loctite to the threads (leave rear-most bolts at this time). Torque all hardware except the rear-most bolts to 65 ft-lbs.
- 90. Remove the factory outside rear bumper brackets and install the new provided ones in their place with the original hardware Figure 33. Torque bolts to 35 ft-lbs.



Figure 33

Install the provide middle rear bumper bracket to the original frame mount (behind the license plate) with the factory bolts. Install the bracket so that the short side is to the frame and the bracket offset toward the front of the vehicle Figure 34. Torque bolts to 35 ft-lbs.



Figure 34

- 92. Install the rear bumper on the vehicle by first attaching it to the outside brackets with the factory nuts and bolt tabs. Leave hardware loose.
- 93. Attach the top lip of the bumper to the new top brackets with the factory bolts and to the middle bracket with 3/8" x 1-1/4" bolts, nuts and 5/16" USS washers. Leave hardware loose.
- 94. With all the rear bumper hardware installed, tighten all mounting bolts to 35 ft-lbs, starting with the outside brackets and working inward.

## Step 93 Note

Rear bumper hardware is located in hardware pack #237.

- 95. Reinstall license plate and license plate lights.
- 96. Remove the rear-most bed mount bolts and apply Loctite to the threads. Reinstall and torque to 65 ft-lbs.
- 97. Remove the hitch pin retaining the spare tire winch crank tube to the winch. Remove the crank tube from the vehicle.
- 98. Remove the plastic crank tube grommet from the frame rail Figure 35.



Figure 35

99. Place the provided 'L' shaped crank tube support bracket up to the bottom side of the frame crossmember and align it to the existing hole (where the plastic grommet was). Using the new bracket as a template, mark the holes to be drilled Figure 36. Drill a 5/16" hole at each mark.



Figure 36

100. Mount the crank tube support bracket to the top of the frame crossmember using the holes just drilled and 5/16" x 1" bolts, nuts and 5/16" SAE washers. Torque bolts to 20 ft-lbs. Install plastic grommet in the new bracket Figure 37.

## Step 100 Note

Spare tire crank bracket hardware is located in hardware pack #236.



Figure 37

101. Remove the three spare tire winch mounting bolts and discard. Position the three provided spacers (5/8" OD x 3" long) between the winch and the top of the crossmember Figure 38 and fasten with 8mm x 100mm bolts and 5/16" SAE washers. Apply Loctite to the threads and torque to 20 ft-lbs.





- 102. Reattach the crank tube to the winch with the factory hitch pin. Reinstall the spare tire in the vehicle back in its stowed position.
- 103. Reattach the fuel filler tube to the filler neck with the original hose clamp and tighten securely. Adjust the hose at the tank if needed.
- 104. Apply silicone or other comparable spray lubricant to the provided barbed fuel vent hose extension. Insert the extension into each half of the vent line to reconnect it Figure 39. Slide each section all the way onto the barb portion of the extension.

## Step 101 Note

Spare tire winch spacer hardware is located in hardware pack #237.

# 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 steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure.

3. Perform head light check and adjustment.

4. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

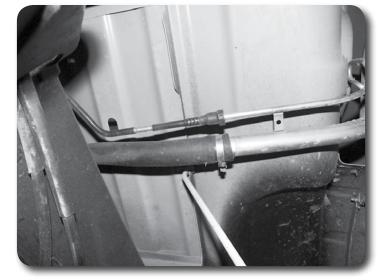


Figure 39

- 105. Check all hardware for proper torque.
- 106. Check hardware after 500 miles.
- 107. Ensure that the cooling system and window washer reservoir is topped off before driving.