D2300 Installation Instructions
2006-2011 Dodge Ram 1500 4WD
2.5" Adventure Series Suspension System

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

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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. 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.

Difficulty Level

easy 1 2 (3) 4 5 difficult

Estimated installation: 4-5 hours

Special Tools Required

Ball Joint Separation Tool

Tire/Wheel Fitment

35x12.50 with 4.75" Backspacing

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

D2300 Kit Contents

Qty	*Part*
1	Drv Upper Control Arm
1	Pass Upper Control Arm
2	Straight grease fitting
2	Ball joint aluminum slugs
2	2-5/16" Circlip - yellow zinc
2	2-1/4"OD x 3/32 O-ring
4	Upper control arm factory style bushings
2	Upper Control arm ball joints
	Diff Drop Kit
1	Pass - front diff drop brkt
1	Pass - rear diff drop brkt
1	DRV - Frt diff drop brkt
1	DRV - Rear diff drop brkt
2	Rear crossmember drop bracket - Pass side
2	Rear crossmember drop bracket - DRV side
1	Modified 1/2"-13 x 2" carriage bolt
2	Spacer drv rear diff drop
1	Bolt pack #942 - diff drop hardware
1	1/2"-13 nut - yellow zinc (Non-locking)
1	1/2" SAE Thru-hardened washer - yellow zinc
4	12mm-1.75 x 30mm bolt - class 10.9 - clear zinc
4	12mm-1.75 x 60mm bolt - class 10.9 - clear zinc
2	12mm-1.75 x 70mm bolt - class 10.9 - clear zinc
6	12mm-1.75 Prevailing torque nut - clear zinc
16	1/2" USS washer - clear zinc
8	7/16"-14 x 1" bolt - grade 5 - clear zinc
16	7/16" SAE Washer - clear zinc
8	7/16"-14 nylock nuts - clear zinc
	Strut Spacer
2	2.5" strut spacer
1	Strut spacer bolt pack
2	Preload spacer
1	Loc-tite
2	Sway bar link spacer

Kit Fitment notes:

1. On 2009 and newer TRX model trucks, do not install the preload spacer inside of the strut, this part can NOT be installed on TRX trucks.

2. Do not use this kit with Bilstein leveling struts, or with any other form of suspension lift.

INSTALLATION INSTRUCTIONS

» Disassembly

1. The factory service manual specifically states that striking the knuckle to loosen the ball joints or tie rod ends is prohibited. Striking the aluminum knuckle can damage it. A special puller tool #8677 (or equivalent ball joint tool) is recommended to be used to separate these components from the knuckle.
2. Park vehicle on clean flat and level surface. Block rear wheels for safety.
3. Raise front of vehicle and support frame rails with jack stands. Remove the front wheels
4. If equipped, remove differential skid plates. They will not be reinstalled.
5. Remove sway bar nut from the sway bar links at the sway bar, remove bushings and cup washers. Fig 1

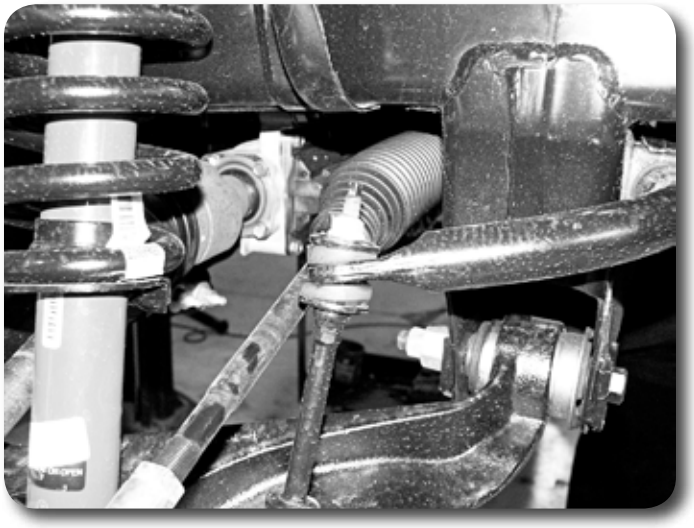

Figure 1

6. Remove the upper ball joint nut and use appropriate puller to disconnect the ball joint from the steering knuckle. Do NOT strike the aluminum knuckle with a hammer! Remove upper control arm from vehicle.
7. Disconnect the tie rod end from the steering knuckle using appropriate puller. Again do NOT strike the aluminum knuckle with a hammer!
8. Disconnect the brake caliper bracket from steering knuckle, hang caliper out of the way, do not allow the caliper to hang from the brakeline. Remove the brake rotors for safety.
9. Disconnect the ABS wire connector at the inner fender well. Remove wire from retaining clips.
10. Remove the lower strut bolt and nut. Fig 2

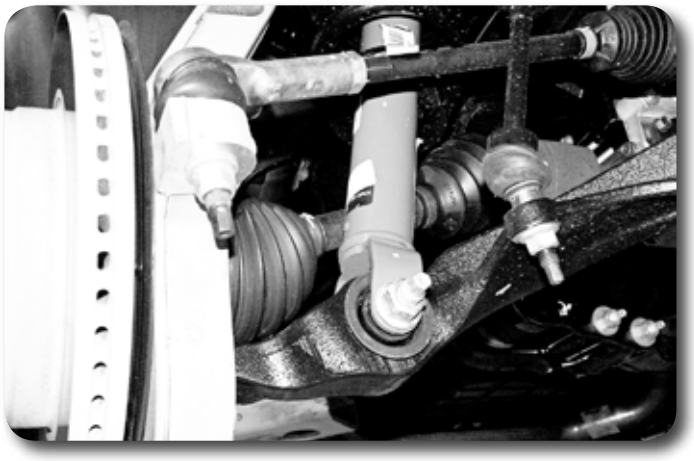

Figure 2

11. Remove upper strut nuts and remove strut assembly from vehicle.

12. Disconnect the inner CV from the differential by striking the CV with a hammer to dislodge the internal retaining clip. Remove the CV shaft from the differential. Swing the lower control arm assembly down and out of the way **Fig 3a, 3b**.

Figure 3a

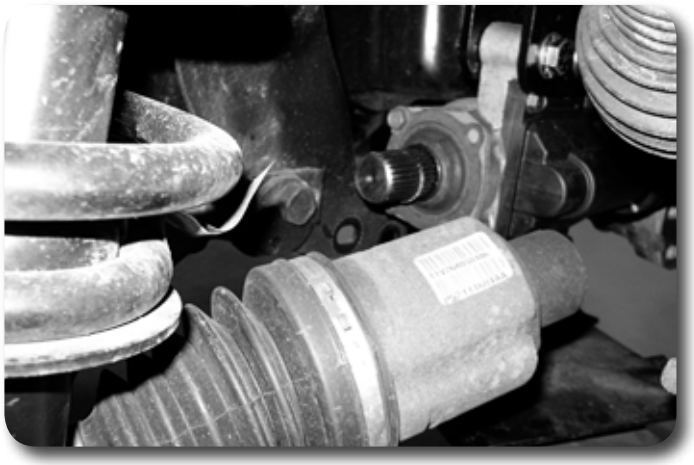

Figure 3b

13. Disconnect the differential breather hose from the differential. Disconnect the differential actuator wiring harness from differential Fig 4. Disconnect the front driveshaft from the differential, hang the driveshaft up out of the way. Do not allow the driveshaft to hang at full droop, the driveshaft boot may become torn.

Figure 4

14. Remove the factory rear crossmember between the lower control arm mounts.

15. Remove the retaining clips that attach the wire loom to the oil pan directly behind the driver's side differential mounts. There is not enough clearance to remove the hardware with these in place, pull the wire down slightly to gain clearance for hardware removal. A good method is to use a set of long needle nose pliers to grab onto the clips and pull down. Fig 5a, 5b

Figure 5a

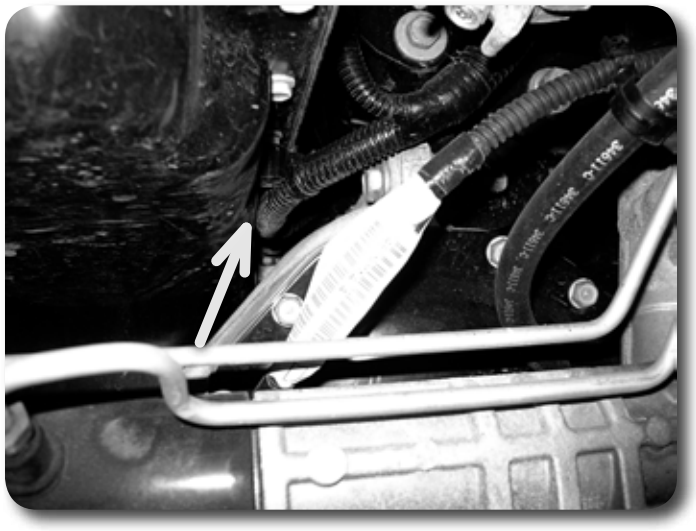

Figure 5b

16. Support the front differential with an appropriate hydraulic jack (transmission jack is highly recommended or have an assistant help). Remove differential hardware and remove differential from vehicle.

17. Cut 1: Measure ‘in’ 9/16” from the hole as shown in the figure (front and rear). Create a cut line that goes all the way around the crossmember. Remove this section from the vehicle. **Fig 6a, 6b**

Figure 6a

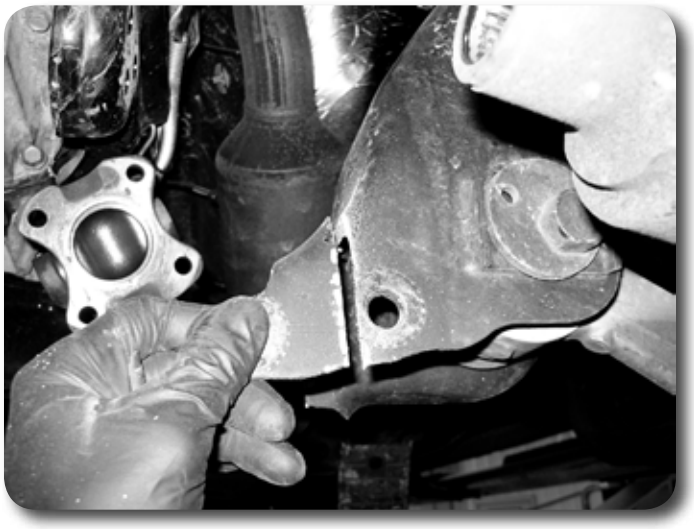

Figure 6b

18. Cut 2: Measure in 1-1/2” from the cam slot edge as shown and up ¾” from the factory hole. Remove this section all the way to the back face to create enough differential clearance. **Fig 7**

Figure 7

19. Place crossmember drop bracket against the frame as shown. Mark center of hole, and drill to ½”, repeat on backside. **Fig 8**

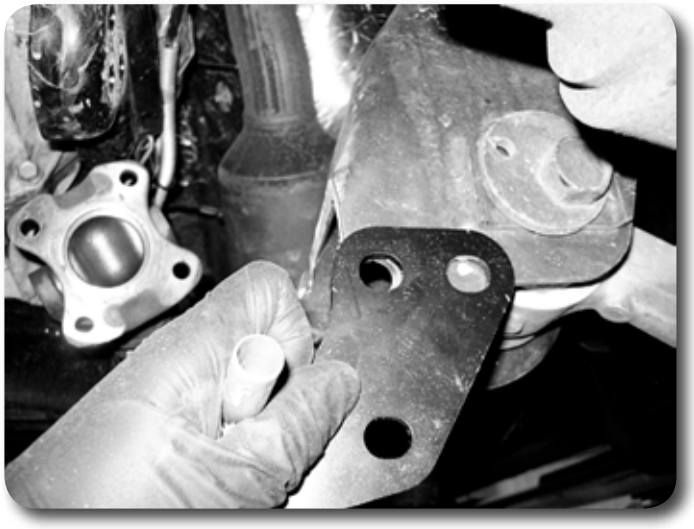

Figure 8

» *Differential Drop Bracket Installation:*

20. Install differential drop brackets on the passenger's side There are small recesses cut in the bracket. These go at the top factory mount. Attach with 12mm x 30mm hardware with 1/2" USS washers, leave slightly loose at this time. **Fig 9a, 9b**

Step 20 Note

12mm hardware is in bolt pack #942. All differential drop hardware is in this pack, 06-07 model year trucks will require the use of factory hardware where non-threaded factory holes are present.

Figure 9a

Figure 9b

21. Install driver's side front differential drop bracket. Attach with 12mm x 30mm hardware with 1/2" USS washers, to the frame leave slightly loose. **Fig 10**

Figure 10

22. Attach the driver's side rear bracket with spacer sleeves and factory hardware into factory threaded nuts. Do not tighten at this time. **Fig 11a, 11b**

Figure 11a

Figure 11b

Fig 11b Note

Machined carriag bolt location shown

23. Install differential into drop brackets. Attach as follows:

24. Driver Front 12mm x 60mm Pass 12mm x 70mm Driver rear ½" modified carriage bolt with non-locking yellow zinc nut at rear most upper, 12mm x 60mm at other 2 places.

25. Tighten all differential hardware to 65 ft-lbs.

26. Reinstall front driveshaft with factory hardware with loc-tite on threads. Tighten to 65 ft-lbs.

» *Strut Modification:*

Strut Modification Note:

Do not install this preload spacer with 2009 and newer TRX model year trucks

27. Mark the strut assembly for correct orientation. Fig 12, Fig 13

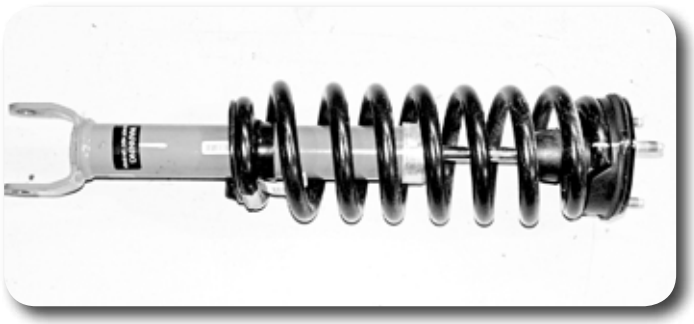

Figure 12

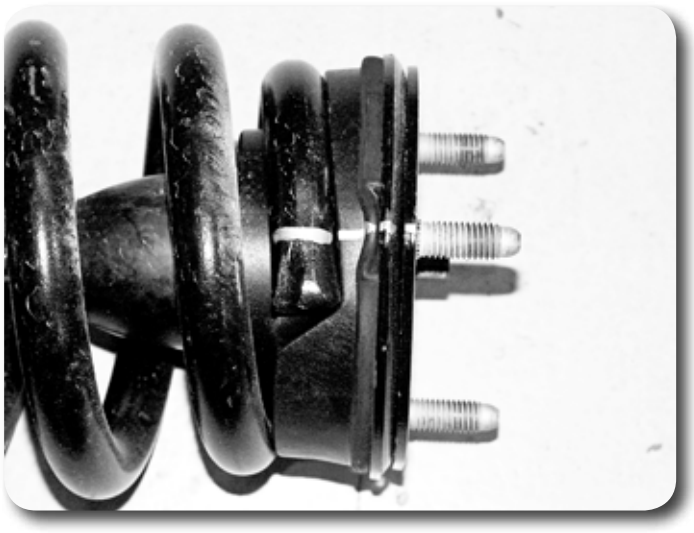

Figure 13

28. Using an appropriate strut compressor, compress the coil spring and remove the upper strut nut Fig 14.

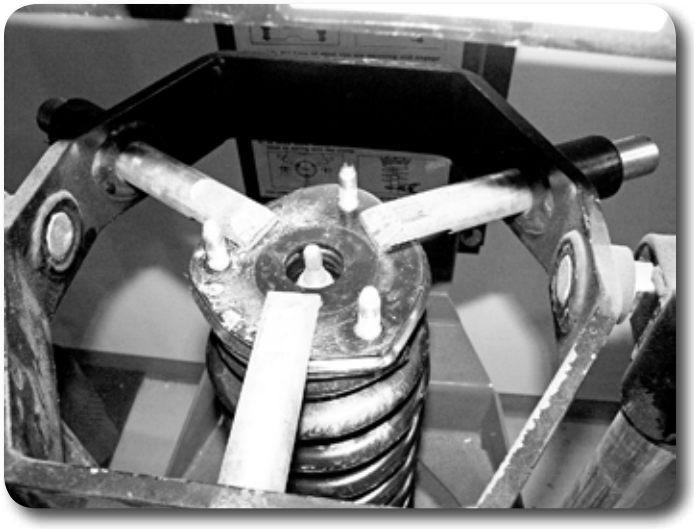

Figure 14

29. Remove the strut, strut cap and upper coil seat from the coil spring.

30. Remove the rubber isolator from the strut cap. Fig 15

Figure 15

31. Install the preload spacer and reassemble the strut with factory nut. Make sure the alignment marks are still in the correct orientation. Fig 16

Figure 16

Step 32 Note

Strut spacer hardware is in bolt pack #943

32. Install the new top spacer with factory nuts onto the strut assembly. Tighten to 40 ft-lbs.
33. Attach the strut assembly to the frame with new 3/8" nuts with washers. Leave hardware slightly loose.
34. Swing the lower control arm up and attach the CV shaft to the differential. Seat the CV's onto the differential shaft.
35. Attach the lower control arm to the strut with factory hardware, do not tighten at this time.
36. Install new upper control arms with factory hardware. The arms will offset the ball joint to the rear of the vehicle. Leave loose at this time.
37. Attach steering knuckle to new upper control arm with new crown nut and cotter pin. Tighten to 65 ft-lbs, do not loosen to get cotter pin to align.
38. Install o-ring, aluminum cap, and circlip into control arms. Thread grease zerk into aluminum cap. Grease the assembly. **Fig 17**

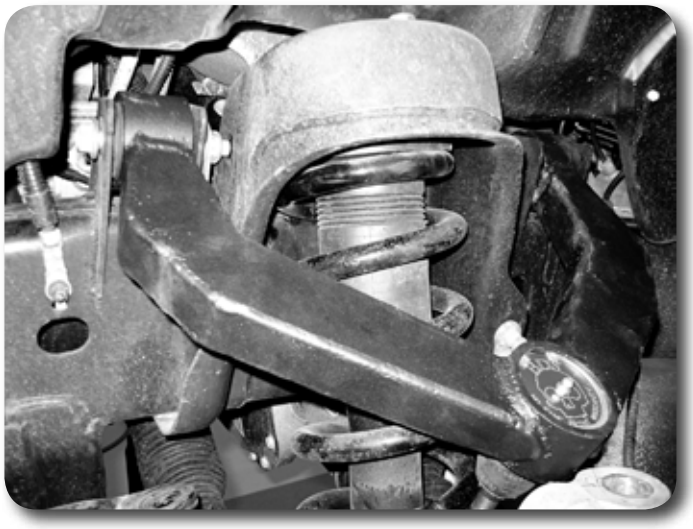

Figure 17

39. Reinstall brake rotors and calipers with factory hardware. Tighten to 130 ft-lbs
40. Attach tie rod to steering knuckle, tighten to 45 ft-lbs then an additional 90 degrees
41. Reconnect the ABS wire, secure with included zip ties.
42. Tighten upper strut hardware to 40 ft-lbs.
43. Install spacer sleeve on sway bar link, reassemble with factory bushings, cup washers, and nut. Use loc-tite on the nut. Do NOT over tighten the nut, tighten until the bushings begin to swell. It may be necessary to compress the suspension slightly to get the bushings at an appropriate angle to allow for assembly. The nylock portion should be just engaged into the threads. **Fig 18a, 18b**

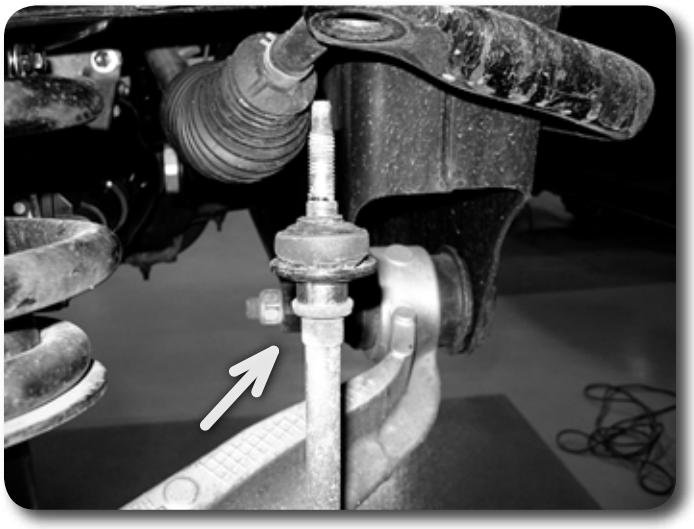

Figure 18a

Figure 18b

44. Install rear crossmember drop down brackets with 7/16” hardware to the front side of the vehicle. Reinstall crossmember with factory hardware. Tighten to 45 ft-lbs

Fig 19a pass side, 19b driver’s side, both shown from the back of the vehicle

Figure 19a

Figure 19b

45. Reinstall wheels, tighten to factory specifications
46. Lower vehicle to the ground. Tighten lower strut hardware to:155 ft-lbs Upper control arm hardware to: 130 ft-lbs
47. Recheck all hardware for proper torque, check again after 500 miles and at regularly scheduled maintenance intervals.
48. A front end alignment must be performed.

D2301 Installation Instructions
2006-2014 Dodge Ram 1500 4WD
Replacement Upper Control Arm

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

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Always wear your seat belt.

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» 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.

Difficulty Level

easy 1 (2) 3 4 5 difficult

Estimated installation: 1 hours

Special Tools Required

Ball Joint Separation Tool

Tire/Wheel Fitment

Stock

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

D2300 Kit Contents

Qty	*Part*
1	Drv Upper Control Arm
1	Pass Upper Control Arm
2	Straight grease fitting
2	Ball joint aluminum slugs
2	2-5/16" Circlip - yellow zinc
2	2-1/4"OD x 3/32 O-ring
4	Upper control arm factory style bushings
2	Upper Control arm ball joints

INSTALLATION INSTRUCTIONS

» *Disassembly*

1. The factory service manual specifically states that striking the knuckle to loosen the ball joints or tie rod ends is prohibited. Striking the aluminum knuckle can damage it. A special puller tool #8677 (or equivalent ball joint tool) is recommended to be used to separate these components from the knuckle.
2. Park vehicle on clean flat and level surface. Block rear wheels for safety.
3. Raise front of vehicle and support frame rails with jack stands. Remove the front wheels
4. Remove the upper ball joint nut and use appropriate puller to disconnect the ball joint from the steering knuckle. Do NOT strike the aluminum knuckle with a hammer! Disconnect hardware and remove upper control arm from vehicle. Do NOT allow the knuckle assembly to hang by the brake line / ABS wire
5. Install new control arm, the arms are side specific and will offset the ball joint to the rear of the vehicle. Attach with factory control arm bolts. Attach ball joint to steering knuckle with included castellated nut. (Fig 1)

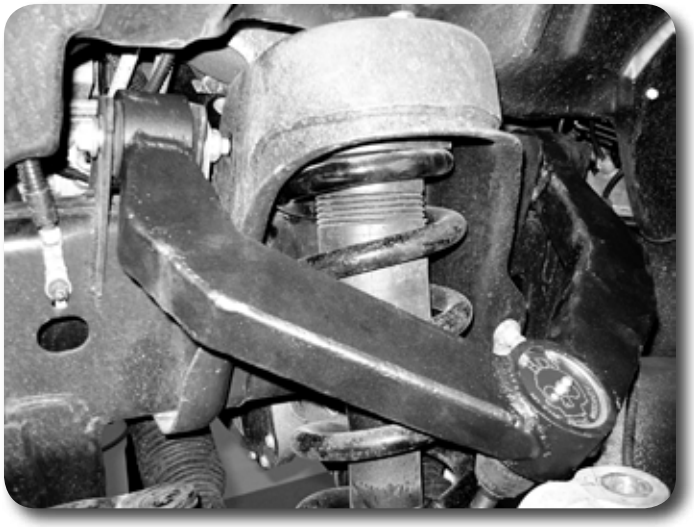

Figure 1

6. Tighten ball joint nut to 55 ft-lbs, align castellated nut with hole in the ball joint and install cotter pin. Do NOT loosen the nut to get the cotter pin to align.
7. Grease the upper control arm assembly once installed.
8. Reinstall wheels, tighten to factory specifications
9. Lower vehicle to the ground. Tighten Upper control arm hardware to: 130 ft-lbs. Do NOT tighten the upper control arms when the vehicle is hanging in the air, the bushings will bind and cause premature wear.
10. Recheck all hardware for proper torque, check again after 500 miles and at regularly scheduled maintenance intervals.
11. A front end alignment must be performed.

D9151 Installation Instructions
2006-2008 Dodge Ram 1500
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

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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.

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Difficulty Level

easy 1 (2) 3 4 5 difficult

Estimated installation: 2-3 hours

Special Tools Required

Reciprocating saw or equiv.

Tire/Wheel Fitment

33x12.50

» 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.

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

Kit Contents

Qty	Part
14	1-1/2" x 3" OD Lift Block
4	Bed Spacer
4	Christmas tree fastener
4	3/4" x 2-3/16" Sleeve
1	Front Bumper Bracket - Drv
1	Front Bumper Bracket - Pass
2	Rear Outside Bumper Bracket
2	Rear Inside Bumper Bracket
1	Rear Center Bumper Bracket
1	Rear Bumper Step Spacer
1	Spare Tire Relocation Bracket
1	Spare Tire Crank Relocation Bracket
1	Bolt Pack 279
6	12mm x 70mm bolt
6	12mm flat washer
8	12mm x 150mm Bolt
	21/4" external tooth serrated edge washer
	1/4"-20 nylock nut - clear zinc

Qty	Part
1	Bolt Pack 281
14	3/8 x 1-1/4" Bolt
14	3/8" Prevailing Torque Nut
28	5/16" USS Flat Washer
2	1/2"-13 x 1-1/4" flat head allen bolt
2	1/2"-13 serrated edge flanged nut
3	5/16" x 1-1/4" Bolt
6	5/16 SAE Flat Washer
3	5/16" Prevailing Torque Nut
1	5/8" x 1-1/2" Bolt
2	5/8" SAE Flat Washer
1	5/8" Nylock Nut
6	7/16" x 3-1/2" Bolt
12	7/16" SAE Flat Washer
6	7/16" Prevailing Torque Nut

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 Dissassembly

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. Figure 1

Figure1

6. Disconnect the ground cable from the driver's side frame rail, just in front of the upper control arm Figure 2. Save bolt.

Figure 2

7. Disconnect the driver's side ABS line at the connector attached to the inner fender.

8. 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 3.

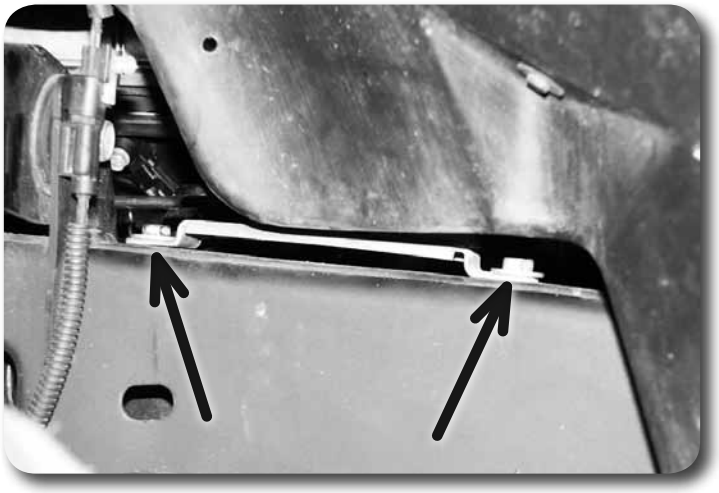

Figure 3

» Cab Lift Procedure

9. Loosen but do not remove the driver side cab mount bolts.
10. 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.
11. Using a hydraulic jack and block of wood to spread the load, slowly lift the passenger's side of the cab. Continuously watch for lines, hoses, etc to be sure nothing is 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.
12. Install 12mm x 150mm bolts with the factory oversized washers that were removed from the original bolts up through the cab mounts. Leave hardware loose.
13. Repeat the lift procedure on the driver's side. Pay close attention to the brake line junction block.
14. 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.
15. Reattach the ABS line to the driver's side inner fender and ground strap to the frame.
16. Reattach the brake line juntion block removed in step 8. It will be necessary to slightly reform the lines to line the holes back up.

Step 12 Note

All new body mount hardware is located in hardware pack XX.

» Front Bumper Installation

17. 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. For reference, this cut line should be located just behind a bulge in the frame rail.
18. 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

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.

surfaces Figure 4. These lines will aid in positioning the new provided bumper brackets.

Figure 4

19. Double check the line dimension at several different spots to ensure they are at the appropriate location.

20. 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.

21. 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 of the bulge remains, grind it down flush with the rest of the frame rail. Paint any bare metal. Figure 5

Figure 5

22. 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 goes toward the inside of the vehicle. Align the top edge of the side plates on the new bracket with the top of the frame rail to determine the vertical position.

23. 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.

24. 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 ½" holes at each mark **Figure 6**.

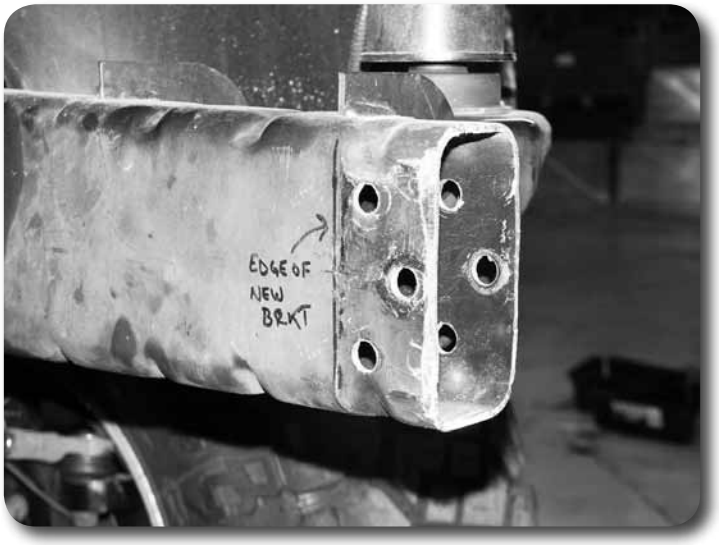

Figure 6

Step 25-26 Note

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

25. 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. **Figure 7**

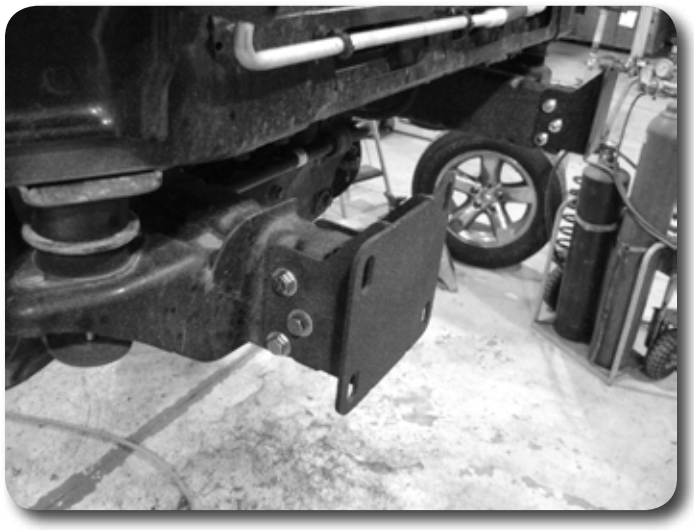

Figure 7

26. 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 ½" x 4" bolt, nut and ½" SAE washers. Leave hardware loose **Figure 8**.

Figure 8

27. Install the front bumper on the new brackets and fasten with the factory nuts. Leave hardware loose.

28. 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.

29. Reconnect the front fog lights.

» Rear Bumper Removal

30. Disconnect the license plate lights and trailer harness (if equipped) from the rear bumper Figure 9.

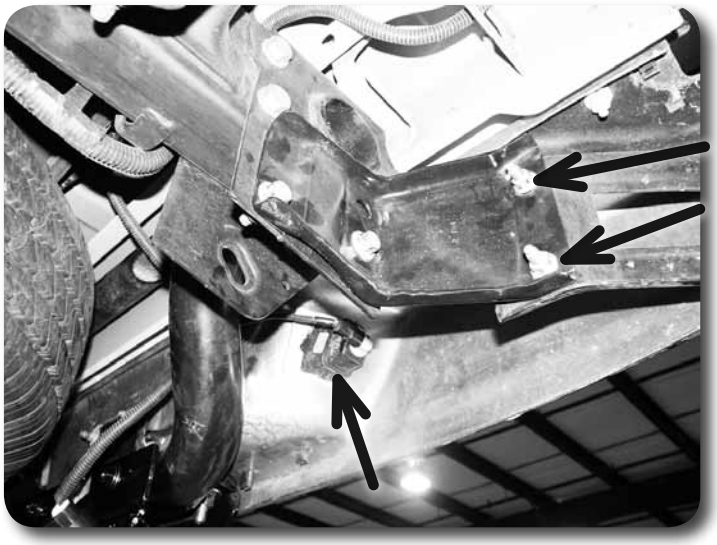

Figure 9

31. Remove the license plate from the rear bumper and remove the two middle bumper bolts. Save hardware.

32. Remove the two (one per side) bolts mounting the top lip of the bumper to the frame Figure 10. Save bolts.

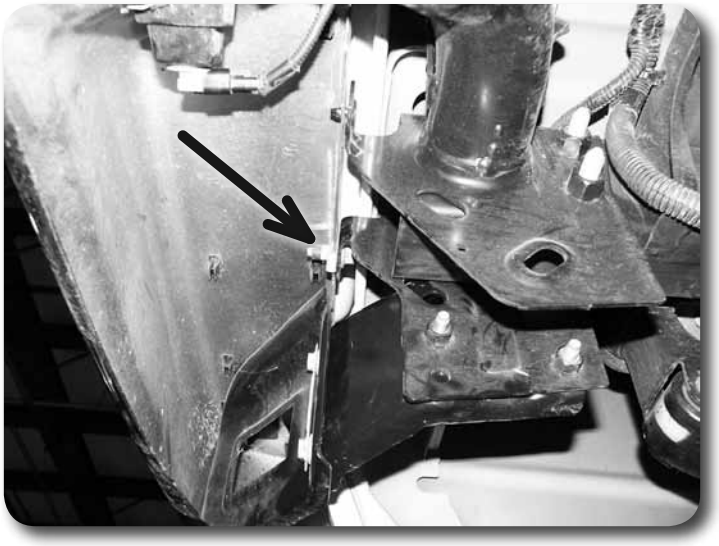

Figure 10

33. Remove the remaining two main bumper mounting bolts on on each side connecting the bumper bracket to bumper. Remove the bumper from the vehicle.

34. Locate the spare tire removal tool from under the passenger side seat and lower the spare tire and remove. See owner's manual.

» Bed Lift Procedure

Step 36 Note

All bed mount hardware is located in hardware pack xx

35. Loosen the 3 drivers side bed mounting bolts.

36. Remove the passenger side bed mounting bolts. Lift the passenger side of the bed just high enough to insert the body lift blocks. Install 12mm x 70mm bolts and 7/16” USS washers. Leave hardware loose.

37. Repeat the bed lift procedure on the driver side. With both sides lifted, remove the rubber pads from the frame where the bed rails rested. Place the provided 1.5" tall steel overload spacers where the pads were located and install bed spacers with the supplied christmas tree fasteners through the hole in the frame.
Figure 11

Figure 11

38. Adjust the bed using the dimensions taken earlier. Remove one bolt at a time and apply Loctite to the threads. Torque all hardware to 65 ft-lbs.

Spare Tire Winch Relocation

39. Remove the hitch pin retaining the spare tire winch crank tube to the winch and remove the crank tube from the vehicle. Remove the plastic grommet from the frame rail. Figure 12

Figure 12

40. Snap the OE crank grommet it in to the new relocation bracket. Figure 13 Install the bracket to the frame with the 5/8" x 1-1/2" bolt nut and washers into the existing hole in the crossmember. Leave loose.

Figure 13

41. Remove the 3 bolts that hold the spare tire winch to the frame. Locate the provided spare tire winch relocation bracket. Install the relocation bracket to the frame with the original hardware so the winch crank will now point towards the passenger wheel well. Loosely attach the winch to the bracket with the 5/16" x 1-1/4" bolts nuts and washers. Figure 14

Note

Spare tire winch hardware is located in bolt pack xx.

Figure 14

42. Slide the crank tube through the grommet and into the winch. Reattach it with the original hitch pin. Tighten the 5/16" winch hardware to 17 ft-lbs and the 5/8" bolt to 60 ft-lbs.

» Rear Bumper Installation

43. The alignment pins at each bumper mount location will need to be removed. Using a cut off wheel, cut off the heads of the studs behind the mount Figure 15 and punch them out. Remove the factory U-nuts.

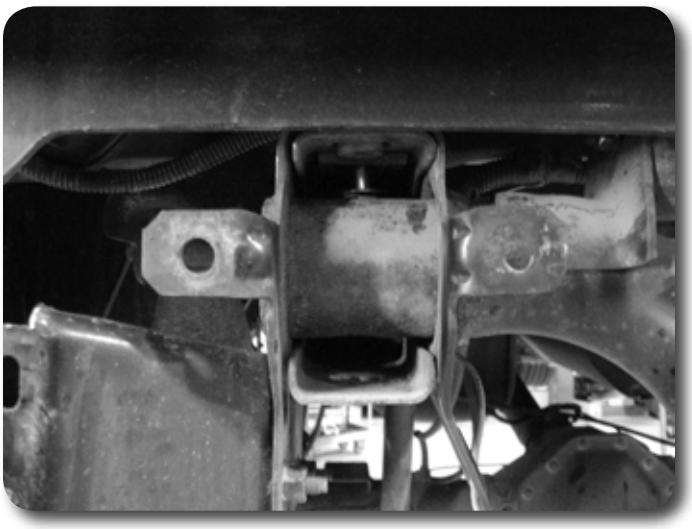

Figure 15

44. Locate the rectangular shaped bumper brackets with the formed ends. Using the lower holes and with the formed ends facing in, attach the supplied brackets to the frame using 3/8 x 1-1/4" bolts nuts and washers. Leave hardware loose.

45. Remove the factory U-Nuts from the center bracket and install them in the large holes of the center relocation bracket. Install the center relocation bracket using the 3/8" Flat head bolts, 5/16" USS washers, and flange nuts. Figure 16

Step 44 Note

It may be necessary to slightly clearance or drill out the stud hole to 7/16" if 3/8" hardware will not will not fit.

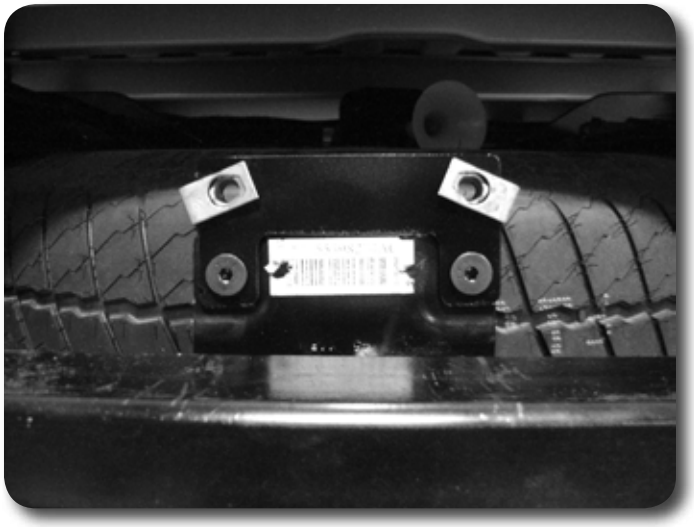

Figure 16

46. Install the provided bumper step spacer with the 3/8" x 1.25" bolts nuts and washers through the exising holes in the bumper mount. Use the larger OD washers on the frame side.

47. Measure in approx. 2-5/8" and remove the formed material as shown from the bottom of the brackets that are still attached to the bumper on both sides. This will allow clearance for the flat relocation brackets to be attached. **Figures 17 & 18**

Step 46 Note

Step spacer hardware is located in bolt pack xx.

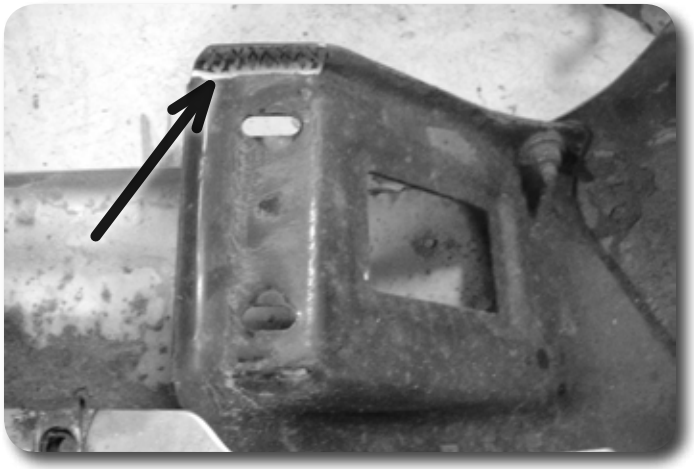

Figure 17

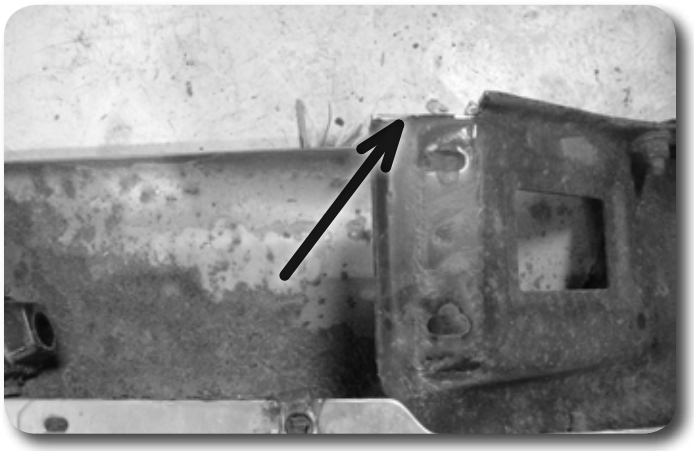

Figure 18

48. Using the new outside bumper relocation brackets as a template, mark the center of the holes to be drilled on the factory bumper brackets. Drill 1/2" holes at the marks on both bumper brackets. Figure 19

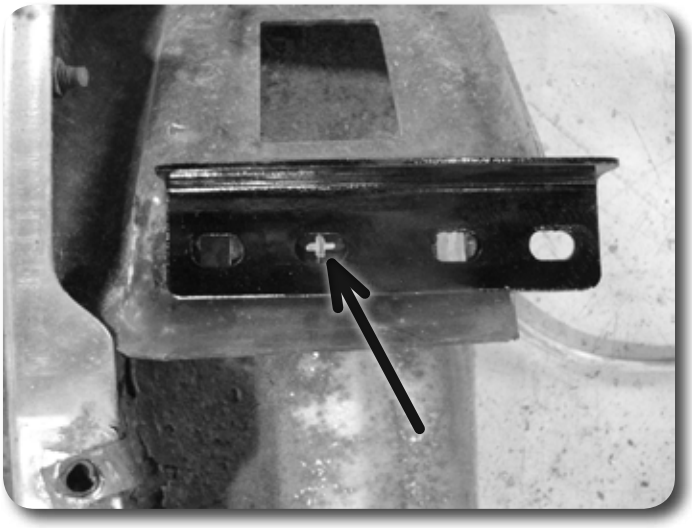

Figure 19

49. Similar holes will need to be drilled on the bumper brackets still on the frame. Either measure up 1.5" from the center of the slot and mark or use the new brackets as a template. Drill 1/2" holes at the marks. Figure 20

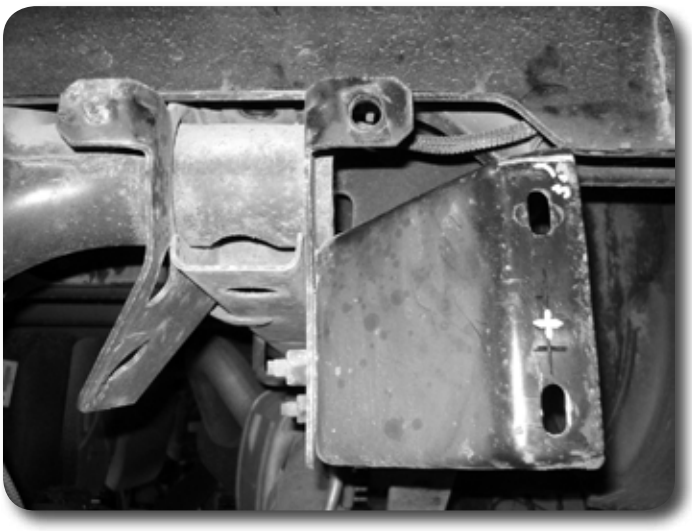

Figure 20

50. Install the outside brackets to the bumper with the top bolts only. The rest of the bolts will have to be installed with the bumper on the vehicle as the bracket is sandwiched between the factory bumper brackets. Figure 21

Step 50 Note

All rear bumper bracket hardware is located in bolt pack xx.

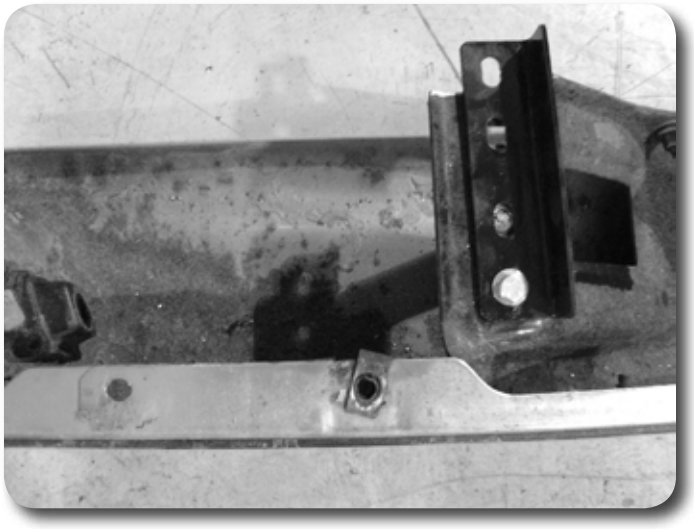

Figure 21

51. Install the bumper back on the vehicle by letting it rest on the new step spacer. Loosely fasten the center bracket with the factory hardware.

52. Install the remaining 3/8" x 1-1/4" hardware in the remaining bumper bracket mount locations. 2 at each inside bracket and 3 on each outside bracket. Figure 22

Figure 22

53. Reconnect the trailer and license plate light harnesses and re-install the license plate.

54. Re-install spare tire.

55. Check all hardware for proper torque.

56. Check hardware after 500 miles.

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.