

1-1/2 Body Lift Installation Instructions 2014 - 2016 Dodge Ram 2500 2013 - 2016 Dodge Ram 3500 D9152

# 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

## >>> 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-zone@sporttruckusainc.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.

easy 1 2 3 4 5 difficult

Estimated installation: 6 - 8 hours

Special Tools Required

sawzall / cutoff tools

Tire/Wheel Fitment

n/a

nev010716

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

#### **D9152 Kit Contents**

#### Qty Part

- 3 Crush tube short
- 1 Crush tube long
- 1 1.5" Radiator crossmember
- 1 DRV Frt 1.5" bumper bracket
- 1 Pass Frt 1.5" bumper bracket
- 14 3" OD x 1.5" Tall body lift blocks
- 1 Bumper spacer tube
- 1 Bolt Pack main body hardware

- 1 Bolt Pack misc hardware
- 4 1.5" Radiator drop bracket
- 1 Pass Side Strap
- 2 1/4" thick spacer
- 2 Radiator crossmember mounting brackets
- 4 Spacer Sleeves Radiator x-member
- 1 Bolt Pack rear bumper bracket
- 1 Bumper center bracket
- 2 Outer bumper bracket
- 3 Spare tire tube spacer sleeve

- 1. Park vehicle on clean, flat, and level surface. Block the rear wheels for safety.
- 2. Disconnect the negative lead on battery(s).
- 3. Disconnect the AC condenser lines from the passenger's side of the frame rail Figure 1. Note, this will need to be disconnected to gain access to the oil filter each time an oil change is performed.



Figure 1

4. Disconnect the coolant line near the firewall on the passenger's side from the retaining clip. Figure 2



Figure 2

5. Remove the upper radiator cover. Figure 3

# **Preinstallation Notes**

This is a body lift on a Diesel truck. While the instructions are thorough, a skilled competent mechanic is highly recommended to perform this installation.

## **Truck Fitment**

Kit is designed to work on Diesel crew cab trucks with short bed. Long bed trucks may require additional hardware. Megacab trucks require (2 extra) 12 x 140mm bolts - not included.



Figure 3

6. Remove the grill. Figure 4



Figure 4

7. Remove the front bumper. The bolt tabs must be cut, due to lack of clearance to the intercooler. Figures 5a, 5b





Figure 5b

8. Remove the rubber air guards Figure 6



Figure 6

9. Remove the active air intake tube. Figure 7



Figure 7

10. Disconnect the cooler on top of the radiator crossmember by removing the hardware shown. Figure 8



Figure 8

11. Disconnect the hardware that attaches the radiator and transmission cooler to the upper radiator crossmember Figures 9a, 9b, 9c.



Figure 9a



Figure 9b



Figure 9c

12. Remove the radiator crossmember by cutting it out with a sawzall. Use caution around the radiator, transmission, AC, & intercooler lines. The extra tab must be trimmed off each side. Figures 10a, 10b



Figure 10a

# Figure 10a Note

Cut the plastic and the metal radiator crossmember on BOTH sides of the truck to allow crossmember to be removed.

# Figure 10b Note

Shown is the radiator crossmember after removal from the vehicle. The cut line is visible after it is removed. It must be cut to be removed. This crossmember will not be reinstalled, a new one is provided in the kit. Do not weld back together (for instruction purposes only)



Figure 10b

13. The core support around the radiator hose will need to be clearanced if the truck has two radiators. It is possible to do this while the hose is in place, use extra care not to damage the radiator hose. Figures 11a, 11b, 11c



Figure 11a



Figure 11b

## Step #13 Note

This step is only required for trucks that have the extra forward radiator. It may not be require for all trucks.



Figure 11c

- 14. Remove the cab and front core support hardware from one side of the truck; loosen the hardware on the opposite side.
- 15. Slowly raise the side of the cab with two hydraulic jacks on the side with the hardware removed. Check hoses and wires while lifting the cab for adequate slack. Install the body lift blocks with new 12mm hardware once lifted enough to get the blocks in place. Figure 12





- 16. Repeat block installation on opposite side.
- 17. Attach new upper relocation straps to the upper radiator core support with carriage bolts and the stock upper hardware. Leave loose to allow the radiator to move around. Figure 13

## **Body Hardware Note**

All body and bed hardware is in bolt pack # 286. Mega cab models will require (2) extra 12 x 140mm bolts, not included with kit.

Body lift block shown - similar throughout the rest of the installation.

# **Front Hardware Note**

All front hardware is in bolt pack # 287.



Figure 13

 Install the new front lower radiator crossmember. Install the side support plates, the plates will be on the front side of the new crossmember. There are spacer tubes that go in the outer two mounting locations. Attach with 7/16" hardware. Figures 14a, 14b, 14c, 14d



Figure 14a





Figure 14c



Figure 14d

19. Attach the cooler to the top of the new radiator with new ¼" hardware with fender washers on the bushing side. Figures 15a, 15b



Figure 15a



Figure 15b

20. Attach the AC condenser to the new lower crossmember. Slide the plastic parts through the opening in the crossmember, and then slide the rubber retainers over the end to lock it in place. Figures 16a, 16b



Figure 16a



Figure 16b

21. Attach the active ram plastic piece to the core support with 1-1/2" relocation bracket. Drill <sup>1</sup>/<sub>4</sub>" hole in core support and attach bottom portion to core support with zip tie. Figures 17a, 17b



Figure 17a



Figure 17b

22. Tighten factory hardware that is holding relocation brackets for radiator and transmission cooler to 20 ft-lbs, tighten carriage bolt hardware to 20 ft-lbs.

#### **FRONT BUMPER INSTALLATION:**

- 23. Remove the factory brackets from the bumper. Disconnect factory brackets from the bumper. Disconnect factory tow hooks.
- 24. Transfer tow hooks with factory hardware to new brackets, tighten to 55 ft-lbs. Attach new brackets with factory hardware to the bumper. Use spacer washers (1 per bracket) to allow the bumper to sit flush to the bracket. Figures 18a, 18b, 18c Snug, but do NOT tighten at this time.



Figure 18a



Figure 18b



Figure 18c

- 25. Reinstall bumper onto the truck with new hardware.
- 26. Adjust bumper to have correct gaps, tighten all bumper hardware to 50 ft-lbs.
- 27. Attach transmission cooler extension to frame rail on passenger's side with factory hardware and <sup>1</sup>/<sub>4</sub>"nylock nut with washer. Figure 19



Figure 19

28. Gain adequate slack for the battery cables on the passenger's side, it may be necessary to adjust clamps on battery terminals Figures 20 – top view (pass side).

## **Bumper Bracket Note**

Fig 18b - 1/4" spacer goes between bumper and new relocation bracket.



Figure 20

#### $\gg$ **R**EAR INSTALLATION:

- 29. Lower the spare tire. Remove from the vehicle
- 30. Remove the license plate, access the two nuts behind the license plate, remove hardware.
- 31. Disconnect all of the wire harnesses that connect to the rear bumper. Figure 21





32. Remove the outer hardware, remove the rear bumper. Remove the stock bumper plate (10mm hex head bolt)

#### **Bed LIFT INSTRUCTIONS:**

- 33. Remove the 6 bolts that attach the bed to the frame.
- 34. Raise the bed and install the 1.5" thick blocks at the original bed mount locations. Loosely attach with 12mm hardware.
- 35. Attach the rectangular tubes to the bed with 3/8" bolts, large diameter fender washers, and flanged nuts for the 3 shorter blocks. The one long block will get a #12 self drilling screw. The pictures are labeled with the blocks location. Run hardware from Top Down, fender washer inside the bed rails. Figures 22a, 22b, 22c, 22d & 22e



Figure 22a (Driver Front)



Figure 22b (Driver Rear)



Figure 22c (Pass Front - View From Wheel Well)

## **Rear Hardware Note**

All bed 12mm hardware is in bolt pack # 286. All the rest of the rear hardware is in bolt pack # 290.



Figure 22d (Pass Front - Inside Frame Rail View)



Figure 22e (Pass Rear)

36. Adjust bed gaps to be even with the cab. Tighten bed hardware to 55 ft-lbs, tighten crush block 3/8" hardware to 35 ft-lbs. Secure the #12 self threading block for the long crush block.

#### » Spare Tire Winch Modification:

37. Disconnect the crank from the winch by removing the lynch pin. Remove the tube from vehicle. Figure 23



Figure 23

- 38. Remove the 3 bolts that attach the spare tire crank to the frame.
- 39. Install the (3) 1.5" spacers below the spare tire crank. Attach with new 8mm hardware. Tighten to 30 ft-lbs. Figure 24



Figure 24

40. Reinstall the crank tube with lynch pin to the spare tire crank. Attach wire clamp above the factory crossmember to retain the crank tube with 1/4" hardware. Tighten to 20 ft-lbs. Figure 25



Figure 25

## **Rear Bumper Modification:**

41. Remove the 2 studs from the license plate area. These studs are electrically resistance welded. There are two options: Cut the head off the stud and grind the area flush, hit the stud with a hammer to remove it, or use a large ball joint press to pop the studs out. Figures 26a, 26b



Figure 26a



Figure 26b

42. Attach the new bumper bracket with 3/8" flat head bolt and serrated edge flanged nuts. Figure 27



Figure 27

43. Remove the area shown from the factory bumper brackets to create clearance for the head of the stock bolt in the relocated position. Figure 28



Figure 28

44. Bolt the new relocated bumper brackets with stock hardware to the inner mounts. Align the slot with factory slot. Figure 29



Figure 29

45. Drill / clearance the stock bumper hole / slot to clear 3/8" hardware. Figures 30a, 30b



Figure 30a



Figure 30b

46. Attach the lower bumper step bracket to the factory receiver with 3/8" hardware, fender washer, and flanged nut. Ensure bracket is square and centered. Tighten hardware to 35 ft-lbs. Figure 31



Figure 31

- 47. Reinstall the bumper with factory outer hardware. Use new 10mm hardware at the outer location that was enlarged earlier. Attach to center bracket with 3/8" flanged nuts with washers. Adjust bumper so that gaps are even. Tighten hardware to 35 ft-lbs.
- 48. Reconnect the trailer and license plate light harnesses and re-install the license plate.
- 49. Re-install spare tire.
- 50. Check all hardware for proper torque.

# 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. Longer replacement hoses, if needed can be purchased from a local parts supplier.

3. Perform head light check and adjustment.

4. Re-torque all fasteners after 100 miles. Always inspect fasteners and components during routine servicing.