



## D1301 Installation Instructions 2019-2020 Ram 2500 & 3500 3" Radius Arm Suspension 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

[www.zoneoffroad.com](http://www.zoneoffroad.com) may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to [tech-zone@ridefox.com](mailto:tech-zone@ridefox.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: 6 hours

#### Special Tools Required

Pitman Arm Puller

Cutoff Wheel

#### Tire/Wheel Fitment

35x12.50 w/ 4-1/2" Backspacing

37x12.50 w/ 5-1/2" Backspacing

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

### D1301 Kit Contents

**Qty Part**

2	Coil Spring (Diesel Only)
2	Bump Stop
1	3" Zone Track Bar Bracket
1/1	Brakeline Bracket (DRV/PASS)

1	Bolt Pack (#495)
2	1/4" USS Washer
2	5/16"-18 Nylock Nut
1	Bolt Pack (#494)
2	14mm-2.00 x 35mm Bolt
4	14mm Washer
2	14mm-2.00 Prevaling Torque Nut

Important—measure before starting!

Measure from the center of the wheel up to the bottom edge of the wheel opening

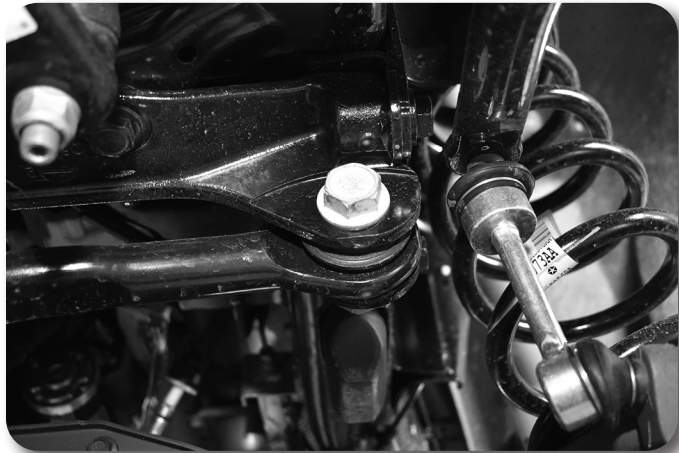
LF \_\_\_\_\_ RF \_\_\_\_\_

LR \_\_\_\_\_ RR \_\_\_\_\_

## INSTALLATION INSTRUCTIONS

1. Park vehicle on clean, flat, and level surface. Block the rear wheels for safety.
2. Disconnect the front trackbar bolt from the frame while the vehicle is still on the ground. Retain bolt and nut tab. (Fig 1)

**FIGURE 1**



3. Raise the front of the vehicle and support the frame rails with jackstands.
4. Remove the wheels.
5. Disconnect the factory sway bar links. (Fig 2)

**FIGURE 2**



6. Disconnect the brake line bracket from the top of the axle. Retain hardware (Fig 3)

**FIGURE 3**



7. Disconnect the brake line from the backside of the axle. Retain hardware (Fig 4)

**FIGURE 4**



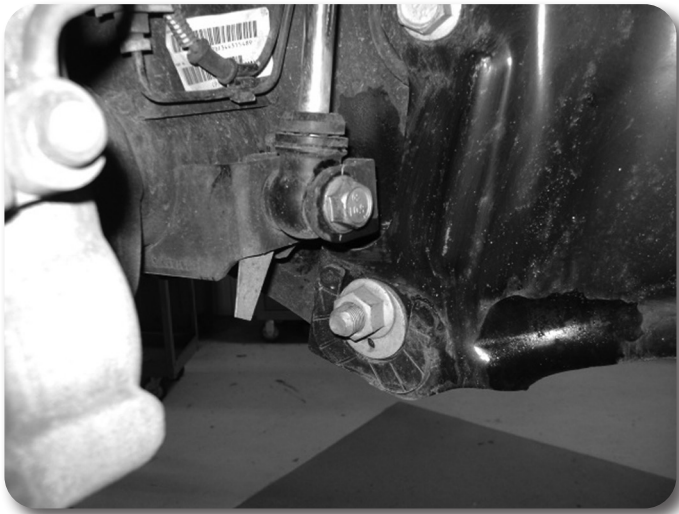
8. It is recommended to disconnect the drag link from the pitman arm at this time. This will prevent the joint from binding while installing new coils. Use care not to damage the drag link joint boot. (Fig 5)

**FIGURE 5**



9. Detach the ABS and Central Axle Disconnect wires from retaining clips to allow for extra slack when new coils will be installed.
10. Support the front axle with a hydraulic jack.
11. Disconnect the shock hardware at lower and upper mounts. Remove the shocks. (Fig 6)

**FIGURE 6**



12. Lower the axle and remove the factory coils. Use care not to overextend any brake line, ABS, or CAD wires.

### **Bump Stop Installation:**

13. Remove the factory bump stops. It is easiest to hit them from the side with a hammer to get them to pop out. (Fig 7)
14. Lightly grease and install new bump stops by compressing the axle and pressing the bump stops into position. (Fig 8)

**FIGURE 7A**



**FIGURE 8**



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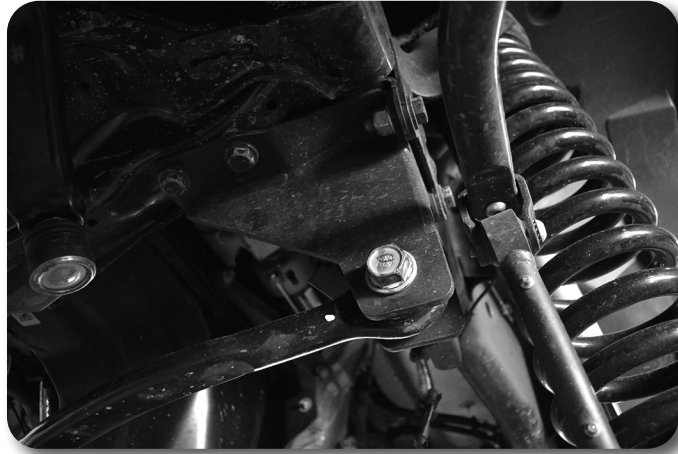
» **TRACK BAR BRACKET INSTALLATION**

15. Remove the factory track bar bracket, retain the vertical hardware that goes into the cross member.
16. Install the provided trackbar bracket with factory bolts through the original vertical trackbar bracket holes in the crossmember, do not tighten.
17. Bolt the new trackbar bracket to the Frame tab with the provided 14mm hardware, place the nut on the inside of the frame tab. Use OE hardware in the 3 remaining holes. Torque the OE bolts to 118 ft-lbs and provided 14mm hardware to 148.4 ft-lbs. (Fig 9)

**FIGURE 9**

**Step #17 Note:**

Track Bar Hardware in bolt pack #494



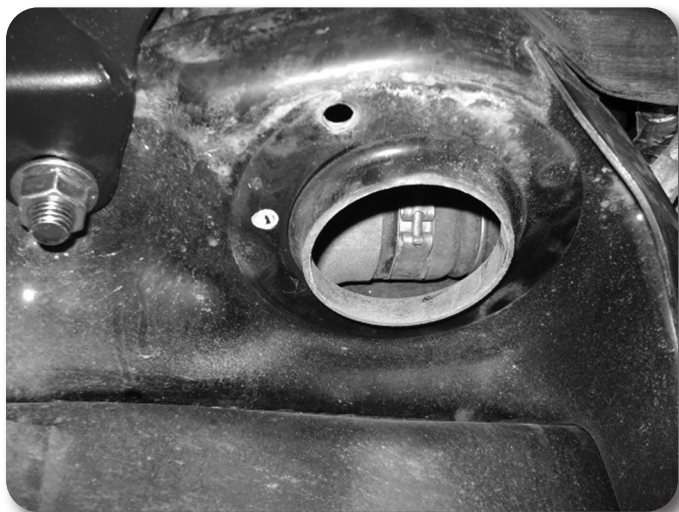
### **Coil / Shock Installation:**

18. Cut out the template at the end of the instruction sheet and place it on the PASSENGER'S side upper coil bucket at this time. Mark the center of the hole to be drilled, remove template, and drill hole to  $\frac{1}{2}$ ". This step is only required on the passenger's side, do not do this on the driver's side. (Fig 9a, 9b)

**FIGURE 10A**

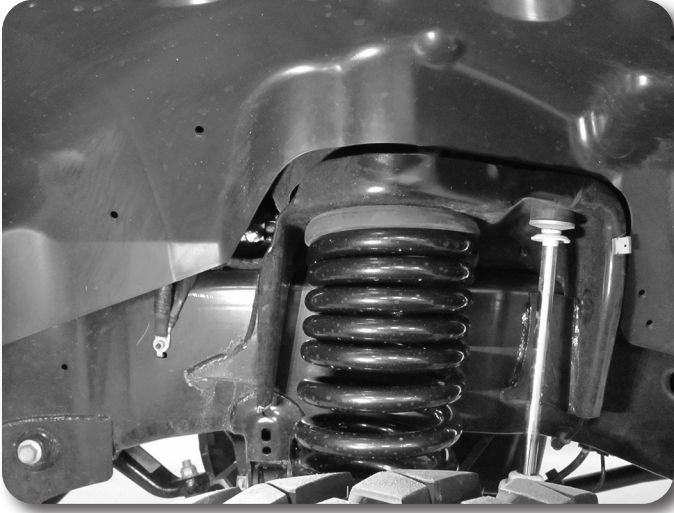


**FIGURE 10B**

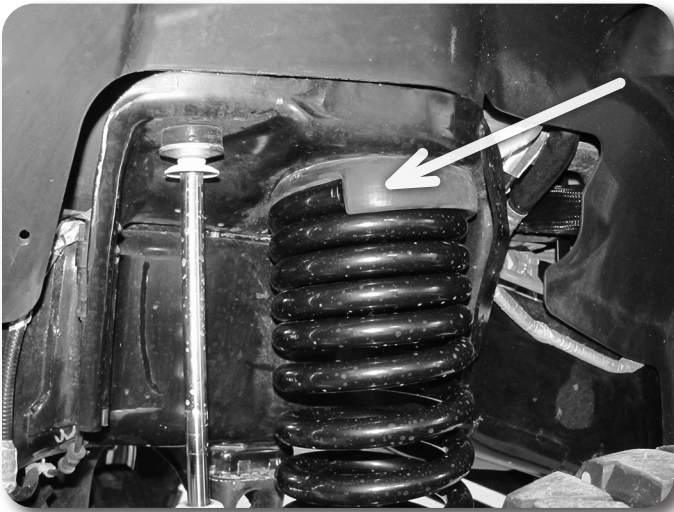


19. Install new coils with the factory isolator on top of the coil. The end of the spring with the windings closer together will go at the top, do not install upside down. Use hydraulic jack to raise the axle to seat the coils. Ensure that the coils are seated properly. Driver's side – Figure 10, Passenger's side Figure 11a, 11b.

**FIGURE 11 - DRIVER'S SIDE**



**FIGURE 12A PASSENGER'S SIDE**



20. Grease and install bushings into new shocks. Install new shocks on vehicle with factory lower hardware and new cup washers, bushings, and nut on the top. Tighten the upper nut until the bushings begin to swell, do not over tighten. Note: It is easiest to install the lower hardware first, compress the shock and allow it to expand up into the upper mounting position. Ensure that the upper mount is centered in the factory hole. Tighten lower mount to 89 ft-lbs.).



**Tip** Front shock numbers are Fox982244710 or 7342

21. Lower the axle and allow the axle to hang from the shocks.
22. Reattach the factory drag link to the pitman arm with factory nut. Tighten to 65 ft-lbs.

### **Brake Line Bracket:**

23. Unbolt the Brake lines from the frame. Retain hardware. Install the provided brake line relocation brackets onto the frame, driver and passenger side. Attach the brake line to the relocation bracket. Some manipulation of the hard line will be required. Ensure the tab on the factory line is located in the relocation

### **Step 23 Note:**

Brake Line Bracket Hardware in Bolt Pack #495

bracket. Tighten factory hardware to 15 ft-lbs, tighten provide hardware to 209 in-lbs. (Fig 13A, 13B)

### Step 23 Note

The bracket will only rotate the brake line about 45deg. On the passenger side the bracket will end up resting against the motor mount frame bracket.

**FIGURE 13A**



**FIGURE 13B**



### Step 24 Note

Use a small adjustable wrench or pliers to help bend the bracket slightly.

### 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.

24. Reattach the brake line to the the axle with factory bolts and locations, tighten to 15 ft-lbs.

25. Reconnect the factory sway bar links.

### **Rear Kit (2500 & 3500 see separate instruction sheet):**

26. Reinstall wheels, lower vehicle to the ground and torque lug nuts to specification.

27. Turn the steering wheel to get the trackbar sleeve to align with the hole in the bracket. Tighten to 74 ft-lbs plus 160deg.

28. Have an assistant turn the steering wheel to help align the trackbar into the frame mounting bracket. Attach with factory bolt and nut tab. Tighten the axle mount to 285 ft-lbs.

29. Straighten the steering wheel by adjusting the drag link adjuster. Do not drive the vehicle for extended periods of time with the steering wheel off center.

30. Recheck all hardware for proper torque, check again after 500 miles, and at regularly scheduled maintenance intervals.

31. An alignment is now recommended. Adjustment for better driving characteristics may be required.





