



D1202 Installation Instructions 2019-24 Dodge Ram 1500 4WD 2" 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

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 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.
8. Due to clearance to the upper ball joint, factory wheels / tires cannot be reinstalled.
9. **Rebel / Offroad Package Trucks install only 2 of the 3 provided preload spacer rings per each strut.**

Difficulty Level

easy 1 2 **3** 4 5 difficult

Estimated installation: 3-4 hours

Special Tools Required

Ball Joint Separation Tool

Strut Compressor

Tire/Wheel Fitment

Stock wheels cannot be reinstalled

295/65 R20 w/ 5" BS

33x12.50 w/ 4.5" BS

IMPORTANT

It is required that ride height measurements be taken before and after installation. Measure from the **WHEEL AXLE CENTER** up to the **FENDER LIP** of the wheel opening. Do this for all 4 wheels. Record measurements below.**

BEFORE:

LF _____ RF _____ LR _____ RR _____

AFTER:

LF _____ RF _____ LR _____ RR _____



****These ride heights will be required if you have any ride height concerns after installation. Please be prepared to provide these to Technical Support.**

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

D2301 Kit Contents

Qty	Part
1	Upper Control Arm - Driver
1	Upper Control Arm - Passenger

D1202 Strut Spacer

Qty	Part
2	Poly Strut Spacer
2	Bolt Head Retaining Preload Ring
4	Preload Ring
1	Strut Spacer Bolt Pack

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. Disconnect the sway bar links from the lower control arm. Leave the links attached to the sway bar Fig 1



Figure 1

5. 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.
6. Disconnect the tie rod end from the steering knuckle using appropriate puller. Again do NOT strike the aluminum knuckle with a hammer!
7. 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.
8. Disconnect the ABS wire connector at the inner fender well. Remove wire from retaining clips.

Kit Fitment notes:

1. Do not use this kit with Bilstein leveling struts, or with any other form of suspension lift.
2. Do not install spacer kit without upper control arms, the factory upper ball joint will be extended past operating range. Vehicle damage may occur.

9. Remove the lower strut bolt and nut. Fig 2

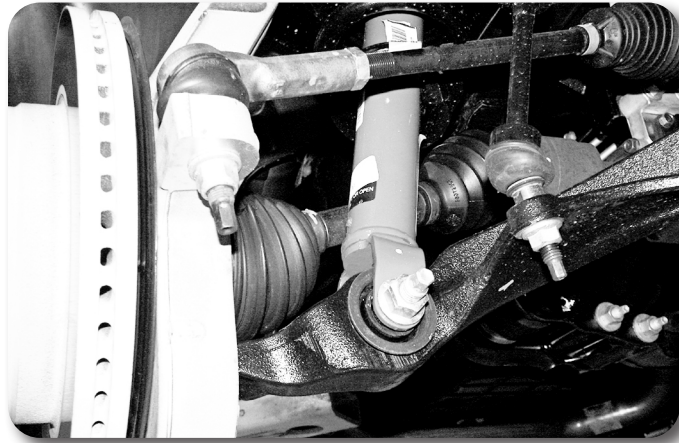
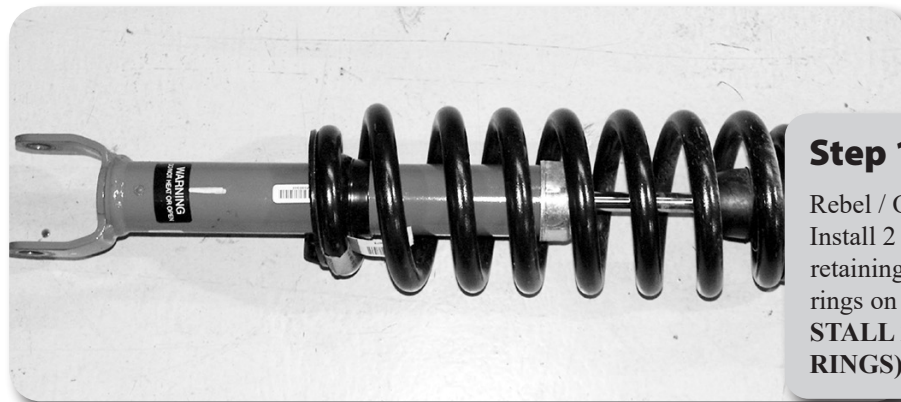


Figure 2

10. Remove upper strut nuts and remove strut assembly from vehicle.
11. Make alignment marks on the strut body, strut cap, and upper coil seat for ease of reassembly. Fig. 3A & B



Step 15 Notes:
Rebel / Offroad Package Trucks Only
Install 2 spacer rings, the bolt head retaining ring and (1) of the preload rings on each strut. **(DO NOT INSTALL 2 OF THE "PRELOAD" RINGS).**

Figure 3A



Figure 3B

12. Using an appropriate strut compressor, compress the coil spring and remove the upper strut nut. Remove the strut, strut cap and upper coil seat from the coil spring. Fig. 4

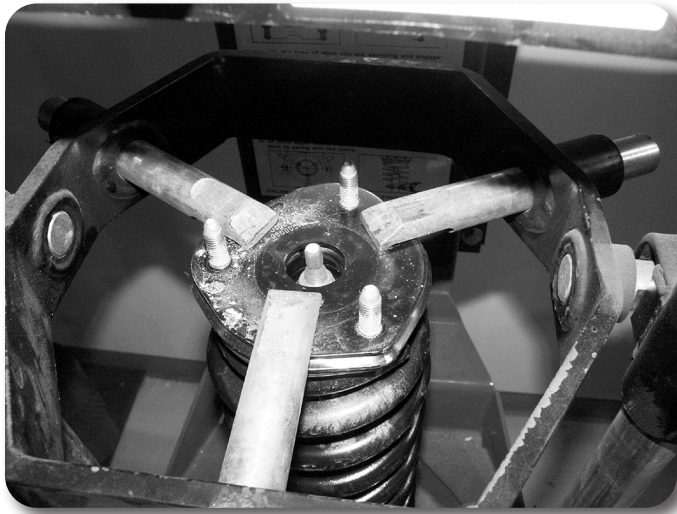


Figure 4

13. The factory studs in the strut cap will need to be removed. It is easiest to use a vice and a hammer to knock the studs out. The studs will not be reused.
14. **Standard Trucks:** Align the three preload spacers (1 Bolt head retaining preload ring and 2 preload rings) and three new 10mm bolts. Insert the three 10mm bolts through each of the preload spacers, rubber isolator, and into the strut cap. The bottom most preload spacer must be the bolt head retaining preload ring to prevent the bolt from spinning. The plastic coil seat will be below the preload spacers. Fig. 5A & B
15. **Rebel / Offroad Package Trucks:** Align the two preload spacers (1 Bolt head retaining preload ring and 1 preload rings) and three new 10mm bolts. Insert the three 10mm bolts through each of the preload spacers, rubber isolator, and into the strut cap. The bottom most preload spacer must be the bolt head retaining preload ring to prevent the bolt from spinning. The plastic coil seat will be below the preload spacers.

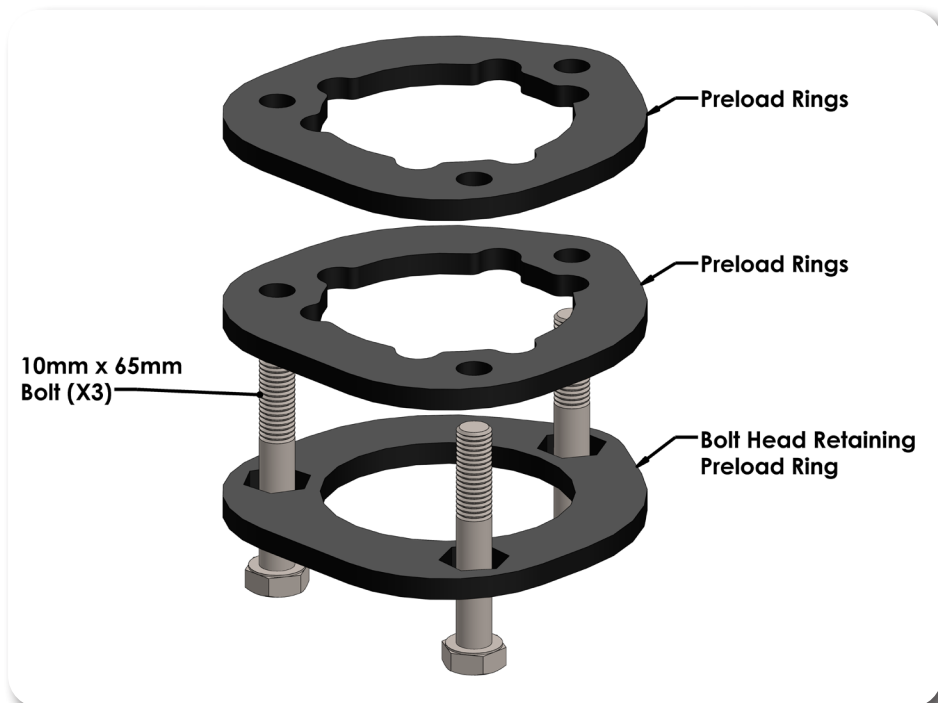


Figure 5A

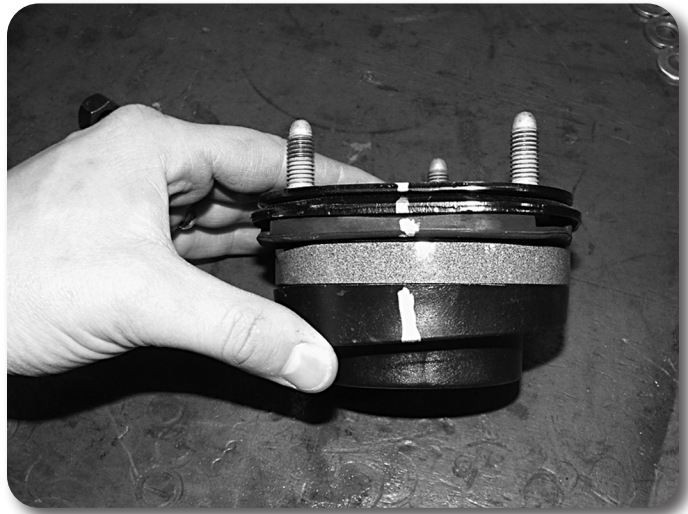


Figure 5A

16. Reassemble the strut as it was take apart aligning the index marks made earlier. Fasten the assembly with the OE strut nut. Torque nut to 52 ft-lbs.
17. Install the provided 3/4" thick poly top spacer. Install the strut assembly with the poly top spacer and preload spacers back into the truck. Fig. 6

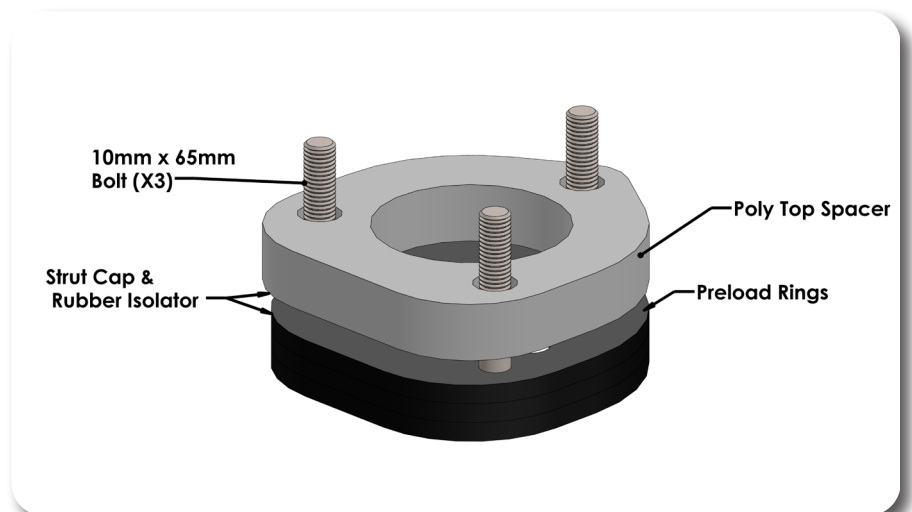


Figure 6

18. Attach the strut assembly to the frame with new 10mm nuts with washers. Leave hardware slightly loose.
19. Swing the lower control arm up. Attach the lower control arm to the strut with factory hardware, do not tighten at this time.
20. Remove the stock upper control arms, retain all hardware.
21. 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.
22. Attach steering knuckle to new upper control arm with new crown nut and cotter pin. Tighten to 26 ft-lbs +180 degrees, do not loosen to get cotter pin to align.
23. Grease the upper control arm assembly once installed. Fig. 7

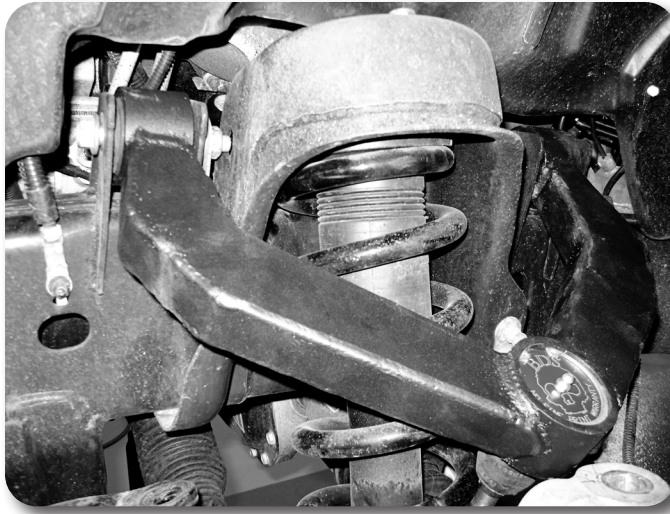


Figure 7

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. Reinstall brake rotors and calipers with factory hardware. Tighten to 59 ft-lbs plus an additional 55 degrees
25. Attach tie rod to steering knuckle, tighten to 45 ft-lbs then an additional 90 degrees
26. Reconnect the ABS wire if disconnected from the steering knuckle.
27. Tighten upper strut hardware to 40 ft-lbs.
28. Reattach the sway bar link to the lower control arm. Torque to 88 ft-lbs
29. Reinstall wheels, tighten to factory specifications
30. Lower vehicle to the ground. Tighten lower strut hardware to: 124 ft-lbs Upper control arm hardware to: 128 ft-lbs
31. Recheck all hardware for proper torque, check again after 500 miles and at regularly scheduled maintenance intervals.
32. Adjust headlights.
33. A front end alignment must be performed.

Component	Torque (FT-LBS)
<i>Stabilizer Bar Link Lower Nut</i>	88
<i>Upper Ball Joint Nut</i>	26 + 180 degrees
<i>Shock Absorber Upper Nut</i>	52
<i>Brake Caliper adapter bolts</i>	59 +55 degrees
<i>Upper Control Arm Bolts</i>	128
<i>Shock Absorber Lower Nut</i>	124