



C1171 Installation Instructions

2019 Chevy/GM 1500 2/4wd

AT4 / TrailBoss

1-3/4" Strut Spacer 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 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.

Difficulty Level

easy 1 (2) 3 4 5 difficult

Estimated installation: 1-2 hours

Special Tools Required

None

Tire/Wheel Fitment

Wheel / Tire:

295/70 R17 *Stock Wheel

295/65 R18 *Stock Wheel

295/60 R20 *Stock Wheel

295/55 R20x9 5" BS

33x12.50 R20x9 5-1/2" BS

* A wider tire cannot be used on stock wheels due to clearance to the steering knuckle.

C1171 Kit Contents

Qty	Part		
2	Top Strut Mount Spacer	2	Steering Stop
2	Thick Preload Spacer	1	845 Bolt Pack
2	Thin Preload Spacer		6 10mm-1.50 x 65mm Bolt
			6 3/8" USS Washer
			6 10mm-1.50 Prevailing 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 the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Raise the front of the vehicle and support the frame rails with jack stands.
3. Remove the front wheels.
4. Disconnect the front driver's and passenger's side sway bar links from the lower control arm (18 mm). Save hardware. **Figure 1**

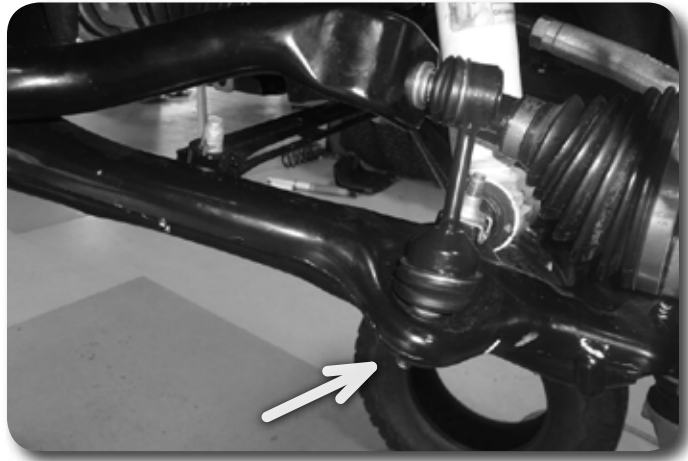


Figure 1

Perform the following installation steps on one side at a time.

5. Remove the wire retaining clips from the strut studs and loosen but do not remove the three upper strut mount nuts at the frame. **Figure 2** Do not loosen- the center strut rod nut.



Figure 2

Step 5 Note:

For the passenger side inner nut it may be easier to access the nut through the engine bay.

6. Remove the nut from the steering tie rod end. **Figure 3** Thread the nut back on a couple of turns by hand. Strike the knuckle near the tie rod end to dislodge the rod end taper from the knuckle. Remove the nut and the tie rod end from the knuckle. Save nut.



Figure 3

7. Unclip the ABS wire from the knuckle for additional slack. **Figure 4**

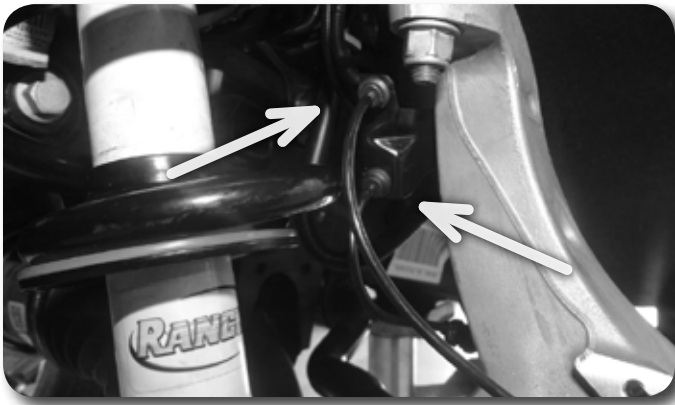


Figure 4

8. Support the lower control arm with a hydraulic jack and remove the nut from the upper ball joint. **Figure 5A** Thread the nut back on a couple of turns by hand. Strike the knuckle near the upper ball joint to dislodge the rod end taper from the knuckle. Remove the nut and allow the knuckle to swing rearward out of the way **Figure 5B**. Save the ball joint nut.

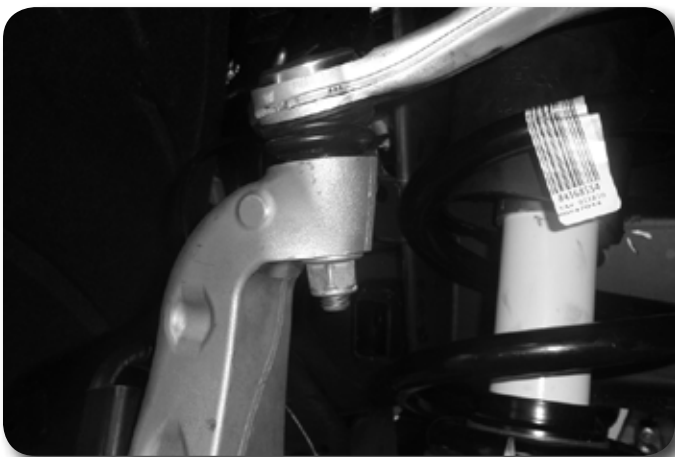


Figure 5A

Step 8 Note:
A strap can be used to hold the knuckle back in order to prevent the CV axle from pulling out of the inner joint.

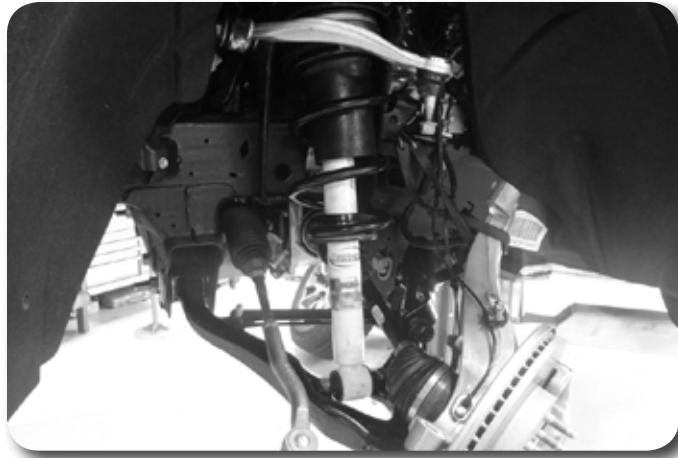


Figure 5B

9. Remove the two lower strut bar pin bolts. **Figure 6** The bolts will not be reused. Lower the control arm with the jack so there is enough room to remove the factory strut.



Figure 6

10. Remove the three nuts attaching the strut to the frame **Figure 7**. Remove the strut from the vehicle. **DO NOT** remove the center strut rod nut. Save a nut for later use.



Figure 7

11. The strut assembly must be disassembled for installation of the preload spacer. Place alignment marks on the upper strut mount, isolator, spring, strut body, and lower coil seat.



Figure 8

12. Using an appropriate strut compressor, compress the coil spring and remove the upper strut nut.

! Caution *Coil Spring is under extreme pressure. Improper removal/installation of coil spring could result in serious injury or death. Use only a high-quality spring compressor and carefully read and follow the manufacturer's instructions*

13. Remove the factory 10mm studs that are pressed into the upper strut mount.



Figure 9

14. Install the preload spacers along with the new 10mm bolts into the recessed hex on the bottom of the preload spacer **Figure 10**.

Step 13 Note:

The studs will not be reinstalled. A hammer and vice can be used to knock out the studs. Be careful not to damage the aluminum upper strut mount

Step 14 Note:

The preload spacer will install with the thicker plate on the bottom and the thinner plate on the top. Run the 10mm bolts up through the bottom into the recessed hex and also through the thinner preload spacer

Figure 10 Note:

Figure 10 shows the two preload spacers, the thicker preload spacer is 5/8" thick and the thinner preload spacer is 1/4" thick.



Figure 10

15. Install the preload spacer on to the upper strut mount. The bolt holes will only line up one way Figure 11A. Install the coil spring plastic isolator on to the preload spacer Figure 11B. The plastic isolator can only install one way.

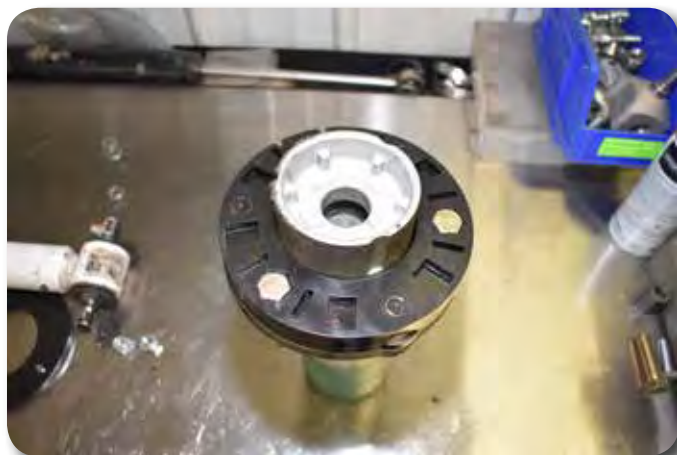


Figure 11A



Figure 11B

16. Reassemble the strut assembly lining up the marks made in the previous step. Be sure to reinstall all of the factory components including the rubber isolator onto the plastic isolator and bump stop Figure 12A. The notch in the thinner preload spacer will line up with the notch in the upper strut mount Figure 12B.



Figure 12A



Figure 12B

17. Install the provided 3/8" top spacer on top of the upper strut mount Figure 13. The notch on the top spacer will line up with the notch on the upper strut mount.



Figure 13

18. Reinstall the strut into the vehicle using the provided 10mm nuts and washers at the upper mount. Leave the hardware loose.
19. Reinstall the lower mount with the factory hardware and factory clips. The rear bolt (one underneath the CV shaft) will need the end tip trimmed off of it for

Step 17 Note:

Verify the strut assembly looks like Figure 13 with the two preload spacers installed and the 3/8" top spacer.

Step 18 Note:

Do not tighten the upper strut nuts at this time, it will make it easier to install the lower strut mount.

clearance to the CV shaft **Figure 14B**. The threaded portion of the bolt should be about 2-3/8" long **Figure 14A**. Tighten the lower hardware to 40 ft-lbs.

Step 19 Note:

Run a 10mm-1.50 die down the threads of the studs after they have been cut to clean up the threads. If you do not have a die, thread the factory 10mm strut nuts on the studs before cutting them. After the studs are cut, when removing the nuts they will help to clean up the threads as they are unthreaded.



Figure 14A



Figure 14B

20. With the lower hardware tight, torque the factory upper strut mount nuts to 40 ft-lbs.
21. Reattach the upper ball joint to the knuckle. Use the jack to support the lower control arm and torque the upper ball joint nut to 40 ft-lbs.
22. Reattach the tie rod to the knuckle and torque the factory nut to 44 ft-lbs.
23. Repeat installation on the opposite side of the vehicle. When both sides are complete, reattach the sway bar links and tighten hardware to 60 ft-lbs.
24. Reattach any brake or ABS lines to factory position that were disconnected for slack.
25. Due to stock control arm clearance and certain size wheel and tire combinations, a steering stop may be required. These are only needed when the tire hits the upper control arm at full lock. Prep the lower control arm for welding, remove paint. Disconnect the battery in the truck to protect electronics.
26. Weld steering stop on to lower control arm as shown. **Figure 15**



Figure 15

27. Reinstall the wheels and lower the vehicle to the ground. Torque lug nuts to 140 ft-lbs in a crossing pattern.
28. Check all hardware for proper torque.
29. Check hardware after 500 miles.
30. Adjust headlights.
31. The vehicle will need a complete front end alignment.

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.