

ZONC7003 UCA Bushing Replacement Chevy/GMC 1500 4WD / 2WD | 2019-2026 Chevy/GMC 1500 AT4 / Trail Boss 4WD | 2019-2026

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.
- 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 hour

Special Tools Required

- Press/pull sleeve kit, arbor press, or hydraulic press
- Pickle fork (optional)

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

Kit Contents

<u>Oty</u>

Description

2

Upper Control Arm Bushing

Important—measure before starting!

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

LF RF

LR RR

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.

INSTALLATION INSTRUCTIONS

- 1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
- 2. Measure vehicle ride heights before beginning and record in table to the left.
- 3. Raise the front of the vehicle and support with jack stands at each frame rail behind the lower control arms.
- 4. Remove the front wheels.
- 5. Remove the tie rod end nut. Disconnect the tie rod from the knuckle (Fig 1). *Aluminum Knuckles:* Avoid striking the knuckle, typically the taper unseats more easily and gently hitting the end of the tie rod end will unseat the taper. A pickle fork can also be used. Save the mounting nut.



Figure 1

- 6. Support the knuckle assembly.
- 7. Remove the upper ball joint nut (Fig 2, pg 3) and thread back on by hand a couple of turns. *Aluminum Knuckles*: Avoid striking the knuckle to release the taper, recommended to use a ball joint separator tool to release the taper. If you do resort to hitting the knuckle avoid re-use and discard.

Step 7 Note

TIP: When the upper ball joint is free from the knuckle, a strap can be used to hold the knuckle back in order to prevent the CV axle from pulling out of the inner joint.

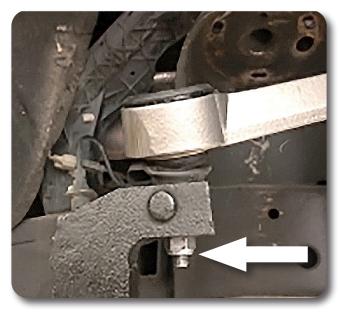


Figure 2

- 8. Remove strut or coilover assembly to ease access to upper control arm mounting bolts. Consult OE service manuals and Zone Kit Installation Instructions for proper damper removal and reinstallation procedures.
- 9. Remove the upper control arm from the vehicle by removing the two bolts attaching the upper control arm to the strut bucket / frame. Mark and note bolt orientation upon removal, this same bolt orientation will be used for reinstallation. Save hardware.
- 10. Using an appropriate bushing press, remove the old bushings from the upper control arm.
- 11. Install new bushings into the upper control arm using an appropriate bushing press.
- 12. Reattach control arm to the strut bucket/frame and ensure correct mounting bolt orientations marked in Step 8.
- 13. Swing knuckle assembly upwards and snug up the upper ball joint nut to fully seat the taper, but <u>do not torque down</u>. The upper ball joint nut will be removed from the knuckle later so that the strut can be reinstalled.
- 14. Using a jack, set the ride height from the fender lip to the center of the hub at 24-1/2" (2" Kits), 25" (1.75" AT4/Trail Boss Kits), 26" (3.5" and 4" Kits), or 28-1/4" (6" or 4" Trail BOSS/ AT4 Kits) (Fig 3A).

FIGURE 3A



Step 8 Note

<u>CAUTION</u>: When removing strut assemblies, exercise caution and awareness. Coil spring is under extreme pressure, improper removal/installation could result in serious injury or death. <u>DO NOT</u> remove center strut nut.

Step 10 Note

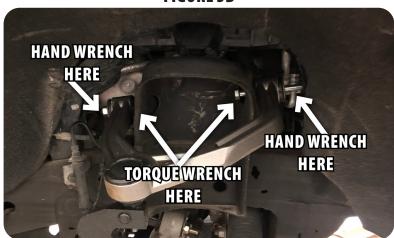
<u>TIP</u>: A universal press / pull sleeve kit works well for removal/ installation of control arm bushings. An arbor press or hydraulic press may also be used.

Step 11 Note

<u>TIP</u>: Inspect upper control arm ball joint and ball joint boot during bushing service. Replace ball joint if damaged.

15. Using a torque wrench on the <u>inside of the strut bucket and a wrench on the outside bushing</u> to prevent the nut / bushing from moving (Fig 3B), tighten the control arm hardware to **126 ft-lbs**. This will ensure the rubber bushings are tightened to the right position and not put preload in the rubber bushings. <u>DO NOT</u> spin the "bushing side" hardware when tightening, only tighten from the inside "frame side".

FIGURE 3B



Step 16 Note

<u>CAUTION</u>: When installing strut assemblies, exercise caution and awareness. Coil spring is under extreme pressure, improper removal/installation could result in serious injury or death. <u>DO NOT</u> remove center strut nut.

- 16. Support the knuckle assembly. Remove upper ball joint nut and reinstall strut or shock assembly into vehicle. Consult OE service manuals and Zone Kit Installation Instructions for proper reinstallation and torque procedures.
- 17. Reattach ball joint to the steering knuckle and torque ball joint nut to the following:
 - First Pass = 26 ft-lbs
 - Second Pass = 60-75 degrees
- 18. If applicable, reattach wires and/or hoses to upper control arm in same locations pre-service.
- 19. Reconnect tie rod end to the knuckle with OE hardware and torque to the following:
 - First Pass = 26 ft-lbs
 - Second Pass = 85-100 degrees
- 20. Reinstall wheels / tires with lugnuts.
- 21. Lower the vehicle to the ground and torque lug nuts to manufacturer specifications.

POST INSTALLATION

- 22. Double check all fasteners for proper torque.
- 23. A vehicle alignment is recommended following installation.
- 24. Ensure CV shaft engagement into the front differential.
- 25. Check steering/tire clearance lock to lock. Ensure adequate slack in ABS wire and brake lines through full steering angles.
- 26. Check all fasteners after 500 miles.