C1241 Installation Instructions
2019-2025 Chevy 1500 2/4wd
2019-2025 GMC 1500 2/4wd (Including Denali)
2" Strut Spacer Lift w/ UCA

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: 3-4 hours

Special Tools Required

N/A

Tire/Wheel Fitment

Stock Wheels and Tires will require 1/4" Wheel Spacer to clear upper control arm.

Recommended: 285/60 20x9; 285/70 18x9; or 285/75 17x9 w/ 6.18" to 5.5" BS (GMC or Chevy)

285/60 20x9; 285/70 18x9; or 285/75 17x9 w/ 5" BS (GMC)**

295/55 R20 w/ 5.75” BS (GMC) *

285/60 20x9; 285/70 18x9; or 285/75 17x9 w/ 5" BS (Chevy)*

295/60 20x9; 295/70 18x9; 295/70 17x9 w/ 5.75 - 5.5”" BS (Chevy) **

*Trimming may be required

**Trimming IS required

Wider tires (305, 315, or 12.50) than recommended may require steering stops welded to the LCA.

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.*

Kit Contents

Qty	Part
2	Top Strut Mount Spacer
2	Steering Stop
2	Ball Joint Cap
2	O-Ring
1	Driver Side Upper Control Arm Assembly
1	Passenger side Upper Control Arm Assembly
1	Bolt Pack 874
3	Wire Clamp
2	1/4"-20 x 3/4" Bolt
2	1/4"-20 Nut
4	1/4" SAE Washer
2	12mm-1.75 Nylock Nut
1	Bolt Pack 864
6	10mm-1.50 x 50mm Bolt
12	3/8" USS Washer
12	10mm-1.50 Nut
1	Bolt Pack 640
4	14mm-2.00 x 80mm Bolt
4	14mm-2.0 Nut
8	14mm Washer

Pre-Installation Notes

1. Control arms typically add 1-2 degrees caster above stock alignment specifications.
2. All aftermarket wheels should be test fit prior to mounting the tire to ensure proper clearance to the brake caliper. Some wheel profiles will not clear the brake caliper. These can be test fitted before the vehicle is lifted.
3. Replacement ball joint is ZONF8202, use this for replacement purposes if a new ball joint is ever needed. Ball joint is directional and must be installed with the 'dot' facing either inward or outward on the vehicle, otherwise damage may occur.
4. This kit will NOT fit Trail Boss or AT4 models. Use kit ZONC1173 for these models.
5. This kit will NOT fit ZR2 or AT4X models.
6. This kit WILL work with Denali and other models with ARC (Adaptive Ride Control). UCA has provision for sensor relocation.

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. Save hardware. **Figure 1**

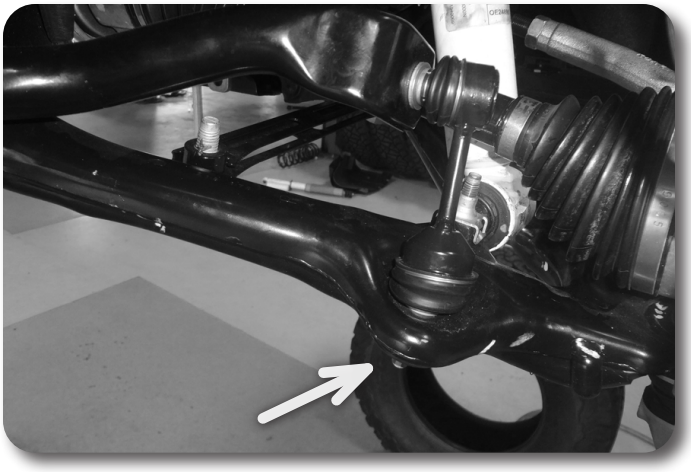

Figure 1

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

Step 5 Note:

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

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

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.

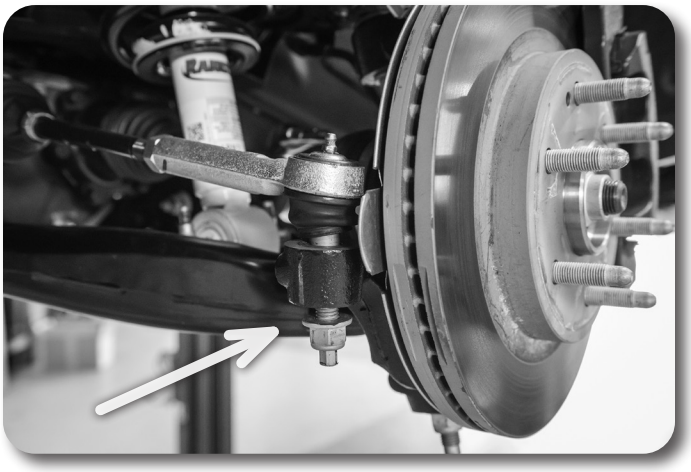

Figure 3

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

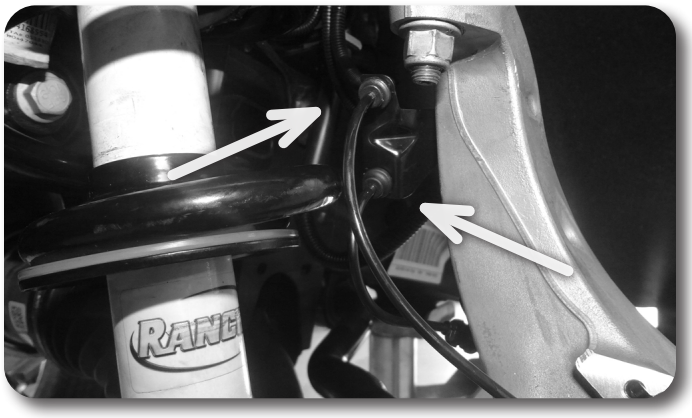

Figure 4

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.

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.

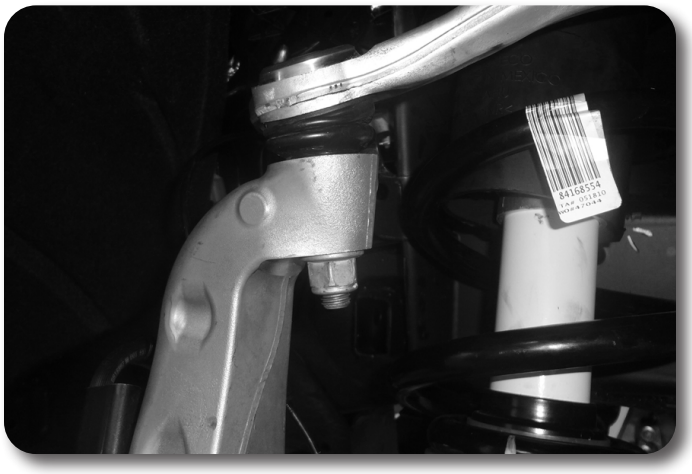

Figure 5A

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

Control Arm Installation

11. Remove the ABS wire / brake sensor wire from the upper control arm. Remove the upper control arm from the vehicle by removing the two bolts attaching the upper control arm to the strut bucket / frame Figure 8. Save hardware. If replacing the upper arm on a Denali truck, remove the sensor arm from the ball stud on the upper control arm.

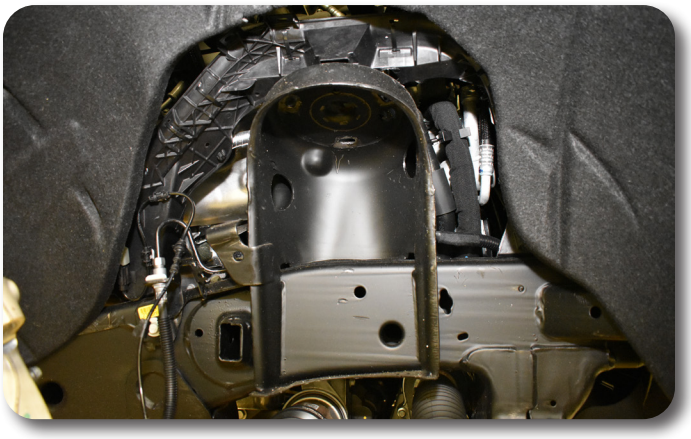

Figure 8

12. The new replacement control arm assemblies have a larger profile than the OEM assemblies. They are also designed with a wider range of available travel. Due to these unique differences, the tab on the side of the strut bucket must be removed to avoid interfering with the proper function of the new control arm assembly. Cut the tab from the side of the strut bucket as shown in Figure 9.

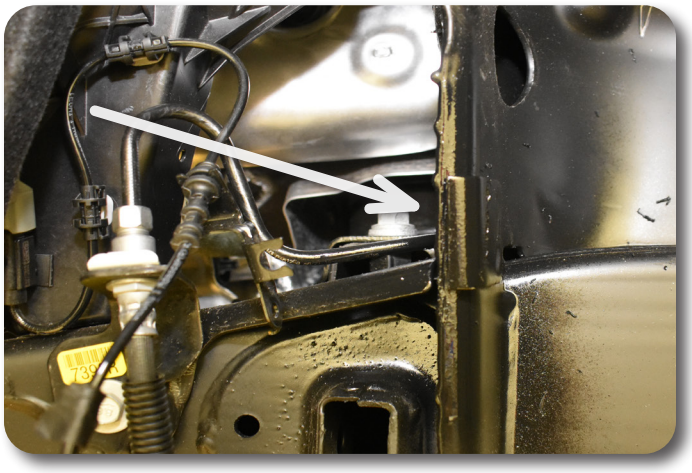

Figure 9

13. Install the new upper control arm to the vehicle using the **new provided 14mm bolts, washers, and nuts from Bolt Pack 640 and using thread locker.** Run the bolt with a washer from the inside out of the strut bucket outwards with a washer and nut on the outer bushing washer surface. Do this for the front and rear control arm mounts. Figure 10. Snug up hardware.

Step 13 Note:

The UCA hardware is located in Bolt Pack 640.

Figure 10

IMPORTANT

FAILURE TO FOLLOW PROCEDURE FOUND IN STEP 13 CAN RESULT IN BUSHING DAMAGE.

14. Attach the ball joint on the new upper control arm to the knuckle. Snug up ball joint using the OE Nylock Nut, but do not torque down. The upper ball joint will be removed from the knuckle later so that the strut can be installed.

15. Set the ride height from the fender lip to the center of the hub at 24-1/2" (2" Kits). Figure 11a **Using a torque wrench on the inside of the strut bucket and a wrench on the outside bushing to prevent the nut / bushing from moving**, 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. DO NOT spin the "bushing side" hardware when tightening, only tighten from the inside "frame side". Figure 11b

Step 15 Note:

The OE nylock nut will only be temporarily used to set the control arm at the correct ride height so that the rubber bushing preload is correct. DO NOT USE THE OE NYLOCK NUT FOR THE FINAL INSTALL.

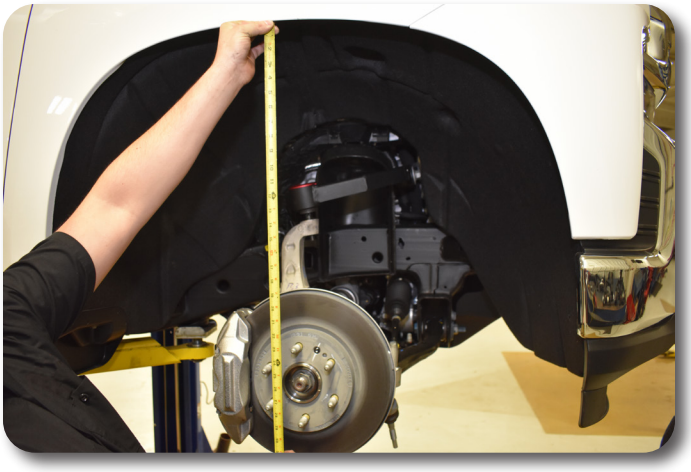

Figure 11A

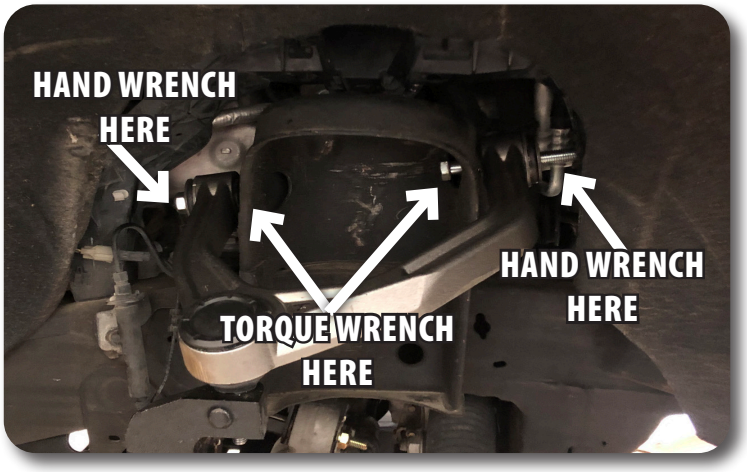

Figure 11B

16. Remove the upper ball joint from the knuckle. Discard OE nylock nut. Make sure the knuckle is supported so it does not pull out the CV.

Strut Spacer Installation

17. Due to lower bar pin angle in the strut, the top hat of the strut assembly must be rotated 180 degrees. Place alignment marks on the upper strut mount, isolator, spring, strut body and lower coil seat for reference when the strut is assembled. Compress the coil spring slightly and rotate the upper plate 180 degrees Figure 12&13.

Figure 12

Figure 13

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*

18. The studs in the top hat of the strut assembly must be trimmed for the new strut spacer. Mark the struts to a length of 1-1/8" and cut the studs on the mark Figure 14. Clean up the threads as needed in order to thread the new nuts on.

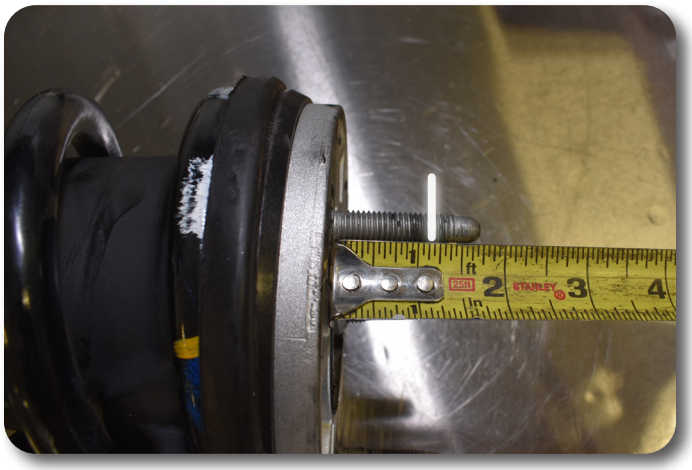

Figure 14

19. Install the 10mm bolts into the holes on the bottom of the strut spacer into the recessed hex openings Figure 15.

Figure 15

Step 18 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.

20. Install the strut spacer onto the strut with the provided washers and nuts. Figure 16 Torque the nuts to 40 ft-lbs. The spacer will only install one way.

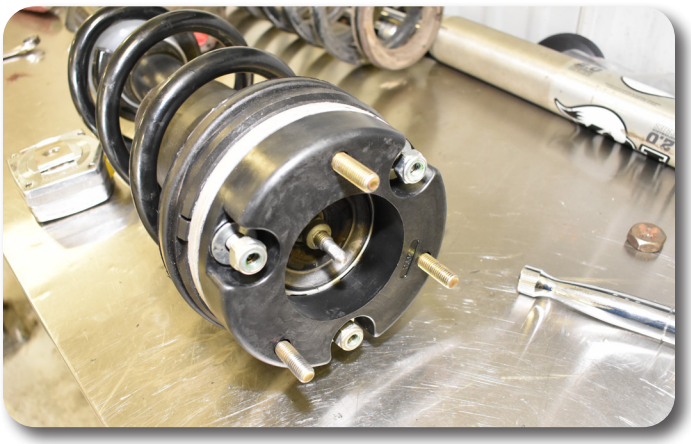

Figure 16

Step 21 Note:

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

Step 22 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.

Strut Installation

21. Reinstall the strut into the vehicle using the provided 10mm nuts and washers at the upper mount. Leave the hardware loose.

22. 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 clearance to the CV shaft Figure 18. The threaded portion of the bolt should be about 2-3/8" long Figure 17. Tighten the lower hardware to 40 ft-lbs.

Figure 17

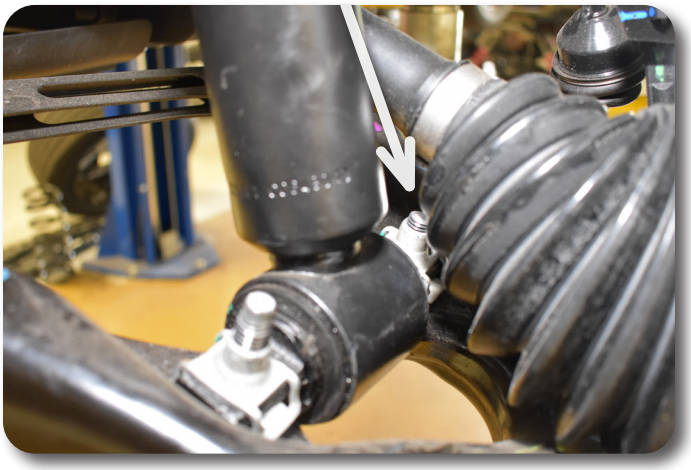

Figure 18

23. With the lower hardware tight, torque the factory upper strut mount nuts to 40 ft-lbs.

24. Reattach the upper ball joint to the knuckle Figure. 19. **Use the provided 12mm nylock nut in bolt pack 874.** Use the jack to support the lower control arm and torque the upper ball joint nut to 26 ft-lbs with the first pass and 60-75 degrees on the final pass.

Step 24 Note:

The nylock nut is located in Bolt Pack 874.

Figure 19

25. Reattach the tie rod to the knuckle and torque the factory nut to 44 ft-lbs.

26. 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.

27. Reattach the brake wire / ABS wires to the factory position on the knuckle Figure 20. Use the provided wire clamps and 1/4" bolt to attach the brake wire / ABS wire to the upper control arm. Check for enough slack in the wires and adjust as necessary.

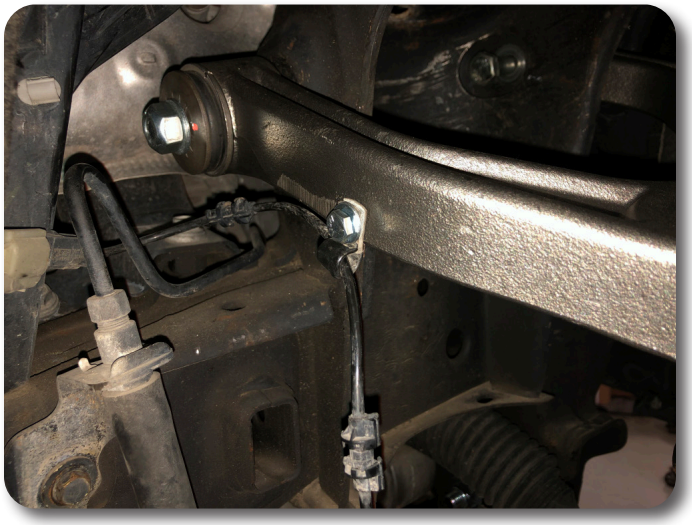

Figure 20

28. If the upper control arms are used on a Denali truck, transfer the ball stud to the threaded hole on the front side of the upper control arm Figure 21. Reattach the sensor arm to the ball stud. The sensor location on the ZONE UCA is already relocated for 2" leveling kits, the sensor does not need to be relocated at the frame.

Figure 21

29. Reattach any brake or ABS lines to factory position that were disconnected for slack.

30. **Optional:** Due to 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.

31. **Optional:** Weld steering stop on to lower control arm as shown. Figure 22

Figure 22

32. Reinstall the wheels and lower the vehicle to the ground. Torque lug nuts to 140 ft-lbs in a crossing pattern.

33. Grease the ball joint at this time with 3-4 pumps. Do NOT over grease the ball joint. Install the o-ring onto the black ball joint cap. Using the provided grease packet, lightly grease the o-ring and install the cap onto the control arm by lightly tapping it down with a rubber mallet.

Post Installation Instructions

34. Check all hardware for proper torque.
35. Check hardware after 500 miles.
36. Adjust headlights.
37. The vehicle will need a complete front end alignment
38. At regular maintenance intervals make sure the upper ball joint is greased (3-5,000 miles). The grease fitting can be accessed using a flathead screwdriver and removing the cap from the ball joint cup.

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.