



ZONC6596 Installation Instructions

6" Single Strut Replacement

GM 1500 - 2WD & 4WD

2014-2018

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.

»» PRE-INSTALLATION NOTES

1. A high-quality strut compressor is required for strut disassembly and reassembly.

»» 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 with jack stands at each frame rail behind the lower control arms.
3. Remove the front wheels.
4. Disconnect the sway bar end link from the sway bar **Figure 1**. Retain bushings and hardware.

Kit Contents

ZONC6596

Qty	Part
1	GM Strut
1	Strut Parts Pack



Figure 1

5. Remove tie rod end nut. Strike the knuckle near the tie rod end to dislodge the tie rod end tapered seat **Figure 2**. Retain tie rod end nut.



Figure 2

6. Mark on the front strut body to indicate DRV versus PASS side. Make the marks on the side of the strut facing outwards.
7. Support the lower control arm with a jack. Remove the lower strut mounting bolts Figure 3. Retain hardware.

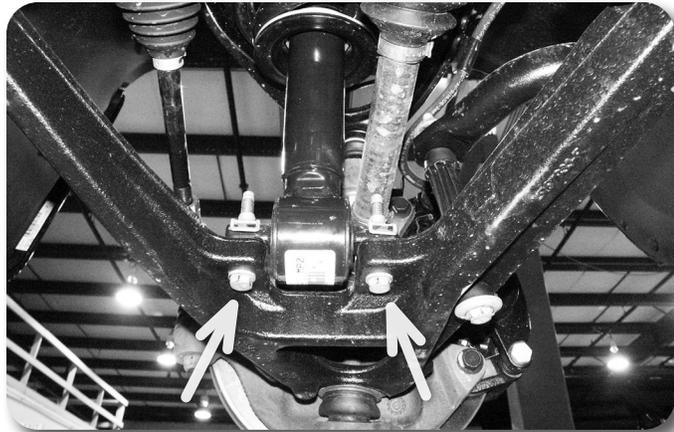


Figure 3

8. Loosen but do not fully remove upper ball joint nut. Strike knuckle near the upper ball joint to dislodge the tapered seat Figure 4. Take care to not strike the ball joint.

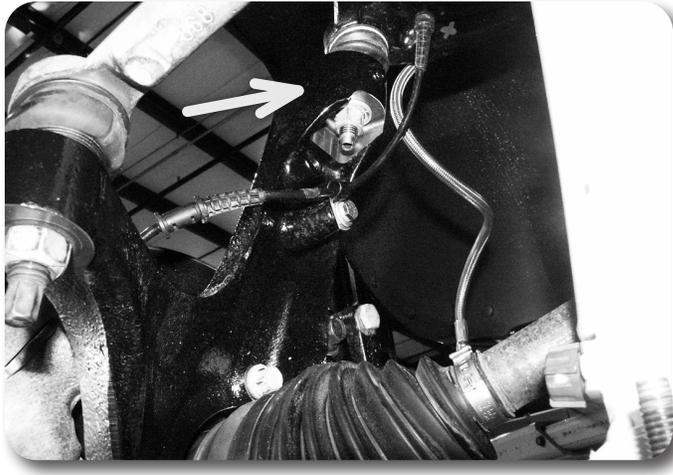


Figure 4

9. Remove the three upper strut mounting nuts and remove the strut from the vehicle **Figure 5**. **DO NOT** remove the center strut rod nut.

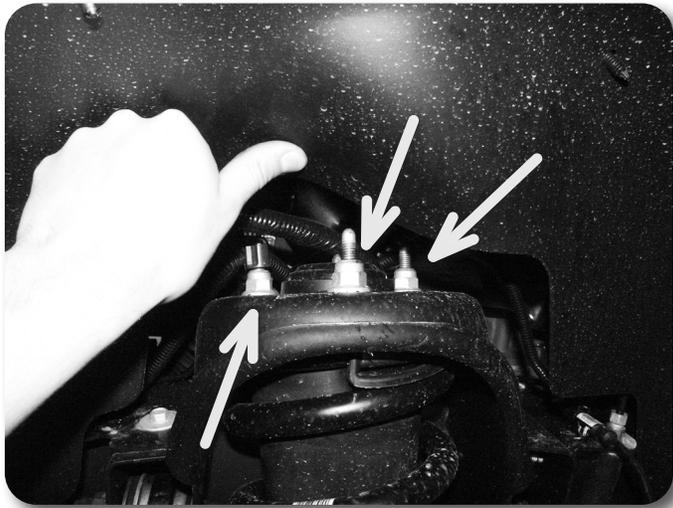


Figure 5

10. Using a writing utensil place two, vertical indexing marks that cross the upper mount, spring upper coil seat, and coil spring. These marks will be used as reference during strut reassembly.
11. Using an appropriate strut compressor, compress the coil spring and remove the upper center strut nut. Remove strut from the coil spring. Release the pressure from the coil spring and save all of the upper parts for re-installation on the new strut.
12. Remove the OE jounce bumper from the old BDS strut. Remove the jounce bumper cap and slide the retaining ring up the strut rod for removal. If necessary, it's possible to lay the retaining ring across the jaws of a vice and gently tap the end of the strut to get it to slide off.
13. Install the coil spring isolator from the old BDS strut onto the new strut. Install the jounce bumper on the new strut followed by the NEW provided retaining ring with the stepped side towards the strut body. Reinstall the jounce bumper cap to the jounce bumper **Figure 6A & Figure 6B**.

Step 11 Note

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. Carefully read and follow the manufacturer's instructions.



Figure 6A

Step 15 Note

CAUTION: Make sure the coil spring is compressed far enough for the nut to tighten against the cap and is not compressing the coil spring. Improper installation can result in strut stem failure, refer to **Figure 8** for assembly reference.

Step 15 Note

CAUTION: Pay attention to the lower mounting bar as it is not angled perpendicular to the strut body **Figure 7**. This bar pin must be oriented correctly to mate the lower control arm properly, angled down towards the outside of the vehicle once installed. Additionally, verify the coil spring is seated properly on the lower spring seat.

Step 15 Note

TIP: Struts are shipped collapsed. Rotate the strut rod counter-clockwise to allow it to extend.

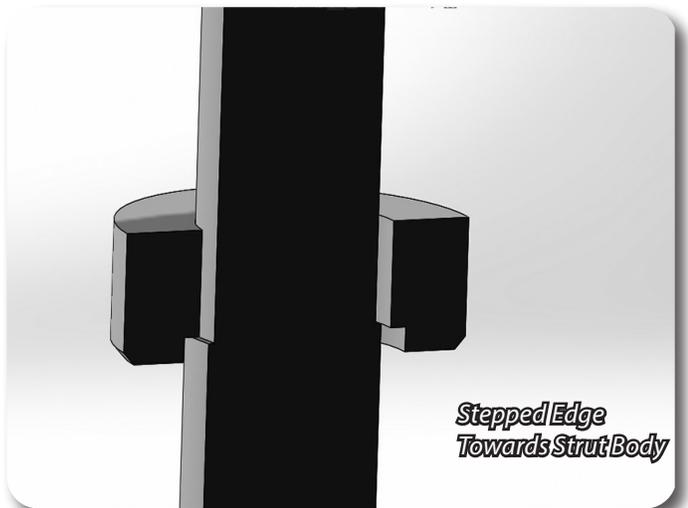


Figure 6B

14. Re-install the OE strut cap with the OE coil seat and shroud the same as it was installed on the old BDS strut. The upper strut cap fits best on the OE coil seat in one position. Line up your original indexing marks from Step 10. Compress the assembly for strut installation.
15. Install new strut to the same orientation as the previous BDS strut into the coil spring.

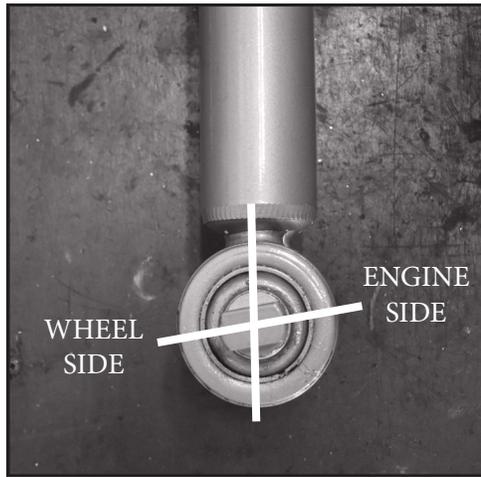


Figure 7

16. Fasten the strut with the NEW provided nut from the Strut Parts Pack. Torque upper strut nut to 22 ft-lbs ft-lbs. DO NOT overtighten the strut stem.



Figure 8

17. Install new strut assembly into the upper strut frame mounting location. Ensure orientation aligns with indexing mark from Step 10 and Step 6. Fasten three upper OE strut nuts Figure 9A. Torque nuts to 37 ft-lb.

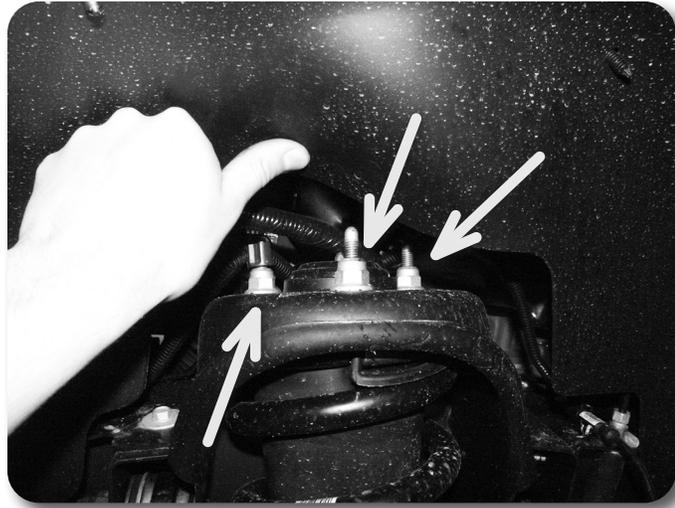


Figure 9A

18. Fasten knuckle and control arm assembly to lower strut mount with lower OE strut mounting bolts **Figure 9B**. Torque hardware to 37 ft-lbs.



Figure 9B

19. Reattach knuckle to upper control arm with OE ball joint nut. Torque upper ball joint nut to the following:
 - First Pass = 37 ft-lbs
 - Final Pass = 90-110 degrees
20. Reattach sway bar link to sway bar end **Figure 10**. Tighten the sway bar link nut to 12 ft-lbs. Do NOT overtighten the sway bar link nut.



Figure 10

21. Reconnect the steering tie rod end to the knuckle. Ensure the nut has full thread engagement and the taper seats. Torque to the following:
 - First Pass = 26 ft-lbs
 - Final Pass = 85-100 degrees
22. Install wheels / tires and lower the front of the vehicle to the ground. Torque lug nuts to manufacturer's specifications.
23. Bounce the front of the vehicle to settle the suspension. Verify upper control arm and lower control arm mounting bolts torqued to factory specifications.

» POST INSTALLATION

24. Double check all fasteners for proper torque.
25. A vehicle alignment is recommended following installation.
26. Check steering/tire clearance lock to lock. Ensure adequate slack in ABS wire and brake lines through full steering angles.
27. Check all fasteners after 500 miles.