



ZONC6599 Installation Instructions

6" Single Strut Replacement

GM 1500 - 2WD & 4WD

2007-2013

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.

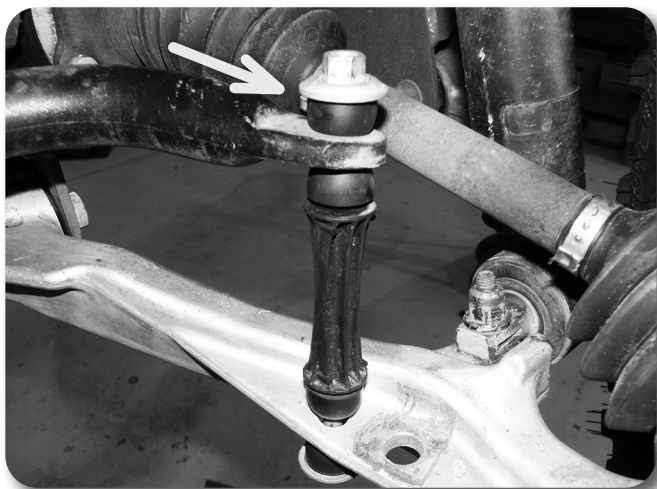


Figure 1

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.

Kit Contents

ZONC6599

Qty	Part
1	GM Strut
1	Strut Parts Pack

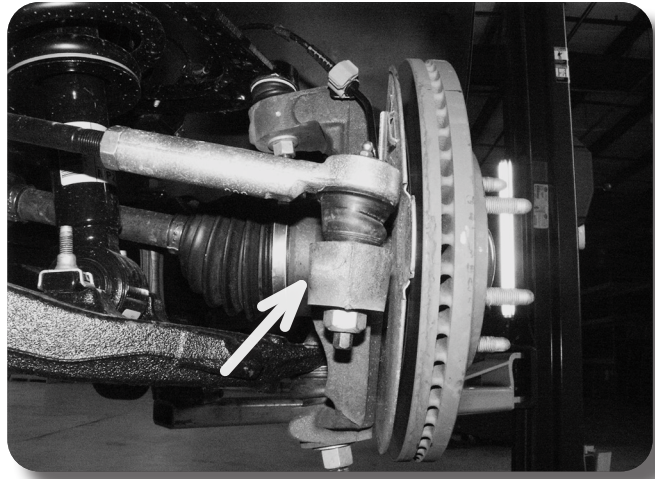


Figure 2

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.

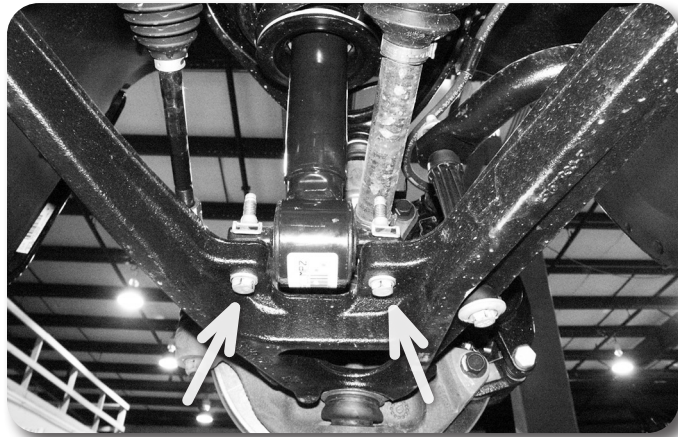


Figure 3

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.

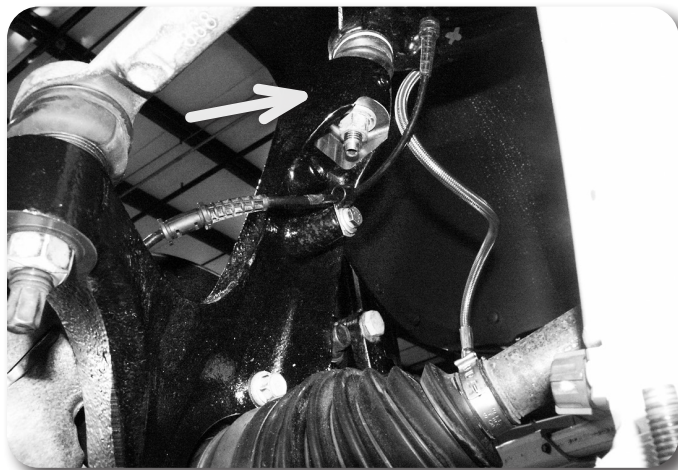


Figure 4

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.
12. Remove the bump stop from the old strut. Apply grease to the ID of the bump stop to ease installation, and install it on the NEW strut.
13. Install new strut to the same orientation as the previous Zone strut into the coil spring. Ensure indexing marks from Step 10 are aligned. Fasten strut with the new provided nut (Strut Parts Pack).

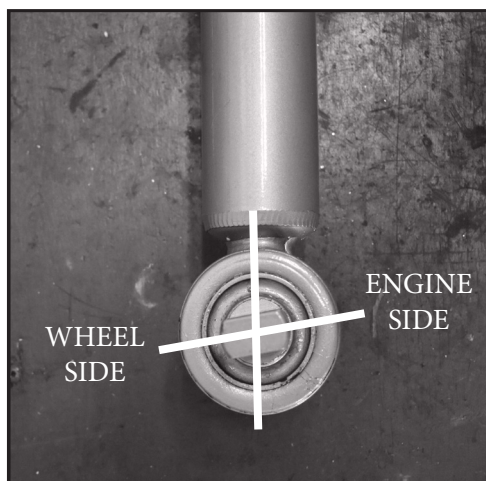


Figure 6

14. Torque upper strut nut to 22 ft-lbs. **DO NOT** overtighten the strut stem.
15. Locate the two captive nuts on the old Zone strut bar pin. Carefully remove these nuts (**Figure 7**, 2x per side) and transfer them to the new strut.

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.

Step 13 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.

Step 13 Note

CAUTION: Pay attention to the lower mounting bar as it is not angled perpendicular to the strut body (Fig 6). This bar pin must be oriented correctly to mate to the lower control arm properly, angled down towards the outside of the vehicle once installed.

Step 13 Note

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

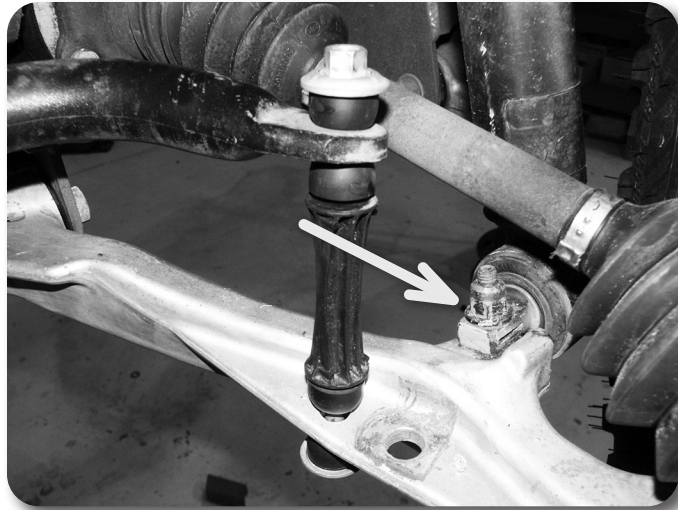


Figure 7

16. 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 8A**. Torque nuts to 37 ft-lb.

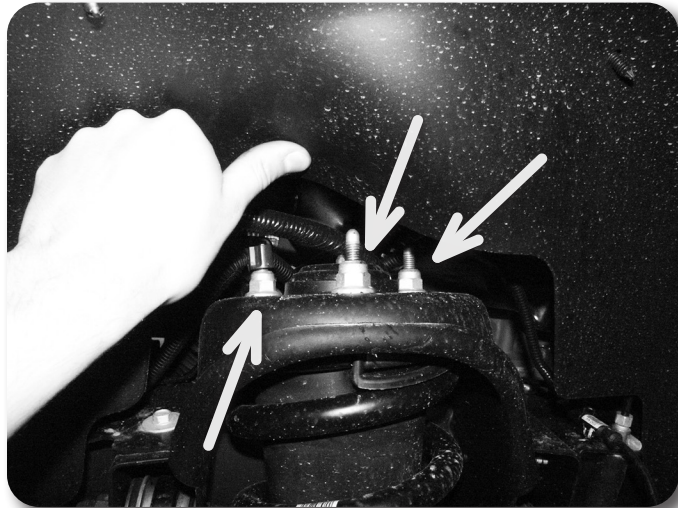


Figure 8A

17. Fasten knuckle and control arm assembly to lower strut mount with lower OE strut mounting bolts **Figure 8B**. Torque hardware to 37 ft-lbs.



Figure 8B

18. Reattach knuckle to upper control arm with OE ball joint nut. Torque upper ball joint nut to 37 ft-lbs.
19. Reattach sway bar link to sway bar end **Figure 9**. Tighten the sway bar link nut to 17 ft-lbs. Do NOT overtighten the sway bar link nut.



Figure 9

20. Reconnect the steering tie rod end to the knuckle, ensure the nut has full thread engagement. Torque to 44 ft-lbs.
21. Install wheels / tires and lower the front of the vehicle to the ground. Torque lug nuts to manufacturer's specifications.
22. 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

23. Double check all fasteners for proper torque.
24. A vehicle alignment is recommended following installation.
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.