



#C1231 Installation Instructions 2020-21 Chevy/ GMC 2500/3500 HD(4wd/2wd) 2" Front 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

Torsion bar unloading tool Kent Moore #CH48809 or equivalent

Tire/Wheel Fitment

35x12.50 on stock wheel or equiv.

Kit Contents

Qty	Part
2	Chevy HD Torsion Key
2	Torsion Bar Retainer
4	Upper Shock Spacer
4	12mm Nut
4	1/2" SAE washer

PRE-INSTALLATION NOTES

1. Installation of these torsion keys requires a modified length shock or the provided shock spacers.
2. The torsion bars are under extreme pressure and require the use of a Kent Moore #CH48809 torsion bar tool or equivalent for proper unloading/loading. Follow tool manufacturer instructions.
3. C1230 ONLY install this kit on a truck with a factory torsion key part number of 84461807, see image below for example of factory torsion key part # location.
4. C1231 ONLY install this kit on a truck with a factory torsion key part number of 84634344, see image below for example of factory torsion key part # location. (03917 will be machined on the torsion key for C1231)



Figure A

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 vehicle on clean, flat, and level surface. Block the rear wheels for safety.
2. Measure the ride height of the vehicle and record - see side box.
3. Raise the front of the vehicle with a hydraulic jack. Support the frame rails with jackstands. Figure 1

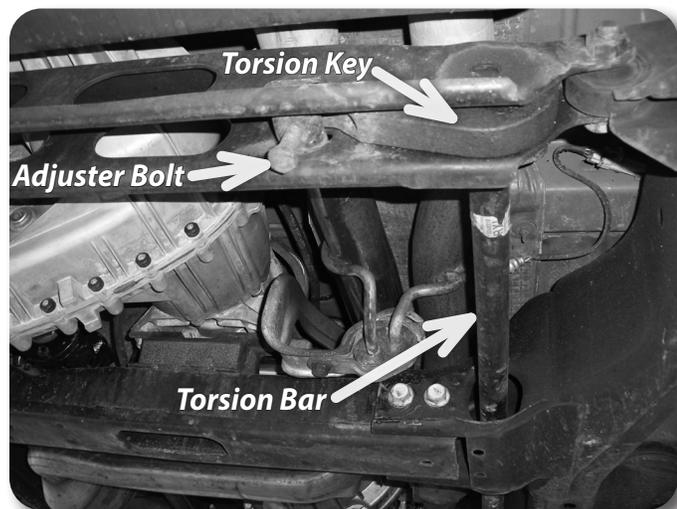


Figure 1

4. Measure the length of the torsion bar adjuster bolts (top of the adjuster bolt head to adjuster) and record - see side box.

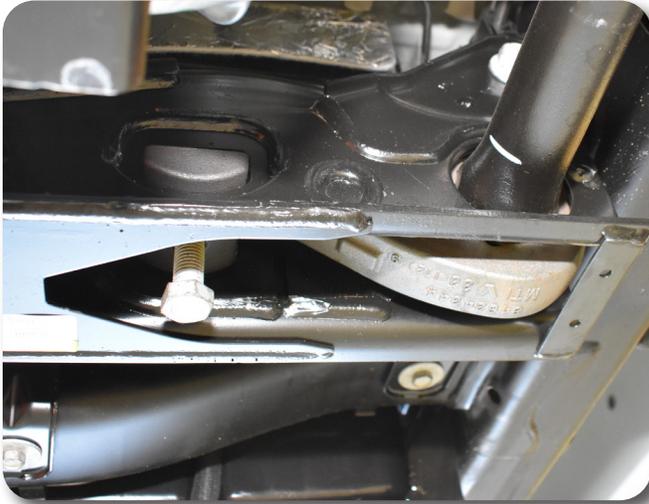


Figure 2

Important—measure before starting!

Measure from the exposed length of the torsion bar adjusters before starting:

Drv _____ Pass _____

Caution: There is an extreme amount of energy stored in the torsion bars. Use extreme care with the proper tools to avoid serious injury or death.

5. Remove the adjuster bolts, keep driver's and pass side bolts separate.
6. Use the torsion bar removal tool to remove the threaded adjuster assembly. Release the pressure from torsion bar with the unloading tool. **Caution: There is an extreme amount of energy stored in the torsion bars. Use extreme care with the proper tools to avoid serious injury or death.**
7. Slide the torsion bars forward to allow the factory keys to be removed. On older vehicles, it may be necessary to use an air hammer to get the bars to break free.



Figure 3

8. Install the torsion bar adjusting bolt retainer onto the end of the torsion key. This will keep the bolt centered on the torsion key when loaded. (Fig 4) It may be necessary to grind the flashing on the parting line of the key casting to get the bolt retainer to stay in place or the retainer can be tapped onto the key with a hammer. The retainer should be centered on the arched area of the torsion key.



Figure 4A

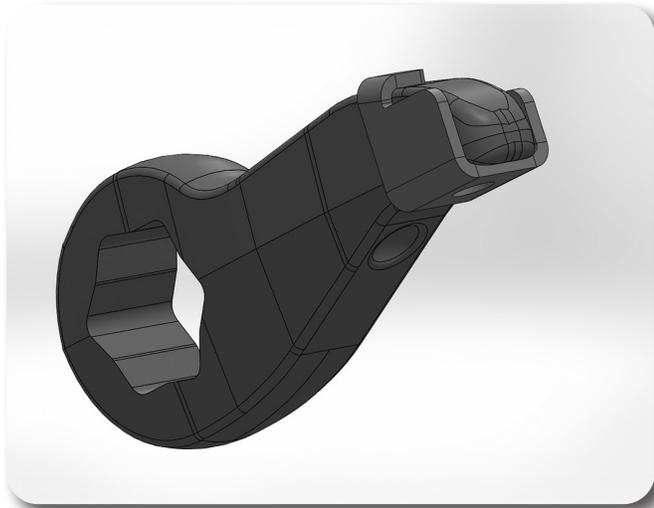


Figure 4B

9. Apply a small amount of grease to the hex on each end of the torsion bar. Install the new torsion keys. When installed the keys should be nearly horizontal and pointing toward each other. Because of slight differences in hex shape, the factory and Zone keys will appear to have very similar indexing.

» SHOCK EXTENSION/NEW SHOCK INSTALLATION

10. Remove the upper shock nuts and lower shock bolt. Remove shocks from vehicle. If installing longer aftermarket replacement shocks, do so now with the factory/provided hardware.
11. If using the included shock extension, install the provided shock extension washers over the factory bar pin studs. Reinstall the shock in the vehicle with provided 12mm nuts and 1/2" SAE washers. Leave hardware loose.



Figure 5

12. Reattach the lower shock mount with factory bolt and nut. Tighten to 95 ft-lbs. Torque the upper hardware to 60 ft-lbs.

» TORSION KEY INSTALLATION

13. Install the torsion bar adjuster assembly with torsion bar tool. Make sure the bolt goes into the torsion bar bolt retainer installed previously.
14. Set the overall length of the exposed thread and bolt head to the original measurement. The minimum recommended length is 3/4". This may need to be adjusted if heavy accessories are added to the front of the vehicle.

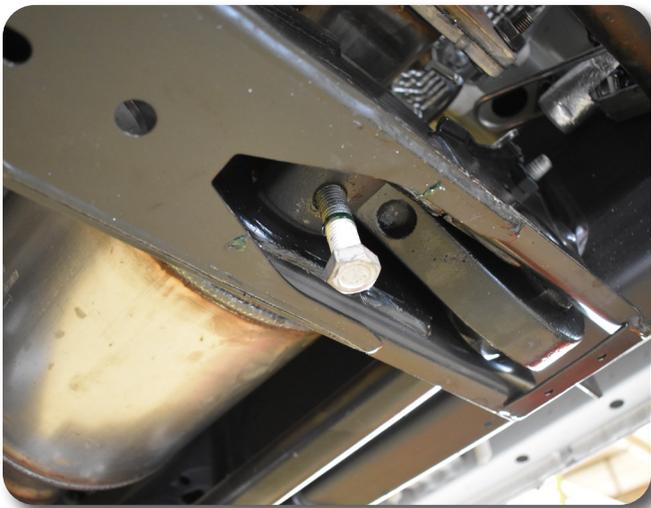


Figure 6

15. If the front wheels were removed, reinstall the wheels and lower the vehicle to the ground. Torque lug nuts to 140 ft-lbs in a crossing pattern
16. Roll the vehicle forward and back to settle the suspension.
17. Check the final ride height measurement. This should not be more than 26-1/2". If it is greater than this, the adjusters need to be lowered.

» 'Z' HEIGHT REFERENCE INSTRUCTIONS

18. It is very common for the particular vehicle model to have widely varying starting suspension heights. In order to give a more precise suspension height setting we have provided a Z-height reference. Refer to Figure A

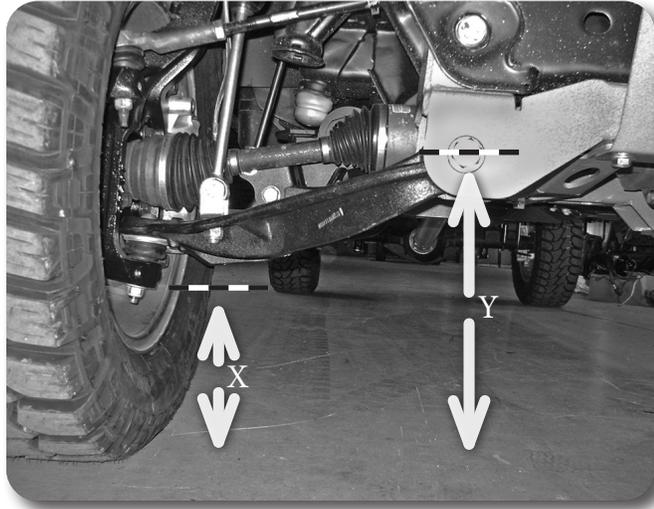


Figure A

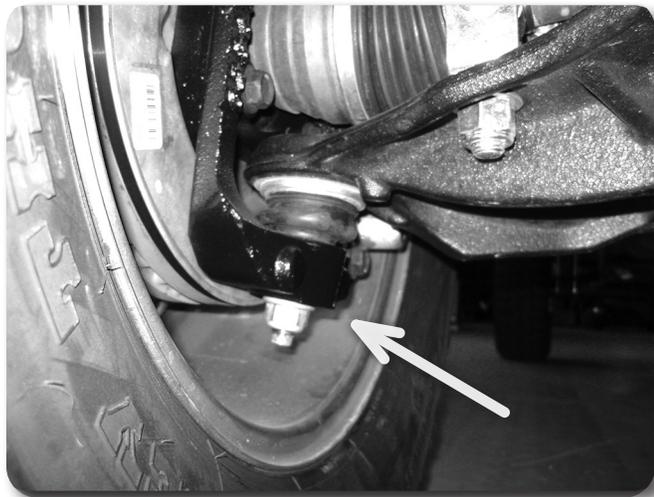


Figure B

19. Roll the vehicle forward and back to settle the front suspension. With the vehicle on flat, level ground measure the distance from the floor to the center of the front lower control arm bolt. This is distance 'Y'.

Record here: _____

20. Measure from the floor up to the lowest point on the steering knuckle, near the ball joint. (Fig B). This is distance 'X'.

Record here: _____

21. To determine the Z-height use the following equation: $Y-X=Z$. For the intended 2" of lift the value for Z should be approximately 6-5/8". If your value for 'Z' is less than 6-5/8" the torsion bars need to be adjusted up (tightened). If your value for 'Z' is more than 6-5/8" the torsion bars need to be adjusted down (loosened). The 'Z' height should not exceed 6-5/8". However, this system can be run at a lower ride height down to a minimum of 1" of lift. At 1" the 'Z' height is 5-5/8".
22. Check all hardware for proper torque.

23. Adjust headlights.
24. A front end alignment must now be performed.
25. Check hardware after 500 miles.

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.