

# C2315 Installation Instructions 2020 Chevy/GM 2500/3500 HD 4WD Replacement Upper Control Arms

# 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

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- 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.
  - 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**

Torsion Bar Tool - GM #CH48809

# **Tire/Wheel Fitment**

## 2-3.5" Kits

35x12.50 on 17, 18, 20x9 5.5-5.75"BS

295/60 on 20x9 5-5.75" BS

285/65 on 20x9 5-6.18" BS

285/70 on 18x9 5-6.18" BS

285/75 on 17x9 5-6.18" BS

Stock wheels and stock tires can be installed, but are tight to the ball joint cup

Kits using a replacement steering knuckle follow MFG recommendation for wheel / tire fitment.

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Qty	Part	Qiy	Part
1	DRV Arm Assembly	1	PASS Arm Assembly
1	HD Ball Joint	1	HD Ball Joint
2	Rubber Bushing	2	Rubber Bushing
1	Ball Joint Cap	1	Ball Joint Cap
1	Grease Zerk	1	Grease Zerk
1	O-ring	1	O-ring

## **PRE-INSTALLATION NOTES**

- 1. 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.
- 2. Compatible with gas or diesel models as well as standard or AT4 models.

# 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





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

# Important—measure before starting!

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

LF	RF			
LR	RR			
Important - Measure from the				
exposed length	of the torsion bar			
adjusters before	starting:			

Drv

**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.

Pass



Figure 2

- 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.

#### **Upper Control Arm Installation**

- 7. Optional: Remove the upper shock nuts and lower shock bolt. Remove shocks from vehicle.
- 8. Remove the upper ball joint nut, reinstall a couple of turns. Hit the side of the knuckle to dislodge the upper ball joint from the steering knuckle.
- 9. Remove the factory upper control arm from the vehicle. Figure 4a, 4b



Figure 4a

## **Step 7 Note**

Shocks can be removed to aid in removal of the upper control arm bolts. The shocks are not required to be removed.



Figure 4b

10. Install new upper control arm assembly with factory cam bolts. Arms are side specific. Snug, but do not tighten at this time. Attach the upper ball joint to the steering knuckle with provided nut, washer, and cotter pin. Tighten the upper ball joint nut to 37 ft-lbs on the first pass and a final pass of 90-110 degrees. Install the cotter pin (do not loosen the nut to line up the cotter pin hole). Figure 5



Figure 5 Driver Side Shown

11. If removed, attach the lower shock mount to the lower control arm with factory bolt and nut. Leave lower shock bolt loose. This will be tightened with the weight of the vehicle.

## **Step 11 Note**

The new upper control arms will have additional clearance to the droop limiter on the front control arm pocket. Verify the correct UCA is installed on the correct side by the raised area around the droop limiter. See Figure 5



Figure 6

12. If removed, attach the upper shock mount with the same hardware that was removed.



Figure 7

- 13. If removed, torque the upper shock hardware to 60 ft-lbs.
- 14. Install the torsion bar adjuster assembly with torsion bar tool. Make sure the bolt goes into the torsion bar bolt retainer installed previously.
- 15. Set the overall length of the exposed thread and bolt head to the original measurement.

# 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.



Figure 8

- 16. Reinstall the wheels and lower the vehicle to the ground. Torque lug nuts to 140 ft-lbs in a crossing pattern
- 17. Roll the vehicle forward and back to settle the suspension.
- 18. If removed, torque the lower shock mount bolt to 95 ft-lbs.
- 19. Center the upper control arm cams. Tighten the cam bolts to 140 ft-lbs.

## **Post-Installation**

- 20. Check all hardware for proper torque.
- 21. Reconnect the positive and negative battery cables.
- 22. The vehicle will need a complete front end alignment.
- 23. Check all hardware after 500 miles.
- 24. Adjust headlights.