

# Zone C2350 Installation Instructions 2007-2013 Chevy 1500 3.5" 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

*Live Chat* provides instant communication with Zone tech support. Anyone can access live chat through a link on www.zoneoffroad.com .

www.zoneoffroad.com may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to tech@zoneoffroad.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: hours

## **Special Tools Required**

Sawzall, Plasma Cutter, or Cutoff Wheel

10mm Allen Key

Tire/Wheel Fitment 285/70/17 w/ 4-1/2" Backspacing

#### \*Important\* Verify you have all of the kit components before beginning installation.

#### **C2350 Kit Contents**

#### Qty Part

- 1 Diff Skid Plate
- 1 Diff Drop DRV
- 1 Diff Drop PASS
- 2 Strut Spacer
- 1 Bolt Pack Strut Spacer Top
- 1 Bolt Pack Strut Spacer Lower Mount
- 1 Bolt Pack Diff Drop Kit
- 6 M10-1.50 Nylock Nut Clear Zinc
- 6 10mm flat washer clear zinc

- 1 Drv Upper Control Arm
- 2 UCA Bushing
- l 07+ Chevy Upper Ball Joint
- 1 Ball Joint Cap
- 1 o-ring (2" OD x 1/8")
- 1 Grease Zerks long
- 1 Pass Upper Control Arm
- 2 UCA Bushing
- 1 07+ Chevy Upper Ball Joint
- 1 Ball Joint Cap
- 1 o-ring (2" OD x 1/8")
- 1 Grease Zerks long
- 2 Wire Clip
- 2 5/16"-18 x 3/4" bolt
- 2 5/16"-18 prevailing torque nut
- 4 5/16" SAE washer
- 1 Bolt Pack brakeline hardware
- 2 Steering Stop

- 1. Park vehicle on clean, flat, and level surface. Block the rear wheels for safety.
- 2. Lift the front of the vehicle and support frame rails with jack stands.
- 3. Remove the front wheels.
- 4. Remove the stock differential skid plate, keep hardware.
- 5. Disconnect the ABS wire from the top of the upper control arm mounting bracket. Disconnect the bracket from the top of the upper control arm. Figure 1, 2



Figure 1



Figure 2

6. Disconnect the upper ball joint nut, reinstall the nut several turns. Strike the steering knuckle to dislodge the upper ball joint. Disconnect upper ball joint from steering knuckle, repeat process for tie rod end. Figure 3

Importa ing!	ant—i	measu	re bef	ore sta	rt-

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

LR	RR

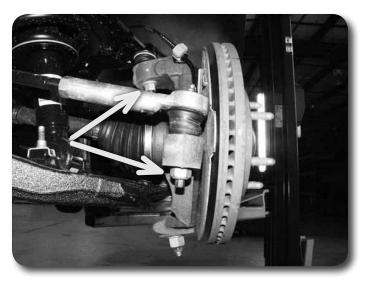


Figure 3

7. Disconnect the CV's from the differential, retain all hardware (6 bolts per side) Figure 4

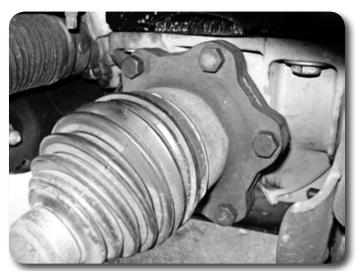


Figure 4

8. Disconnect the wire harness and differential breather from the differential. Disconnect wires from the differential. Figure 5, 6

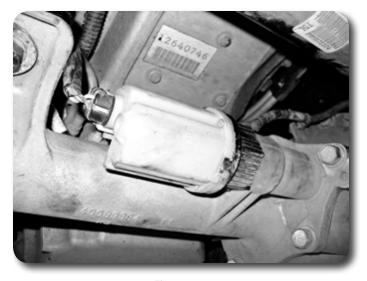


Figure 5

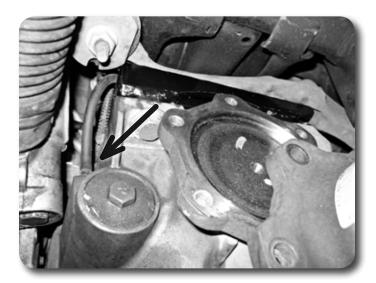


Figure 6

## 9. Remove the rear crossmember, keep all the hardware. Figure 7\



Figure 7

10. Make an alignment mark between the driveshaft u-joint and the pinion flange. This will be used later in reinstallation for realignment to the factory alignment. Remove the bolts and straps that attach the drive shaft to the differential. Figure 8



Figure 8

11. Support the differential. Remove the hardware from the passenger's side. Remove the passenger's side differential bracket. Figure 9, 10

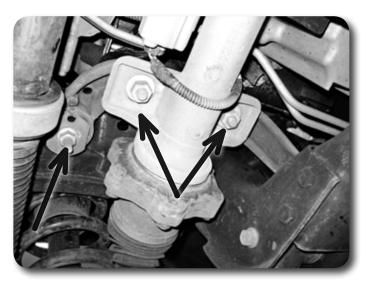


Figure 9



12. Remove the studs that are pressed into the passenger's side bracket, they will not be reused Place the bracket over a vice as shown and knock the studs out with a hammer. If a vice is not available a large socket will work. Figure 11



Figure 11

- 13. With the differential supported, remove the driver's side hardware. Shift the differential towards the passenger's side, rotate the pinion up, and remove the differential from the vehicle. Have an assistant aid in the removal of the differential, it is heavy and awkward
- 14. Mark the driver's side pocket as shown. Remove section from the vehicle, coat area with paint. Figure 12, 13, 14

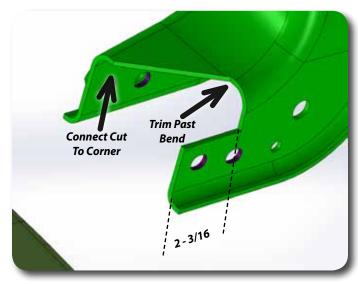


Figure 12

# Fig 12 Note

Use a sawzall, cutoff wheel, or plasma cutter to remove section. If a plasma cutter is used, the undercoating must be removed. Paint after area is removed

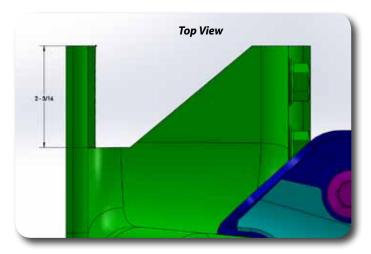


Figure 13

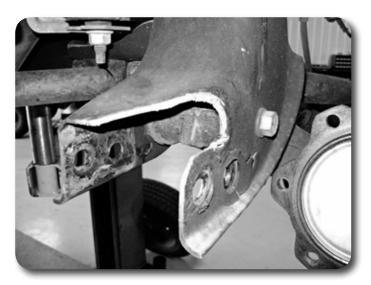


Figure 14

15. Cut out the template at the end of the instruction sheet. Mark the differential rib as shown. Grind this flange down slightly for clearance when reinstalled. Figure 15, 16, 17

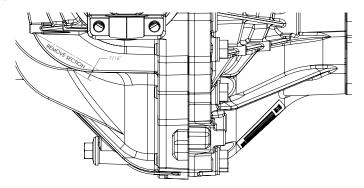


Figure 15

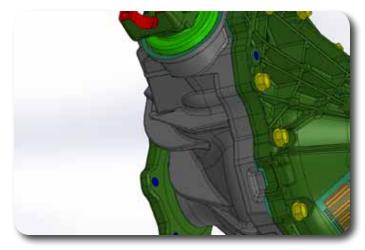


Figure 16



Figure 17

16. Attach the differential drop bracket to the passenger's side factory bracket as shown. The ½"x2 hardware will require loc-tite and flat washer with lock washer. Tighten hardware to 65 ft-lbs. Figure 18, 19



Figure 18

# Fig 17 Note

Only the rear rib needs to be ground. A flap disk is highly recommended for material removal.

## Figure 19 Note

Use lock washers only on the top side of the passenger's differential bracket. All differential hardware is in bolt pack #949

Passenger's side uses 1/2" hardware, tighten to 65 ft-lbs.



Figure 19

- 17. Reinstall factory bracket with stock hardware. Tighten to 55 ft-lbs.
- 18. Install driver's side bracket with 12mm SHCS (allen bolts) with loc-tite on threads. Shift the bracket so that it is as REARWARD as possible. Tighten 12mm hardware (10mm allen key) to 55 ft-lbs. Figure 20



Figure 20

19. Reinstall the differential. Attach to passenger's side with thick washer with ½" hardware with loc-tite. Leave slightly loose at this time Figure 21. Attach to driver's side with 12mm hardware with flat washer. Check for adequate clearances, there should be a very minor clearance between the differential and steering rack. Tighten 12mm hardware to 55 ft-lbs, ½" hardware to 65 ft-lbs. Figure 22

## Fig 20 Note

Slid bracket as far REARWARD as possible, tighten allen head bolts to 55 ft-lbs.

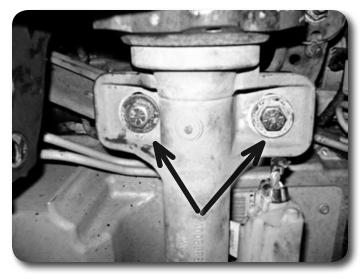


Figure 21



Figure 22

- Align driveshaft marks to differential from previous step and reattach driveshaft to differential with factory hardware and straps. Loc-tite and tighten bolts to 19 ft-lbs.
- 21. Reinstall the factory rear crossmember with factory hardware. Tighten to 55 ft-lbs.
- 22. Reattach the wiring harness to the differential along with the differential breather line.
- 23. Attach skid plate to the factory crossmembers with factory hardware. It may be necessary to loosen the front splash guard to get the new skid plate to install easily. There will be 2 holes that are not present, and will need to be drilled to 21/64~11/32 and attached with 3/8" self threading bolts. Certain model trucks may have the hole on the Passenger's front align, but not be threaded, if hole is not present, drill to 21/64~11/32". If it is present but not threaded, attach with 3/8" threaded bolts, otherwise attach with factory bolt. Figure 23, 24, 25

## **Figure 21 Note**

Use the large diameter extra thick washers on the passenger's side differential mount. (Bolt Pack #949)

### **Figure 22 Note**

12mm hardware for driver's side is in bolt pack #949

Attach differential to relocation bracket with 12mm x 35mm bolt with clear zinc washer. Tighten to 55 ft-lbs.

## **Figure 23 Note**

- \* hole may or not be present, drill and tap w/ 3/8" hardware, reuse factory hardware if factory equipped.
- \*\*Drill to  $21/64\sim11/32$  and attach with 3/8" self threading bolt (#949)

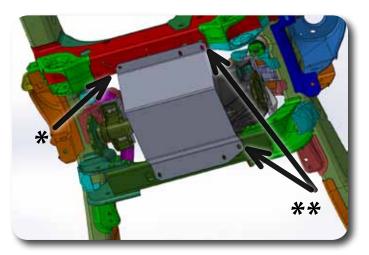


Figure 23



Figure 24



Figure 25

- 24. Tighten 3/8" skid plate hardware to 25 ft-lbs, stock 10mm hardware to 35 ft-lbs.
- 25. With the upper balljoint disconnected, remove the factory strut assembly, retain all hardware.

26. Trim the two studs that are towards the inside of the vehicle. Only the very top, unthreaded portion needs to be removed. Figure 26

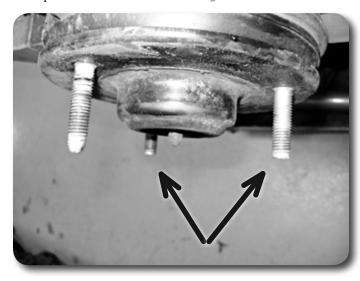


Figure 26

- 27. Install top spacer with new 10mm nuts with washers. Tighten to 40 ft-lbs.
- 28. Reinstall strut assembly with new 3/8" nuts and washers at the upper mount. Attach with new 10mm hardware at lower mount. Run hardware below the CV shaft top down for additional clearance. Figure 27, 28

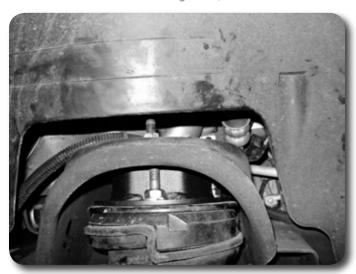


Figure 27

# **Step 27 Note**

New 10mm hardware is in the bag kit to attach the strut spacer to the factory strut.

# Fig 27 Note

3/8" hardware for upper strut mount to the frame is in bolt pack #943

## Fig 28 Note

New 10mm strut hardware is in bolt pack # 709. Tighten to 40 ft-lbs. Run hardware top-down for clearance to CV shaft.



Figure 28

- 29. Tighten upper hardware to 35 ft-lbs. Tighten lower hardware to 40 ft-lbs.
- 30. Attach CV shaft back to the differential with factory hardware. Tighten to 40 ft-lbs.
- 31. Mark the upper control arm cam position. Remove the stock upper control arm. Figure 29

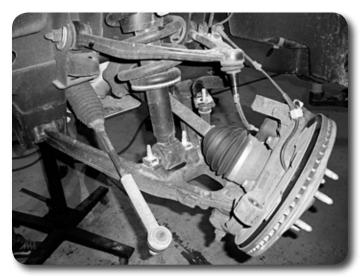


Figure 29

32. Install new control arm assembly with new nut at the steering knuckle and factory cam bolts at the frame. The small tab welded to the top of the new arm will be toward the rear of the vehicle. Tighten ball joint nut to 37 ft-lbs. Install cotter pin. Do not loosen nut to get the cotter pin to align with the hole.

- 33. Adjust cam bolts to previous marks, snug, but do not tighten at this time.
- 34. Cut the extra tab from the brake line bracket as shown. Use ½" hardware (#768) to attach the brake bracket to the upper control arm. Figure 30



Figure 31

35. Disconnect the battery. Install weld on steering stops to the lower control arm as shown. Paint after welding, reconnect battery.



Figure 32

- 36. Reinstall wheels. Cycle steering to check for clearance between the tire and upper arm at full droop. Check for adequate clearance between brake line and ABS wire and tire / wheel. Lower vehicle to the ground, torque lug nuts to specification.
- 37. Bounce suspension to settle at correct ride height. Align to previous marks, tighten upper cam bolts to 95 ft-lbs.
- 38. Cycle steering and check for clearance at ride height between tires and upper control arm. Check for adequate clearance between brake line and ABS wire and tire / wheel. Additional steering stops may be required if a tire / wheel package outside of the specified range is chosen.
- 39. Recheck all hardware for proper torque, and alignment is now required. Check hardware after 500 miles.
- 40. Rear box kit must be installed see separate instruction sheet.

#### Fig 31 Note

1/4" brake line hardware is in #768 bolt pack. Tighten to 10 ft-lbs.

# Recommend Alignment Specifications

#### **C**ASTER

 $3.30^{\circ} \pm 1.00^{\circ}$ 

#### **C**AMBER

 $-0.10^{\circ} \pm 0.60^{\circ}$ 

#### TOE

 $+0.10^{\circ} \pm 0.20^{\circ}$ 

# 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.

