Carli Suspension: 422 Jenks Circle, Corona, CA 92880 Tech Support: (714) 532-2798

CS-LTB-D & CS-LTB-H

NOTE:

Please review the product instructions prior to attempting installation to ensure installer is equipped with all tools and capabilities necessary to complete the product installation. We recommend thoroughly reading the instructions at least twice prior to attempting Installation.

Before beginning disassembly of the vehicle, check the "What's Included" section of the instructions to ensure you've received all parts necessary to complete installation. Further, verify that the parts received are PROPER TO YOUR application (year range, motor, etc.) to avoid potential down-time in correcting potential discrepancies. Any discrepancies will be handled by Carli Suspension and the correcting products will be shipped UPS Ground.

LIFETIME PRODUCT WARRANTY

Carli Suspension provides a limited lifetime product warranty against defects in workmanship and materials from date of purchase to the original purchaser for all products produced by Carli Suspension. Parts not manufactured by, but made to Carli Suspension's specifications by third party manufacturers will carry a warranty through their respective manufacturer. (i.e. King Shocks, Bilstein Shocks, Fox Shocks). Deaver Leaf Spring's warranty will be processed by Carli Suspension.

Proof of purchase (from the original purchaser only) will be required to process any warranty claims. Carli Suspension products must be purchased for the listed Retail Price reflected by the price listed on the Carli Suspension Website at the time of purchase. Carli Suspension reserves the right to refuse warranty claims made by any customer refusing or unable to present proof of purchase, or presenting proof of purchase reflecting a price lower than Carli Suspension's Retail Price at the time the item was purchased.

Carli Suspension's Limited Lifetime Warranty excludes the following parts which are subject to wear: Track Bar Bushings, Track Bar Heim Joints, Limit Straps, Control Arm Bushings, Radius Arm Bushings, Shock Bushings, Sway Bar End Link Heim Joints, Shock Seals, Shock Bearings, and Corrosion on Shock Shafts or Bodies. These items will be warranted for a period of 60 days from the date of purchase only if determined to be installed properly signifying manufacturing defect. Carli Suspension cannot warrant a product's cosmetic finish due to the varying extreme elements that may be encountered.

Any alterations, modifications, or improper installation, of the product will void this warranty. Products should be inspected for defect upon receipt and approved before installation. Any defect in NEW product will be warranted if returned before installation in its original packaging. Carli Suspension's obligation under this warranty is limited to the repair or replacement of the defective product only. All costs of removal, installation or reinstallation, freight charges, incidental or consequential damage are expressly excluded from this warranty.

Carli Suspension is not responsible for damages and/or warranty of other vehicle parts related or non-related to the installed Carli Suspension product. This warranty shall not apply to any product that has been subjected to accident, negligence, alteration, abuse or misuse as determined by Carli Suspension. Carli Suspension reserves the right to refuse warranty claims if produced parts are combined and/or substituted with other aftermarket suspension products. Combination and/or substitution of other aftermarket suspension components may cause premature wear and/or product failure. Carli Suspension reserves the right to change/alter product without obligation to update any previously purchased products.



LONG TRAVEL AIRBAGS

- DOT approved 12" travel works with 3" and 6" of lift
- 5-75 p.s.i. optimum operating range
- · For big toy haulers and 5th wheels
- Custom laser cut and powder coated brackets
- Can be used manually with or air compressor system



Fitment

CS-LTB-D

2003-2011: DODGE 2500-3500 4X4 - Diesel

CS-LTB-H

2003–2011: DODGE 2500-3500 4X4 - Hemi DODGE 1500 4x4 (Mega-cab ONLY)

What's Included In the Kit

- Qty. 2: Upper Brackets
- Oty. 2: Airbags
- Qty. 2: Assembled Lower Brackets *(MIRRORED, see below)
- Qty. 1: Hardware kit with Vent Relocation

Diesel Lower Axle Brackets:

- Two pieces: Bracket & Strap.
 Diesel Strap is 5 3/4" tall and has a larger radius.
- Each bracket assembly will receive
 - o Qty. 2: 3/8" Carriage Bolts
 - Qty. 2: 3/8" washers
 - o **Qty. 2**: Split-lock washer
 - o Qty. 2: 3/8" nuts

- Qty. 1: Heat Shield
- Oty. 2: Carli Black Billet Bump Stop Drops
- **Qty. 1**: Air Line (Approx: 9 feet)
- Qty. 1: Airbag Instructions

Hemi Lower Axle Brackets:

- Two Pieces: Bracket & Strap. Hemi Strap is 5 1/4" tall and has a tighter radius.
- Each bracket assembly will receive:
 - Qty. 2: 3/8" Carriage Bolts
 - Qty. 2: 3/8" washers
 - o **Qty. 2**: Split-lock washer
 - o Qty. 2: 3/8" nuts

NOTES:

- This air bag system was designed around a stock exhaust configuration. Some aftermarket exhaust systems will require modifications to the tail pipe!
- This Airbag kit needs 1"-2" of lift in the rear, DO NOT RUN this kit on a stock-height truck.
- 4" rear lift (matches 6" front lift) requires spacer (mounts between the bag and the upper airbag Bracket): PN: CS-AIRBAGSPCR
- Installation will be done with rear axle at full droop (extended).
- AFTER INSTALLATION AND BAG AIGNMENT, A TACK WELD ON EACH SIDE OF EACH LOWER BRACKET WILL ENSURE THEY DO NOT ROTATE.
- If installing on a hemi, Exhaust modification will be required to clearance the passenger side upper bracket from the resonator over the axle.

Installation Instructions

- 1. Block front wheels so vehicle will not roll during the install.
- 2. Jack up rear of the vehicle and place jack stands under both frame rails.
- 3. Let axle fully extend, remove rear wheels if easier access is desired.
- **4.** Remove rear bump stops.
- 5. Remove vent tube from axle housing.
- 6. Remove vent tube fitting from axle housing.

7. Slightly loosen brake lines at "T Block" and rotate the "T Block" so the rubber line is facing up.





8. Retighten brake lines. Install supplied vent tube relocation fitting pointing it towards the front of the truck. Tighten fitting at both points.



9. Mount upper air bag brackets to inner frame rails using supplied bump stop bolts. Be sure to route the wire harness over the top of the mount on the driver side.



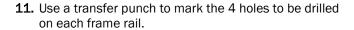


10. Mount the "Carli" Logo billet bump stop drop blocks between the Airbag bracket and the bump stop.

DO NOT SPACE THE AIRBAG BRACKET BY INSTALLING THE DROP BLOCKS BETWEEN THE FRAME MOUNT AND AIRBAG BRACKET.

Order: frame bump stop mount, air bag bracket, Billet Spacer drop block, OEM Bump stop.

- 1: Airbag Bracket (against frame-bump mount)
- 2: Billet Spacer
- 3: OEM Bump Stop







- **12.** For a cleaner install, remove brackets before drilling holes
- 13. Use a 3/8" drill bit to drill 2 lower holes on each side.
- 14. Use a 19/64" drill bit to drill 2 upper holes on each side.

 Be sure to use only a 19/64" drill bit! This will allow the self tapping bolts to go through the double walled frame.
- **15.** Loosely attach upper brackets using supplied: 10 x 1.5 x 50mm bump stop bolts, then Billet Aluminum Bump Stop Drops followed by the OEM bump stops. Do not tighten until all fasteners are in.
- **16.** Use the supplied 3/8 16 x 1 button head bolts through the bottom two holes putting the washer and nut on the frame side.

17. Use the supplied 5/16 – 18 x 1 self tapping screws through the upper holes. This is best done by hand to ensure you do not strip the holes with an impact!



- **18.** Install 90* swivel fittings into air bags.
- 19. Mount air bags to upper brackets using supplied bolt, lock washer, and flat washer. Be sure to point swivel fittings towards rear of the truck. Heat shield goes on passenger side sandwiched between upper bracket and air bag. Note: Exhaust is removed in picture for clarity.



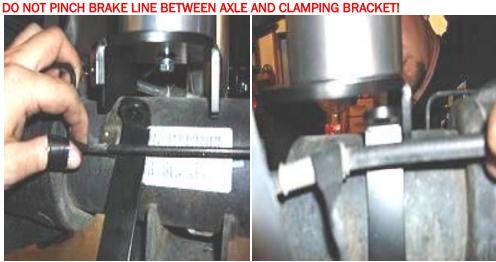
20. Pry back brake line loop on passenger side and tap flat against the axle.



21. Mount lower brackets to bottom of air bags with supplied bolts, lock washers, and flat washers. Note: Tab on lower plate is only for driver side brake line "T Block" and points towards the rear and inboard. Carriage bolt holes also are on the inboard side.



- 22. Pull air bag down until lower bracket sits squarely on the axle.
- 23. Insert supplied 3/8 -16 x 1 1/4" carriage bolts through square holes in lower brackets.
- **24.** Now use the clamping bracket to secure lower bracket to axle. These will mount inboard of shock mounts. **Note:** Loosen Parking brake cable on passenger side shock mount for easier assembly.



- **25.** Bag must be aligned side to side and should be level with the top bracket. When the bag is inflated, spacing of the bag to the bottom bracket must be equidistant ensuring proper orientation. The bag will not function properly if mounts are tilted.
- 26. Bolt driver side brake line T Block to tab on lower bracket with supplied ¼ -20 x 1-¼ fastener. Note: Be very careful when adjusting brake lines to proper alignment with the tab. And be sure to make sure brake lines are clear from interfering with anything!
- 27. Reroute vent tube to the front of the air bag and up the wire harness on the frame. Zip tie accordingly.
- 28. Bend parking brake hanger on driver side to pull cable away from the air bag. It may also be necessary to zip tie the e-brake cable to the bracket to insure the cable does not rub on the airbag



29. Double check to make sure nothing is rubbing on the air bags!

30. To ensure the lower bag brackets do not rotate under load, put a solid tack weld on each side of the lower airbag brackets. One large tack weld per side will be sufficient.

AIR PRESSURE NOTES:

- **EMPTY:** Please ensure to run a minimum of 5psi in the bags at all times. This, in addition to the bump drops installed, will ensure the bag pistons do not collapse onto each other causing damage to the bags.
- LOADED: Bags can be filled to a MAXIMUM of 100psi. Adjust the pressure according to the load.
- Carli Long Travel Airbags are designed to supplement your payload capacity for light to medium duty applications, they are not
 designed for extremely heavy or severe duty loads, and they are not designed for constant heavy weight. Carli Airbags work best
 in the 20-70psi range. If you find yourself running the airbags at more than 70psi the majority of your towing, the lifespan of the
 airbags will be shortened.
- Carli's long travel airbags can be setup to work with any in-cab air pressure control unit so long as the compressor uses a 1/4" airline and uses a dual solenoid (right and left pressures can be controlled independently).
- AFTER INSTALLATION AND BAG AIGNMENT, A TACK WELD ON EACH SIDE OF EACH LOWER BRACKET WILL ENSURE THEY DO NOT ROTATE.
- <u>PLEASE NOTE:</u> Carli Suspension's airbags should NEVER be "T" (ed) together; each should run on their own airline from either the compressor outputs or individual pressure solenoids. This will ensure air cannot move from one bag to the other during operation and maintaining control of the load.