

CS-RAM15C20

CS-RAM15P25

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.



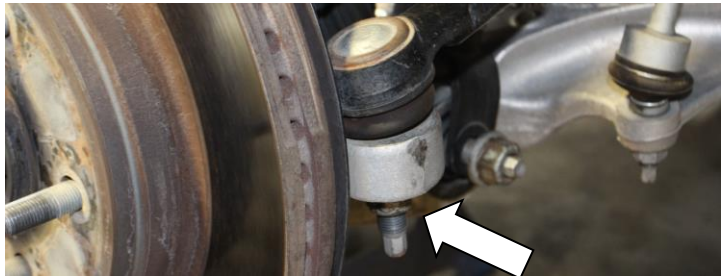
PLEASE VISIT: Forums.CarliSuspension.com
Troubleshooting advice or to download an electronic copy of this document.

WHAT'S INCLUDED IN THE KIT:

- **Front Coilover: Fox 2.0 IFP or King 2.5: Remote Reservoir**
- **Front Reservoir Mounts (KING ONLY)**
- **Rear Fox 2.0" IFP or King 2.5" Piggy-Back Reservoir Shocks**
- **CS-RAM15MRC-14-R: Rear Coil Springs**
- **CS-DEL-R-14: Rear Extended Sway Bar End Links**
- **CS-RAM15PRBDROP: Rear Track Bar Drop Bracket**

Coilover Installation Instructions:

- 1) Using a jack, lift the front of the truck and support the frame with jack stands. Ensure you jack it high enough to completely droop the front suspension.
- 2) Remove the Passenger's side wheel/tire.
- 3) Using a 16mm socket, remove the upper nut that compresses the pillow bushing retaining the sway bar to the end link.
- 4) Remove Tie-Rod from spindle using a 13/16" Socket.



5) Remove the lower strut bolt



6) Loosen the upper Ball joint/Spindle nut so it's only engaged a couple threads. You will need to smack this junction with a dead-blow hammer to separate the joint; leaving the nut on will ensure the knuckle/arm separation is controlled.



7) Remove Upper Ball Joint Nut to separate the spindle and control arm. Support the spindle and ensure the brake lines and axle are not supporting the weight of the spindle assembly (tie it off to the frame for the time being).



8) Remove the three 15mm nuts that retain the factory strut to the upper mount on the frame; then remove the factory strut.



- 9) Slide your Coilover loosely into the coil bucket and over the lower shock mount, then insert the lower shock bolt and thread the nut on a couple turns to ensure it remains in place. To affix the coilover to the top of the mount, use a jack under the lower control arm to manipulate the coilover until everything lines up enough to secure it with the provided hardware. While jacking up the suspension to align the coilover, loosely reattach the ball joint to the spindle.

FOX 2.0 – Commuter: The Fox 2.0 Coilover is equipped with studs, nuts and washers like the factory strut. Affix the coilover to the upper strut mount utilizing this hardware. **Toque to: 20 ft. lbs**

King 2.5 – Performance: Index The top of the coilover so the reservoir hose fitting faces directly outward, toward the wheel, and the hose wraps under the front of the upper control arm. Using the provided hardware, thread the bolts with a washer into the coilover. **Toque to: 26 ft. lbs** Dry-fit the Carli Reservoir brackets by centering and securing the reservoir to the bracket and positioning the mounting surface of the reservoir bracket it to the underside of the frame rail where the 90° fitting entering the reservoir is clear of the sway bar pivot. Mark the location and remove the reservoir from the mount. Secure the mount to the bottom of the frame rail using the provided self-tapping hardware, then secure the reservoir to the mount using the hose clamps provided. (see picture in next step)

- 10) Torque the upper ball joint back into the spindle taper and torque to **60ft.lbs.**



- 11) Reinstall the Tie-Rod end, torque to **45ft.lbs.**
12) Reinstall the sway bar end link/sway bar bushings enough to lightly compress the rubber pillow bushings.
13) Repeat installation on the Driver's side.
14) Once the front end is complete, reinstall the wheels and tires (Lug nut torque is **125 ft.lbs.**) and lower the truck onto the ground.
15) Once the weight of the truck is on the suspension, torque the lower shock bolts to **150 ft.lbs.**
NOTE: An Alignment **WILL** be necessary after completing suspension installation. If any height adjustments are made to the coilover, an alignment will be needed after each adjustment.

Rear End Instructions:

1. Jack up the rear end and support the frame rail with jack stands; then remove the wheels and tires.

2. Using an 8mm or 5/16" socket, remove the rear wheel liners to gain access to the factory shocks and coil springs.



3. Place a jack under the rear pumpkin and jack up the axle to preload the suspension slightly, then remove the rear shocks and sway bar end links.



4. Droop the rear suspension and remove the factory coil springs. The factory coil spring isolators will be reused atop the new, Carli Suspension rear coil springs.



5. Remove the upper track bar bolt and pull the bar out of the bracket and lay it on the axle to prepare the upper bracket for the track bar drop bracket installation.

NOTE: Be sure not to let the axle hang from any ABS or brake lines.

NOTE: The track bar will be under tension. Be sure to stay clear of the axle movement when removing the track bar bolt. Using a ratchet strap on the frame bracket to the axle will help control the axle once the bar is disconnected.



6. Installing the track bar drop Bracket.

- a. Slide the track bar bracket into place so the slotted hole is centered vertically on the factory bolt hole and the tang protruding from the top of the Carli bracket is on the INSIDE of the factory track bar bracket.



b. Install the provided $\frac{1}{2}$ " x 2. Bolt and washer in the upper hole of the Carli/Factory Bracket to index the drop bracket.



c. Install the factory bolt in the slotted hole to finish indexing the bracket for the two holes to be drilled.



d. Using a $\frac{1}{2}$ " Center punch, mark the holes to be drilled on the front and rear 2 holes adjacent to the factory bolt.



e. Loosen the factory clamp on the Passenger's side exhaust (exiting the muffler) to remove that section of the tailpipe; this will provide clearance to drill the $\frac{1}{2}$ " holes.



f. Remove the bracket and drill the center-punched holes to $\frac{1}{2}$ " diameter in the front and rear of the bracket.

NOTE: Coat with primer and black paint to prevent rusting.



g. Re-install the Carli Drop bracket utilizing the upper tang mount and 4 drilled $\frac{1}{2}$ " holes. Secure the bracket with the provided hardware, (qty 5) $\frac{1}{2}$ " x 1" bolts. Each bolt has a washer for each side of the bracket and a lock nut. **Torque to 75ft.lbs.**

NOTE: The factory track bar hole will not be utilized; it was only used to index the drilling of the 4 - $\frac{1}{2}$ " holes.



h. Utilizing the factory bolt, reinstall the factory track bar in the Carli Drop Bracket. Hand tight for now; this is a vulcanized bushing and **MUST** be torqued on the ground, when the suspension's under the weight of the truck.

NOTE: Reinstalling the track bar may require assistance in shifting the axle to line up the bolt hole.



7. Place the factory coil spring isolator on top of the Carli coil springs and install the rear coils **NOTING that they're side specific. -P for passenger, -D for driver.**



8. Jack up the axle to preload the coil springs so the shocks can be installed.

9. Using the factory upper and lower mounting hardware, install the shocks body up (King 2.5" faces the reservoirs forward). **Torque upper and lower hardware to 100ft.lbs.**
NOTE: King 2.5" shocks use offset misalignment spacers. The larger spacers go to the inside of the mount to space the shock **AWAY** from the control arms.



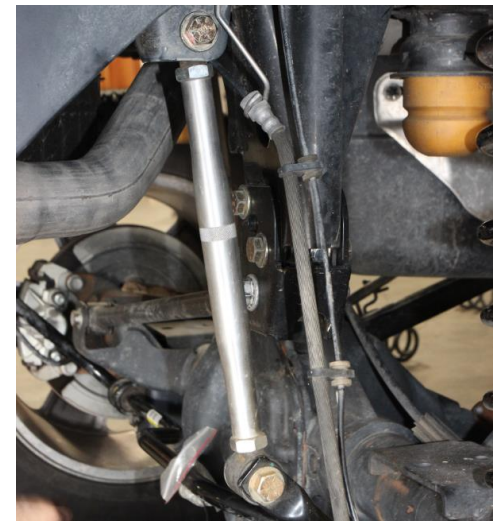
10. Assemble the provided sway bar end links as short as they'll go, approximately 12.5" Center to Center.



11. Tighten the jam nuts to set the length ensuring the ends remain parallel.

12. Using a 1/2" Drill bit, bore the factory sway bar and upper, frame side mounting bracket to 1/2" to accept the larger, provided 1/2" x 2.75" hardware and install the rear end links. On the **INSIDE** of the factory sway bar. **Torque hardware to 60ft.lbs.**

NOTE: Orientation from outside to inside should be ***bolt head, washer, factory bracket, end link, washer, lock nut on the upper*** and ***bolt head, washer, sway bar, end link, washer, lock nut on the lower.***



13. Replace the passenger side exhaust that was removed, and reinstall wheel liner.

14. Reinstall factory wheels and tires (**125ft.lbs. Lug Torque**) and set the truck on the ground.

15. Torque factory rear (upper) track bar bolt to: **150ft.lbs.**

16. Take the truck for an alignment and **retorque everything after the first 500 miles.**