2019+ Ram 1500 Commuter & Performance Systems

Carli Suspension, Inc.
596 Crane St.
Lake Elsinore, CA 92530
888-992-2754

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.

Parts Checklist—Commuter 2.0

☐ **(Qty. 1) - Fox Shock Package**
- ◊ (Qty. 2) Fox 2.0" Coilovers
- ◊ (Qty, 2) Fox 2.0" IFP Rear Shocks

☐ **(Qty. 1) Rear Coil Springs, Set**

☐ **(Qty. 1) Rear Sway Bar End Links, Set**

Parts Checklist—Performance 2.5

☐ **(Qty. 1) - KING Shock Package**
- ◊ (Qty. 2) King 2.5" Coilovers, Remote Reservoir
- ◊ (Qty. 2) King 2.5" Piggyback Reservoir Rear Shocks
- ◊ (Qty. 2) Reservoir Mounting Brackets with Hose Clamps

☐ **(Qty. 1) Front Upper Control Arm Set**

☐ **(Qty. 1) Rear Coil Springs, Set**

☐ **(Qty. 1) Rear Sway Bar End Links, Set**

☐ **(Qty. 1) Brake Line Kit**

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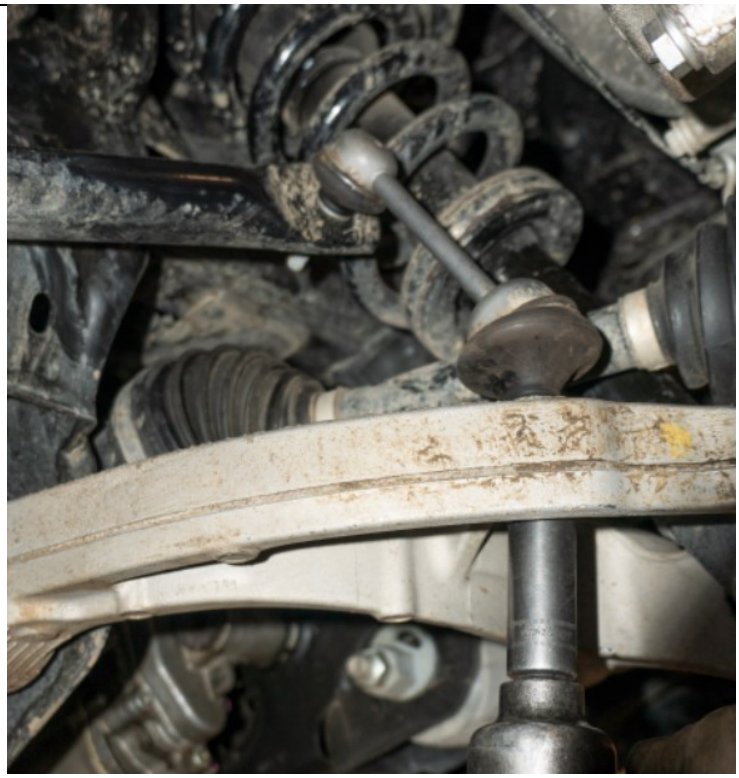
Instructions

1. Raise the truck and support it by the frame ensuring it's safely suspended with suitable jack stands. The suspension should be at full extension with at least a 4" between the bottom of the tires and the ground.
2. 22mm — Remove the Factory wheels and tires.
3. 18mm — Remove the lower Sway Bar Nut from the Lower control arm on both sides.
4. Lift the sway bar up, away from the lower control arms.

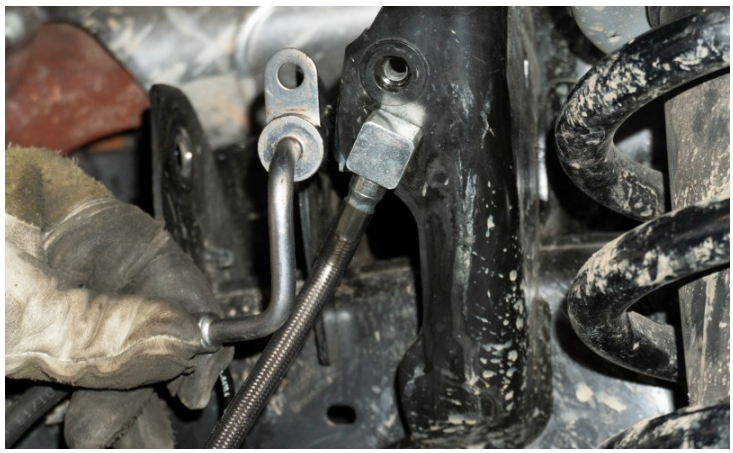


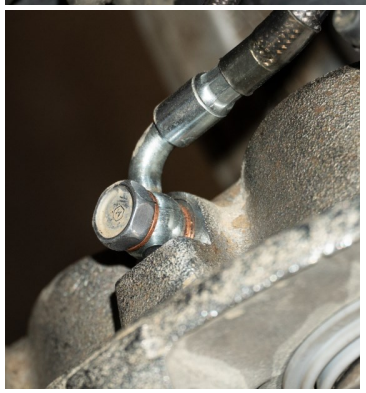
5. 21mm — Remove the Tie Rod Ends from the knuckle. Loosen the nuts until they're only engaged a few threads. Use a tie-rod end puller to disengage the tapers. Once it drops, remove the tie rod end from the housing.

6. 21mm — Remove Upper Control arm Ball Joint from Spindle Taper. Loosen the nuts until they're only engaged a few threads.
7. Use a tie-rod end puller to disengage the tapers.
8. Once it drops, support the assembly with a jack from the lower ball joint and remove nut to disconnect the assembly.
9. Gently rest the spindle/axle/hub assembly ensuring no tension on any abs or brake lines. A bungee cord helps.
10. Push the factory control arm up and out of the way.

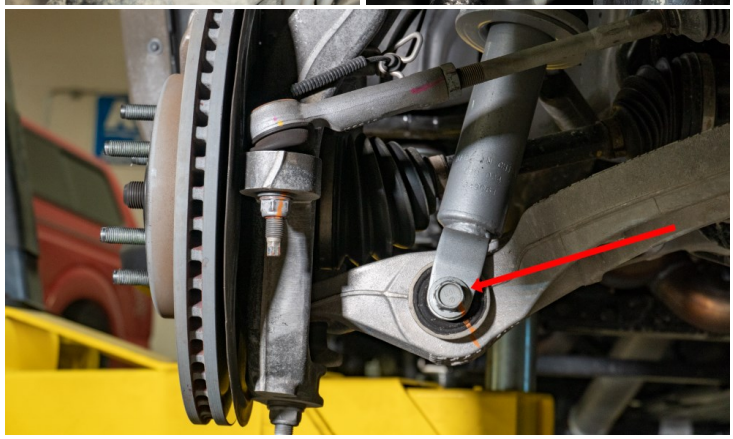
11. **Performance 2.5 ONLY** — 21mm — Remove control arm hardware from the frame and remove the factory control arms from the truck. Keep the hardware as it'll be reused with the Carli Arms.

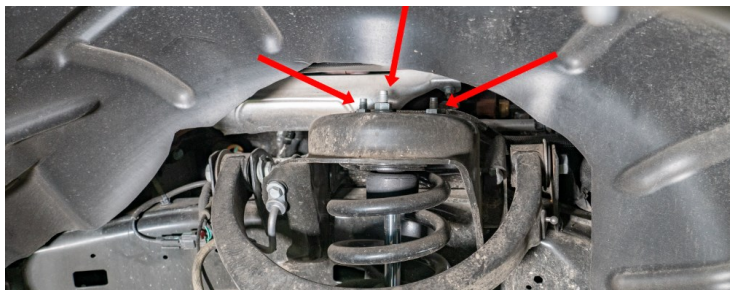
12. **Performance 2.5 ONLY** — Use a 12mm line wrench and 15mm socket to remove the factory Front Brake lines.
13. **Performance 2.5 ONLY** — Install Carli Brake lines in the factory location. Use the supplied brackets to index the brake lines down and slightly rear. The factory bolt (15mm head) that secured the factory brake lines will secure our indexing brackets at the frame mount.
14. **Performance 2.5 ONLY** — The caliper side of our brake lines should have 1 copper washer on each side of the bajo fitting.



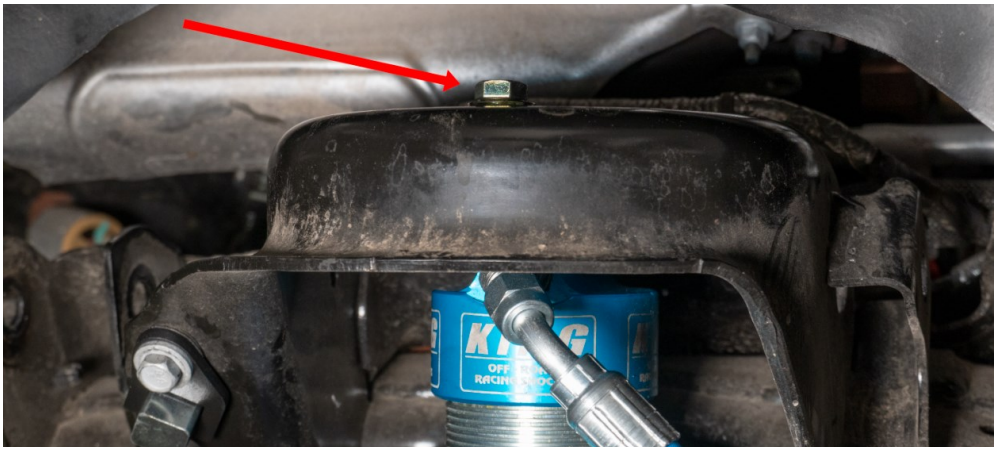


15. 24mm — Remove the nut from the factory strut at the lower control arm connection leaving the bolt in place.
16. 16mm — Remove the three nuts securing the upper portion of the strut to the factory frame bucket.
17. Lower the jack supporting the lower control arm to allow the front to droop ensuring no cables/lines are holding it up and remove the factory strut assembly.
18. Place the new coilover onto the lower control arm mount and put the factory bolt back in. Spin the nut on a few threads.
19. Jack the lower control arm assembly up to align the top of the coilover with the upper mounting bucket.
20. **Commuter ONLY** — When the studs come through the top of the bucket, use the provided washers and nuts to secure the upper strut mount. Torque to 20lb.ft.





21. **Performance 2.5 ONLY** — Insert one of the provided grade 8 bolts and a washer to start the outermost upper control arm thread in the top of the coilover. **USE Anti-seize as you're threading grade 8 bolts into aluminum threads!**



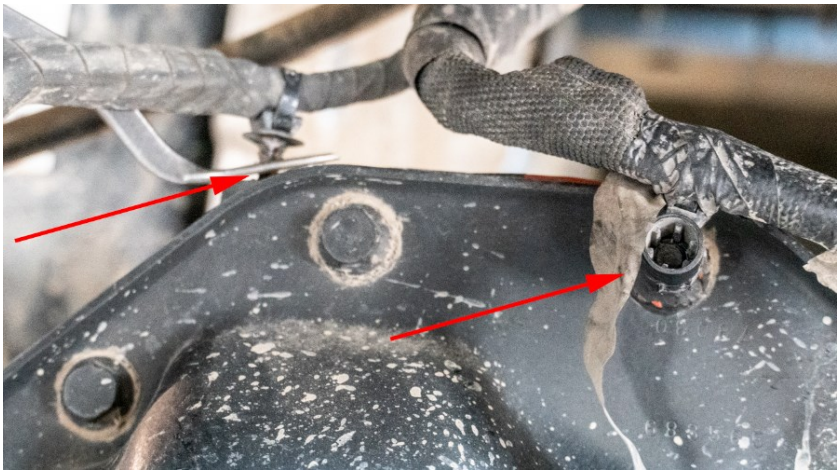
22. Once the outermost bolt is started, place the reservoir mount into position and secure it using the innermost two bolts and washers. The longer portion of the reservoir mount faces rear.
23. Torque upper bolts to 26lb.ft.

24. **Performance 2.5 ONLY** — Follow instructions in the Carli Upper Control Arm Box.
25. Wrap the reservoir hose to the front and loop the reservoir into the bracket securing it to the mount with the provided stainless hose clamps. Use the provided insulated P-Clamp to secure the reservoir hose to the frame (keep the hose away from the arm). There are two bolts in the frame right behind the routing of the reservoir hose; use the rear bolt to secure the p-clamp/hose. The Driver's side is an existing, factory bolt. You're provided a bolt for the passenger's side with the kit.
26. **COMMUTER ONLY**—Pull the Factory upper control arm down to meet the knuckle and torque factory nut to 26lb.ft.

27. Reinstall the factory tie-rod ends into the knuckle. Torque nuts to 45lb.ft.
28. Pull the factory sway bar down and reinstall into the lower control arm. Torque to 74lb.ft.

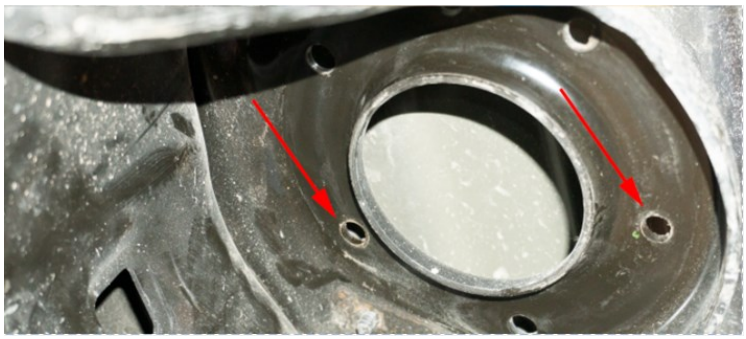
REAR

29. 8mm—Remove rear fender liners
30. 12mm—Remove hardware securing the rear brake line routing brackets to the frame
31. 21mm Lower — 18mm Upper — Remove the factory rear shocks.
32. 18mm Lower — 16mm Upper — Remove factory rear sway bar end links.
33. 21mm — Remove factory track bar bolt at the axle and loosen frame side so it's hand tight.
34. Loosen all 8 bolts securing the rear control arms so they're **hand-tight.**
35. Disconnect the 2 top fittings from the center housing of the differential to ensure they aren't damaged when dropping the rear axle.
36. Lower the axle and remove the factory springs.
37. Install the Carli Rear Springs. With the rear coils seated, compress the rear axle to hold tension on the rear springs.

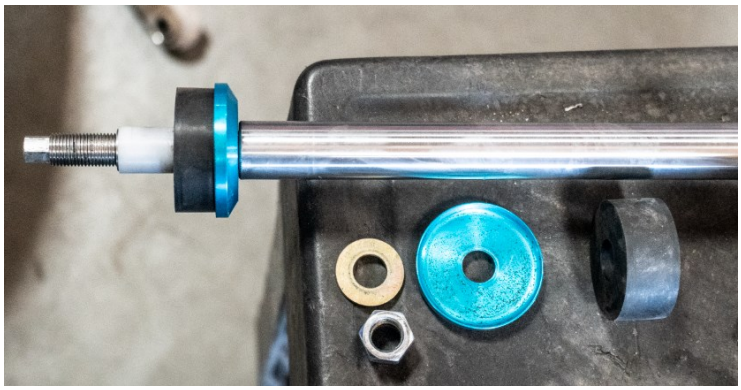


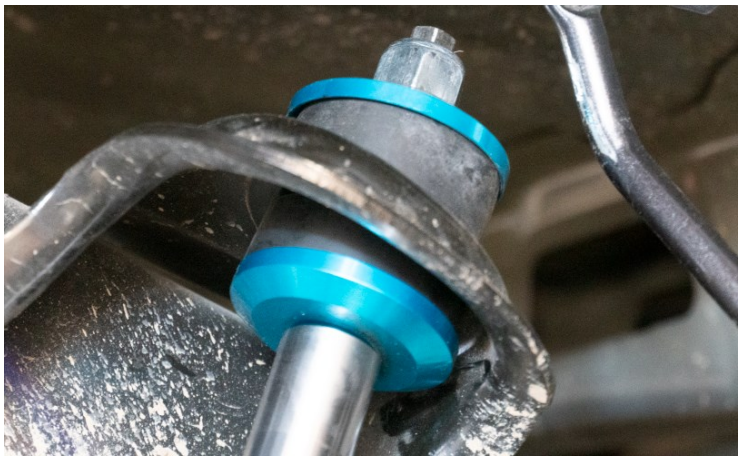
Rear Coil Installation Notes

- The rear coils springs are side specific! The Drive ends in a "D", Passenger in a "P". Place the factory coil isolator on the Carli spring ensuring the upper spring end seats against the index in the isolator.
- There are 2 male index points on the top of the isolator, ensure they go into the SAME holes from which they were removed. You'll see them come out the top of the coil bucket when installed.



38. Reinstall the lower track bar bolt **hand tight**. (a large ratchet strap/come a long can assist in lining up the bolt hole).
39. Install the rear Shocks. Using the factory lower shock bolt (100lb.ft.) and provided stem-top upper hardware. Reservoirs on the King shocks should face forward.
40. **Commuter —** remove the nut, upper bushing housing and upper bushing leaving the lower half in place. Slide the pin through the factory mount and assemble the upper bushing half, housing and nut. Tighten until the bushing starts to crush.
41. **Performance 2.5** — Drain the nitrogen from the shock (depress the Schrader valve at the end of the reservoir) to ease installation. Remove the nut, washer, bushing cap and large rubber upper half of bushing. This will leave the metal lined composite sleeve and the thin, lower half of the bushing in place on the shock stem. Slide the pin through the factory mount and assemble the upper bushing half, cap, washer and nut. Tighten until the bushing starts to crush.





42. For the 2019+, you'll need to install the smaller crush sleeve into the upper end link bushing (10mm ID). The 14mm ID sleeve can be pressed out in a vice or hammered out. We use a vice with an 11mm deep socket to press out the sleeve without disturbing the bushing assembly, then a larger piece of tube on the other side of the sleeve to receive it. The new sleeve should be greased and can be installed with the light tap of a hammer.

43. With the smaller sleeve installed, unthread the rod ends on the provided sway bar end links to expose the threads. Coat the threads with blue Loctite and assemble the sway bar end links as short as they'll go, approximately 12.5" Center to Center.
44. Use a 3/4" wrench to hold the body while you tighten the jam-nuts with a 15/16" **ensuring the ends remain parallel.**

45. Use the provided M10 x 60mm upper bolt and fender washer to assemble the end link the welded frame nut. Torque to 30lb.ft.

46. Use the provided lower 1/2” bolt and crimp lock nut with a washer between the bolt head/sway bar and bushing/nut to secure the link to the inside of the sway bar. Torque to 60lb.ft.

47. **Performance 2.5 ONLY** — With the installation complete and the truck at full droop (tires off the ground and suspension at full extension), fill the shocks to 225psi, front and rear.
48. Install Wheels/Tires on vehicle. Torque factory lug nuts to 130lb.ft.
49. Set the truck on the ground

Final Torqueing

With the truck on the ground, torque the vulcanized bushings, as follows, to set the ride height:

- Front Lower Control Arm/Coil Over Bolt: 124lb/ft.
- Rear Track Bar Bolts: 129lb/ft.
- Rear Control Arms: 148lb/ft.
- Retorque ALL fasteners after 500 miles!

50. Take truck for an alignment.