



**CS-DLEVEL-1419-D-AR —2014+ Ram 2500 AIR RIDE Leveling System**  
**CS-DPT25-LVL-1419-D-AR —2014+ Ram 2500 AIR RIDE Pintop Leveling System**

### 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 “Parts Checklist” 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.

### Parts Checklist—BASE Kit

**CS-DLEVEL-1419-D-AR—2014+ Ram 2500 Leveling System, Air Ride**

- (QTY. 1) CS-DLRC-14-LVL-D: Dodge Front Linear Coil, 2014+, Diesel
- (QTY. 1) CS-DATB-1419: RAM Track Bar, 2014/2019
- (QTY. 1) CS-DLEVELSPKG-14-D-AR: Leveling Shocks

**CS-DPT25-LVL-1419-D—2014+ Ram 2500 Pintop Leveling System, Air Ride**

- (QTY. 1) CS-DLRC-14-LVL-D: Dodge Front Linear Coil, 2014+, Diesel
- (QTY. 1) CS-DATB-1419: RAM Track Bar, 2014/2019
- (QTY. 1) AS-DPT25SPKG-LVL-14-D-AR: RAM Pintop Shocks, 2.5", F&R, SS, 14+ 2500 Diesel
- (QTY. 1) CS-DRM-14-2.5: RAM Reservoir Mount, 2014+, 2.5
- (QTY. 1) CS-DBLT-1419-R: RAM 2500 Rear Brake line Relocating Brackets

### Parts Checklist—Air Ride System

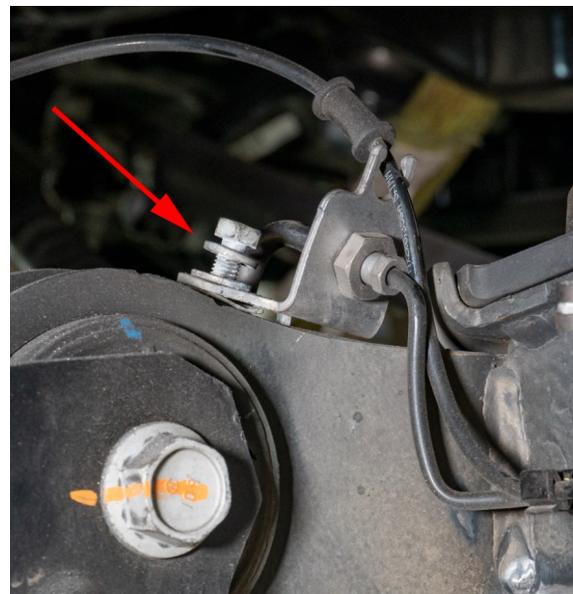
**AIR RIDE SYSTEM**

- (QTY. 2) Air Bag Spacer Brackets, 1”
- (QTY. 8) Air Bag Bracket Stand Supports
- (QTY. 4) M8-1.25 x 16mm Button Head Bolts
- (QTY. 4) 3/8-16 Carriage Bolts, Washers, Lock Washers and Nuts
- (QTY. 6) 3/8-16 Grade 8 Bolts and Lock Washers
- (QTY. 2) Rear Bump Drop Spacers, 1.875”
- (QTY. 4) M10 x 80mm Bolts
- (QTY. 2) Extended Sensor Links

### Installation Instructions

1. Remove the factory front shocks, disconnect the sway bar end links from the sway bar and swing it up out of the way. **NOTE:** If you’re going to install the Carli Torsion Sway Bar, remove the sway bar and the sway bar end links from the truck.
2. **2019+ Trucks:** due to the redesigned driveshaft with a CV joint at the transfer case, it’s necessary to disconnect the front driveshaft to droop the axle enough to install a taller spring. We recommend cycling a torch on the factory bolts to break the loctite, then remove the bolts and disconnect the driveshaft; use a ratchet strap to secure it while finishing the installation.
3. Use a 13mm Socket to Disconnect the brackets holding the ABS lines to the top of the factory radius arm axle mounts to provide sufficient length for coil removal.
4. Remove factory Tack-Bar from the truck.
5. Follow Instructions in the “CS-DLRC-14-LVL-D: Dodge Front Linear Coil, 2014+, Diesel” Box. Be sure to install the Reservoir mount on the Coil Spring!
6. Compress the front suspension to load the coils and install the front Shocks.

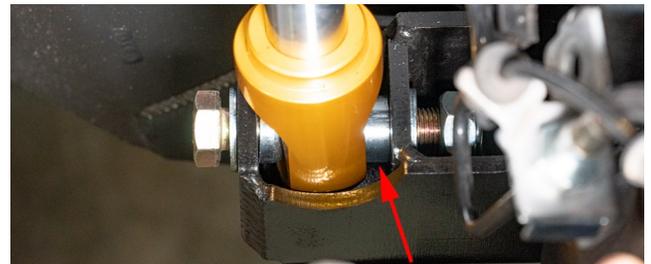
**NOTE:** The 2014+ Rams have a notoriously weak front, lower shock mount. It’s the reason we sell a weld-on replacement. MOST of the issues we see with the factory shock mount would be avoided by completing the weld on the factory shock mount! Looking at it, you’ll see it’s half-welded from the factory. This led to MANY shock mounts tearing for the axle under even mild use. If you have the ability, Finish weld your mount while your factory shocks are out!



- **Leveling System/Fox 2.0 IFP:** These shocks are bushing equipped, top and bottom. Install the lower bushing into the factory lower shock mount, remove the top half of the bushing, compress shock and guide the stem-top through the factory upper shock mount. Reassemble the upper bushing half on top of the shock mount and tighten the provide nut to preload the bushing.

- **Pintop 2.5:** These shocks are Bushing upper, bearing lower. Access to Nitrogen will make the installation MUCH easier. These shocks can be “muscled” into position but the nitrogen pressure will need to be confirmed to ensure proper operation, once installed. **THEY ARE NOT ALWAYS SHIPPED FROM KING WITH THE CORRECT NITROGEN PRESSURES!!**

1. Remove the nut, washer and upper bearing retainer.
2. Remove the upper bushing assembly from the shock. The Bushing assembly consists of an internal metal sleeve with a plastic outer liner - around this is a 2-piece bushing. Separate the bushing so the internal sleeve is connected to the lower half and assemble it to the factory mount securing it by assembling the upper bushing half back to the lower half & crush sleeve sandwiching the factory Shock Mount.
3. Drain the king shocks of their nitrogen pressure by depressing the Schrader valve on the end of the reservoir and compress the shock shaft about half way into the shock body.
4. Install the shaft end into the lower shock mount. **THE LONGER OF THE TWO SPACERS GOES TO THE FRONT** - this offsets the shock position slightly rearward. Secure with the factory shock bolt (or, if installed, with the hardware provided with your Carli Shock Mounts).
5. With the lower rod end installed, Guide the pin of the shock into the assembled bushing in the factory upper shock mount until enough thread is exposed that you can install the bushing cap, washer and nut.
6. Tighten the upper bushing assembly until you feel the crush sleeve engage and there’s slight bushing preload.
7. Mock the reservoir to the mount to see the outward facing portion and install the reservoir stickers.
8. Secure the Reservoir to the mount with the provided hose clamps.
9. Charge the Shocks to 225psi of NITROGEN (NO compressed air) while they’re at full extension.



**LARGER SPACER TO FRONT**



7. **Torque the lower shock bolt to 100lb.ft. (125lb/ft. if running Carli Lower Shock Mounts)**
8. **If you’re installing the Carli Torsion Sway bar, now is the time. If you’re running the factory sway bar, wait until later to re-connect it.**
9. Install the wheels and tires and set the truck on the ground to load the suspension.
10. Install Carli Track Bar following the instructions provided in the “**CS-DATB-1419: Dodge Track Bar, 2014+**” Box. **NOTE:** The track bar will not likely line up with the frame hole now that the truck is lifted. The easiest way to line it up it to have an assistant key the truck on (don’t turn the engine on) and move the steering wheel to line up the bolt. With the bolt installed and the truck at ride height, torque the factory both to 255lb/ft.
11. Resecure your ABS lines (use a ratchet and **BE CAREFUL** as this strips very easy), factory sway bar and front driveshaft (with loctite) if disconnected.
12. With everything installed in the front and the weight of the truck on the suspension, adjust the eccentric bolts (Lower axle to Radius arm hardware used to adjust caster) to the rear-most setting in their adjustment range and torque Upper and Lower Axle Connections to 220ft.lbs.
13. To set the vulcanized bushing on the radius arm to the new ride height, loosen the factory pivot at the frame mount to allow it to reset, then re-torque to 255lb/ft. **ONLY DO THIS AT RIDE HEIGHT.** If installing the Carli Radius Arms, the spherical bearing in the rear can be torqued in the air or on the ground.
14. Block the front wheels on both sides to ensure the truck doesn’t shift while working on the rear. Brake the lug nuts free while the rear is on the ground.
15. Jack the rear end up and support the truck by the frame rails ensuring there’s **NO** tension on any rear brake lines or ABS lines.
16. Support the Axle with jack stands
17. Use a 12mm Line Wrench to loosen the air-fittings from the compressor labeled “LR and RR” under the passenger door next to the frame rail.
18. Remove the rear shocks



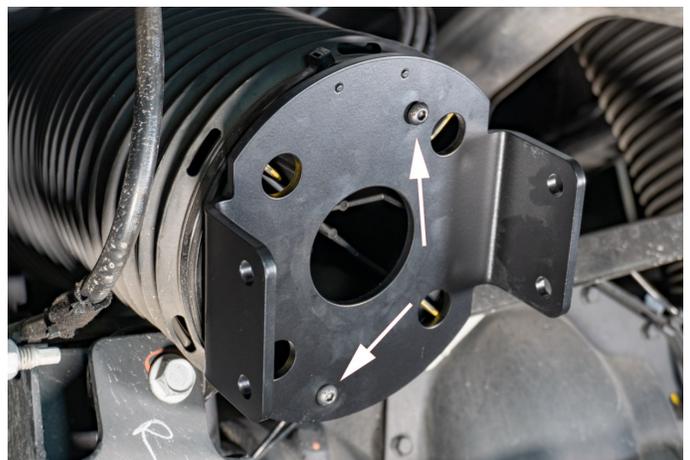
19. Loosen the axle side rear track bar bolt, remove the frame side and lay the track bar flat to the axle out of the way.
20. **PINTOP ONLY:** Follow Instructions in box for the “CS-DBLT-1419-R: E-Brake Routing Tabs”
21. Use a 13mm wrench to remove the nuts securing the air bags to the axle mounts. There will likely be 3 total nuts - 2 on the passenger bag, 1 on the Driver’s side bag. For whatever reason, Ram leaves the front, lower bag stud in the axle without a nut securing it.



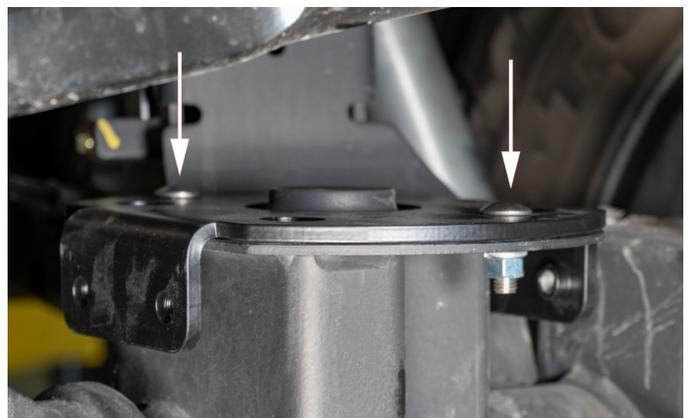
22. Remove the factory position sensor links from the armature and axle mount. These will pop off with force—be careful to not damage the sensor arm.
23. Lift the bags from the axle mount to expose the lower studs.
24. Use a 4mm hex-bit to remove the threaded studs from the bottom of the airbags. These are RHT so counter-clockwise removes them.



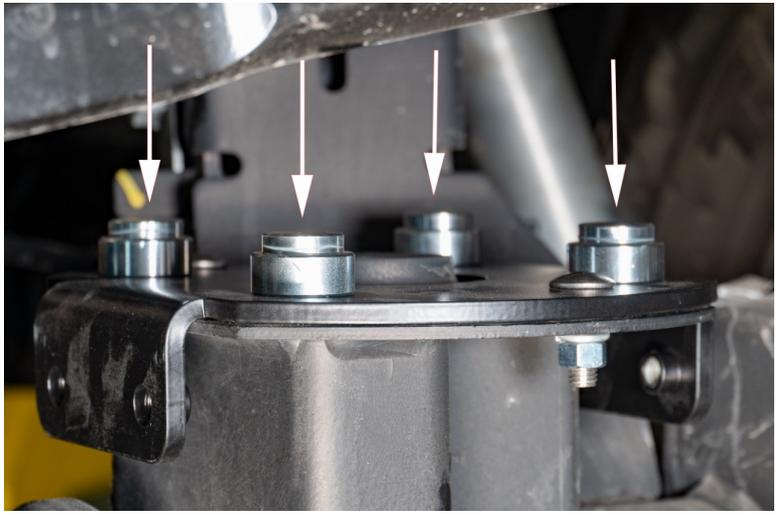
25. Install the Top half of the Carli Airbag spacer to the bottom of the air-bag using the provided M8x16mm Button head bolts. **SNUG** These, do not overtighten as they’re going into a metal sleeve in a plastic bag piston. **DO NOT USE AN IMPACT.** **NOTE:** There are two pins installed in the Carli upper brackets; this marks the REAR; these will sit tight to the back of the lower bag piston as a failsafe.



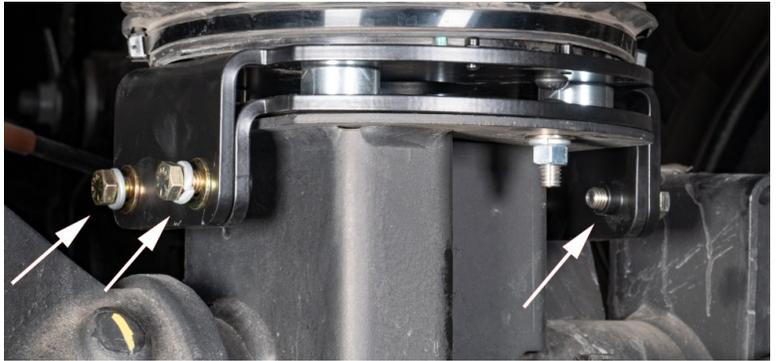
26. Install the Bottom half of the Carli Airbag spacer to the axle mounts using the provided 3/8” carriage bolts, lock washers and nuts. Use Blue Loctite on these nuts and torque to 18lb/ft.



27. Place the 4 Air Bag Bracket Stand Supports onto the lower airbag bracket and sandwich them with the upper bracket/airbag assembly. The whole assembly should seat together at this point.



28. With everything lined up, secure the assembly hand tight using the provided (Qty. 4) 3/8-16 x 1-1/4" Grade 8 Bolts and lock washers in the holes on the sides of the brackets. NOTE: Only 3 are shown in the picture but there are 4 per assembly—8 total.

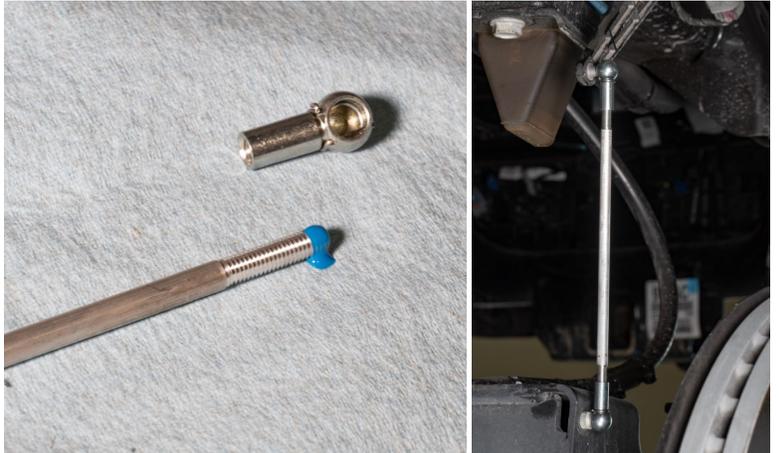


29. Disassemble the Carli extended sensor links and coat the threads in blue Loctite. Thread the ends back on, bottom them out and ensure they're set to 8.5" Center of socket to Center of socket. Both sockets/ends should be facing the same direction with this measurement set.

30. Remove the spring clip from the sockets. This pops off and slides out vertically.

31. Install the links to the factory sensor arms and axle connection then reinstall spring clips. Popping these on requires some serious force, use caution not to break the sensor arm.

32. Re-install the airlines to the compressor.

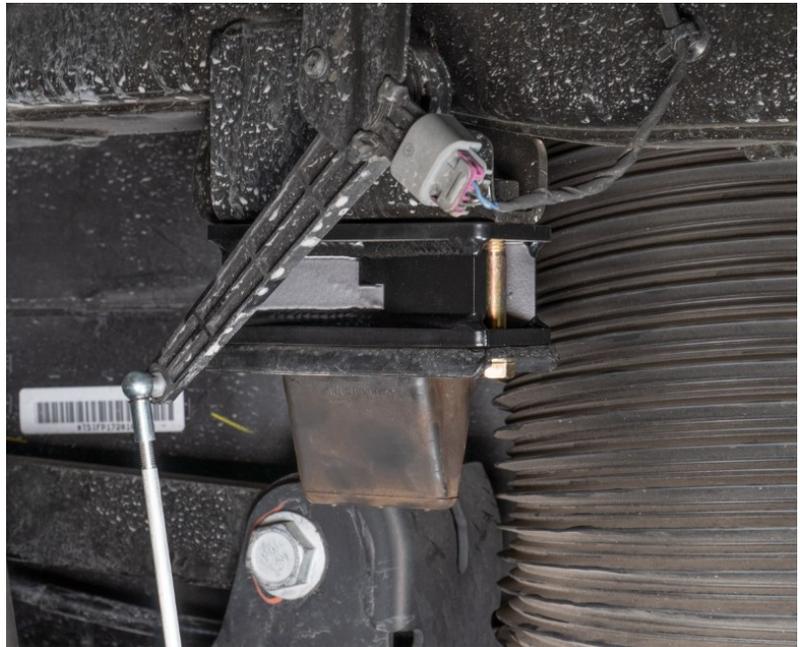


33. The upper portion of the airbags isn't secured to the upper crossmember with any hardware; there are 2 indexes in the top of the airbags that will need to be guided into their respective holes to position and seat the airbag. We recommend jacking up the rear axle to align these holes before kicking on the compressor to inflate the rear bags.

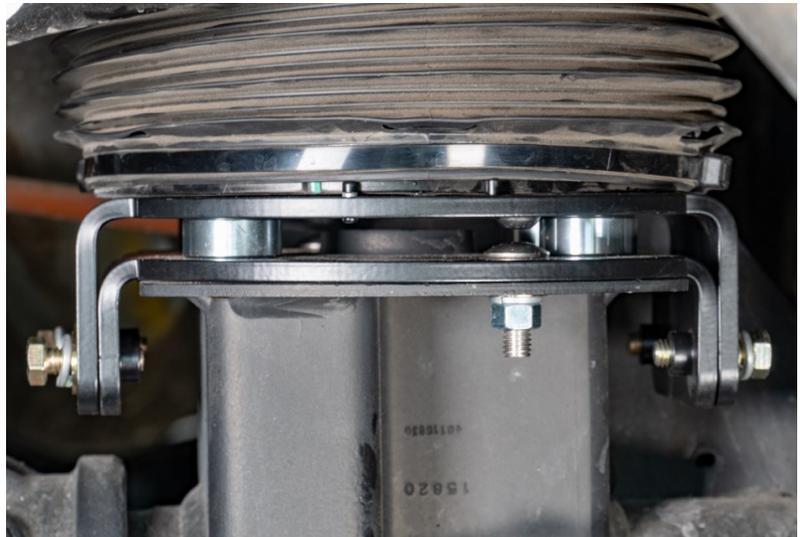
34. With the airbags properly seated and the axle slightly compressed, Install your rear shocks. **KING PINTOP:** install body down, shaft up with the reservoirs facing forward. The upper stem-top mount should be installed exactly as the front was; lower installs into the factory shock mount and again, the torque spec is 100lb/ft.



35. Use a 15mm socket to remove the factory bump stops from the frame rail—Install the Carli bump drop with the Provided Extended M10 hardware between the frame and factory bump stop.
36. Reinstall the factory rear track bar hand-tight.
37. If the axle was manipulated with a jack to index the upper portion of the airbag, ensure the axle is now on LOW jack stands and the airbags are still indexed properly into the upper crossmember.
38. Open any door of the truck to engage the air suspension. You should hear the compressor kick on and the bags inflate to the new ride height. Confirm the airbags are properly seated into the upper crossmember.
39. Install the wheels and tires and set the rear of the truck on the ground.



40. With the weight of the truck on the rear airbags and spacers, torque the (Qty. 8) 3/8"-16 x 1.25" bolts securing the spacer assemblies together to 25lb/ft.
41. Torque the factory rear track bar bolts to 155ft. lbs to set the vulcanized bushings **at the new ride height.**
42. **Nitrogen charged shocks require proper pressures to operate as designed and tuned. The King Pintop Shocks require the nitrogen to be filled to the same 225psi at full extension and should be confirmed regardless of whether they were drained or not. King does NOT always fill them to 225psi!!**
43. Extend the steering drag link to re-center the steering wheel.
44. Take truck in for a complete alignment and retorque all bolts after 1000 miles. Periodically check to ensure bolts remain torqued per the instructions.



## ALIGNMENT

**If you're taking the truck for an alignment, give them the following specs:**

**Toe:** 0 - 1/16" TOE IN

**Caster:** 3.8° to 4.5°, positive — *DO NOT CROSS CASTER*

**Camber:** None-adjustable on these trucks.

**If you're doing your own alignment:**

Don't get too hung up on "0" overall toe, many people read about this on other's recommended alignment specs. Any variance on this could lead to toe-out which you DO NOT want. 1/32" to 1/16" toe-in ensures you're erring on the right side of 0° and, if you look at this measurement on a tape measure, you'll see why we describe this as a better option—it's extremely minimal.

**Caster:**

2.5" Carli Systems are designed to work without the Carli Radius Arm Drops installed. This will require you to max the eccentric bolts (caster adjustment bolts on the lower radius arm to axle connection) in their adjustment range to the REAR of the truck. If you're going to cross caster for any reason, we do not recommend deviating more than 2 hash marks, side to side. In the radius arm trucks, extreme cross caster (i.e. one adjuster maxed in each direction) will pull one side down and push the other side up causing a significant lean.

**If you've elected to run the Carli Radius Arm Drop Brackets** with your leveling systems, the caster adjustments should be centered in their range, NOT maxed.

**Final Notes:**

Aligning these trucks is easy, confirm the toes is correct as this measurement will NOT change with the lift and should still be set from a previous alignment or the factory, if new enough. That said, ALWAYS confirm the toe—we use 2 straight edges and a tape measure (old school beats alignment racks in our opinion). You can find 100 videos on toe adjustment on YouTube if you're interested in doing a manual alignment.