



CS-FFSP-LVL-17: 2.5" Ford Progressive Leaf Springs
CS-FFSP-17: 4.5" Ford Progressive Leaf Springs

Carli Suspension, Inc.
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888-992-2754

Fitment
2017+ F250/350 4x4

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

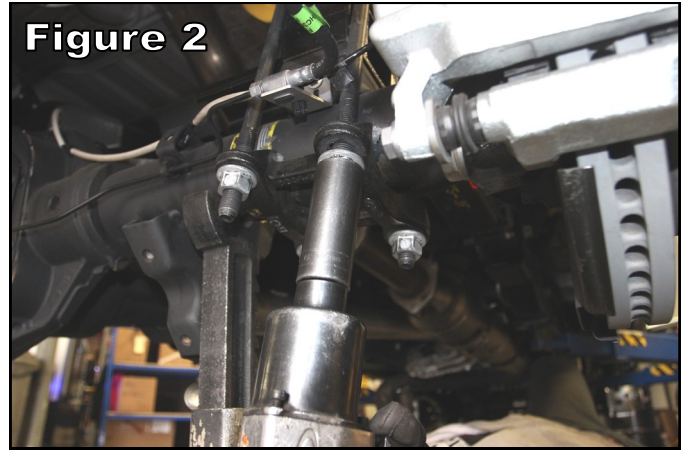
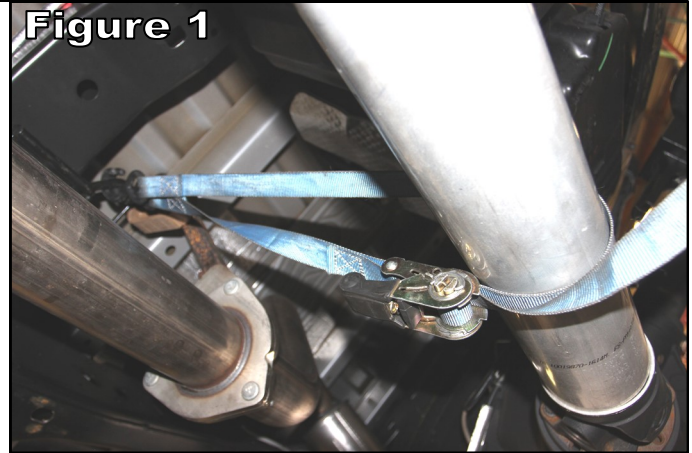
- (Qty. 2) - Leaf Spring Packs, Center Pins, Bushings & Crush Sleeves Installed**

- (Qty. 1) - Zinc Plated U-Bolt Kit**
 - (Qty. 4) - Zinc Plated U-Bolts**
 - (Qty. 8) - U-Bolt Washers**
 - (Qty. 8) - U-Bolt Nuts**



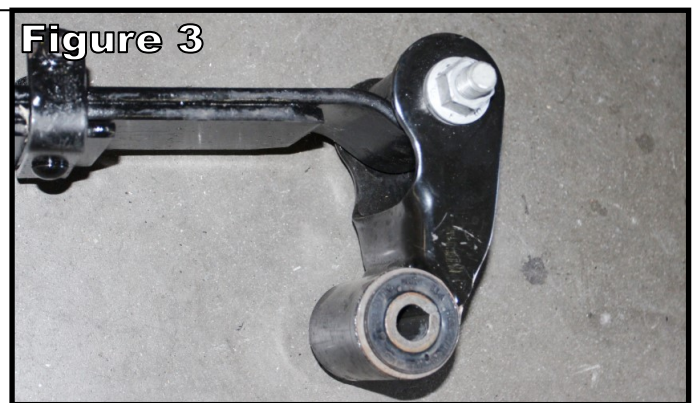
Disassembly Instructions

1. Raise the rear of the truck and place floor jacks underneath rear axle. Place safety jack stands under the frame to support the truck and lower the truck onto jack stands.
2. Remove lug nuts with a 13/16" Socket, then rear wheels.
3. Using an 18mm socket for the upper mount and 21mm for the lower mount, remove the rear shocks.
4. Using a ratchet strap, support the driveshaft/pinion to the closest exhaust hanger. (very important if you're doing both sides at the same time) - **Figure 1**
5. We recommend working on one side at a time, remove Passenger side rear U-bolts using a 15/16" socket and set the Upper & Lower U-Bolt Plates to the side. - **Figure 2**
6. Carefully lift the truck from the frame to droop the rear axle and separate the leaf springs from the factory 3.25" Block. - **Figure 4**
DO NOT ALLOW AXLE TO HANG FROM ANY HOSES OR CABLES
7. Remove the factory block assembly.
8. Remove front hanger bolt and nut .
9. Remove rear shackle to hanger bolt **PAY ATTENTION TO ORIENTATION OF BOLT/NUT**; it's imperative these bolts/nuts are installed the same way.
10. Remove the assembled factory leaf spring pack with the shackle still attached.



Passenger's Side Installation Instructions

11. Swap the shackle over to the Passenger Side Carli Spring pack and assemble hand tight. The military (double) wrap installs in the front hanger; the shackle installs on the single wrap. - **Figure 3**
12. Insert the leaf springs from the front of the axle, over the axle and set the center pin on the bottom of the leaf spring into the index on the center of the spring perch. - **Figure 4**
NOTE: It may be necessary to loosen the U-Bolts on the Driver's side to get the axle to droop enough to install the spring!
13. Using a floor jack, manipulate the axle/leaf spring to get the front of the spring pack into the hanger and assemble the factory bolt hand tight.
14. Install the shackle into the rear hanger and secure with factory hardware, hand tight.
15. With everything aligned and assembled, place the factory upper U-Bolt plate on top of the Carli springs to ensure the center-pin hole is large enough to accommodate the Full Spring Pack's Center pin. Drill with an appropriate chamfer bit if it needs to be bored; otherwise, set it atop the Carli springs and assemble the provided U-Bolt hand-tight to ensure they're even. This will also allow the Driver's side to droop enough to install the matching spring without allowing the assembled spring to shift out of it's center-pin index.



Driver's Side Installation Instructions

16. The Driver's side is a bit more complicated as the fuel tank is in the way of the factory bolt. There are a few options here:

- A. Order a new front Leaf Spring bolt from your local Ford Dealer - FORD MPN: W718336S439 - Loosen the front hanger bolt and push it out as much as possible to access the shoulder with a reciprocating saw and cut off the head of the bolt. Remove the remainder of the bolt. Cut your new factory bolt to 5" length and install the opposite direction to make it easier should you ever need to remove/replace the leaf springs (to avoid dropping the fuel tank a second time).
- B. Drop the fuel tank, remove the factory bolt, install new spring, reinstall fuel tank.
- C. **OUR RECOMMENDATION:** Drop the tank enough to remove the factory bolt then re-install the tank. Cut your factory bolt to 5" length and install the opposite direction to make it easier should you ever need to remove/replace the leaf springs (to avoid dropping the fuel tank a second time). This avoids cutting near the fuel tank so it's the direction we give below:

17. Open the fuel door and remove the filler caps. Let the Diesel filler cap hang and the DEF can be removed from the filler neck, set it aside.

18. Look for the panel pop slot under the DEF filler-neck. Gently pop the panel using a flathead; it slides to the left and pops out. - **Figure 5**

19. Using an 10mm for the Diesel and 8mm for DEF, remove the 3 bolts that hold in each filler neck assembly, allowing them slack for when you lower the fuel tank.

20. Place a 4x4 on a floor jack or use a transmission jack under the fuel tank to support its weight while you remove the tank straps.

21. Lower the tank enough to remove the front leaf spring bolt. - **Figure 6**
DO NOT ALLOW THE TANK TO HANG FROM ANY CABLES OR HOSES. If you're stressing any of the connections, undo them before lowering the tank more. We were able to remove our bolt without disconnecting anything but the filler neck.

22. Once the bolt is removed, jack the tank back into place, re-secure with the factory tank straps and reinstall filler necks and panel. Set bolt aside for reuse.

23. Remove U-Bolts from the Driver's side spring assembly and set the upper U-bolt plates aside.

24. Remove the rear leaf spring shackle bolt and remove the springs and block.

25. Transfer the shackle to the Carli Springs (hand tight).
26. Grab the factory front leaf spring bolt. It should be 6" long; mark it at 5" and cut (we used a bandsaw). Clean up the threads and ensure the nut goes on easily. - **Figure 7a, 7b**

27. Slide the Carli Springs in from the front of the axle and seat them onto the spring perch; insert the rear shackle bolt.

28. Use the jack under the axle to manipulate the spring into the front hanger and insert the bolt reversed to factory orientation (head on the outside of the mount, nut toward the fuel tank on the inside). Assemble the nut to the bolt.

29. Install U-bolt plates and new, Carli U-bolts hand-tight to secure the spring assembly. - **Figure 8**

30. Lower it onto rear jack stands to load the suspension at ride height. Torque both side U-Bolts to 110lb/ft. in a cross pattern ensuring threads are even.

31. Apply Red-Loctite to the front leaf spring hanger bolt; torque to 400lb/ft.

32. Apply Red-Loctite to both leaf spring shackle bolts; torque to 180lb/ft.

33. Install wheels and tires and set the rear of the truck on the ground. Re-torque all above with the weight of the truck on the ground.

34. Continue to the next step in the kit instructions.

