

CS-FLVL-05 – 2005-16 Ford 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 “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:

1. Ford Leveling Coils
2. Extended Brake Line Tabs
3. Caster Correction Shims
4. Adjustable Track Bar
5. Front Bilstein 5100 Shock Package

LEVELING SYSTEM NOTE:

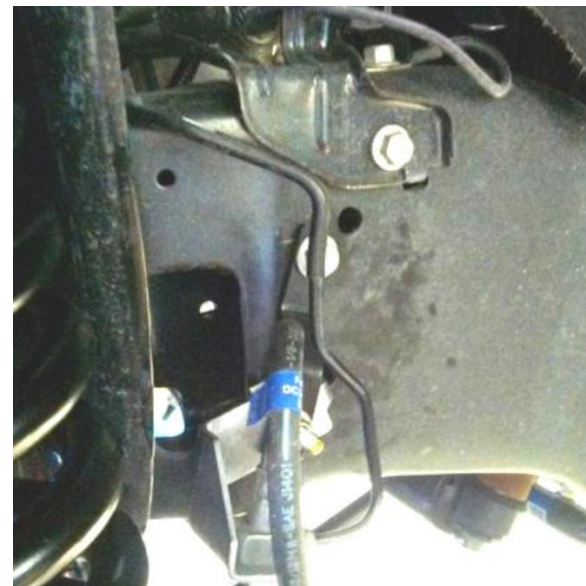
The Leveling kit is a front-only system; Super Duties equipped with a 2" block from the factory will require the factory 3-5/8" Block (PN: 7C3Z-5598-HB, 7C3Z-5598-JB), Aftermarket 4" Block, or Carli Add-a-Pack (PN:CS-FPAP-05(08)(11) to attain a leveled stance. The aforementioned additions will also require longer shocks. Super Duties equipped with a 3-5/8"-4" block will require no modification to achieve leveled stance.

DISSASSEMBLY

1. Set emergency brake and block rear wheels, in front and behind tires
2. Break lug nuts loose while the truck is on the ground (do not remove until the truck's weight is off the tires)
3. Jack up the front end and properly support the frame on jack stands that are rated for the weight of the vehicle. Use a jack under the axle to compress the front suspension.
4. Remove the front wheels and wheel well liners.
5. Disconnect sway bar end links from the axle.
6. Disconnect brake lines and ABS wires from lower factory spring mount (disconnect 4wd vacuum lines if necessary). You are not removing brake lines yet, but simply "unclipping" them from the axle.
7. Remove upper track bar bolt at the frame end.
8. Using a Ball-Joint puller, remove the axle track bar connection from the axle ball joint and remove the track bar.
9. Remove factory shocks.
10. Droop front suspension slowly to unload the spring and remove the factory coil springs. Set aside factory coil spring isolators for re-use with the Carli Springs.

FRONT INSTALLATION INSTRUCTIONS

11. Follow Directions in **CS-FLRC-05 - 2.5" Coil Spring Box**.
12. Disassemble the upper bushing assembly on the front shock leaving half of the bushing in place for the bottom of the upper, factory shock mount.
13. With the front suspension loaded and new coil springs installed, insert the lower rod end of the front shock into the factory lower shock mount. Secure with the factory bolt hand tight.
14. Compress the shock and slide it into place so the thread sleeve slides through the factory, upper shock mount hole.
15. Assemble the upper bushing half, bushing retainer, and nut to the top of the shock and tighten by hand until you feel the bushing preload; do not tighten past this point.
16. Torque lower shock bolt to 100lb/ft.
17. Reattach factory Sway-Bar Links
18. If front tires were removed, reinstall and lower the truck prior to setting the torque.
19. Follow instructions in the **CS-FPRB-05 - Adjustable Track Bar Box**
20. Install factory fender liners using factory hardware.
21. Reattach vent tubes if they were disconnected.
22. Unbolt the brake lines from the upper mount on the frame rail if 2008+ (2005-2007, unbolt from the side of the coil bucket).
23. Using the factory hardware, attach the brake line drop brake to the frame (or coil bucket if 2005-07)
24. Mount the factory brake line tabs to the relocation hole on the installed tab using the provided hardware and trim the bolt as necessary. This may require slight manipulation of the hard lines. Bend the hard lines with slight pressure and avoid sharp bends to ensure not to kink them.



COMPLETING INSTALLATION:

25. Lower truck onto the ground.
26. Torque Lug Nuts and double check torque on all suspension components to OEM specs once the truck is on the ground.
27. Take truck for an alignment.

NOTE: If desired, a home alignment can be performed as the Toe measurement doesn't change when lifting a straight axle truck. Install the provided caster shims FAT side to the front (slit facing directly REAR).

 - A. Jack up the truck and support the axle with jack stands to take the vehicle weight off the ball joints.
 - B. Remove Wheels and tires from the front.
 - C. Work on one side at a time. Remove the cotter pin from the upper ball joint stud, then, remove the nut that retains the factory alignment shim.
 - D. Using a pry-bar, work around the upper edge of the shim until it pops loose (Southern California version... if corroded, this may require cycling penetrating lubricant and heat).
 - E. Once removed, clean out the knuckle bore as much as possible and install the caster-correcting spacer on the upper ball joint stud. The gap on the thin part of the spacer will face DIRECTLY REAR! This puts the fat part at the front, essentially rolling the axle back to achieve additional caster.
 - F. Once installed, thread the ball joint nut back onto the stud, this step will finish pressing in the shim. While holding the shim's orientation with a wrench, torque the upper ball joint nut to 69ft.lbs.
 - G. Check your work and ensure the shim did not rotate while torquing the ball joint. Once confirmed, install cotter pin and wheel/tire.
 - H. Repeat on other side.
 - I. Set the truck on the ground and ensure the wheels are straight and the truck is at ride height, then adjust the drag link to center the steering wheel.
28. Re-torque after first 500 Miles