

## **CS-F45EX-P25-99: 4.5” Excursion System, 1999-2006 Diesel**

### **NOTE:**

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**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**

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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. Carli/Deaver Front and Rear Lift Springs & U-Bolts
2. Extended Sway Bar Links
3. Extended Brake Lines
4. Front and Rear Bump Stop Drops
5. Track Bar Drop Bracket
6. Rear Shock Mounts
7. King 2.5" Shock Package

## SYSTEM NOTES:

1. Rear driveshaft must be checked for 1 piece or 2 piece units. It is recommended that 2 piece driveshafts order a carrier bearing drop, PN# CS-CARRIERDROP-F
2. Carli recommends a 17"-18" wheel, no more than 9" wide with 5" of backspacing on 4.5" lift systems
3. 35", E-rated tire fitment is recommended. Recommended unloaded tire pressure 45F/40R
4. Installing Leaf Springs is a 2 person operation!

## DISSASSEMBLY

5. Set emergency brake and block rear wheels, in front and behind tires.
6. Break lug nuts loose while the truck is on the ground (do not remove until the truck's weight is off the tires).
7. Jack up the front end and properly support the frame on jack stands.
8. Use a jack under the axle to compress the front suspension.
9. Remove the front wheels and wheel well liners.
10. Remove factory sway bar end links.
11. Disconnect 4wd vacuum lines.
12. Remove upper track bar bolt at the frame end.
13. Remove Drag Link Tie-Rod end from pitman arm and remove factory Pitman Arm with a puller.
14. Remove lower Core Support.



15. Remove factory shocks.
16. Install the front, extended brake lines on both sides. As the picture shows, the passenger side bracket housing the hard/flex line junction will need to be slightly manipulated for optimal clearance. Bend it down until the tab is perpendicular to the frame. Driver's side brake line can be installed without modification to the bracket.
17. Secure the extended brake lines to the vacuum and ABS lines with zip ties to ensure all can achieve the same extended droop the for which the brake lines are designed.



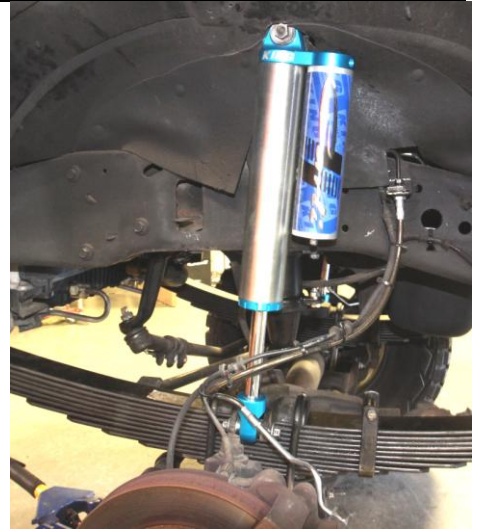
18. Droop front suspension slowly to unload the spring and, once full droop is reached, SLIGHTLY tension the axle with the jack and remove the factory U-Bolts.
19. Remove the nut from the bolt securing the front leaf spring eyelet to the hanger
20. Remove the nut and bolt securing the rear leaf spring eyelet to the shackle.
21. Remove the five bolts that secure the front leaf spring hanger to the frame rail and the single bolt that secures the bumper brace to the front leaf spring hanger. Two are visible directly above the front leaf spring eyelet, three are hidden in the very front and secure to the tow hook.
22. Let the axle down to lower the spring/front spring hanger assembly and remove from the truck.

23. Follow Instructions in **CS-FFSPF-EX-99 - Excursion Front Full Progressive Spring Pack U-Bolt Box.**
24. Follow Instructions in **CS-FBDF-EX-99 - Excursion Front Bump Stop Drop Box.**

### FRONT SHOCK INSTALLATION INSTRUCTIONS

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25. Install the King 2.5" Shock onto the upper pin and into the lower shock mount and secure with factory hardware. Torque to 45 lb/ft. Reservoir should face the rear, Carli Decal will face outward.



26. Follow Instructions in **CS-FPRBDROP-EX-99 - Excursion Track Bar Drop Bracket Box.**
27. Follow Instructions in **CS-FEL-EX-99 - Excursion Extended Sway Bar End Links Box.**

### KIT INSTALLATION INSTRUCTIONS CONTINUED

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28. Reattach front vacuum lines (if disconnected).
29. Install Drop Pitman Arm (Some models 199 lb/ft, others 350 lb/ft., check with your local Ford Dealer).
30. Reinstall drag link into the new arm.
31. Reinstall front fender liners.
32. Install front wheels and tires, torque lug nuts to 150lb/ft.
33. Set the front end of the truck on the ground.
34. Jack up the rear end and support the frame and axle with jack stands.
35. Remove rear wheels and tires.
36. Follow Instructions in **CS-FFSPR-EX-99 - Excursion Rear Full Progressive Spring Pack U-Bolt Box.**
37. Follow Instructions in **CS-FRSM-EX-99: Excursion Rear Shock Mounts Box.**

### REAR SHOCK INSTALLATION INSTRUCTIONS

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38. With the shock mount installed, slide the shock up into the shock mount with the reservoir mount exiting to the front.



39. Secure upper shock bearing with the provided 1/2" hardware and torque to 60 lb/ft.
40. The lower rod end installs into the factory shock mount on the axle with the factory 12mm hardware; torque to 45 lb/ft.



41. The Reservoir mounts will install to the upper, outside frame rail in line with the shock body using the provided self-tapping bolts. We set them up so the reservoir starts in the location of the upper shock mount and faces rear.
42. Secure the reservoir to the reservoir mount using the provided hose clamps.



43. Follow Instructions in **CS-FBDR-EX-99 - Excursion Rear Bump Stop Drop Box**.

#### **COMPLETING INSTALLATION:**

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44. Install rear wheels.
45. Lower truck onto the ground.
46. BLEED BRAKES to ensure proper operation.
47. Now that the truck is at ride height and the suspension is loaded, Torque:
  - a. Front and Rear Lug Nuts: 150 lb/ft.
  - b. Front and Rear U-Bolts: 110 lb/ft.
  - c. Front Leaf Spring, Front Hanger: 185 lb/ft, Front Leaf Spring, Rear Shackle: 185 lb/ft.
  - d. Rear Leaf Spring, Front Hanger: 185 lb/ft, Rear Leaf Spring, Rear Shackle: 185 lb/ft.
  - e. Upper Track Bar to Drop Bracket 370 lb/ft.
48. Take truck for an alignment.
49. Re-torque after first 500 Miles.