

## 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.



**Please Visit:** [Forums.CarliSuspension.com](http://Forums.CarliSuspension.com)  
*Troubleshooting advice or to download an electronic copy of this document.*

*Ford Dominator King 3.0 System: 4.5" Lift System*

### **What's Included**

1. Full Progressive Leaf Springs, U-Bolts and Center Pins and Rear Bump Drops
2. Dominator Shock Package:
  - a. Front and Rear King 3.0 Piggy-Back Shocks with Stainless Shock Shafts
  - b. Front Upper Coil Bucket (all years) and ABS Bracket (2008+) with Hardware.
3. Adjustable Track Bar
4. Extended Sway Bar End Links (2005-2010) OR Sway Bar Drop Brackets with End-link Spacers (2011-2015)
5. Radius Arm Drop Brackets with Crossmember and Hardware Pack
6. Front Bump Stop Drops and Hardware
7. Stainless Steel, Braided Brake lines
8. Caster Shims

### **System Notes:**

- Super Duties equipped with a 2" tall block from the factory will require the factory 3-5/8" tall Block to attain leveled stance with the add-a-pack. Part Number: 7C3Z-5598-HB, 7C3Z-5598-JB
- 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
- Carli Recommends a 17"-18" Wheel, no more than 9" wide with 5" of Backspacing on 4.5" Lift Systems
- 37", E-Rated Tire Fitment is recommended. Recommended unloaded Tire Pressure 45F/40R

### **Installation Instructions**

**Note:** Prior to installation, carefully inspect the vehicles steering and drive train components. Be sure to check all front end components. Everything must be tight and in good working condition prior to installation of a suspension system.

**\*We recommend installation be done by a trained professional.**

**\*Read instructions carefully before attempting installation.**

**\*Secure and properly block vehicle prior to installation.**

**\*Front end alignment is necessary upon completion of install.**

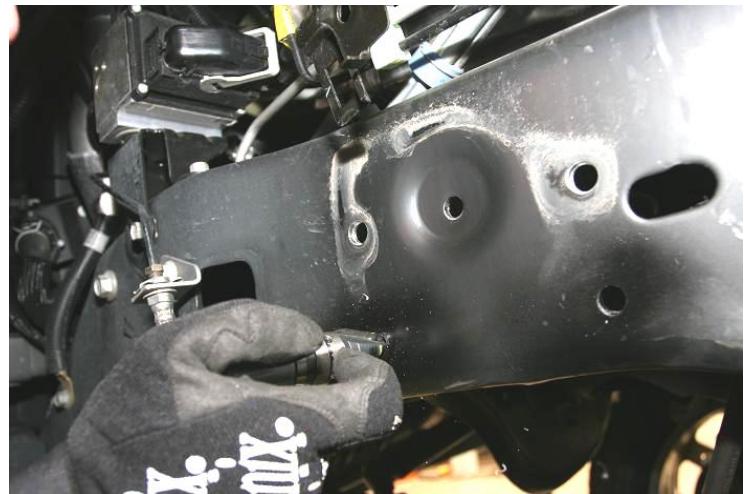
**\*Re-torque all nuts and bolts Front and Rear after 500 miles to ensure tightness.**

1. Set emergency brake and block rear wheels, in front and behind tires.
2. Lift truck to extend suspension 3 to 4 inches. Do not lift truck off the ground.
3. Remove factory transfer case skid plate and hardware.
4. With a jack supporting radius arms, remove rear bolts from radius arms and lower radius arms.
5. Install new radius arm drop brackets using supplied 3/4" and 3/8" hardware. Do not tighten at this time.



**NOTE: 2011+ vehicles may require drilling two 3/8" holes on the bottom of the passenger side frame rail where the drop bracket meets the frame.**

6. Raise radius arms up into drop brackets and re-install rear using factory hardware. Do not tighten at this time.
7. Set truck on the ground.
8. Torque radius arms drop bracket hardware.  
*Torque 3/4" hardware to 350 ft/lbs. and 3/8" hardware to 47 ft/lbs.*
9. Torque rear radius arm bolts to factory spec.
10. Install new transfer case skid plate using supplied 3/8" hardware.  
Torque to 47 ft/lbs.
11. Jack up the front end and properly support the frame on jack stands that are rated for the weight of the vehicle. Set emergency brake and block rear wheels, in front and behind tires.
12. Disconnect sway bar end links from sway bar and axle, then remove.
13. Disconnect brake lines and ABS wires from lower factory spring mount (disconnect 4wd vacuum lines as necessary).
14. Remove upper track bar bolt.
15. Remove factory shocks.
16. Fully extend front suspension and remove factory coils
17. Remove Fender Liners
18. Remove factory bump stops and mounts. Do not discard these as they will be used later.
19. Remove pan rod bar bracket. Do not discard this will be used later.
20. Remove bolt on backside of driver's side spring/shock mount that holds wiring loom bracket.
21. **2011/12 Vehicles require the ABS pump to be unbolted from the back of the OEM coil bucket prior to removal.**
22. Remove factory spring/shock bucket by removing 7 rivets that retain it to the frame. Drill out factory rivet holes to 1/2"



23. Replace factory brake line with supplied steel braided brake lines

**NOTE:** After installing Braided Brake Lines, You will need to bleed the brakes to ensure proper operation!

24. Using a 5/16 drill bit, drill the threads in the frame where the O.E.M. bump stops attach to the frame.
25. Install Carli front bump stop drops and OEM mount, using supplied 5/16 x 18 x 4.25 bolts, washers, and nuts.
26. Reinstall the factory foam bump stops into the O.E.M. mounts.
27. Install upper Coil Bucket with supplied 1/2" hardware and torque to 119 ft/lbs.  
**NOTE:** 2011 Vehicles will require the ABS pump to be bolted onto the Coil Bucket at this time. Be sure to attach the Brake Lines back into their clips behind the coil bucket). ABS Pump will be secured using the factory bolt on top of the coil bucket and using the provided bolt behind the spring seat. (Referenced by the upper and lower arrows in the following picture)
28. Mount previously disconnected wiring loom bracket to new upper coilover mount with supplied 5/16" hardware.
29. Install the Carli lift coils using the factory coil isolator on top.  
**NOTE: Coils Are Side Specific**
30. Compress the front suspension once springs are properly seated and indexed (in the lower spring perch) so there is a slight preload on the coil and install the King 3.0 shock into the upper coil bucket and factory lower shock mount.
31. Torque upper shock mount to 119 ft/lbs and lower factory shock mount to 117ft.lbs.
32. Re-mount factory pan rod bar bracket using factory hardware and torque to 70 ft/lbs



33. Secure ABS lines to factory radius arm (or Carli Radius arm is equipped).
34. Use the OEM Bolts to connect the new brake lines to the front of the lower spring retainer.
35. Install factory fender liners using factory hardware.
36. Place Carli Decal Onto Reservoir, facing out.

#### **FOR 2005-2010 VEHICLES**

37. Adjust supplied Carli sway bar end links to 7.25" eye to eye if 08-10.  
**If 2005-07.** Adjust the end link so the pin is perpendicular to the mounting bracket at ride height (in the middle of travel)
38. Install supplied Carli end links in the factory location using O.E.M mounting hardware. Tighten all sway bar hardware including jam nuts.



#### **FOR 2011-12 VEHICLES ONLY:**

39. Disconnect factory Sway Bar from the frame and install supplied Drop Brackets to the frame mount with OEM Hardware. Make sure the Drop Brackets angle forward so that it pushes the sway bar away from Coils.
40. Reinstall Sway Bar onto Drop Bracket with supplied 3/8"x1.25" hardware.
41. Disconnect the lower retaining nuts on the sway bar end links from the axle bracket (both sides).
42. Push up on the passenger side of the sway bar to remove the lower pin-mount on the end link from the axle bracket.
43. Slide the provided gold spacer onto the lower end link stud and push the sway bar back into position guiding the end link back into the axle mount.
44. Re-secure the end link to the lower axle mount with the factory nut with the spacer sandwiched between the end link and axle mount as pictured below. Do this hand tight until the Driver's side spacer is in place as well.
45. Repeat spacer installation on Driver's side.
46. It may be necessary to remove the thin metal "bridge" that binds the clamps on the drag-link adjustment collar to ensure full clearance of the drag link and sway bar.
47. Tighten all hardware to factory spec



#### **ALL YEARS:**

48. Remove O.E.M. track bar from the axle with a ball joint puller.
49. Adjust the supplied Carli Track Bar to 38" center eye of bearing to center eye of the tapered end.
50. Apply thread locker to threads and torque Jam nut to 150 lb./ft.
51. Install Carli track bar onto factory axle mount using the factory nut.
52. Torque to 150 lbs/ft.
53. Install factory fender liners using factory hardware.
54. Set truck on ground.  
*(If front tires were removed, reinstall and only slightly tighten until the truck is lowered onto the ground, then set torque.)*
55. Install frame end of track bar into the factory mount.  
**NOTE:** Have someone turn the steering wheel to help line up the rod-end to the mount.
56. Install upper factory bolt. Torque to 406 Ft Lbs (factory torque).
57. Reconnect factory ABS lines and vent tubes. Mount new ABS tabs in factory mounting locations utilizing the provided button head bolts.
- 58. Rear Installation – Remove rear shocks and follow the Full Spring Pack, Reference Instructions in U-Bolt Box**



#### **Rear Shock Mounts**

59. Remove the factory rivets retaining the Upper, Rear shock mount.
60. Remove the shock mounts and discard.
61. Attach the fabricated shock mounts using supplied ½" hardware in the factory location. Torque to 119 ft. lbs.  
**NOTE:** Carli Shock Mounts are identical for 2008-2015 trucks (2005-07 are side specific). Either mount can be used on either side.

#### **Completing Installation:**

62. Install rear wheels
63. Lower truck onto the ground
64. Torque wheels and suspension components to OEM specs once the truck is on the ground.

- 65.** Mount the REAR Piggyback shocks body up, shaft down. Both Reservoirs should face AWAY from the axle. Driver's side reservoir points rearward and Passenger reservoir points forward.
- 66.** Torque lower shock bolts to 35 ft lbs lower and 125ft. lbs. upper for the 9/16" shock bolt.
- 67.** Place Carli Sticker (from hardware kit) onto the shock reservoir facing rearward.
- 68.** Take truck for an alignment.
- 69.** Re-torque after 1000 Miles.

### **Operational Inspection and Settings**

---

Please note, the shocks included with this system are nitrogen charged, they require specific nitrogen pressure to operate correctly. Ensure the vehicle is supported properly and that the axle is at full droop when verifying nitrogen pressure. Many gauges will release nitrogen in the process of checking the pressure; ensure your gauge will maintain shock pressure during verification (Lock out Gauge) to avoid loss of nitrogen. If you're unsure, many suspension shops, welding supplies, tire shops, or motorcycle repair shops will be able to check or refill your nitrogen charged shocks.

Without the proper nitrogen pressure, Carli Suspension's shocks will not operate properly and will be more susceptible to damage to the seals and internals of the shock. No shocks will be replaced under warranty if the shocks were not properly charged before installation. Shock should ship charged but should be verified prior to installation. **ONLY USE NITROGEN TO CHARGE THE SHOCKS.**

Nitrogen Pressures:

King 3.0: 250 psi