

# Rear Box Kit

Ford Super Duty/Excursion 4wd | 1999-2004

Part #: 013007, 013009

Rev. 052019



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## SAFETY WARNING

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

## INSTALLATION INSTRUCTIONS

1. Park the vehicle on a clean, flat surface and block the front wheels for safety.
2. Raise the rear of the vehicle with a jack and support with jack stands under the frame rails, just ahead of the spring hangers.
3. Remove the wheels.
4. Locate the brake line bracket on the driver's side frame rail. Using a large set of pliers, bend the bracket out flat. Take care not to kink the brake line. After the bracket is reformed, drill out the rivet that fastens the bracket to the frame. Pull the bracket free and allow it to hang. It will be reattached after the new springs are installed.
5. Disconnect the factory brake line bracket from the top of the differential. Save hardware.
6. Disconnect the rear most driver's side e-brake cable bracket on the driver's side frame rail. It will be reattached forward with the passenger's side cable bracket after the springs are installed.
7. Support the rear axle with a jack. Remove the factory shocks. Save hardware.

*Install leaf springs one side at a time.*

8. With the axle well supported with a jack. Loosen, but do not remove the passenger's side leaf spring and shackle bolts.
9. Remove the passenger's side u-bolts and lower the axle away from the spring. Remove the front spring hanger bolt and the rear shackle-to-frame bolt. Remove the spring from the vehicle.
10. Locate the new leaf spring (003609 or 003809). Remove the factory spring shackle from the original spring and install it on the new spring. Leave hardware loose. The shackle will attach to the smaller eye of the spring. The spring center pin should be offset toward the front of the vehicle when installed.
11. Install the new spring in the vehicle with the factory hardware. Leave hardware loose.
12. On Super Duty Applications, position the factory block between the axle and the spring. On 10" lift Excursion applications, replace the factory block with the provided 4" tapered block. Be sure the shorter end of the new tapered

### 013007/ 013009 Box Kits

Part #	Qty	Description
4KB-W96	2	4" Lift Block (013007 Only)
583581500RB	4	5/8" x 3-5/8" x 15" U-bolt/nuts/washers(013007)
583581200RB	4	5/8" x 3-5/8" x 12" U-bolt/nuts/washers(013009)
B197	1	Bag Kit
B381G2	1	3/8"-16 x 1" Bolt
B382G5	1	3/8"-16 x 2" Bolt
N38SS	2	3/8"-16 Hex Nut
SBLA	1	Brake Line Bracket
45313	1	Brake Line Bracket Spacer
W38SAE	4	3/8" SAE Washer
W58SB	8	5/8" SAE Washer
N58FHB	8	5/8" Fine High
33622	2	3/8" Split Lockwasher

block is towards the front of the vehicle. On Excursion 6-8" lift applications, re-install the OE lift block between the axle and leaf spring.. Fasten the new spring and block with the provided u-bolts/nut/washers. Snug u-bolts enough to set the springs and blocks to the axle. Final u-bolt torque will be performed with the vehicle on the ground.

13. Repeat spring installation on the driver's side.
14. Install the new provided shocks with the original hardware. On taller applications (Super Duty F-350s with 4" tall blocks) it may be necessary to loosen and rotate the axle shock mounts to reposition higher on the axle. Tighten shock mount u-bolts to 35 ft-lbs. Torque 12mm shock mount bolts to 65 ft-lbs. On Excursion, torque the upper bar pin bolts to 30 ft-lbs.
15. Attach the driver's side e-brake cable bracket to the same mounting point as the passenger's side cable bracket on the driver's side frame rail. Use the factory hardware and torque to 15-20 ft-lbs.
16. Install the provided flat brake line bracket (SBLA) to the top of the differential using the original brake line hardware. Make sure the bracket is pointing forward and tighten the hardware to 25 ft-lbs. Attach the factory brake line to the new bracket with a 3/8" x 1" bolt, nut and flat/lock washers. Torque 3/8" hardware to 25 ft-lbs.

17. Install the supplied sleeve (45313) between the factory brake line bracket and the driver's side frame rail. Fasten the bracket and sleeve to the frame through the original hole with a 3/8" x 2" bolt, nut and flat/lock washers.
18. Install the wheels and lower the vehicle to the ground. Torque lug nuts to 165 ft-lbs.
19. Bounce the rear of the vehicle to settle the suspension. Torque spring u-bolts to 130-150 ft-lbs.
20. Torque all spring hanger and shackle bolts to 180 ft-lbs.
21. Check all hardware for proper torque.
22. Check hardware after 500 miles.
23. If the vehicle (truck applications) is equipped with a 2-piece rear driveshaft and a driveline vibration occurs, install the appropriate BDS carrier bearing drop kit. Fine tuning of the carrier bearing drop and/or pinion angle may be necessary on some vehicles as driveline angles will vary slightly from vehicle to vehicle.

## **POST-INSTALLATION WARNINGS**

24. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.
25. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.
26. Perform head light check and adjustment.
27. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.