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Part#: **013529, 013429**

Product: **4" & 5" Rear Block Kit**

Application: **2009-2012 Ford F-150 4WD**

READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS PRIOR TO INSTALLATION OF SYSTEM AND OPERATION OF VEHICLE.

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.

PRODUCT SAFETY WARNING Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

PRE-INSTALLATION NOTES

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/ reassembly procedures of OE and related components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
5. Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.
6. If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.
7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

POST-INSTALLATION WARNINGS

1. 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.
2. 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.
3. Perform head light check and adjustment.
4. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

PARTS LIST

Part # Qty Description

013529 - 5" Rear Block Kit

01716	1	Offset Brake Line Drop Bracket
02085	2	5" Offset Rear Block
02079B	1	E-Brake Bracket - black
02086	2	Lower Spring Plate
02087B	2	Upper Spring Plate
774	1	Bolt Pack - Rear Block Kit
	2	1/2"-20 x 3-1/2" bolt flat SHCS
	2	1/2"-20 nut
	2	7/16"-14 x 1-1/4" bolt
	4	7/16" SAE washer
	2	7/16"-14 Prevailing torque nut
	1	1/4"-20 prevailing torque nut
	1	1/4" USS washer
120400FCP	2	1/2 x 4 Pin w/Nut
963181212QB	4	9/16 x 3-1/8 x 12-1/2 Square U-bolt
W96S-B	8	9/16 SAE Washer
N96FH-B	8	9/16 Fine High Nut

013429 - 4" Rear Block Kit

01716	1	Offset Brake Line Drop Bracket
02429	1	4" Rear Block - DRV
02430	1	4" Rear Block - Pass
02079B	1	E-Brake Bracket
605	1	Bolt Pack - Rear Block Kit
	2	7/16"-14 x 1-1/4" bolt
	4	7/16" SAE washer
	2	7/16"-14 Prevailing torque nut
768	1	Bolt Pack
	2	1/4"-20 x 3/4" bolt
	2	1/4"-20 lock nut
	4	1/4" USS washer
963181212QB	4	9/16 x 3-1/8 x 12-1/2 Square U-bolt
W96S-B	8	9/16 SAE Washer
N96FH-B	8	9/16 Fine High Nut

INSTALLATION INSTRUCTIONS

1. Block the front wheels and raise the rear of the vehicle. Place jack stands under the frame rails ahead of the spring hangers.
2. Remove the wheels.
3. The parking brake cable must be relocated. To disconnect the cable from the frame first pull down on the cable and clamp it off with vise grips near the middle of the frame (Fig 30). This will gain slack to disconnect the driver's side rear cable from the main (passenger's side) cable.
4. Remove the driver's side parking brake cable from the junction bracket (Fig 31).



Fig 30

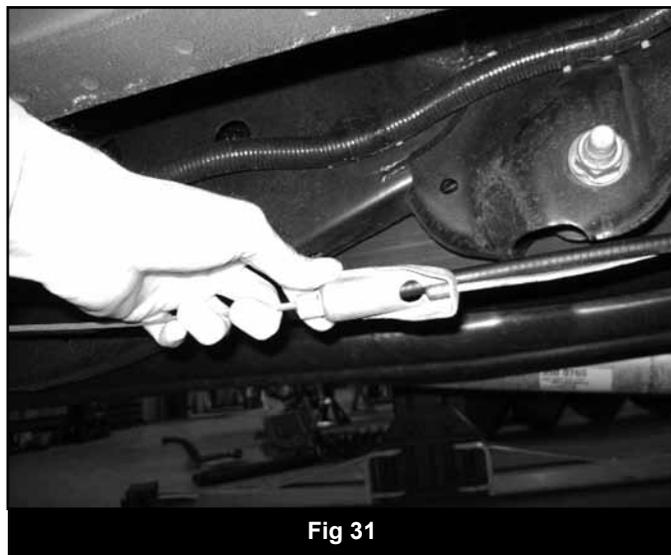


Fig 31

5. Compress the retaining tabs and remove the driver's side cable from the spring hanger (Fig 32). It will be relocated and reconnected later.
6. Disconnect the rear brake line from the frame. (Fig 33)

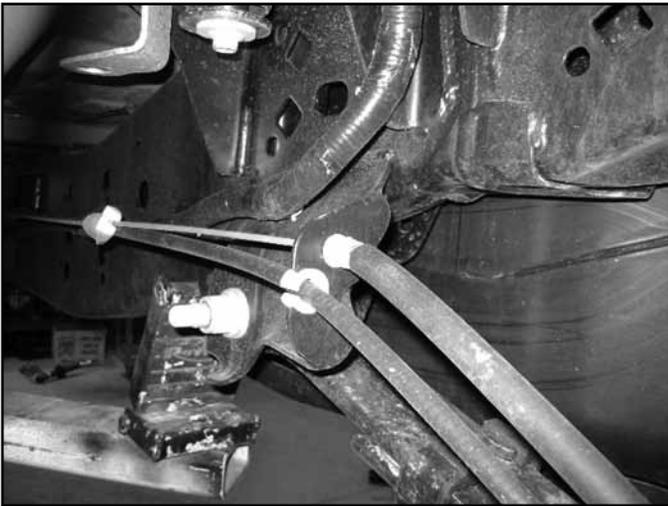


Fig 32

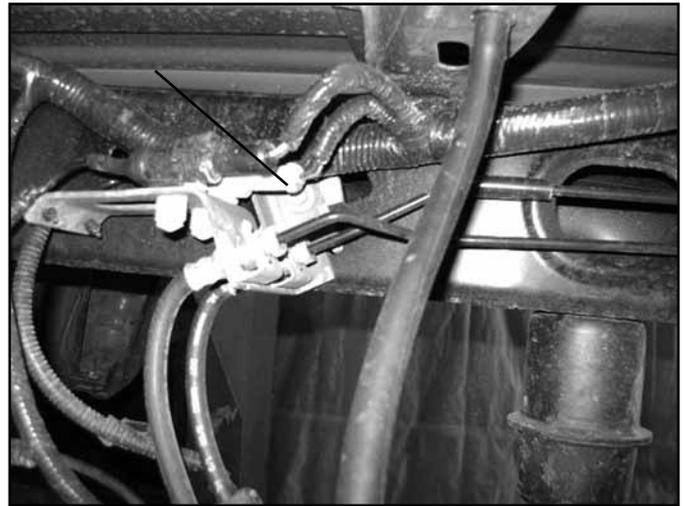


Fig 33

7. Support the rear axle with a hydraulic jack. Remove the OE shocks. Retain mounting hardware.
8. Note: Perform the rear installation on one side at a time.
9. Remove the passenger's side u-bolts.
10. Lower the axle and remove the OE lift block, it will not be reused.
11. 5" rear block kit, follow steps 89-93. 4" rear block kit follow steps 94-95.
12. Using C-clamps, clamp the leaf spring pack together on each side of the center pins. Remove the center pins and discard.
13. Place the plate on the bottom of the leaf pack and secure with new center pin in the 'forward' hole and flat head allen bolt through the 'rear' hole. Install new u-bolt retaining plate on top, it will be offset 'forward'. Tighten to 35 ft-lbs. (Fig 34, Fig 35A, B)

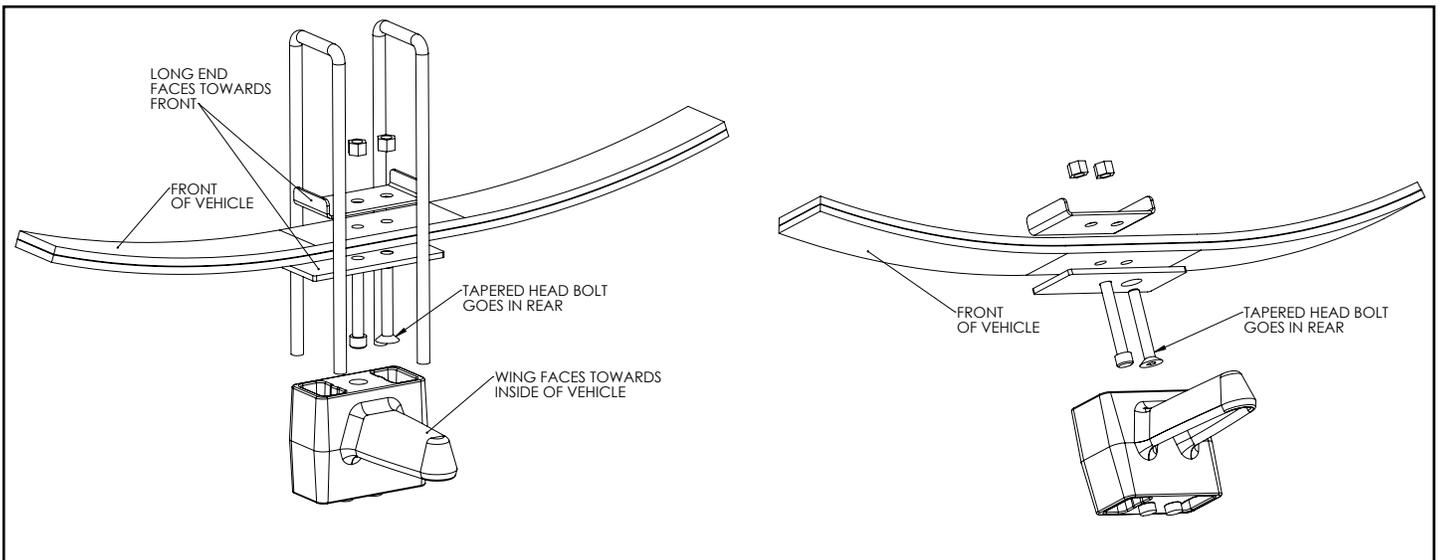


Fig 34



Fig 35A



Fig 35B

14. Install the new provided lift block so that the bump stop wing goes toward the inside of the vehicle. The block will use the both of the lower center pin holes. The upper only uses 1 hole which will shift the axle slightly forward.
15. Raise the axle/block to the spring while aligning the center pin. Fasten the spring/block assembly with the provided u-bolts, high nuts and washers. Snug u-bolts, they will be torque with the weight of the vehicle on the springs. (Fig 36a)

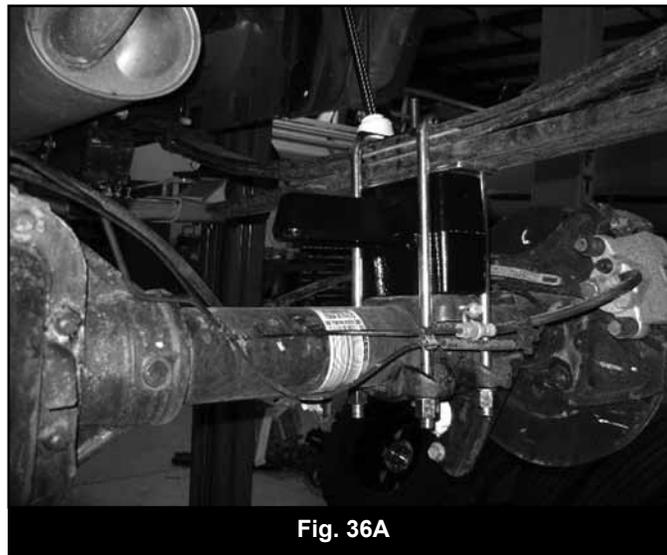


Fig. 36A

16. Repeat installation procedure on the driver's side of the vehicle. Skip ahead to step #96
17. Install rear block (02429 - DRV side, 02430 - Pass side). The block is designed to offset the axle forward slightly. The bump stop wing will be centered under the bump stop on the frame with the vertical gusset facing towards the front of the vehicle. Align the center pins and raise axle. Fig 36b

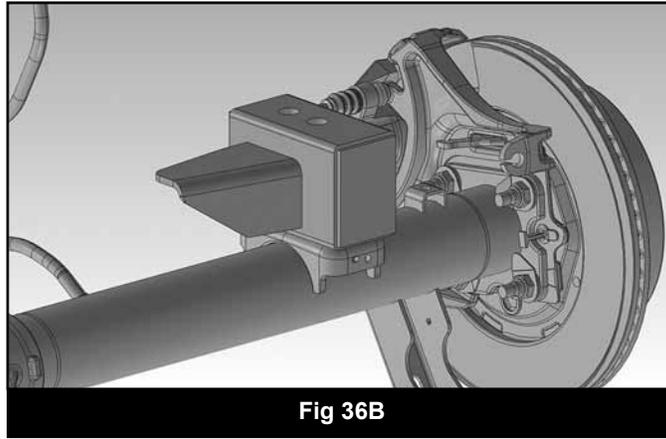


Fig 36B

18. Attach u-bolts with the factory lower u-bolt plate. Snug u-bolts, they will be torqued to specification when the vehicle is on the ground.
19. Install the provided parking brake relocation bracket to the driver's side front spring hanger using 7/16" bolts, washers, and nuts. Late 2012 models and newer will require the retaining wire to be bolted to the bracket with 1/4" hardware (#768). (Fig 37a, 37b)

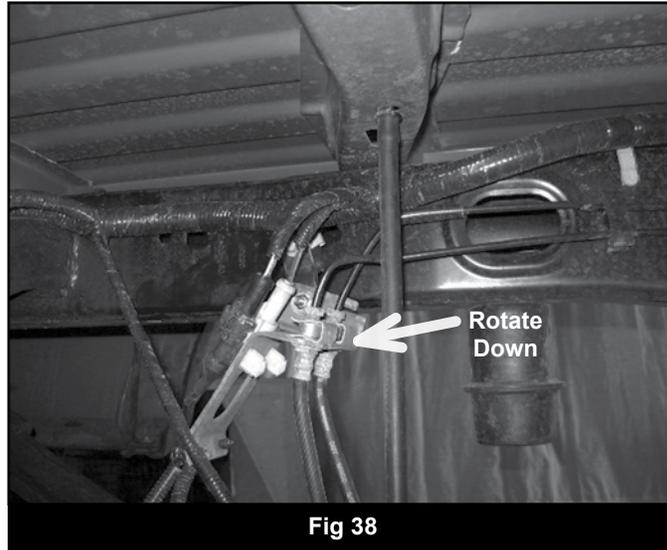


Fig. 37A



Fig. 37B

20. Reconnect the parking brake cable at the junction. When reconnected, remove the clamp to allow the cable to return to its normal tension. Attach the parking brake cable through the relocation bracket through the slot in the bottom. Note: Models with automatic retracting running boards will require an additional bracket to have the cable clear the linkage. This optional accessory bracket kit #123018 is available separately.
21. Install the provided brake line relocation bracket to the driver's side frame rail with the OE brake line bracket bolt (Fig 38). Torque to 15 ft-lbs.



22. Attach the brake line to the relocation bracket with a ¼" nut and ¼" USS washer (BP #774). It may be necessary to rotate the OE brakeline clip bracket to have the lines face 'down' for adequate slack. Torque to 15 ft-lbs.
23. Install the provided new BDS shocks with the OE hardware. Torque to 60 ft-lbs.
24. Check all lines/wires for proper slack.
25. If the vehicle is equipped with EPAS, reconnect the power steering control module connector.
26. Install the wheels and lower the vehicle to the ground.
27. Bounce the rear of the vehicle to settle the suspension.
28. Torque the u-bolts to 100-120 ft-lbs.
29. Check all hardware for proper torque
30. Check hardware after 500 miles.
31. A complete front end alignment is necessary.
32. Adjust headlights.

NOTICE TO DEALER/INSTALLER

These instructions, the warning card, and included decals must be given to the owner of this BDS Suspension product.

For questions, technical support and warranty issues relating to this BDS Suspension product, please contact your distributor/installer before contacting BDS Suspension directly.

Sold/Installed by: