

INSTALLATION GUIDE



Part#: 018301



HARDCORE LIMITED LIFETIME WARRANTY

Performance Lift Kit

Toyota Hilux 4WD | 2016-2024

Rev. 042224

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Web: www.bds-suspension.com • E-mail: tech-bds@ridefox.com

Read And Understand All Instructions And Warnings Prior To Installation Of System And Operation Of Vehicle.



THANK YOU

Your truck is about to be fitted with the best suspension system on the market today. That means you will be driving the baddest looking truck in the neighborhood, and you'll have the warranty to ensure that it stays that way for years to come.

Thank you for choosing BDS Suspension!

BEFORE YOU START

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.

FOR YOUR SAFETY

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.

BEFORE INSTALLATION

- Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- 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.
- 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.
- Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.
- If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.
- 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.



Visit 560plus.com for more information.

TIRES AND WHEELS

265/75R17 Tire
5-1/4" Backspace Wheel



BEFORE YOU DRIVE

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.

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.

Perform head light check and adjustment.

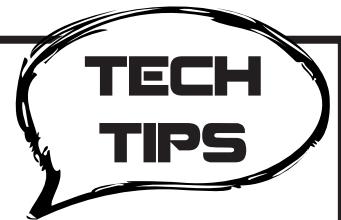
Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

CONTENTS OF YOUR KIT

BDS018301 Box Kit		
Part #	Qty	Description
02911	2	Ball Joint Cap
45NA53	1	Multi Purpose Grease, Packet, 1cc
9452K145	2	O Ring
967	1	Bolt Pack
BP1007	1	Bolt Pack - 4x - 9/16 U-Bolt
	8	9/16"-18 High Nut, Black
	8	9/16" SAE Washer, Black
BP1084	1	Hardware: Carrier Bearing Bolt Pack
	4	10mm-1.25 x 40mm Hex Head Bolt, Class 10.9, Clear Zinc
	4	10mm Oversized Thick Washer
02866	8	Spacer Washer
380412FCP	2	3/8 x 4.5 Pin & Nut (CB380412)
A473	1	BDS UCA Assembly - Driver
A474	1	BDS UCA Assembly - Passenger
962121000QB	4	9/16 x 2-1/2 x 10 Square U-bolt E-coat
01004B	2	Lift Block - 1" x 2.5 Wide

TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

1. BDS Suspension recommends to grease the ball joints every oil change / 3,000 miles.
2. Replacement Ball Joint service kits are available:
 BDS088201 service kit includes (1) Ball Joint and (1) O-ring seal.
 BDS073202 service kit includes (2) rubber bushings.
3. Do NOT hit the knuckle with a hammer to separate the ball joint. Use appropriate ball joint separation tool (09628-62011).
4. BDS UCA are designed to work with a Fox coilover or aftermarket strut spacers



PRE INSTALLATION

IMPORTANT

It is required that ride height measurements be taken before and after installation. Measure from the **WHEEL AXLE CENTER** up to the **FENDER LIP** of the wheel opening. Do this for all 4 wheels. Record measurements below.**

BEFORE

Left Front _____ *Right Front* _____

Left Rear _____ *Right Rear* _____

AFTER

Left Front _____ *Right Front* _____

Left Rear _____ *Right Rear* _____



****These ride heights will be required if you have any ride height concerns after installation. Please be prepared to provide these to Technical Support.**

FRONT INSTALLATION

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
2. Raise the front of the vehicle and support with jack stands under the frame rails, behind the suspension.
3. Remove the front wheels.
4. Disconnect both outer tie rod ends at the knuckle.
5. Disconnect the ABS wire from the upper control arm and the knuckle(Fig. 1A, 1B)

SPECIAL TOOLS

SST: 09628-62011 (Ball Joint Separator)

Torque Wrench

C-Clamps (X2)

FIGURE 1A



FIGURE 1B



6. Optional: Remove the nut and disconnect the front stabilizer link assembly from the steering knuckle.
7. Remove Cotter Key from the ball joint / castle nut. (Fig. 2)

FIGURE 2



8. Use a Special Service Tool: 09628-62011 to dislodge the upper ball joint from the steering knuckle.
9. Remove the inner fender guard to access the upper control arm bolt. (Fig. 3)

FIGURE 3



10. It is recommended to disconnect the ABS wire from the clips on the inside of the fender well to prevent over-extending of the ABS wire. Do not allow the brake line to hold the steering knuckle assembly in place.
11. Remove UCA Arm bolt (Fig. 4A, 4B). The inner fender well sheet metal may need to be slightly formed to get the bolt to be removed easily. Reference factory service manual if necessary.

FIGURE 4A



FIGURE 4B



12. Remove UCA, Retain bolt and washers.

COIL-OVER INSTALLATION

13. Follow coil-over installation at this time for installing into the vehicle.

UPPER CONTROL ARM INSTALLATION - CONTINUED

14. Install the new upper control arm with factory hardware. Snug, but do not torque bolts. (Fig. 5)
15. Attach the new upper control arm ball joint to the steering knuckle at this time with new hardware. Tighten ball joint hardware to 81 ft-lbs.
16. Install cotter pin.
17. GREASE BALL JOINT at this time! Install the o-ring on cap with grease from the included grease packet to aid installation. Install cap. Cap must be removed to access grease fitting for future maintenance.
18. Remove the factory ABS mounting bracket from the ABS line. Attach the ABS wire to the control arm with new 1/4" hardware with new wire clip. Tighten to 15 ft-lbs.
19. If removed, reattach the front stabilizer link to the steering knuckle. Torque the hardware to 69 ft-lbs.

FIGURE 5

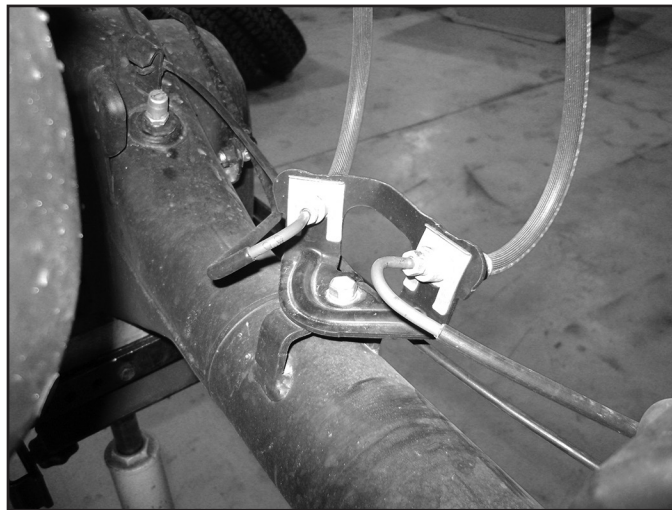


20. With both sides assembled, install the wheels and lower the vehicle to the ground. Torque lug nuts in a crossing pattern to 77 ft-lbs.
21. Bounce the front of the vehicle to settle the suspension. Torque the upper control arm hardware to 85 ft-lbs.

REAR BLOCK INSTALLATION

22. Block the front wheels and raise the rear of the vehicle. Support the frame rails with jack stands.
23. Remove the rear wheels.
24. Support the rear axle and remove the rear shocks. Save the mounting hardware.
25. Disconnect the brake line bracket from the rear axle (Fig 6).

FIGURE 6



26. Disconnect the emergency brake line bracket from the leaf spring clamp. Retain hardware. (Fig 7)

FIGURE 7



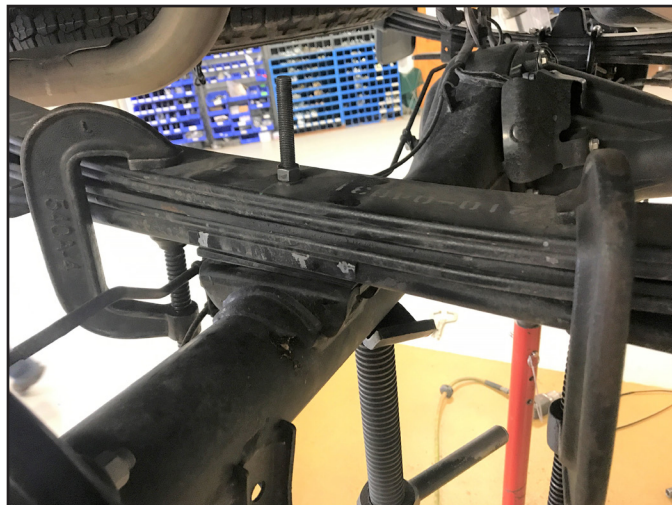
- 27. If necessary, the brake line can also be temporarily disconnected from the frame.
- 28. Remove the factory U-bolts and lower the rear axle. Loosen the u-bolts on the opposite side of the vehicle, but do not completely remove them. This will allow the axle to flex for easier installation of the rear AAL (Fig. 8).

FIGURE 8



- 29. C-clamp on either side of the center pin clamping all leaves together. (Fig. 9).

FIGURE 9



- 30. Loosen the top center pin nut and lower the axle enough to remove the factory center pin.

31. Place the provided 1" block on the bottom of the leaf pack and insert the new 3/8" center pin first through the block, then through the leaf pack. (Fig. 10)

FIGURE 10



32. Tighten the center pin nut to 20 ft-lbs.
33. Remove the C-Clamps.
34. The center pin will need to be trimmed to work with the bump stop pad on the top of the leaf spring as it was with the factory center pin. (Fig. 11)

FIGURE 11



35. Fasten the entire assembly with the provided u-bolts, high nuts and washers. Snug but do not torque the u-bolts at this time. (Fig. 12)

FIGURE 12



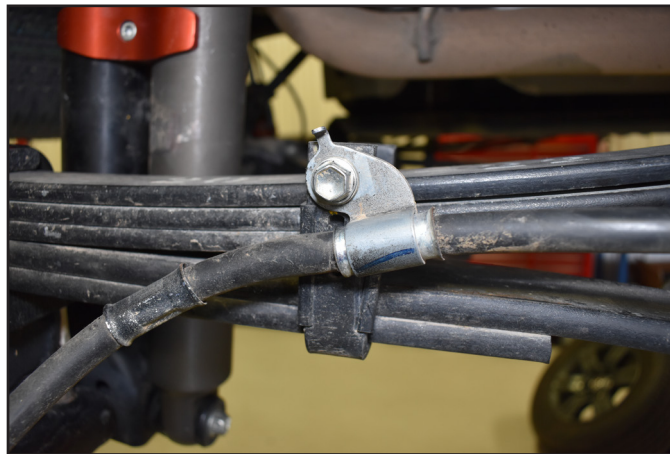
36. Repeat block installation of the driver's side. Take care not to over extend the brake lines Use the provided center pin and 1" bolt on block and install the block to the bottom side of the OE leaf pack.
37. Align the center pin head with the locating hole on the axle tube spring pad.
38. Install new u-bolts with OE top plate and bottom plate. Use provided new washers and nuts (Fig. 13).

FIGURE 13



39. Re-install emergency brake line brackets to both the frame and leaf spring clamp. (Fig. 14)

FIGURE 14



40. Re-attach the brake line bracket to the rear axle.
41. Install new shocks with new upper hardware and OE lower hardware.

REAR SHOCK INSTALLATION

42. Install shock in upper and lower mounts. Follow shock installation instructions.

REAR INSTALLATION - CONTINUED

43. Use an even amount of the provided 02866 (1/4" tall) spacer washers and BP1084 to space down the carrier bearing as needed. Recommended to use (2) spacers (1/2" total height) for each mount of the carrier bearing.
44. Reinstall wheels and torque lug nuts to 83 ft-lbs.
45. Lower vehicle to ground and torque u-bolts to 100-120 ft-lbs.

POST-INSTALLATION

46. Check all hardware for proper torque.
47. A front end alignment must now be performed to original equipment specifications.

- 48. Adjust headlights.
- 49. Check hardware after 500 miles.
- 50. Grease ball joint by removing cap at 3,000 mile increments.



WE WANT TO SEE YOUR RIDE!

Grab photos of your BDS-equipped truck in action and send them in for a chance to be featured. Send it in to our Bad Ass Rides customer gallery at bds-suspension.com/bar and post them on the BDS Fan Page on Facebook at facebook.com/BDSSuspensions. Don't forget about your BDS swag! BDS offers t-shirts, hoodies, decals and more available on the BDS website or through your local BDS distributor.

TIME TO HAVE SOME FUN

Thank you for choosing BDS Suspension.

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