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Part#: **028252**

Product: **3" Front Spacer, 1" Rear Block Kit**

Application: **21999-2006 Toyota Tundra**

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

#028252

Part#	Qty	Description
01418-1	2	Front Strut Spacer
558	1	Bolt Pack

#018109

Part#	Qty	Description
9621208340	4	9/16"x2-1/2"x8-3/4" U-bolt
N96FH	8	9/16" Fine High Nut
W96S	8	9/16" SAE Flatwasher
01419-1	1	Brake Valve Bracket
YJTC3-1	1	Spacer
380412FCP	2	3/8"x4.5" Pin & Nut
342701	1	Loctite

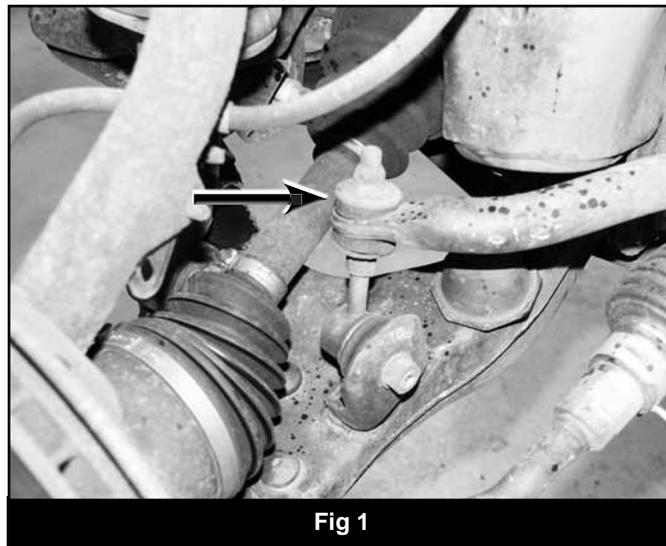
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Part#	Qty	Description
9621208340	4	9/16"x2-1/2"x8-3/4" U-bolt
W96S	8	9/16" SAE Flatwasher
N96FH	8	9/16" Fine High Nut
01419-1	1	Brake Valve Bracket
YJTC3-1	1	Spacer
342701	1	Loctite
2KB-W96	2	2" Lift Block

INSTALLATION INSTRUCTIONS

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 the frame with jack stands behind the lower control arms.
3. Remove the front wheels.
4. Disconnect the sway bar links from the sway bar (Fig 1). Retain hardware.



5. Support the lower control arm with a hydraulic jack
6. Remove the upper ball joint cotter pin and nut. Reinstall upper ball joint nut by threading down a couple turns.
7. Dislodge upper ball joint with appropriate tool. Remove upper ball joint nut and retain.

Perform the following steps one side at a time, starting with the driver's side.

8. Locate the driver's top strut mounting nuts (Fig 2). Remove the three nuts that hold each strut to the frame.
CAUTION: DO NOT remove the center strut nut. It is under extreme pressure.

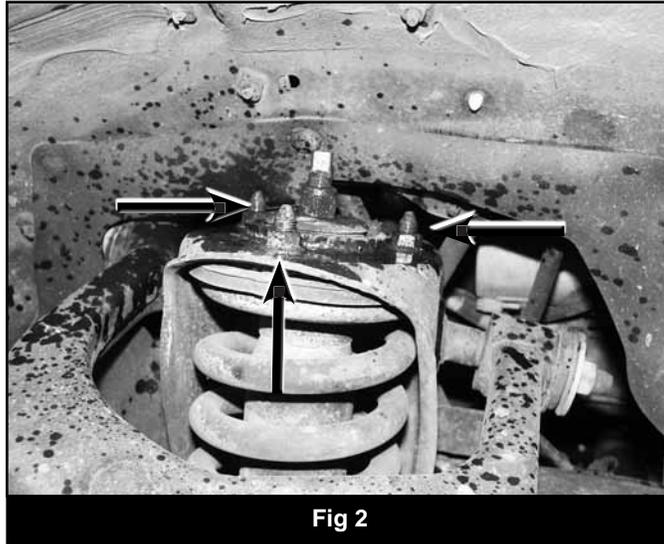


Fig 2

9. Mark the strut to indicate correct side (drv or pass). Remove the bolt that mounts the strut to the lower control arm (Fig 3). Retain hardware.

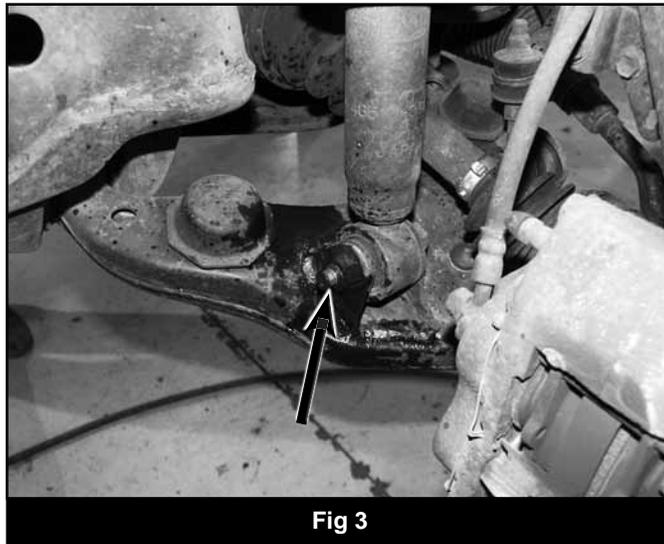


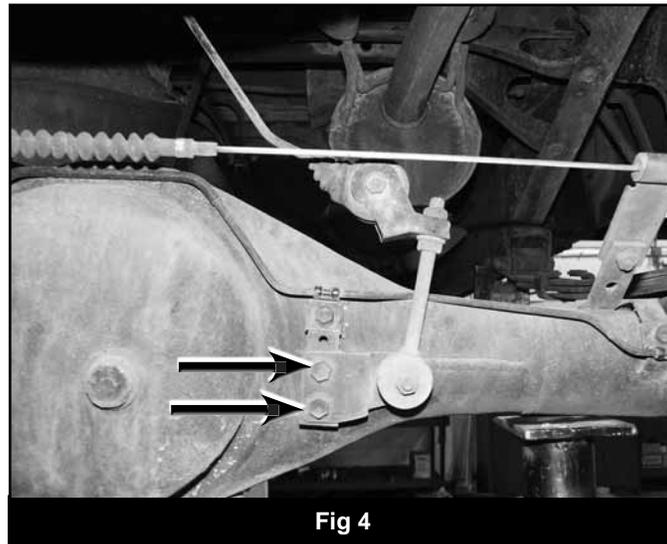
Fig 3

10. Remove the strut from the vehicle.
 11. Mark the relationships between the top strut plate, coil spring, coil spring mount and strut. Also mark what side of the strut faces out. The mark on the top plate will need to be transferred to the new top plate provided to ensure the strut is reassemble correctly for proper alignment during installation.
- ⓘ *Note: A high-quality wall mounted coil spring compressor (Branick or equivalent) is recommended for the installation. A rod style compressor is sufficient, but use extreme caution and inspect all components for signs of wear and/or fatigue before each use.*
12. Compress the spring enough to relieve pressure from the strut rod nut. Remove the nut and remove the top washer, strut plate, rubber/plastic isolator and lower washer.
 13. Transfer the mark on the OE top strut plate to the new one. Loosely install the new 7/16" carriage bolts into the provided strut mount, it will be easier to install the bolts before the strut is reassembled. Install the OE isolator on the new strut mount by lining up the alignment marks.
 14. Install the new strut mount/isolator on the strut with the bushings and cup washers in the order they were removed. Compress the spring enough to install the bushing and stem washer on top and retain the assembly with the OE nut. Tighten nut to 30 ft-lbs
 15. Release the spring compressor.
 16. Install the modified strut assembly in the vehicle by aligning the studs in the top plate with the original mounting holes. Fasten the strut to the frame with 7/16" nuts and washers on the studs. Leave hardware loose. **Note:** *It may be necessary to slightly clearance the mounting holes with a die grinder or 7/16" drill bit.*

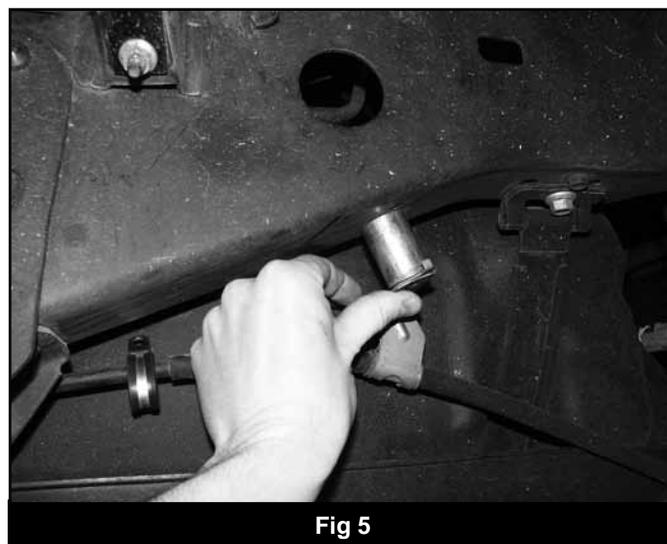
17. Attach the strut to the lower control arm with the OE hardware. Snug nut but do not tighten. Final torque will be done with weight of the vehicle on the suspension.
18. Torque the upper 7/16" hardware to 50 ft-lbs.
19. Repeat procedure on the passenger's side.
20. Reattach the upper ball joint to the control arm with the OE nut. Tighten nut to 45 ft-lbs. Use new cotter pin to secure castled nut. Do not back off nut to get nut aligned for installation of cotter pin.
21. With both sides complete, reattach the sway bar links to the sway bar with the OE hardware. Tighten the nuts until the bushings begin to swell.
22. Install the wheels and lower the vehicle to the ground.
23. Bounce the front of the vehicle to settle the suspension. Torque the lower strut mount hardware to 175 ft-lbs.
24. Check all hardware for proper torque.
25. Check hardware after 500 miles.

Rear Installation

26. Block the front wheels for safety.
27. Raise the rear of the vehicle and support the frame with jack stands.
28. Disconnect the rear proportioning valve from the axle (Fig 4).



29. Disconnect e-brake bracket from frame. Install spacer with new 8mm bolt and 5/16" washer (BP 558). (Fig. 5)



30. Support the rear axle with a hydraulic jack.
31. Remove the passenger's side rear shock.
32. Remove the passenger's side u-bolts.
33. Loosen u-bolts on driver's side, but do not remove.
34. Lower rear axle enough to remove the leaf spring center pin. Clamp the leaf spring pack together with "C" clamps on each side of the center pin so that it will not "fan out" when the center pin is removed. Remove the center pin from the leaf spring. **Note:** *The parking brake cable may need to be disconnected from the brake lever at the end of the axle to allow the axle to drop an adequate distance.*
35. Install the provided center pin in the new 1" lift block and install the block and pin to the bottom of the spring through the center pin hole. Fasten the assembly together with the provided center pin nut. Torque nut to 20 ft-lbs.
36. Remove the "C" clamps from the leaf spring and raise the axle to the spring by aligning the center pin with the hole in the axle spring perch.
37. Reattach leaf springs to axle with new 9/16" u-bolts, washers, and high nuts. Snug the u-bolts. The final u-bolt torque will be done with the vehicle on the ground.
38. Repeat block installation on the driver's side.
39. Reattach rear shocks, it may be necessary to slightly compress the rear springs to reconnect the shocks. Tighten hardware to OE specifications.
40. Install rear proportioning valve relocation bracket (#01419) onto rear axle with new hardware (bolt pack #558). Tighten to 20 ft-lbs.
41. Lower rear of vehicle to the ground.
42. Tighten u-bolts to 95 ft-lbs.
43. Recheck all fasteners for proper torque.
44. A front end alignment must be performed.
45. Recheck all fasteners after 500 miles and at regular scheduled maintenance intervals.

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: