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Part#: 012202 2" Spacer Kit

2006-2008 Dodge 1500 1/2 Ton 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**

- 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.

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## **PARTS LIST**

Part #	Qty	Description	
735	1	Bolt Pack	
01265	2	Strut Spacer	
01278	2	Preload Spacer	



#### **PRE INSTALLATION**

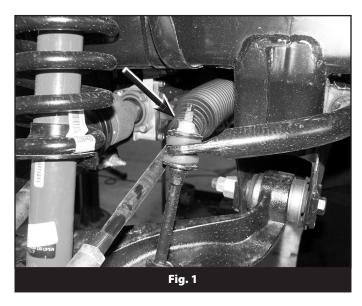
1. Measure from the center of the wheel up to the bottom edge of the wheel opening

I F	RF	I R	RR

• NOTE: The factory service manual specifically states that striking the knuckle to loosen the ball joints or tie rod ends is prohibited. Striking the aluminum knuckle can damage it. A special puller tool #8677 (or equivalent ball joint tool) is recommended to be used to separate these components from the knuckle.

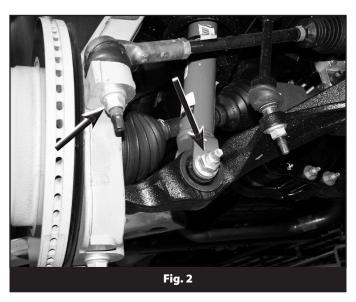
#### INSTALLATION INSTRUCTIONS

- 2. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
- 3. Raise the front of the vehicle and support with jack stands under the frame rails.
- 4. Remove the front wheels.
- 5. Disconnect the sway links from the sway bar (Fig 1). Retain the OE stem nut, washers and bushings.

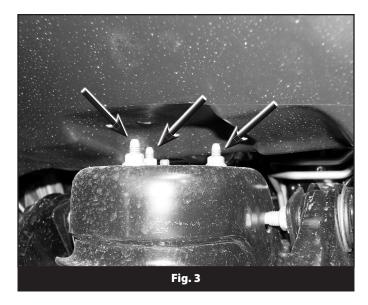


Complete the removal and installation on one side at a time, starting with the passenger's side.

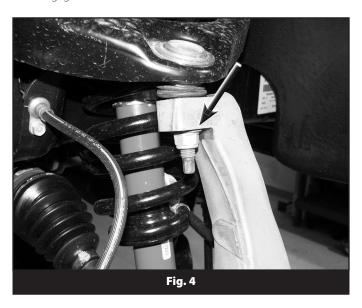
6. Remove the tie rod end nut at the knuckle and retain (Fig 2). Disconnect the tie rod end from the knuckle using the appropriate puller.



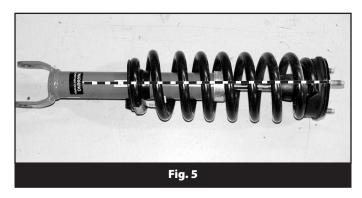
7. Remove the nuts from the three upper mounting studs holding the strut to the frame (Fig 3). DO NOT remove the center strut nut.

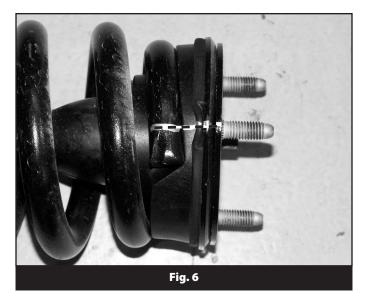


8. Support the lower control arm with a hydraulic jack. Remove the upper ball joint nut and thread it back on a couple of turns by hand (Fig 4). Disconnect the ball joint from the knuckle using the appropriate puller. Remove and retain the ball joint nut. Note: Take care to not allow the knuckle assembly to fall outward and disengage the CV shaft.

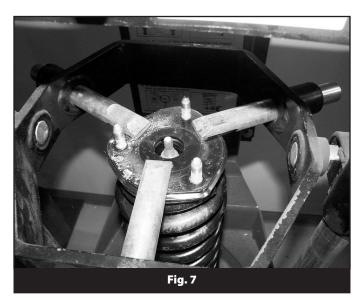


- 9. Remove the lower strut bolt that mounts the strut to the lower control arm (Fig 2). Retain the strut bolt and nut.
- 10. Lower the jack and remove the strut from the vehicle. Ensure that the knuckle assembly does not fall outward (it can be reattached to the upper control arm and the nut install finger tight).
- 11. Place indexing marks on the strut body, strut cap and upper coil seat (Fig 5, 6) for realignment of the components when the strut is reassembled.





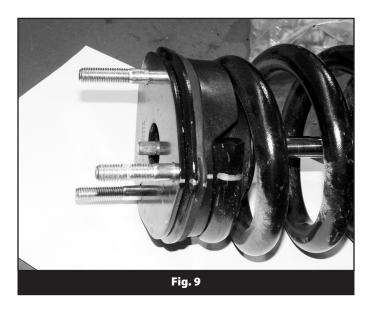
- Caution: Coil spring is under extreme pressure. Improper removal/installation of coil spring could result in serious injury or death. Use only a high-quality spring compressor and carefully read and follow the manufacturer's instructions.
- 12. Using an appropriate strut compressor, compress the coil spring and remove the upper strut nut (Fig 7). Remove the strut, strut cap and upper coil seat from the coil spring.



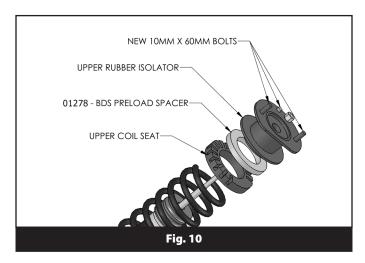
13. Remove the rubber isolator from the strut cap (Fig 8).



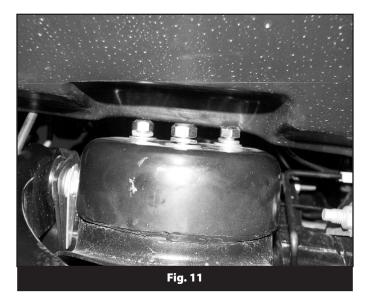
- 14. Using a hammer, remove the three captive studs from the cap. Note: This will free the top plate of the cap.
- 15. Install three 10mm x 60mm bolt in the mounting holes of the strut cap and top plate (Fig 9). Reinstall the rubber isolator on the cap to retain the bolts. Note: Do not use washers on the bolts.



16. Install spacer (01278) between upper coil seat and rubber isolator as shown (Fig 10).



- 17. Reassemble the strut as it was taken apart by aligning the index marks made earlier. Fasten the assembly with the OE strut nut. Torque nut to 50 ft-lbs.
- 18. Install the provided top spacer (01265) on the new studs protruding from the strut cap.
- 19. Install strut assembly in the vehicle by aligning the top studs with the original mounting holes in the frame. Loosely install a 3/8" USS washer, 7/16" lock washer and 10mm nut on each stud (Fig 11).
- 20. Supporting the lower control arm with a hydraulic jack, connect the strut to the lower control arm with the original nut and bolt. Leave bolt loose.
- 21. Raise the lower control arm to reconnect the upper ball joint to the knuckle. Fasten with the OE nut. Torque the upper ball joint nut to 55 ft-lbs.



- 22. Torque the three upper strut mounting nuts to 30 ft-lbs.
- 23. Attach the tie rod end to the knuckle with the OE nut. Torque the tie rod end nut to 55 ft-lbs.
- 24. Repeat the installation procedure on the driver's side of the vehicle.
- 25. With both sides complete, attach the sway bar links to the sway bar with the original bushings, washers and nuts. Tighten the sway bar links nuts until the bushings begin to swell.
- 26. Install the wheels and lower the vehicle to the ground.
- 27. Bounce the front of the vehicle to settle the suspension.
- 28. Torque the driver's and passenger's lower strut mounting bolts to 125 ft-lbs.
- 29. Check all hardware for proper torque.
- 30. Check hardware after 500 miles.
- 31. The vehicle will need a complete front end alignment.
- 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: