

Part#: 014201 Product: 2" Spacer Kit Application: 05-06 Jeep Grand Cherokee

# 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
01919	2	Strut Spacer Mount
M03672	4	Stem Bushings
01918	2	Rear Coil Spacer
741	1	Bolt Pack
Bolt Pac	k 741	
	4	1/2" USS flat washer
	2	12mm-1.75 nylock nut

- nut
- $\mathbf{2}$ 10mm-1.50 x 35mm bolt
- 2 3/8" USS flat washer

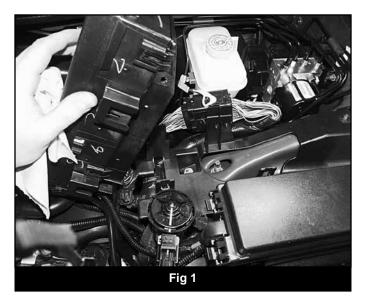
### INSTALLATION INSTRUCTIONS

1. 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.

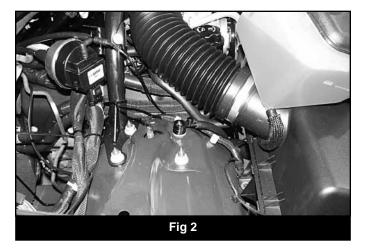
# INSTALLATION INSTRUCTIONS

### Front Installation

- 2. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
- Open the hood. Disconnect the negative battery cable. 3.
- 4. On the driver's side of the vehicle, pull the long narrow electrical box from of the plastic retaining clips to expose one of the three mounting nuts for the power distribution center. Remove the three nuts and pull the power distribution center up to access the top strut nuts. (Fig 1)



- Remove the four driver's side strut retaining nuts. Save nuts for installation. DO NOT remove the center stem nut, 5. it is under extreme pressure.
- 6. On the passenger's side, remove the coolant reservoir mounting hardware and move the reservoir to expose the passenger's side strut nuts. Remove the four strut nuts and retaining. DO NOT remove the center stem nut, it is under extreme pressure. (Fig 2)



- 7. Raise the front of the vehicle and support with jack stands behind the rear portion of the lower control arms.
- 8. Remove the wheels.
- 9. Disconnect the sway bar links from the lower control arms. Retain mounting bolts.

#### Complete the following steps on one side of the vehicle at a time.

- 10. Disconnect the ABS line from the connector at the frame. Also disconnect the line from any retaining clips on the body and strut.
- 11. Disconnect the tie rod end from the steering knuckle. Remove and retain the mounting nut. Use the appropriate puller to separate the tie rod end from the steering knuckle. Take care not to damage the tie rod end.
- 12. Loose but do not remove the strut-to-lower control arm bolt.
- 13. Support the lower control arm with a hydraulic jack.
- 14. Remove the upper ball joint nut. Reinstall the nut a few turns by hand. Separate the ball joint from the steering knuckle using the appropriate puller. Take care not to damage the ball joint. Remove the upper ball joint nut.
- 15. Remove the strut-to-lower control arm bolt and remove the strut from the vehicle. Note: Loosening the upper control arm pivot bolts will make it easier to push the upper control arm up and out of the way for strut removal. If this is done, be sure to retighten the bolts properly after installation of the strut.
- 16. Mark the relationship between the top strut plate, coil spring and strut. 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.
- 17. Compress the spring enough to relieve pressure from the strut rod nut. Remove the nut and remove the top strut plate and rubber isolator.
- 18. Transfer the alignment mark made earlier on the OE strut plate to the corresponding location of the new strut plate. Install the OE rubber isolator on the new strut plate by placing the alignment dimple in the appropriate hole in the plate.
- 19. Install one of the provided stem washers and bushings on the strut stem.
- 20. Place the new top plate on the spring and adjust so the alignment marks are all in line.
- 21. Compress the spring until the new top bushing and washer can be installed. Fasten the assembly with the new provided 12mm nylock nut and tighten until the bushings swell (about 60 ft-lbs).
- 22. Install the strut assembly in the vehicle and loosely fasten with the original strut-to-lower control arm bolt and nut. Also loosely fasten the four top studs with the original nuts.
- 23. Support the lower control arm with a hydraulic jack. Reattach the upper ball joint with the original nut. Torque nut to 55 ft-lbs.
- 24. Reattach the tie rod end to the knuckle with the original nut and torque to 55 ft-lbs.
- 25. Reattach the ABS line to the connector at the frame and to all the appropriate retaining clips on the body and strut.

- 26. When both sides are complete, reattach the sway bar links to the lower control arm with the original hardware. Torque bolt to 75 ft-lbs.
- 27. Install the wheels and lower the vehicle to the ground.
- 28. Bounce the front of the vehicle to settle the suspension. Torque the upper strut plate nuts to 65 ft-lbs. Torque the strut-to-lower control arm bolt to 125 ft-lbs. Note: If the upper control arm bolts were loosened, torque to 60 ft-lbs.
- 29. Replace the coolant reservoir and power distribution center to the appropriate locations and fasten securely with the original hardware.
- 30. Check all hardware for proper torque.
- 31. Check hardware after 500 miles.
- 32. A complete front end alignment is needed.

#### **Rear Installation**

- 33. Block the front wheels and raise the rear of the vehicle. Support with jack stands at the frame, in front of the lower control arm mounts.
- 34. Remove the wheels.
- 35. Support the rear axle with a hydraulic jack.
- 36. Remove the OE rear shocks. Retain the mounting hardware.
- 37. Disconnect the track bar from the axle. Retain hardware.
- 38. Disconnect the sway bar links from the body. Retain hardware.
- 39. Disconnect the driver's side upper control arm from the axle mount. Retain hardware.
- 40. Lower the axle until the springs are free. Take care not to overextend the any lines or hoses. Remove the rear springs. Remove the upper OE rubber spring isolators.
- 41. Pull the rubber bump stop from the mount at the upper coil mount. Remove the bump stop mounting cup bolt and remove the mounting cup from the vehicle.
- 42. Install the provided coil spacer in conjunction with the bump stop cup and fasten with the provided 10mm x 35mm bolt and 3/8" USS washer. Torque mounting bolt to 35 ft-lbs.
- 43. Place the bump stop in the coil spring right side up and install the spring back in the vehicle in with the OE upper isolators.
- 44. Push the bump stop back into the mounting cup.
- 45. Reattach the sway bar links with the original bolts. Torque to 65 ft-lbs.
- 46. Reattach the driver's side upper control arm to the axle with the original bolt. Do not tighten at this time.
- 47. Reattach the original shocks with the OE hardware. Torque bolts to 65 ft-lbs.
- 48. Install the wheels and lower the vehicle to the ground.
- 49. Bounce the rear of the vehicle to settle the suspension.
- 50. Install the track bar in the axle bracket with the original hardware. Torque bolt to 125 ft-lbs.
- 51. Torque the driver's side upper control arm bolt to 65 ft-lbs.
- 52. Check all hardware for proper torque.
- 53. Check hardware after 500 miles.