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

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**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.



## INSTALLATION INSTRUCTIONS FRONT

1. Raise vehicle and place jack stands under frame approximately 3" behind front spring shackles. Remove front wheels and shocks.
2. Remove one rivet from the outside of the frame at the engine crossmember closest to the OE hose to steel line connection. Attach the 90 degree brake line extension brackets using the 3/8" x 1" bolts, nuts, and lock washers.
3. Disconnect front brake line at frame and reroute through extension brackets and secure. **CAUTION: Careful attention must be exercised in rerouting.** Do not kink, pinch or stretch lines! When both sides have been completed, bleed the brakes. Refill the master cylinder with Dot approved fluid.
4. Place hydraulic floor jack under front differential and rise to support differential.
5. Remove cotter pin and nut securing the drag link to stock steering arm. Use pickle fork to de-seat tapered stud from arm. (Fig. 1)

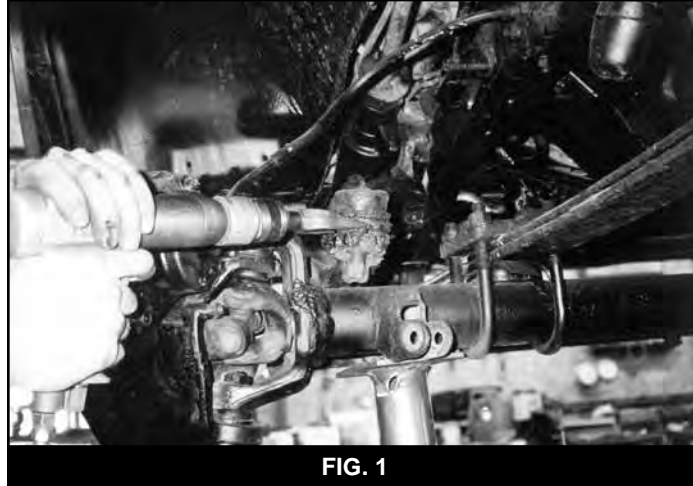


FIG. 1

6. Remove front spring to axle u-bolts. (Fig. 2) Remove spring to front hanger bolts, and shackle bolts. (Fig. 3) Save all hardware for reinstall. Remove front springs. 6" and up lift kits, remove sway bar to frame bushing bolts, save all hardware for reinstall. Support sway bar with strap to frame, or with jack stand.

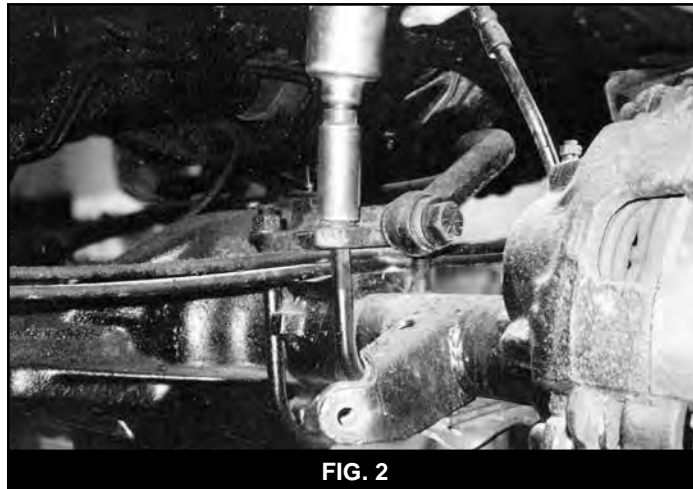


FIG. 2

7. Lubricate spring bushings and install into front lift springs. Large bushing and 3/4" steel sleeve into front eyes. Small bushing and 1/2" steel sleeve into rear eyes.

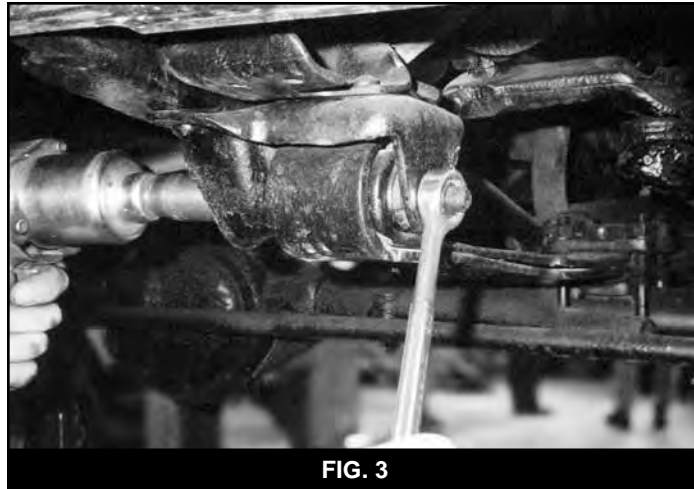


FIG. 3

8. Install front springs assemblies into vehicle using OEM fasteners removed in step 5. If new hardware is needed it is available from BDS #121004 for 1973-87 trucks or #121005 for 1988-91 trucks. Leave spring eye bolts hand tight to be tightened with truck on the ground.
9. Fully seat spring center pins into axle spring seat and secure springs to axle using the longer u-bolts, nuts, and washers supplied. (Fig 4.) Do not Torque hardware at this time. 6" and up lift kits Install sway bar drop kit #121451 per instructions at this time.

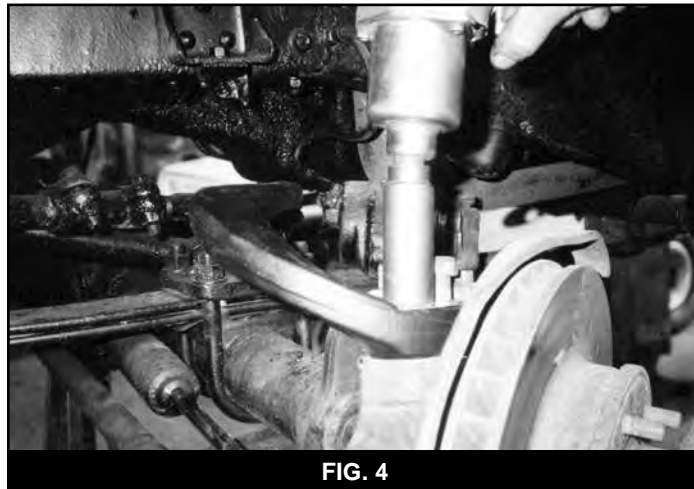
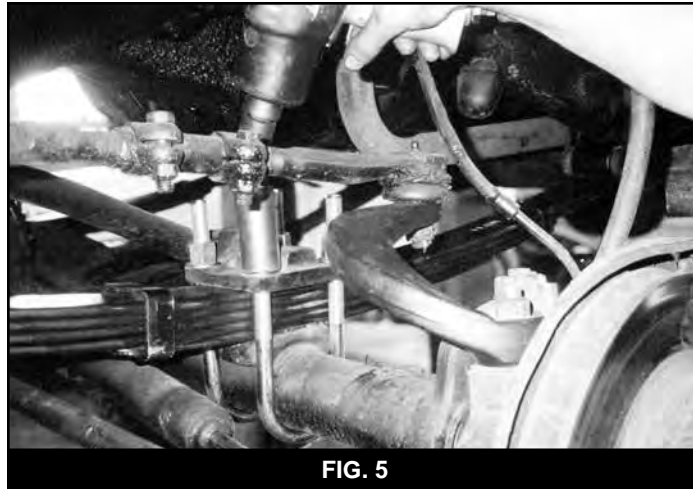


FIG. 4

### **Steering Arm Installation (if applicable)**

#### **BDS # 081401**

10. Clean and oil studs before removing nuts.
11. Remove nuts and tapered sleeves. Retain for reinstallation. Remove Arm.
12. Clean axle pad and studs, inspect for damage or penetrating rust. Consult the OEM service manual for stud replacement. Install new arm and torque fasteners to 175 ft.lbs. (Fig. 5)

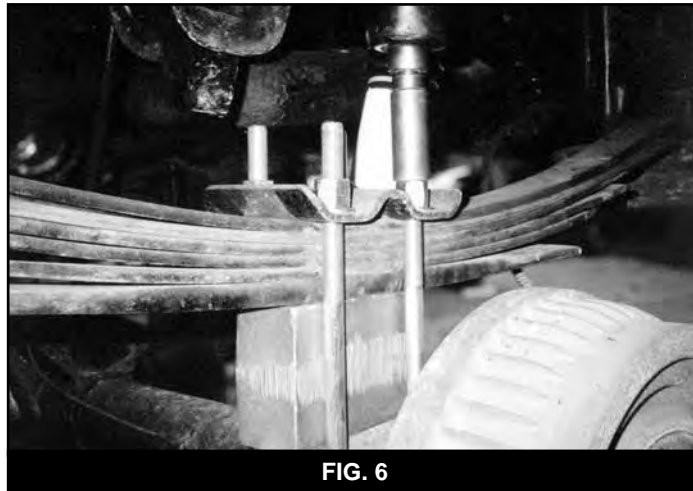


13. Re-secure drag link to new steering arm and lock with cotter pins.
14. Install recommended replacement BDS shocks and reinstall front wheels and tires. Remove jack stands and lower the front to the ground.
15. With the vehicle on the ground, go back and torque spring eye bolts to 9/16"= 130 ft. lbs and 7/16"= 60 ft.lbs. Do not over tighten. Over tightening the shackle bolts will restrict movement. Torque u-bolts to 130-150 ft.lbs.
16. 6" lifts and up Install transercase lowering kit # 121000 per there instructions at this time.

## REAR BLOCK KITS

**Note: Steps 2-4 apply to 4" & 6" lifts only.**

1. Raise rear of vehicle and support with jack stands under frame in front of the front spring hanger.
2. With axle supported with a jack, remove the brake line at the axle.
3. Secure rear brake line extension bracket to axle with the factory bolt. Reattach the brake line to the relocation bracket with the provided 5/16" hardware.
4. Remove rear shocks, retain all hardware for reinstall.
5. Remove rear u-bolts and lower axle away from spring assemblies.
6. If installing an add-a-leaf 119157 or 119158 do so now per their instructions.
7. Place lift blocks on top of axle spring seat, tapered end forward and secure with supplied u-bolts. Torque u-bolts to 130-150 ft.lbs. (Fig.6)
8. Install recommended BDS shocks with reused hardware. Reinstall wheels and tires.
9. Double check all hardware torque.
10. Adjust headlights
11. Check all moving parts for clearance.
12. A front end alignment should be performed.
13. Recheck all fasteners after 500 miles



## REAR SPRING KITS

1. Raise rear of vehicle and support with jack stands under frame in front of the front spring hanger.
2. With axle supported with a floor jack, remove the brake line clip attaching the line to frame bracket. Pull the line through bracket approximately 4". **Caution: Careful attention must be exercised when re-routing brake line.** Do not kink, pinch or stretch brake lines!
3. Using hack saw, cut a slot through to the hole, bend bracket open to remove brake line. Bend bracket back into position.
4. Secure rear brake line extension 'Z' bracket to frame bracket using 5/16" bolt, washers and lock-nut. Reroute line through extension bracket and secure with clip.
5. Remove rear shocks, retain all hardware for reinstall.
6. Remove rear u-bolts and lower axle away from spring assemblies.
7. Remove spring to front hanger bolts, and shackle bolts. Save all hardware for reinstall. Remove rear springs.
8. Lubricate spring bushings and install into rear lift springs.
9. Install rear springs assemblies into vehicle using OEM fasteners removed in step 7
10. If new hardware is needed it is available from BDS #121009 for 1973-91 trucks
11. Fully seat spring center pins into axle spring seat and secure springs to axle using
12. The longer u-bolts, nut, and washers supplied. Do not torque hardware at this time.
13. Install recommended replacement BDS shocks and reinstall rear wheels and tires. Remove jack stands and lower the rear to the ground.
14. Torque u-bolts to 130-150 ft.lbs. torque spring eye bolts to 9/16"= 130 ft. lbs and 7/16"= 60 ft.lbs. Do not over tighten. Over tightening the shackle bolts will restrict movement.
15. Double check all hardware torque.
16. Adjust headlights.
17. Check all moving parts for clearance.
18. A front end alignment should be preformed.
19. Recheck all fasteners after 500 miles.