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Part#: 014401 Product: Front & Rear Box Kit Application: Jeep J10, J20

# 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   963000712R 2   963120912R 2	<b>Description</b> 9/16 x 3 x 7-1/2" Round Front U-bolt 9/16 x 3-1/2 x 9-1/2" Round Front U-Bolt	N58FH W585 BP123401	8 8 1 4 4	5/8" Fine High Washer 5/8" Flat Washer Bolt Pack 3/8" x 1-1/4" Bolt 3/8" Nut
583001200R 4 N96FH 8	5/8 x 3 x 12" Round Rear U-Bolt 9/16" Fine High Nut		8	3/8" USS Washer
W96S 8	9/16" Flatwasher			
SBLA 1	Flat Brake Line Drop Bracket			
90BA 2	Bent Brake Line Drop Bracket			
3KB-W96 2	3" lift block			

### INSTALLATION INSTRUCTIONS

### Front Installation

- 1. Park and secure the vehicle on a level hard surface. Block the rear tires to avoid accidental movement.
- 2. Raise the front of the vehicle so the axle is hanging freely and the tires are just off the ground. Support the vehicle with jack stands under the frame rail about 3" behind the spring shackles.
- 3. Remove the tires and wheels.
- 4. Remove the original shocks and retain hardware for later use.

#### Complete the following steps one side at a time.

- 5. Place a floor jack under the axle to support it. Remove the spring u-bolts.
- 6. Remove the leaf spring eye bolts. Lower the axle and remove the original spring.

#### A CAUTION: Do not over extend the brake lines.

- 7. Disconnect the OE brake line from the frame. Install the brake line relocation bracket (90BA- 90degree bend) using the  $3/8 \ge 1^{\circ}$  bolt, nut and washers to the frame.
- 8. Install the new leaf springs using the original shackle and hanger fasteners. Hand tighten only. The spring eye bolt must be tightened after the vehicle is on the ground
- 9. Install new u-bolts to retain the spring to the axle. The 3-1/2" wide u-bolts are used on the differential side and the 3" wide by 7-1/2" long u-bolts used on the other. Torque to 120 ft-lbs.
- 10. Complete the above steps for the passenger side.
- 11. Install aftermarket shocks at this time.
- 12. Install pitman arm at this time. A pitman arm or steering block is recommended with this kit.
- 13. Install tires and wheel.
- 14. Lower the vehicle to the ground.
- 15. With the full weight of the vehicle on the springs, tighten the leaf spring eye bolts to OE specification.

#### **Rear Installation**

- 16. Park and secure the vehicle on a level hard surface. Block the rear tires to avoid accidental movement.
- 17. Raise the rear of the vehicle so the axle is hanging freely and the tires are just off the ground. Support the vehicle with jack stands under the frame rail about 3" in front of the spring mounts.
- 18. Remove the tires and wheels.
- 19. Remove the original shocks and retain hardware for later use.
- 20. Remove the OE brake line bracket from the differential cover. Install supplied flat brake line drop bracket to the differential. Install the OE bracket to the supplied bracket using the 3/8" fasteners supplied

#### Complete the following steps one side at a time.

- 21. Place a floor jack under the axle to support it. Remove the spring u-bolts. Lower the axle away from the leaf spring.
- 22. Install the 3" block in between the leaf pack and the axle tube with the thick side toward the rear of the vehicle.
- 23. Raise the axle. Be sure to align the block pin in the axle tube hole and the spring pin in the block.
- 24. Install remaining 3" wide by 11" long u-bolts and torque to 120 ft-lbs.
- 25. Install BDS shocks.
- 26. Install tires and wheels.
- 27. Lower vehicle to the ground.
- 28. Install warning card on rear view mirror for vehicle operator.
- 29. Check all fasteners after 500 miles.
- 30. A complete front end alignment should be completed after installation of this kit. A headlamp adjustment should also be completed.

## 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: