

Part#: 121400

Product: Shock Relocation Kit

Application: 1999-2006 Chevy Autoride

491 W. Garfield Ave., Coldwater, MI 49036

Phone: 517-279-2135

Web/live chat: www.bds-suspension.com

E-mail: tech@bds-suspension.com

# 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.

rev. 5/13/2013 121400 Page 1

## **PARTS LIST**

Part #	Qty	Description			
02184	2	4.5" front autoride shock relocation	01176	2	Auto leveler relocation brkt
		bracket		2	6mm-1.00 x 15mm bolt - class 8.8 -
69	2	0.750 x 0.090 x 1.375 sleeve			clear zinc
75	2	Spacer sleeve		2	1/4"-20 x $1/2$ " type $f$ self tapping bolt
54587	2	spacer sleeve			hex head - clear zinc
342701	1	Loctite		2	1/4" SAE washer - clear zinc
444	1	Bolt pack	02339	2	Rear autoride shock relocation brkt
	2	9/16″-12 x 3″ bolt - grade 8 - yellow zinc		4	9/16″-12 x 3-1/2″ bolt - grade 8 - yellow zinc
	2	9/16″-12 prevailing torque nut - yellow zinc		4	9/16″-12 prevailing torque nut - yellow zinc
	4	9/16" SAE thru-hardened washer - yellow zinc		8	9/16" SAE thru-hardened washer - yellow zinc
	2	3/8"-16 x 2-3/4" bolt - grade 8 - yellow zinc		4	3/8″-16 x 1-1/4″ bolt - grade 8 - yellow zinc
	2	3/8″-16 prevailing torque nut - yellow zinc		4	3/8″-16 prevailing torque nut - yellow zinc
	4	3/8" SAE thru-hardened washer - yellow zinc		8	3/8" SAE thru-hardened washer - yellow zinc

# **INSTALLATION INSTRUCTIONS**

Note: This kit is designed to work with BDS lift systems. These instructions are to be used in combination with the full lift instructions.

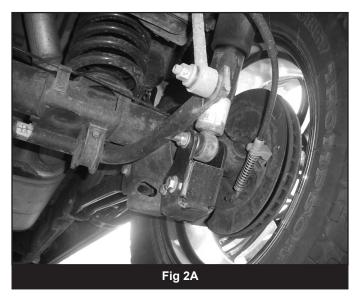
- 1. Disconnect the upper autoride fitting from the top of the shock. Remove the nut, cup washer, and bushing. Retain all pieces, do not discard like non-autoride applications.
- 2. Remove the lower shock bolt and retain.
- 3. Install the lower shock relocation bracket over the OE shock clevis. Mark the 2 holes to be drilled, remove bracket and drill holes to 3/8"~13/32".
- 4. Reinstall bracket with sleeve between the OE shock clevis. Use the 9/16" x 3" bolt with washers and nut. Attach upper two holes with 3/8" x 2-3/4" bolt with washers and nut. Do not tighten hardware at this time. (Figure 1)



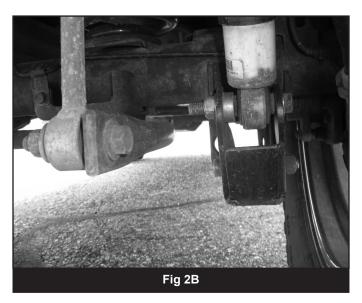
5. Reinstall shock into the vehicle with OE hardware. Tighten hardware as follows: 3/8" – 35 ft-lbs, 9/16" – 95 ft-lbs, 14mm – 100 ft-lbs, upper mount – until bushings swell. Reattach autoride air fitting to the top of the shock. Note: When installing this on the 4.5" BDS kit, it is recommended that reattaching the lower shock bolt is done after the vehicle has had the torsion bars loaded and when the vehicle is on the ground. This will greatly reduce the amount of force required to preload the torsion bars, and make installation easier.

#### **REAR INSTALLATION**

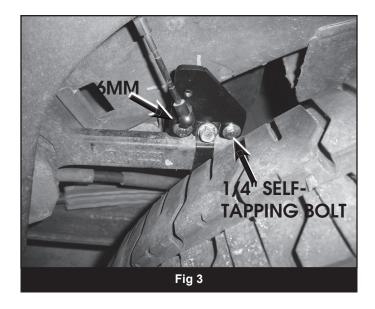
- 6. Remove rear shock from the axle mount. Discard hardware.
- 7. Install relocation bracket as shown on the outside of the OE shock mount with new 9/16" hardware. Mark the hole on the inside of the vehicle. (Figure 2a)



- 8. Remove bracket and drill hole thru both sides of the bracket to 7/16".
- 9. Install the relocation bracket with new 9/16" x 3-1/2" bolt, washers, torque nuts and crush sleeve in the OE shock mount. Attach to the 7/16" drilled holes with 3/8" x 1-1/4" bolts, washers, and nuts.
- 10. Install the OE shock into the relocation bracket with a spacer sleeve as shown with new 9/16" x 3-1/2" bolt, washers, and torque nut. (Figure 2b)



- 11. Tigthen 9/16" hardware to 110 ft-lbs, 3/8" hardware to 35 ft-lbs.
- 12. Unthread the ball stud from the autoride level sensor bracket. It is easiest to pop the ball out of the plastic socket and use a socket to remove the stud.
- 13. Attach the level sensor relocation bracket to the OE bracket with 6mm into the forward position and ¼" self tapping bolt in the rearward hole. Securely tighten both fasteners. (Figure 3)



- 14. Thread the ball stud into the upper hole for 6" kits and lower hole for 4.5" kits, securely tighten the stud. Pop the ball back into the plastic socket at this time.
- 15. Attach the lower shock eye to the axle with OE hardware.
- 16. Tighten 9/16" hardware to 95 ft-lbs. Torque remaining OE hardware to specifications listed in the main instruction sheet.
- 17. Check hardware for proper torque after 500 miles.

## 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: