



491 W. Garfield Ave., Coldwater, MI 49036
Phone: 517-279-2135
Web/live chat: www.bds-suspension.com
E-mail: tech@bds-suspension.com

Part#: **123013**

Product: **Dual Shock Hoop**

Application: **2005-2007 Ford Super Duty**

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			
02013	1	Dual shock hoop - DRV	669	1	Bolt pack
02014	1	Dual shock hoop - pass		6	9/16"-12 x 3" bolt - grade 8
01844	1	Lower mount - DRV		18	9/16" SAE Washer
01845	1	Lower mount - pass		8	9/16"-12 Prevailing torque nut
01701	2	Steering stop spacers		4	9/16"-12 x 1-1/2" bolt - grade 8
73	6	Shock Spacer Sleeves		2	3/4"-10 x 1-3/4" bolt - grade 8
02031	2	Nut Tab		4	3/4" SAE Thru hardened washer
				2	3/4"-10 Nylock nut

INSTALLATION INSTRUCTIONS

1. Park vehicle on a clean, level and flat surface. Block the rear wheels for safety.
2. Disconnect the battery (batteries), welding is required.
3. Raise the front of the vehicle and support the frame rails with jack stands.
4. Remove the front wheels
5. Support the front axle with a hydraulic jack. Work on only one side of the vehicle at a time.
6. Disconnect the front shock and remove it from the vehicle. Retain the lower bolt.
7. Place the dual shock mounting hoop on top of the original upper shock mount. It may be necessary to trim the inner fender well to get the bracket to properly seat against the frame.
8. Attach hoop with 3/4" bolt through the original upper shock mount to hold it in place. Mark hole centers for the end tubes. (Fig 1, Fig 2)

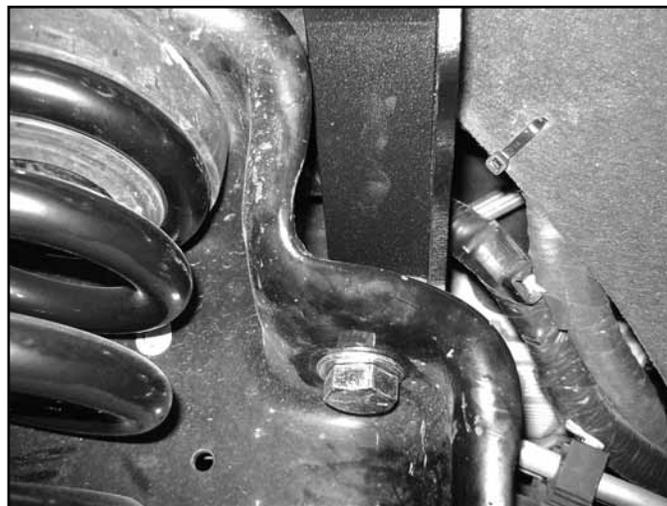
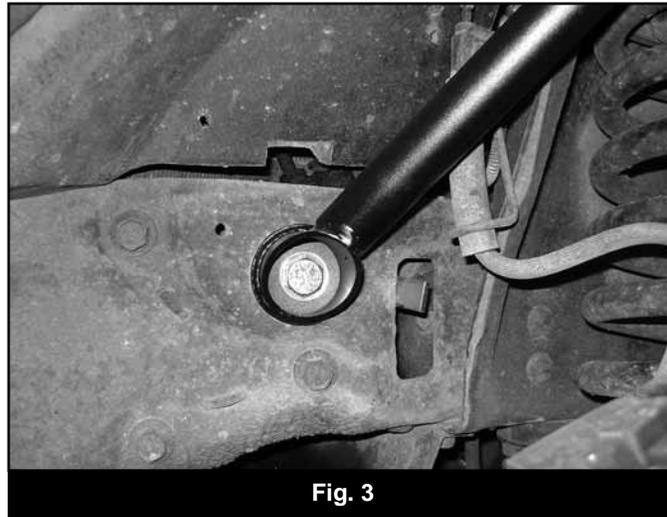


Fig. 1

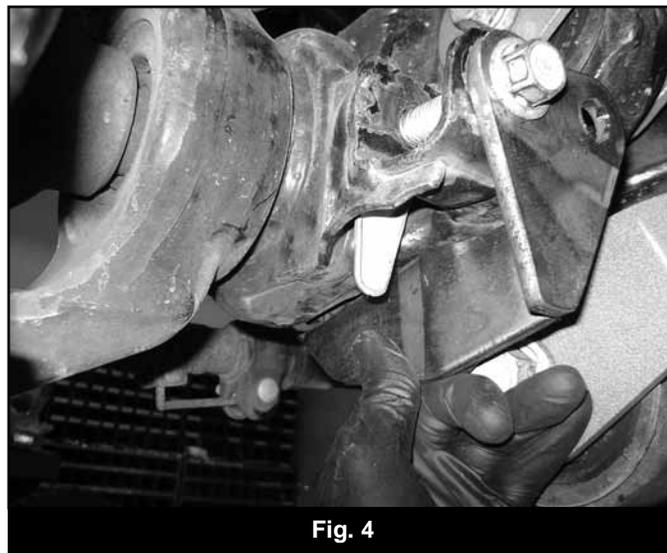


Fig. 2

9. Remove hoop, and drill to 9/16"-5/8".
10. Reinstall hoop with 9/16" x 1-1/2" bolts with washer and nut tab on the inside of the frame rail (regular nut with washer at rear mount). Attach the bracket to the old upper shock mount with 3/4" x 1-3/4" bolt, washers, and nut. Run bolt from bottom – up. Tighten 3/4" hardware to 125 ft-lbs, 9/16" hardware to 95 ft-lbs. (Fig 3)



11. Prep area shown for welding.
12. Install lower bracket with the factory bolt on the backside of the lower shock mount (Fig 4). Loosely tighten the bolt (do not over compress the pocket).



13. Weld the lower dual mount bracket to the axle. (Fig 5)

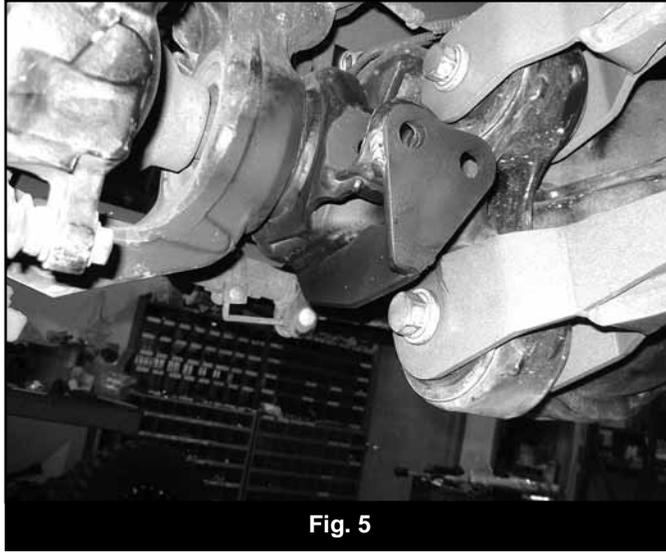


Fig. 5

14. Weld the steering stop to the inner C of the axle. (Fig 6) Note: This step may be skipped if the tire size is 12.50" or narrower with 4-1/2" to 4-3/4" of backspace wheels are used. Dual rear wheel applications with stock rims and tire may also skip this step.



Fig. 6

15. Wait for welds to cool, coat with paint to prevent corrosion.
16. Install shocks with 9/16" x 3" bolts, washers, spacer washer, and nuts as shown. The spacer washer goes directly against the shock hoop. Tighten hardware to 65 ft-lbs.(Fig 7, 8)

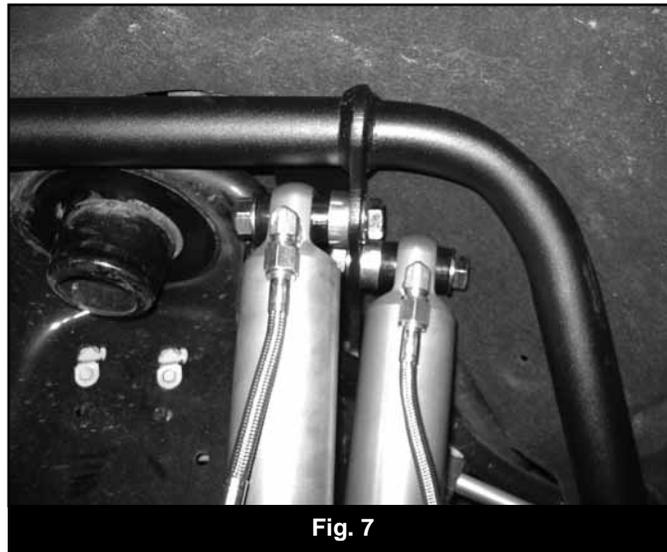


Fig. 7

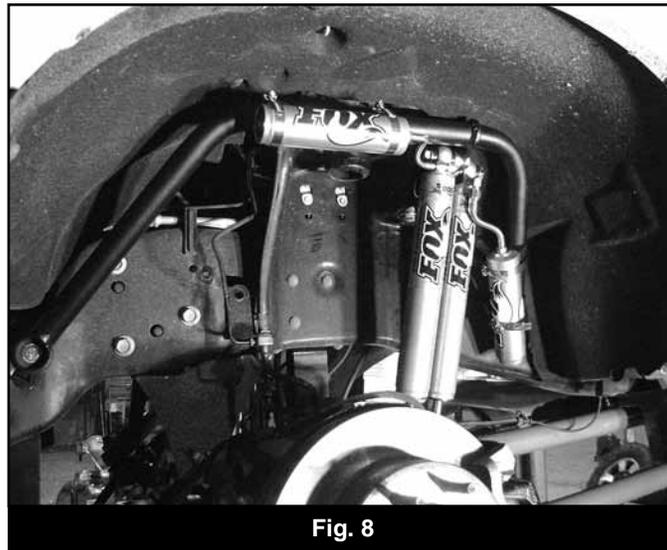


Fig. 8

17. Install shock into the factory lower mount with the factory bolt. Install the auxillary shock with 9/16" x 3" bolt, washer, spacer washer, and nut. Do not use a washer on the backside of the 9/16" bolt, there is not enough clearance at the lower mount. Tighten hardware to 65 ft-lbs.
18. Reinstall wheels and check for tire to shock clearance. Torque wheels to factory specifications.
19. Lower the axle and check to make sure the coil is unable to become unseated.
20. Recheck all fasteners, check again 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: