



# BD Steering Box Support (SBS) 2003-2009 Dodge Cummins

1032005 2003-2008 4WD P/N# 2009 4WD

#### PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION

This part does not fit the POWERWAGON model.

BD ENGINE BRAKE, INC.

## <u>KIT CONTENTS:</u>

Please check to make sure that you have all the parts listed in this kit **before** you start the disassembly your truck.

DODGE 2003-2008 STEERING BOX SUPPORT (SBS) (BD# 1302005)						
1302005			1302010BC			
Steering Box Support			Sector Shaft Bolt			
Qty: 1			Qty: 1			
1302017	1040150		1040153	1040152		
			0			
Bearing Assembly	½" x 1-½" Capscrew		Flat Washer	Lock Washer		
Qty: 1	Qty: 2		Qty: 2	Qty: 2		
1040151	1302020		1302028	1452815		
	STORY OF THE PROPERTY OF THE P					
½" Nut	Thread Lock	Frame Bolt M10 x 1.5" x 35mm		Frame Washer (M10)		
Qty: 2	Qty: 1	_	Qty: 4	Qty: 4		

DODGE 2009+ STEERING BOX SUPPORT (SBS) (BD# 1302006)							
1302005			1302070BC				
Steering Box Support			Sector Shaft Bolt				
Qty: 1			Qty: 1				
1302017	1040150		1040153	1040152			
Bearing Assembly	½" x 1-½" Capscrew		Flat Washer	Lock Washer			
Qty: 1	Qty: 2		Qty: 2	Oty: 2			
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1040151	1302020	1302028		1452815			
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½" Nut	Thread Lock	Frame Bolt M10 x 1.5" x 35mm		Frame Washer (M10)			
Qty: 2	Qty: 1	Qty: 4		Qty: 4			

#### Welcome

Thank you for purchasing a BD Steering Box Support. This manual is divided into different areas to assist you with your installation and operation of your steering box support system.

This product is not a replacement for a new steering box and/or ball joints, but it will aid in reducing the stress placed on the steering box and associated wear. All steering components should be checked and replaced if necessary prior to addition of the steering box support.

Installation should occur on a vehicle properly secured to prevent rolling.

Application of lubrication at regular chassis lube intervals will promote bearing life.

## THIS PRODUCT IS NOT SAFE TO USE AS A TOWING OR WINCHING ATTACHMENT POINT.

#### Required Tools

- 15mm, 17mm & 19mm Socket / Wrench
- 1-5/16" and 1-1/4" Socket/Wrench
- 1/8" Allen wrench
- Torque Wrench (40-180 lbs-ft).

#### Maintenance

Grease bearings at regular oil change intervals for optimal protection of bearing from wear and contamination due to environment.

### Installation



### \*\* CAUTION \*\*

# THE SWAY BAR WILL DROP WHEN BOLTS ARE REMOVED, SO REMOVE WITH CAUTION.

Hold onto or otherwise support sway bar.

Remove the four mounting bolts (15mm) that secure the sway bar to the frame.



Allow the sway bar to swing down and rest on the steering linkage.



The 1-5/16" socket will be required to remove the steering box sector shaft bolt with lock washer. Retain the lock washer for re-installation with new nut.



The 1-1/4" Deep socket (180 lbs-ft) should be used to install the new sector shaft nut, re-using the stock lock washer.



Slide support bar into place, where the mounting feet are positioned in between the sway bar mounting and the frame.

When the sway bar is moved into place the large diameter hole on the bearing plate will be approximately centered on the sector shaft nut.



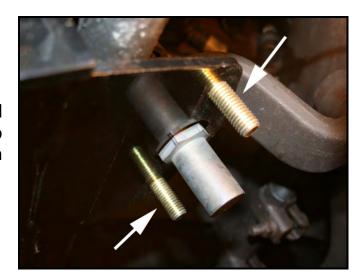
Apply Loctite.

Install (**snug, not tight**) the four supplied **17mm** bolts with washers to re-secure sway bar and SBS to the frame, while allowing for final mounting position to be fine tuned Bracket is aligned when sector shaft nut is centered in hole.

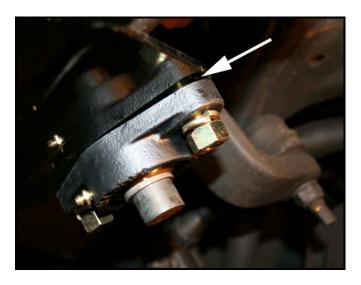
\*\*\*It may be necessary to loosen the sway bar end link bolts to ease process (**15mm**).



Install two bolts through the small holes in bearing mounting area, so that the threads are hanging through the bracket.



Install bearing assembly over the sector shaft nut until bearing block comes to rest on the support bracket (noting that the block may not be flat to the mount at this point). With two bolts slid through holes in bearing block. Install lock washer and nut. Snug do not tighten.

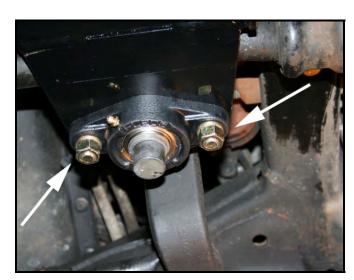


Tighten the four sway bar mounting bolts (17mm) to 40 lbs-ft (as per Dodge Specification).



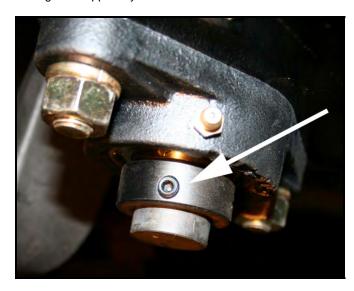
Ensure free movement (rotation) of the steering box sector shaft nut. If not free moving undo sway bar bolts and readjust.

Tighten bearing with lock washers and nuts. (19mm)



Remove the set screws and apply lock tight.

Install and tighten the set screws (3/32" Allen wrench).



Check that the zerk grease fitting is tight.
Use standard grease gun to apply grease to the bearing.

If you have any technical difficulties, concerns, comments, or complaints, please phone our Technical Support hotline at (800) 887-5030 between 8:30am-5:00pm PST (Pacific Standard Time) Monday to Friday, or post a message on the BD Discussion Forums located at:

http://forum.bd-power.com/



Visit our Internet forums at <a href="http://www.dieselperformance.com">http://www.dieselperformance.com</a> and share your comments or technical support questions with some of the industry's leading experts in the diesel field.