

# HELL BENT STEEL, INC - INSTALLATION INSTRUCTIONS

## STEERING STABILIZER BAR FOR DODGE RAM 2003+

YOU CAN ALSO VIEW THE INSTRUCTIONS ON LINE AT [www.hellbentsteel.com](http://www.hellbentsteel.com)

### **IMPORTANT NOTES:**

Please read before beginning installation.  
OEM Manual should be used as a reference.

### **IT IS HIGHLY RECOMMENDED THAT A CERTIFIED MECHANIC PERFORM THIS INSTALLATION.**

Read and understand all the instructions before beginning installation.

Before installing the Hell Bent Steel Steering Stabilizer bar, inspect all steering components for signs of wear or damage. Replace worn or damaged parts as necessary. This product is NOT designed to be a replacement for a new steering box and/or ball joints and will not fix or replace worn-out steering components.

The HBS Steering Stabilizer bar is designed to reduce the stress on the steering box and extend the life of the steering components.

Use Loctite® on all bolts associated with this installation.

It is the responsibility of the mechanic and customer to wear safety glasses at all times during installation, especially when working with air tools.

Before installation begins, drive the vehicle and inspect it to make sure that there are not any uncommon sounds or frame damage.

### **IMPORTANT CUSTOMER INFORMATION:**

It is the customer's responsibility to make sure a re-torque is performed on all hardware associated with this suspension system after the first 100 miles and every 1000 miles thereafter and after every off road use.

**DO NOT USE THIS PRODUCT AS A TOWING ATTACHMENT POINT.**

### **Required Tools:**

- 15mm & 17mm Socket/Wrench
- 3/4" and 1-5/16" Socket/Wrench
- 2003-2008 models: 1-1/4" Wrench
- 2009-Current models: 1-1/2" Wrench
- 1/8" Allen Wrench
- Torque Wrench (40-225 ft-lb)

### **Torque Settings:**

Anti-sway bar to frame bolts – 45 ft-lb  
Sector shaft nut – 185 ft-lb (2003-2008) or 225 ft-lb (2009+)  
End-link to frame nut – 40 to 60 ft-lb

**View instructions in full color on the HBS website**

**[www.hellbentsteel.com](http://www.hellbentsteel.com)**

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### **Installation:**

1. To begin installation block the rear tires of the vehicle so that the vehicle is stable and cannot roll.

2. With a 15mm socket or end wrench, remove the four (4) 10mm mount the anti-sway bar mounting bolts. (Two bolts per bracket)



**NOTE:** The anti-sway bar will swing free when the bolts are removed. Allow the bar to rest on the steering linkage, but be sure to support the bar to avoid excessive load on the end links.



3. Remove the sector shaft nut and lock washer. Retain the lock washer for re-installation. Take care to ensure no thread damage occurs with the removal of the nut.

4. Apply Loctite and attach the provided sector shaft nut with a deep socket wrench re-using the lock



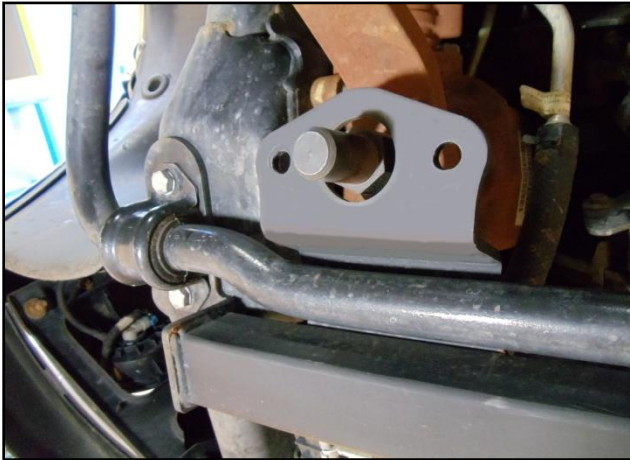
washer. Hand-start the nut to ensure no cross-threading occurs. Torque sector shaft nut to spec.

5. Slide the stabilizer bar into place, so the feet are between the frame and sway bar mounts. Ensure that the large diameter hole on the bearing plate is approximately centered on the sector shaft nut.



6. Apply Loctite to the provided 10mm sway bar mounting bolts (x4) and install using a 17mm socket or end wrench. Do not tighten the bolts all the way; there will be some adjusting of the bar's final position. The stabilizer bar is properly aligned when sector shaft nut is centered in the hole. If necessary, loosen the sway bar end links bolts to ease proper positioning of stabilizer bar.

**Figure 1** shows proper placement of the steering stabilizer with respect to the anti-sway bar when installing on a stock vehicle.



**Figure 1**

**Figure 2** shows the proper placement of the steering stabilizer with respect to the anti-sway bar when installing the stabilizer bar along with the anti-sway bar drop brackets.



**Figure 2**



7. Install two ½" bolts through the holes in the bearing mounting plate so the threads extend through the bracket.

8. Install bearing over the sector shaft nut and bolts until it comes in contact with the support bracket.

**NOTE:** the bearing block may not be flush to the support bracket at this point. Install lock washer and nut using a ¾" socket; snug, do not tighten.



9. Tighten all bolts in the following order:

1. Sway bar mounting bolts-torque to spec.
2. Bearing bolts
3. Bearing set screw
4. End-link bolts

**ADDITIONAL NOTES:**

Inspect the end links for excessive wear or torn boots. New end links are available at [www.hellbentsteel.com](http://www.hellbentsteel.com). The idea position of the end links should be vertical, for proper function and life span of end-link bushings. If your end-links are positioned at a forward/backward angle it may be necessary to install the HBS Anti-Sway Bar Drop Bracket kit.

Hell Bent Steel offers a wide range of products that improve the look and functionality of your vehicle. All of the following products will work alongside your steering stabilizer. For more information visit our website at [www.hellbentsteel.com](http://www.hellbentsteel.com)

- 110-250-001 DODGE 2.5" LEVELING KIT
- 111-250-001 DODGE ANTI-SWAY BAR DROP BRACKET
- 113-SMX-112X DODGE REPLACEMENT END LINKS

