Dodge Off Road, LLC

Specializing in Dodge Ram Solid-Axle 4x4
Suspension and Steering for Off Road Applications
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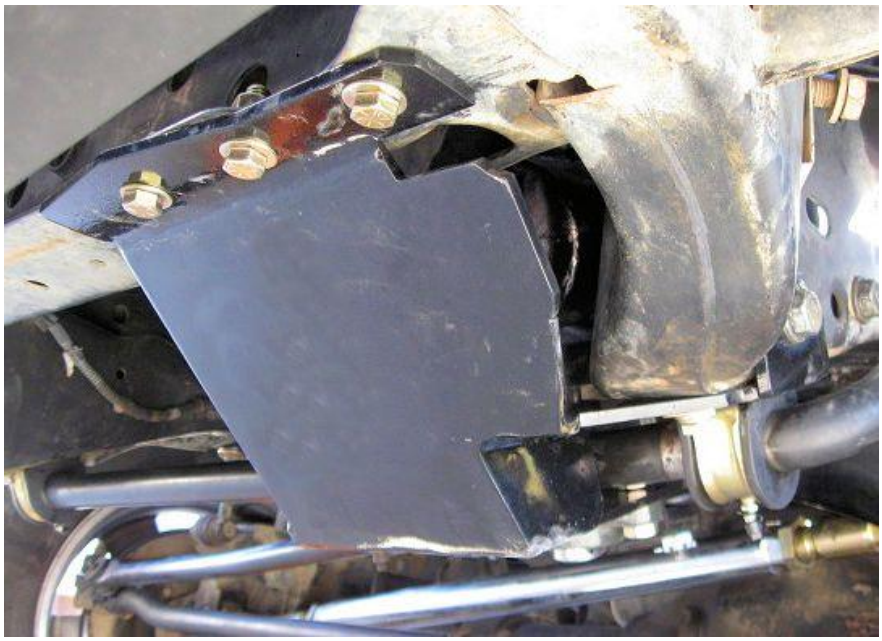
DODGE OFF ROAD STEERING BRACE INSTALLATION INSTRUCTIONS

For all 1994-2001 Dodge Ram 1500 4x4 Trucks, and all 1994-2002 Ram 2500 and 3500 4x4 trucks.



Thank you for purchasing the Dodge Off Road Steering Brace, the strongest and best-designed steering brace on the market for Dodge Ram trucks! This brace is used to support your steering box from the push and pull design of Dodge steering, while eliminating the transfer of frame flex to the sector shaft, which is a problem that all frame-to-frame braces cause.

Tools Needed

32mm socket or large crescent wrench, socket set (SAE and Metric), assorted wrenches, 1/8" Allen wrench or driver, grease

Installation Procedure

Park the truck on a flat, level surface, with the tires pointed straight ahead and the steering wheel in the centered position. Ensure the truck will not roll away while you are working under it.

With the tires on the ground, remove the factory pitman arm nut and lock washer using a 32mm socket or large wrench. Do not remove the pitman arm, only the nut holding it in place.

Install new pitman arm machined nut extension using new lock washer and torque to 185 ft.lbs. This requires a 1 1/4" wrench.

Unbolt the sway bar on the driver side only, and barely loosen the sway bar bolts on the passenger side. This will allow the sway bar to hang down just enough to slide the DOR steering brace in without removing the entire sway bar. Most trucks use a 15mm socket. You can lay the driver side sway bar bolts aside – you won't be reusing them.

Remove the steering box bolt that is closest to the front of the truck, using a 13/16" socket. You will reuse this bolt.

Now the DOR steering brace can be slid into place from the back side, between the sway bar and frame, and making the new sector shaft machined nut extension fit in the large center hole on the bearing plate. Align the side tab where the steering box bolt was removed, and quickly slide that bolt back into place to help hold the brace up. You don't need to tighten it all the way yet, but you can thread the bolt in by hand a few turns.

You can now put the supplied 10mm bolts through the factory sway bar bracket, then through the DOR brace, and finally into the frame. These are the smallest bolts in the package and do not include a nut. Don't tighten these up all the way as you may need to adjust the brace a little to get everything lined up perfectly. These bolts use a 14mm socket.

Next, you will want to use the supplied 7/16" hardware (bolts, washers, lock washers, and nuts) to secure the front of the skid plate to the crossmember under the radiator. There are three holes in place already on most trucks, so you can just slide the bolts in upwards through the mounting tab, then put your washer, lock washer, and nut on the top side. You will use 5/8" wrench for the nut and an 11/16" socket for the bolt head. Do not tighten these all the way yet.

NOTE: If your truck does not have the third hole on the crossmember, you can either drill that hole out using a ½" drill bit, or you can leave it alone as the other two bolts are more than enough to secure the skid plate.

Mount the bearing onto the main plate. You may want to apply some anti-seize to the sector shaft extension before sliding the bearing on if you live in a climate where rust is an issue. The bearing goes on the bottom side of the brace, so you will just slide the bearing up onto the machined nut extension and then use the larger 1/2" bolts to secure the bearing to the plate. By doing this part last, you ensure that the bearing will be centered on the sector shaft. To tighten the bearing bolts, you will use a 3/4" socket on both the bolt and nut. Torque these bolts to 50 ft.lbs.

At this time you can go back and torque down the sway bar mount bolts to 40 ft.lbs (driver and passenger side), and the steering box bolt to 60 ft.lbs. The skid plate bolts can be torqued to 40 ft.lbs.

Now with the mounting tabs all secured, you can tighten the Allen head set screws on the bearing collar. These use a 1/8" Allen wrench. These help secure the bearing to the nut extension.

You can now grease your bearing and test the steering out. Start the truck and turn the steering lock to lock to make sure nothing is hitting anywhere, and then you are set! You will want to grease the bearing every 15,000 miles or more often depending on your terrain.

Final Torque Numbers

Sector Shaft Nut Extension – 185 ft.lbs

Steering Box Bolt – 60 ft.lbs

Sway Bar Bolts – 40 ft.lbs

Skid Plate Bolts – 40 ft.lbs

Bearing Bolts – 50 ft.lbs

Please recheck all hardware after 100 miles, as new bolts can stretch. Recheck as needed afterwards. Trucks used in harsh conditions such as gravel roads, poorly maintained roads, or in off road environments, should recheck hardware more frequently or consider the use of Loctite.

If you have any questions, please do not hesitate to email us at sales@dodgeoffroad.com ! Thanks again for your purchase. Happy driving!

Please check out our site for other steering and suspension upgrades to put your 2nd gen Ram in better shape than when it was brand new! http://www.dodgeoffroad.com/store.php

Final Notes:

This is a patented design by Danny Gaston, Dodge Off Road, LLC. This brace is only available through us or our authorized dealers, and is legally protected from duplication. We want to make sure you are getting the best quality possible while at the same time protecting our original design.
These are made entirely in the U.S.A. at our shop in Lakeview, Arkansas.
The brace is not interchangeable between the stock Saginaw box and the newer Borgeson box we sell.
If your bearing ever wears out, we sell replacements at a very reasonable price and they are generally in stock. Please send us an email if you need to order one.
We have found these braces do not work with some sway bar drop brackets, as well as some snow plow and winch mounts that utilize the steering box bolt. To get around the sway bar drop blocks, we sell extended sway bar links that are much better quality than stock and will allow you to run your sway bar without the lowering blocks. Please visit our site for more information.

Hardware List:

- **2 – 1/2" bolts, nuts, with four washers. Bearing mount.**
- **3 – 7/16” bolts, nuts, lock washers, and six washers. Skid plate mount.**
- **2 – 10mm bolts, washers, lock washers. Sway bar mount.**
- **1 – 1 1/4" machined nut extension and lock washer. Sector shaft/pitman arm nut.**
- **1 – 1” bore 2-bolt bearing.**

Made in the USA using US steel, cut on an American CNC plasma table designed in Minnesota, that uses electronics all produced in Texas, with a plasma cutter built entirely in New Hampshire. These are welded by American welders and grinded with American-made grinders. Our hardware is all American-made Grade 8 steel. When we say “Made in the USA,” we really mean it. We support U.S. companies and we are glad that you do too!

Made in the U.S.A.