



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 3rd GEN STEERING BRACE INSTALLATION INSTRUCTIONS

For all 2003-2008 Dodge Ram 2500 and 3500 4x4 Trucks, including Power Wagon models.



Thank you for purchasing our patented 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

1.25" open ended wrench or crescent wrench, socket set (SAE and Metric) and wrenches, 1/8" Allen wrench or driver, grease gun

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.

Make sure that the included sector shaft extension piece fits onto your sector shaft. This is the machined piece that the bearing slides onto. If this piece does not fit, abort the installation and contact us so we can swap your sector shaft extension and lock washer out. There are several variations of boxes and we have two different size sector shaft extensions. The one supplied with this kit is for the stock 2003-2008 steering boxes with the smaller sector shaft. Some trucks have been upgraded to 4th gen boxes and will need the larger hardware.

If the machined piece fits, you can go ahead and torque it to 185 ft.lbs, with the supplied lock washer between this piece and the pitman arm.

Loosen and remove the factory sway bar bushing bolts on the driver side, using a 15mm socket. These will not be reused.

Loosen the factory sway bar bushing bolts on the passenger side, but do not remove them. These are also 15mm.

Loosen and remove the factory rear, lower steering box bolt using an 18mm socket (23/32" also works). Keep this bolt close by because you will reuse it.

Now you can fit the DOR brace by sliding the sway bar mount between your factory sway bar bushings and the frame. You'll need to slide the sector shaft extension piece through the large hole in the main plate on the brace. If needed, you can remove the sector shaft extension to make this easier.



Once the brace is in position, you can begin to align it with the bolt holes. The easiest way to do this is to put the steering box bolt through the side tab on the brace and thread it in a couple of turns, and then you can either push up on the sway bar bushing mount, or use a floor jack to raise the sway bar into position. Once you are able to get the new bolts started by hand, you can tighten them, but do not torque them yet. The new bolts will take a 17mm socket.

Then slide the new bearing and 1/2" bolts up onto the sector shaft extension. Do not tighten these bolts, but you can go ahead and start the nuts to hold the bearing up.

With all of the mounting bolts loose, you should be able to move the brace either by hand, or by tapping it with a rubber mallet, to get everything lined up. Our brace is a tight fit and will probably take a little work to get everything lined up. It is built this way on purpose, so the brace won't wiggle around once it's installed. Once the bolt holes are centered and the brace is centered, you can torque all of the mounting hardware. The sway bar bolts should be torqued to 40 ft.lbs, and the steering box bolt should be torqued to 60 ft.lbs.

The ½" bearing bolts can now be tightened. If you notice that the bearing is not completely flush with the steering brace plate, just tighten the bolts and it will misalign. The bearing has 12 degrees of misalignment built in, so it does not have to be perfectly level to function properly. It is similar to a heim joint.

Once the bearing bolts are tight, you can secure the small Allen head screws on the bearing, and retighten your passenger side sway bar mount bolts.

You should now start the truck and turn the steering wheel lock to lock, making sure that everything clears and there is no binding. You may notice that the steering wheel is much tighter, and this is from the brace holding the sector shaft in place – it's a good thing!

Now you can grease the bearing until you see grease come out of either side, and double check all of your hardware. You'll also need to retorque all bolts after 500 miles, and as needed afterwards.

Final Torque Numbers

Sector Shaft Nut Extension – 185 ft.lbs

Steering Box Bolt – 60 ft.lbs

Sway Bar Bolts – 40 ft.lbs

Bearing Bolts – 50 ft.lbs

If you have any questions, please do not hesitate to call us at 855-900-9367 or email us at sales@dodgeoffroad.com ! We can usually troubleshoot problems quickly via email with one or two pictures of the problem you are having.

Please check out our site for other steering and suspension upgrades to put your Ram truck in better shape than when it was brand new! <http://store.dodgeoffroad.com> We sell many products that are not only stronger, but better-designed and will improve your truck rather than simply repair it. If it involves your steering or suspension, we probably have it on our site and on our fleet of Dodge Ram trucks. We don't just make parts for Ram trucks, we also drive and four-wheel them.



Final Notes:

This is a patented design by Danny Gaston, Dodge Off Road, LLC. This brace is only available through DOR 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. If your bearing ever wears out, we sell replacements for about \$15 and they are always in stock. Just email us if you need a replacement. The bearings usually last 5 to 7 years, sometimes longer. The key to bearing life is keeping it clean and greased.

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. If you need a passenger side spacer plate to drop the sway bar down ¼" to match the driver side, we do sell those. These are only needed when plow brackets and other accessories are installed to the sway bar bolt holes.

If you have an aftermarket torsion sway bar, our brace will fit. We have tested this with our DOR torsion sway bar as well as the Carli Suspension torsion sway bar, and it works great with no clearance issues. It has not been tested with other brands.

Hardware List:

- 2 – 1/2" bolts, nuts, with four washers. Bearing mount.
- 2 – 10mm bolts, washers, lock washers. Sway bar mount.
- 1 – Machined nut extension and lock washer. Sector shaft/pitman arm nut. Two sizes available.
- 1 – 1" bore 2-bolt bearing.

Made in the USA using US steel, cut on an American CNC plasma table built in Minnesota, that uses electronics all produced in Texas, with a plasma cutter built entirely in New Hampshire. These are welded with welders built in Wisconsin, and all labor is done by American workers. 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.