



## Solid Steel Industrial Manufacturing Ltd.

### Installation Instructions for DSS (Steering Box Brace) **(Refer to diagram on back of this page)**

Remove original sector shaft nut (pitman arm nut) from steering box and retain the lock washer.

Apply blue Loctite® and install DSS Nut from the hardware kit using the original lock washer and torque to 185 ft/lbs.

Arrange a jack stand or other means of support for the stabilizer bar on your truck - make sure the stabilizer bar is supported or it will drop when you remove the bolts in the next step.

Remove four stabilizer bar mounting bolts and lower the bar 3-4". Stabilizer bar links may need to be loosened under certain conditions to allow enough movement.

On 4X4 models: Slide DSS in from front, positioning outer mounting tabs over stabilizer bar mounts and bearing mounting plate under stabilizer bar.

On 2WD models, slide DSS in from rear over stabilizer bar mounts.

Position large hole in DSS bearing mounting plate over the DSS nut and lift DSS and stabilizer bar into place. There will be very limited clearance between the DSS and stabilizer bar until everything is in place and bolts are tightened.

Use 4 new M10X35 bolts, lock washers, and flat washers supplied in the hardware kit to attach DSS and stabilizer bar to the original stabilizer bar mounting holes. Do not fully tighten yet. Keep in mind that the stabilizer bar will need to be pushed rearward to line up the mounting holes as it has a tendency to move forward when unbolted. Snug mounting bolts up, but allow for final positioning of DSS.

Align DSS by centering the DSS nut in the large hole in the DSS bearing mounting plate.

Tighten the four M10X35 mounting bolts to 40 ft/lbs. (Make sure DSS position is maintained in relation to the DSS nut)

Apply grease or some other anti-seize compound in the bearing bore and lock ring to facilitate future disassembly for steering box maintenance.

Install bearing (including holder) onto the DSS nut. Orient grease nipple in bearing holder to desired position. The bearing holder may not sit flat against the DSS bearing mounting plate at this point, but will align as the mounting bolts are tightened.

Attach bearing with two 1/2" X 1 1/2" bolts, flat washers, lock washers, and nuts supplied in the hardware kit. Install the 1/2" flat washers on the bolts and then drop the bolts in from the top of DSS bearing mounting plate. Lock washers and nuts can then be easily assembled from the bottom to hold the bearing in place. (***\*\*IMPORTANT\*\* Tightening these bolts after the four frame mount bolts are torqued will ensure that no unwanted pre-load is applied to the steering box.\*\****) Torque to 50 ft/lbs.

Install the bearing lock ring by sliding onto the shaft and rotating ring to allow it to engage eccentric on bearing race. Rotate (clockwise or counterclockwise) lock ring tight by tapping with a punch and hammer in hole in the lock ring. ***Do not tighten using the set screw hole.*** Tighten set screw with 1/8" Allen wrench.



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Notes:

Grease bearing at normal chassis lube intervals.

Recheck all bolts after 500 miles and then periodically for proper torque.

Do not use the DSS steering box brace as an attachment point for towing or winching.

In the event that the bearing needs to be replaced and refuses to slide off of the DSS nut after removing the lock ring and mounting bolts, you may remove the DSS nut by inserting a flat wrench between the DSS and steering box and unscrewing the DSS nut and bearing as a unit. This will allow you to press the bearing off of the shaft. (Remove bearing from holder by twisting bearing 90 degrees to holder in alignment with two slots in backside of holder)

Questions or Problems CALL (503) 654-9004  
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