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Revisions			
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Ram Dual Steering Stabilizer Kit Installation Instructions

Applications:
2014+ RAM 2500 4x4
2013+ RAM 3500 4x4



TITLE:
**RAM DUAL STEERING STABILIZER KIT,
14+ 2500, 13+ 3500 INSTALLATION
INSTRUCTIONS**

SIZE	DWG NO:	REV
A	8710-01-INST	A
	SCALE: N/A	PAGE 1 OF 8



RAM DUAL STABILIZER KIT, 14+ 2500, 13+ 3500 INSTALLATION INSTRUCTIONS

Thank you for purchasing the best aftermarket products available for your vehicle. We strongly feel that the parts you are about to install should meet or exceed your expectations for performance. Proper assembly is critical to the performance of these components and the vehicle as a whole. Please take the time to carefully read these instructions and familiarize yourself with the installation procedure before working on your vehicle. If you have any questions PLEASE contact Synergy Manufacturing BEFORE beginning installation. Thanks again for supporting Synergy – enjoy the performance benefits of the best aftermarket products available for your vehicle!

Synergy Manufacturing

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Modifying or otherwise altering vehicle components may cause the vehicle to handle differently than originally designed. It is the driver’s responsibility to familiarize themselves with the performance and handling characteristics of the modified vehicle. Vehicles with larger diameter than stock tires must be driven carefully and cannot be expected to perform as stock or meet OEM performance with regard to handling, braking or crash performance. Ensure all replacement components are compatible with vehicle capacities so as not to overload components, especially tires. It is up to the individual to ensure that the vehicle and all components are compatible with the intended vehicle use, including load ratings, road conditions, and driver abilities. Thorough and frequent vehicle inspections are recommended to ensure a safe and reliable state of readiness, especially after off-highway use.

PARTS LIST

8710-01 Ram Steering Stabilizer Relocation Bracket		
QTY	Part Number	Description
1	871001-PC	Ram Dual Stabilizer Bracket, 14+ 2500, 13+ 3500
1	6910-01	Dual Stabilizer Branding plate
2	4050-75	1 3/4” Tube Clamp
2	HF8-8-22	1/2-20 X 2.5” FINE THREAD, HEAX HEAD, GRADE 8 BOLT, YELLOW ZINC
2	NSF-8	1/2-20 TOP LOCK NUT, ZINC PLATE
4	NAS1149-F0863P	FLAT WASHER, 1/2" ID, 7/8" OD, MIL-SPEC

GENERAL NOTES

- These instructions are also available on our website; www.synergymfg.com. Check the website before you begin for any updated instructions and additional photos for your reference.
- The installation of the Synergy 8710-01 Dual Stabilizer Bracket will allow for the use of two steering stabilizers on your Ram 2014+ 2500/3500 truck.
- The 8710-01 Dual Stabilizer Bracket was designed around the Fox 985-24-170 stabilizer. If using the dual stabilizer bracket with Fox TS or ATS stabilizers, two 4051-01 Steering Stabilizer Clamp Adapter kits must be purchased to adapt the units to the 1.75” tube clamps.
- 2” of bump spacing is required to keep the pitman arm from contacting the stabilizer shock bodies, Synergy 8734-02 2” Front Bump Stop Drops are recommended.

TOOLS REQUIRED

- 18mm, 13mm 3/4" Sockets and Wrenches
- 7/32" Allen wrench
- Tape measure
- Torque wrench
- Marking tool (Paint Pen or Sharpie)
- Basic hand tools

ESTIMATED INSTALLATION TIME

~ 1 Hour

INSTALLATION

1. Make sure the vehicle is parked on a flat, level surface. Ensure the vehicle is in park or in gear with the parking brake set.
2. Remove the stabilizer bolt on the axle bracket. (18mm) **See Figure 1.**



Figure 1. Stabilizer Bolt to be Removed

3. Remove the bolts (qty 4) securing the factory stabilizer bracket to the axle and remove the bracket.
See Figure 2.



Figure 2. Bolts to Remove Factory Stabilizer Mount

4. Remove the tie rod side stabilizer mounting bracket and completely remove the steering stabilizer.
5. Install the new Synergy MFG Dual Stabilizer Bracket onto the axle. Thread in the 4 mounting bolts, do not tighten the bolts. **See Figure 3.**



Figure 3. Dual Stabilizer Bracket Indexed on the Differential Housing

6. Beginning with the two bottom bolts, tighten all 4 mounting bolts and torque them to 40 ft-lb.

7. Bolt the shaft side of the passenger side stabilizer on to the bracket using the supplied 2 1/2" long 1/2" bolts. A thin washer will be used under the head of the bolt followed by the Synergy nameplate. A washer will also be placed between the dual stabilizer bracket and the nut. **See Figure 4.**



Figure 4. Partially Installed Stabilizer on Synergy MFG Bracket

8. Have a helper turn the steering all the way to the **passenger** side, it is important that they keep pressure on the wheel to make sure the truck stays at full steering lock. **See Figure 5.**



Figure 5. Driver Side Knuckle Fully Turned to the Passenger Side, Contacting the Steering Stop

9. Compress the driver side stabilizer until there is between 1/8" and 1/4" of shaft showing, mark the center of the stabilizer eyelet on the tie rod. See Figures 6 and 7.



Figure 6. Compressed Steering Stabilizer



Figure 7. Marking the Mount Centerline

10. Install the 4050-75 tie rod clamps on the tie rod so that the 1/2" stabilizer mount lines up with the mark left from step 9. Torque the Allen head bolts to 15 ft-lb with a 7/32" Allen key. See Figure 8.

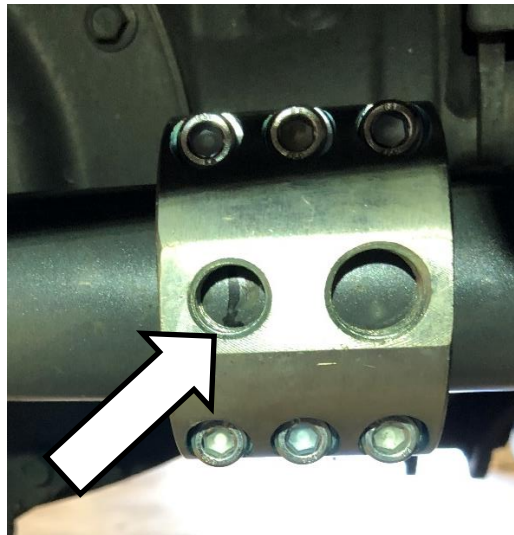


Figure 8. Driver Side Stabilizer Clamp Installed on the Tie Rod with 1/2" Mounting Hole Over the Mark Left from Step 9.

11. Bolt the stabilizer to the tie rod clamp. Removing the stabilizer from the duals mount may be required to ensure the bolt at the 4050-75 clamp goes in straight. Reattach the stabilizer to the duals bracket.

12. Repeat steps 7-11 on the passenger side of the vehicle with the wheels turned completely to the driver side.
13. Torque the stabilizers to the dual stabilizer bracket and tie rod clamp mounts. Torque all 1/2" bolts to 70 ft-lb. **See Figure 9.**



Figure 9. Dual Steering Stabilizers Installed on Dual Stabilizer Bracket

14. Have a helper turn the steering from full driver to full passenger to verify that the stabilizers do not fully compress or fully extend through the entire travel of the steering. If the stabilizers do fully compress or extend before the steering hits the axle stops, remove and reinstall the tie rod clamps following steps 7-11 until the correct 4050-75 mounting location has been achieved.
15. Recheck all hardware after approximately 100 miles of use and after each off road trip.

Installation is Complete

Table 1. Bolt Torques

Bolted Joint Location	Wrench Size	Torque
Bracket Bolts to Axle	13mm	40 ft-lb
Stabilizer Mounting Bolts on Bracket	3/4"	70 ft-lb
Stabilizer Mounting Bolts on Tie Rod	3/4"	70 ft-lb
Stabilizer Clamp Mount Socket Head Bolts	7/32" Allen	15 ft-lb

