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Revisions					
Rev.	Description	Date	Approved		
-	Initial Release Per ECO 22-079	10/26/22	RG		



## Ram Dual Steering Stabilizer Kit

**Installation Instructions** 

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





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TITLE:						
RAM DUAL STEERING STABILIZER KIT, 14+ 2500, 13+ 3500 INSTALLATION INSTRUCTIONS						
DWG NO:		REV				
8710	ı					
SCALE: N/A	PAGE 1 OF 8					



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 Phone: (805) 242-0397

Email: support@synergymfg.com

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				
2	4050-75	1 3/4" Tube Clamp				
1	871001-HDW	Ram Dual Stabilizer Hardware Kit				

#### **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.

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# **TOOLS REQUIRED**

- 18mm, 13mm and 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

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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 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. Loosely Installed Synergy MFG Dual Stabilizer Bracket

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

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7. Bolt on the driver side stabilizers on to the bracket using the supplied 1/2" bolts See Figure 4.



Figure 4. Partially Installed Driver side Stabilizer on Synergy MFG Bracket

**8.** Have someone 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

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9. Compress the **driver** side stabilizer until there is between an 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. Mount Centerline Marking

- **10.** Once the mounting location of the driver side stabilizer has been marked, repeat steps 7 through 9 by turning the truck to the driver side and marking the passenger side stabilizer mounting location.
- 11. Install the 4050-75 tie rod clamps on the tie rod so that the 1/2"stabilizer mount bolts line up with the marks left from step 9. **See Figure 8.** With a 7/32 Allen key, torque the socket head bolts to 15 ft-lb.

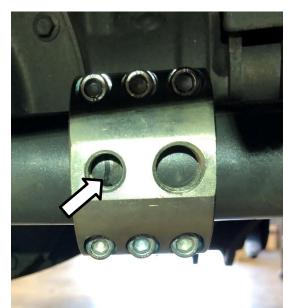


Figure 8. Stabilizer Clamp Installed on 8702 Tie Rod with the 1/2" Hole Over the Mounting Location Mark.

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**12.** Remove the stabilizers from the Synergy MFG Dual Stabilizer Bracket and install them in their tie rod mounts. Tighten the bolts securing the stabilizers to the tie rod clamps to 70 ft-lb. **See Figure 9.** If you are installing Fox ATS or TS stabilizers, the body of the shock will mount on the 4050-75 clamp with the Synergy 4051-01 Steering Stabilizer Clamp Adapter for FOX TS and ATS.



Figure 9. Installed Drivers Side Tie Rod Clamp and Steering Stabilizer

13. Reinstall the stabilizers to the dual stabilizer bracket and tighten the bolts to 70 ft-lb. See Figure 10.



Figure 10. Driver Side Steering Stabilizer Installed on Dual Stabilizer Bracket

**14.** Have a helper turn the steering from full driver to full passenger to verify that the stabilizer does not fully compress or fully extend through the entire travel of the steering. If the stabilizer does fully compress before the steering hits the stops, remove and reinstall the tie rod clamp following steps 7, 8 and 9.

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15. Install is complete. Recheck all hardware after approximately 100 miles of use.







## **Installation is Complete**

**Table 1. Bolt Torques** 

<b>Bolted Joint Location</b>	Wrench Size	Torque			
Bracket Bolts to Axle	13mm	45 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			

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