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Revisions			
Rev.	Description	Date	Approved
В	Revised Per ECO 20-099	11/18/20	C.W.
С	Revised Per ECO 21-029	3/16/21	R.G.



# **Dodge Ram Sway Bar End Links**

**Installation Instructions** 

#### Applications:

1998.5-2001 Dodge Ram 1500 4X4 2006-2008 Dodge Ram 1500 Megacab 4X4 1998.5-2013 Dodge Ram 2500 4X4 1998.5-2012 Dodge Ram 3500 4X4



	TITLE:		
	DODGE RAM SWAY BAR END LINK INSTALLATION INSTRUCTIONS		
SIZE	DWG NO:		REV
A	8515-INST		C
	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!

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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 – 3" Lift

	8515-11 Dodge Extended Sway Bar End Link Kit, 3" Lift			
QTY	Part Number	Description		
2	851511	3" Dodge Ram Sway Bar Endlink, Assembled		
2	851501-PL	Stem Top Adapter		
2	N/A	1/2"-13 UNC x 3.00" Grade 8 Hex Head Bolt		
2	N/A	1/2"-13 UNC Lock Nut		
4	N/A	1/2" Flat Washers		

DOC NO. 8515-INST PAGE 2 OF 8



## Parts List - 6" Lift

8515-12 Dodge Extended Sway Bar End Link Kit, 6" Lift			
QTY	Part Number	Description	
2	851512	6" Dodge Ram Sway Bar Endlink, Assembled	
2	851501-PL	Stem Top Adapter	
2	N/A	1/2"-13 UNC x 3.00" Grade 8 Hex Head Bolt	
2	N/A	1/2"-13 UNC Lock Nut	
4	N/A	1/2" Flat Washers	

## **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.
- Some model years (1998.5-2005) will require drilling out the axle side sway bar link mount hole to 1/2".
- Second generation trucks (1998.5-2002) will require the use of an additional spacer between the link and the axle side sway bar link mount. (PN: 4006-01)
- Replacement bushings (PN: 4100-10) and tie rod ends (PN: 4132) are available from our web site: www.synergymfg.com.

#### **Tools Needed**

- 1", 3/4", Crescent, and 15mm wrench
- 3/4" socket and ratchet
- Power drill with 1/2" drill bit (for 1998.5-2005)

DOC NO. 8515-INST PAGE 3 OF 8



#### **Estimated Installation Time:**

#### ~1 Hour

## **Installation**

1. Remove the stock sway bar end links. It is easiest to remove the upper attachment points first and swing the sway bar up out of the way. Depending on model year, the lower mounting bolt size will vary, as will the attachment point on the axle end. Note, some sway bar links are tapered and will require knocking out with a hammer. **See Figure 1.** 



Figure 1. Using Hammer to Release Taper Fit

2. Some model trucks will require drilling out the lower mount. With stock sway bar links removed, check fit a 1/2" bolt in the lower mount. If the bolt hole is too small for the 1/2" bolt, drill it out using a 1/2" drill bit. Use caution and drill slowly. **See Figure 2.** 

DOC NO. 8515-INST PAGE 4 OF 8





Figure 2. Drilling Out Lower Mount to 1/2"

3. Assemble the end links as shown below. Ensure the wrench flats on the stud end mate up with the machined slot in the adapter. **See Figure 3.** 



Figure 3. Properly Assembled Sway Bar End Link

DOC NO. 8515-INST PAGE 5 OF 8



4. Install the end links on the truck, leaving all hardware loose. For the lower (axle) side mounts, install one washer under the head of the bolt (against the end link bushing) and one washer under the nut (against the axle tab). **As Shown in Figure 4**.



Figure 4. Correctly Installed Sway Bar End Link (2003-2013)

5. <u>98.5-02</u> applications require installation of the 4006-01 kit spacer between the end link bushing and the axle tab to avoid contact between the coil bucket and link. **See Figure 5**.

DOC NO. 8515-INST PAGE 6 OF 8





Figure 5. Correctly Installed Sway Bar End Link with Spacer (1998.5-2002)

6. Install the large tapered nut on the adapter stud with the taper side of the nut pointing down, against the sway bar. With all hardware loosely installed verify that the links are the correct length. The sway bar should be pointing 'up' towards the driver at approximately 20 degrees, pointing at the steering wheel. If the sway bar is close to flat, or pointing 'down' then extend the links by removing the link from the adapter and turning the end counterclockwise. If the sway bar is pointing up at too much of an angle shorten the links by removing the link from the adapter and turning the end clockwise. **Do not exceed maximum lengths Shown in Tables 1 and 2.** 

DOC NO. 8515-INST PAGE 7 OF 8



Table 1. 8515-11 3" Extended Sway Bar End Link Lengths

8515-11 3" Extended Sway Bar End Link Lengths		
Minimum Collapsed	7-1/2"	
Maximum Extended	8-1/2"	

Table 2. 8515-12 6" Extended Sway Bar End Link Lengths

8515-12 6" Extended Sway Bar End Link Lengths		
Minimum Collapsed	10-7/16"	
Maximum Extended	11-3/8"	

7. Once the correct length has been achieved, tighten the lower axle side 1/2" bolt to 80 lb-ft. Next tighten the jam nut on the link itself, making sure the stud end is parallel to the lower bolt. Next tighten the 1/2" nut fixing the link to the adapter to 50 lb-ft. Finally tighten the 5/8" nut fixing the adapter to the sway bar to 100 ft-lb.

#### Installation is complete!

**Note:** The end links come pre-lubricated and do not require lubrication upon installation. Lubricate the end links every 5-6k miles depending on driving conditions. Recheck all hardware after 100 miles of driving.

DOC NO. 8515-INST PAGE 8 OF 8