



Overview:

The factory sway bar links have a fixed length which does not allow for neutralization of left to right preload. The adjustable links allow for easy and precise adjustment for a neutral left to right setup and are easily disconnected during suspension setup. More predictable and consistent handing are a result. Included heat shields protect rod ends from radiated brake heat on track. Optional boots protect the rod ends from debris.

Compatibility:

The rear sway bar links are compatible with any 1996-2017 Viper.

Construction:

Cadmium plated 4340 steel, aerospace grade rod end / bearing with PTFE liner. Anodized aluminum adjuster. Lower friction joint than OEM.

Weight:

Maintains weight of OEM link.



Rear Stabilizer Bar Links and Heat Shields

Ordering Information:

http://www.dougshelbyengineering.com/

Installation Guide:

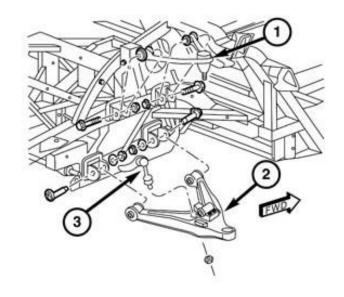
OEM Link Removal (remove both at one time for easier installation)

- 1. Raise and support vehicle.
- 2. Remove wheel and tire assembly.
- 3. Remove nut attaching stabilizer link to end of stabilizer bar.

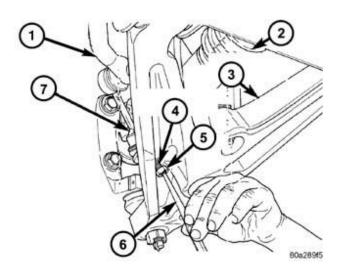
CAUTION: Use only Remover, Special Tool MB991113, to remove link from stabilizer bar. Use of a pickle fork or other alternate tool will damage seal and ball joint on link.

- 4. Separate stabilizer bar from link using Remover, Special Tool Remover, Tie Rod End MB991113.
- Loosen, but do not remove, nut attaching stabilizer link (3) to lower control arm (2). Thread nut to end of stabilizer bar link stud.

CAUTION: Nut must be positioned at end of stabilizer bar link stud to help prevent end of stud from being damaged when separating it from lower control arm.



- 6. Position center punch (6) in dimple on end of link stud (4).
- Strike center punch with hammer to remove link stud (4) from lower control arm (3).



Remove stabilizer link from vehicle.

Adjustable Link Installation:

A 12-point 3/8 and $\frac{1}{4}$ socket wrench will be required for installation. The $\frac{1}{4}$ 12-pt bolt should be torqued to 10 ft-lbs.

Note: The link adjuster comes pre-assembled with the ideal upper/lower thread section exposed to obtain minimum length. The lower heat shield is not pre-installed for ease of installation.

Tip: It is helpful to remove both OEM link sides first to allow the stabilizer bar freedom to move for ease of installation. At points during the new link installation it will be helpful to remove the bolt at the upper rod end.

Tip: with both sides installed the stabilizer bar should be checked to ensure it is centered left to right on the chassis. This ensures consistent clearance and engagement of the links side-to-side. This adjustment can be accomplished by measuring a reference point to the frame. Adjust the bar side-to-side as desired by moving the plastic stoppers left/right on the bar.

Control Arm End Installation

- 1. Remove the upper 12pt rod-end bolt from the assemblies to separate the stabilizer bar adapter from the remainder of the link.
- Install the lower tapered rod end adapter into mounting hole on lower control arm and install loosely with the washer / nut. Orient the rod end as shown (12pt bolt head facing outward)
- 3. Tighten the nut on the underside of the control arm to 17 lb-ft while being mindful of the preferred orientation.
- 4. Confirm the lower 12-pt rod end bolt is tightened to 10ft-lbs.



Installed Link with Preferred Orientation

Stabilizer Bar Offset Adapter Installation

5. Install rear stabilizer bar adapter onto stabilizer bar using the provided bolt and washer on the inboard side of the bar. Note these adapters are sided to fit the passenger/driver side. *Apply Loctite to the bolt and tighten to 12 ft-lbs*.

Lower Heat Shield Installation:

- 6. To install the lower heat shield, back the coupler off of the lower rod end in order to remove the lower rod end from the link. Keep the coupler installed on the upper assembly to maintain proper engagement (upper rod end should start off fully bottomed out in the coupler for minimum link length).
- 7. Using the two thin aluminum nuts install the heat shield as shown. Maintain clearance to the sway bar adapter and lower control arm (nuts can be located slightly above the lowest possible orientation to achieve a gap to the control arm).
- 8. Apply Loctite to the aluminum jam nuts and tighten them above and below the shield to secure orientation of the shield.

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Reinstall link jam nut. Reengage coupler while maintaining thread engagement on the upper rod end.

(The following step may be delayed until both adjustable links are installed and after setup and alignment procedure) One link can be left disconnected for freedom of movement during setup)

- 10. Insert the upper rod end bolt through the heat shield and rod end into the upper side threaded hole of the stabilizer bar adapter. Tighten to 20 lb-ft using a 12 point socket.
- 11. Note: Once the links have been set during final setup the tower heat shield locking tab can be bent against the nut to help prevent rotation.



Upper Bolt Disengaged for Installation Adjustments.

Installed Link and Heat Shields

12. Repeat steps for the opposite side. Leaving the upper rod end bolt disconnected on the first installed side can help with installation.

Final Steps and Adjustments:

- 13. Check that the sway bar is centered on the chassis. This ensures ideal engagement and clearances for the link. Reference the shown point on the frame and measure to the same spot on the link. Adjust sway bar stoppers left/right/ against the roll bar bushings to center the bar as required.
- 14. Lower vehicle. (coupler will be adjusted at ride height during setup to ensure proper link length and orientation)

Setup and Adjustment:

During setup and alignment the rod ends can be adjusted to avoid a left to right preload load on the wheels.

- 1. The upper rod end 12pt bolts can be removed for easier vehicle setup and alignment. Reconnect once alignment is complete by adjusting length as necessary and tighten bolt to 20lb ft.
- 2. Adjust so the bar engagement is roughly perpendicular to the link at ride height.
- 3. Once the satisfactory length has been achieved tighten the upper and lower jam nut against the aluminum turnbuckle. Be sure to maintain all heat shield clearance and rod end orientation when doing the final tightening.



Checking Stabilizer Bar is Centered Left-to-Right

Inspection and Maintenance:

- Periodically inspect the link and hardware to ensure nothing is loose or damaged. With everything tightened the link assembly should be solid.

Thank you for your purchase!

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