2003-2017 Dodge Viper Delrin Control Arm Bushings

Overview:
The OEM control arm bushings are rubber which deteriorate as they age. The softer bushing can cause variance in handling response on track even when new. In addition, rubber bushings are not free rotating and therefore have a preload when installed. Replacing the rubber with Delrin allows for consistent, smooth, low friction movement without deflection or deterioration over time. The result is improved cornering and braking consistency on track equating to more reliable handing response.

Control Arm Delrin Bushing Assembly

Compatibility:
The bushing assemblies are available for any 2003-2017 Viper upper or lower control arms. The bushing assembly replaces the factory rubber version without modification.

Construction:
The bushings are manufactured from cadmium plated steel and Delrin inserts with Stainless Steel retaining rings.

Ordering Information:
http://www.dougshelbyengineering.com

Components of the OEM Rubber Bushing

Installation Guide:

Remove the control arms from the frame. Refer to the service manual for control arm removal. See our website for videos highlighting the process.

Once removed you can use a press or large vice to remove the control arm bushings. Mopar also offers a tool to accomplish this.

OEM Rubber Bushing Removal Tips:

Note: the metal lining sleeve pressed into the control arm should not be removed from the control arm, only the inner steel and rubber pieces of the bushing as shown.

Remove the steel end caps of the OEM bushings by prying them off or clamping them in a vice and pulling them out of the assembly. These are pressed into the bushing center shaft.

Once the ends have been removed you can press out the steel bushing shaft center. A tapered socket of the correct diameter works well. Support the other side of the control arm with a large diameter and depth press tool if using a vice. Press from the inside of the control arm out since this is the direction the rubber will need to be pushed out as well.

Use a larger diameter socket to press out the rubber bushing in the same fashion. Take care to not damage the metal lining sleeve pressed into the control arm.

Control Arm Prepared for Bushing Installation

Delrin Bushing Installation:

Clean the inside sleeve on the control arm and check for any damage.

Press in the Delrin component of the bushing from the outside. The larger OD flange should be on the outside of the control arm. The bushing should fit tight in the control arm and not rotate. *If the bushing does not fit tight see below steps:*

The Delrin diameter has been sized to err on the lower end of the tolerance to account for variations in control arms. If the bushing fit is not tight and does not prevent rotation retaining compound will need to be used per the following steps.

Prime the inside sleeve of the control arm with Loctite primer 7649.

Prime the outside of the Delrin bushing in the same way.

After the primer has dried, apply Loctite retaining compound 641 to both the Delrin bushing and inner sleeve.

Allow the compound to cure for 24 hours. Once cured double check the bushing is tight within the assembly and will not rotate.

Install Red Washer and stainless steel Retainer with the Retainer Press Tool on the inside of the control arm bushing as shown (chamfered inner diameter allows tabs to bend outward as shown).

Delrin Bushing Installed

Delrin Bushing Installed with Retainer

Final Installation:

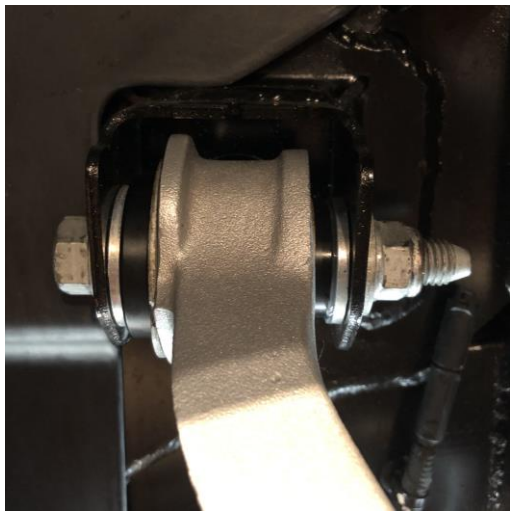
When ready to install control arm, apply superlube to the steel bushing inserts including the side of the flange that will contact the Delrin.

Insert the steel halves (large diameter against large flange of the Delrin). Press halves together and confirm a tight fit with free rotation.

Reinstall the control arm per factory procedures as outlined in the service manual. After final assembly and alignment tighten the upper bushing bolt to 33 lb-ft and the lower to 85 lb-ft.

Inspection and Maintenance:

- Periodically inspect the bushing and hardware to ensure nothing is loose or damaged.



Bushing Assembly Installed

Thank you for your purchase!

Your business is appreciated! Customer satisfaction is our top priority! Don't hesitate to contact us with any questions or feedback. Word of mouth is the best form of advertising so if you are satisfied please spread the word!

Disclaimer of Liability:

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