



1996-2010 Gen III-IV Rear Precision Adjustable Toe Link

Overview:

The rear adjustable toe link rod allows for easy and precise toe adjustment. The adjustment is designed to be more precise than OEM, each turn of adjustment adjusting length by 66% of what an OEM turn will achieve.

High strength steel stud and nuts and precision PTFE lined rod ends. Includes stainless steel heat shield for protection from brake heat during Boots protect the bearings from debris. This replaces the OEM inner and outer tie rod; saves ~0.35 lbs per side.

Compatibility:

Compatibility with all 1996-2010 Vipers.

Construction:

Cadmium plated 4340 steel stud adapter, 6061 hard anodized aluminum, coupler and nut locks, aerospace grade rod end / bearing with PTFE liner, stainless steel heat shields.

Ordering Information:

<http://dougshelbyengineering.com/>

Installation Guide:

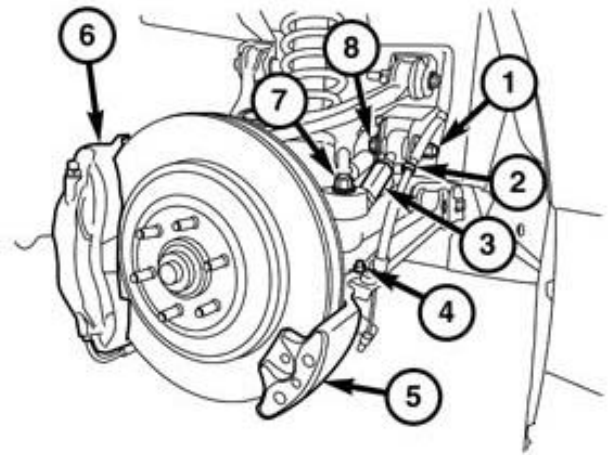
Do not change the length of the OEM link during removal. Once you have removed the OEM toe link, measure the distance from the flat section to the ball joint pivot center. Use this length to prepare the DSE toe link to the closest possible approximate length of the OEM length (bolt center to bolt center) with the best range of adjustment from that point. This makes alignment quicker after installation.

Rear Toe Link Removal (excerpt from Gen V Service Manual):

1. Raise and support vehicle.
2. Remove wheel and tire assembly.
3. Remove the parking brake caliper (5)
4. Remove the wheel speed retainer (2) from the parking brake cable.
5. Remove plastic appearance cap from toe link stud.
6. Remove nut (7) from the toe link at knuckle.
7. Release toe link (3) from knuckle.
8. Remove toe link cam bolt and nut (1,8).



Rear Adjustable Precision Toe Link



NOTE: Do not use a pickle fork or ball joint separator to remove the toe link tapered stud as the ball joint seal is made from a soft, heat resistant, silicone and damage to the seal will occur. A rubber, plastic or brass mallet used on the end of the ball stud is advised.

9. Remove toe link (3) from vehicle by sliding it out of its mounting bracket and "U" channel, then out through rear wheel opening.

Installation:

The adjustable toe link comes assembled except for the nut locks. Take note of the stack up before disassembling for installation on the vehicle.

Setting the ideal adjustment range:

The Link adjusts finely by having two right hand threaded sections. The downside of this feature is that the link needs to be preset to the rough length prior to installation.

The adjustment ranges listed below assume a minimum of 1/2" thread is always maintained on all threaded sections. Red paint on the threads indicates the minimum threshold has been reached.

Using the OEM toe link length (assuming this length is accurate to the desired length), setup the DSE link as follows:

Maximum Length Configuration:

13.91" Maximum Length (starting position);
Adjustable to 13.465"

Start with the outer-threaded section (outer tie rod) fully threaded into the outboard coupler and the middle threaded section threaded only to the minimum 1/2" to the red paint. Adjustment will make the overall length shorter.

Minimum Length Configuration:

13.06" Minimum Length (starting position);
Adjustable to 13.5"

Start with the middle threaded section fully threaded into the outboard coupler and the outboard threaded section threaded only to the minimum 1/2" (to the red paint). Adjustment will make the overall length longer.

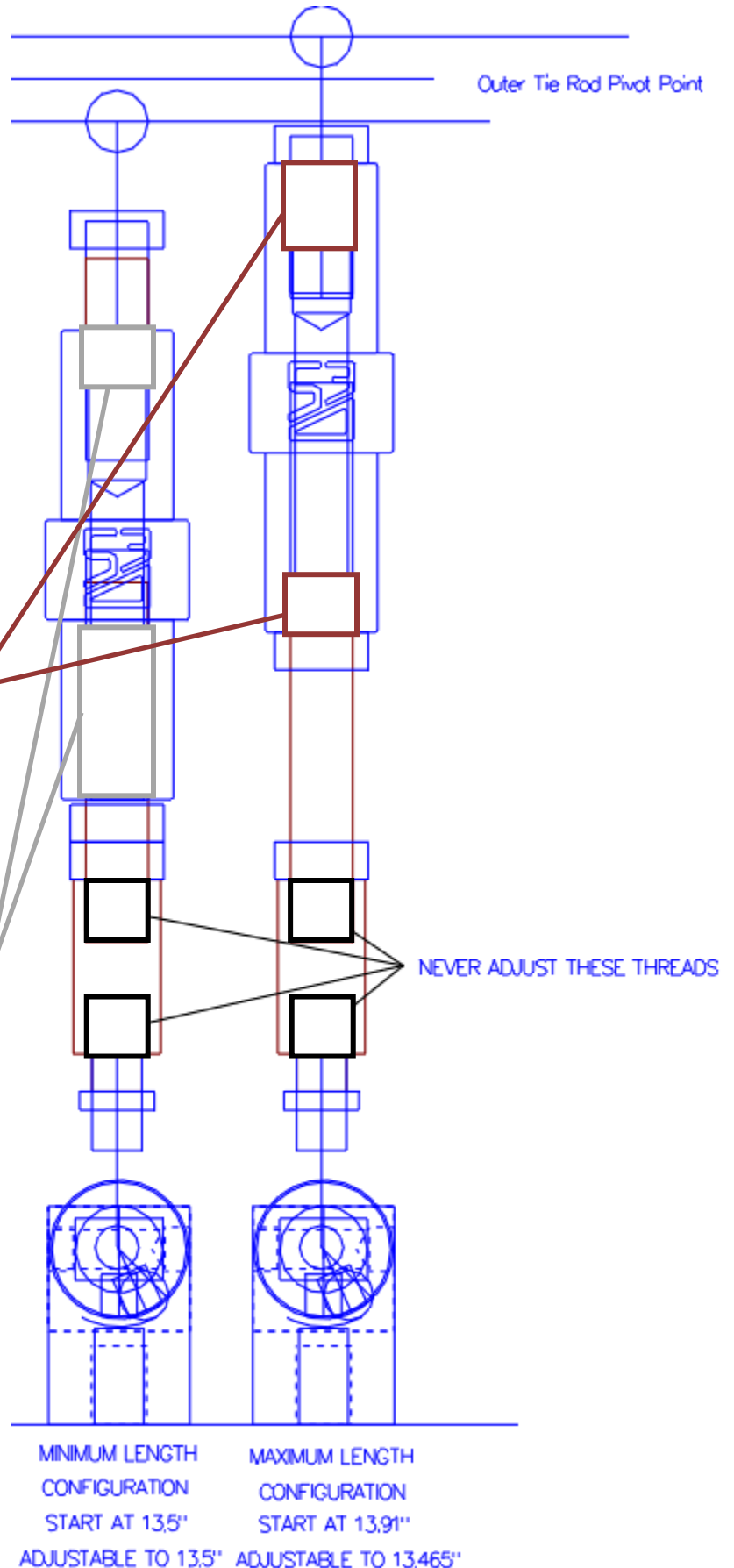
Note – the inboard coupler is never adjusted on either side.

Center Adjustment Configuration (example):

If the desired range falls between the minimum and maximum use the following guide:

13.7" Minimum Length (starting position);
Adjustable to 13.3"

Start with the outer threaded section (outer tie rod) fully threaded into the outboard coupler and the middle threaded section threaded to the minimum 1/2" +0.2"
Adjustment will make the overall length shorter.



Inboard Side: Screw the female end of the link into the male side on the car, use the provided Restobond Red Loctite to secure.

Outboard side:

Remove the upper stud bolt and install stud onto steering knuckle. The split lock washer should be on the top side of the knuckle.

Check the stack up on the bottom side of the knuckle. It should be (top to bottom) rod end, aluminum spacer, heat shield, split lock washer, and nut.

Tighten both the top and bottom nuts while holding the heat shield in place so that it will protect the rod end from the rotor heat. Tighten until the lock washers are almost fully compressed.

Check the hole alignment on the top and bottom nut locks for reference. Continue to tighten top and bottom nuts until the split lock washers are fully compressed.

Install the nut locks with the wavy washer between the nut and nut lock. If the holes do not align with the holes in the stud, tighten or loosen slightly to adjust for alignment. Use Loctite on the nut lock flat head screw before final installation.

Double check alignment of everything including the heat shield When happy with the shield placement bend the locking tab into place so it holds the shield location relative to the top side nut. The shield may be bent to close in the gaps between sides.

Steering Setup

The toe link is used to make toe adjustments. Perform an alignment per the service manual and adjust toe link length as necessary. Once everything is set, tighten the adjuster nuts in place to secure the length. Inspect to ensure everything is tight and there is no play in the installation.

Inspection and Maintenance:

Periodically inspect all parts to ensure there is no damage and everything is sufficiently tightened.

Thank you for your purchase!

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Vehicle Modification:

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Disclaimer of Warranty:

Seller disclaims any warranty express or implied with respect to the parts sold hereby whether as to merchantability, fitness for particular purpose, or any other matter.