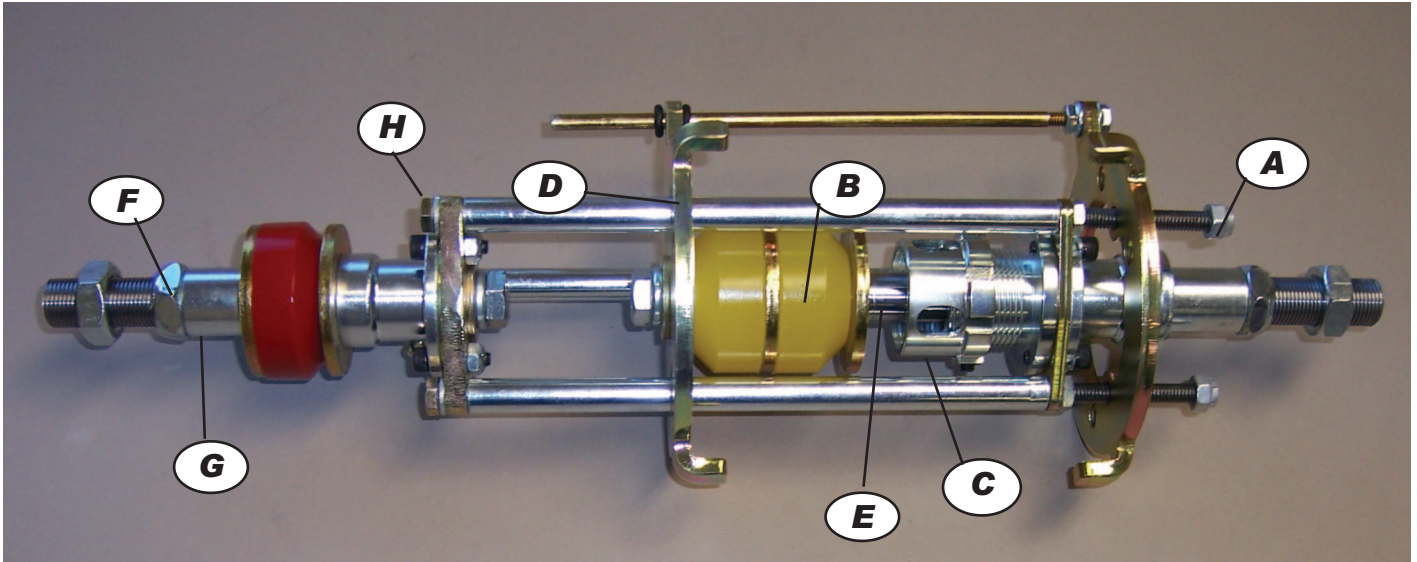




TECH SHEET: 4700 TORQUE LINK TUNING & MAINTENANCE

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The 4700 torque link uses a combination of a wire spring and poly spring bushings to absorb engine torque and increase traction to the rear tires. As engine torque is applied the wire spring will compress and the poly spring bushings will engage. As the spring bushings engage the spring rate will increase. This torque link is very tunable. Understanding the various adjustments which can be made is crucial to torque link performance.

1. Wire Spring Selection - A 5" OD. X 6-5/8" or 7" tall spring is needed. This torque link has proven to work with a wide variety of springs from 600# straight rate springs to 1600# progressive springs. However a 1050# or 1200# spring has proven to be a good starting point for most racers. When traction conditions are good use a stiffer spring. As a track becomes dry slick soften the spring rate (or adjust the poly spring bushings).

2. Wire Spring Preload - Preload the wire spring by adjusting the three 5/16" locking nuts (A). Preloading the spring 1/8" to 1/4" is a good starting point. Be careful to adjust the nuts evenly. If you run more preload than 1/4" we suggest you reduce preload as the track slicks up.

3. Poly Spring Bushing Selection - The 4700 torque link comes standard with two yellow 75 durometer poly spring bushings (B). The yellow bushings have proven to work well for a majority of racers, especially racers running open class mods, such as UMP and USMTS cars. IMCA mods, or cars with less spoiler or motor may need softer bushings such as purple (60 durometer) or 55 durometer (orange) bushings.

4. Adjustment of Poly Spring Bushing Engagement - The point at which the poly spring bushings engage can be adjusted by turning the internal adjuster nut (C) in or out. To adjust the engagement point push the bushings and washers against the spring plate (D) so there is a gap (E) between the internal adjuster nut and the bushings. For an open class mod a 1/2" gap is a good starting point. For an IMCA mod a 3/4" gap is a good starting point. Increase the gap if the tires break loose during acceleration or when the track slicks up. Reduce the gap to bring the car out of the corners harder or when traction conditions are good. An 1/8" gap adjustment will affect performance.

5. Brake Bushing Tuning - The red brake bushing can be preloaded by adjusting the 3/4" nylock nut (F). Recommended preload is 1/8". The 4700 torque link comes standard with one red brake bushing. The brake bushing spacer (G) can be removed and replaced with another poly spring bushing and washer. Installing a second brake bushing will reduce the spring rate of the pair of bushings by about 50%. This will tighten the car under deceleration. Softer bushings than the red can also be installed to tighten the car. When reducing brake bushing spring rate be careful the spring rate is not so soft it allows excessive negative pinion angle.

6. Torque Link Maintenance - Maintenance of the torque link is simple. Periodically grease both grease zerks. Only a couple of pumps are needed. Check the 1/2" bolts holding the shafts in place. You don't want the bolts to come loose. If you ever remove one of the 1/2" bolts apply Blue Loctite during reassembly. Periodically check the torque on the three 5/16" cap screws (H). The screws should be torqued to 29 ft/lb. With a torque wrench. Over tightening the cap screws can stretch and damage the cap screws. The poly spring bushings should be replaced annually or when the bushings loose excessive static height. The normal static height of the bushings is 1" to 1-1/16".

If you have questions please feel free to call us at 920 788 0356