

Do I Need A Watts Link Or Is The Panhard Bar Enough?

That selection is based on either one of two things; performance demand on your chassis, or aesthetics.

Basically, both a Panhard Bar (also known as a “Track Bar”) and a Watts Link serve the same function, laterally locating the rear axle in the car, and defining the rear roll center while linking the lateral loads generated when the vehicle is turning. As these loads increase the strength of this linkage must be adequate to the task. 2005-up Mustangs are originally equipped with a Panhard bar that bends under raised lateral loads, as evidenced by multiple failures in the Miller Cup Series FR500s which have to retain the OEM unit by the rules. So all our kits include a bar adequate to the loads, along with adjustability and reduced compliance.



The improvement a proper Watts Link makes is the roll center location is nearly fixed; it has minimal movement (migration) vertically with ride height changes due to braking, acceleration, and road undulation. (A Proper Watts Link design will have the bell crank located on the Axle). This creates more consistent tire loading as the body rolls rises and falls, which yields more predictable behavior. The consistent roll center height will definitely improve transitional response and build confidence in the driver over a Panhard Bar, much like a TorqueArm improves longitudinal load consistency over a 3 or 4 link. So you definitely will have an advantage with a Watts Link if you are in competition of any sort involving lateral loads where the rules allow, Road Racing, Autocross, Canyon racing etc., anywhere that a performance edge is required, especially if the car needs to make rapid left right transitions. The more esses, the more a Watts link is favored. Also, The GR40 Watts Link has roll center height adjustment in four positive positions which allows the user to easily tune the chassis balance to ambient conditions, which if you are competing will prove most valuable. But, if you are building a street cruiser, never to see high lateral loads, a Watts is not required, unless you need it for the bling factor as a priority of design.

We believe that you should not install any more than you need, and the cost of a Watts Link option should never prevent the installation of a GR40 system. All GR40 systems are upgradeable, so a Watts Link can be added later if the need arises. To quantify, if you install even the least expensive of our base GR40SS system is retails for \$3600 with P/Bar on a 2005-2010 Mustang GT as an example, the GR40SS system will reduce lap times at Sonoma Raceway by about 6 seconds over stock with Ford’s OE Track Pack. Adding a Watts Link lowers the lap time by another second a lap, but also adds nearly \$1000 to the price. At Buttonwillow, where there are more rapid esses and other transitional factors present, the Watts addition is worth a little over 2 seconds.

So, if you need to win or impress at the car shows, install the Watts, otherwise a properly located Panhard bar will suffice.

- Bruce Griggs

