

THE MISSING LINK

TIGHTEN UP YOUR MUSTANG'S BACK SIDE WITH MAXIMUM MOTORSPORT'S BOLT-IN PANHARD BAR KIT



EVERY SELF-RESPECTING MUSTANG ENTHUSIAST THAT HAS HIGH OCTANE FUEL PUMPING THROUGH THEIR VEINS SEEMS TO HAVE AN OPINION ON WHAT GOOD HANDLING IS AND HOW TO GET IT. YOU CAN POLL TEN DIFFERENT MUSTANGERS AND GET TEN DIFFERENT ANSWERS. NO MYSTERY WHY, SINCE THE MUSTANG IS FORTUNATE TO HAVE A STRONG AFTERMARKET SUPPORT. THIS IS GOOD NEWS FOR ENTHUSIASTS, AS WE HAVE TONS OF GOODIES TO CHOOSE FROM, AND ALL OF THEM PROMISE TO IMPROVE YOUR PONY'S CORNERING ABILITY.

Among the sea of performance suspensions parts there are a number of key components that are mandatory if you expect your Mustang to handle with Europe's or Japan's finest offerings. These include, but are not limited to: lowering springs, shocks and struts, chassis-stiffening devices, and sticky tires. These modest and simple upgrades will transform the way your Mustang corners.

So what happens if you already have the previously mentioned equipment? Does that mean that your Mustang has reached its handling limit with (gasp) no more room for improvement? Of course not! This simply means that in order to take your Mustang's handling ability to the next level you will have to address one of its major shortcomings.

Since the inception of the venerable Fox platform in 1979, the Mustang has utilized a four-link type of rear suspension design with upper and lower control

arms. The rear control arms serve several functions, among them: 1) connect the rear axle to the chassis; 2) allow the rear suspension to travel freely through its range of motion; 3) limit the amount of lateral, or side-to-side, movement of the rear axle relative to the chassis. Sounds like an easy task, however, remember that Ford equips the Mustang with flimsy steel control arms and spongy rubber bushings that deflect under hard cornering. Naturally, this leads to the sideways movement of the rear axle and consequently "rear-end steering." In other words, under hard cornering, the rear axle is moving laterally, which causes the rear tires to effect the direction that the car is being steered in. This condition can cause the back end of the car to come around and induce a spin-out.

Obviously this is not a good position to be in when you are pushing your Mustang through the twisties. Call me

old fashioned, but I am a firm believer that the front wheels should be doing all of the steering. This lateral movement of the rear axle is the enemy of precision handling and the topic at hand.

A proven and simple method to remedy this inherent handling problem is to employ the use of a panhard bar kit. In its purest form, a panhard bar is a lateral suspension link between the rear axle and the chassis, and is an effective way of controlling side-to-side movement of the rear axle. Due to its superior design and strength, the panhard bar does a better job of positively locating the rear axle compared to the Mustang's stock four-link suspension. Furthermore, by virtue of having a panhard bar system onboard, this will lower your Mustang's rear roll center height. This translates into flatter cornering and a reduction in sway, which is always welcomed.

This article will take an in-depth look



1. Here we see the stock four-link rear suspension. The weak link (excuse the pun) is the puny lower control arms and rubber bushings—the source of all sorts of rear end squirelliness when pushing a pony to the edge.

2. Remove both rear shocks, followed by the driver side lower shock mount.

3. Remove the driver side lower control arm pivot bolt at the rear axle.

4. Position the Maximum Motorsports Panhard Bar axle mount bracket around the driver side lower control arm mount.

5. Install the supplied hardware through the rear axle housing and MM Panhard bar axle mount bracket and torque to specs.

6. Unbolt/loosen cat-back, if necessary, for clearance.

7. Temporarily hold and test fit the MM Panhard bar chassis mount against the rear subframe rails.

8. Be sure to push the chassis mount upwards fully against the frame rails. Now you can mark and drill the required four holes on the outside of the frame rails.

9. Insert a screwdriver into the previously drilled holes until it bottoms out against the inside of the frame rails and note the depth.

10. Transfer those measurements on the MM frame insert tubes, being sure to label each insert front/back and driver side/passenger side. Next, cut the frame insert tubes to the marked length.

at how to install Maximum Motorsports' Panhard Bar kit onto a late-model Mustang. Maximum Motorsports has forged a reputation for itself as one of the premier suspension manufacturers in the Mustang world. Every piece they make is track-tested and race-ready. Our friends at GTR High Performance made short work of this normally complicated installation procedure. One of GTR's skilled installers, Diego Toledo, allowed us to look over his shoulder while we fitted Moe Zamora's gorgeous (and fast) 1992 Mustang LX with a panhard bar kit. Moe is no stranger to performance parts and fast driving, as he had previously

asked GTR to outfit his LX with a host of performance suspension upgrades that include Eibach springs, Tokico shocks and struts, Maximum Motorsports sub-frame connectors, J&M control arms, light-weight ROH rims, huge Nitto tires and too many other goodies to list. By all accounts, his Mustang already handled significantly better than the average pony. Moe, not being one to leave well enough alone, decided he was ready for the next step, and gave the nod to Maximum Motorsports and GTR High Performance.

Should you decide that a panhard bar kit is in your future, you will want to be familiar with the supplied detailed

instructions that Maximum Motorsports provides you with before attempting the installation. Keep in mind that there are many steps that are not shown here due to space limitations, and this should simply act as a brief guide to the installation procedure. There is a fair amount of drilling and measuring required to complete the job. On paper, this is a relatively basic installation, yet it can be quite time-consuming and, for some people difficult, however, not impossible. The more experienced wrench-turner and an assistant, with a well-stocked toolbox, should be able to get through the installation and manage to retain their

sanity. If thrashing under your Mustang for several hours and cursing your existence is not your cup of tea, the talented bunch at GTR High Performance can make it look easy (almost too easy) as they offer this and many other installations of high performance Mustang parts.

Once complete, I snuck Moe's Mustang out of the shop for a quick (literally) joyride and evaluation (just don't let him know). The most noticeable sensation I felt under hard cornering is the newfound confidence that the panhard bar gave me. The Mustang simply feels more sure-footed, especially when cornering over roads that are less than perfectly flat. Gone was the rear-end "wobble" that is synonymous with live-axle, rear-wheel drive Mustangs. Moreover, the Mustang felt as if it were an extension of me. I pointed the car and it responded with no drama. The tail didn't skip or slide. It just dug in and powered through the curves. In the occasions when I entered the corner a tad too hot and applied excessive throttle, the rear tires would slide out in a predictable and smooth manner, which allowed me to catch it before it got away—almost as if I had been warned that it was going to happen. Before the panhard bar installation, the back-end would whip out quickly and sometimes violently, which made for unpredictable handling. Although time behind the wheel was limited, the results were impressive and immediate.

The bottom line is simple: if you value high speed handling and crave the thought of blasting through some corners, a call to Maximum Motorsports and GTR High Performance should be on your "to-do" list. ■

SOURCES

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11. Install the MM frame rail inserts as previously labeled. Now drill the inner side of the frame rail wall using the frame rail insert as a guide.

12. Re-install the MM panhard bar chassis mount and line up the four previously marked holes. If necessary, add the supplied MM spacer plates between the U-bracket and frame rails.

13. Install the supplied hardware through the U-bracket and frame rails and torque to specs.

14. Due to clearance issues with the aftermarket cat-back muffler system, these tail pipes were cut off. NOTE: This may not be required depending on what brand of aftermarket cat-back muffler system your car has. Check with MM or GTR for details. If required, tailpipes can be re-installed/modified once the installation is complete by a qualified muffler shop.

15. Install the MM panhard rod using the hardware provided.

16. Re-install both wheels and lower the car to the ground.

17. Adjust the panhard rod using a level so that it is parallel to the ground with car at normal ride height. Again, the supplied instructions will have complete details on this and other critical data.

18. Once the rod is in position, tighten it and double-check the instructions to ensure complete torquing and proper installation.



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