IT'S ONLY A SPRING — DIFFERENT SYSTEMS FOR DIFFERENT NEEDS

Last time, we highlighted the many components of your car that act as springs and discussed the need to review these components as a "system" when you consider making a change to even one of its elements. This system approach to selecting springs will yield predictable and satisfying results. In Part 2 we focus on how to set up your street car suspension to deliver your desired balance between appearance, comfort, and performance on 1987 to 2004 Mustangs.

Let's look at a few different ways to set up your Mustang suspension:

EVERYDAY STREET PERFORMANCE SYSTEM

For the vast majority of Mustang owners, there's a pretty straightforward spring solution I call the "Street Performance" package. This solution changes your Mustang appearance by lowering it approximately 1-1/4 inches (based on the stock GT ride height), maintains a "reasonable" amount of ride comfort and improves performance/handling dynamics. You can put this street performance package together very easily and on a budget with these simple steps:

1. Locate a set of four springs designed to work together at a 1 to 1-1/4 inch lower height, shoot for a front spring rate in the 600-lb. range and rear springs in the 250-lb. range.
2. I strongly recommend revising the dampening at the same time by purchasing a set of struts and shocks designed to function in the new suspension travel range.

For cars that have less than 50,000 normal driving miles, springs, struts and shocks are all you will likely have to do to transform your car's appearance and handling. For cars with over 50,000 miles, I recommend checking your front and rear bushings, tie rod ends and ball joints for signs of wear and if worn replace all of them with a set of high performance rubber or urethane bushings. For the tie rod ends, I recommend either a set of rod ends that can be greased or a bump steer kit.

COMBINATION STREET / RACE / SYSTEM

If you want to change your Mustang to a "low, tough" or a "ground scraping street racer" appearance, you need a street/race/style suspension set-up. I recommend lowering your car in the 1-1/2- to 2-inch range for this look and beware: This system changes handling and ride comfort. Follow these steps for a ground hugging suspension set-up:

1. Locate a set of four springs designed to work as a system for your desired ride height. You need springs with a higher spring rate that correlates with the amount of lowering you want to achieve. For example, if you want to lower your car two inches, find springs in the 700-lb. range for the front and 300-lb. range in the rear.
2. Change vehicle dampening characteristics to include a set of struts and shocks designed to function in the new suspension travel range.
3. Add adjustable caster/camber plates since lowering the height more than 1-1/2 inches cause the front suspension geometry to be out of factory specifications. (I like to set the camber at -1° and for as much caster as I can get for a "street performance set up.")
4. Add a bump steer kit to remedy steering geometry that is out of factory spec due to the ride height change. (Set the front tie rods so they are level with the ground while the car is on the ground and set the toe to approx. 1/16-inch toe in.)
5. Replace the rear jounce bumper (pinion snubber) to lower profile bumper.

FULL RACE SYSTEM

In order to transform the Street/Race Style from a rough, rugged ride into a car that handles like it owns the road, you'll have to add a few more tricks:

1. Urethane bushings all the way around will transfer more energy to the body, minimizing "body-roll" when cornering.
2. Offsetting front A-arm bushings will help weight balance front to rear and aid in cornering and braking dynamics.
3. Keep front and rear stabilizer bars stock or close to stock (remember, the stabilizer bar is just a spring ... pick the spring you want to perform the energy management in your car).
4. Adjustable rear lower control arms to manage ride height and to adjust wheel rates (important for fine tuning the handling dynamics of your car).
5. Shock tower braces, weld-in sub frame connectors and an engine cross-member reinforcement will add the necessary body structure reinforcement for this new operating condition.

Finally, to finish the suspension set-up, remember these tire/wheel general rules of thumb: Tires with a 35 aspect ratio or lower can be very stiff and harsh and do not select a wheel with a diameter greater than 19 inches for 1987-2004 Mustangs.

Now all you have to do is choose if you want the everyday street performance system, combination street/race system, or the full race system. Then you can configure your suspension system appropriately and have fun with your now, "more nimble" steed!

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