

TECHNICAL I REAR SUSPENSION UPGRADE



Thanks to the installation of rear coil spring spacers, our GTO now has that classic raked look that we wanted.

Need a Lift?

A basic rear suspension upgrade for our GTO will include new springs, shocks, and coil spring spacers

Text and photography by Jim Black

One of the most popular suspension mods back in the day was giving a car a good rake, by jacking up the rear end of the car. Some felt it helped traction. Others just liked the look, or thought the factory stance was just too low in the back end.

Our '69 GTO's rear was hanging a bit too low for our taste, so we decided to give it that old school rake.

We should point out that there are some safety concerns to consider before lifting your Pontiac's rear. One is that it can affect handling, by shifting the center of gravity and effectively changing front end geometry (caster, in particular). More importantly, however, a jacked-up rearend does make the gas tank more vulnerable to an impact from behind, which could result in a fire. The higher you raise the rear, the worse both risks will be, so don't over-do it.

Up, Up And Away

There are several ways to achieve

the desired "raked" look that we're after. We could go with a modern air bag system like those offered by Air Ride Technologies; choose an airlift suspension set up from Airlift; go conventional with higher-rate coil springs like those found on wagon models; or just use adjustable air shocks like the good old days.

All the above methods vary in complexity, cost, and installation, but if all you really need is to just raise the rear of the car an inch or two, then Budzter's rear coil spring spacers are a choice you should consider.

The spacer route is by far the easiest to install of all the methods and it's entirely trouble-free. Simply lift up

the coil springs and place the spacers on the spring perches under each coil and you'll generally gain from 1 inch to 1½ inches of lift at the rear depending on the condition of your coil springs. Budzter's coil spring spacers are precision made on CNC machinery for exacting tolerances and made from 100% steel that will never break, bend or wear out. They will always stay the same height and will never need to be changed. Generally speaking, you can use these spacers to keep the body of the car from rubbing against bigger tires, prevent bottoming out on heavier loads, and of course achieve a desired ride height that won't require regular adjustment to maintain.

Although placement of the spacers doesn't require a new set of shocks and coil springs, since we were going to have things apart, we took the



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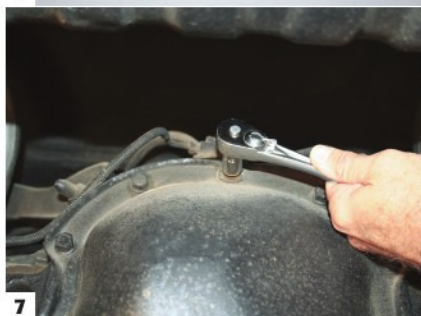
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1 Here's the before shot: the '69 GTO convertible sat a tad low in the rear. Our goal was to bring it up an inch or two for a more aggressive attitude ... but without having to worry about maintaining the height.

2 We decided to use coil spring spacers from Budzter, because they don't require any maintenance down the road and they're a cheap, easy install. The spacers are CNC-machined steel and should raise things 1 to 1½ inches, depending on your springs.

3 Since we were going to be under the car with the suspension apart, we decided it was a good time to replace our aged and sagging springs with new coils from Federal-Mogul, which are

made to correct O.E.M. specifications. 4 We also elected to replace the cheapie shocks that were on the car with gas-charged Bilstein dampers that feature a chrome piston rod, one piece alloy rod guide and seal system, rising rate self-adjusting digressive working piston, and a patented nitrogen chamber. We like their cool yellow color, too, but could easily have painted them gray so they'd look stock to the casual observer.

5 Before starting, we measured from the ground to the top of the rear wheel opening. This became our baseline for later comparison.

6 With the front wheels chocked, we used a hydraulic jack to carefully raise

the rear end of the car, then placed jack stands solidly under the frame rails ahead of and behind the rear wheels.

7 We then unbolted the clip that attached the brake hose bracket at the rear end, which would allow the rear to fully extend without binding – or breaking – a brake line or hose.

8 Next, we removed the two upper shock mounting bolts and the lower bolt and disconnected the old shock from the axle.

9 Using the hydraulic jack, we carefully lowered the rear axle until we could free the coil spring from its mounting location.

is a primary concern when working under a car and as such we can't stress enough that the tires should be properly chocked and the car should be supported on quality jackstands. Follow along as we take the rear end of our GTO up a notch or two.

No special tools are required for this job – the components can be easily installed on one side at a time in about 30 minutes, without the need for a hydraulic lift. Safety, however,

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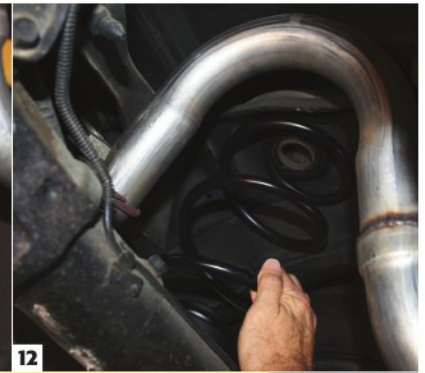
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SOURCES

BUDZTER ENTERPRISES

(spring spacers)
36 Wyatt Street
Stratford, Ontario
Canada N5A 7C8
(877) 699-9919
www.budzter.com

FEDERAL-MOGUL CORPORATION

(coil springs)
26555 Northwestern Highway
Southfield, MI 48033
(248) 354-7700
www.federal-mogul.com

ORIGINAL PARTS GROUP, INC.

(spring pads)
1770 Saturn Way
Seal Beach, CA 90740
(800) 243-8355
www.opgi.com

THYSSENKRUPP BILSTEIN OF AMERICA, INC.

(shocks)
14102 Stowe Drive
Poway, CA 92064
(858) 386-5900
www.bilstein.com

10 We prepared the spring perch for the new spacer by removing metal burs, rust, and corrosion that would prevent the spacer from mounting in a solid fashion, then simply placed it on the perch. No attaching hardware is required.

11 We placed a new spring insulator pad atop the coil spring prior to installation of the spring.

12 We positioned the new coil spring with the end of the lower coil indexed in the same direction as before making sure that it was correctly seated over our new spacer and within its spring seat above. Because of the added height of the spacer, we discovered we had to raise the car further and lower the rear axle more, in order to

fit the new spring.

13 Here's a better view of the new coil spring seated on our new spacer.

14 We jacked up the rear axle sufficiently to install our new shock absorber and checked the bolts for tightness. Then we reattached the brake hose bracket at the rear end and lowered the car to the ground.

15 After doing the same to the other side of the car, we again measured the height to the peak of the wheel opening and noted a full 2 inches of lift had been gained. While our new springs probably contributed some of the added height, our Budzter coil spring spacers accounted for most of the change. ■