

## Metallic Enhancement Gear (MEG) TGNA Prius Stability Bars

### Overview

I was recently asked by Metallic Enhancement Gear (MEG) to review a set of after-market stability bars designed for the Gen 4 Prius. Since I've always attributed stability bars to sporty cars and the people who drive them, I was uncertain whether I fit that category in my 2017 Prius Prime. On the other hand, I already thoroughly enjoyed driving my Prime and if there's something that might make it even a little more fun, then bring it on!

First, I wanted to try and get a feel for how the stock Prime handles. Like I said, I really enjoy driving it so I didn't think I'd find anything to critique. However, after some internet searching, I came to understand about roll during regular cornering. Once I knew what I was looking for, I started recognizing it. I'll get back to cornering a little later.

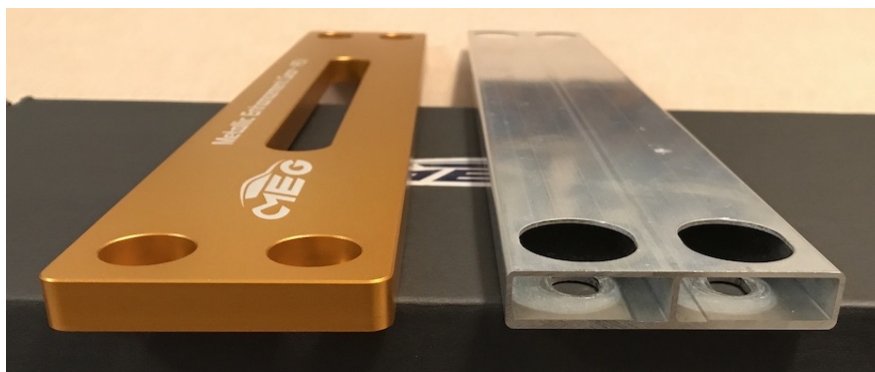
MEG shipped them to me and provided the tracking number. I always monitor the progress of my shipments when I can. It allows me to plan for being home when it arrives. The process of acquiring the bars was easy and painless. We exchanged emails throughout.



There are three stability bars in a Prius Prime. They come neatly fitted into a sleek black box. The presentation, though not flashy, was attention getting. Packing the goldish bars in the flat-black box makes them really stand out. The gold sheen is broken only by the printing. It's subtle and very well designed.

The first thing you notice when you pick them up is the heft. Each bar is solid. Being new to stabilizer bars, I did not realize that this was a big deal. After all, I reckoned, aren't all stabilizer bars solid? My assumption was wrong. So very wrong.

Here is a picture of an MEG bar next to an original Prius Prime stability bar. Notice that the MEG are crafted from a solid piece of metal. Compare that to an original Prime stabilizer bar. The original stabilizer bars are hollow pieces of extruded aluminum.



## Installation

Here is where I offer my first piece of advice: not all shops are willing or allowed to install “customer-provided” parts. That was the case with my first choice. And second. Fortunately, I know a place that's a little more “small town good natured” and they were fully willing to earn a buck – I mean, install the bars.



In fact, they were intrigued. This made it easy for me to get permission to watch the installation process and snap some pictures while talking to the mechanic. Advice number two: when you find a good mechanic, stick with them!

The installation process was made about 100-times easier with the full-color instruction guide that comes with the bars. Seriously, it's so well spelled out that if I had the tools I would have been able to do the installation myself.

Under the car, the front-most stability bar is fully exposed. The other two are covered on the ends by the under-carriage sheathing.

In this picture (provided by MEG and used here because their lighting is better than mine) the front of the car is toward the top of the page. Notice the rounded piece of metal. That'll be in another picture later.

For the purpose of this document, the fasteners will be labeled Pair1, closest to the front of the car, Pair2, Pair3, and Pair4 at the back of the car.

The first bar, since it was fully exposed, was easy-peezy: you can see the four 12mm bolts in the image to the left. Using the same bolts, the new bar was installed just as easily with 21.5 ft-lb of torque per bolt. 29Nm in the rest of the world.

The back two, however, have their bolts covered by the sheathing. So first you must loosen the sheathing. This task is at once easy and hard. The easy part is that Pair1 is just a couple bolts and Pair2 are standard pop-out fasteners next to the middle stabilizer bar.

The hard part is that Pair3 and Pair4 are some new fasteners we'd never seen before. The way they work is that to remove them, they unscrew like any screw (large Philips screwdriver). However, to reseal them, they simply slip into place. Here's why that's maddening: You have to pull down on the sheathing while spinning the fastener head. This is no small feat. And once the sheathing is completely separated, you have to make sure it does not spring back. In terms of sheathing fastener, it's a brilliant idea and they work very well. But they drove us insane.

Once you are able to loosen those fasteners, the pop-out fasteners, and the screws, removing and replacing the two bars is a piece of cake. Just to reiterate, the bolts are 12mm and the torque rating is 21.5 ft-lb. (29nM)



After that, simply reattach the sheathing and it's over. In my case, start-to-finish was about 20 - 30 minutes. My taking pictures didn't slow him down too much. In fact, it was probably our talking about the new bars and fiddling with the fasteners that slowed us down the most.

Here is a picture of the new bars installed on my Prime. The photo provided by MEG has much better lighting but I wanted to make sure and use my car with the bars installed. This was December in Chicago and we'd already had an accumulation of snow. That is why the black undercarriage sheathing is dirty. They look really sharp; it's a shame I might never see them again.

In total, labor cost \$55 for about a half hour work. Seems fair to me.

### **Perceptions**

It's been a month now that I've been driving with the new bars. As I mentioned before, it's not as though I'm a sports car driver or

even pretend to be. Or at least I wasn't. You have to understand how different the Prius Prime is to my old 2004 Prius. When I got the Prime, it felt as though I had taken a 3 and cranked it up to 10. Let me assure you that adding the bars takes it to 11.

There's a hypermiling technique referred to as "suicide turns", in which the goal is to turn a corner as fast as safely possible. The intent is to maintain momentum going into the turn so it doesn't require as much effort (and fuel) to come out of the turn. I got pretty good at this in my Gen2 and actually enjoy them in the Prime. Adding the bars takes suicide turns to a whole new level and it's a little freaky, to be honest. I had grown accustomed to a little sway and roll in the car when turning quickly. With the new bars, the car stays flat and makes the turn swiftly. Honestly, this is exhilarating and it's a little scary how much I enjoy it.

But to be clear, it's not just during "suicide turns" that I appreciate the MEG bars. They really do stiffen the underbelly and provide a better ride.

No doubt that after all the writing about the installation process, you would expect a lengthy review about how much greater the drive is and how much more stable the car feels. In reality, though, there are only so many ways to express that the car handles so very much better with the new bars.

## **Recommendations?**

Let's be clear: these bars are not for everyone. As I mentioned above, I didn't originally feel they were for me. Some people drive a Prius because they want to get better mileage; the bars aren't going to improve your MPG. Some people want to stand out with an easily recognizable car; since the bars are mounted to the underside of the car they aren't showy. Some people, however, want a fuel-efficient, showy vehicle that is also a lot of fun to drive. Make no mistake, they really do stiffen up the chassis and make the Prius a lot more fun to drive.

Because the Gen4 Prius Liftback and Prime are both based on the Toyota New Global Architecture platform (TNGA), the same bars fit both cars.

Long story short: now that I have them, I don't want to remove them. So yeah, I recommend them.