

## The Easiest Tall Person Prius Mod:

Danny asked me to review a new Prius Chat Store product. These are 2004-2009 seat extending brackets for tall people. These brackets will extend the driver's seat backwards up to an extra four inches. Containing only four bolts and two brackets, "Extend My Seat", is very easy to install. I'm basing that statement from experience training employees where I work. Some folks are quick, and others are slow. With this mod, it doesn't matter. Trust me, you CAN do this. I'm 6'-5", but I've heard tall driver comfort is an issue even if you're a half foot shorter than I am. Here are a few pictures showing how I normally fit in our 2004 Prius, prior to installing ExtendMySeat:



We've made multiple drives from Montana to So Cal. Not being able to stretch out literally becomes a pain.

The instructions state that the install can easily be done in 30 minutes (or less, if you're fast). Even if you're VERY uncomfortable with (DIY) do-it-yourself jobs, the install can be done in 2 hours or less. 2 hours will even give you time to stop for a snack. I swim, ergo I snack.

As I mentioned, the whole kit consists of 2 brackets and 4 bolts. The instructions that come with it are in black & white. I personally find that B & W photos take away too much detail. There are color install pictures at the manufacturer's web site, as well as YouTube video links of the whole install. The instructions give adequate detail how to get it done, including the tools you'll need. (just an open end wrench and/or a socket/wrench at a minimum). There's one grammar typo in the instructions. Also, they'll tell you use a 13mm socket. I attribute the 13mm to being a typo also, as I've had the seats out to change cloth upholstery to leather. You need a 14mm socket to pull the driver's seat. No big deal. If you have one size, you'll have the other.

After doing a few training classes I'd prefer instructions show a few more pictures to help the slow DIY'ers. For example, it's helpful to **not** only show the seat bolts that have to be removed ... it's more helpful to show a wrench & hand on it, along with some of the seat, giving juxtaposition to

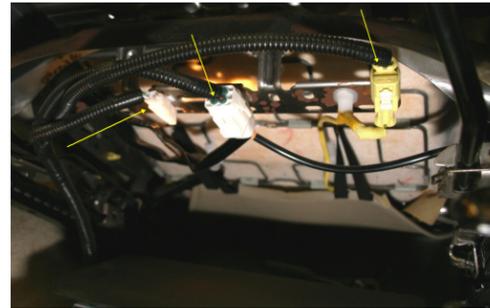


everything. The instructions only show a zoom shot of the 3 wiring harnesses from under the seat. A newb would prefer even more detail. All wiring is located under the seat. I'd want a shot leaning the seat back, just to first look at the wires. Many have never seen under the seats. More pic's give more comfort, especially for "first timers". Better to have an expert's eyes glaze over from boredom, than for a newbie DIY'er to get overwhelmed, imo.

I'd want the instructions to say, "Get your head under the seat & get familiar with the wires". I'd like newb's to know that the modular connectors don't just pull apart ... rather they lock together securely.



Newb's should read for example, "On the far left connector, push the blue dot in ... push in the square button on the center module ... slide the white slider on the yellow connector; slide it towards the black wire jacket" ... or something



similar. I'd want arrows in the pictures to simplify it. I'd also throw in a blurb about being careful to NOT get new bolts mixed up with the old ones, & show the difference! (Both length & thread pitch) Metric/SAE threads will strip if interchanged. I am a BIG believer in Loctite removable thread locker too ... especially in this application. I'll explain below. I noted that the mounting threads in the right rear bracket are somewhat shallow. Besides my writing/legal experience, there are 2 decades of aerospace machinist talkin' here. Danny, you sure know how to pick your reviewer :^)



Generally you want a thread hole to have at least 25% more thread depth, than the width of your fastener. Common sense says one thread pulls out easier, than 2, 4, or a whole lot of threads. These fasteners are (appx) 3/8" diameter here (all 8, 4 SAE & 4 metric). So to get optimum clamp load, you'd want thread depth to be roughly 12mm or more. The less threads that clamp, the more likely they'll shear/fail during critical loading, or (non critical failure) at best, you may accidentally strip 'em during the install.



Now, in comes Loctite (see dabs of dark blue on the bolt threads pictured above). Before it hardens, it acts as a lube. Wet threads give higher clamp load even at lower torque. This means you can use over 20 lbs less torque during installation! Less torque is a GOOD thing if you have limited thread penetration. FYI, Torque is how tight your bolts are.

No one wants to tell customers they ought to have a torque wrench to do a job, but I'd balance that against stripped / sheered threads. If you're in an auto accident (puts on his attorney/products liability hat), you do NOT want bolt failure. But you can't get a torque or socket wrench on the rear left bracket. It's fastened underneath your original seat rail.



I used a 'crowsfoot' wrench. This has a claw feature of an open end wrench, but offsets to ratchet or torque in hard to get at places. Stick your ratchet

handle or torque wrench into the square of the crowsfoot, and you won't have to worry about galling or rounding off the hex on a fastener's head. Here, my open end wrench sits elevated on the left rear extender bracket lip. This 25° incline means you get less bolt mating surface, thus less torque.



Disclaimer: There's a dandy one included with the instructions. I wasn't asked to review its boilerplate, so I won't (other than to say there are legal principles where you can't build defective stuff, with the expectation of avoiding fault via a document stating, "if it fails don't look to the seller/reseller for help).

Ignoring all of my personal preferences above, the bracket install went very easy. The manufacturer suggests setting the seat on the ground or somewhere else. But once it's loose I found it easier to set the seat in the rear seat of the car, up against the center console. I also got my flashlight out for the job. When unhooking little wire harnesses



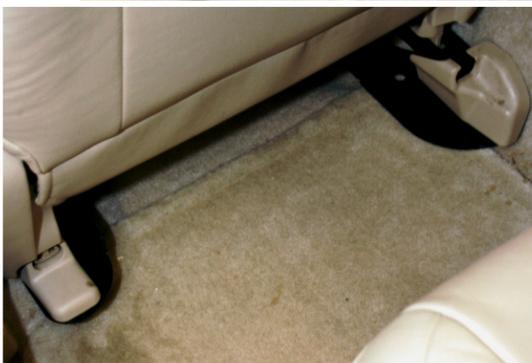
under the seat, it's always good to get adequate lighting, especially for us far sighted folks. The yellow arrows pictured point to where the NEW mount holes are ... 4" back from the hex heads where the original mount holes are. The original metric bolts get put back in loose, for wiggle-room. Similarly, when you drop the seat back into position, the 4 new 3/8 bolts get put in loose.



That's about it for the installation! Tighten stuff down; snap the 3 wire sets back on, along with the rear seat rail plastic covers. Yes, they just snap on/off. That tidbit could be added into the instructions as well. Here are a couple before & after shots of the plastic seat rail brackets. The seat is forward in both "before/after" pics. Note how the NAV DVD shows before. After extend my seat bracket install is done, you can't see it. In fact, the extender brackets actually cover over the floor mats a good 4". The brackets are all elevated above the floor mats, so don't think they're now impossible to remove. The floor mats can slide right out from under the seat extender brackets.



So ... I've been driving around for a couple days now with the seat extender, actually able to straighten out my 36" inseam legs. I fabricated brackets years ago to improve seat travel, but the model above is superior for ease of install. Below are shots of the seat (and I) fully set back the maximum 4":



It may look like my (left) knee still can't straighten out, but consider my foot is resting up on the peg. Additionally, I use a comfort cushion when I drive. You may have heard ... the Gen II Prius seat isn't "world renowned" for comfort, for all drivers. I fall in that group. My cushion blows up almost 2" thick (see picture below). I have it stuffed behind me, in the



above shot. Besides noting my seat cushion, you can see one other thing. With the seat all the way back, some may find there's a bit of "ugly factor" going on.

The seat rails are now clearly visible. It won't bug me, but maybe it will for some. You may want to install longer floor mats if that's too bothersome. Also note the splits in the carpet that are normally not visible. Now they are visible. Some buyers may only need one or two inches of extra rear travel, so for them, carpet splits and visible rails won't be an issue.



It's good! I like 'em a lot. I was never able to fill my lumbar support cushion fully, without shrinking my leg space too much. Now, not only are my legs more comfy, my back feels better while I'm traveling as well.

I recommend these easy to install guys. The only caveats are the ones stated above. Get a torque wrench, and a cheapo set of crowsfoot wrenches so you can properly torque the slightly hard-to-get-to rear left fastener ... especially if you don't do much DIY car stuff. Harbor freight (or any equally cheap on line tool place) will sell you both for under \$26.00 so they won't break the bank. You won't accidentally strip any threads either.



Lastly? Please FOLLOW the manufacturer's INSTRUCTIONS!! They'll remind you to "always wear your safety glasses". Now days, safety glasses even come with bifocal readers built in, for all of us old geezers. That's it! Enjoy!

