

Project: Short Shifter

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Car model: 1991 Honda Prelude SR
Engine model: Honda B21A1

This writeup details instructions on creating something that I offer for sale. If you would like a short shifter, but don't have the tools or the time to make your own, you can buy one from me from my [Prelude Store](#).

In my opinion, one of the few mistakes that Honda made when designing the 3rd generation Prelude was to give it a shift lever that was a little too long. Sure, this makes for physically easy shifts, but when it comes time to change gears in a hurry, the shift feels a little bit sloshy. Plus, the shifts take too long, which can sometimes result in grinding gears if the clutch is let out prematurely.

I wanted to change the shifter in such a way as to make the shift feel crisper and shorter. I decided that the best way to achieve this was to shorten the shift lever of my car, thereby shortening the distance required to change gears. This turned out to be a relatively easy project, and the results were very favorable.

Before you start into this project, you need to remove the shift assembly from your Prelude. This is relatively easy to do, and I won't bother explaining each step. Just take your center console apart, and you'll see how to remove the shift lever. I took the whole shift assembly out so that I could clean it, but if you just want to shorten the shifter and not bother with any refurbishing, the only thing you'll need to remove is the shift lever.

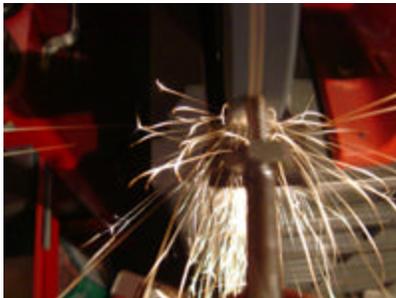


The first thing I had to do was locate a "tap and die" set with the appropriate die to extend the existing threads on my shift lever further down the shift lever shaft. The die size you need is M10, which in my experience is part of most metric die sets. Don't worry about the cost, tap and die sets are usually quite cheap.

With my die ready to go, I had to prep the shift lever by grinding away some of the extra metal below the existing threads so that the die would be able to cut new threads. I accomplished this using a bench grinder, but I'm sure it could have also easily been done with an angle grinder or a dremel. The shift lever was now ready to have the threaded area lengthened.

Starting the die was really easy. All you have to do is thread the die onto the existing threads and just start turning it down the shaft. When it hits un-threaded metal, things will get a little bit difficult. At

least in my case, I had to turn the die quite hard to create new threads. I found mounting the shift lever in a bench vise to be very helpful.



I had previously decided that I wanted to shorten my shifter by 1.5 inches, and so, I added 1.5 inches of thread to the shaft. The die became really hard to turn near the end, but I managed to get the threads the way I wanted them. Then, leaving the die in place, cut 1.5 inches off the end, thus shortening the shift lever. The action of cutting the metal makes a mess out of any threads that were made, so it is important to clean them up. I corrected the threads by first grinding off any rough edges at the end of the threads with a bench grinder. Then I screw the die completely off to correct any thread damage that had occurred.

In the end, everything turned out really well, and the threads worked perfectly. My shift knob threaded right on as it should, and with everything back together, it made my shifter look a lot more attractive. My shifts are crisper now, as I had expected. My shifter now makes a pleasant clicking sound as I finalize each sweep into gear. Bottom line is that I can shift faster, and the shifts feel very snug. It's been quite a while now, and I've never looked back.

Here is what my finished shift assembly looked like when I was all done. You'll note that I took the time to clean and paint any parts that needed refurbishing. I also used some waterproof grease to lubricate where needed.

