

Floor Jack Modification

By Larry Klusza, February, 2026

Disclaimer: What is documented here applies to modifying a shop tool beyond its original design. The math calculations are sound and the modification places no additional stress on the jack's capability beyond its intended limits. I hope you find it helpful. However, should you wish to perform this modification yourself, understand that you are doing so at your own risk. Remember – think safety first! L.K.

Given that GM A-bodies like Pontiac Le Mans/GTO, Buick Skylark, Oldsmobile Cutlass, and Chevrolet Chevelle are close "cousins" in many areas, I thought I'd share some details about a floor jack modification I made for my '70 GTO a while back that some of you might like.

For context, I've never liked jacking up the rear of the car from the center. Just the thought of the car's weight trying to bend the axle tubes down from the outside ends is scary. Not to mention that I have the rear sway bar that passes under the rear housing. So, I'm jacking the sway bar up against the rear center section to lift the back of an approximately 2-ton vehicle so I can put it on jackstands or Race Ramp blocks under the wheels. I know people have been doing this for years and you do what you must sometimes, but it still doesn't seem right to me.

So, I went shopping to try and find an attachment for my Harbor Freight 2-ton floor jack. No luck. I did, however, find spreader-type attachments for small cars - just nothing big enough for me. Time to make one. I bought the narrower one just to get the adjustable "slidey" end bits and made a larger center section.



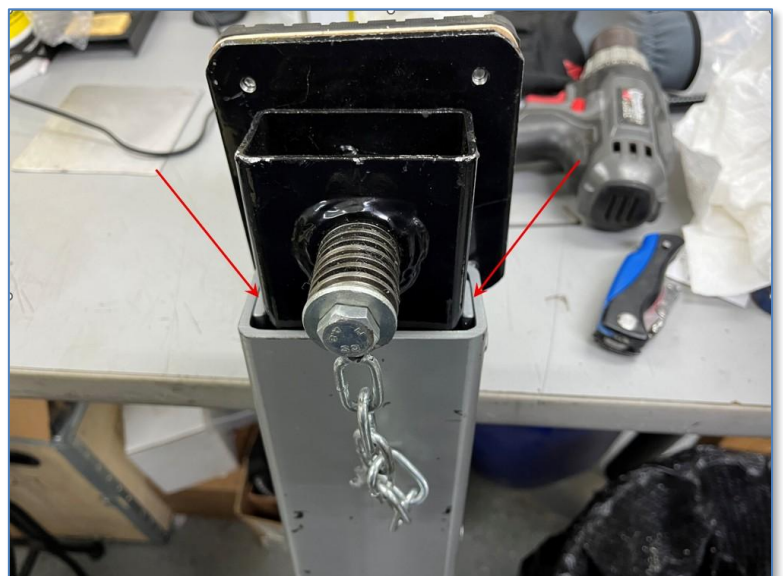


Then I removed the round swivel plate from the base of the jack arm and drilled/tapped 4 holes in the base.

I measured the dimensions of the original green center section which I sourced through SummitRacing.com. It measured 3.5" x 2" x .150" wall thickness steel. Then I went shopping for the closest thing I could find. Since it's not the size or type of steel tubing most folks have just laying around, I had to get it from [OnlineMetals.com](https://www.onlinemetals.com) as nothing close was available locally.

Starting out, I looked at how much adjustment the sliders provided in the original unit with the limiting safety chains connected. That showed me how wide or narrow the unit could ultimately be. I then scaled up the size of the center section to have a similar range of adjustment when applied to my GTO rear axle. Obviously, the closer in you can keep the sliders, the sturdier the assembly will be but if you're considering making one yourself it will ultimately depend on the width between the lower control arms on your axle. I also remembered to account for the width measurement between the front control arms as well. I made sure I had enough width adjustment to span between lower front ball joints or as close to the point you can reach between the front tires on the lower control arms. I forget if that was greater or narrower than the span on the rear axle, but those two measurements will dictate the size of the new center section.

I determined that the optimum length for the large center section (without the slidey bits) was **37"**. The closest I could get from OnlineMetals.com was 2" x 4" x 48" with .187" wall thickness rectangular tubing in hot rolled carbon steel. I bought the 48" length size from OnlineMetals.com because it was a stock item. Besides, a cutting charge from them was both an additional expense and pointless since I already have a perfectly good cutoff saw. With the sliders being narrower in width than the new tube, the extra side play meant I had to shim the sides with some 3/16" x 1 steel. I drilled and tapped the shims and bolted them into the sides of the new center section (arrows).



I'm very happy with the 37" center measurement. It works perfectly for my '70 GTO so I'm assuming it will be OK for the same generation of GM A-bodies as well. Others will require careful measurement.



This was not a very cheap project, but I couldn't find another solution at the time. While I do have to bolt the new cross arm onto the jack when required and it's certainly not light, it works so much better and I do feel much safer when using it.

The best part is that using the attachment to jack up either end of the car keeps the suspension loaded and not "drooping" so that it sits on the Race Ramp blocks squarely as if it were still on the ground.





As an aside, I use the Race Ramps because they have the dished tops to minimize flat spotting the tires during storage while providing me tons of space underneath to perform any maintenance. They also weigh almost nothing and store nicely when not in use.

Sometimes if you need lift, you just have to make your own.