



To make your own Tire Changing Station as seen in the video, you will need the following:

Tools:

- Three, motorcycle tire irons
- 18" bar-clamp (the one where you squeeze the handle to tighten it)
- Valve stem remover
- Pressure gauge
- Air supply (compressor) and air chuck.
- 13mm or 5/16" socket and wrench (depending on which bolts you use below)

The "Platform":

- One, 18"x18" or larger, piece of $\frac{3}{4}$ " plywood
- Two, square 2x6 blocks – these will be stacked in order to raise the wheel/tire off the workbench surface and get the bar-clamp around it
- Three bolts to secure the wheel; either, #8 (1.25 thread) x 50mm hex head bolts (on which the Segway wheel nuts will fit) - OR 5/16 x 2" standard hex head bolts, plus nuts. (Note: Carriage bolts are preferred if available. Countersinking, as described below, is still advised.)

The idea is to wind up having a piece of plywood with two 2x6 blocks attached in the center of it and three bolts sticking through the top of the upper block in the same pattern as the wheel bolt holes. Here's one way to get there:

Drill three holes in one of the 2x6 blocks just large enough to allow the bolt shanks to pass through. Use a wheel as a bolt-pattern template. Counter sink the heads of the bolts into the block, *but not completely*. Leave just enough of the head protruding so that when the other 2x6 block is screwed to the bottom of the first block, the bolt heads will get "sandwiched" between them. This helps prevent the bolts from spinning when attaching the wheel.

Screw the 2x6 blocks together and then attach them to the center of the plywood with deck screws through the plywood and into the blocks. Now use two "C" clamps to affix the plywood base to your workbench. (Or, you can screw it down if you're not planning on moving it often.)