

PLANS TO BUILD A SIMPLE CHASSIS WELDING BENCH FOR HOME

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INTRODUCTION

I had been planning how to build this chassis and welding bench for some time but never got around to it. A chassis bench, or table as some call it, is the only way to get a true level surface because most floors will not be level, they will have dips and bumps that can mess up any sort of fabrication you do. I persevered for a long while knowing where to lay and not to lay steel in my shed or packing it up a bit so it was flat, what was I thinking? I should have built one of these 10 years ago.

Now for the disclaimer;

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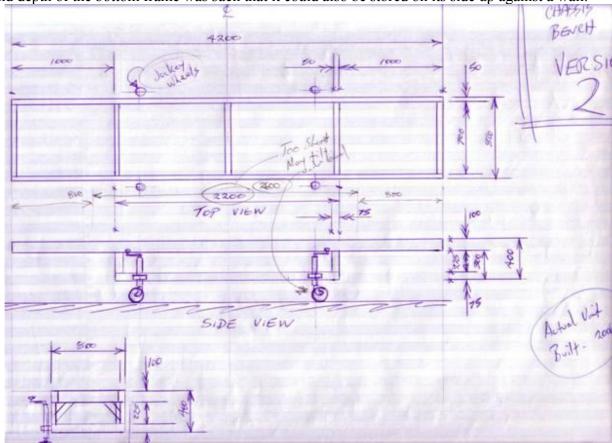
For those who fail to understand legal jargon; If you have been an idiot, made something that broke, generally stuffed up or what ever, don't go blaming us or others because it is your fault. Take responsibility, make it right, learn from your mistakes and move on.

Now lets have some fun with it.



THE PLANS

Now I am old school so I drew them up by hand on the kitchen table, I was not thinking at the time I would do a paper like this on them. I just wanted to build it but it has turned out so useful, so here they are warts and all. Don't worry there are actual photos so it will all make sense soon. The size and depth of the bottom frame was such that it could also be stored on its side up against a wall.



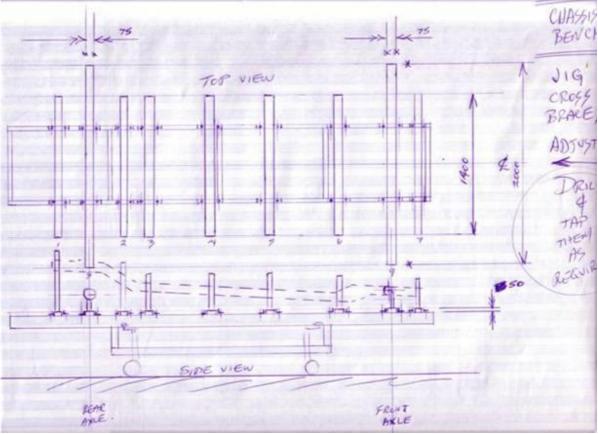
This sketch show the base frame of the unit, what is not shown on this drawing is all the diagonal cross bracing and extra supports which you will pick up in the photos later on.

All long sections and cross pieces are made from $100 \times 50 \times 3.5$ square tube. The bottom smaller parts of the frame and uprights are made from $75 \times 50 \times 3.5$ square tube.

The standard trailer jockey wheels are obviously so you can adjust the height while working on it and you can also wheel it around. They are cheap too. But be careful as you build you Rod because they will not be able to support every thing as you mock up your chassis engine, diff etc. So when you have the weight of these items resting on the chassis bench, be sure to place jack stands under the bench to support the added weight or remove the jockey wheels and place the bench on the ground.



This sketch below shows the cross pieces that sit on top of the bench. The idea being that the top of these cross pieces is your working ground level. The wider ones are located where your front and rear axle will be. All the other cross braces are located where ever there will be a chassis cross member or the need to support a component for welding, fitting etc. The idea is to weld the whole of the bottom frame up and then you bolt the cross pieces where ever you want them. Then if you build something else you can drill and tap and shift the cross pieces around to suit, or if you put them in the wrong spot just re-drill and tap. Also for storage you can unbolt them and tip the bench up on its side and stack them in it. Also bolting them does not distort them.



To bolt the cross braces on I just used 10mm (or 3/8) type general purpose bolts. The up rights that held the chassis, I ended up just tacking them on to the cross braces at each lower corner of the up right, and tacking the upright to the chassis itself. As you can see I wanted the chassis to be fixed at it's actual ride height.

I am going to state the obvious; make sure its flat and square before you weld anything. Now a word on welding it up, don't distort the thing by doing bloody big long welds. You want it square and dead flat across the top, so tack it up completely first then just do 20mm (3/4 inch long welds at each end of a join where say normally you would do one long weld. Remember you will not be belting down the highway on your chassis bench; it just has to be strong enough not to fall apart in your workshop and have no distortion.



FINISHED UNIT - PICTURES

Not that much more to tell you apart from; man this thing has made life so easy, I love it. Pictures tell a thousand stories, so I will shut up now.









This last photo shows the rear end of the chassis being built on the chassis bench.



Happy Trails..... Ron.