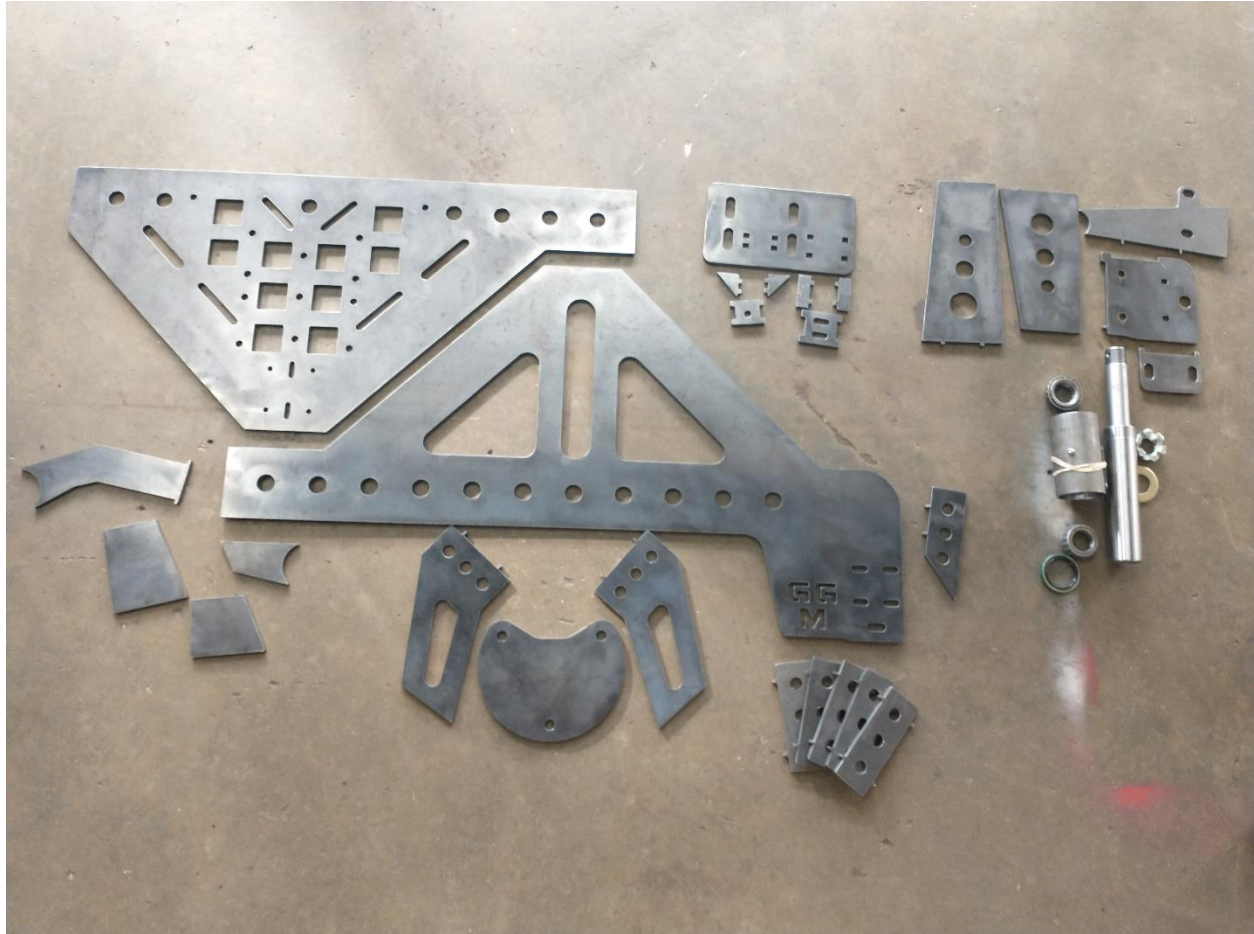




## Weld it Yourself 80 Series Tire Carrier Assembly Instructions

All the pieces included with the kit minus the hardware. Some pieces may change slightly as the design is improved. NOTE! These instructions are for a driver side kit. The steps are the same for a passenger side kit but several pieces are mirrored.





A couple tips on the design, the skinny tabs are to hold the piece in place and also shows the width of the final part. The ends of the tabs should be even with the end of the part. Also, when fully welding, burn right through these tabs as if they aren't there.







We have fixturing to streamline this process, but the same can be achieved with some patience. It is important to get the two main plates aligned and square with each other.





The main plates should be 2.25" wide outside.





This plate will set everything else up towards the spindle. The tabs on the right side should be at the edge of the straight portion. Remember to clock the zerk fitting perpendicular with the main plates. It is very important to get the spindle sleeve as square as possible.







The angled plates fit with the smaller end towards the spindle. The larger one of the two goes on the front. Almost everything on this project should be aligned as a corner joint.







The smaller of the angled plates. The top plate does cover the edge where the side plates come together. The outside edges of the side plates should meet. Again, making sure the spindle sleeve is square with the assembly is paramount.





A support plate is used above the top plate





A view of these pieces tacked together, add extra tacks to the spindle sleeve to make sure it doesn't move during welding with heat added to the part.







This portion is tricky, having a friend to help hold the pieces in place can help. The tabs of the extension pieces align with the back plate and the edges align with the top. The tricky part is getting the two extension pieces to align with the tire mount plate (we call that the cat head) while keeping the mount plate square and indexed. We have a fixture to simplify this. Take your time! Find a way to hold the pieces before you weld them, it's going to take a lot of adjustment to get it right.



The support plate with an angle goes towards the latch side like this.



**GENERAL GREEN  
MANUFACTURING**





Another support plate goes above the previous piece.







Now flip the assembly over, it helps to align the top of the carrier to a corner of a table. This small piece may need to be trimmed to fit. It is helpful to use a magnet to hold it while it's tacked in place. Try to keep an even gap just over  $\frac{1}{4}$ " on all edges.



**GENERAL GREEN  
MANUFACTURING**



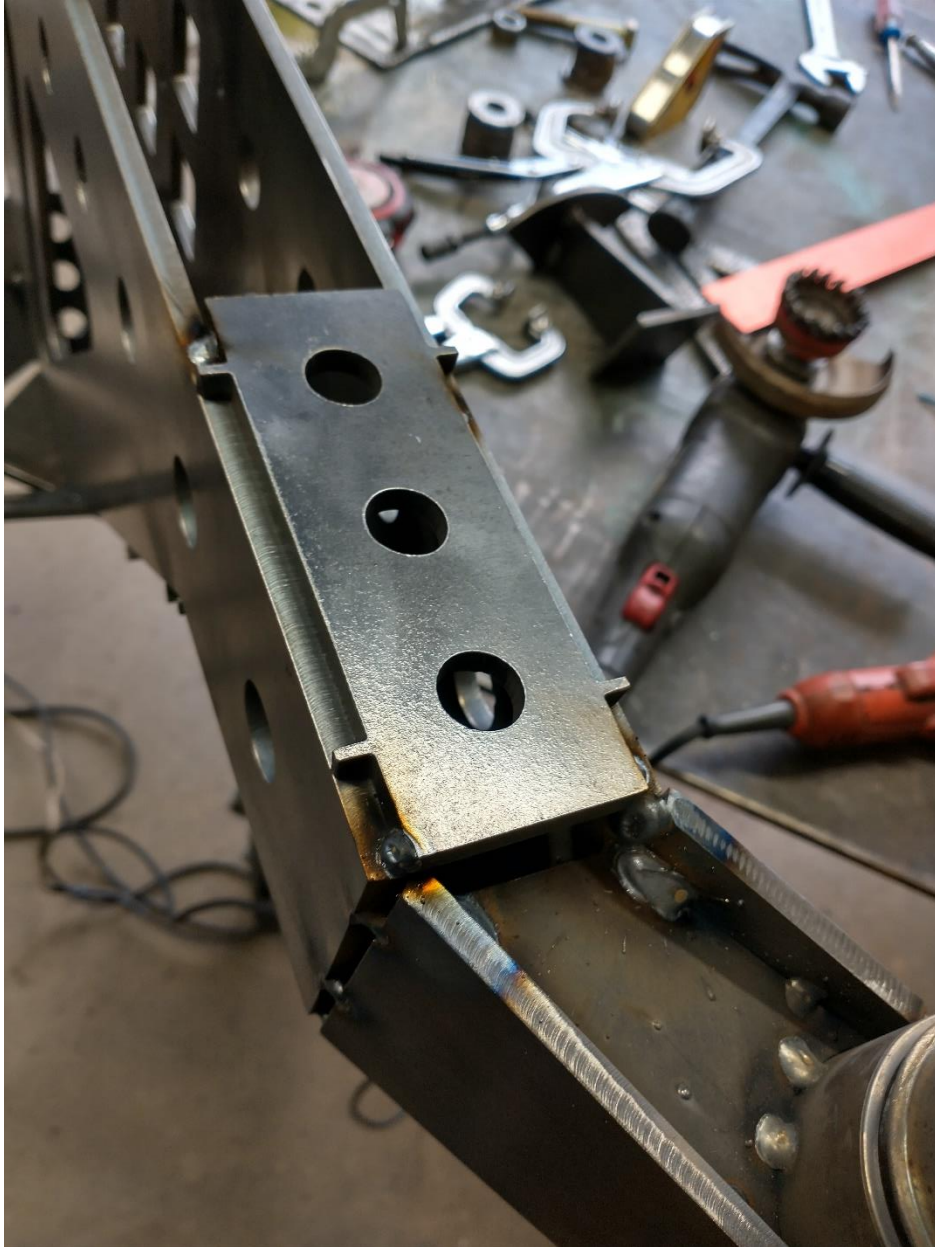


**WARNING!!** Although it is fine when tacking together, the sleeve piece is about 3/16" wall thickness. Turn your welding setting down or you **will burn through the sleeve!!**





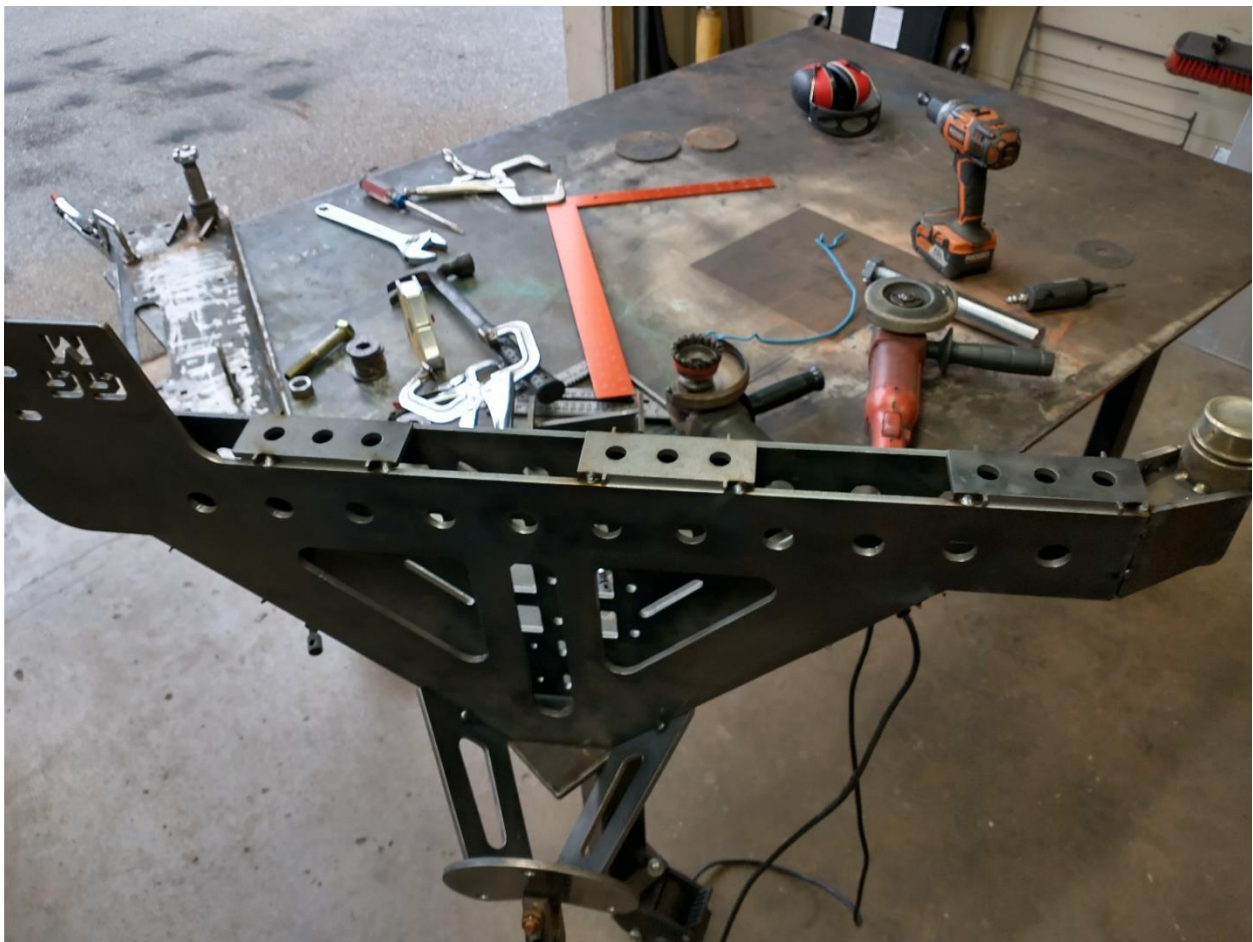
Add another support piece and align it with the edge of the main plates.



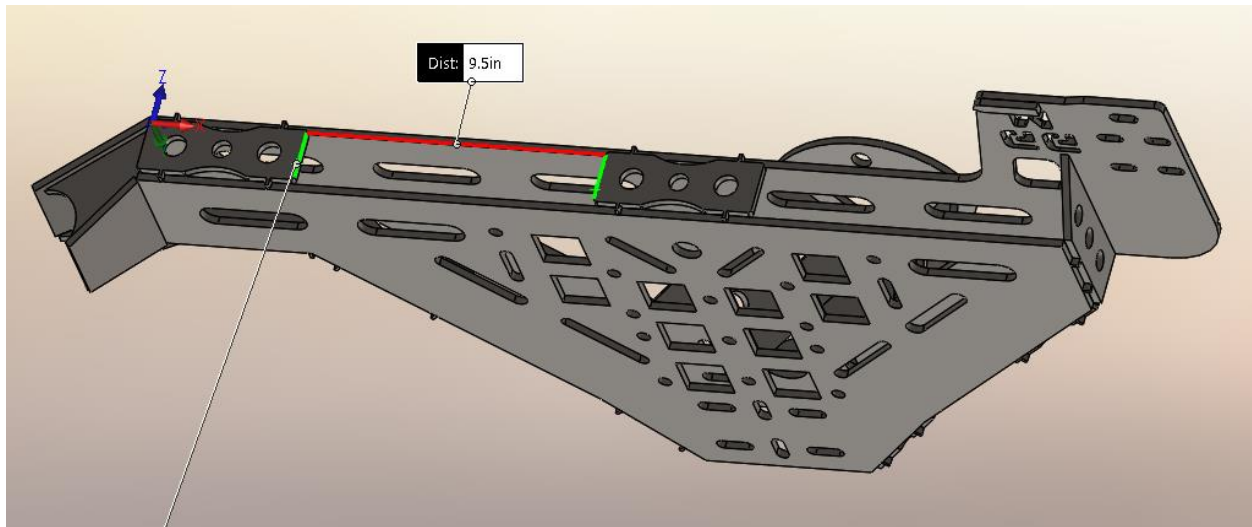


Add two more support pieces to the bottom. The older design is 3 plates at 5 ¼" apart from edge to edge. The new design is 2 plates at 9.5" apart.

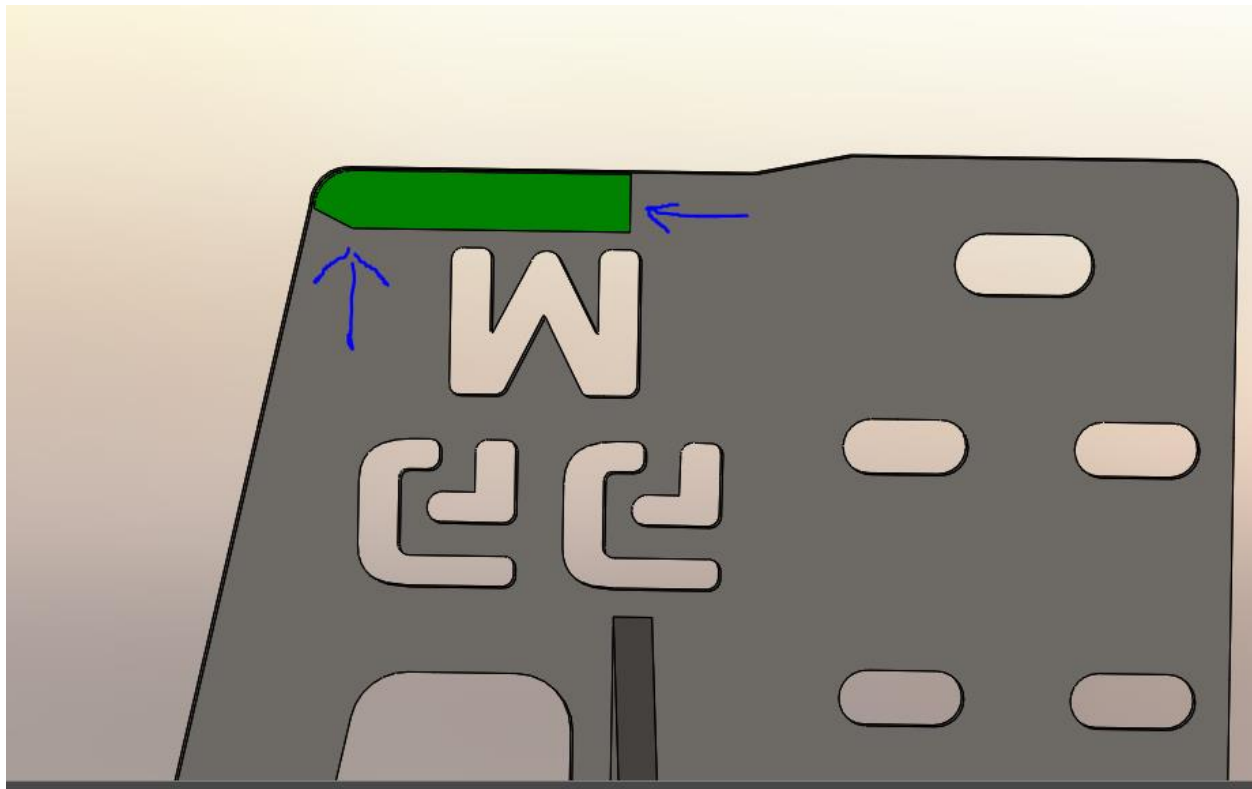
OLD DESIGN:



NEW DESIGN:



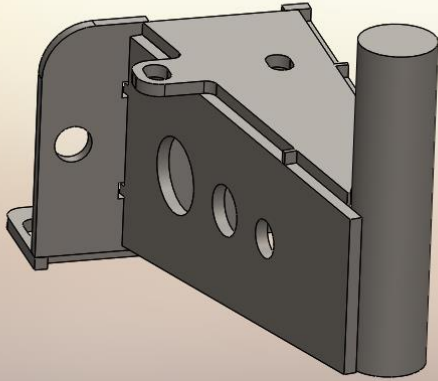
Another new feature is an extended “foot” pad where the tire carrier rest against the rubber pad. You’ll want to get the piece, on the back, flush with the bottom and only weld where the arrows show below. Any misalignment can be ground down until flush.



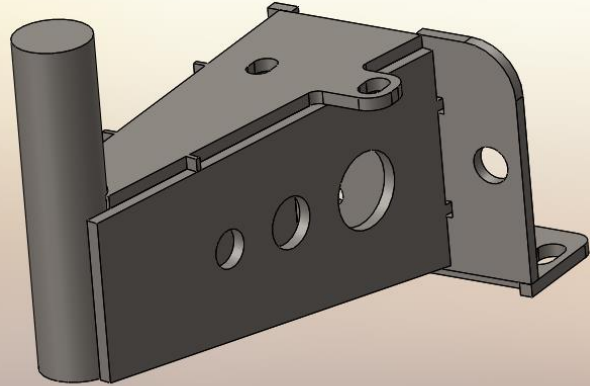


Frame Mount. NOTE a passenger side kit needs to be assembled mirrored to these steps.





**DRIVER**



**PASSENGER**





Something to pay attention to, these two pieces are slightly different sizes the shorter one will be used before the longer one.





Pay close attention to the orientation of this step. The mirror of this can be put together and you'll end up with the opposite mounting side.



The edge of the top piece is  $\frac{1}{4}$ " from the edge. Use another piece from the kit to check this.

**GENERAL GREEN  
MANUFACTURING**



**GENERAL GREEN  
MANUFACTURING**



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MANUFACTURING**





This piece is critical to get as square as possible. Take your time in checking this. Tip, tack on both sides to keep the plate from pulling to one side.

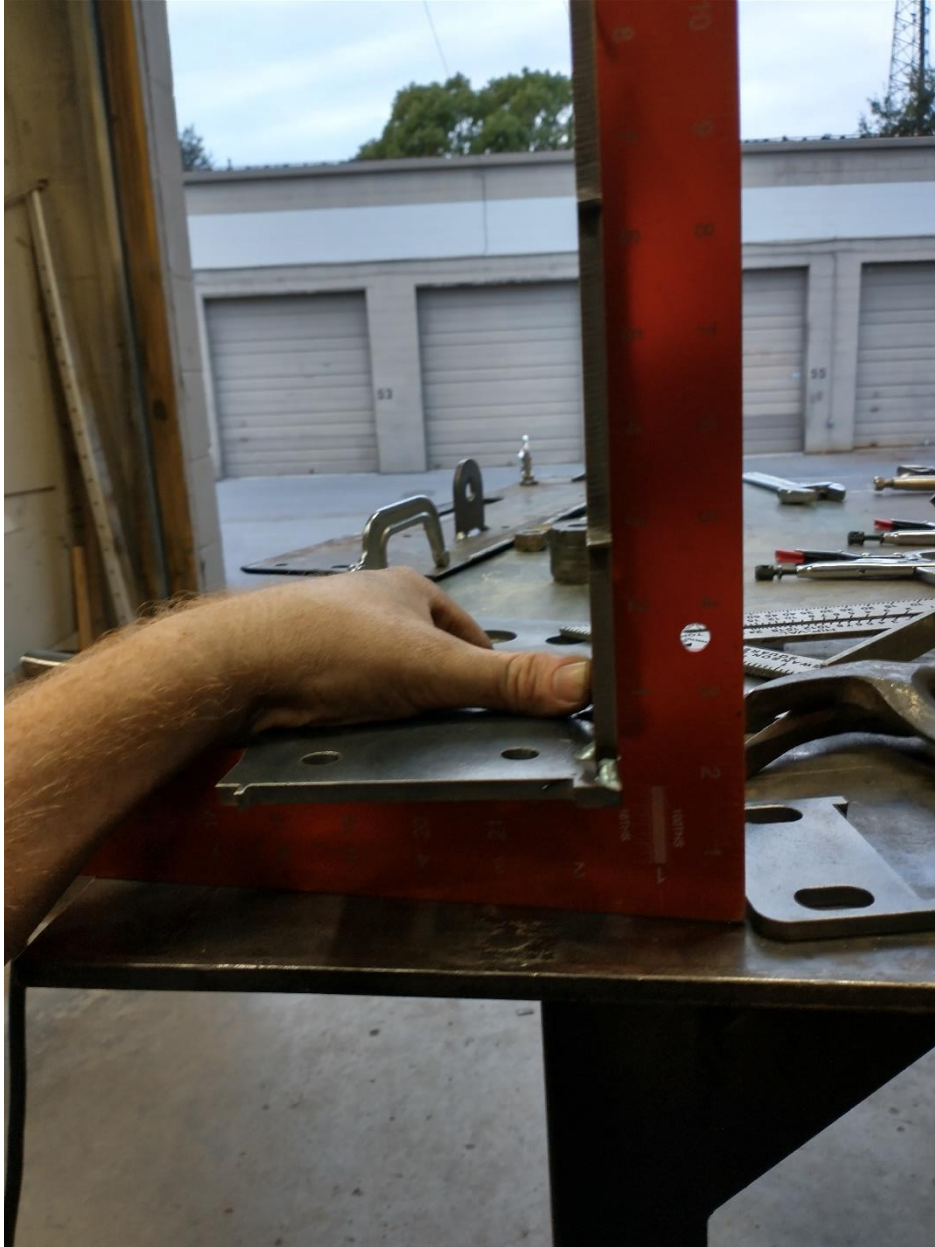


**GENERAL GREEN  
MANUFACTURING**





Checking that it is square





Next is the shorter side piece.



The bottom edges should align.





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MANUFACTURING**

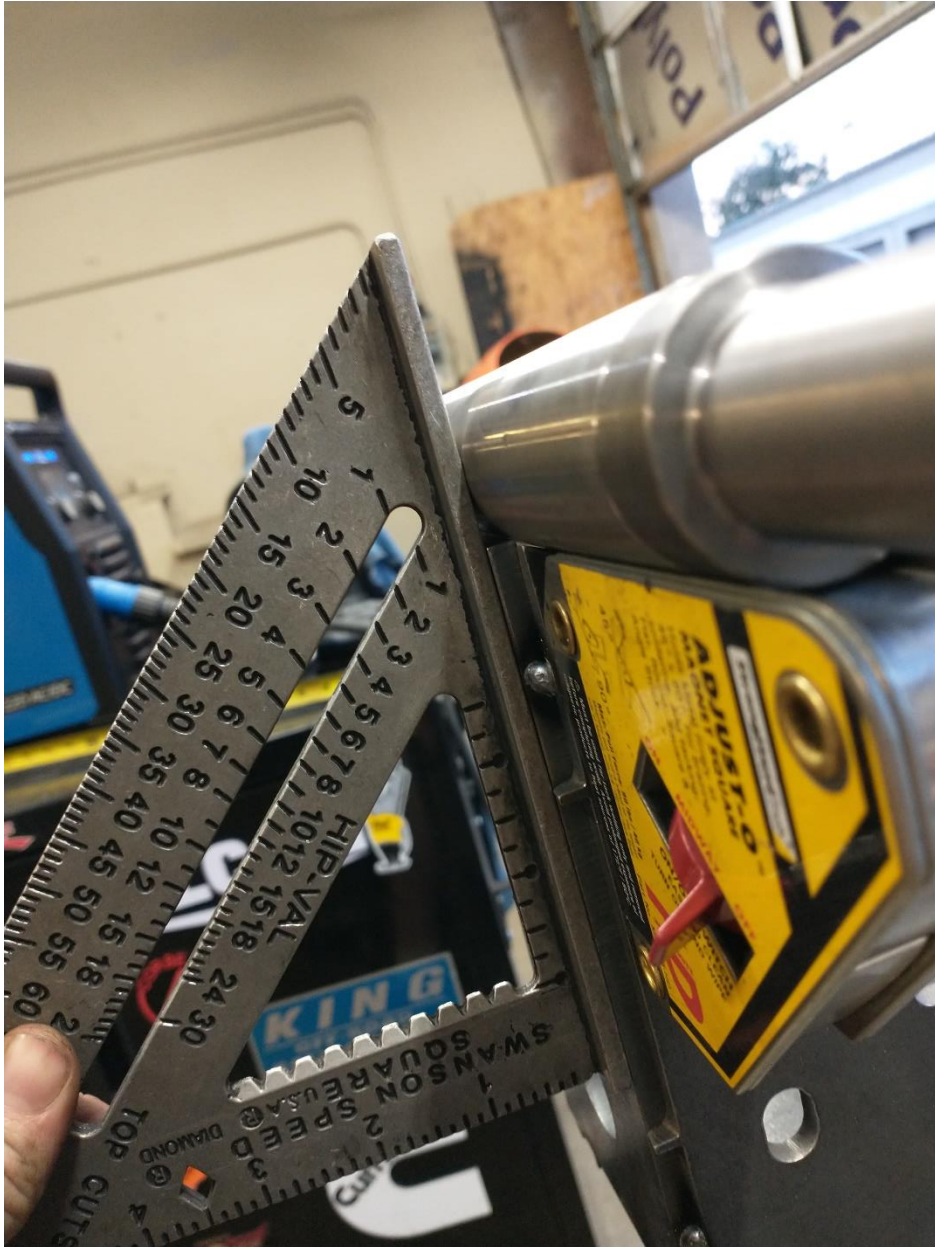




Now it's time to set the spindle on. The bottom of the spindle should align with the bottom of the plate.



The spindle should be square (or very close) with the side plate.





Tack the spindle into place. Add the larger plate on the back and push it against the assembly.



Check that the spindle is square.







Flip the assembly over. The bottom plate lines up with the edges.



**GENERAL GREEN  
MANUFACTURING**





Tack the outside edges first to prevent the heat from pulling the plate up.





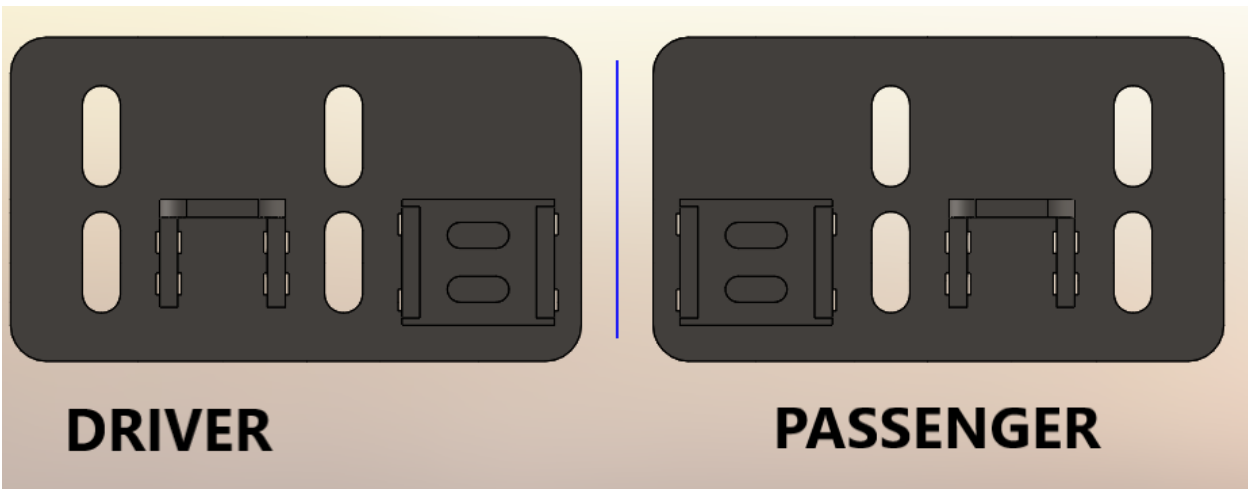
The bottom corner of the spindle needs to be relieved to fit LC plastics. Cut approximately a 5/8"x5/8" triangle out. Do not cut into the weld or plate.





### Bumper Mount

NOTE a passenger side kit needs to be assembled mirrored to these steps







First set the square tabs in.



Align the latch plate





Clamp



Tack the outer edges.





Remove the latch plate, and weld the tabs in. Do not weld the outside as it may interfere with the bolts.



Re-clip the latch plate and weld.





Set the triangles into the slots. Notice the hole is offset from center. It should be further out from the mounting plate.





Tack the edges and ensure they are flat. Next weld inside edges. Spatter is the enemy.



Then weld the top to the triangles. You will have some grinding to do.

**GENERAL GREEN  
MANUFACTURING**





Weld the heads of the provided M12 bolts into the tire mount plate.







Congrats! Now you are ready to do the fun part. Get to welding! Don't forget to adjust your welder's setting when welding on the spindle sleeve. Take your time and enjoy!

Download our installation instructions from our website at [generalgreenmanufacturing.com](http://generalgreenmanufacturing.com)

Revisions		
Initial Release	11/18/22	
Rev 1	5/23/2023	Added features from Gen2 design, added driver/passenger notes