

Kitbash A Marx Vanderbilt Tender

By John D LeBaron

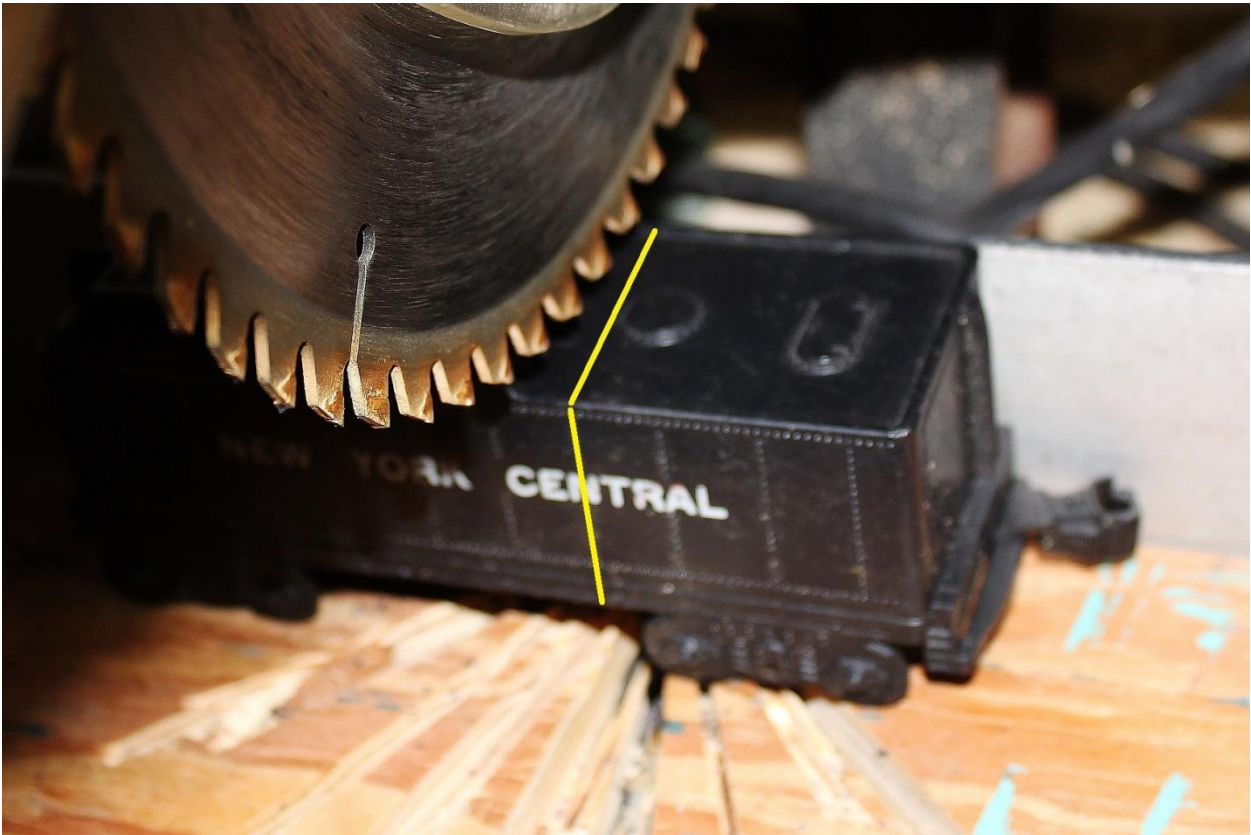




I had quite a few inquiries about building a Vanderbilt tender so I thought I'd share step by step as this will probably be the last one I do for a while. It's not difficult, just time consuming (which is why I don't build them to sell) You'll need a 4wp tender, 8wheel csOX tank car, a dremel with cutting wheels and sanding wheels, a chop saw, and a permanent marker. This is as far as I got this evening, will continue to post as I build it.



First thing I do is cut the tender with the chop saw just to the left of the round cap (where the yellow line is). Don't cut the faux wheels off until after you make this cut as they help keep the tender level.



After the tender is cut, then cut the faux molded wheels from each side with a dremel and thin cutting wheel. Cut about on the red line. Leave a little "wiggle" room as the cutting wheel tends to melt the plastic a little as it cuts. Then sand the cut smooth with the bottom of the tender with a round sanding wheel. Use the chop saw to cut the angle cut. Draw a line with your permanent marker from just above the lettering to the rivet line (the one that goes through the "R" as shown).



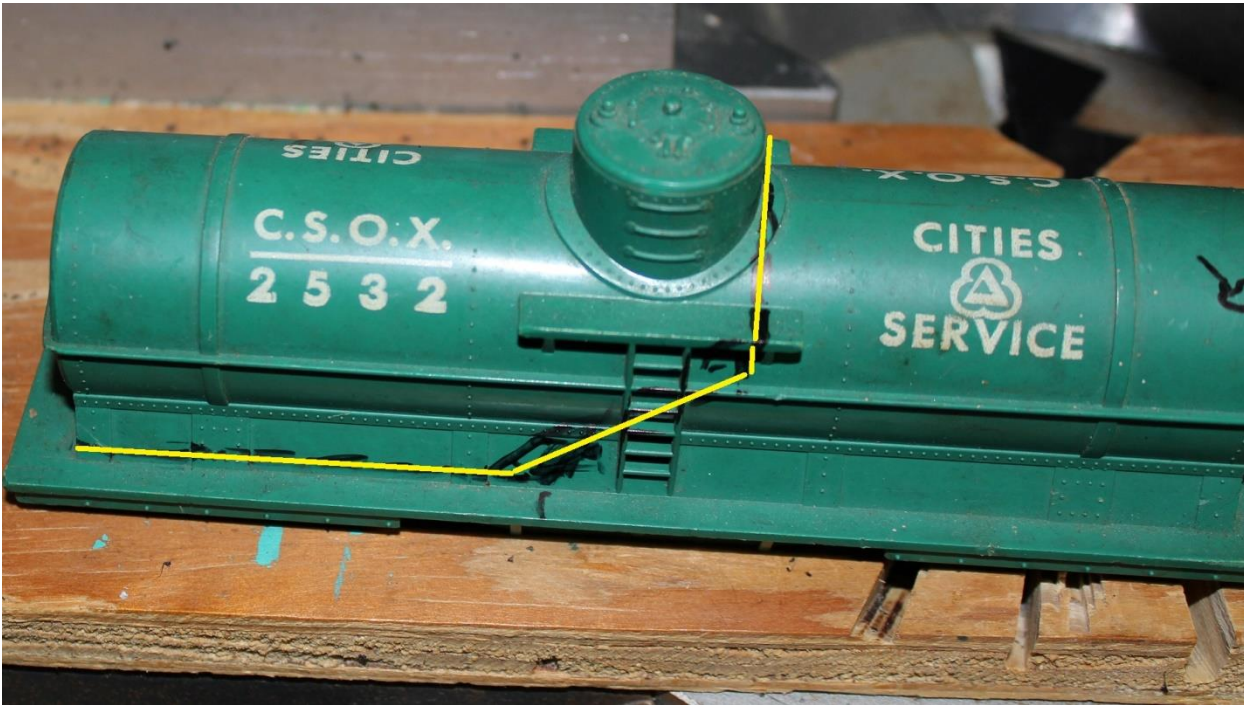
This is the complete coal hopper part of the tender.



Line up the hopper with the tank car, then use the permanent marker to trace your lines as best as you can.



The yellow lines show where the cut should be made.



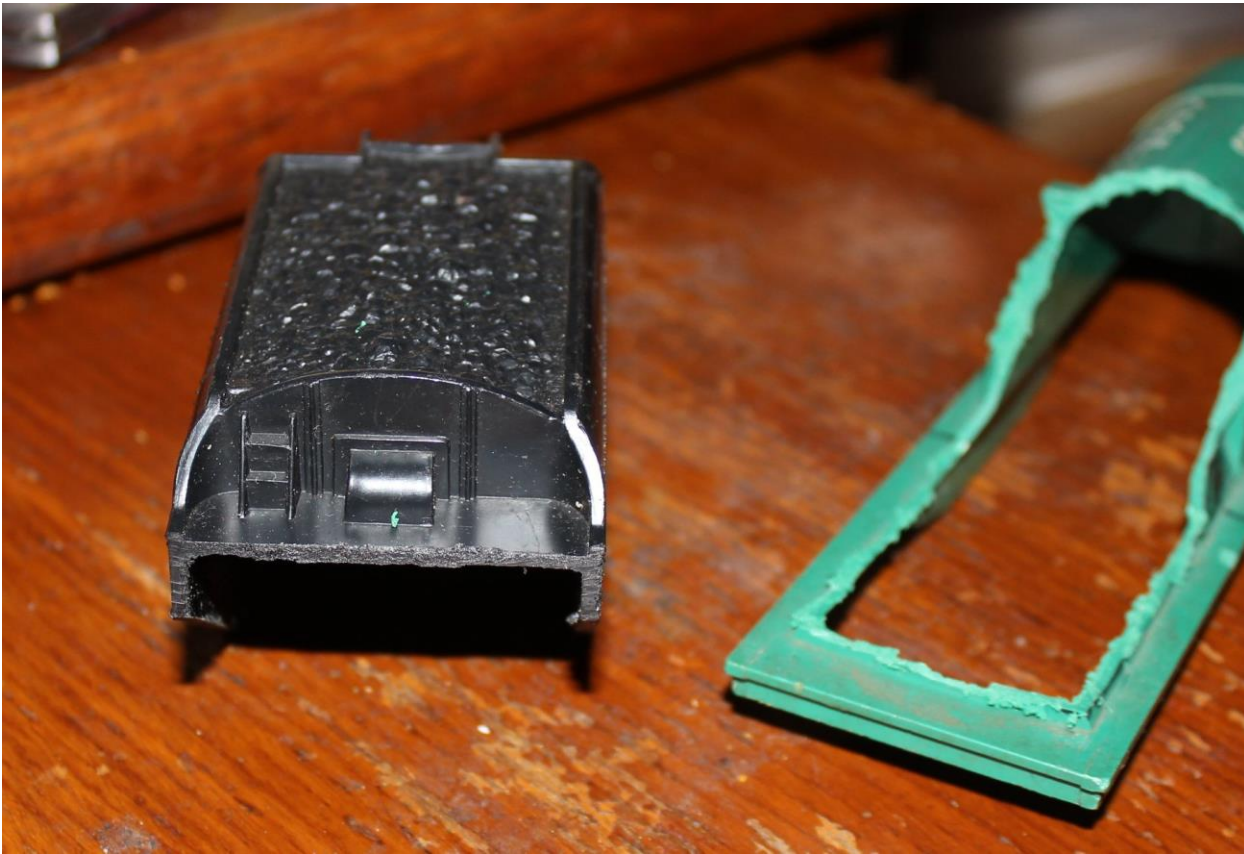
I use a larger diameter wheel and cut from the back side of the dome. Make this cut as close to the dome as you can and as straight across as possible.



I use a thinner cutting wheel to cut the angle on the sides and around the frame, Be careful as the frame can be broken quite easily at this stage.



Back side of the coal hopper. The left side angle is a little bigger so I'll use a file to even it with the right side.



Don't sand either of these ridges off, the cat walk sits on top of them. The next step is to remove the molded ladder from each side by first scraping it with an Xacto knife, then sanding it smooth. I'll work on that tomorrow

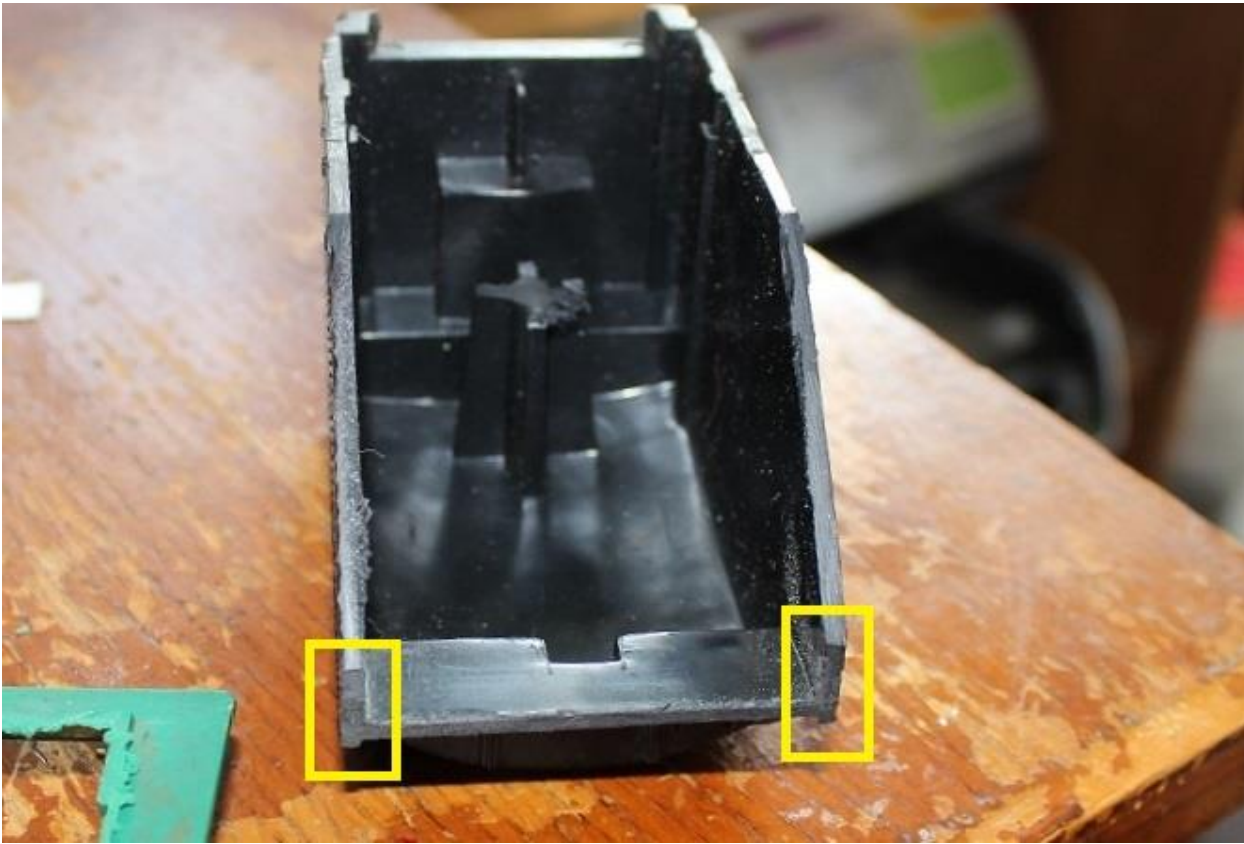


Continuing with more steps to the Vanderbilt tender build, I'm not sure how to group this with the first post but possibly and administrator will. Read the instructions on all the photos first for best results!

Now that the pieces are cut, time to fit, sand & trim.



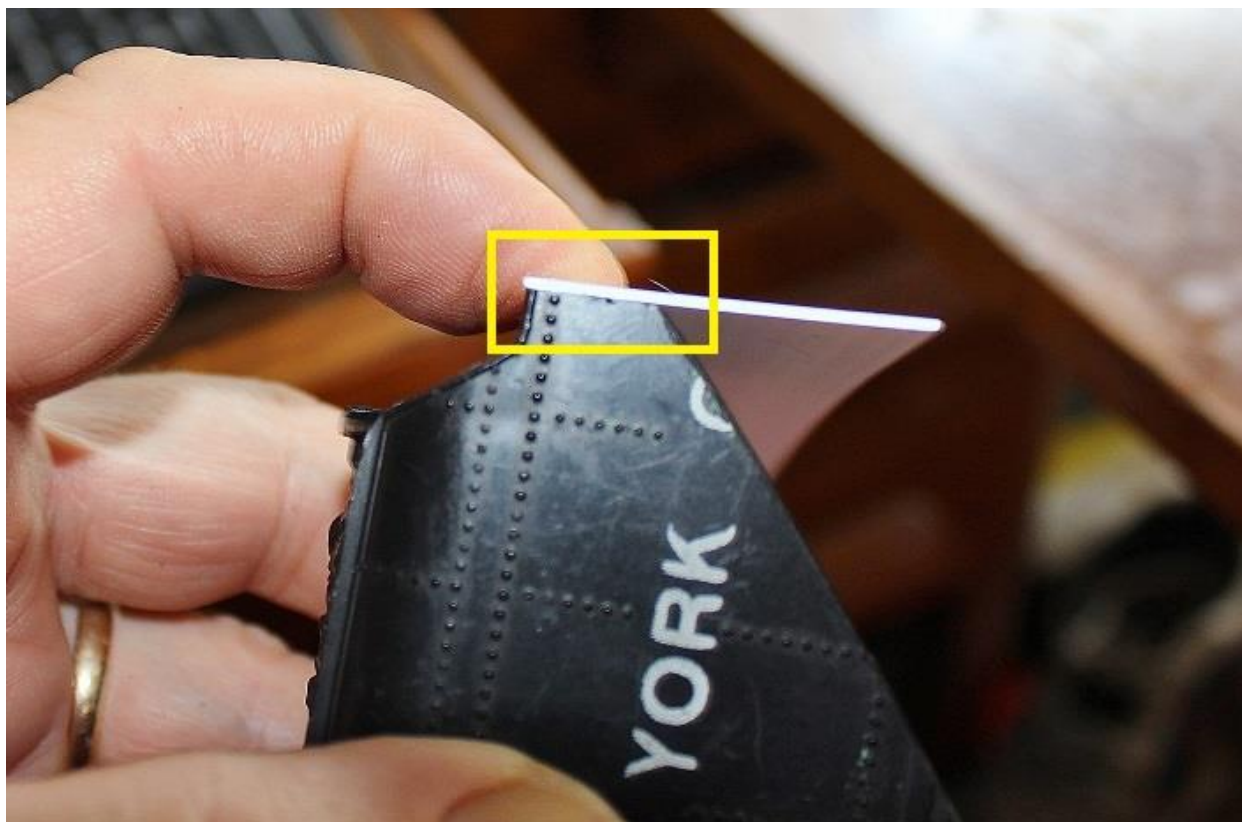
The two areas in yellow should be the same size, if they aren't, sand the larger sloped side till they are



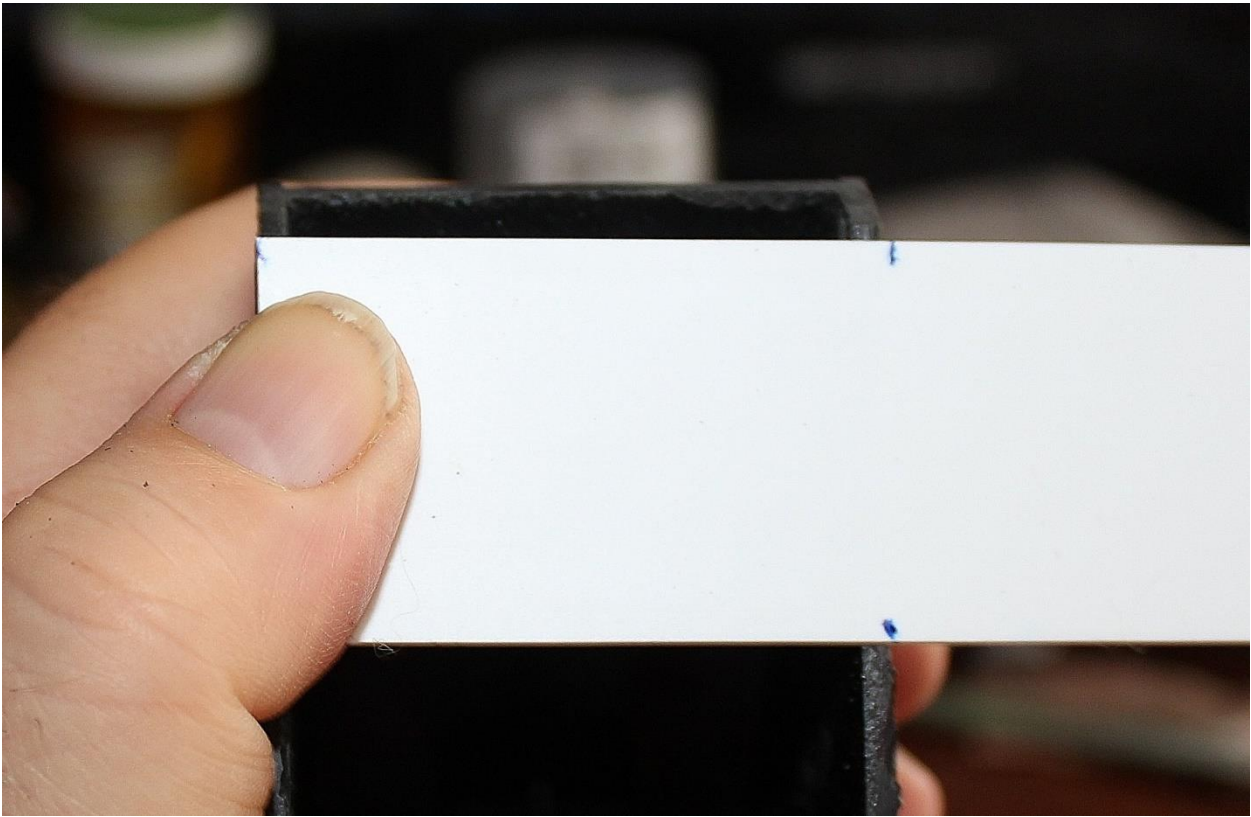
Line up the hopper and the tank. Make sure there's enough gap between the tank & the hopper for the back, I used a piece of the stock I intend to use to make the back to measure. If the space is too small, file the back of the hopper till there is.



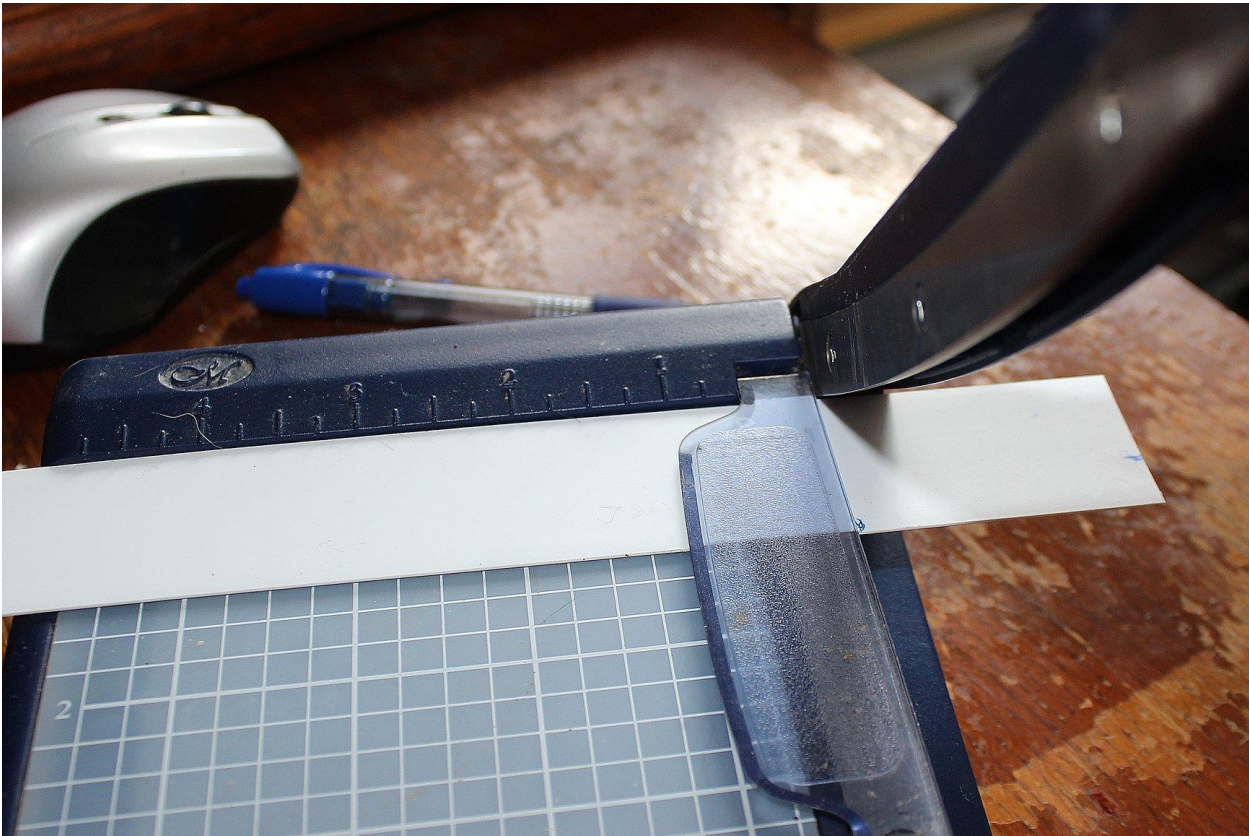
Line up the styrene strip to make the shorter piece first. I used plastruct styrene strips #90642 (.030x 1 1/4") for mine. After marking both sides, cut with a straight edge & utility knife or a guillotine type cutting board. I have one I bought for scrap booking that works great.



Mark the larger piece and cut.



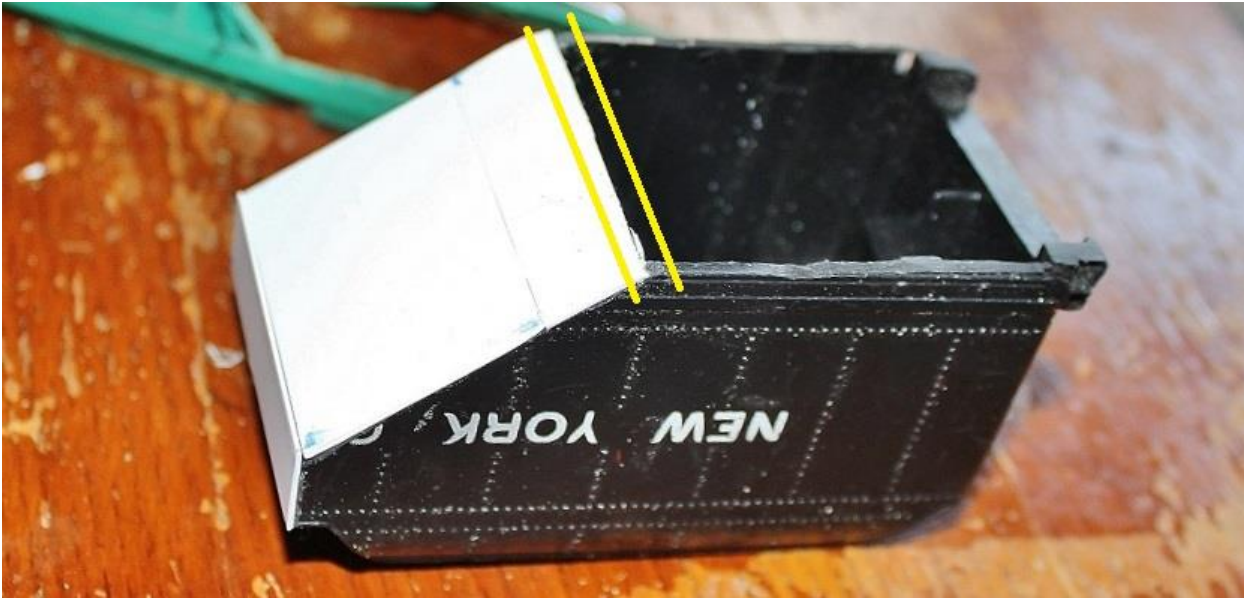
A cutting board meant for scrap booking works great for this and cutting pin striping or decals.



Glue the smaller piece to the hopper first.



Next glue the larger piece. I decided to make another small piece to fill in the gap in the bottom as the styrene wasn't wide enough. Sand the bottom (the area between the yellow lines) to make sure there's no high spots.



Make sure everything fits (don't glue yet!!) Sand or file any high spots. Don't worry about gaps, we'll fill those in later. Just make sure the hopper fits nicely on the frame.



I decided to keep the undamaged part of the ladder, you can also remove it if you want to. A dremel with the small sanding bit will remove the bulky parts, then trim and peel any extra away with a xacto knife, sand smooth. It's easier to fix or remove the ladder before gluing the hopper.



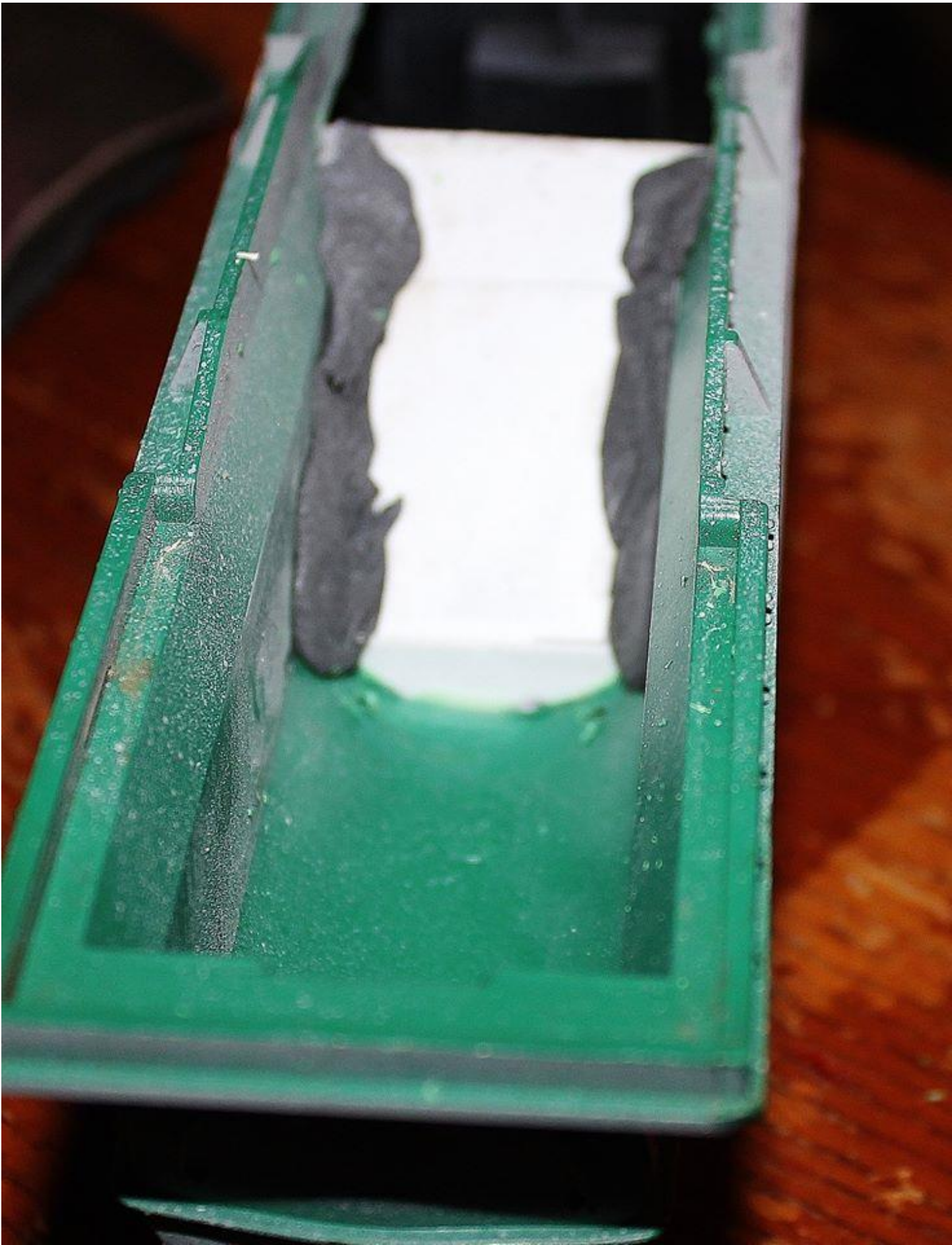
After getting the ladder sanded, glue the hopper to the tank car frame. Super glue works best as it's thinner but line it up quickly! JB Weld "Gel" superglue gives you a little more time.



As I said, don't worry about gaps on either side, we'll address them as soon as the glue is dried good!



Once the super glue dries, turn the shell over and fill the gaps between the tank and the coal hopper. I use jb weld steel stik. It sets up quickly and adds weight to the shell. From inside the shell, push the putty through the gaps then turn the shell back over and smooth out the putty as smooth as you can. This area is difficult to sand so get it as smooth as you can. Make sure not to get any putty in the grooves that hold the shell to the frame.



The steel stik sets up quickly so smooth it out quickly and it won't need sanding. Fill in any small gaps with squadron putty or whatever your favorite filler is. Sand it gently. Try not to sand away any of the molded detail if you can



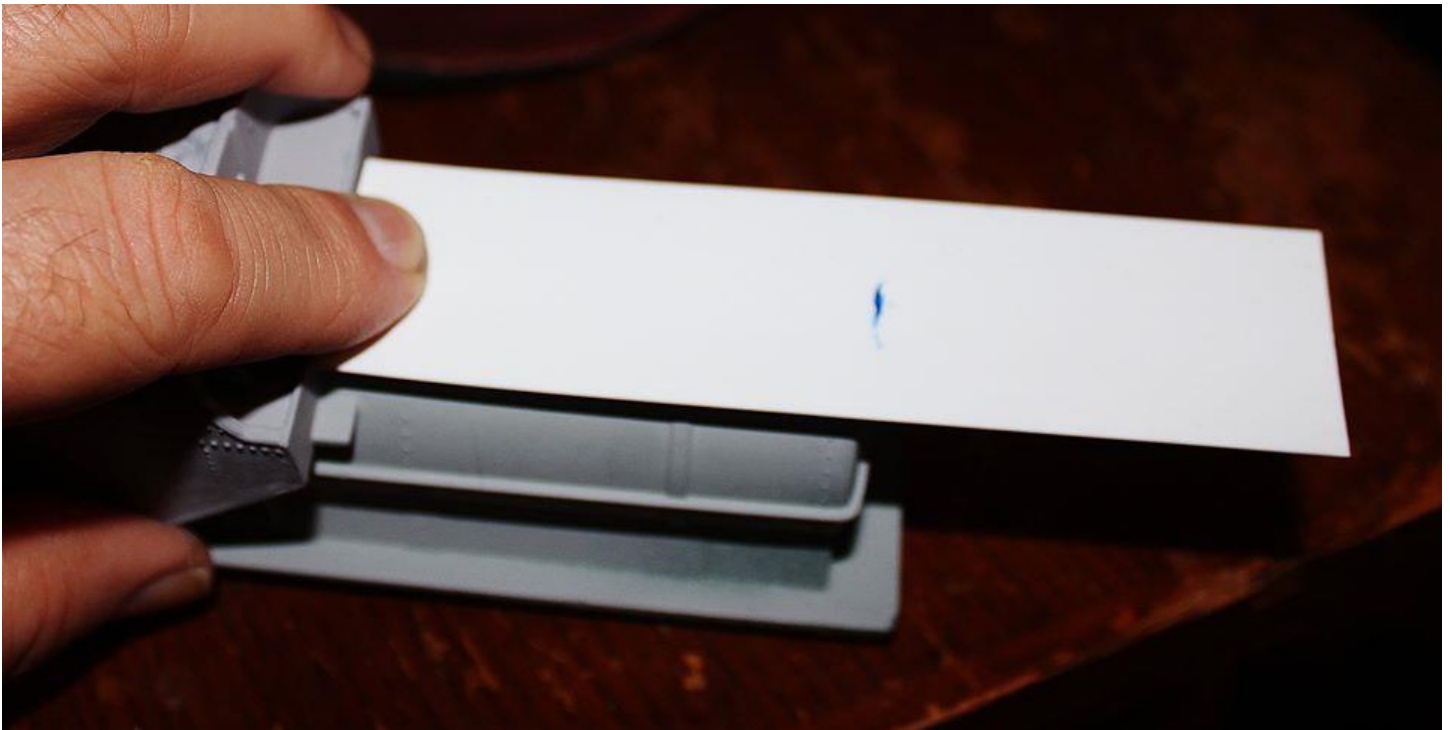
Don't forget to fill in the gap in the front with steel stik. After it cures, you can sand it smooth and prime it. I use rustoleum 2 in 1 primer/filler. Works great and fills in or smooths out surfaces.



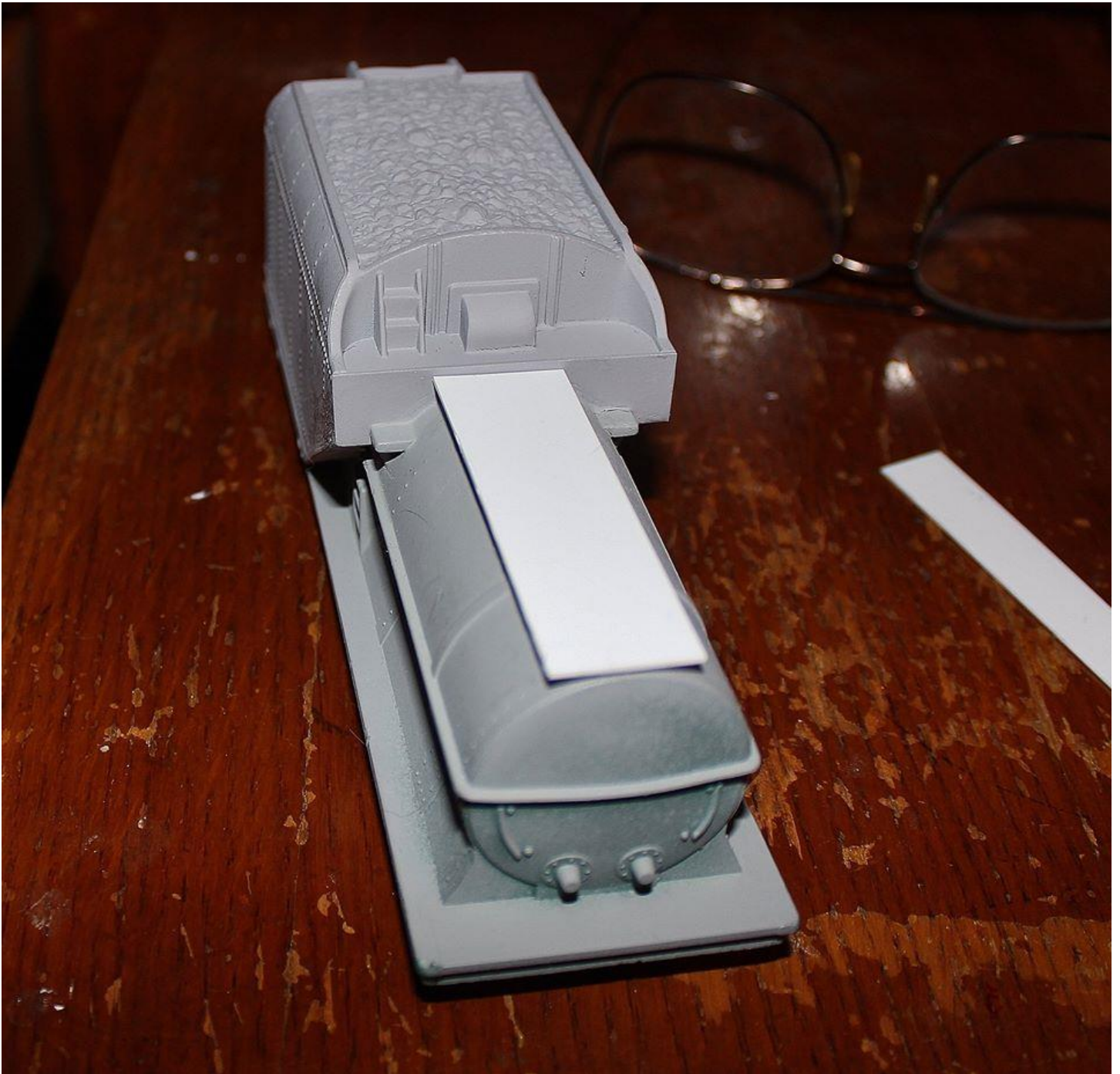
Lightly sand away the lettering, being careful not to sand off the molded rivets. Then cover with the Rustoleum primer and it will smooth out any sanding marks or scratches.



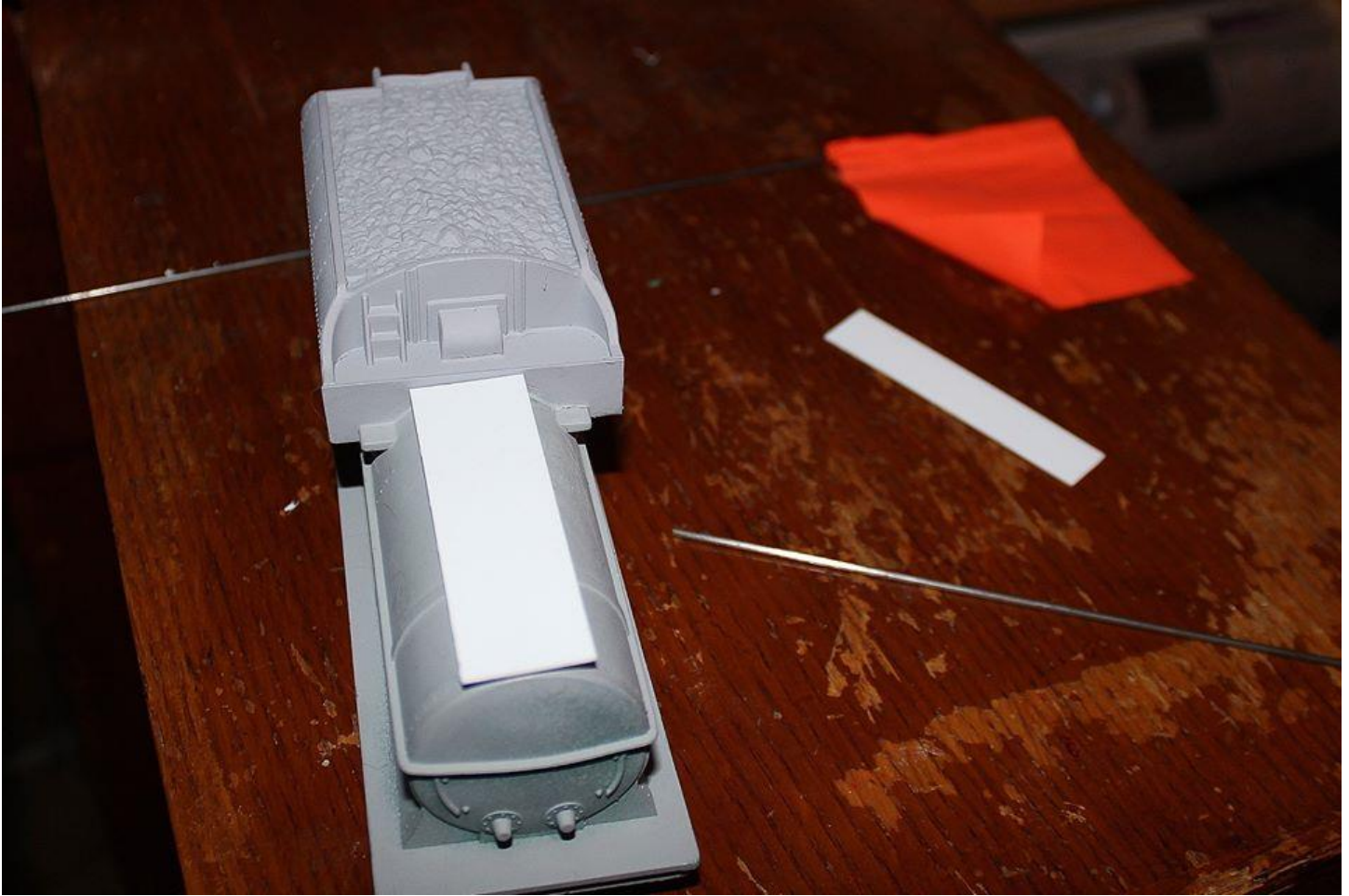
The same styrene I used to box in the coal hopper is what I use for the catwalk. Measure and cut it to length, then cut the width you like (mine are about 5/8" wide).



After cutting it to the width you like, super glue the catwalk in place, you'll have to eyeball it and get it as straight and even as you can.



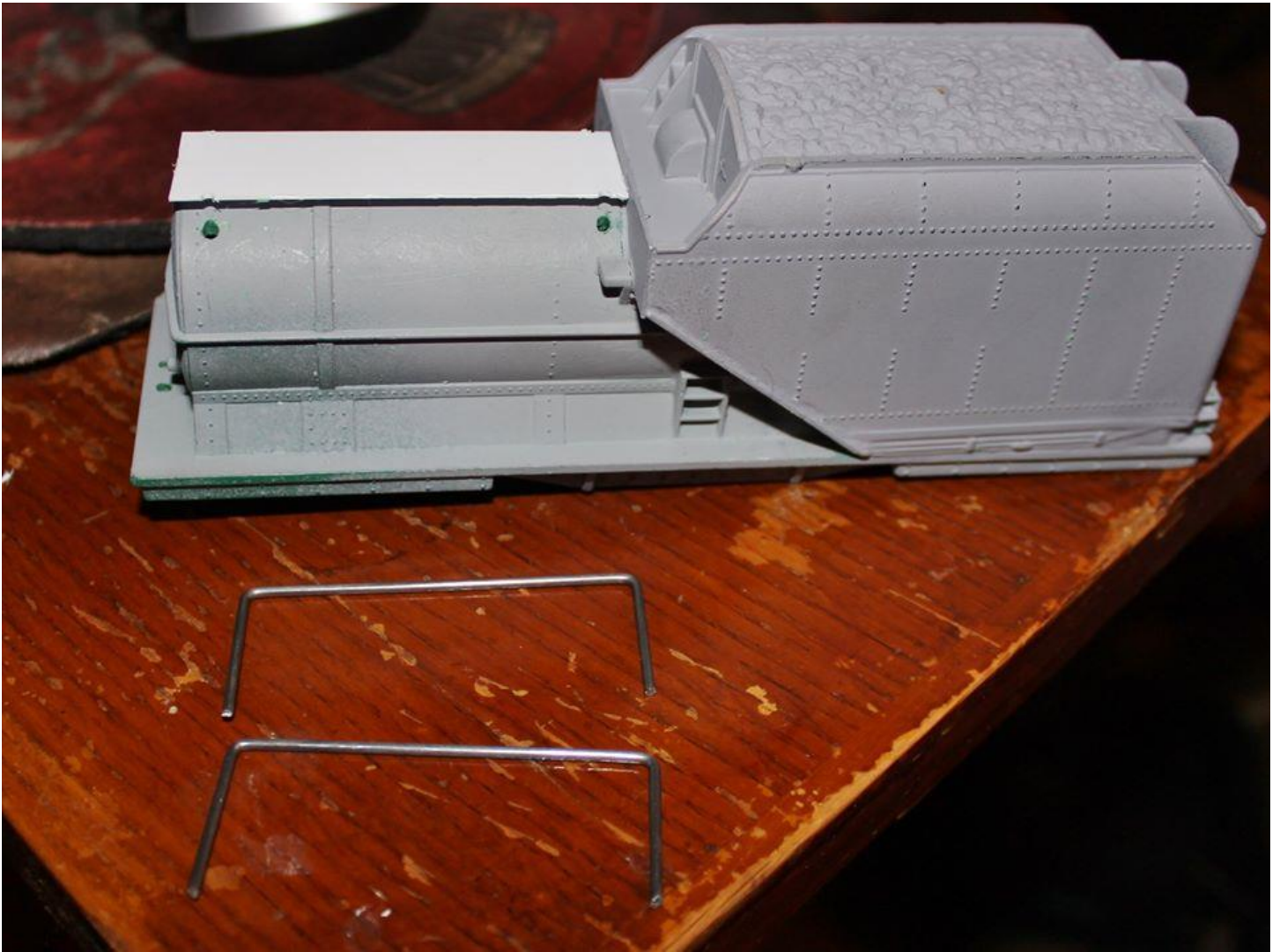
I fabricate the railings by using the wire from orange marker flags. It's identical in size to most of the railings marx used anyway.



I drill my railing holes first, then bend the wire to fit, I don't know what size bit I use, I eyeball it by lining the base of the bit up with the wire.



Railings bent and cut to fit.



The ladder is a repro from Grossman, the same one used on the 3 dome tank cars & deluxe crane. You can use the two molded drain spouts at the bottom of the tank as a guide, drill the holes for the base of the ladder just to the inside of each of the drain spouts. I don't know what size drill bit I used, I just fit them by holding the bit next to the leg of the ladder to eyeball it, same with the railings. Remove the railing and the ladder for further priming and painting. Decal, clear coat, then glue the ladder and railings in place! All that's left once the shell is complete is to decide which trucks you want to use. The original tank car frame will fit right in but only goes in one way so make sure you get the tab & slot coupler for the engine on the right end! I will be put tab & slot on both ends of mine so that won't be a problem.



For those following this project, I added the rest of the photos and descriptions that should help you finish the project. The only step left is for you to decide what trucks you want to use on it. The original tank car frame will fit, just make sure to get the tab and slot coupler on the front end as the frame only goes in one way.