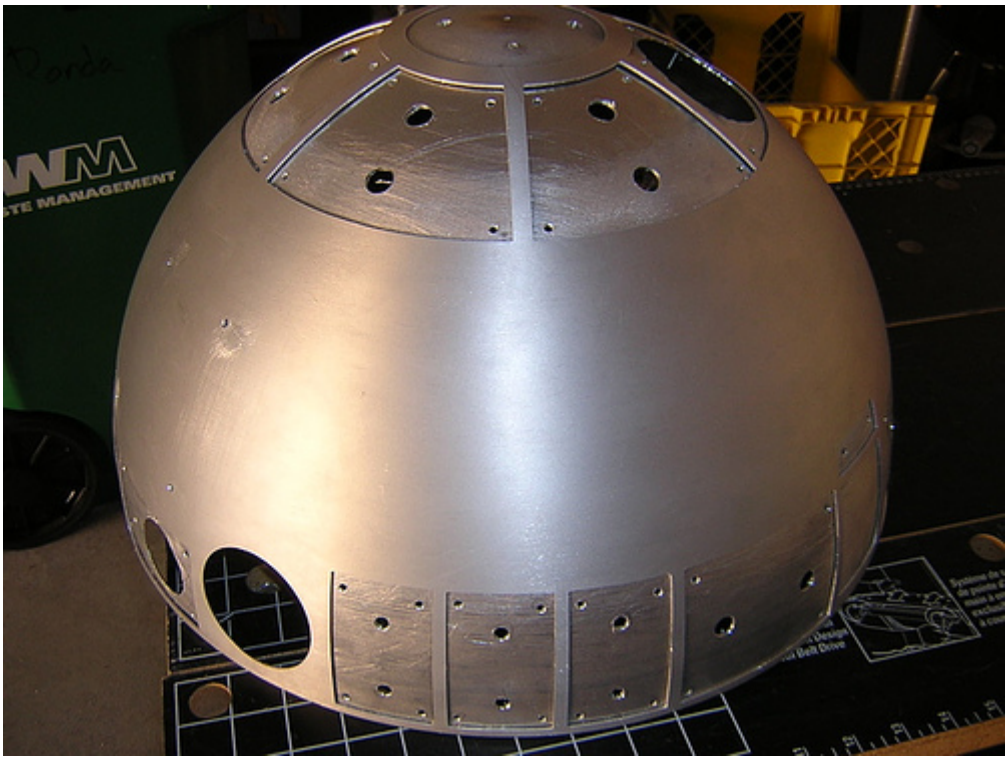
SATURDAY, APRIL 01, 2006

Primed Dome Ring, Drilled Dome Panel Holes

In preparation for painting the top half of the dome ring, I applied a couple of coats of primer, lightly sanded with 400 grit sandpaper, and then added another coat of primer. I'll do the blue tomorrow.

Next I plugged R2's head full of holes, sixty-nine to be exact, underneath where the panels will go. These holes will facilitate removal of the panels in the future should I ever need to repaint them.



posted by Victor Franco at 11:00 PM 2 COMMENTS

Giving Up

I woke up this morning and asked myself, "What are you doing? You're a grown adult, and here you are making a huge, expensive toy!" My friends think I'm crazy, my coworkers can't understand why I come in late and leave early, and the neigbhors hate me for the noise I make with the power tools.

The time, energy and money spent on this could be going toward so many other things. I don't need the stress anymore. I want this thing out of my sight so I can just forget about it. And the daily blog updates? What am I, nuts?

Phew. With that out of the way, all that's left to say is....

APRIL FOOLS!!!!

Sorry, I just had to do that. More updates later. ;)

posted by Victor Franco at 11:49 AM 0 COMMENTS

SUNDAY, APRIL 02, 2006

Painted Dome Ring & Large Data Port

I painted the dome ring and large data port today. The dome ring still has the masking tape on the top and bottom, so it's hard tell what got painted. I'll take

the tape off tomorrow and take another sneak-peek at everything put together again.

posted by Victor Franco at 5:24 PM 0 COMMENTS

MONDAY, APRIL 03, 2006

Applied Foil Tape to Eye, Battery Boxes Arrive

Now that the paint is dry on the dome ring and large data port, I was able to place them back on the droid.

I finished up the radar eye tonight by using an Xacto knife to cut some thin strips of foil tape and applying them to the grooves in the radar eye.

Craig's awesome PVC battery boxes arrived today. There's no way I would have been able to make these myself.

posted by Victor Franco at 9:35 PM 2 COMMENTS

One Year Ago Today...

Today marks the one-year anniversary of when I unsuspectingly went to Walmart to check out the Episode III Star Wars goodies. Who happened to be there, but none-other than R2-D2 (along with his associate, Mike Senna). Little did I know I was about to acquire a new hobby that was to keep me busy for the foreseeable future.

I actually didn't start building until July 2, 2005, but this got me going.

See How it Started.

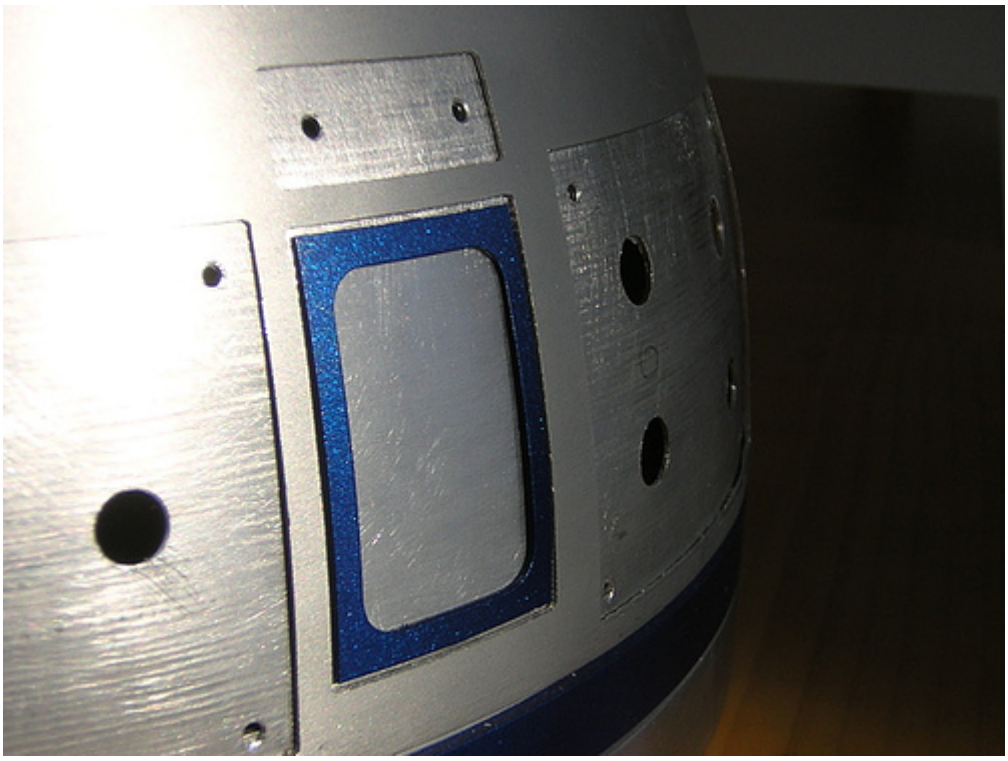
posted by Victor Franco at 7:24 AM 0 COMMENTS

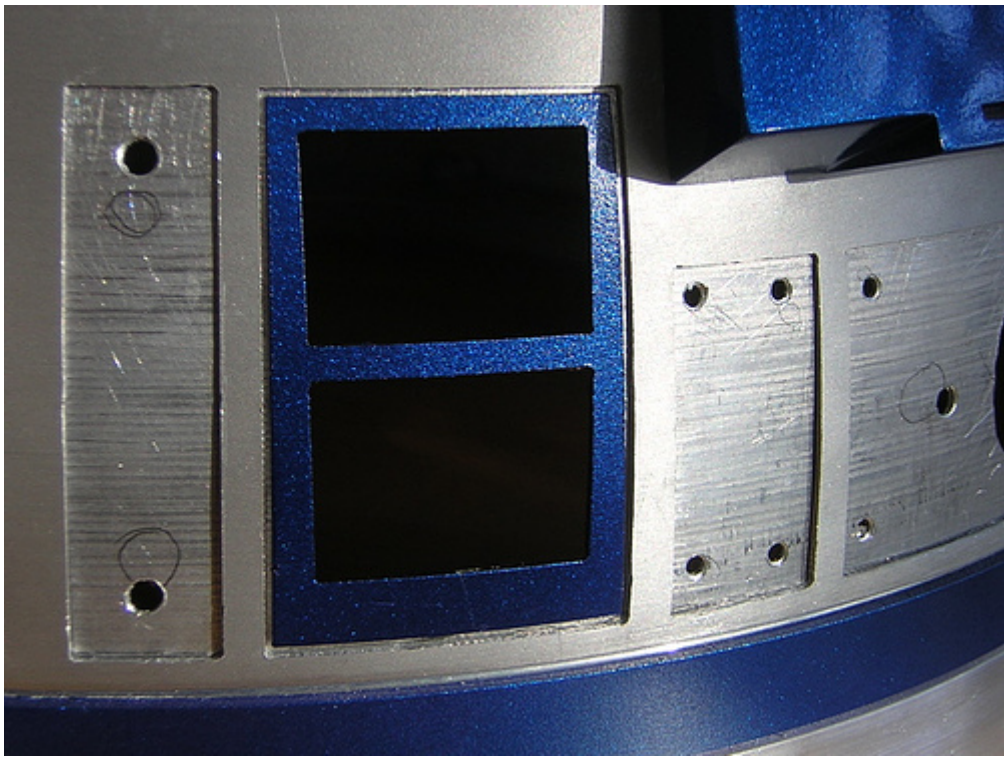
WEDNESDAY, APRIL 05, 2006

Attached First Two Dome Panels with Silicone

This morning I applied silicone to the corners of two of the dome panels and glued them onto the dome. I used the blue tape to hold them in place during the day while the silicone dried, and in the evening removed the tape.

I used silicone for these two panels because there isn't enough room for them to be backed with the double-sided tape I plan to use for the other panels. I'm still waiting for my 5 mil tape to arrive, so until it does I can't do a whole lot more to the dome at the moment.



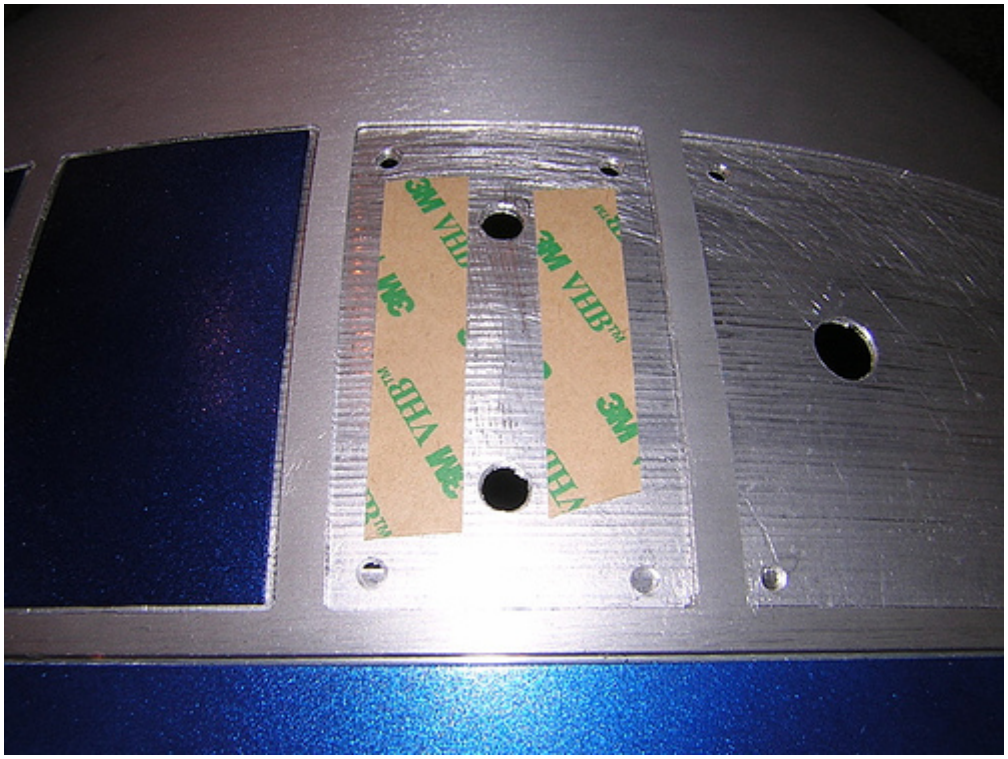


posted by Victor Franco at *10:44 PM* 4 COMMENTS

FRIDAY, APRIL 07, 2006

Attached Rest of Panels to Dome

Tonight I affixed all of R2's remaining dome panels to the dome. All but the very top two small pieces were attached with 3M Very High Bond Tape (5 mils x 1/2", clear), the other two were attached with silicone.



Once the side panels were done but before the pie panels up top were on, R2 truly looked like a "chrome-dome."

It took quite a while, but finally Phase 1 of the dome build is just about done. All that remains is to secure the eye lens to the eye with silicone. Phase 2 will involve the dome electronics and holoprojectors. I'm not sure when I'll get to those, I will probably get back to work on the legs next.

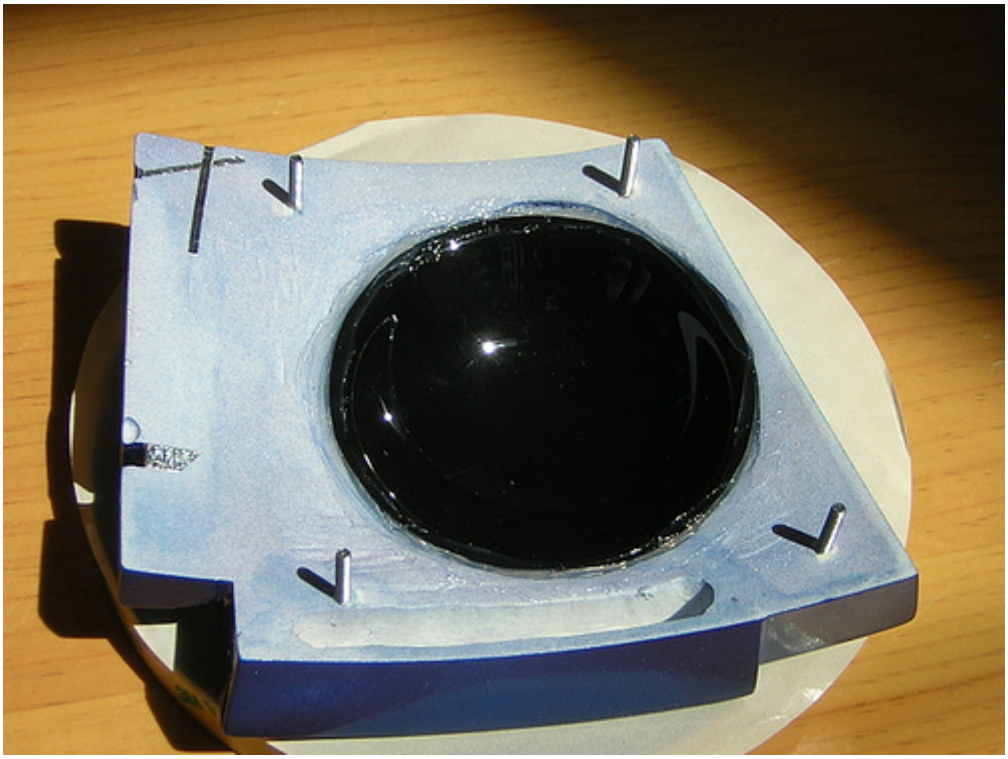
posted by Victor Franco at 11:51 PM 2 COMMENTS

SUNDAY, APRIL 09, 2006

Glued Lens Into Eye, Dome Phase I Done

Today I used silicone to glue the acrylic lens into the eye socket, thus completing phase one of the dome build. Yea!

(You can see excess foil tape at the upper- and middle-right. I left it there to make it easier to peel off in the future.)



Here's what I have to show for myself thus far. A long, long way to go.

posted by Victor Franco at 10:39 PM 0 COMMENTS

WEDNESDAY, APRIL 12, 2006

Strategizing

I never like to post without having some progress to show, although I do it occasionally, and this is one of those.

Right now I'm thinking about what to do with the legs. I have PVC horseshoes (layered shoulders), but I'm planning on making my own MDF horseshoes instead, using the PVC as a backup in case I'm unsuccessful. I am going to try using the PVC as a template for routing, and make a "proper" horseshoe template out of MDF for the various layer sizes (shim layer, big layers and small layers). Then, with that template, I'll make the rest of the horseshoe layers out of MDF and glue them together.

Why would I do this? Mainly because I did a very poor job of gluing together the

PVC horseshoe layers, and they are coming apart. I'm confident that won't happen with MDF and wood glue. Plus I think I can do a better job with MDF in hiding the layers along the outer edge of the horseshoes, using wood putty, like I did on the legs.

This whole idea may be a big mistake, maybe not. Either way, I probably can't work on it until the weekend. So that's what's going on.
posted by Victor Franco at 3:07 PM 4 COMMENTS

FRIDAY, APRIL 14, 2006

Marked MDF for Horseshoe Templates

Well, it isn't much, but at least I did something related to building. I started marking outlines on MDF for building my layered shoulder ("horseshoe") template, for cutting tomorrow.

Because I want the non-shim layers of the horseshoes to match the existing legs, I used the leg template to mark the outer outline of the horseshoe template. I will use the existing PVC horseshoes to mark the inner part of the horseshoe template.

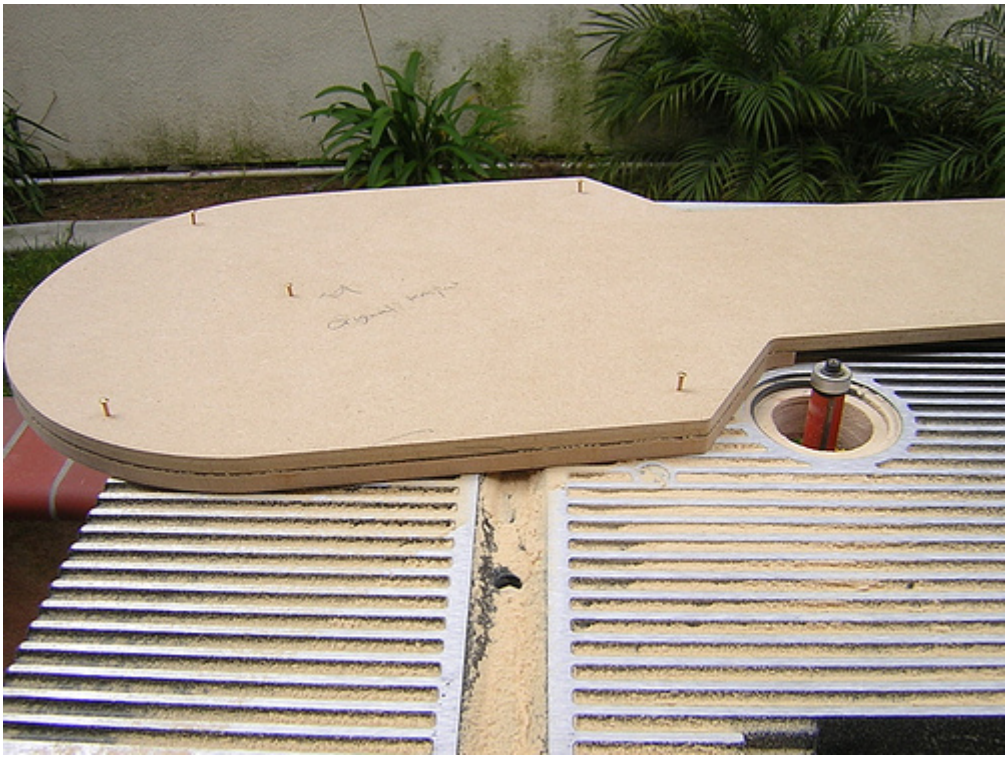
posted by Victor Franco at 9:37 PM 0 COMMENTS

SATURDAY, APRIL 15, 2006

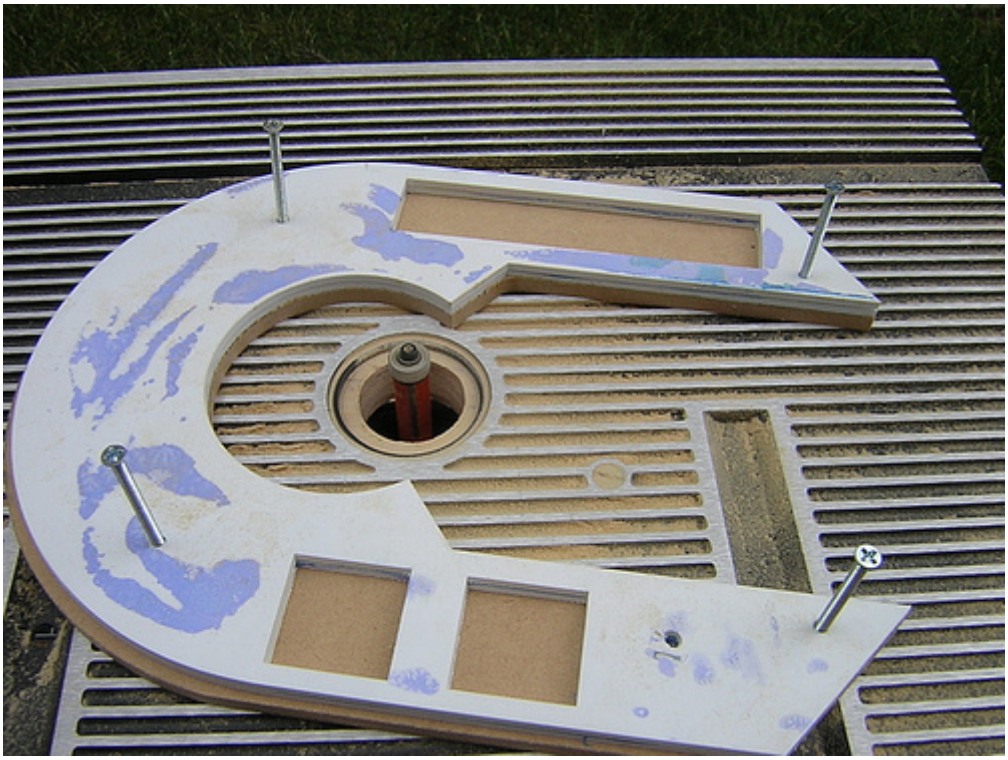
Started Cutting Horseshoe Layers

I'm finally back to building. Today I started cutting horseshoe layers from 1/8" MDF.

First, I had to make a 1/4" master template for both the large and small horseshoe layers. I did this in two phases. First, for the outside perimeter of the horseshoes, I used my original leg template that I hadn't touched since last summer. I used this template so that the outer perimeter of the horseshoes would perfectly match the shoulder area of the legs that are already built from the same template.



Next, I needed to form the inner perimeter of the horseshoe template. This was done using the PVC horseshoes that I purchased from Alex and Andy. Note that the outer perimeter of the PVC horseshoes are not an exact match of the legs, due to differences in the way they were made, otherwise I would have used the PVC horseshoe for the whole template.



Using these new MDF templates, I knocked out four small and four large horseshoe layers, enough for one leg (kind of, one of the small layers needs to be cut a bit more to serve as the shim layer against the leg). I traced outlines onto the MDF, rough-cut them with a jigsaw, and routed them down to size using the pattern cutting bit.

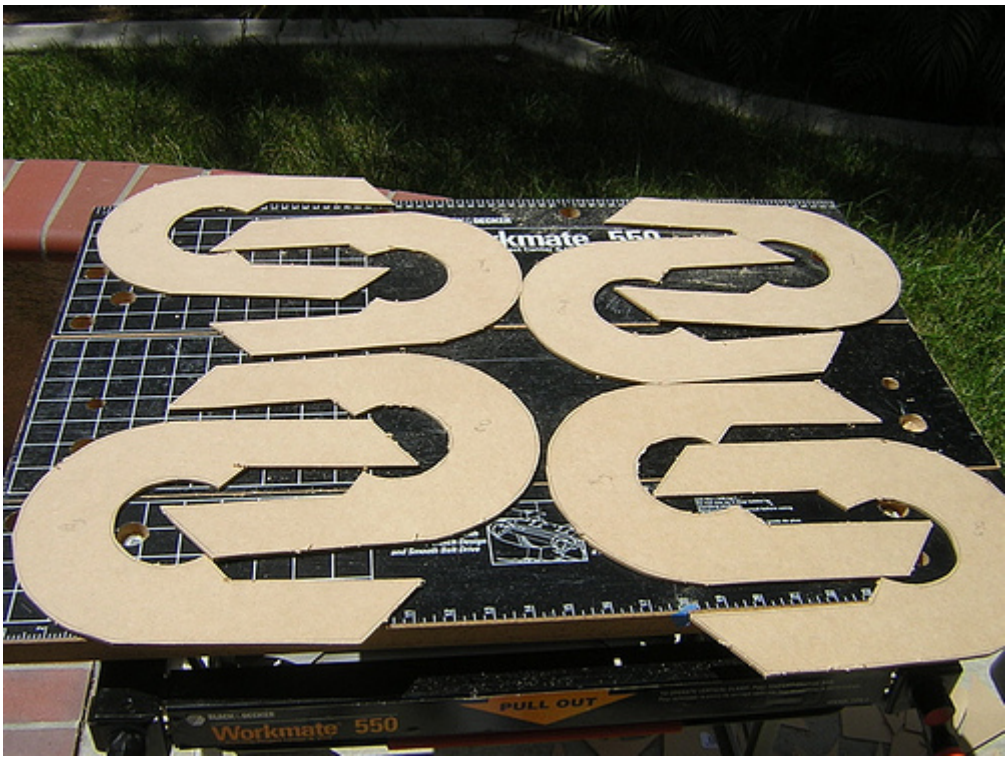
Finally, I cut the holes in the template for the shoulder buttons and hydraulics, and stacked the layers to see how they looked. This turned out a lot better than I was guessing it would. A little wood putty and sanding, and I think they just might work!

posted by Victor Franco at 11:09 PM 0 COMMENTS

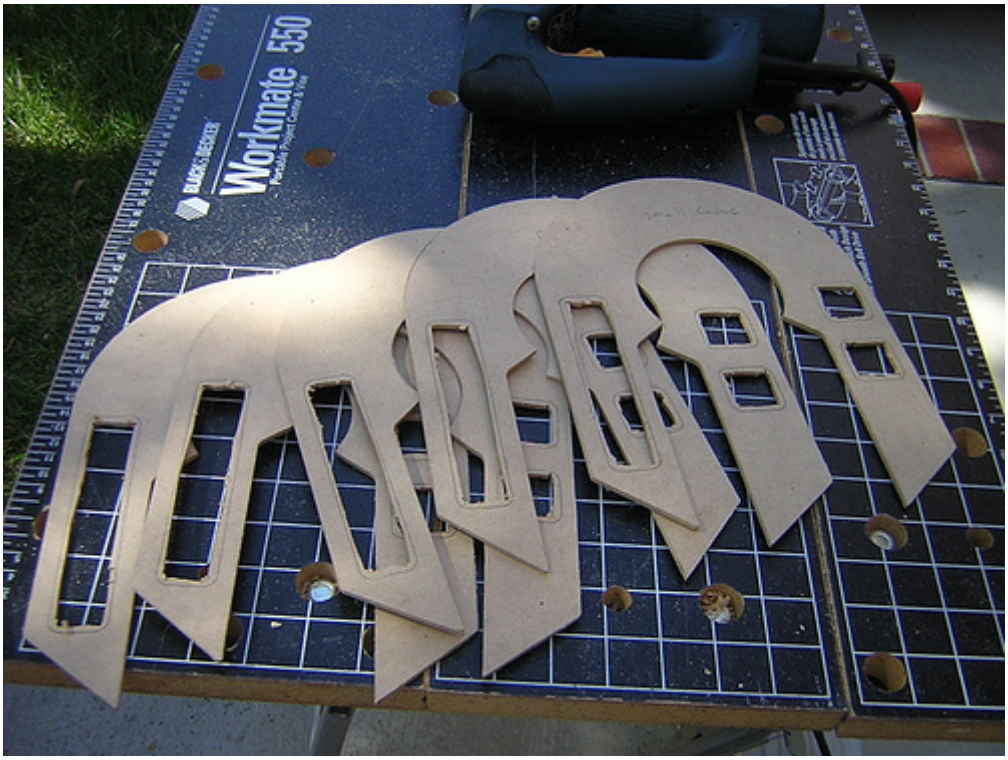
SUNDAY, APRIL 16, 2006

Finished Cutting Horseshoe Layers

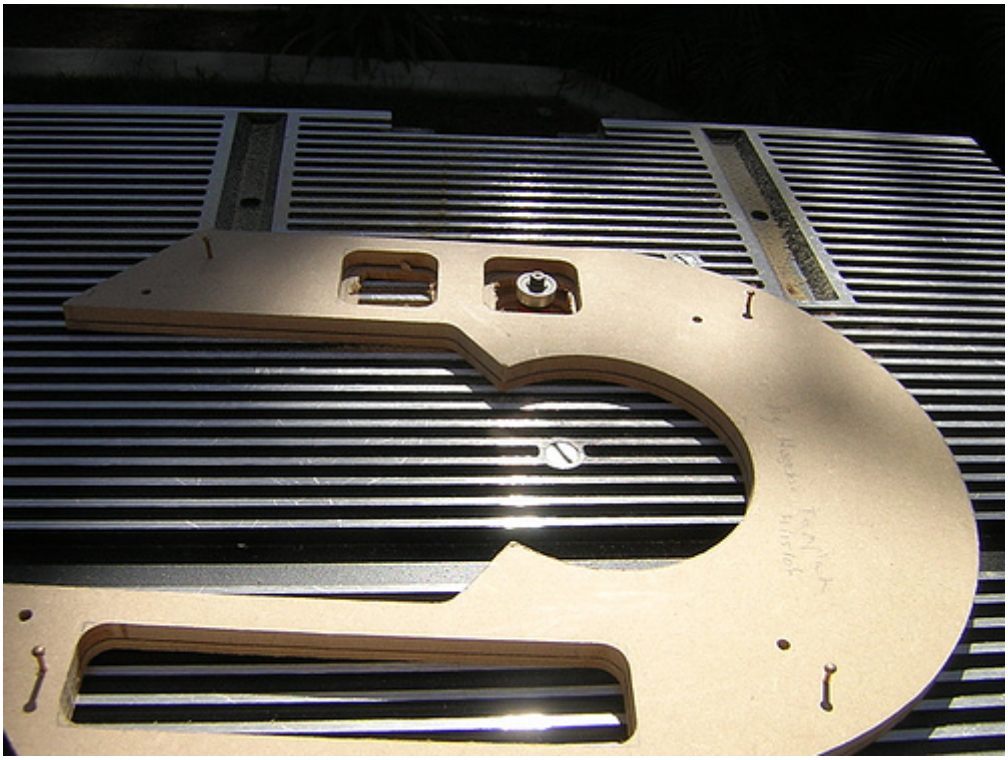
Another busy day. First, I rough-cut eight more horseshoe layers.



After routing the horseshoes down to size with my MDF templates, I rough-cut the holes for the shoulder hydraulics and buttons. This was a pain, as there's not much room to work the jigsaw.



Then I used the router to route the holes in the top layer (only) to size. The reason I only routed the top layer holes to size and left the other four layers below it rough-cut is that I'm going to glue them together first. Then I'll route the five layers glued together, using the top layer as the template. Routing each layer individually would run the risk of a mismatch from layer to layer.



It was a busy weekend, 20 layers cut in total. Four of the cutouts are templates. Two templates are for the big layer, and are mirror images of each other to allow for buttons and hydraulics to be symmetrical on both legs. One template is for the small layer, and the fourth template is for the shim layer, which I don't think I'm going to end up using. I'm not sure yet exactly how I'm going to finish the shim layer, I may end up hand-sanding the edge of the bottom-most small layer.

Next up, gluing some of the layers together.

posted by Victor Franco at 5:50 PM 2 COMMENTS

MONDAY, APRIL 17, 2006

Recut Horseshoe

One of the horseshoe layers that I made yesterday had a small break in it from pounding on it too hard with the jigsaw, so I cut a replacement this evening. I also bought some goodies at Home Depot and Lowe's tonight for aligning the layers for glue-up.

posted by Victor Franco at 9:52 PM 0 COMMENTS

TUESDAY, APRIL 18, 2006

Made Horseshoe Alignment Jig

I made the world's ugliest jig today to align the horseshoe layers, for when I glue them up. Obviously I want them aligned as much as possible, so I took some old scrap from my temporary feet, screwed down some more scrap wood as a frame around the horseshoes (screws coming up from the bottom into the frame siding), and voila, an ugly horseshoe frame. The horseshoes do fit in nice and snug, so this should do the job.

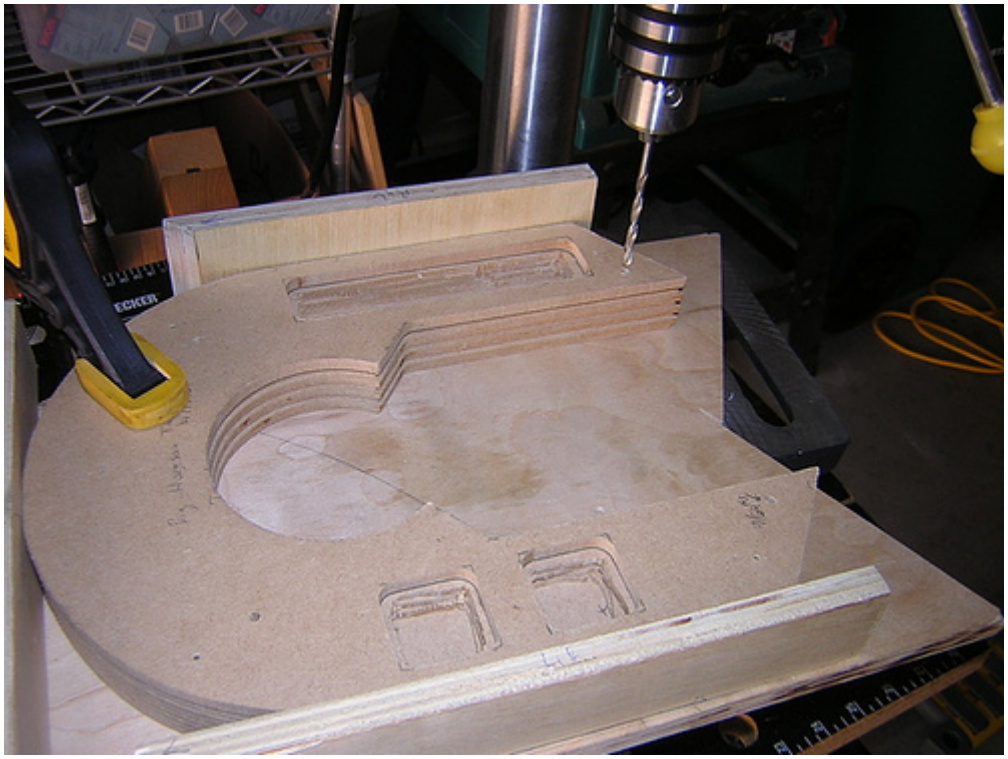
I'm going to use the drill press to drill four mouting holes through the stack of horseshoe layers, and then put 1/8" diameter vertical pegs into the bottom of the jig and stack the layers, with the pegs securing them in place. Then I can glue various layers without worrying about them sliding around when I clamp them.

posted by Victor Franco at 10:31 PM 0 COMMENTS

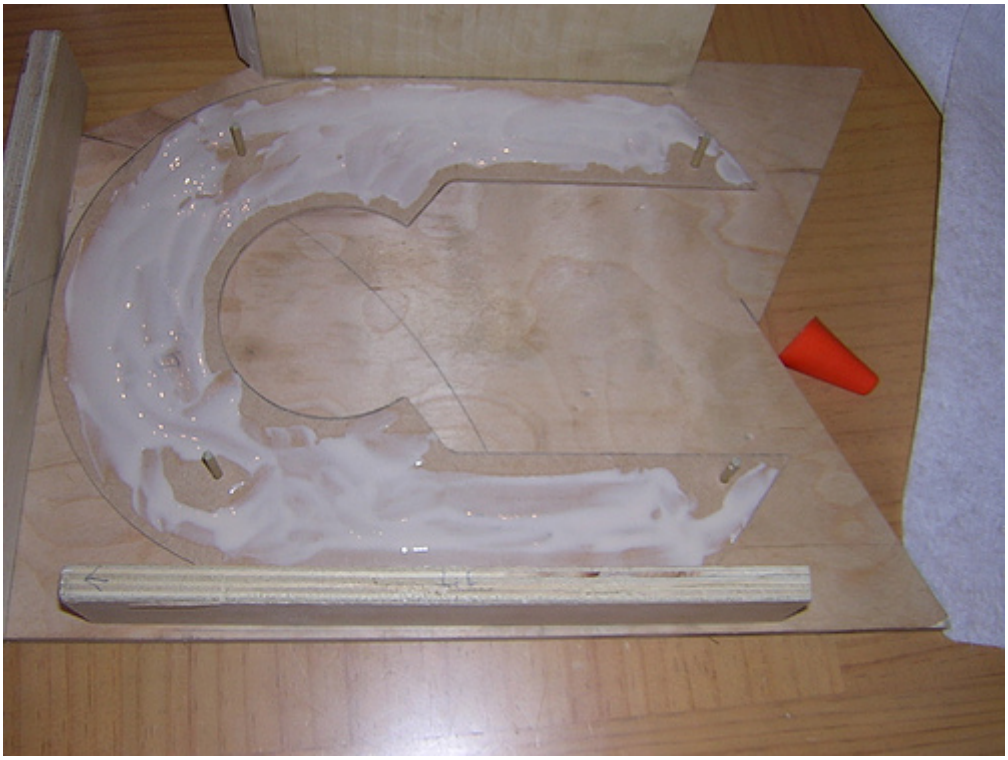
WEDNESDAY, APRIL 19, 2006

Started Gluing Horseshoe Layers

Before I could start gluing the horseshoe layers, I needed to drill four holes through all layers, except for the top layer, to accommodate the pegs on which I planned to stack them. For the top layer, a drilled a hole half way deep from the back, so as not to mar the outer surface.

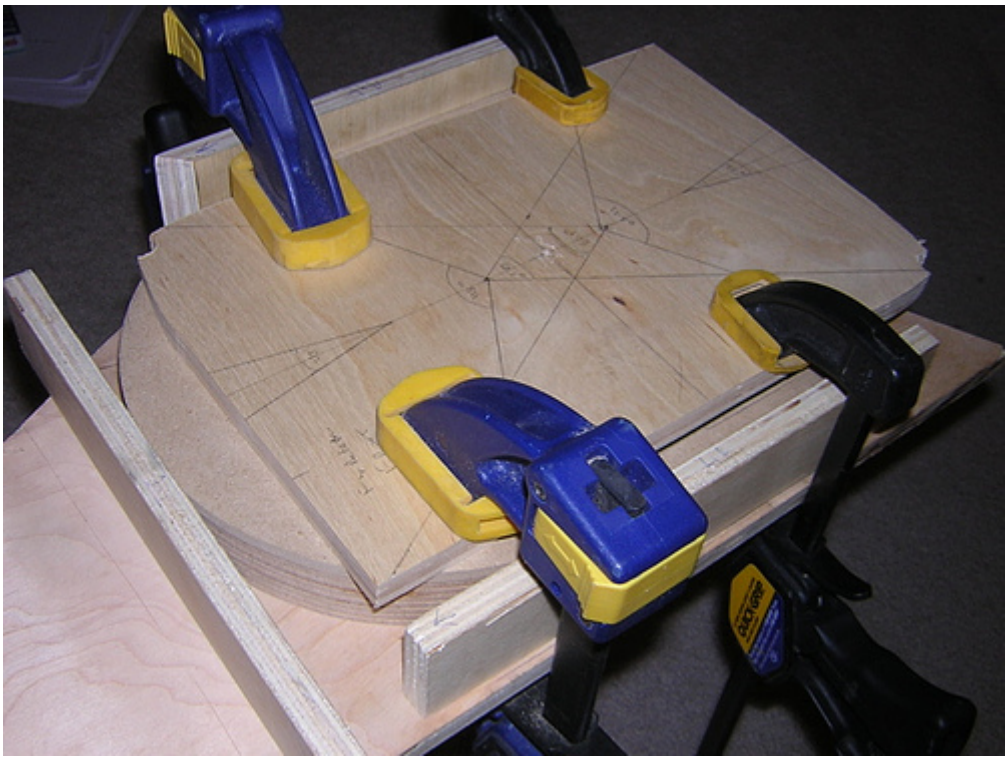


With that done, I could start stacking layers and gluing them. I left the shim layer out of the stack, since I want it to remain separately paintable (it is silver, the rest are white). Plus, I haven't sanded the shim layer's outer edges down to size yet.



I want to apply wood putty to the button and hydraulic holes and sand them before all the layers are glued together. So, counting from the layer just above the shim as layer 1, outward to the top-most layer (layer 7), I glued layers 1 and 2 together, and layers 3 through 7 together. I'll glue these two sets together once I'm done working on the holes.

I clamped everything down, using the rectangle cutout of my skirt to evenly apply pressure across the surface.



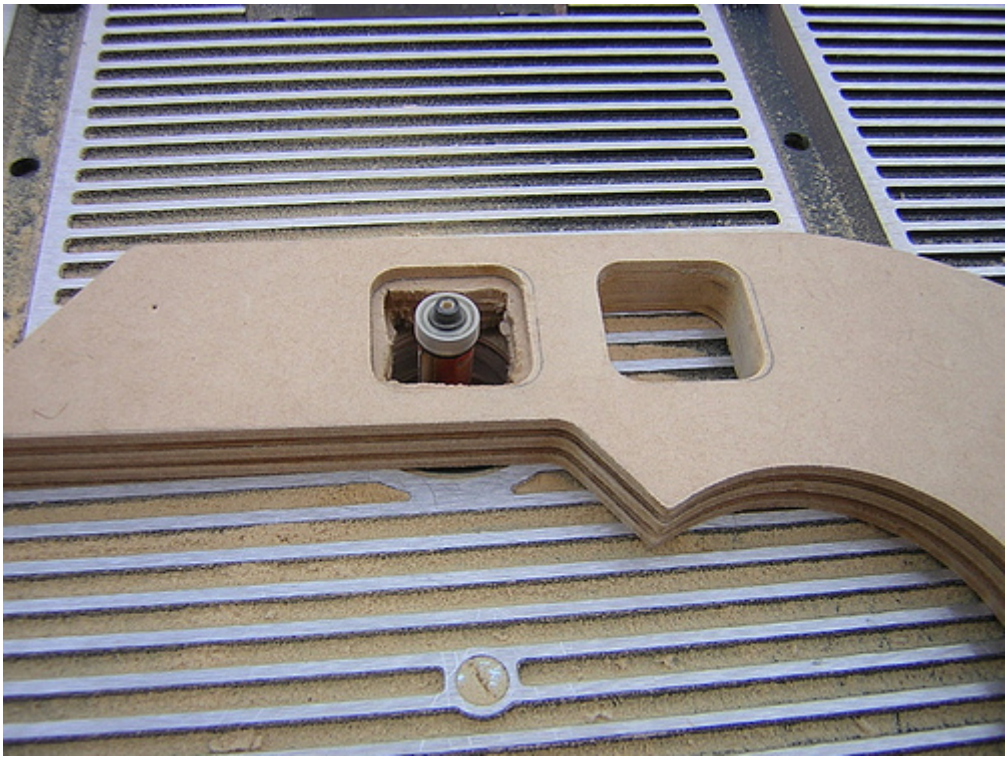
posted by Victor Franco at 11:37 PM 0 COMMENTS

THURSDAY, APRIL 20, 2006

Glued Second Horseshoe, Routed Holes

In the morning, I glued up the layers to the second horseshoe set exactly as I did with the first set yesterday.

When I got home in the evening, the glue was dry on both sets, so I was able to route out the hydraulics and button holes. Recall that I originally routed only the top layer to size, and left the others rough-cut. Now I was able to route out all the rest of the layers together, using the top layer as a template, and get a pretty good match.



The results were positive. I still need to apply some wood putty to the seams and sand them down so you won't be able to see the various layers in the holes.

posted by Victor Franco at 10:10 PM 0 COMMENTS

FRIDAY, APRIL 21, 2006

Puttied & Sanded First Shoulder Holes

Ah yes, DAP Plastic Wood, my arch enemy from the leg build. I used this stuff again in the morning on seams of the layers for the hydraulic and button holes for one of the layered shoulders today, and in the evening sanded it down. I then made a second pass, filling in small gaps and holes. Hopefully one more light sanding and I can work on the other shoulder's holes. Fortunately there is a *lot* less area to cover than the legs had.

posted by Victor Franco at 11:41 PM 0 COMMENTS

SATURDAY, APRIL 22, 2006

Puttied & Sanded Second Shoulder Holes

This afternoon I did a repeat of yesterday, and puttied and sanded the shoulder holes for the second shoulder.

Earlier in the day I dropped by Mike Senna's for a little while and went over how to go about my next task: Building the booster covers from wood. That will make the horseshoes look like childsplay...

posted by Victor Franco at 11:25 PM 0 COMMENTS

SUNDAY, APRIL 23, 2006

Finished Gluing Horseshoes

Now that the hydraulics and button holes are puttied, sanded and finished up, I was able to glue the layers with the holes to the layers below them without holes on both shoulder sets. I also did some very minor work on preparing for mounting the front vents to the frame.

posted by Victor Franco at 11:02 PM 0 COMMENTS

MONDAY, APRIL 24, 2006

Puttied Outer Horseshoe Seams

Okay, the layers are glued up, time to sand the bare MDF a bit and start applying wood putty to the outer edging to hide the seams. I'll start sanding the dried wood putty tomorrow.

I went through this with the legs for what seemed like months. I hope it goes faster this time. After all, how many more days in a row of this can you (or I) take?

posted by Victor Franco at 10:20 PM 0 COMMENTS

TUESDAY, APRIL 25, 2006

Sanded Putty on Outer Edges of Horseshoes

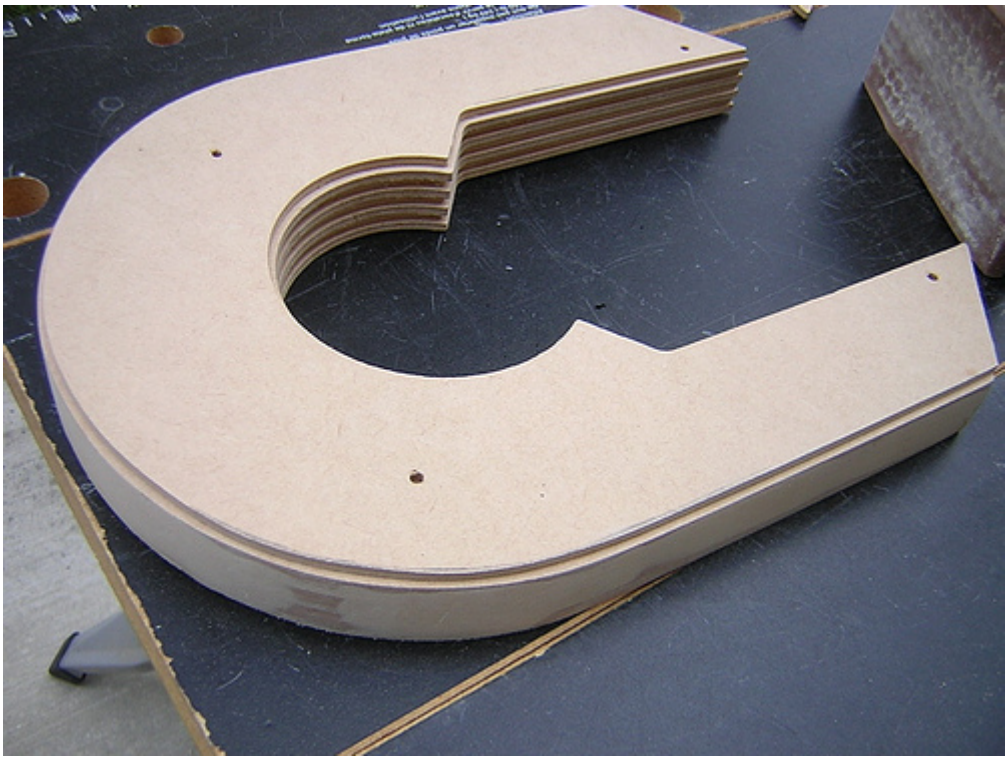
This evening I sanded down the putty from yesterday that I applied to the outer edging of the horseshoes. I made a second pass and applied trace amounts of putty where needed afterward to fill in small gaps. I'll lightly sand one more time, and then the shoulders should be ready for primer. I still need to shave 1/16" off the outer edge of each shim layer too.

posted by Victor Franco at 10:34 PM 2 COMMENTS

WEDNESDAY, APRIL 26, 2006

Sanded Down Shim Layers

Once again I flipped the belt sander belly-up, and sanded the edges of the shim layers of the horseshoes. The shim layer is not glued to the other layers. I don't plan to glue it at all so it can be painted (silver) separately from the other layers (white). I still need to do some light sanding here and there on these shoulders to even them out. There are areas that rise and fall just a bit along the edges.



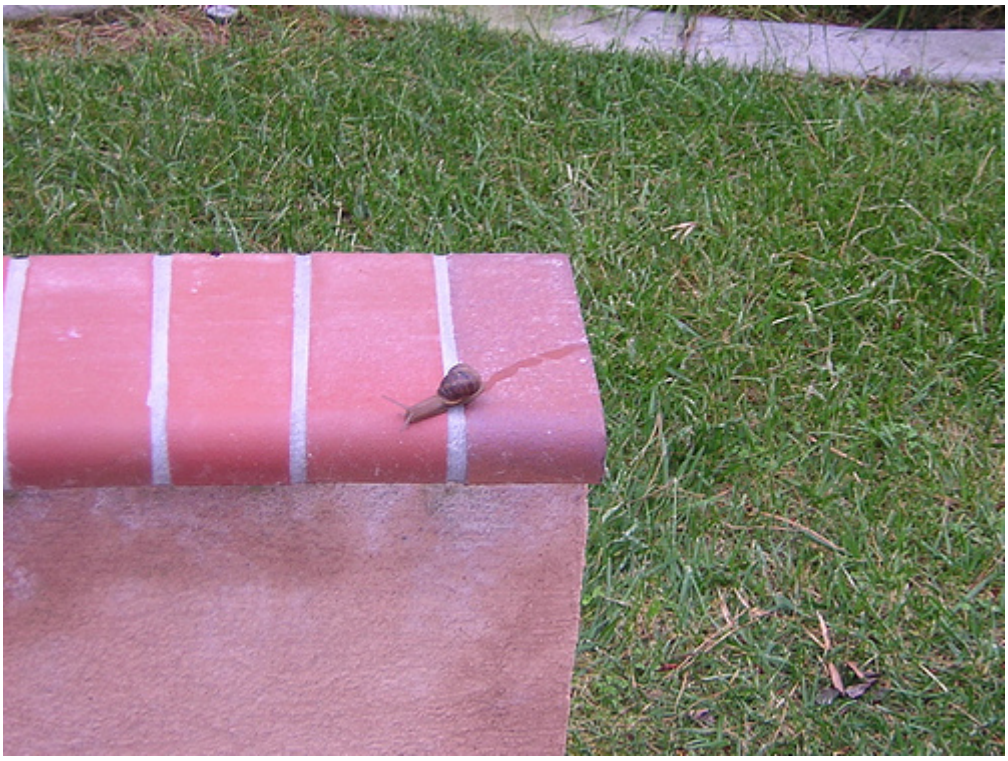
posted by Victor Franco at 10:58 PM 0 COMMENTS

FRIDAY, APRIL 28, 2006

Slow Progress

I'm still sanding the horseshoe layers so they'll be as close to perfect as possible. One of my shim layers was better than the other, so I made a 1/4" MDF template from it and cut another 1/8" shim from that. Now I have two fairly decent shim layers.

Self portrait of me working on R2 this week:



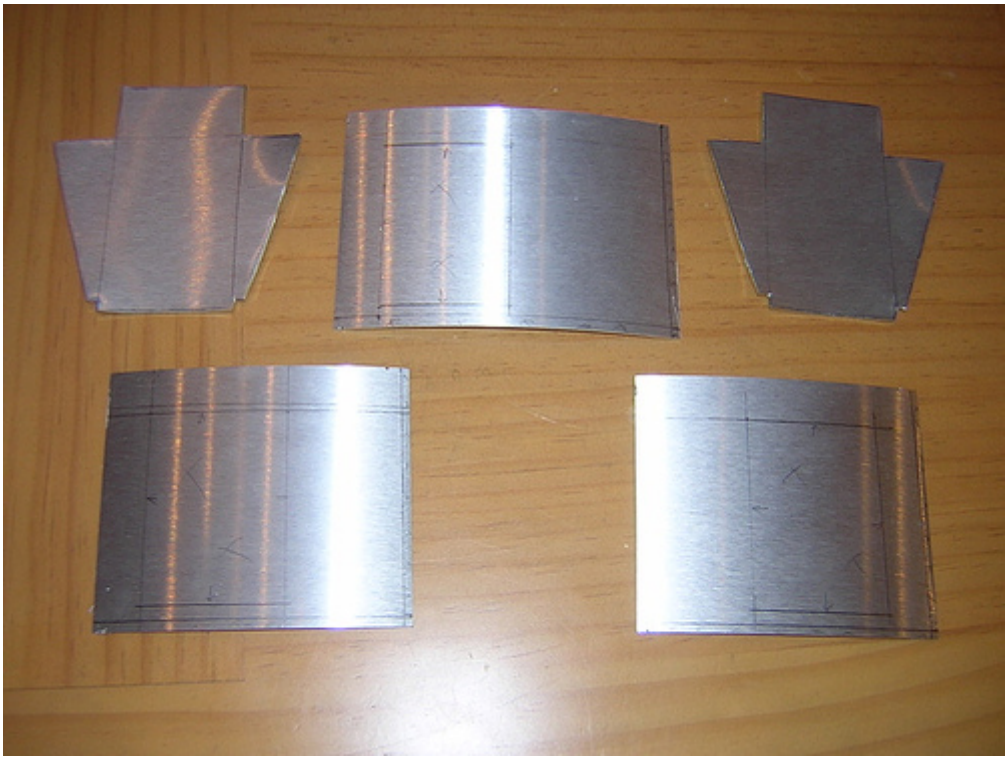
posted by Victor Franco at 10:55 PM 0 COMMENTS

SATURDAY, APRIL 29, 2006

Front Vent & Coin Return Work, Shoulder Struts Arrive

I took a day off from the horseshoes to work on other details today. The horseshoes are almost done, I'll probably finish them tomorrow.

In the meantime, I continued working out the mounting of the front vents to the frame. Additionally, I decided to try my hand at the coin returns again, I was never happy with my previous attempts. I cut out a couple of coin return innards, and marked up three coin return frames. Tin snips are the way to go for cutting out the thick aluminum. I still need to cut out another arrow head, and cut the frames appropriately.



Also, the aluminum shoulder struts from Michael McMaster's run arrived today. Excellent!

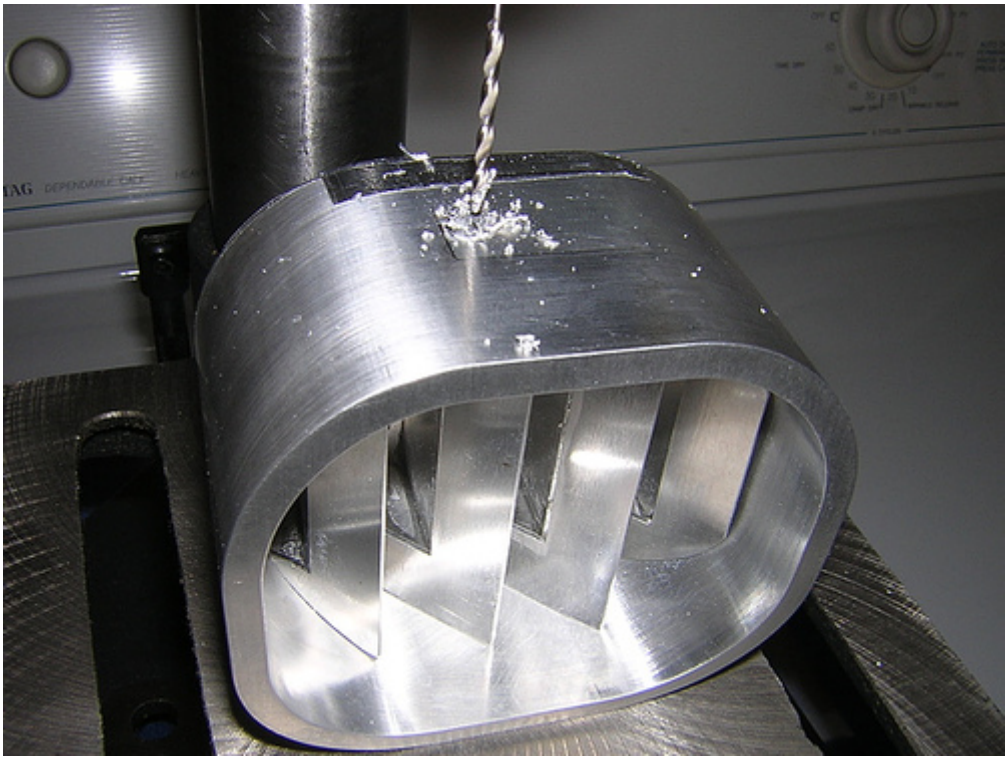
posted by Victor Franco at 11:34 PM 0 COMMENTS

SUNDAY, APRIL 30, 2006

Finished Horseshoes, Built Front Vent Harness, Started Coin Returns (Again)

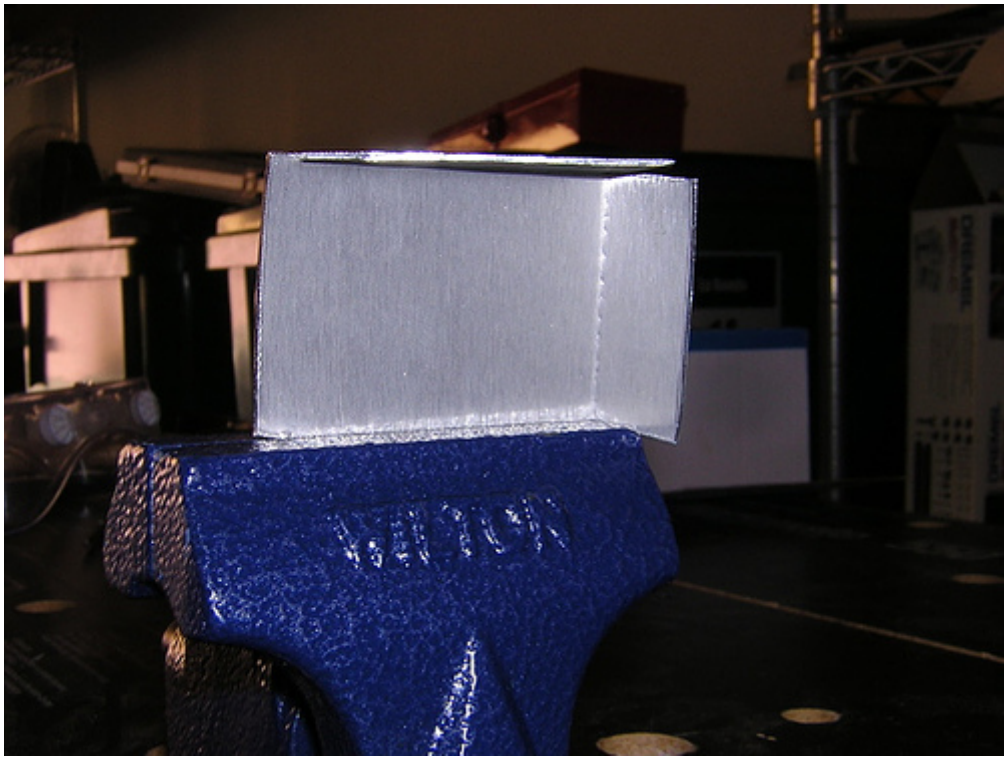
This morning I finished up the cloned shim layer that I made the other day, thus completing the horseshoe build. The horseshoes are ready for primer, but it was too breezy today.

Next I worked on building a harness for the front vents. I drilled holes into the sides of the vent surrounds (I hated to do that, but in the interest of sturdiness, I did), and then tapped the holes for #4-40 screws. The holes were strategically located so they won't show, unless if you were to lay down on the ground perhaps, and even then, only the top vent's holes would be visible.



I've managed to live my entire life without ever using a tap until now, that's how far removed I am from being an actual craftsman-type. I glued a small piece of 1/4" MDF to separate the two vents in between them, and then screwed down the rails that will attach to the frame from the inside. The frame ribs on either side of the vents will need to be shaved a bit when I screw the L-channel to them, to have the vents look just right from the outside.

Next, I used the vise to fold the two coin returns that I cut out yesterday. What a difference having the right tools makes! Using tin snips and a vise for the job was so much easier than using scissors and the edge of a table, and produces much better results.



This coming week I will probably keep working on the vents and coin returns, and start thinking about the booster covers,which I hope to start working on next weekend.

posted by Victor Franco at 10:32 PM 0 COMMENTS