

# Perfessor Evil's Nightmare

<http://www.perfessorevil.com/2partmold.asp>

## 2 Part Mold

By Bryan Patterson, CalHauntS NorCal Chapter, and compiled by Perfessor Evil

This was part one of a three part CalHauntS NorCal workshop. The final product is going to be a 2 foot tall animatronic figure that turns its head and moves its arm.

The workshop was led/taught by Bryan Patterson, and Eric, aka Lovemonk. Any mistakes in process or documentation are the results of my poor memory, not their teaching. :)

Sorry for the poor quality of these pictures, but I hadn't planned on making this web page, so all I had on me was my cell phone camera.

In this first session, we took latex heads that Bryan had cast from "Igor", an original sculpture from Likit (Byron) Jaeron. We cleaned up the seams, made a two part mold, and then filled the heads with a 2 part foam.



The first step was grinding away the seam using a Dremel felt polishing wheel.

This works great for smoothing out the seams that you get where the two parts of your mold meet.

Next, we stuffed the heads with newspaper, making sure that the detail section like the eyes and chin were firmly stuffed. This makes sure that when we put the plaster on later, the weight of the plaster doesn't deform the final product.

The third step was creating a framework to hold the clay wall we will use to divide the two halves of the mold. For the purpose of this class, Bryan used the cheapest clay you can get, what they call remnant clay. Basically, it's just the remnants of a bunch of other blocks of clay that they have reformed into blocks. It works great, it's cheap, but you don't have any control over the color of the clay. If the clay is strongly colored, it will tint the final mold, so if this is a problem for you, pay a bit extra for the non-colored clay.



Basically, we took a piece of clay, and put it down on the table to cradle the back of the head, so that the head and neck were fairly level, and then shored it up around the edges with pieces of 2x4's.

The blocks should come up to just below the mid point you want to use. One helpful tip: You can use more of the clay to brace the blocks against the table and make sure that they don't move.



When you have the blocks positioned correctly, you can start to make your wall. You want to create a flat surface all the way around the item you are casting, and make sure that the clay goes all the way to the edge/surface of what you are casting. We used tongue depressors for the most part, and then some clay working tools for the fine detail. Don't forget to make a wall across the bottom edge as well.

As a total tyro to working clay, mine ended up looking like it was done by a rather slow kindergartener.



Dean, on the other hand, showed us all what you can do when you have had a little experience.

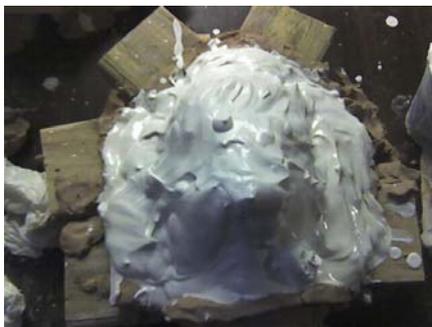
Once we had the (supposedly) level clay wall, we took the tongue depressors and made little divots in the clay around the edges. These will help to align the mold if we reuse them.

Next step: Mixing the plaster

You add water to the bucket first, and then add plaster to the water. The warmer the water is, the faster the plaster will start setting, so if you are using a quick 20 minute set like we were, it's best to start out with cold water. You want to keep adding plaster into the water until the plaster starts creating a little mound above the water before dissolving back into the water. This let's you know you are close to the right amount. When fully mixed, the mixture will be like a thin pancake batter, and will thicken up as it sits.



Before starting on the plaster, you want to spray the face and clay with a mold release. You can buy nice expensive mold release for \$12 a can, or you can do what we did... use a PAM-like non-stick cooking spray.



While the plaster is still fairly runny, brush it onto the mask, making sure you get it worked into all the wrinkles and/or crevices. This is very important, because it is this layer that provides all the detail if you decide to make more copies later.



After that, you just keep adding plaster, building up the layers. Most of us used 3 layers of plaster, with varying results, as you can see below.



Hmmm... doesn't plaster look yummy?



Once the plaster has set firmly, turn the mold over and remove the clay and blocks.



Mine

Dean's

You will want to create some wedges out of clay to put on top of the plaster... these will make pry points if you have any problems separating the two halves of your mold later. Unfortunately, I didn't get any pictures of this part, but you can see them sticking out in the picture below. The wedges should go about 2/3 of the way between the outside of your mold and the item you are casting, but definitely not touching the item you are casting.

Build up a new neck collar out of clay, add your release agent, and then it's plastering time again! Don't forget your brushed in detail coat.



While some made nice smooth works of art out of their casts, I was more going for the banana cream pie look.

When this was done curing, we removed the newspaper from inside the head, and we were ready for foam.



Bryan used a 2 to 1 foam from Douglas and Sturgess. It takes less than 5 minutes to fully expand, and then (mostly) cures in 20 minutes.

Part A



Part B



Believe it or not, these three tiny containers worth filled up the entire head.

To mix, Bryan added the three parts to a disposable cup, and then quickly mixed it up with a tongue depressor, scraping along the sides as he went. Note: This stuff sticks to EVERYTHING. Especially clothes and furniture. You have been warned.

After mixing, he quickly poured the mixture into the mold, making sure to scrape all of it out of the cup. Remember, this stuff expands to about 15 times it's original volume, so any little bit left in the cup is going to mean 15 times that missing from whatever you are filling.



We rolled the mold around quickly, making sure to get the eyes, ears, chin, and other detail parts covered, and then put the molds down so the foam could expand.

This stuff is like a soufflé , and will collapse if it is jostled during the setting process, so be gentle once it starts to foam.



After about 10 minutes:



And then... the release! Turns out I was able to separate the two halves of the mold by hand, so the pry points were not necessary.



Amazingly enough, there were 12 of us who's molding experience ranged from total newbie to people who do this stuff for movies, and every single mold turned out. Bryan did a great job.

And, just for fun, here's some more pictures of the workshop, so you can get an idea of what utter and total chaos 12 people making molds at once can be.

Becky, Sherri, Kevin



Bernice, Jason, Chainsaw, Mutant



Sherri, Kevin (in the background),  
Becky, Mark



Keith, Clay, Bob, Anna, Brian



Some of Bryan's props

Obtained from  
marshhauntedtrail.com