



<http://www.deathappeal.com/>



I wanted another moving prop and I thought I would setup a witch in a rocking chair that would rock by it self. I needed a few things to get started but the biggest part was a rocking chair. I happened to find one at a Flea Market for \$20.00 so I grabbed it. Most of the other items I found laying around the house from other projects.

- 1) 1 1/2 PVC
- 2) Rocking Chair
- 3) Low RPM Motor
- 4) Mask
- 5) Fishing Line
- 6) Screws
- 7) Foam Padding
- 8) Wig or Mannequin head
- 9) Few yards of black material

This next list of things are not required but I've added them to give the head some movement and audio.

- 1) [Parallax](#) Basic Stamp BS2SX
- 2) [Quadravox](#) QV306M4P Playback module
- 3) [Quadravox](#) QV430P Sound Recorder
- 4) Large servo. I got a [Hobbico](#) CS-80 from [Tower Hobbies](#) (Part #LXLN93)
- 5) Talking door mat from [American Science and Surplus](#). Two part numbers but they are the same thing (#27203 and #27198)

The first 4 items on the list are a bit pricey and if you have no desire to program or build electronics then don't waste your money. I have just started using the Basic Stamp and I'm sure it will come in handy for other projects.



For the motor I'm using a TM95MTR2804 from [Herbach & Rademan Co.](#) It is a 20 RPM, 90 oz torque, continuous duty, AC motor.

When I purchased it the price was \$19.95. This motor seemed to work fine for me and when I tested it the chair had a nice even rocking motion. I'm sure this will all depend on the type of chair you have. It also seemed to have plenty of torque to rock the chair.



Now you need to construct the body. I use 1 1/2 inch PVC but you can probably use smaller.

I like to have my frames sturdy so I use the heavier PVC. How much PVC? That will depend on the size of your chair.

In the picture below there was close to 13 feet but as you can see from the picture the legs are a bit long and will be trimmed down later. Normally you could glue this or even duck tape the joints but I just drilled a hole and screwed them in the joints.



This made it quite sturdy, kept it from falling apart as I moved it around, and still gave me a tiny bit of play so I could still position the arms and lets. Plus I could then remove the screws and pull it apart and store it later.

Obtained from
[Omarshauntedtrail.com](#)



I use all kinds of joints on this but what you need to aim for is a good shape so you will need a few elbows, T's and 3 way joints. I drew mine out on paper and figured what I would need but even then when I went to assemble it I changed the plans. Again, you just want a shape to work with.



This is not the mask I will be using but I wanted to see what it looked like. You can see in the second picture a piece of 1/2 PVC sticking out.

This is going to be used to hook up a servo to a pressure pad so the head will turn to the left and then back to center position. I did a test fit with jacket to make sure the proportions were close and they seemed to be.



Obtained from
Omarshauntedtrail.com



In the picture here I have added the mask I'm going to use which came from [Death Studios](#) and is called Swamp Witch.

The hands are also from Death Studios but they are actually monster hands but Death Studios will paint them to match your mask. They are actually a bit larger than I wanted but I still think they look great.

I've also started to add some foam padding to fill in some of the body. On the two vertical pieces of PVC you can see two 6 inch carriage bolts. This will be used to attach a block of wood so I can bolt down the servo which will turn the head.

I used a 1/2 inch x 12 inch long plastic nipple to screw into the mannequin head. This also made it easier to get fittings to attach the servo horn to.

The body is just about complete. If you look at the picture above I've taken a hose clamp and bound the waist together because this gave the frame more stability when I was moving it around and kept it from separating.



Holes were drilled in the joints and I put screws in because I didn't want to glue the frame together.

If you haven't noticed yet the legs are way to long. This was really by accident and will change when I'm finished with all the electronics.

On this type of rocking chair, without the legs the chair leans WAY back and looks like it's in an un-natural position but with the long legs it balances the weight. Once electronics are installed I'll trim them down so I get a good balance and enough room so the chair can actually rock. Again, your rocking chair might not have this problem.