

Creepy Nights on Calamio

<http://www.creepynights.org/Projects/2007/Blucky-Popup/index.html>

Blucky Popup

Blucky'll make YOU jump!

Yet another use among the 1,001 uses of the famous box pusher cylinders that were on sale a few years ago.

To this box pusher, we mounted a Blucky (blow mold) skeleton. This was done by first fastening a 3/4" PVC pipe to the box pusher mechanism so it raised and lowered the PVC pipe.

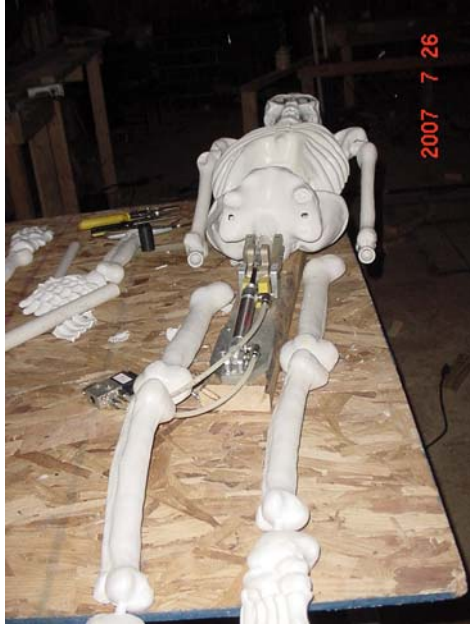


Then ol Blucky was hollowed out a bit. Holes were cut at most of his joints to allow the PVC pipe to insert up through his hips, up his backbone, then into his skull. A PVC "cross" (x-shaped) piece was inserted into his back at the neck/shoulder joint so there is one piece of PVC from bottom to his neck joint, then the "X", then another short piece extending up into the skull.



Inserted THROUGH the 3/4" PVC cross at Blucky's neck joint is a piece of 1/2" PVC pipe; basically from shoulder to shoulder. 90 degree elbows were fitted onto each shoulder (you can see them in some of the photos below) to give us something to attach Blucky's upper arms to.

Blucky's upper arms were also hollowed out at the ends to allow the 1/2" PVC pipe to fit through - you can see that in the photos below.



The reason for the fancy cross and different sizes of PVC is to allow Blucky's arms to ROTATE as he sits up. His vertical frame is made of 3/4" PVC - up to and including the "X" joint you see in the cutout above. Horizontally through this "X" we inserted a 1/2" PVC pipe with some special customizations. On one side of the X joint is a T-junction lined up so the odd side points out away from the Blucky's body. A short length of PVC was inserted into this joint sticking straight out from his back and fishing line was fastened to this pipe and tied down to an eye hook on the 2x4 which the valve is mounted to just behind the cylinder.



The pipe had to be carefully adjusted so when the Blucky is lying down the line lets his arms rest on his chest; yet when he is lifted up, the tension on the line pulls the pipe down rotating the arms upward as he sits up. (It sounds a lot more complicated than it is).

We also used a compression fitting on the other side of the "X" joint to keep his whole shoulder/arms assembly from sliding side to side.

And with his arms all attached:





To add a nice spooky touch, we fitted Blucky's eyes with some blinking green LEDs. They were wired up through the inside of the skull and held in place with a couple globs of clear silicone caulk (which serves double duty by also diffusing the light to make it even more spooky).



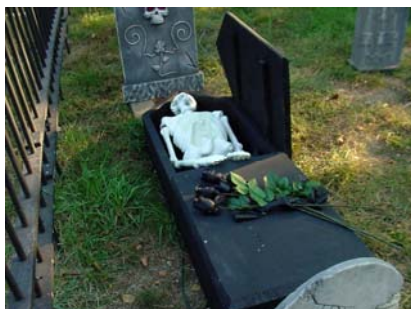
Blucky needs a place to call home, so he gets a nice coffin. Christopher created this using 2x8 sides and a plywood bottom.





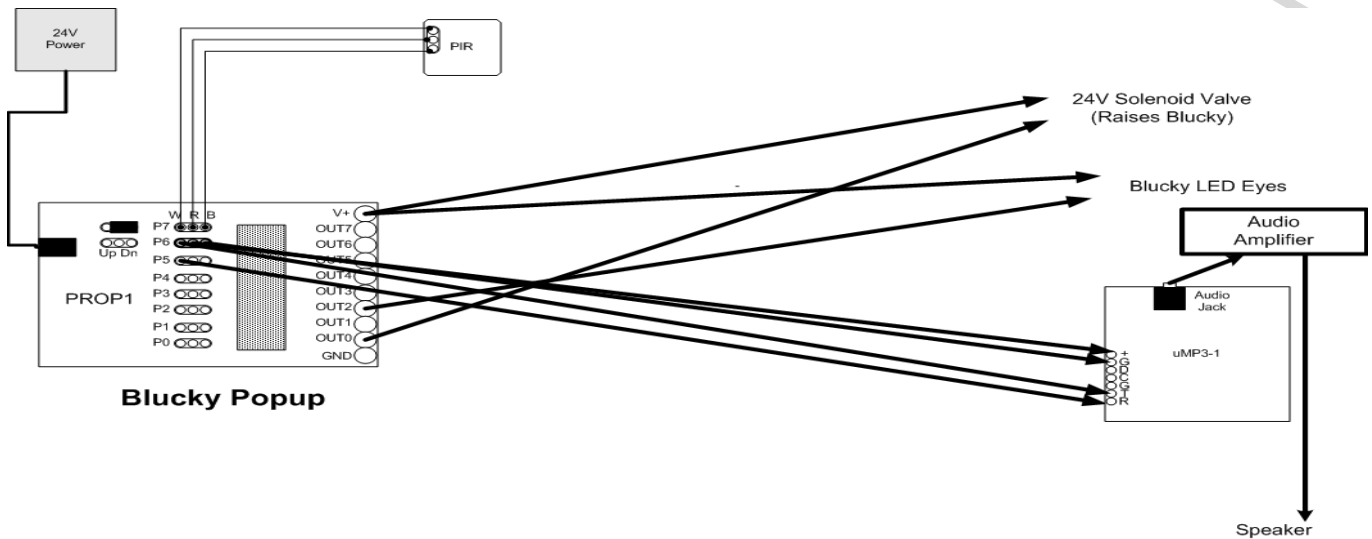
A top was created from two pieces of plywood covered with styrofoam panels (given an angled edge by using a foam cutter). The pieces were painted flat black (along with the rest of the coffin); the bottom half was screwed down onto the coffin and concealed all the electronics and cylinder workings. The top half was mounted "open" by drilling holes so a pair of metal spikes stuck up from the side of the coffin and slid into matching holes drilled into the side of the plywood top.

Here's what the final product looked like:



Like most of our props, he's controlled by a PROP1 micro controller. A PIR (motion sensor) lets him know when someone's coming, and a uMP3 from Rogue Robotics gets triggered to let people KNOW he knows! The cylinder (box pusher kit) we're using requires 24V, so we made sure everything else we're controlling can be driven by 24V. The LEDs were wired up with an appropriate resistor; the uMP3 is powered off the P6 pins on the PROP1 which supply 5v. Here's a diagram of the controls:

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We added a little spice to his routine --- the uMP3 player accepts a SD memory card (like many cameras use) and can store lots of music/sound files which the player can control. With a little help from Jon at EFX-Tek I wrote up a program that picks one of 8 random "wise cracks" each time the prop is triggered. The wise cracks were suggested by members of the CreepCrafters and Halloween-L lists, and the sound files were recorded for us by "Damien" of Vanessa Reed Designs (he also did the sound files for the witch in the "well to hell" prop).