HauntMaven.com - Wolfstone's Haunted Halloween Site



http://wolfstone.halloweenhost.com/PropsMisc/sklpop_PopupSkeleton.html

Popup Skeleton

We decided that our graveyard would be a bit creepier if we added some interactive inhabitants. In particular, we added a skeleton that pops up at trick-or-treaters.

This is a pneumatic effect, powered by compressed air (controlled by HAM), and remotely triggered via X-10.

Skeleton



The key to this easily-built effect is a cheesie cheap blowmolded plastic skeleton.

Here we show the cheap blow-molded skeleton next to a much nicer and more authentic Bucky. Although Bucky is beautiful, he is also very heavy, while the cheesie skeleton weighs under a pound. Light weight is a definite benefit when you come to flinging stuff around.

Besides, few trick-or-treaters will be checking out the details of the skeleton as it slams up at them.

Mechanism



This is the most important picture on this web page!

It shows all the important parts of the mechanism

The mechanism is quite simple. It consists of:

- a flat wooden base
- a chunk of scrap wood firmly attached to the base as a spacer
- with a piece of 1x2 lumber serving as a lever, attached to the spacer with a hinge •

The pneumatic activation is provided by an improvised pneumatic cylinder made from a screen door closer.

When air is let into the screen door closer, it pushes out the piston, levering the 1x2 upright.

It's really hard to describe how the cylinder is attached to the hinged board! We attached the screen door closer using the same parts that come with it to mount to doors (with a modification at the end where we pump in the air). Take a careful look at a real screen door and see how the closer is mounted.



The wooden lever is attached with a plain "T" hinge.

The screen door closer (acting as a pneumatic piston) is attached to the wood with the same hardware that would normally be used to mount the door closer to a door!





The lightweight skeleton is attached to the 1x2 with black cable ties.

A small slit is cut in each side of the spine; the tie pushed through; and fastened around the wood.



The skeleton in repose, attached to the wooden lever and pop-up mechanism.





Side view of the completed scare.

Our friend from the back.



Action



Here's the business end of the gadget.

Under combat conditions, the base of the popper is fastened to the ground with four tent stakes that go through holes drilled in the base.

Action!

Notes

The star of this attraction is the pop-up skeleton. But he does have some costars to help him look good.

As we already mentioned, the effect is remotely triggered via X-10. This means that the haunters can wander in and out of the house, up and down the street, and still set it off via radio-controlled Palm Pad. Since the effect is not activated by motion, light, or other automatic trigger, you can wring some unexpected scares out of it. Many of our victims brought friends over to "look at this

cool skeleton that pops up". But he wouldn't. "Hey, you! Jump up!" But he wouldn't. And then, just as the second trick-or-treater started razzing the first one, up it flies - getting both of them.

The remote control not only triggered the skeleton to pop up. It also used a trigger relay to turn on a strobe light shining on the skeleton, and triggered a scream box.

The combination of all of these effects packed a big punch, because the flashing strobe highlighted the skeleton as he jumped up, and the sudden scream provided an audio startle.