

Spider Girl- How to Hack a Store Bought Prop

For Maker Faire

1. Start with an Theme/Idea- and a Store Bought Prop to Hack!

- Sometimes, building a prop completely from scratch is not the best way to go as it could take too much time or be too difficult.
- There are lots of inexpensive Halloween props out there, even at your local drug store, that can serve as the basis for a great prop.
- You can physically alter these props to improve them and fit better with your desired theme.
- You can even take animated props that make noise and hack into them to give your prop better sound, and to control it more easily for your haunted house.
- Using the “spider girl” prop and a few others in the haunt as examples, we’ll explain how to approach this.

First – Hack the Physical Prop!

Spider Girl & Barking Zombie Dog

Examples of Thematic Ideas & the Starting Prop for “Spider Girl”.

- My favorite theme is “the mad scientist lab” since I am a scientist in real life. Other themes might be the haunted cemetery or pirates.
- For this year’s haunted house, I decided to infest the haunted forest with a few creatures that have escaped from my mad scientist lab (Chimeric Enterprises) – chief among these was “Spider Girl”.
- I wanted to make an attack spider that was genetically engineered to be half human and half spider – and all dangerous!
- I started with the Spirit Halloween “attack spider”, which is animated and makes a chittering sound:
<https://www.spirithalloween.com/product/spider-web-decoration/12-inch-attack-spider-animatronics-decorations/pc/0/c/0/sc/1062/127741.uts?thumbnailIndex=2>



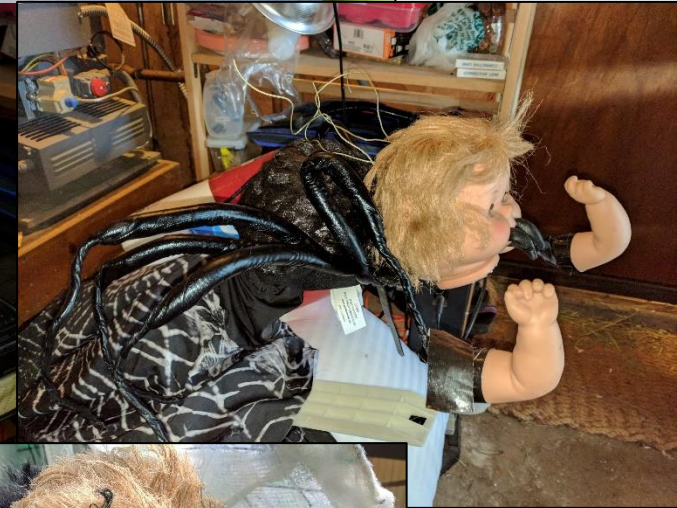
2. Decide how you want to “Redress” the Prop Physically

- Many inexpensive props are not well painted or are very standard – typical spiders, ghosts, etc., and may not directly fit your theme
- You can improve them by painting them, adding additional fur, feathers, or cloth, or adding other decorative parts. Corpsing (see other poster) can also be done to an animated skeleton to make it a zombie creature.
- In my case, I wanted a half human, half spider creature, so I searched Etsy, and found some doll heads and arms to add my human part to the Spirit prop.



Spider Girl Comes to Life!

- The head was hollow, so it could be slit up the back and fit over the spider's head. The mouth was then slit to pull the fangs out.
- The arms were also hollow and fit over the front spider legs – I then covered the end of the arm with some black fur that matched that on the spider.
- You should also put your prop in an appropriate setting – I decided to create a “tunnel spider lair” with chicken wire and spider web (beef netting and the more typical cheap stretchy spider web.) I painted this with glow in the dark paint.
- Then, with some painting of the face and addition of extra “eyes”, Spider Girl was ready to be animated.



Final Prop Appearance— Before & After



Initial Prop



Final Prop Before Exhibit



Final Prop At Exhibit

Second Example – Barking Zombie Dog

- As a quick second example – the barking zombie dog in our haunted forest room was created from a barking dog skeleton.
- I wanted a dog that was more of a real (but scary) dog to be standing guard over the dead scientist, so I corpsed it with plastic (see the other demo on the table) & painted it with latex and acrylic paint, then dry-brushed it for that aged look.
- Jeff then hacked the sound (attached it to a better speaker as the sound track was good) and attached a controller to it.
- The hands on demo on the table shows an example of how he did this with a smaller, corpsed barking dog.

Zombie Dog Pictures with Physical Hack



Starting Skeletal Prop



Prop with Plastic Muscles

Second Part – Hack the Sound & Animation!

Can be applied to Any Animated Prop

Controlling Your Prop & Fitting it to Your Haunted House

- Some store bought props have sound and animation – but usually, these have issues.
- The sound track may be inappropriate or have poor speakers & the controller for the animation may not work well.
- While you could simply build your own or buy a high end animated prop, this is very expensive and/or may take a long time.
- By hacking the sound and electronics of a store bought prop, you can improve the quality of it and can make it more appropriate for your specific haunted house theme.

Decide Whether You Need a New Sound Track- & if so, the Internet is Your Friend

- Frequently, the associated sound track isn't very good – either it has a lot of inappropriate “scary sounds” or the speakers are not good.
- It is easy to just get rid of that by snipping a speaker wire, but then you have to fill in the void.
- While you could tape your own sound effects, this can get complicated. The internet has many free snippets of sound that can be stitched using free, open-source Audacity sound editing software.
- Also, even if your prop has a good sound track (such as for a barking dog skeleton), attaching it to a better speaker can make a huge difference.

Sound & Software

- To find sounds for your home haunt, Google is very useful. Just search for the type of sound effect you have in mind, such as:
 - “graveyard sound effects”
 - “Halloween sounds”
- Then download or record them on your computer, and turn them into an MP3. You can use an iPod or laptop to give your home haunt a background soundtrack.
- Get Audacity – This is open-source sound editing software. It can capture audio that your computer is playing and save it. You can then edit the sound track to keep just what you want.

Hacking the controller & prop sound- the electronics of the hack.

- Many inexpensive animated props don't have a good way to control when the prop activates – either it goes off all the time, or it never seems to do it when you want it to.
- The demo dog on the table shows the basics, using an Arduino and a relay. The Arduino is running a simple timer program, based on the “Blink” sketch.
- This can be applied to many props, as long as there is a way to connect to it – in our room, it controls the spider girl, barking zombie dog, and owl.
- You can snip the speaker wire and use the Arduino to play back your own MP3 from a sound board. Check Adafruit or Sparkfun for these modules.