

by **Thinkenstein** on December 13, 2010

Author: Thinkenstein	2
License: Attribution (by)	2
Intro: Rubber Drum Heads	2
step 1: Making the Head Material	3
step 2: Stretching and Stapling	4
step 3: Wrapping with String and Trimming	5
step 4: How They Sound	6
File Downloads	6
Related Instructables	6
Advertisements	6



Author: **PRO** Thinkenstein [author's website](#)

I'm a refugee from Los Angeles, living in backwoods Puerto Rico for about 35 years now and loving it. I built my own home from discarded nylon fishnet and cement.

**License:** [Attribution \(by\)](#) 

### Intro: Rubber Drum Heads

I first replaced the rawhide heads of these cheap bongo drums with X-ray film heads, which was an improvement. (see: <http://www.instructables.com/id/X-ray-Drum-Heads>) Unfortunately, the tension hardware broke on one of the drums recently , so I replaced the head with cloth-reinforced silicone rubber.

I like the sound, which is deep like a much larger drum. It didn't combine well with the remaining X-ray head sound, however, so I changed the second head also.

The heads are hand-stretched and stapled in place with a staple gun.

You can hear how they sound in the last step.



## step 1: Making the Head Material

Silicone rubber doesn't stick well to some plastics, such as the polyethylene plastic kitchen cutting board I have.

I used some synthetic cloth material that I scavenged a long time ago from the underside of a box spring mattress to reinforce the silicone rubber against tearing. It allows for tighter stretching of the finished material, also.

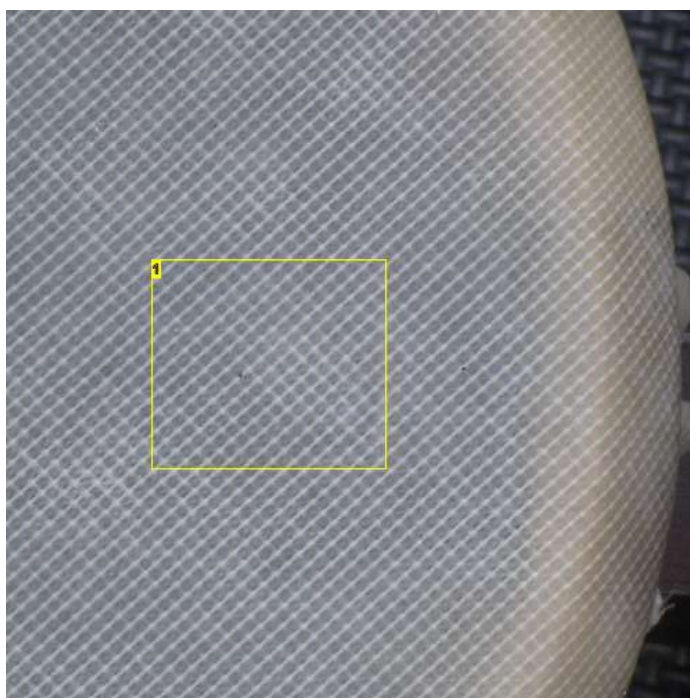
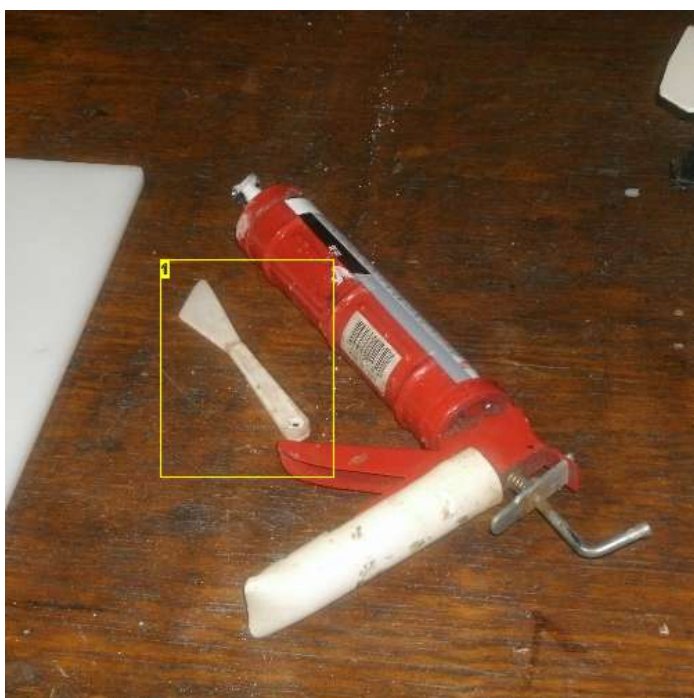
Cut a circle of the material out, large enough to give a skirt around the edge of the drum to grab onto and pull while stretching it. Excess will be cut off later.

Cover an area of the cutting board with silicone and spread it out with a palette knife, or similar spreading tool. This makes sure that the bottom surface of the skin will be completely covered when you peel it up later. If you try to squeegee the silicone through the cloth from the top, you might have areas of bad penetration.

Set the cloth material on the wet silicone and immediately start stroking it with good pressure using the palette knife. The idea is to squeeze the silicone up through the cloth from the layer below. It is easier to make sure the cloth is saturated that way. Depending on the amount that squeezes up through the pores, you might want to add a little more on top to make sure it is completely covered.

I let it dry overnight and then peeled it up in the morning.

Although the polyethylene cutting board is an ideal work surface for silicone, you can also stretch out some trash bag material with tape on a table as a non-stick work surface. Eliminate any wrinkles, and work on that.





#### Image Notes

1. Palette knife.

#### Image Notes

1. This is a close-up of the square mesh material. It is a synthetic material and very strong.

### step 2: Stretching and Stapling

Stretching the drum head is similar to stretching an artist's canvas. Always work opposing sides to eliminate wrinkles and create a uniform tension over the whole surface. If you think of it like stretching over a compass; staple North, stretch South and staple South. Staple East, stretch West and staple West. Staple NE, stretch SW and staple SW. Staple NW, stretch SE and staple SE. Then keep dividing those areas in half and stapling opposing sides until the entire circumference is stapled. I used two staples at each point.

If the staple gun doesn't have the power to drive the staples in completely, you can tap them in the rest of the way with a hammer.



#### Image Notes

1. Thinking of it like a compass, staple North, pull South and staple South. Staple East, pull West and staple West. Always work opposing sides to eliminate wrinkles and make uniform stretching.



### step 3: Wrapping with String and Trimming

After you finish stapling, wrap the whole skirt a couple times with strong twine. I used nylon twine and dabbed a little glue on the knot to keep it from unraveling, as nylon tends to do.

Then trim off the excess skirt material.

The two drums were then reunited with the connecting bridge and bolt that held them.





## step 4: How They Sound

Click on the icon below, that looks like a piece of paper with the corner bent over, to open an MP3 file and hear how they sound.

### File Downloads



RUBBER DRUM HEAD.mp3 (236 KB)

[NOTE: When saving, if you see .tmp as the file ext, rename it to 'RUBBER DRUM HEAD.mp3']

## Related Instructables



**X-ray Drum Heads** by Thinkenstein



**How to re-skin a drum** by cjkrieseSF



**Bongos for stepmania/simon game** by radiorental



**How To Make Mini Bongo Drums!** by Soodime



**Electronic Drums Lingo** by doggyd69b



**How to Make an Effects Snare Drum** by drums787