Pop Top Lamp Shade

Written By: Sean Michael Ragan

**TOOLS:**

- Needle Nose Pliers (1)
- Side cutters (1)
- Small Flathead Screwdriver (1)

**PARTS:**

- Lamp shade top wire hoop (1)
  
  *Can be purchased new online, or cut out of a cheap paper or fabric shade from the thrift store.*

- Lamp shade top wire hoop (1)
  
  *Same diameter as top hoop.*

- Soda can tabs (100+)
  
  *See Step 1 for information about how to estimate the number of tabs you'll need.*

**SUMMARY**

**Update:** Lots of folks have been asking about the fancy rainbow-colored shade in the new photo. It was made using the same techniques described in this article. The tabs are not painted; they are all recycled from cans that have factory-anodized color pull tabs. A few of them I collected myself, but most of them I scored by watching eBay for awhile. Yes, you really can get anything from eBay.

I made the first one of these back in 2009, and it was later included in Garth Johnson's creative reuse book. Since then, I have had many requests for a detailed tutorial. Well, here 'tis!
The only parts in this lamp shade are soda can "stay" tabs and the top and bottom lamp shade hoops. No wire, string, glue, or other part or fastener is required. Mine is 7" in diameter and 8" tall and consists of 16 rows of 34 tabs each--544 tabs in all. Shades can, of course, be made bigger or smaller as you please.

### Step 1 — Remove tabs from cans

- Remove the tab from the can by bending it back and forth until the metal fatigues and breaks.
- If you want to estimate the number of tabs you'll need beforehand, here are a couple of rules of thumb:
  - For each row of mail, including the top and bottom hoops, you will need 4.857 tabs for every inch of shade diameter.
  - The top and bottom wire hoops, wrapped with tabs, add about 1/4" of height apiece.
  - Each row between the top and bottom hoops adds 1/2" inch of height.
Step 2 — Bend the tabs

- Grab the tab across the short dimension with a pair of pliers, and use your thumb to bend it down about 20 degrees, as shown.

- Tabs that will go in the top and bottom rows should be bent, but not cut (at least, not yet). So bend enough tabs for two rows of mail and set them aside before picking up your side-cutters.

- Unplug the lamp, remove the bulb if one is present, and install the top lampshade hoop on the lamp.

- **Update:** I use a pair of jeweler’s pliers with a custom 3D-printed insert to bend each tab to exactly the same angle, which greatly improves the appearance of the finished mail. More details [here](https://www.makeprojects.com).
Step 3 — Install top hoop clip

- Start with an uncut tab bent as in Step 2.
- Set the tab on the top wire hoop, aligning the hoop with the bend. Apply finger pressure to continue the bend to about 90 degrees.
- Insert a small flatblade screwdriver through both openings in the tab and apply leverage, as shown, to wrap the tab tightly around the wire hoop.
- Check to see that the bent tab is secured to the hoop and will not "lift" off. Pinch troublesome tabs with needlenose pliers to secure them.

Step 4 — Finish the top hoop

- Continue adding tabs around the circumference of the top hoop, as shown in the previous step, until it is covered all the way 'round.
- To accommodate the spokes attaching the hoop to its hub, remove an adjacent tab that has already been formed around the wire, and cut the finger loop so the spoke can be passed through it as shown.
- Do not attempt to just work around the spokes by butting tabs close against them on either side. These tabs will be too far apart.
Step 5 — Cut the tabs

- Set aside one row’s worth of bent tabs. These will be used later to form the bottom hoop clips, and should not be cut yet.
- Snip the remaining tabs, as shown, using a pair of side-cutters.

Step 6 — Make the first link

- Using finger pressure, open the cut loop in a single tab by about 1/16".
- Pass the bottom loops of two adjacent hoop clips through the cut loop, as shown.
- Twist the tab, once you have it in place, to close the open legs of the cut loop again.
Step 7 — Do it many, many more times

- Continue adding tabs, as shown in the previous step, until you've completed the first row.
- Keep adding rows until the shade is almost as tall as you want it to be.
- The last row requires a bit of special treatment, so when you feel like you only need one more row of mail (not counting the bottom hoop), stop and proceed to the next step.
- Remember that the bottom hoop will add about 1/4" to the height of the shade.

Step 8 — Trim bottom row

- Tabs in the last row (again, not including the tabs that will be wrapped around the bottom hoop) have to be trimmed a bit, as shown.
- Use your side cutters to make two cuts, one from each edge of the tab, about 1/8" up from the end, as shown.
- Proceed to install the trimmed tabs in the last row of mail, as shown.
**Step 9 — Prepare bottom hoop clips**

- Proceeding as in steps 3 and 4, wrap the bottom hoop in uncut tabs to form "clips" that will link it to the mail above.
- Once formed, remove the clips from the bottom hoop and, using your fingers, open each one to an angle of about 45 degrees.
- Snip each tab with side cutters so that it can be incorporated into the mail.

**Step 10 — Install bottom hoop clip**

- Work the bottom hoop clips into the mail as usual; slip the cut loop of each clip through two adjacent tabs in the bottom row.
- Insert the bottom shade hoop into the open clip, as shown.
- Use strong finger pressure to close the clip around the hoop.
- As before, make sure the hoop cannot "lift" out of the clip, and use pliers to secure troublesome clips.
Step 11 — Finish bottom hoop

- Work all the way around the bottom hoop, installing clips as shown in the previous step.
- Install the bulb and test the lamp.
- You're done!

Yes, this can be pretty tedious work, but unless you a truly prodigious aspartame addict, it will probably take your household a considerable time to generate the hundreds of tabs required to make one of these lamp shades. If you form a habit of doing a little bit at a time--say, whenever you empty the recycling--the work can become a pleasant distraction from, and maybe even a reason to look forward to, an otherwise boring chore. And the finished shade makes a great Opus-style holiday or birthday gift: "Oh, just something I put together in my spare time..."