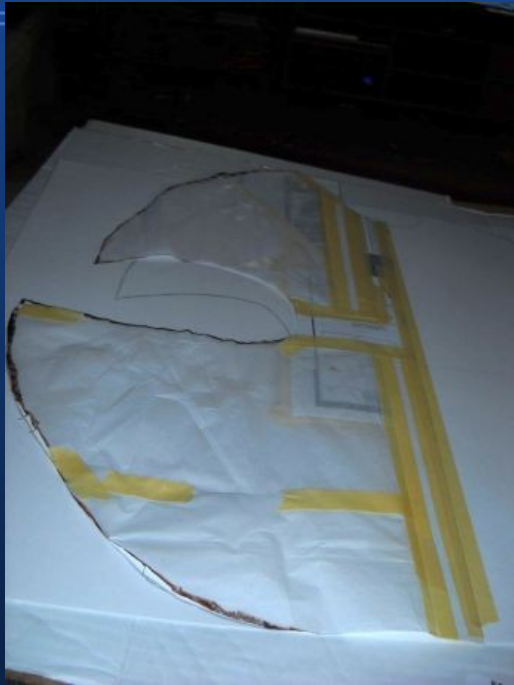


# How to make a Time Lord Collar

These instructions will walk you through how to make a collar and hat. The materials used will be wonderflex heat molded plastic, acrylic paint, trim, buckram, & fabric. -Mad Girl



# Making the form



- Start with drawing out  $\frac{1}{2}$  of the the basic shape on tracing paper (or tissue paper) then tape along the middle edge onto some poster board (if your board isn't big enough add where you need to like I did at the top here).
- To make the front pieces pivot the shape at the neck curve till the tip points up.
- Trace your shapes on both sides to get symmetry and then cut out 2 fronts & the back split down the center to adjust for back shape (seen later) .

# Making the form



- Tape front to back at edge to start to create the shape

- Tape the back pieces together, adjusting them to create neck contour and curve for head.
- Fill in back opening to finish off shape with more poster board (or a stiff paper as shown here using a grocery bag).



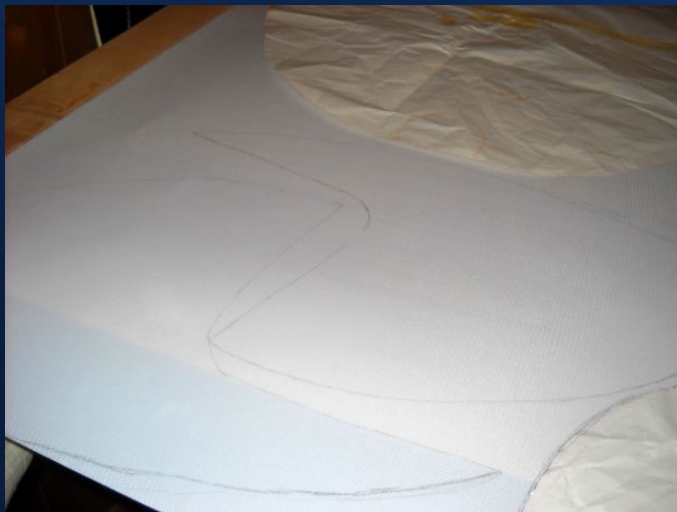


# Making the form



- Next add paper mache to the outer surface of the form. Make sure to add enough layers to make your form really stable. (I used paper packing tape for mine, because it has string worked into it to give extra stability and has the glue on it already)
- The final step in making your form is to cover the outer surface with aluminum foil (this step is to keep the wonderflex from sticking to the form). Use double stick tape and gaffers tape (or masking tape if you don't have gaffers tape) at the edges of the aluminum foil to really secure it.

# Make a Collar pattern from form



- To make the pattern for your collar pieces trace around your form for the back section & use the same pattern you used from the form for the front. Then make reinforcing pieces for the bottom front & center edges by tracing a 2 inch strip from those sections of the front pieces.
- You'll need to trace & cut out: 2 back pieces, 2 front pieces, 2 bottom reinforcers, & 2 center edge reinforcers.

# Collar pieces



- Back & front pieces right
- Reinforcing front pieces below



- Here's what your pieces should look like just after you cut them out (I have 4 front pieces shown here, but you will only need 2).



# Construction tools



Here's the things you'll need to start construction:

- A heat gun (the kind you can get in a hardware store to strip paint).
- Small binder clips & small pieces of aluminum foil to hold the plastic.
- Cooking spray to coat the form and small pieces of aluminum foil (to keep the plastic from sticking).
- An Ice pack to firm up the plastic when you have it the shape you want.
- A modeling tool for seaming pieces by rubbing them together etc.
- A spray cleaner & paper towels to remove the cooking spray when you want to bond pieces and when you are finished with forming the collar.
- & most importantly, your own hands for shaping the plastic.

# Construction

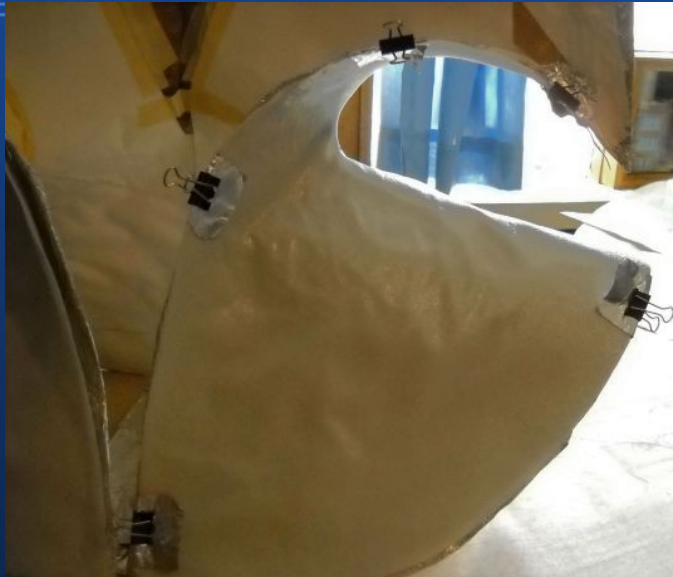


- Before you begin make sure the form & clip aluminum are sprayed with oil.
- Step one: shape the back. Drape one back piece over the form (face down) and clip it at the bottom edge. Then use the heat gun to soften the plastic. You will need to put a crease at the neck to get the shape to completely conform. After the first piece has hardened you need to repeat this step with the second back piece. You will need to make sure that the neck crease is in a slightly different location and that you rub the second piece to make sure it bonds to the first.
- Once you have both sheets bonded you need to make sure that the plastic at the neck and along the bottom edge of the top have a  $\frac{1}{4}$  inch curved around the corner. This will be how you seam it to the front pieces. After the back sets, set it aside & start on the front.





# Construction



- For the front piece it's easiest to soften it first then clip it to the form and work it with an ice pack to get the shape stable.



- When you shape the front you may end up with a piece at the neck that will need to be trimmed. Once the piece is set use a pencil to mark where it needs to be trimmed then remove the piece and cut the extra off with a scissors Replace the piece on the form to make sure it lines up properly. Repeat for the second side.

# Construction



- Clip both front pieces to the form & flip the form on it's front. Wipe the inside shoulder & the curved edge of the back piece with cleaner to remove the oil and insure a good bond. Place the back piece over the form and use the heat gun & pressure to join the pieces. There should be a lot of overlap at the shoulder this helps to keep the collar more stable. At the top of the neck where you curved over the  $\frac{1}{4}$  inch this should wrap over the front piece.



- There should be a small eye shaped opening at the curve of the neck after you have joined the front to the back. This is necessary to get the proper shape. Once your collar is set remove it from the form and wipe off the area around the opening with cleaner, soften a small scrap of plastic and place it over the opening from the inside. And rub it into place to fix it there. Note that you do not need to soften the collar, just the patch.

# Construction



- The last piece of construction is to add the reinforcement to the front. This allows the front to be stable but flexible enough to go over your head.
- Soften the bottom reinforcement and attach it to each side as shown .
  - Next soften the center reinforcement and apply, starting from the bottom edge, it so that the bottom overlaps.
  - Work your way along the edge to the point smoothing as you go (here you can work out any wrinkles you may have had). You may need to add a little heat at this point but try to only soften where you need to and use some cardboard to keep the rest of the collar from getting hot.



# Construction



- At this point your collar construction is almost done, and should look a lot like this. All that's left is to clean off all the remaining oil thoroughly and add the notch to the top.
- Cut out a template and position it in the center. Use a pencil to trace it & look at it to be sure it's where you want it before cutting it out.



# Paint & trim



- If you would like a smoother finish coat the collar & a second coat around the seams with Jesso (available at craft or paint stores). For the top coat I used Acrylic artist's paint, but spray paint works on wonderflex too.

- I added the trim with a low temp glue gun (high temp will soften the plastic).

- For even lines I measured 1 inch between cords on the top & 1 ½ for the bottom (note dotted lines on close up shot).



- The seals are circular pieces of the plastic painted & applied with a glue gun.



# Hat



- I made the pattern for the hat covering by laying the base on it's side & tracing around, then I added a dart so that it would curve properly. I did the center by tracing the front & rocking it to the back for length.
- I cut 2 side pieces & one middle.
- I sewed the dart on each side then sewed the sides to the middle.

- The hat was made with buckram formed wet over a hat form (but a Balloon inflated to your head size will work too).
- Once the buckram dried I cut it to shape and whip stitched a wire around the front to help it keep shape.





# Hat



- Once the cover was machine sewn I hand sewed the cover onto the buckram all the way around the edges.
- The final touch was to slip stitch on some trim to match the collar.

- FIN -

