

# PANTS, The Pattern

## Your First Pair — Quick and Cheap!

This method was given to me by Keeve, the Budget Quartermaster:

- 1) Buy a pair of sweatpants one or two sizes size too large. In order to find a good Klingon color, even women will have to look in the men's department.
- 2) Mark the center front and back of each leg, and starting at these lines, fold and sew  $\frac{1}{4}$  inch tucks down the center front and back of each leg. If you use a very narrow zigzag stitch, the tucks will be more flexible. In order to simulate the detail on the uniform pants, you'll need to make 3 to 5 tucks, side by side. Quarter inch tucks take up  $\frac{1}{2}$  inches of fabric each, so if you make 10 tucks (5 in front, 5 in back) on each leg, you'll reduce each leg measurement by 5 inches. Knowing this, make sure the sweats are large enough.

There! You're done! These are very cheap and a great way to start, but they'll stretch out of shape like any sweats and they're warm. They'll do until you can round up materials for the more accurate version below:

## THE REAL THING

### YOU'LL NEED:

Jumbo Spandex-----2  $\frac{1}{2}$  to 3 yards depending on your size  
Wide elastic for waistband----your waist measurement minus 3 inches  
1 inch black elastic---- $\frac{1}{2}$  yard  
Invisible zipper, 7-9 inch (optional)  
Matching thread  
Wooly nylon thread for serger (optional)  
90 Stretch Double Needle, 4.0 or larger, if possible (optional)

## MATERIALS

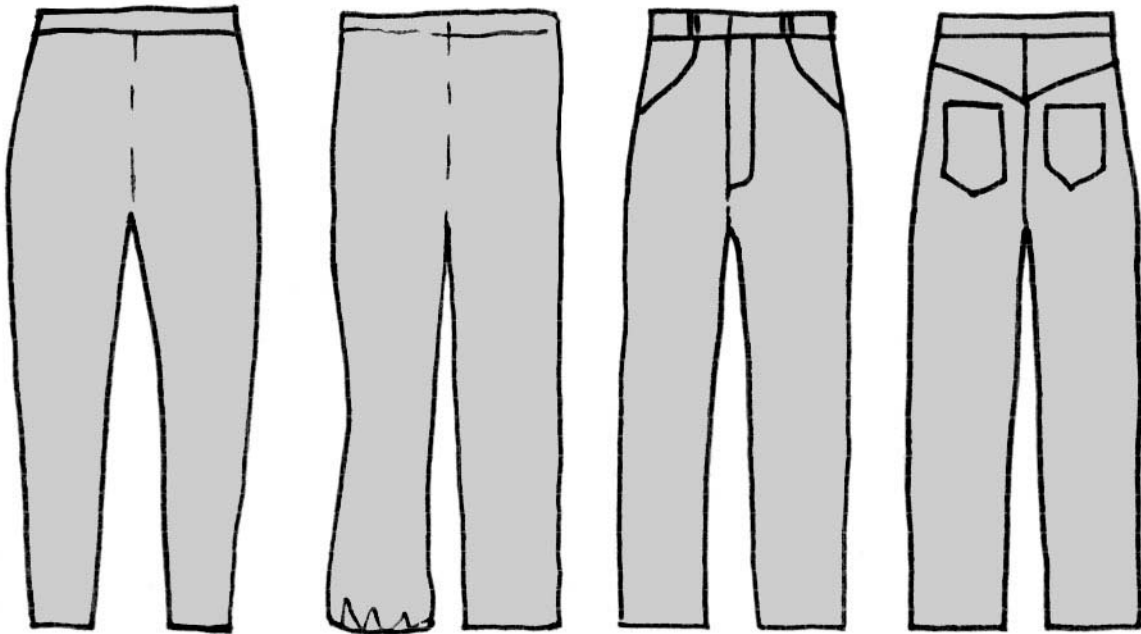
Klingon pants are made of a very heavy nylon/lycra/rayon material known by some suppliers as "jumbo spandex or jumbo lycra". Most normal fabric stores may have a bit lighter version that's a lycra/rayon blend used for skating or biking wear. Check the net or specialty stores for the heavier jumbo type. Men, especially prefer it because it is less revealing. After all, we're Klingons, not ballet dancers. I have seen this fabric in black and the raisin brown color also used in Cardassian jumpsuits. The more cinnamon brown and the charcaol gray color are harder to find. It has a very shiny side and the reverse is more matte—that's the side we use for the outside.

Stretch fabrics are not all alike. Besides being made in different weights, they have different amounts of stretch, and may stretch in two or all four directions. Beware 100% polyester fabrics that seem to be stretchy—they may stretch out of shape. The jumbo spandex I use has most of its stretch running the length of the fabric, which is about 45 inches wide. I lay out the

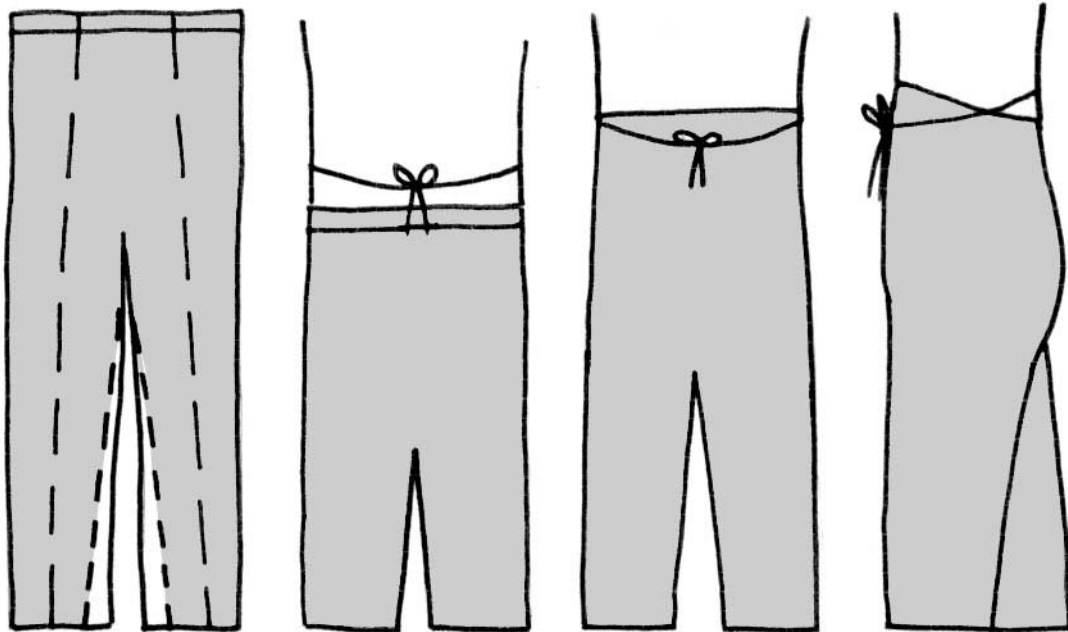
pattern so that it runs up and down the fabric width, but the tucked panels are cut along the fabric length, so that they'll stretch well at the knee. There's a slight ribbed texture on the fabric going across the width, and cutting the tucked pieces across it makes it easier to fold.

## THE PATTERN

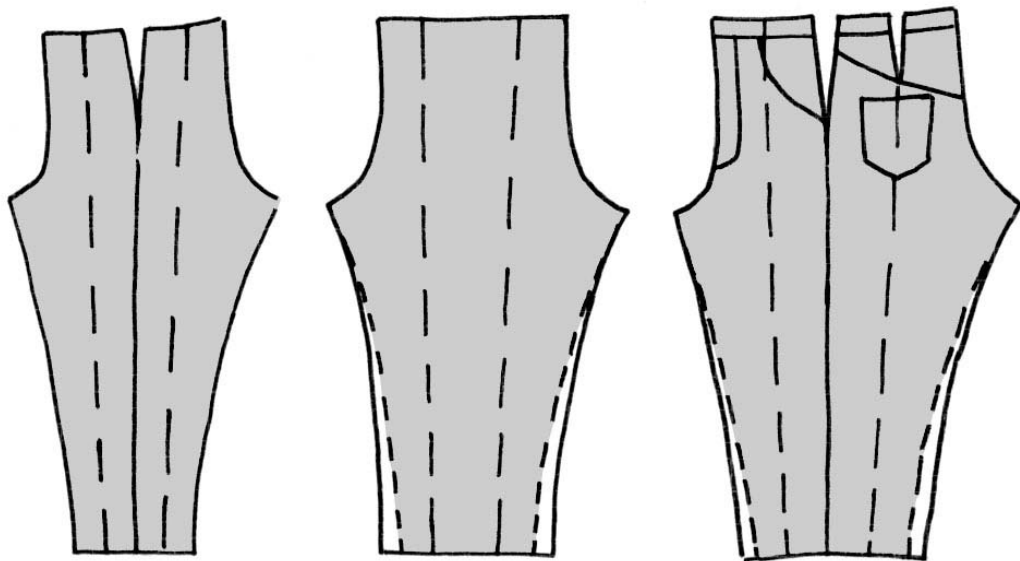
It is possible that there are patterns for stretch pants available—I'm sure there are for women. Guys may have more problems, but I've got solutions! You can take a pattern from old leggings, stretch pants or close fitting sweatpants, as long as you're willing to cut them up! It can even be done from old tight fitting jeans with a few added steps.



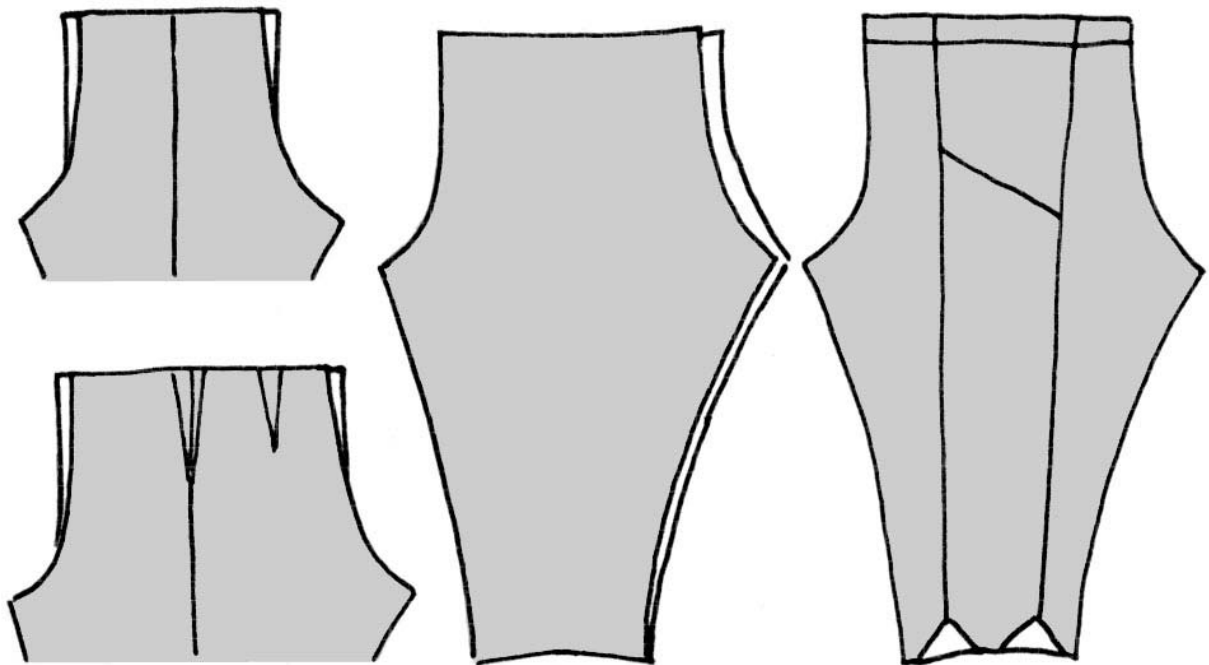
- 1) Try on the pants and check the snugness of the fit. You may wish to remove the elastic from the bottom of sweatpants. Pin in excess fabric below the knee and mark the change on both front and back of the pants inseam with a marker. You'll have to remove the pins before you can take off jeans. These may be a bit short in the waist. Tie a string around your waist and then mark the distance you'll need to add to the top of the waist to bring it up to the waistline every 3 or 4 inches. If the pants are too long in the crotch, tie the string around your waist and mark its position on the pants themselves. You may wish to mark the approximate position of the tucked accents in front and back of each leg.



- 2) Remove the pants and carefully cut them open along the inseam and crotch seam. This will be a bit harder on jeans, because of the zipper in the fly. Cut right across the waistband to separate the two legs from each other. You should have two flat or almost flat pieces. If you are working with leggings, you are ready to draft the final pattern. If not—
- 3) Check both pieces to see if the amount you took off the lower inseam is the same on both legs, and the same front and back. If not, use the smaller of the changes and trim it off the pants smoothly with scissors or rotary cutter



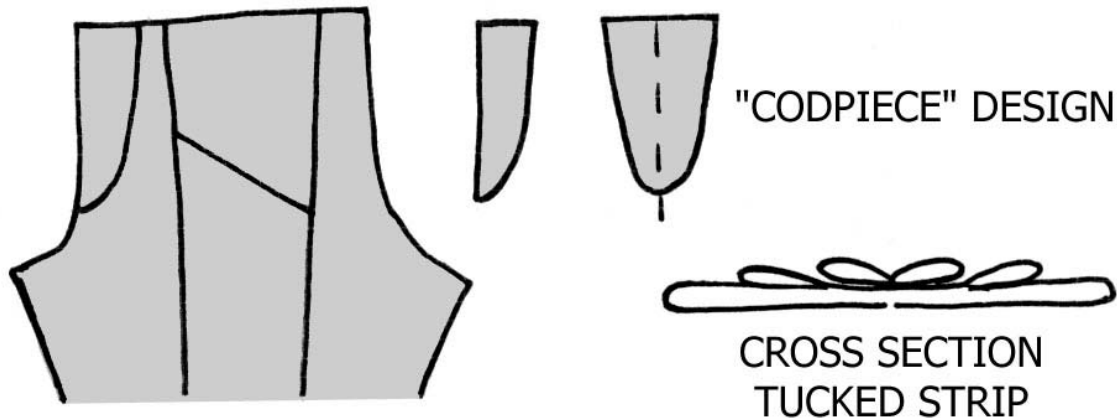
- 4) Jeans and stretch pants will have side seams to deal with and may not lay quite flat. Starting at the waist, open the seam until you reach the widest part of the hip. When you lay the piece flat, the opened area may look like a dart. There may also be a dart in the back going from the buttocks to the waist, or there may be a separate yoke piece, in the case of jeans. Cut open the dart or cut open the yoke piece from the waistband down. This will flatten the leg piece completely. With stretch fabrics we don't need no stinkin' darts. On the final pattern, we'll move the center front and back seams in to take up the holes made by the side seam. The darts will be left open, since these pants have an elastic waist. Trace the altered shape onto a piece of craft or butcher paper. Don't forget to add or subtract to the top of the pattern to get the correct waistline. Now you have a single piece leg pattern. The rest are details



- 5) If you are working from a woven, non-stretch source, like jeans, you will have to take this shape in more along the former side seam. This is because stretch fabrics require a negative ease. Ease is the extra fabric built into garments to allow for movement. Trace the front half of the leg, then shift the leg so that  $\frac{1}{2}$  inch is removed at the bottom of the leg, and 1 inch is removed at the top by the waist. When you make your pants, if the seat still seems too roomy, take them in along the inseam. This will tighten the crotch.
- 6) You'll need to extend the top of the pattern so that whatever elastic you use at the waist is centered at the waistline. So, for 2 inch elastic, add one inch to the waist, for  $1\frac{1}{2}$  inch elastic, add  $\frac{3}{4}$  inch, etc.
- 7) Draw in the center front and center back lines, where the tucked detail will be applied. You may have to straighten these lines somewhat. There is an additional line of tucks

that runs from about mid-hip to crotch and joins the front and back tucked area, but only on the left leg. (I think it would hang up on the holster on the right, so it was eliminated.)

- 8) The last bit of tweaking is at the hem. Because of the tapered leg, this should appear slightly curved. Also, these pants will have elastic stirrups. You may want to remove wedges from the center front and back. This will make getting feet into the stirrups easier.



- 9) Now to draft — for lack of a better term — the codpiece. It is a tapered panel extending down the front of the waist to where the crotch starts to curve. This piece does not touch the tucked strips, but lays in between the two front ones, it has a curved base. I recommend you make it so that it be cut on the fold, or in two separate sections, so you may add a zipper in front. On actual set costumes there was no zipper, but Theme Park Klingons were provided that comfort.
- 10) The final touch — add a standard  $\frac{5}{8}$  inch seam allowance everywhere!
- 11) The tucked accent has  $6\frac{1}{4}$  inch tucks spaced  $\frac{1}{4}$  inch apart. I use a strip  $5\frac{1}{4}$  inches wide which I serge into a tube. The machine I use allows me to completely flatten the tube. Experiment with constructing these strips. You may find you have to add to this dimension and add a seam allowance, or remove some because your fabric is thinner. As you experiment, make the tucks with a slight zigzag in your stitch. This thickens the seam slightly, but it also allows it to stretch. You'd hate to have spent hours making these tucks only to have the thread break the first time you wore the pants and bent your knees. I would also advise that you keep notes, so you remember the machine settings needle placement and presser foot locations that do the job best. This is what separates the casual from the anal sewer.

Here's where I'll stop this. We'll make the pants next time. E-me with questions through the website <http://www.qidar.com>.