



Stitching On Knits

There are all types of knit fabrics available on the market. They differ from woven fabrics in that they are created by the yarns looping around each other. They vary in fiber content from completely natural to completely synthetic and many combinations of the two. They vary in from light way jersey to heavy fleece, usually measured in ounce weight. There are several styles of knits, rib knits, jersey knits, fleece, pique, herringbone, and interlock are just a few types of knitted fabrics.

All knits have two things in common that affect the quality of embroidery. They are stretchy, usually more so in one direction, often lengthwise. The other is that they have loft or nap, again some more than others. This nap compresses and flattens during embroidery which pushes the fabric in front of the stitching.

My general rule of thumb is the heavier the fabric the more it will move. This is a super heavy fleece sweatshirt. I had to compensate for the pushing of the fabric when I digitized this design for it. On the left is a screen print of the design before sewing. Notice the gap between the outline and fill. This is the compensation to get the fill and outline to line up in the stitched design (right side photo).



The stretchiness and yarn compression can lead to puckers, and registration problems. BUT sewing on knits is not something to avoid because it's problematic. That's just not true and you'd be missing out on some fantastic opportunities to create something special.

Thousands of shops around the world embroider millions of knit shirts every single day. You can do it too! In this article I'll share some of my tips for successful embroidery on knit fabrics.

Stabilizers

Start with a good quality stabilizer. Knits need support not only during stitching, but also after. A cut away stabilizer that supports the stitches after many washings will keep the embroidery sharp and good looking.

My personal preference is a nylon mesh product. It's lightweight, yet is sturdy enough to hold the stitches in place. It also has the no-show advantage. You know you've seen those logos on a shirt that have a square of white showing through the fabric! I'm sure you'd much rather that the focus is entirely on the embroidery. The other benefit of nylon mesh stabilizer is that it is softer against the skin than other cut away stabilizers.



Fusible Stabilizer

Some people will tell you to use either a fusible stabilizer or spray adhesive with knit fabrics. They can help if you want to use them. My point of view is that those extra steps are not necessary. Remember about all those shops that sew millions of knit shirts every day? They don't have the time to fuse stabilizer with each shirt. They pump out all that fantastic work without the extra steps. That said a fused fabric/stabilizer combination doesn't hurt anything if you want to have the additional insurance.

Hooping

Hoop your stabilizer and fabric together. If your machine comes with round hoops, use them. They provide even tension on all sides of the fabric. Your hooped fabric should be taut, but not tight. Lightly push your fingers across the fabric. If it forms a roll of excess fabric (like the photo on the right), remove the hoop and start again. The fabric will move a little (remember stretchy fabric!), but it shouldn't move a lot.



Hoop Burn

On a side note, you may have been advised against hooping because it may leave hoop burn. This could be a sign that the hoop is too tight. Some fabrics will show hoop marks, it's the nature of compressing the yarns. Often you can brush the fabric with your fingers and they marks will go away. For really stubborn marks, hit it with a touch of steam. It always works to remove hoop burn.

Design

Choosing a design appropriate for the weight and type of knit is very imperative. Knits can handle filled designs within reason. Jacket back, and full front designs that are stitch intensive could lead to problems. Even if they don't pucker, large filled designs add a weight to the soft knit fabric that looks odd and doesn't drape naturally.



The weight of the fabric will help you to determine the size and type of design to use. Thicker knits can handle more stitches than thin knits can. Good quality designs will provide adequate coverage and still leave the stitched area supple and natural.

T-shirts are very thin will hold fewer stitches before puckering becomes a problem. Choose light density designs or Appliqué.

There are exceptions to every rule. A large filled design can work on knits *if it is designed specifically for that fabric*. This mermaid design is 7.5 inches tall and 37,000 stitches. It was designed to be sewn on a medium weight knit fabric. I even stitched it on a t-shirt.



Which Needle?

Okay, so you have the stabilizer, hooped the fabric and the right design... Use a ball point needle. This will move the yarns of fabric aside and not cut through them like a sharp might do. Ball point needles also cut down on the possibilities of snags during stitching.

Away we go!

Attach your hoop to the machine, program the design, and proceed as usual for the test sew. Be sure to use a similar fabric weight and knit type before moving to your final product. Go to a thrift store and buy some old knit shirts of various weights and types. You'll be glad you did. It can save you from ruining something of value.

When your test sew is complete, unhoop, cut away the excess stabilizer and evaluate the end product. Was the hoop tight enough? Too tight? Did you choose the right design for the fabric weight? If the design seems a little heavy for the fabric you can try a different style. It's also possible that adding a second piece of stabilizer to the recipe will do the trick. Try adding a single piece of tear away. Now is also a good time to consider a fusible product.

If you decide to make changes to the design/stabilizer/fabric combination, test it again! It may seem excessive, but a change in any of these elements can change the whole dynamic.

Once you're satisfied with the test sew, you are ready to complete your project.

With a little forethought and lots of practice you can become an expert at stitching on knits!

All of the designs in this article are available from [Threadlove Embroidery](#).