

Machine Embroidery on Knits

A professional's tips for superior results

BY ANGELA WOLF

Whether you are upcycling an older garment or sewing from scratch, embroidery is a great way to embellish knits. You may have a garment or yardage that you want to enliven or enhance, and embroidery adds a luxe touch. The very factors that make knits so wonderful to wear, however, also make them tricky to embroider. You don't want to lose the drape or softness, or change the fabric's density and stretch any more than necessary to carry an embroidered design.

As a veteran of many embroidery projects—not all of them successful—I have guidance to offer, from practical advice on thread and stabilizer choices to design ideas. Successful results depend on assembling a team of elements that work together: the right thread, the correct stabilizer, a considered embroidery design, and the perfect knit fabric to carry it off. Here are my tips for embroidery success.

Angela Wolf is featured in the DVDs One Pattern Many Ways I and II (The Taunton Press, 2013).



A feather motif is appropriately light on matte jersey. Learn to pair embroidery and fabric on the following pages.

Pattern: The Delila, Angela Wolf Patterns. Fabric: ITY (interlock twist yarn) knit, the author's stash. Embroidery design: "Peacock Feathers," MomoDini.com.

Choose a knit and a design to go with it

There are many types of knits to choose from. Consider the fiber content, thickness, stretch, and texture when selecting an embroidery design for each variation.

POPULAR KNITS

Rayon knit is breathable and soft on the skin, available in various thicknesses. It tends to become thinner after the first washing.

Cotton knit is also breathable and soft on the skin. It is available in a wide range of weights, from tissue knits to “beefy” knits.

Matte jersey drapes beautifully and available in vibrant colors. It is wrinkle-free and typically made with polyester.

Ponte knit is thicker than rayon and cotton knits. It is better for structured garments.

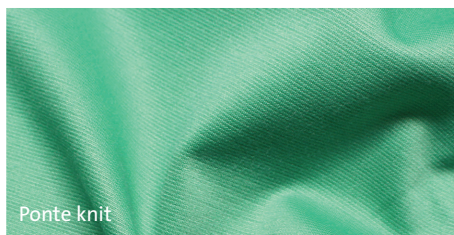
Polyester fleece is thick and comfy, but prone to permanent marks from hooping and stitches sinking into the fabric pile.



Cotton knit



Matte jersey



Ponte knit



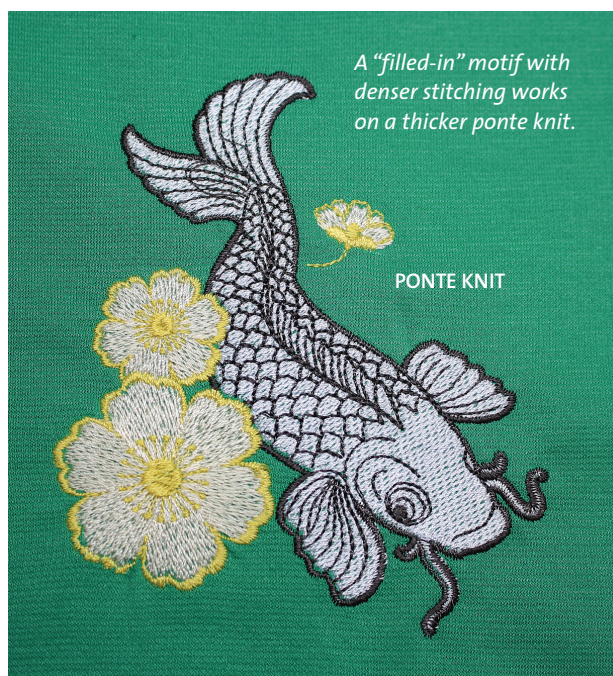
Linear stitches are a better match for a drapey matte jersey than thick satin stitches.

DESIGN DENSITY

- Choose an embroidery design with a density that complements the knit. A design that is thick, with layers of stitches, can stiffen or change the fabric's hand. Always test on a fabric scrap. Make sure the fabric still drapes and check for holes, as dense designs can puncture fabric.

For a knit with drape, use a motif with less density, such as a design built with linear stitches instead of wide satin stitches or large expanses of fill stitches. If you fall in love with a design, keep in mind that one that stiffens matte jersey might work on a thicker knit.

- To prevent puncturing holes or distorting the fabric on thinner knits, choose an embroidery design with fewer stitches. If you pierce the same place on a fragile fabric with the needle too many times, it tears the knit's fibers and creates a hole.
- Depending on the knit's texture, some form of topper might be necessary to prevent stitches from sinking into the fabric. A topper, in machine embroidery parlance, is a stabilizer. I tend to use water-soluble stabilizer, plastic, and vinyl (see “Get to know stabilizers” on the facing page). I've also used plastic dry-cleaner bags as tear-away toppers. Just embroider through the plastic as you would a stabilizer, then tear off the excess.



A “filled-in” motif with denser stitching works on a thicker ponte knit.

PONTE KNIT

NEEDLE AND THREAD FUNDAMENTALS

Be sure to test your needle and thread choices with the motif you're stitching. You should also always test the embroidery for care considerations. Wash and dry it as you plan to care for the garment.

Needles

Use a stretch or ballpoint sewing machine needle with a size complementary to the fabric weight.

Bobbin thread

Bobbin thread is usually 60 weight (90 weight for some less expensive embroidery machines). It's best to check the specifications in the embroidery machine manual, or write down the weight of the bobbin thread that was included with the machine.

Embroidery thread

Choose a thread that suits the design and the garment's care requirements.

- Rayon thread has a nice shine and is available in a wide range of colors. It's less colorfast than polyester, but is more supple and, therefore, may be a good choice for lightweight knits.
- Polyester or silk threads keep a vibrant color that lasts through many washings.
- Metallic thread adds sheen and elegance. Be sure to stitch the design on a swatch first, though, and wash and dry the swatch the same way you would clean the garment to make sure it works for your lifestyle.
- Cotton thread offers a matte finish. I've found it can fade over time.

Get to know stabilizers

Think of embroidery stabilizers in the same way you do interfacings. In most cases, you aim for a pairing that doesn't change the hand of the fabric in an undesirable way.

There are three main types of embroidery stabilizer, cut-away, tear-away, and water-soluble, and each is available in sticky-back, fusible, and nonfusible variations. Choose a stabilizer by how it is applied, and if it is removed, or not, from the fabric. Here are my recommendations.

Medium- and heavyweight cut-away and tear-away stabilizers might not be the best choice for a lightweight knit with drape, because the stabilizer is left behind within the embroidery design and, therefore, stiffens the fabric.

Water-soluble stabilizers are a good choice for knits because the stabilizer washes away when the fabric is rinsed. It won't overly affect the fabric's weight or interfere with its drape. Adding a water-soluble stabilizer or plastic layer on top of the fabric keeps the stitches floating on the fabric surface. This produces a better defined motif in lofty or textured fabrics.

Water-soluble stabilizers are also a smart choice for lightweight



SUGGESTED STABILIZERS FOR KNITS

Sources

- AllBrands.com
- AllStitch.net
- EmbroideryOnline.com
- RedRockThreads.com

Water-soluble toppings

- Exquisite Water Soluble Topping
- Floriani Water Soluble Topping
- Pacesetter Lightweight Water Soluble Machine Embroidery Stabilizer
- Sulky Solvy Water Soluble Stabilizer (lightweight)

Cut-away

- Exquisite No Show Poly Mesh
- Floriani Cutaway Medium Fusible
- Pacesetter Medium Weight Fusible Cut-Away Stabilizer

Adhesive-backed

- Floriani Wet N Gone Tacky

knits that might rip when even lightweight tear-away stabilizers are removed.

Fusible cutaway, also called no-show mesh, remains in the embroidery and adds body. It is pressed and fused to the knit's wrong side. After embroidery, you can steam it off the fabric and cut away the extra.

Consider design placement

Deciding where to place the embroidery design is important for the garment's overall look and fit. There are a few easy techniques I use to make sure I get attractive, wearable results.

One way to determine where to place the embroidery is to print a copy of the motif (or photocopy a sample stitch-out), then use double-sided tape to place the design(s) on the garment. Move the designs around as needed until you are satisfied with the new look.

If the design will be in a fitted area that relies on the fabric's stretch, make allowances for the rigidity of the embroidery design. Trust me, I learned this the hard way after embroidering the outside leg of stretch jeans. Start by adding $\frac{1}{4}$ inch to each seam allowance to allow for the nonstretch embroidery and baste the seams first. Test the fit, and adjust as needed.

Collar ribbing, ribbed binding, cuffs, or entire sleeves are prime real estate for embroidery. Depending on the design's size, either chalk-mark the pattern pieces on the fabric or cut the pattern pieces out first. For example, if the embroidery design is within 2 inches of the seam allowance, chalking the design is best, as it's difficult to embroider close to the fabric edge.

For sleeves, chalk-mark the sleeve pattern on the fabric and then add a line parallel to the grainline from the shoulder notch to the hemline. Use the chalked line as a guide to position the sleeve on the hoop.

tip

Evaluate stretch. Anywhere a garment needs to stretch, for example the neckline or cuffs, consider potential stretch reduction before you embroider.

The embroidery is minimal on the cuffs of a lightweight ribbed cotton knit top. A denser motif would have diminished their necessary stretch.

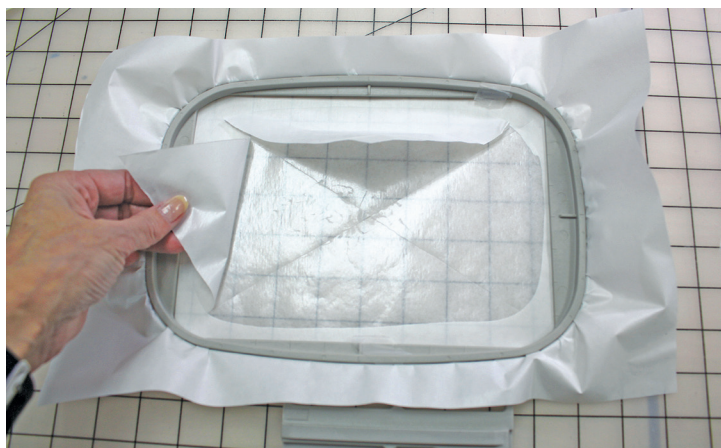
Pattern: The Ruched-T Top (modified), Angela Wolf Patterns. Fabric: cotton knit, the author's stash. Embroidery design: built into Brother embroidery machines, or available at lbroidery.com.



Stitch delicate knits without hooping

If the fabric won't be damaged by hooping, hoop it with the stabilizer. For knits that could be marred by hooping, however, "floating" the fabric on the hoop is a better option. Adhere the fabric to hooped adhesive-backed stabilizer to hold it in place.

1 Hoop adhesive-backed water-soluble stabilizer. Place it with the paper backing side up. Use a pin to gently score the paper: Draw around the hoop's inner edge, then draw an X through the middle. Tear away the paper backing along the scored lines.



2 Apply fusible tear-away stabilizer to the fabric's wrong side. After embroidery, you can steam it to release from the fabric, then trim the excess.



3 Place the knit fabric in the hoop on the sticky stabilizer. Check the placement and stick the fabric on the stabilizer. Make sure the fabric is flat to the stabilizer without wrinkles. Add a water-soluble "topping" stabilizer on the fabric. Then embroider the design.



4 Once the embroidery is complete, cut or tear away all excess stabilizer from the right and wrong sides. Then rinse away any remaining water-soluble topping and stabilizer.



5 Check your results. With the correct combination of design, stabilizer, and fabric, you should have smooth results.



FINISHING TIPS

When the embroidery is complete, cut or tear away the excess stabilizer from the wrong side. Rinse away the water-soluble stabilizer following the manufacturer's instructions.

If the embroidery is on an area of the garment that will rub the skin, cover the wrong side of the stitches with fusible interfacing. Do this after the water-soluble stabilizer and toppings have been washed away and the fabric is dry.