

Getting Started in Miniature Sewing



The above are things you'll find extremely useful besides the standard needles & thread!

Dedicated fabric scissors. The sharper your scissors, the neater your edges. The neater your edges, the less they fray. Extremely important when you have to sew with a tiny seam allowance. (I have a whetstone and sharpen mine monthly)

Seam Ripper. For when you mess up. You never get good enough to not need this.

Pins. To hold things in place.

Fray Check/Fray Block/Fray Stay (different names for the same product). Apply this lightly to the edges of woven fabrics to prevent fraying. Not necessary for non-fraying fabrics like vinyls and synthetics.

Glue Stick. Good for holding things in place that pins can't. NOT permanent, so use this to hold things in place while sewing, like ribbon, lace, and other details.

Fabric Glue. There are a couple of types, and different ones have different qualities. White stuff like Liquid Stitch is a little bit stronger than craft glue and is good for natural fibers like cottons but doesn't stick well to synthetics. Clear Stuff like Fabri-Tac works great on smooth synthetics, but not great on natural fibers. Squirt some onto a piece of scrap and apply with a pin or toothpick. Do NOT squirt directly on fabric. Fabric glue is great for hems (not seams!) and applying details like studs and lace permanently when you don't want to see a stitch.



This stuff isn't necessary, but is great for adding realistic detail

Buckles come in sizes as small as 4mm. You can find them on Etsy and Ebay.

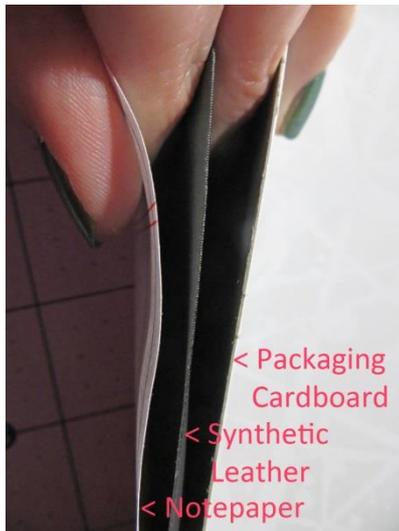
Buttons come in sizes as small as 2-3mm. You can find them on Etsy and Ebay. You can sew them on, but you can't make functional buttonholes in this size (you can make looped button closures, but not buttonholes) so they're ornamental but still add a nice touch.

Miniature studs and spikes can't be found in most miniature sewing shops, but can be found in most stores that specialize in nail art.

Metallic thread can be found anywhere you buy thread. Like buttons, miniature zippers just don't happen at this size, but you can fake them by using metallic thread and a small ornamental stitch.

Fabric paint is also good for painting on details that just aren't going to happen in miniature. I've used it to add designs and fake details like buckles, buttons, studs, and zippers. How well this works for you will have a lot to do with your painting ability.

Fabric Selection is the most important part of getting a good result. You can sew everything perfectly, but if you use the wrong fabric it won't look good. People patterns will give you fabric recommendations of broad types like 'muslin' or 'silk' but there is a wide variety in every fabric type, with only a few good for miniatures.



The first thing to look for is thickness. Fabric has to scale properly. Lots of people make doll clothes from felt because it's easy to work with. The end result also never looks like real clothes because the dolls look like they're wearing clothes 1" or more thick because of scale.

On the left I have a piece of synthetic leather I use for miniature sewing in between a piece of notepaper fabric and a piece of laminated cardboard from the inside of a toy package, about as thin as you get for cardboard. The fabric is about as thick as the notepaper. There are very few situations I'd use something as thick as the cardboard (a wool winter coat, not much else). Try to find something close to paper thickness.



The second quality to look for is how well it drapes in miniature. If you're dealing with something tailored to fit the shape of the body like a pair of pants, you don't need to worry how well it drapes. If you're making a long coat, or a skirt, you do.

Most of the softest fabrics like silks and satins that fall as smooth as a waterfall on a person do not work in miniature. Anything more than a 45 degree angle is going to be too puffy to look natural.

Some fabrics that usually drape well in miniature are stretchy synthetic vinyl/leather, thin taffeta, and thin knits (like T-shirt fabric) but even those fabrics have a range where some will be perfect and others will be too stiff. This is why if you can, always buy fabric in person so you can test it.



The third thing to look for is how easily it ripples and folds. This is the least important aspect, because with most things you can fake it by wetting the fabric and forcing ripples/wrinkles to fold and then letting the fabric dry. This will make your finished products look much more realistic in miniature BUT only if you want them to be mainly in the same pose.

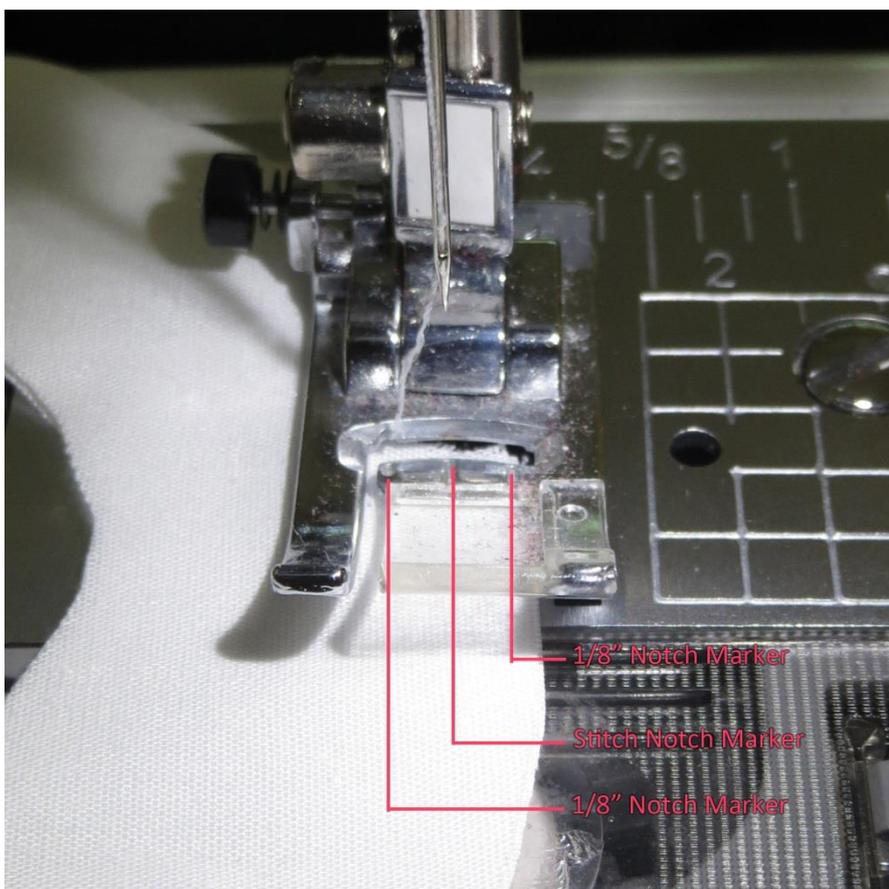
A skirt or coat will drape differently for a sitting character than a standing one, so if you are sewing for something with a lot of articulation that will be moved often instead of set on a shelf, this is a good quality to look for.

Sewing Tips

The biggest complaint for most people with tiny sewing is the seam allowance. On people, you don't notice the seams inside your clothes because they take up proportionately a tiny amount of space. Not so on dolls: imagine the seams inside your clothes were so bulky you had to go up a full pant size. The smaller the seam allowance, the smoother the clothes lie over the body and the better they look.

1/8" is about as small as you can get without fraying becoming an issue on most fabrics. You can use 1/4" starting around 1/3 scale: adult figures about 20" tall or toddler/kid figures around 18" tall. Below that, your clothes will look really bad if you don't use 1/8".

If you need 1/4" or more, you can trace a pattern onto a blank sheet of paper and use a ruler to mark out however much more space you want. Be careful though: it's hard to sew a precise seam allowance on curves so some things become harder, not easier. After you sew with your new seam allowance, you must trim back the seams to 1/8" from the seam line and apply fray block. If you don't, the clothes will not fit right (same analogy with pants size: instead of one size bigger, the larger seam allowance would make you need pants two sizes bigger).



Sewing with 1/8" allowance is pretty easy for hand sewers. Machine sewing, not so much.

Here's a neat trick: look at your universal/basic sewing foot. Mine has three notches: one at the center where the needle will go down, one on the right that is exactly 1/8" from the needle, and one on the left that is exactly 1/8" from the needle. By sighting along those notches, I can sew very precise 1/8" seams.

If your machine foot has no markings, you can get one that does (mine is Brother brand) or you can take a paint pen and ruler and mark your foot yourself.

Apart from the foot, the best way to sew precisely on a machine is to GO SLOW.

Most machines have a speed setting on the machine as well as being speed controlled by the foot pedal. I sew on the slowest speed, unless I'm sewing a straight line (then second slowest!)

If I'm sewing something very curvy (collars, sleeves), I will also stop after ~3 stitches, set the needle in the down position, lift the foot, and manually adjust the angle of the fabric before I sew ~3 more stitches. And repeat.

If you're sewing something detailed, sewing precisely by machine will be only slightly faster than sewing by hand, but it will also take you longer to master fine control on a machine than fine control with hand sewing.

Troubleshooting

Problem: The needle is pushing the fabric down into the machine, where it gets caught.

Solution: New sewing needle. It's hard to tell when a needle dulls, because it always feels sharp on your finger, but the smoother and sharper the needle, the less resistance it has going through fabric. Needles are cheap. For people-sized sewing, you should change your needle after every project/garment. For miniatures, less often. If you're sewing weekly, about once a month should do it.

If a new needle doesn't do it, you can stabilize your fabric by placing it on top of a piece of tissue paper, sewing, and then tearing away the tissue paper after each seam. Doing this will dull your needle more quickly.

Problem: Pin holes. Some fabrics (like vinyl) will show every needle hole and don't self-heal. So how do you pin patterns to them to cut them out? How do you hold them together while you sew?

Solution: You can trace pattern pieces onto fabrics like that with gel pens and then cut them out. For pinning before sewing, you can try to pin only in places that will not show on the finished outfit, use small binder clips, or paper clips. You can also hand sew a 'baste stitch' (a quick, loose stitch that is meant to hold the fabric pieces in place while you machine sew).

Problem: Seams are unraveling.

Solution: Did you use fray block? Did you make sure it was dry before you started to sew?

Problem: Fray block/glue are staining the fabric

Solution: Use less. You only need to wet 1-2mm of the edge of fabric with fray block for it to do its work. If glue is not holding in small amounts, you may not be using the right type (see materials). Glue will also be more effective if used on hems that you already ironed so that it isn't the only thing holding the hem closed, and synthetics that can't be ironed won't stain. Most fabrics will dry clear, but some (like silkies) will be permanently stained because the sheen goes from shiny to matte where glue is applied so the trick is to not use enough to seep through to the finished side.

Problem: Clothes don't fit.

Solution: If they're too small, there's a chance your printer is not set to 100% and shrank the pattern slightly because it read the margins of the document as something that needed to be within the print area. Check both in your control panel and on the software you used to print from. Too small can also be caused by using too thick fabric (which increases the bulk of the seams inside the clothes), and too large seam allowances (ditto).

Too big is less common, but can also be a printer problem. On some patterns that don't take up a lot of space the printer might try to enlarge it to fill up the page better, so check your printer settings first. Too big can also be caused by the wrong fabric, say if you try to sew something designed for non-stretch with stretch, or if you used stretchy material for a stretchy pattern but stretched it out permanently on your sewing machine. Also possible is too small seam allowances, though that's not much of a risk at 1/8"

Terminology

A **seam** is a line along which two pieces of fabric are sewn together.

A **hem** is when you turn over the edge of a piece of fabric and sew it to itself. Usually the bottom or edge of a garment. Since there is no stress on a hem from two pieces of fabric being joined together, you can safely substitute sewing with fabric glue for most hems.

The **raw edge** of fabric is any unsewn edge. The raw edge of a seam is the narrow margin of the edges of pattern pieces after they have been sewn together, usually concealed inside the garment. Aka the **selvage**.

A **straight/basic stitch** is like this - - - -. Almost all seams are done with a straight stitch.

A **zigzag stitch** is a stitch like this $\wedge\wedge\wedge$. It is used on stretchy fabrics you want to stay stretchy as when you pull on the seam, it will straighten out and lengthen.

A **stem stitch** looks like a lightning bolt (on your machine). It's like a narrow zigzag stitch. This is handy for doll clothes because it looks like a straight stitch, but stretches like a zigzag stitch. Not as much, but enough for miniature purposes.

Topstitching is when you open up a seam you just sewed and sew the raw edge of the fabric flat against the inside of the garment by sewing a visible seam alongside the seam you just sewed. Think the light colored stitching on the outside of your jeans.

Ornamental stitching is any stitching that doesn't serve a purpose. In miniature, it's useful to stitch the shape of things that you don't sew, like pockets. This could also be an embroidered design.

When you place a **pattern piece on the fold to cut it out**, you fold the fabric in half and line up the fold line on the pattern piece with the fold on the fabric. This is because people clothes are usually cut from fabric off of a bolt, which comes pre-folded to take up less space. Easy, but pretty wasteful.

When you **jigsaw a pattern on scraps**, you are pinning or tracing fabric pieces on pieces of fabric that are remnants and not regularly shaped. Some pieces will still need to be cut on a fold to get the other half of the pattern piece, and others will need to be flipped over and cut out again for the pieces for the other half of the body. Like quilting, doll clothes are something more often made with scraps.

Right Side/Wrong Side is the term given to the outside and inside of fabric. It can be a bit confusing because while some fabrics have an obvious outside, like a satin with a shiny side and a not shiny side, a lot of fabrics don't. I use '**finished side**' because it's less confusing. Finished side is the side of the fabric that's going to be showing when you're done. Make sure it's always the same side, and you'll have no problems.

Note: there are lots of sewing machine terms (presser foot, bobbin, etc) I'm not explaining because they don't show up in patterns so much and they are explained in your sewing machine manual, which you should read.