



Sew Ready: Machine Basics

with
Amy Alan

What You'll Need

Needles & Thread

SEWING MACHINE NEEDLES

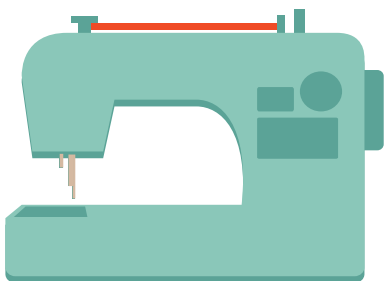
Choosing the correct needle for your project will make a big difference in the quality of your work. Read your machine manual to find out what the correct needle system is for your sewing machine, and read the needle case before purchasing needles to make sure you've chosen the correct ones.

There are many different types of needles. Sharps, ballpoint, universal, leather and topstitching needles are just a few. To read more about needles and decide what one would be right to use with your fabric, thread and project, visit this link: [schmetzneedles.com/learning/pdf/schmetz-needle-chart.pdf](https://www.craftsy.com/learning/pdf/schmetz-needle-chart.pdf)

Needles are fairly inexpensive and should be changed regularly. Some seamstresses change their needles for every project. For the best stitch results, your sewing machine needle should be used for no more than 6 to 8 hours. Many stitch issues can be fixed by simply giving your machine a fresh sharp needle.

BOBBINS

Each sewing machine brand requires a specific bobbin size. Check your owner's manual for information about the correct bobbin for your sewing machine. If you are unsure if your bobbin is the correct one for your machine, look at your stitches. Machines with the wrong bobbin will typically sew for a short while, and then skip stitches or create looped stitches, and then sew correctly again, continually messing up the seam line. Do not use a bobbin that is bent, broken, or has a jagged edge, as your thread may catch and break on the bobbin rim.



PRESSER FEET

The presser feet available for your machine will depend on the age and brand of machine you have. Local sewing machine dealers should be able to order feet for your machine, and online retailers are an alternative for hard-to-find feet, particularly for vintage machines.

- **Standard or zigzag foot:** The most commonly used presser foot, it has a wide mouth to allow for straight, zigzag and decorative stitching
- **Appliqué foot:** The clear plastic or open mouth of this foot allows you to see where you are stitching
- **Zipper foot:** Used to put in zippers and to make piping, this foot is easiest to use when it is very narrow, allowing you to stitch closely to raised edges
- **Buttonhole foot:** Helps to give buttonholes even tension and to make them consistent lengths. May be automatic or have a step-by-step feature
- **Blindstitch foot:** Pick this foot when making a blind hem on the edge of a skirt or pants to more easily sew next to your folded fabric
- **Button sew-on foot:** A wide zigzag stitch with a shortened stitch length can be used with this foot if your machine does not have a dedicated button sew-on stitch
- **Quarter-inch foot:** A favorite with quilters, this foot is used to make precise 1/4" (6 mm) seams when piecing quilt tops
- **Walking foot:** Quilts, thick fabrics and knits are easily fed through your machine with the help of the second set of feed dogs found on this foot
- **Darning foot:** Fix your mending or quilt a blanket with ease once you have a darning foot. Don't forget to lower your feed dogs when using it so that you can easily move your project around

Tip: Be sure to check out your brand and model of machine online to see what additional presser feet may be available to you. The right foot can make your projects much easier to complete.

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NEEDLE GUIDE

You should try out your presser feet and stitches on whatever fabric you are most likely to sew, but these are a few suggestions to help you when picking out fabrics and threads to try. Choose several different types of fabric and thread because comparing the effects and textures is quite fun!

Be sure to check that the needle system you are using matches the one required for your machine. Choose a gauge of needle based on the thickness of your fabric and thread. Check that your thread isn't too thick (or too thin) for the groove on the front of your needle.

Resources

APPROPRIATE NEEDLE SIZES BASED ON FABRIC THICKNESS

Fabric type	Needle size
Fine	70/10-75/11
Mediumweight	80/12-90/14
Heavyweight	100/16-110/18

Suggested fabric	Recommended needle	Optional thread choices	Stitches to try
Quilting cotton (mediumweight)	Universal, Microtex or metallic	Cotton, polyester, rayon, metallic, silk	Straight, buttonhole, decorative
Mid-weight denim (med-heavyweight)	Universal, topstitching	Cotton, topstitching	Straight, buttonhole, decorative
Cotton jersey (fine-medium)	Stretch, ballpoint	Stretch, polyester, rayon	Zigzag, stretch
Wool or fleece (med-heavyweight)	Universal	Polyester, rayon	Straight, decorative, zigzag
Polyester chiffon (fine)	Universal, Microtex	Polyester, rayon, silk	Straight

SOCIAL MEDIA

My blog: www.reallyhandmade.com

My Twitter: twitter.com/amyalan

My Pinterest: pinterest.com/amyalan/

BOOKS

The Sewing Machine Attachment Handbook, by Charlene Phillips (Krause Publications, 2009)

The Sewing Bible, by Ruth Singer (Potter Craft, 2009)

NEEDLE INFORMATION

Great handout to print off for information about needle tips and their uses: www.schmetzneedles.com/learning/pdf/schmetz-needle-chart.pdf








FOR THE LOVE OF SEWING

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Your machine likely has many different stitches to choose from. These are some of the most common stitch choices, with an explanation about what each one is used for.

UTILITY STITCHES

These are the main stitches that you'll likely use every time you sew. They can be used for seaming, edge finishing, and to sew in zippers or make buttonholes.





Stitch Image	Stitch Name	Stitch Function
	Straight	The most widely used stitch, it's most often used for basic stitching, basting, sewing gathers and inserting zippers
	Zigzag	Can be used to seam when a stretch seam is needed, finish edges, sew on appliqué and elastic
	Overcast (also called Mock Overlock)	Stitched on the edge of fabric to keep it from unraveling, gives a similar appearance to a serger stitch
	Blind hem	Sews several straight stitches on the hem allowance, then reaches over to hold on to a few threads of the fabric fold
	Buttonhole	Creates buttonholes. May be automatic or require several steps to complete

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Stitch Types




STRETCH STITCHES

When seaming knits or attaching elastic or stretch trim, you'll need a stitch that will stretch and move with the fabric you're sewing. These stitches would be your best option as a non-stretch stitch may break when stretched or pulled.

Stitch Image	Stitch Name	Stitch Function
	Basic Stretch	This stitch stretches with knit fabric and can be used decoratively
	3-point Zigzag	Can be used to finish the edges of knit fabric, attach elastic and darn
	Stretch Overcasting	Finishes the edge of stretch fabrics
	Triple Stretch Stitch	A strong stitch for seaming knits, sewing inseams, and attaching sleeves

DECORATIVE STITCHES

To add unique details to your projects, consider using a decorative stitch in place of topstitching or along a hemline.

Stitch Image	Stitch Name	Stitch Function
	Scallop	Used decoratively
	Leaf	Used decoratively
	Appliqué	Gives the appearance of hand-embroidered blanket stitching around appliquéd pieces

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Swatch Notes

Stitch name

Thread

Stitch length

Foot used

Notes

Needle

Stitch width

Tension setting

Swatch

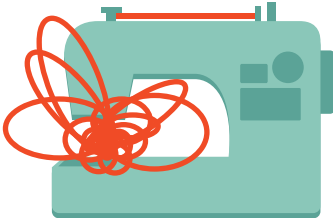

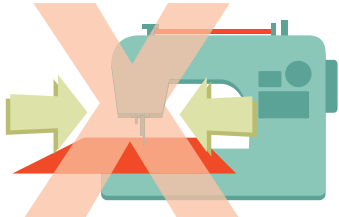


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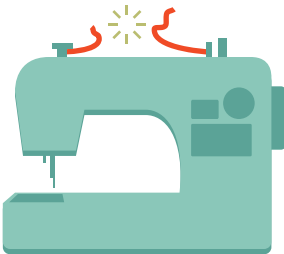
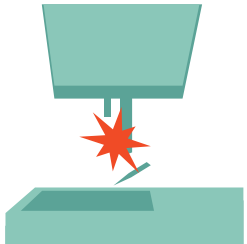
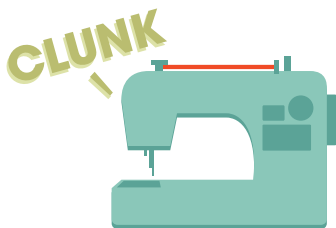
What You'll Learn

Troubleshooting Guide

	Problem	Solution
JAMMED MACHINE 	Threads are too long and get caught in the bobbin holder	Hold threads when beginning to stitch
	Machine is dirty	Clean and oil machine
	Bobbin thread was not drawn up through the machine	Rethread bobbin and bring bobbin thread up through stitch plate and place both threads under the presser foot
	Threads are stuck when you pull out the stitched fabric	Bring the needle to the highest position and raise the presser foot
MACHINE IS NOT STITCHING 	Thread caught around bobbin	Clean machine and remove stray threads
	The bobbin winder is engaged	Disengage the bobbin winder and engage the handwheel, if necessary
FABRIC IS NOT MOVING THROUGH THE MACHINE 	Stitch length is too small	Increase the stitch length
	Feed dogs are lowered	Raise/activate the feed dogs
	Feed dogs are packed with lint	Remove throat plate and thoroughly clean between the feed dogs
	Fabric is too thick to feed under the presser foot	Use a thinner fabric or flatten the seam with a hammer

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Troubleshooting Guide

	Problem	Solution
<p>TOP THREAD BREAKS</p> 	Missed thread guide	Re-thread the sewing machine
	Tension is too tight	Loosen the needle tension
	Needle is bent or blunt	Change the needle to one appropriate for the thread and fabric
	Thread gets caught and breaks due to rough edge on spool	Turn the spool around or use a spool cover (on a horizontal spool pin)
<p>NEEDLE BREAKS (OR BENDS)</p> 	Dull or bent needle	Change the needle, using one that is the correct needle system for your machine
	Needle hits the bobbin or other internal machine parts	Push the needle into the needle clamp as high as it will go and tighten the needle screw. Check that it is the correct needle system for your machine
	Wrong presser foot	Use the correct presser foot for the stitch you have selected to avoid the needle lowering onto the foot
<p>LOUD CLUNKING NOISE</p> <p>CLUNK</p> 	Machine needs to be cleaned and oiled	Clean and oil your machine, or take it to a local machine dealer to be serviced
	Threaded incorrectly	Rethread the machine and replace the needle

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Tension Troubleshooting Guide

Tension problems have a variety of causes. Here are the most common symptoms and treatments. Try these treatments before reaching for the tension dial.

	Problem	Solution
LOOSE STITCHES 	Loosely wound bobbin	Adjust the bobbin winder tension
	Bobbin inserted incorrectly	Check your machine manual for correct bobbin position
	Tension spring on bobbin case is too loose or the needle thread tension is too loose	Tighten the needle tension first, and then slightly tighten the tension screw on the bobbin case, if necessary
	Presser foot is up	Lower the presser foot
PUCKERED SEAM 	Tension is too tight	Rethread the machine and/or adjust the tension dial to a lower number to loosen the tension
	Needle is too large for thread or fabric	Use a smaller needle or thinner thread
UNDERSIDE LOOPS ALL ALONG THE SEAM 	Bobbin inserted incorrectly	Check your manual and place the bobbin in the correct position
	Needle thread is threaded incorrectly	Rethread the machine, being sure to use all appropriate thread guides
	Needle is dull	Replace the needle with one appropriate for the fabric and thread