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Clothing Management: Serger Sense

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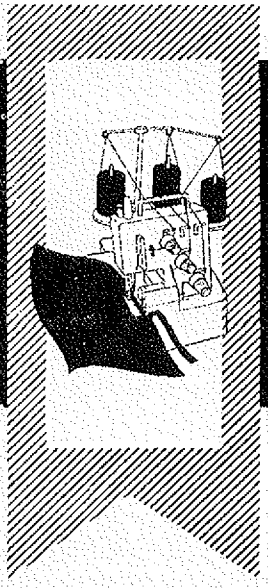


CLOTHING MANAGEMENT FACT SHEET

Louise Young, Clothing Specialist

SERGER SENSE

THE MACHINE

The serger machine, also known as an overlock, has revolutionized home sewing. They are fast, convenient, and produce a professional seam. A serger will sew up to 1700 stitches per minute whereas the conventional sewing machine sews from 700 to 1100 stitches per minute. They can stitch, trim and overcast all at the same time. Another plus for sergers is the way they handle all fabrics from difficult to control silks and sheers to easy to handle knits.

Sergers streamline garment construction by eliminating time consuming steps and encouraging efficient sewing methods such as pinless sewing, flat construction, and continuous seams. Once you have constructed a garment using a serger you will never want to sew without one.

Even though a serger will do wonderful things, you still need a conventional sewing machine for most fashion sewing. True, there are many things you can produce just using the serger such as basic t-shirts, tube skirts, pants, shorts, swimming suits, and table linens. Sergers are great for making finished narrow seams, rolled hems, blindstitched hems, and overcast seams. Use them for quick application of elastic, ribbing, lace, and ribbons. But they will not do details such as zippers, topstitching, pockets, and buttonholes.

WHICH SERGER?

Shopping for a serger can be a frustrating and confusing task. Most of the serger brands are quite similar. Each model is identified by the number of threads it uses. The most popular and versatile model is the 4/3 thread convertible serger because it can be adjusted to sew with three threads for stretch or four threads for a seam and overcast edge. Other models include:

A 2-thread overedger, which resembles the zigzag stitch done on most conventional sewing machines and cannot be used for seaming.

(b) A 3-thread serger will seam, cut and finish at the same time. Stitch width and length can be adjusted to enable a wider variety of functions. This one is especially suited to knits because it allows the seam to stretch. Other features include narrow hemming, and a blind hem capability, either built-in or with an attachment. Some three-thread sergers can be converted to two-thread for ornamental and decorative stitches for t-shirts and sweatshirts.

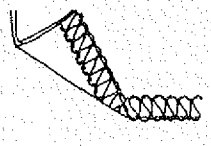


Figure A. 2-thread overedged seam.

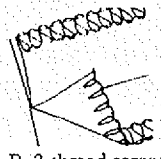


Figure B. 3-thread serged seam.

(c) A 4/3-thread model is very much like the versatile industrial serger which does what the three thread will do plus produce an extra row of stitches to reinforce a seam or strengthen ravel-prone fabric edges. This model is also suitable for all knits. It will convert to a 3-thread by simply removing one needle thread.

(d) A true 4-thread model requires all four threads to sew a serged seam. The left needle and the lower looper form a 2-thread chain stitch while the right needle and upper looper form the 2-thread overedge stitch. The seam is very strong but not stretchy, good for denims. You can overedge by removing the left needle or chain stitch by removing the right needle.

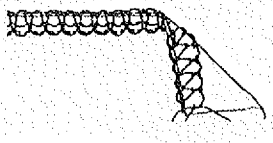


Figure C. 4/3 thread serged seam.

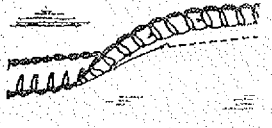


Figure D. 4-thread serged seam.

(e) The 5-thread model was thought to be the most versatile but hasn't lived up to original expectation. They can sew a chain stitch with

either a 2-thread overedge stitch or a 3-thread overlock stitch. Each stitch can also be sewn alone.

(f) The newest model manufactured is the one with differential speed. Many sewers like this extra control as it prevents slippage and is good for matching plaids. Other current features include the tension dials set at specific color coded points for serging certain fab rics and stitches.

Before selecting your serger, ask yourself these questions:

1. What are my specific sewing needs and what will I be sewing? Look beyond your present needs as they may change and purchasing a serger is a major investment. Choosing a versatile model will give you more options.

2. Do I want to only finish seam allowances or do I want a serger that also has the safety stitch to seam the garment together?

3. What is the track record for the brand I am considering and the dealer selling it? Be wary of "hot deals," no demonstration or classes given, and no service or warranty.

4. What sewing features and attachments are available and are they part of the package?

5. Can the machine convert from four threads to three or two threads for versatility?

6. What kind of maintenance is required?

7. Is the serger and the instruction manual easy to use with practical maintenance and thorough use and care guidelines? A manual with good illustrations, examples, and samples is most helpful when troubles arise.

A skilled serger machine demonstrator can make everything look very simple. Watch several brands being demonstrated and compare features. Make sure the features, service, and level of use match your needs. It is a personal choice when determining which features are most important. Take a class, practice on a demo model, or use a friend's machine to gain a better understanding of the features you will want.

BASIC FEATURES

Look for features such as:

- -width and stitch adjustment which is accessible and easy to use
- -a built-in rolled hemmer foot
- -other attachments that make the machine more versatile
- -a built-in light
- -a mark on presser foot that shows where the knife is cutting
- -oiling points marked on machine
- -a knife that can be overridden
- -numbered tension dials

NEEDLES

Needles may vary with each serger model. Check the instruction manual for the best needle for yours. Industrial needles are available with either a flat or round shank and some models will accept a regular conventional sewing machine needle. Only one type of needle will fit and it is not interchangeable. ***Never*** sew over pins or you may break your needle and perhaps even a blade.

The needles wear out quickly due to the high speed of serging. If the needle becomes dull, bent, or burred, stitching problems will occur. When changing fabric weights, change the size of needle accordingly. Lighter weight fabrics require a smaller needle.

THREAD

Thread used for overlock machines is usually wound on large cones or tubes because so much more thread is used than on a conventional sewing machine. Strong, even quality thread will work better on your serger and produce the best quality stitch. Serger thread is typically lighter weight due to the bulk produced by so many close stitches.

Many weights of thread and yarn *can be used* depending on the fabric and desired effect you prefer. For regular fabrics and stitching, 100% cotton thread works well but has limited stretch when sewing on knits. Other threads available include 100% polyester, cotton-wrapped polyester, nylon, rayon , and silk. Yarn, metallic, pearl cotton, and ribbon can be used for special effects or decoration. Your serger's tensions will need to be adjusted for novelty threads and stitches.

Thread on a crosswound cone slips off easier at high speeds and will produce better stitches and trouble free sewing. Conventional sewing machine thread can be used but isn't the best choice.

THREAD TIPS:

1. Choose thread compatible to fabric weight, fiber and care.

2. Cone thread is labeled 100/2, 50/2 and 40/3; the first number refers to the thread size and the second number the number of plies or strands twisted together. The higher the first number, the finer the thread.

3. To determine how much thread is needed, multiply by 6 yards of thread for every one yard of decorative stitching in a garment, or by 7 if using very thin thread.

4. For heavier thread gradually loosen the tension while slowly stitching until a satisfactory stitch results- the thicker the thread, the looser the tension.

5. Always test serge on a scrap of fabric using the same layer of fabrics you will be serging. Allow 10 extra yards of thread on spool for testing.

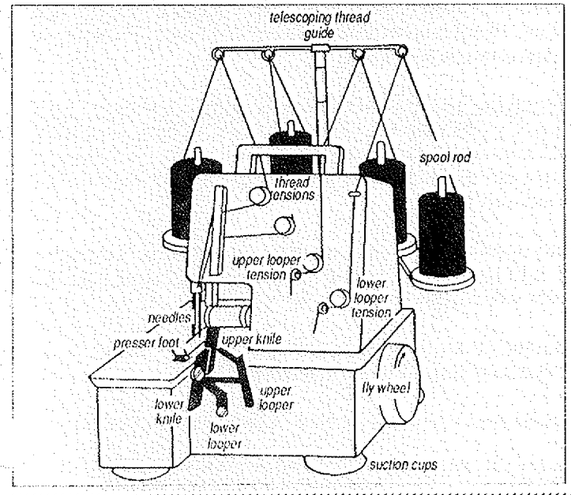
6. Much more thread is needed for the upper and lower loopers than on needles.

7. Always keep your serger threaded. To change thread, cut the existing threads and tie them onto the new color of thread using a square knot. Slowly pull new thread through the old thread path. The knot will not go through the eye of the needle so must be clipped and rethreaded through hole.

Thread the needles and loopers with different colored thread to practice tension adjustment and to become familiar with where each thread goes.

FUNCTION AND PARTS
(See Illustration)

Refer to the serger model instruction manual for the part name, function, and what you can do using each. It is important to know about your machine before you begin to sew. Insist on a complete demonstration and instructions at your dealer before you purchase your serger. The more you use it the more comfortable and experienced you will become.



ACCESSORIES, TOOLS, AND SUPPLIES

Tweezers, rolled hem plate and foot (if not included in machine), edge guide, spool nets, spool caps, looper threader, and tape guides are all useful accessories and supplies to make your sewing time more productive. New accessories and supplies are being developed continually to sell a product as well as assist you in the process of serging. These features may be the reason for selecting a specific model of serger.

Keep your serging supplies handy and organized to make your sewing more enjoyable. Sewing boxes, containers, or drawers close to your work area will eliminate confusion and save time. There are many products available on the market if you don't have built-in space. Try to plan enough sewing space that your sewing machine and serger can sit side by side for the most efficient and productive sewing experience.

OVERLOCK BASICS

Any pattern can be a potential serging project. Many people think simple quick patterns are the only ones used for serging. True these are great to start with, but the selection of styles is unlimited. With practice an overlock machine can be used for nearly everything coupled with the conventional sewing machine for the tough to reach and detailed sewing.

1. After preshrinking fabric, read pattern thoroughly to make the needed adjustments serging may require. Cut, mark, and serge forward!

2. Do the fitting before serging, as the seam allowance is cut off by the knives and alterations cannot be done after serging seams.

3. Follow an assembly line process and save time. Have marking done, interfacing fused, and all pieces ready to sew when you sit down at the serger.

4. No need to lift the presser foot. Butt fabric edge to presser foot and begin to serge. Start slowly until you have mastered the speed. Speedy serging does not mean success—in fact, sometimes just the opposite.

5. Gently guide fabric with right hand in front of pressure foot. Be aware of the fabric edge which will be cut off when they enter the path of the blades.

6. Most sergers have safety shields for finger protection: if yours does not, be cautious of finger placement. (Not a bad idea anyway.)

7. Start seams by sewing a two-inch thread chain. Place the thread chain onto the edge of the fabric and serge over it. (See Figure E.)

8. Finish seam end by placing a few drops of liquid seam sealant on the end of the last few stitches and allow to dry briefly. Avoid allowing the sealant to get on fabric as it may stain and spread. Other methods of finishing are: leave a chain and thread it back through the serged stitches, stitch over beginning stitches, or leave a few extra stitches at the end and pull the bottom thread to produce a knot at the end, or you may simply seam over the end with another seam. (See Figures E-H.)

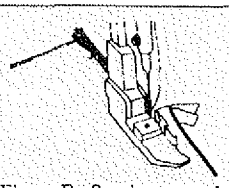


Figure E. Serging over chain.

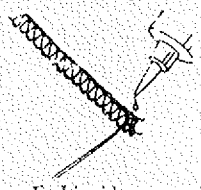


Figure F. Liquid seam sealant.

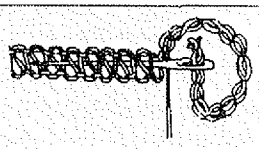


Figure G. Thread a chain stitch back through serged stitches.

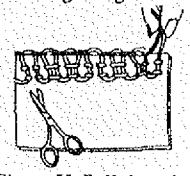


Figure H. Pull thread to produce knot.

MAINTENANCE AND CARE

After every project remove the large lint pieces with a fluffed lint brush, a vacuum or environmentally approved canned air blast to keep the lint from building up on the loopers and throat plate area. Dip lint brush into sewing machine oil to remove fine lint particles. Never blow into your serger because the moisture on your breath can actually damage your machine. Clean tension discs, needles, knives, and feed dogs with alcohol. This is especially important when changing from dark fabrics to light so that darker fibers don't show up in the seams of another garment.

Most brands of sergers need not be oiled at all but those that do should be oiled every 12 to 15 hours of serging. Sergers should have regular maintenance due to the high speed of sewing. Check blades and needles periodically. Cover the serger while not in use and keep out of reach of small children. A carrying case is a good investment if you will be hauling your serger around frequently. Have your serger serviced on a regular basis, at least once a year. But if you care for it properly, it won't be necessary to have high repair bills. Frequency of service depends on the number of hours you use your serger and how well you maintain it yourself.

REFERENCES

For more Serger Information and Techniques:

Creative Serging, the Complete Handbook for Decorative Overlock Sewing, P. Palmer, G. Brown & Sue Green. $6.95.

Fine Sewing, A Comprehensive Guide to How-to Sewing Techniques, Vogue/Butterick Publication, Spring 1990, 3.50.

Live Guides, Serger Video by Kathy Ruddy. This is generic rather than specific to brand.

Serger Update, Update Newsletters, 2269 Chestnut, Suite 269, San Francisco, Ca 94123. Serger Update is published monthly for $36 per year, Managing Editor, Tammy Young.

Sew Much Better, Professional secret to sewing faster & easier. Published by Sew News, Copyright 1989, PJS Publications, Inc. $19.95, Good general information.

Sewing With Sergers, The Complete Handbook for Overlock Sewing, Gail Brown & Patti Palmer, $6.95, Copyright 1985, Published by Palmer and Pletsch Associates, Portland, Oregon. (This was the first complete book on the market.)

Sewing With and Overlock from the Singer Sewing Reference Library, Cy DeCosse Inc. Copyright 1989, Sells over the counter in most fabric or book stores between $12.95-14.95. Can be direct ordered for less or check local Extension Office. This is one of the best resources I have seen for all age groups and sewing levels.

Timesaving Sewing from the Singer Sewing Reference Library, Cy DeCosse Inc. Copyright 1987, (Same as above). This has excellent information, general rather than specific, except for the well illustrated guidelines for tension and correct stitches.

Many good resources are available. One of the best would be the information from your serger manufacturer and the dealer where you purchase your serger.

A serger kit for judging quality stitches is available to be checked out through your Extension office.

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