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Sergers

Ernestine Porter
Extension Textiles and Clothing Specialist

For more than 20 years, manufacturers have used industrial sergers. It has taken some time for these machines to enter the home sewing market.

The Japanese manufacture sergers, and in the sixties, they came up with the idea of making such a machine for the home sewer. As a result they developed a less expensive, lightweight model of the industrial serger. This version of the serger sewed 1,600 stitches per minute. (The industrial model sewed 6,000 stitches per minute. The first serger created for the home sewing market was the Baby Lock®.

The distribution rights for the Baby Lock were unfortunately sold to a distributor who did business with the manufacturing market. Even though this serger was specifically designed for the home sewer, it was sold to manufacturers for 10 years. They purchased it as a less expensive, relatively lightweight version of the industrial sergers that were much larger. The home sewing market was introduced to the Baby Lock by Tacony Corporation in St. Louis. They began selling sergers to this market when they acquired distribution rights about 5 years ago. Today, many different types and brands are on the market.

This new product, the serger, is the most exciting thing to hit the home sewing market in a decade. It allows you to sew **faster** and **better**. Compared to a regular sewing machine, sergers save about a third of the time.

How Sergers Work

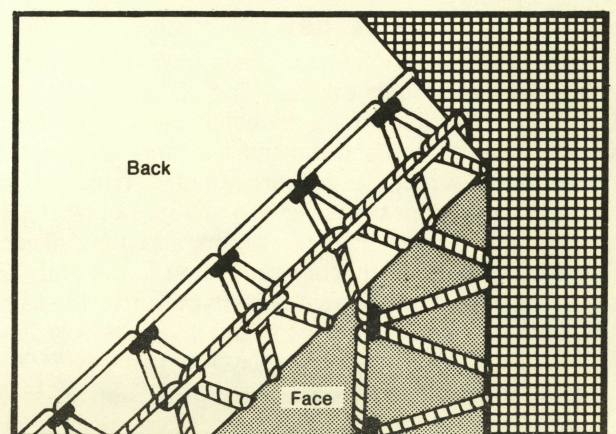
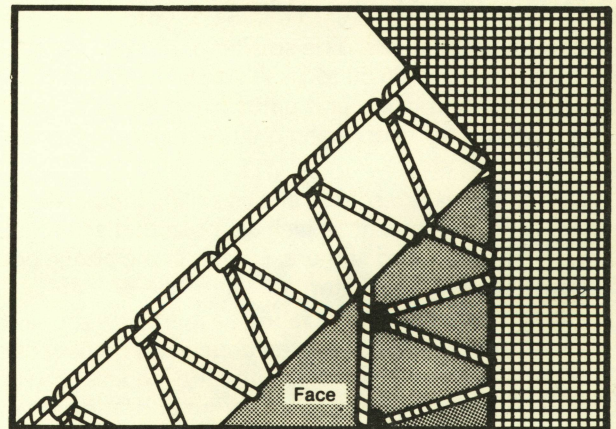
When sewing a seam, the serger sews, overcasts and trims it all in one step. This is all done at double the speed of the regular machine. The serger is often called an over-edge or overlock machine. Seams are finished identically to what you see in ready-to-wear. Narrow hemming can be done on a serger allowing you to finish wedding gowns, table cloths and napkins in seconds.

The presser foot and feed dog firmly hold the fabric. Since they do this better than a conventional machine, you can virtually eliminate pinning. The operator of a conventional machine can have as many as 300 different stitches. With only one serger stitch, you only have to be concerned with length and width adjustments.

The two basic types of sergers are the three-thread and the four-thread models. The three-thread uses one

needle; the four-thread uses two. Both machines operate with loopers instead of bobbins. The threads are looped around the top thread as the machine sews. The three-thread model has two lower loopers and one needle. The serger sews a seam and overcasts the fabric edge in one step. The seam and overedge is one stitch made with three threads. The seam allowance is about 1/8 inch. Stitch width can be adjusted from 2.5 to 5 mm (about 1/8 to 13/64 inch).

Most three-thread models will sew lightweight fabrics like voile or georgette as well as denim. Some machines have a needle guard that keeps the needle from bending when it sews through thick fabrics.



The four-thread overedging machine has two needles and two loopers. The machine makes an overedge stitch independent of the seam stitch. The seamline stitch is a chainstitch like the stitch on a sack of sugar.

Some four-thread models will sew on lightweight to heavyweight fabrics; others will not sew heavyweights such as denim. You can operate the overedging stitch and chainstitch separately. The combination of two-thread chainstitching and overedging is called a safety stitch. The overedge stitch can be widened from 3.5 mm (9/64 inch) for normal sewing to 5 mm (13/64 inch) for overedging heavyweight fabrics.

The industrial-looking design of the serger scares some people. The fright will last until they actually learn to thread the machine and adjust the tension dials.

In the very first minutes of a sewing class, beginning home sewers learn how to adjust thread tension. When replacing thread, it is easiest to cut the thread near the cone or spool, tie the new thread onto the old and pull it through the machine. On some machines, the knot will slip through the needle and looper eyes; others have to be rethreaded.

Thread tension on sergers is independent of the needle. On a regular machine, the thread tension is engaged when the presser foot is lifted. On a serger, the tension is not affected by the presser foot position.

When threading a serger, gently pull thread above and below the tension discs to make sure the thread is engaged securely. Tension is easily adjusted by turning the dials. You need to change the tension only when going from very lightweight to heavy fabrics.

Sergers use cotton or poly/cotton thread sold on spools, like Molnlycke or Double Duty or those sold on cones. There are 1,200-yard and 6,000-yard cones available in up to 20 colors. The smaller cones sell for about \$2; the larger from \$6.50 to \$8. A size 60 Star Fast cotton sells for \$4.75 in white and natural and \$5.40 in colors. This thread is for overedging only as it is too lightweight to sew strong seams.

Thread cones are sold at stores selling industrial sewing machine equipment as well as those that sell regular sewing machines and sergers. Check in the phone book Yellow Pages for local stores.

The knife that trims the fabric as it is sewn should be replaced about every 6 months depending on how often the machine is used. Clean around the loopers regularly because the cutting process leaves lint and fabric scraps.

Shopping for a Serger

If you have been looking for a new sewing machine, or even passing through the machine sales area of your favorite fabric store, you no doubt have stopped to question the sales person about a small, strange looking machine called a serger. Sergers are not new. They've been used in factories for years, sewing all types of fabric, including knits, sheer fabrics, denim and for finishing seams. The industrial machines are large, heavy and very costly. Today's scaled down version performs the same functions as the industrial giant, but it weighs only 20 to 25 pounds and costs considerably less (\$450 to \$600).

Home sergers have many advantages. If you are looking for a new sewing machine because you want a new

type of stitch, the serger becomes very attractive. It sews a totally different stitch than your conventional machine.

Speed is another advantage. Sergers allow you to sew about three times faster than a conventional machine making the job of finishing seams very small in comparison to zig-zagging or making French seams. Some models stitch the seam, finish the edge and trim away excess seam allowances in one step. Others do only an overlock stitch for seam finishing. There are sergers that do a "flat-lock" stitch (used on sweatshirts) similar to a felled seam; ornamental braiding, pin tucking and a rolled hem (used on napkins and tablecloth edges).

Before you buy, be sure to shop around. Ask these questions:

1. What are the differences between a two needle four-thread machine and a one needle three-thread machine?

Two needle four-thread:

- Requires two needles at all times;
- Jams more frequently;
- Corners are difficult to do neatly because the two needles sew a chain stitch for a seam with overlocked edge;
- Chain stitch may not last with normal wearing;
- May be used with two threads to overlock only; and
- Capable of doing some ornamental stitches.

One needle three-thread machine:

- Requires one needle;
- May be used with three threads for seam and overlock or with two threads for overlock only;
- Turns inside and outside corners easily and neatly;
- Capable of performing rolled hem stitch;
- Capable of a variety of stitch width and length; and
- Capable of a variety of ornamental stitches.

2. Does the knife lock in place? If not, you may not be able to sew several thicknesses of fabric without pushing the knife out of position, thus making an uneven, unattractive seam.

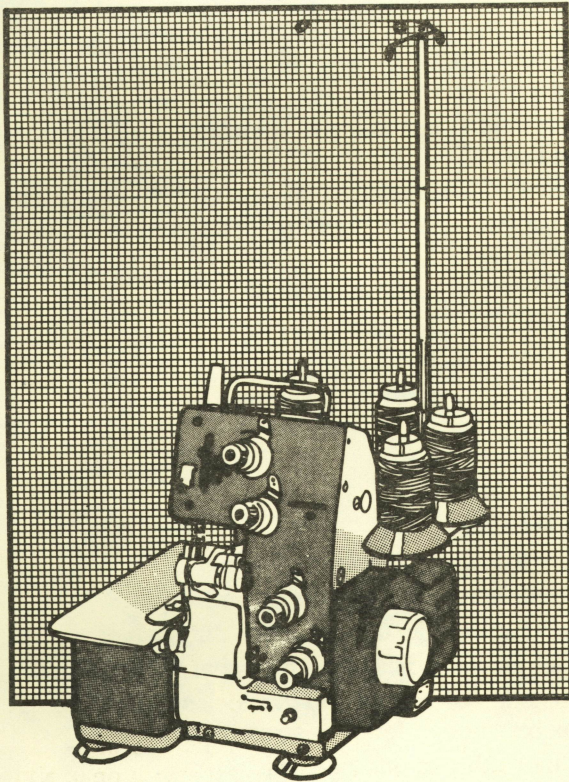
3. Does the machine have color coded thread paths? Threading a serger looks and can be complicated if the paths are not marked on the machine. Referring to an instruction booklet each time you rethread can be a nuisance.

4. If the machine is capable of performing a rolled hem function, is the attachment included in the price? Some machines do not perform the rolled hem function. Others are capable but require an attachment adding \$50.00 to \$75.00 to the price. Other machines have a special throat plate for rolled hemming at no extra cost.

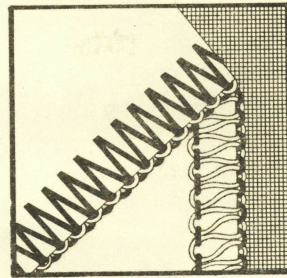
5. Does your dealer offer free lessons? Sewing with a serger compares to cooking with a microwave. If you learn to use it to its fullest extent, you will receive the rewards — professional looking garments, the ease of sewing difficult fabrics and considerable time saved.

6. Do you have time to experiment and learn to use the machine effectively? If not, it could be considered an expensive and wasted purchase.

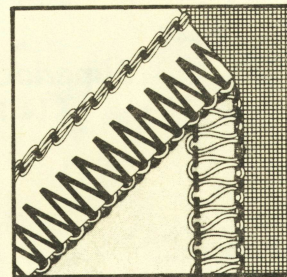
The advantages and disadvantages of three different brands of sergers are listed on the next two pages:



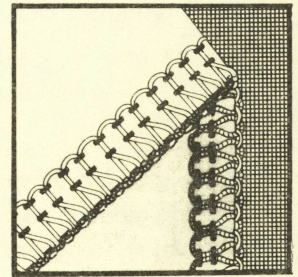
Two needle four-thread machine



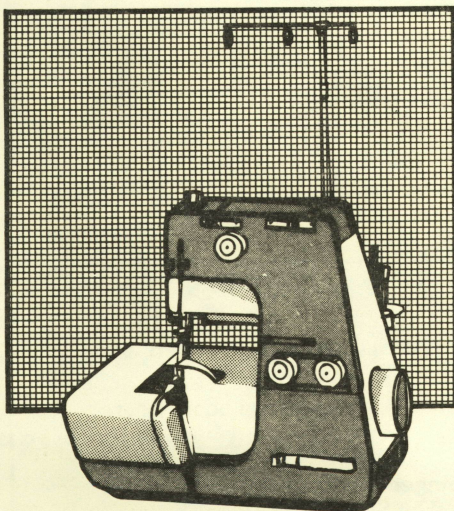
Two-thread overlocking



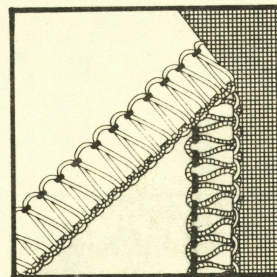
Four-thread interlocking stitching



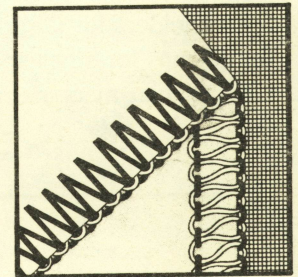
Four-thread overlocking



One needle three-thread machine



Three-thread overlocking



Two-thread overlocking

Advantages

- Built-in light.
- On-off switch.
- Scrap catcher.
- Threading pattern color coded with illustration on machine.
- Storage for brush.
- Sews smoothly and quietly.
- Mark on presser foot shows where knife is cutting.
- Stitch bite adjusts easily.
- Oiling points marked on machine.

Bernette

Disadvantages

- Very difficult to thread bottom looper.
- Necessary to roll upper knife up to thread needle.
- Finger guard bothersome.
- Tweezers too short.
- Rolled hemming attachment not included; sold at extra cost.
- Wheel turns backwards.
- Thread cutter pulls threads.
- Screwdriver provided with machine is too long to use when adjusting the stitch length.
- Only two widths of stitch.
- Numbers on stitch length adjustment are difficult to see.
- No stitch width is included that is adequate for seaming; a straight stitch machine would be required.

Babylock 407

Advantages

- Threading color coded.
- Rolled hem plate included at no extra cost.
- Window in throat plate to facilitate threading lower looper.
- Thread guide printed inside door of machine.
- Capable of doing 4 widths of overlock.
- Capable of doing 5 lengths of stitches.
- Can sew with 2 or 3 spools — 2 for overlocking only and 3 for overlock and seam together.
- Doesn't require a lot of space.

Disadvantages

- No light.
- Presser foot is not marked to indicate where knife is cutting.
- Requires special needles.
- Necessary to remove pressure foot and throat plate to do rolled hem.
- Tension knobs aren't numbered.

Superlock by White (4 spool)

Advantages

- Threading coded by symbols.
- Threading guide inside door.
- Marked to show where knife is cutting.
- Light.
- On-off switch.
- Tension knobs are numbered for easy adjustment.
- Carrying handle.
- Cording attachment for stitching cord into seams.
- Can use 3 or 4 threads.
- Adjustable stitch length from 1 to 5 mm.
- Spool holders for large cones of thread.
- Spool caps for small spools of thread.
- Uses regular machine needles.

Disadvantages

- Presser foot large and cumbersome.
- Had trouble threading by tying on.
- Thread cutter pulls threads when cutting.
- Double needle is difficult to turn sharp corners.
- Combination of straight and overlock stitches may not be flexible enough for very stretchy fabrics.
- Uses more thread and needles.
- No rolled hem attachment included; may be available at a later time and for additional cost.

Where To Buy a Serger

Check the Yellow Pages to locate serger dealerships. They should be listed under sewing machine dealers and also under industrial sewing machines.

The following is a list of companies that distribute sergers in the United States. For information about where their products are sold in your area, write:

Babylock

Tacony Corporation
4421 Ridgewood Ave.
St. Louis, MO 63316

Bernette

Bernina Sewing Machine Co.
70 Orchard Drive
North Salt Lake, UT 84054

Juki Lock

Juki Industries of America, Inc.
421 North Midland Ave.
Saddle Brook, NY 07662

Mini Lock

King Distributors, Inc.
599 Industrial Ave.
Paramus, NJ 07652

Necchi-Lock

Allyn Distribution Co.
1244 Broadway
Denver, CO 80203

Riccar Lock

Riccar America Co.
14281 Franklin Ave.
Tustin, CA 92680

Singer Professional

The Singer Co.
321 First Street
Elizabeth, NJ 07207

Superlock

White Sewing Machine Co.
11750 Berea Road
Cleveland, OH 44111

The Combi

New Home Sewing Machine Co.
171 Commerce Road
Carlstadt, NJ 07072

Tradenames are used to simplify the information presented. Use of these names neither implies endorsement of products nor criticism of similar products not mentioned.

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