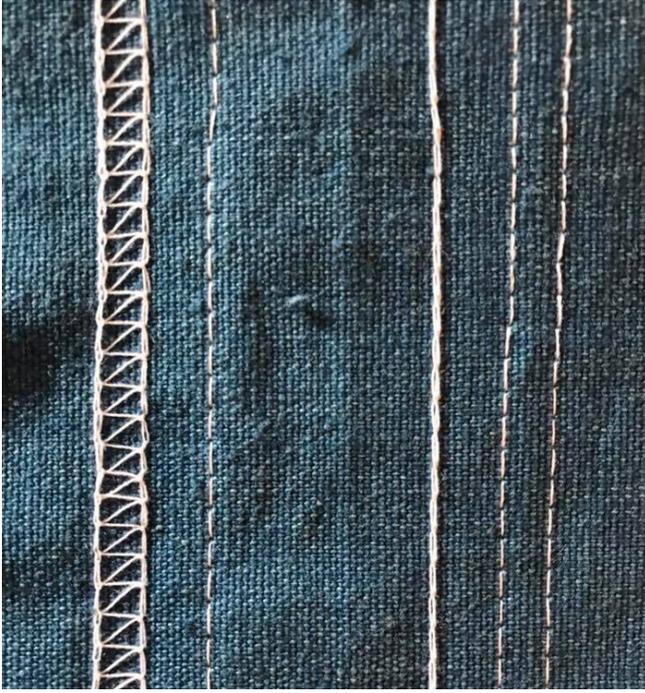


Cover or Chain Stitching

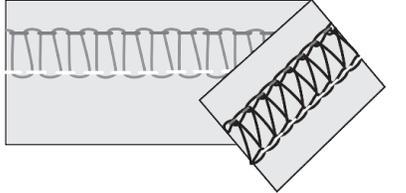
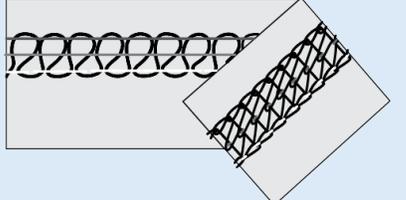
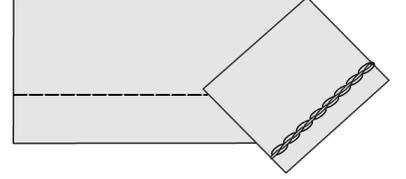
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In recent years, the cover stitch has made its way into the home-sewing arena. Several top-of-the-line serger (overlock) models are capable of converting to cover stitching. Cover stitch machines are also sold as separate stand-alone machines. The cover stitch does not use the cutting blades on the serger. It is created using two or three needles, one for each row of topstitching, and one looper to create a decorative stitch used for hemming. The chain stitch uses only one needle and the looper to create a straight-line stitch used for seaming. Some models have an additional thread that covers the topstitching, adding yet another decorative dimension. See the chart on the next page for illustrations of the different stitch combinations.



Cover or chain stitches at a glance:

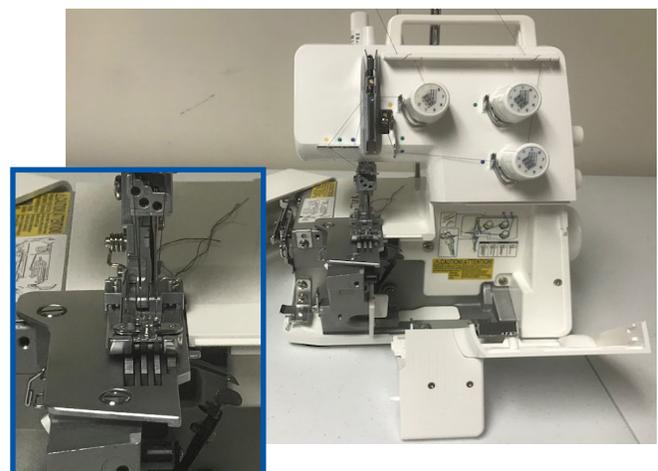
Stitch	Use	Illustration Topside or Underside
3-thread cover stitch (2 needles)	For hemming fabrics and applying decorative effects	
4-thread cover stitch (3 needles)	For hemming fabrics and applying decorative effects	

Stitch	Use	Illustration Topside or Underside
4-thread cover stitch (2 needles)	For hemming fabrics, applying decorative effects, and using specialty thread couching	
5-thread cover stitch (3 needles)	For hemming fabrics, applying decorative effects, and using specialty thread couching	
2-thread chain stitch (1 needle)	For seams, both temporary and permanent; decorative effects; and shirring using elastic thread in the looper	

If the machine is a combination serger and cover stitch machine, use the machine instruction manual to identify the steps necessary to convert from serging to cover stitching. Just like other sewing machines, there are accessory feet and attachments that make the process easier to accomplish. These are especially helpful for keeping hemlines even or when applying elastic and bindings.

The cover stitch is known primarily for hemming knit fabrics. It has an inherent stretch, and when used with the differential feed, can produce hems that are smooth, flat, and pucker-free. Typically, the needle threads are visible on the outer side of the garment or item. However, stitching from the underside is a way of adding a decorative look to the outer side. Like the looper used for serging, the cover or chain looper has an eye that can accommodate a heavier, more decorative thread than the eye of the needle.

Using the chain stitch in reverse can also add decorative stitching to an item. Pictured below is a stand-alone cover or chain stitch machine. Notice the open front portion has an extended surface that forms a flatbed to the right of the needle and that there is no knife or cutting system on this machine, unlike the serger machine. The popped out section highlights the position of the chain looper underneath and the two outer needles threaded for a wide cover stitch.



The machine's instruction manual will give instructions on starting and ending stitching. Here are some basic tips for getting the most from your cover or chain stitch machine.

1. Always begin stitching slowly by turning the hand wheel to get started. Sewing at an even, moderate speed gives the most consistent results.
2. Ultimately, when ending the line of stitching, the stitching needs to be secured with all thread on the underside of the item. Manually pulling threads to the underside can be tedious, but there is a method to do this before the looper thread is cut. End with the needles in the highest position by turning the hand wheel forward. Lift the presser foot, releasing the tension on all threads. Using a small screwdriver, awl, or skewer, pull the needle thread(s) two to three inches in front and below the presser foot. Cut the needle thread(s) at the loop where they are extended. Pull the stitched item back and away from the machine. By doing this, the looper thread pulls the needle thread(s) to the underside and all that is left is to cut the looper thread to remove the work from the machine. Tie the ends to further secure.
3. To remove (rip out) cover stitching or chain stitching, identify the ending of the stitching. If the needle thread(s) has been pulled to the underside, bring it back to the surface by inserting a pin under the last straight stitch(es) and pull. This will release the stitch, and by pulling on the looper thread, the stitching will unravel. Because chain stitching is much easier to remove, use it as an alternative to long machine basting stitches.
4. Tension plays an important part in creating perfect stitches. To get familiar with which thread comes from each spool, start by using a different color of thread for each. If the stitch is loopy or too tight, the colored

thread can show which thread tension needs to be adjusted. Before making any adjustments, however, check to be sure the thread is properly seated between the tension disks or it isn't getting caught on anything.

5. Use the correct needle(s). Jersey, stretch, or ball point needles are recommended when sewing on knit fabrics. Skipped stitches might indicate an incorrect or dull needle in the machine. Universal needles are not always suitable for very stretchy fabric especially those containing spandex.
6. Press the hem in place before cover stitching. Since the hemming is usually done with the raw edge on the underside, it might be difficult to see where the edge is from the top side during stitching, and it is important that the hem be folded under at an even width. There are usually guidelines on the throat plate of the machine to help in guiding the fabric into the machine. To determine which line to follow, start by positioning the hem wrong side up and under the needles so that the left needle is even with the raw edge. Note where the folded hem edge lies on the guidelines. Turn the fabric over and reposition with the top side facing up and the folded edge along the guideline from before. Stitch accordingly. The goal is for the raw edge of the hem to be covered by the looper threads. A hem attachment can also help in this instance. If you have a sensitive touch with your fingers, pay attention to



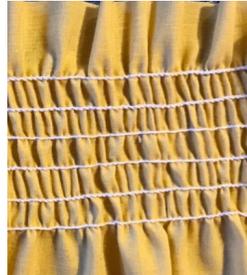
the difference in fabric thicknesses as they approach the front of the presser foot. There are usually indications on the tip of the presser foot that line up with each needle's position. Any excess raw edge can be carefully trimmed if needed. Fusing the hem in place prior to stitching will also give more control. Experiment with the spacing of the needles to get the best-looking hem for the weight of the fabric. A three-needle cover stitch will produce a hem with the most stretch.



Beyond the basics: Here are some ideas for using the cover stitch or chain stitch in more decorative applications.

1. **Shirring or ruching**

with elastic thread
– Use elastic thread in the looper only and set the machine for one-needle chain stitch with regular thread in the needle.



Lengthen the stitch and adjust the tension accordingly for the weight of the thread. Using the differential feed on its highest setting will create more gathering of the fabric. Chain stitch several parallel rows, making sure that the ends are secured. At the end of each line, be sure to pull enough elastic thread away from the machine so that when it relaxes, it is long enough to not spring back into the machine and come unthreaded. Using a thread net will also help control the elastic thread on the spool from pooling off. After all rows have been stitched, turn the work with the elastic side facing up and apply hot steam from an iron to shrink the elastic back up. Heavier fabric will not draw up as tightly as lighter weight fabric.

2. **Shadow** cover stitching – Just like shadow applique, a sheer fabric is used that allows a darker color to show through. Start with

starching or spraying the sheer fabric with a starch alternative and press until dry. Use a heavier and dark-colored thread in the looper and set the machine for two-thread cover stitching with regular thread in the needles. Mark stitching lines on the fabric with a disappearing marking pen or pencil. Follow the marked lines with lines of cover stitching. Once all stitching is complete, layer a solid white fabric underneath to further enhance the shadow effect of the darker thread.

3. **Belt loops** – Create belt loops and straps without the need for turning long tubes right side out. Cut a fabric strip 2.5 times the width of the finished width. Press long edges to the



underside, overlapping the edges in the middle. Turn fabric with raw edges facing the base of the machine. Cover stitch down the center so the looper thread covers the raw edge underneath.

4. **Mock flat-felled seams** – press seam allowance under along the seamline. Overlap with the folded edge aligned with the seamline of the under fabric. Cover stitch through all three layers. Trim any raw edges on the underside close to the cover stitching.





5. Use the previous technique in reverse to join strips of fabric together in rows or other patchwork designs. Sewn from the underside, eliminate the fold and have the underlap fabric extend only the width of the cover stitch (approximately ¼ inch).

6. **Pin Tucks** – Fold the fabric, and, using the chain stitch, stitch close to the fold. Repeat multiple folds and press to one side. Either side of the stitching can be used depending on the intended look. The chain-looper side will give a more pronounced appearance than the needle-stitched side.



7. **Fabric embellishment** – Let your imagination go wild! Cover stitching and chain stitching don't have to always go in straight lines. Use decorative thread in the looper to add exciting embellishment to otherwise plain fabric. This technique is similar to bobbin work done on the conventional sewing machine in that it is done on the reverse side of the fabric. This allows the design to be drawn on the fabric ahead of time without the worry of removing the markings once the stitching is complete.



8. **Reinforcement** stitching on active wear – Performance apparel is an excellent use for the cover stitch. Use it to topstitch and add strength to the seamlines. Using a contrasting thread adds to the design effect whether the stitch is done on the reverse or top of the garment.

9. **Quilting** – The cover stitch or chain stitch can even be used to quilt fabrics together. Depending upon the model, there might be limited space on the machine bed to allow for large projects, though.



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