Buying an Overlocker

By Martyn Smith

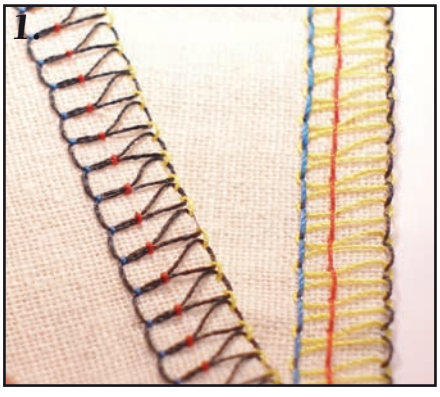
Overlockers have been used in the fashion industry since early last century, but only became popular in the '70s with the increased availability of knit fabrics and stretch sewing. These machines are essential to getting a commercial looking finish on a garment and, with the high-stretch content in many 'woven' fabrics, they are absolutely necessary to get a garment sitting well.

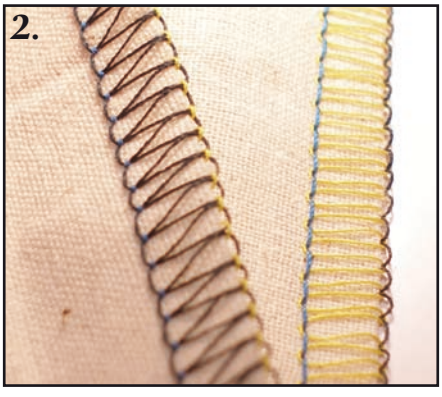
Comments from customers about their overlockers generally sift down into two categories. There are those who absolutely love their machine and those who have a love/hate relationship with it. The latter folk generally have not had good instruction, if at all, when purchasing their unit and don't understand how to thread correctly and how and where to use it successfully.

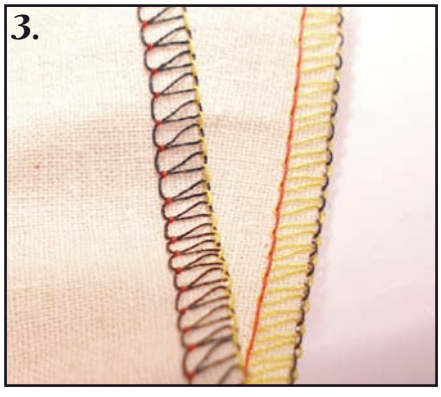
Basically, all overlockers make the same stitch by using one or two needles and an upper and lower looper. The variation in how the different machines actually do this is only very slight. Most of the overlockers on today's market are 4-thread and they all have differential feed (see further on about this). Some do a little more than others can, but in the mid-range there are certain stitches that are essential to use for today's modern fabrics; the four main basics are 4-thread, 3-thread wide, 3-thread and 3-thread rolled hem. The basic 4-thread stitch is the most common stitch used in garment construction. See photo 1. The image shows the correct tension and formation of this stitch, and each colour represents either a different needle or looper. As a good exercise, thread your machine with different colours to see what the tension dials actually do to the stitch or thread when tweaking your machine. Many people ring their local dealer and ask, "which knob should I turn to stop this or that from happening?" By threading the overlocker with different colours it becomes obvious, so a little playing helps the owner of the machine learn more about their unit. Four-thread overlocking (or serging as it's called in the USA) is used for knit and fleece garment construction and some woven garments. When using a 4-thread stitch on a woven fabric there will be a slight 'grin' of stitches showing through on the right side of the garment seam, but only when the garment is under pressure or if it's too tight. Ideally, straight stitching on a sewing machine in these areas will take care of this.

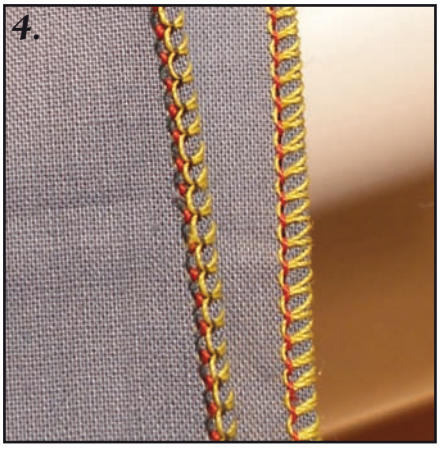
The 3-thread wide and 3-thread stitches are formed with only one of the two needles threaded (the other needle should be removed to let these stitches form correctly). See photos 2 and 3. These stitches are mainly for neatening the edges (overcasting) of the seams inside a garment. They both have the same stitch formation but the wide stitch uses the left-hand needle and the normal 3-thread uses the right-hand needle. Three-thread wide is best used on any fabric that has a tendency to fray, as the bigger bite of the stitch onto the edge of the fabric will ensure that the overlocking doesn't end up falling off during wear or in the laundry process. The narrower standard 3-thread stitch can be used for making up high-stretch garments but the needle thread needs to be tightened a little and the stitch length shortened to give a satisfactory stitch for garment manufacture. Very cheap garments, like sweatshirts and underwear (imports), sometimes have only 3-thread overlocked seams and they end up falling apart in the stress areas of the garment. This is purely to save the cost of thread!

The rolled-hem is used for neatening the visible edges of mid- to lightweight fabric on either the design detail or hem areas of women's day and eveningwear. See photo 4. It has taken the angst out of having to hand roll or battle with the rolled-hem foot on the sewing machine, and is quick, easy and gives a 'store bought' look to any garment. This stitch may involve flicking levers, adjusting tension dials or even changing the needle-plate of the overlocker, but it is very worthwhile learning to do as it's a great edge finish. If you're thinking of purchasing an overlocker ask for a demonstration of this stitch before making your decision. More and more fabrics today are lending themselves to this sort of finish.





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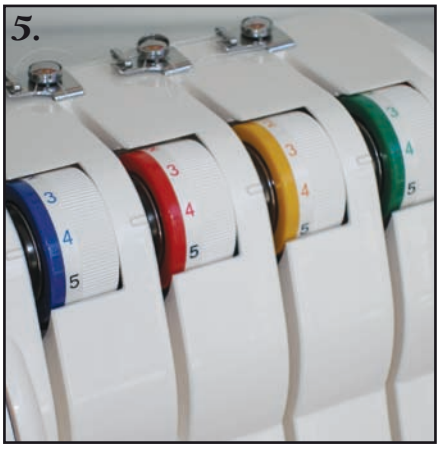
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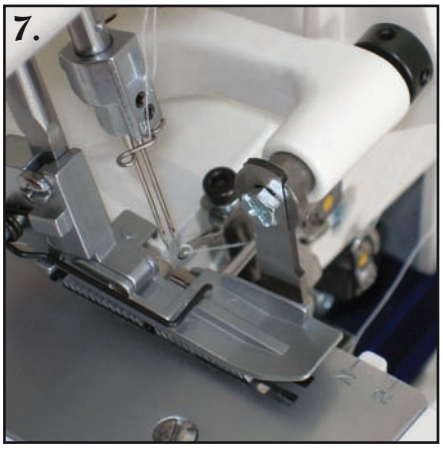
Thread tension is set by either/or a combination of two methods – thread tracks and tension discs to lay your thread into or tension knobs to wrap your thread around to get the right tension for your desired stitch. See photos 5 and 6. All machines should come from the factory set at a standard setting and this should be stated in the instruction manual for your reference. Different weights of thread sometimes require less or more tension on the loopers to get the desired stitch formation. If your machine tension is set 'way off' the suggested settings when new, get it set correctly from the service technician so it is correct; this is not a big job and will give a new user the confidence to change tensions knowing they can get back to 'normal' without any fuss.

An overlocker's ability to cut off excess fabric when neatening seam edges is mainly what an overlocker is about, but the blades dull very easily with abuse and pins. Although they can be re-sharpened by a service mechanic, more often than not they need replacing due to nicks, and these can be expensive. There are two different styles of cutting system found of today's machine. The top blade has the cutting arm sitting above the sewing surface and although it's a powerful cutting action it really does get in the way when trying to thread the needles, however the blade can be pivoted upwards to give a little more access. See photo 7. The other, most common system, has a top blade that looks like a hook. See photo 8. Both methods work as well as each other but if threading needles in a confined area with poor light and dexterity is an issue, make sure you make the right choice.

Domestic overlockers are able to cut through a decent amount of fabric as long as it is taken slowly. However, if you need to go over very bulky seam areas it is wise to trim these seams first with scissors and then just neaten up this seam by shaving the edge of the bulk rather than trying to cut through it. This will make your machine, and the blades, last a lot longer. Kwik•Sew knit patterns have 6mm (¼ in) seams allowed and this is so the blades are not cutting through the fabric but merely shaving off the lint threads from the edges of the seams. The lint-catching tray on the front of some overlockers should be full of shavings, not large chunks of fabric!

Many overlockers have the novice threader in mind and open up all the way to give a very clear view when threading. This is great for people that have trouble threading! See photo 9.

Differential feed has been available on overlockers for decades but many folk don't really understand how it works. The two sets of feed teeth work either together or independently to stretch or gather the fabric under the foot. See photo 10. By increasing the differential feed from the normal setting, the fabric will gather up while being stitched. This is necessary when stitching a horizontal seam across a knit garment to prevent it from stretching when on the body. It can also be handy to use when neatening a curved hem in preparation for stitching up, also stopping a high-stretch fabric from fluting when being neatened. By reducing the differential feed it is possible to stretch the fabric for making frills and flounces when neatening or roll hemming. The stitch formation never looks as neat and regimented when using the differential feed off the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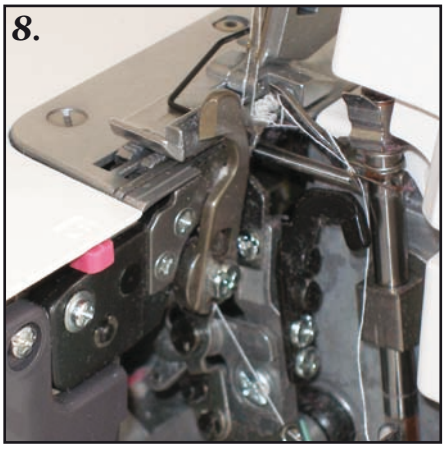
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'normal' setting, but this is quite OK.

Threading the machine is easy if learnt from the day of purchase and is essential that this is shown and practised from day one. The fear of changing the colours of overlock thread is very common but only due to lack of training. Join a class to learn more about this or sit with the in-store demonstrator until you can successfully thread the machine with confidence. Every machine boasts a different threading mechanism to enhance the ability to thread the lower looper, but make sure you can use this properly so you can get the hang of it. The lower priced machines are a little more difficult to thread, as they don't usually have these enhanced threading features. The threading sequence chart is best to follow and ALWAYS start with the upper looper (1), then the lower looper (2), then left needle (3) and right needle (4). See photo 11. This method will ensure you don't have to rethread when you start sewing. There are many brands that suggest threading the lower looper first, but this will only give you a 50% chance of stitching straight away.

Cheap threads are a curse when perfecting a quality stitch. Buy good quality threads and check that they are even in thickness and not over-dyed (pinch the yarn and run along the thread to check for dye flakes). There are five basic colours that will give every colour variance needed when making garments. See photo 12. A charcoal colour could also be added to these, but it is not essential. Some professionals like to use a monofilament thread on their loopers as it blends in with any colour, but these threads cause duress on domestic machines, although if used with care can be ok. Monofilament threads are not to be used on the needles of an overlocker as they may cause dropped stitches and tension issues. Wooly Nylon is also a favourite of some but again it needs to be used with care. To prevent the thread from dropping down below the cone and getting stuck it is always advisable to use a thread net over a Wooly Nylon cone. See photo 13. This is one of the main reasons for breaking a looper and can be very expensive to repair.

Threading tools can be handy for those who have trouble getting the thread in the little eyeholes of the lower looper and even the eye of the needle/s. See photo 14. As we get older this task seems to be more daunting. There are many thoughts on overlocker needles. The EL-705 seems to give a better stitch quality as the back of the scarf of the needle is cut away more and allows the stitch formation more chance to form successfully. See photo 15. Changing the needle in the machine also helps the machine stitch more successfully although some people just don't ever think to do this.

HINT: When removing your work from the overlocker, always remove it out the back of the machine and not sideways. An overlock stitch is formed on a stitch tongue or a 'pin like' prong which is easily bent or broken if the work is removed incorrectly. If for some unknown reason your work gets stuck under the foot and there is a great gnarl up of threads, try removing the foot and remove your work. DO NOT PULL it out as it ends up in a costly repair!