

## WORKSHOP: “SETTING UP TO SEW” – MACHINE SEWING GUIDE



**Summary:** We will talk all about setting up your sewing machine for sewing, the basic parts, features and some things to look for when buying a machine.

### Materials and Equipment

sewing machine

sewing thread

small sharp sewing scissors

small brush for cleaning sewing machines

manual for your sewing machine

scrap fabric

instructions/ideas sheet

any presser feet you have

any sewing machine needles you have

bobbins

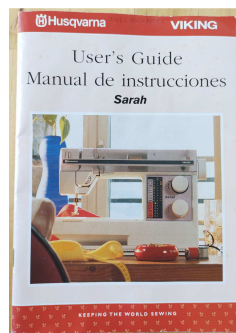
sewing machine oil

optional: overlocker

optional: overlocker cones of thread

### Class Plan: Talking About Sewing Machines

1. The first thing to know is that every sewing machine is different, but there are some basic features in common. Your sewing machine manual is the best guide for your machine.



2. Some sewing machines have an on/off switch, which is usually a button to press (left) or a switch (centre) and is often found near where the power cord attaches to the machine. Some older machines don't have an on/off switch but do have a separate knob just to turn on a lamp (right).



3. The control foot and power cord connect to the base of the machine. When attaching the cords be careful to push the cord attachment all the way in for the machine to work.



4. The control foot goes on the floor under your table and activates machine stitching or bobbin winding when the machine is turned on. With the presser foot down, press on the control foot gently to start sewing. The narrower edge is towards your heel. Pressing harder makes the machine go faster.



5. Sewing machines usually have a metal plate or stamp on them near the power cord attachment, showing the make (manufacturer), model and serial number of the machine. These are useful when searching for a manual, accessories and service.



6. The spool pin(s) hold the top thread for sewing. These can be vertical or horizontal pins at the top of the machine.



- a. If there is a second pin then your sewing machine can likely take a twin needle, so two top threads. Sometimes the second pin comes as an attachment to add only when needed.



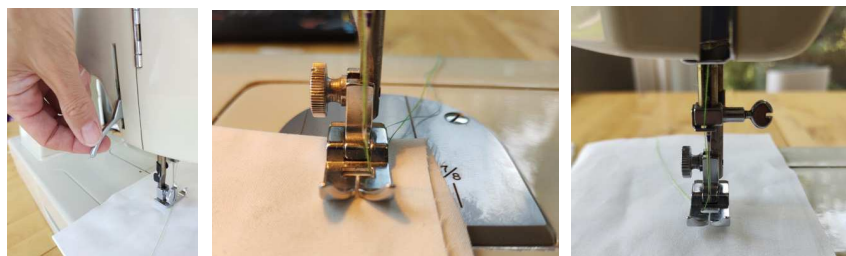
- 7. Sewing machines have a thread tension dial for the needle thread. This is adjusted based on the type of fabric you are working on. Tighter tension is general needed for thicker fabrics to pull the thread through. It is best to test the fabric and number of layers you are working with first.



- a. Some machines when threading you need to slip the top thread between the tension disks when threading the machine. This will be just above where the needle is.



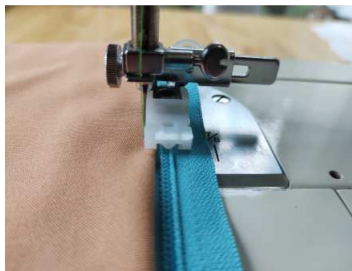
- 8. The presser foot engages the thread tension and holds the fabric down while sewing. Always lower the presser foot (centre) before sewing and raise it to draw thread through after (right). There is usually a lever behind the needle for raising and lowering (left).



9. There are presser feet for a variety of purposes. See the electronic guide on our Google drive for an overview of the types.



- a. A zipper foot, where the attachment to the machine is to one size, to allow the foot to run along the edge of the teeth of a zip when sewing it into your project.



- b. A buttonhole foot has a long rectangular open space in front and measure markings for the size.

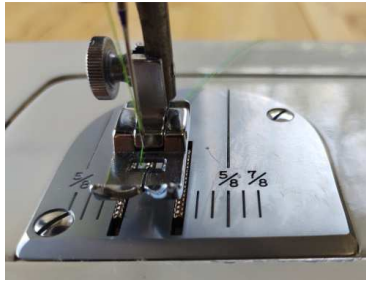


- c. An embroidery foot is more open and allows you to see the stitches as they are formed.

10. The presser foot can be removed on some machines by lifting the front of the foot upward to snap it off. Others have a lever at the back. On other machines there is a large screw to loosen where the foot attaches to the shank and the whole piece comes off.



11. The sole plate is the metal plate directly underneath the presser foot with measurement markings.



- a. Some machines have different sole plates available, such as one with a small hole just big enough for the needle in the straight stitch position to prevent fine fabric getting pushed into the hole.
12. The sewing machine needle is held in place with a screw that is tightened. It can be changed by turning the screw counter clockwise and pulling the needle down and out. Sewing machine needles general have a flat part at the back so they only fit in the machine one way.
- a. To put in a new needle, insert the blunt wider end in the opening all the way and tighten the screw.



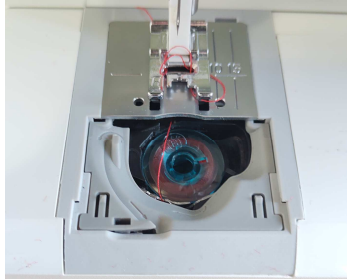
13. Sewing machine needles come in a variety of sizes and suit different purposes and universal, denim, ball point.



- a. Universal needles sizes 70, 80, and 90 are for general purpose sewing. The larger the number the larger the needle, and the heavier weight fabric it is used on.
- b. Stretch or jersey needles are used for sewing stretch knit. They have blunt or ball point tips to go in between yarn fibres to avoid cutting them. Stretch fabrics are often knits, where there is a continuous yarn. Cutting the yarn anywhere can cause the fabric to unravel in ladders.
- c. Demin needles are thicker and meant for going through heavier weight fabric in multiple layers.
- d. Twin needles can be used on some sewing machines with two top threads. The bobbin thread zigzags between the two lines of stitching on the back of the fabric and can be used to overcast a raw edge.



- e. Spring needles can be used for machine embroidery instead of an embroidery foot. I use these on my machine without a presser foot, but always lower the presser foot guide when sewing.
14. Bobbins hold the lower thread for machine sewing. This thread is looped around the upper thread with each stitch to form your stitch line.
- a. Some machines have the bobbin drop in from the top.



- b. Some machines have a bobbin case with a tab you pull out to remove the bobbin case. It is accessed by a door that comes down at the front under the needle.



- c. Bobbin cases often have a screw on the side for adjusting the bobbin thread tension. Tighten by turning clockwise.



- d. Machines with a removable bobbin case also have a removable assembly around it. This sometimes needs removing for cleaning out lint and freeing thread snags.



- e. In some machines you can use a metal or plastic bobbin, but a metal bobbin will need a slightly higher top thread tension to match the heavier resistance. Check your manual for what your machine needs.

15. To use your machine for sewing you need thread in the top and in the bottom of the machine or the bobbin. To wind a bobbin check your machine manual for instructions.
- a. Some machines need the needle disengaged by loosening the centre part of the wheel on the right.



- b. Place your empty bobbin on the bobbin pin for winding, ensuring it is the right way up if your machine uses bobbins that don't work either way (e.g. Husqvarna).
- c. Slide your bobbin pin over to connect with the turning mechanism. On some machines this automatically disengages the needle from moving making (a) unnecessary.



- d. Run your top thread from the spool pin through the thread guide and insert the end into the hole on one of the edges of your bobbin or wrap it around your bobbin a few times. Your machine manual will specify which way around to wrap it to match the winding direction. Two styles are shown below.



- e. Some machines can wind bobbins directly from the needle without unthreading the top part.
- f. Gently press the control foot to start winding your bobbin. Stop before the thread goes beyond the outer edges of the bobbin.

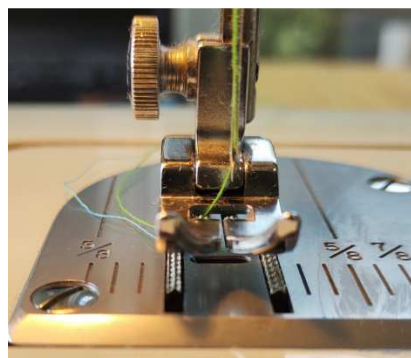
16. Presser foot pressure can be adjusted on some sewing machines. This is how hard the pressure foot presses down on the fabric while sewing. Lighter fabric usually means more pressure and heavier fabric or more layers mean less pressure.
- a. Some machines have a pin on the top of the machine above the needle for adjusting pressure. Press the outer ring down to release pressure (left). Push the centre pin down to increase pressure (right).



- b. Some machines have a dial on the front for changing the pressure.

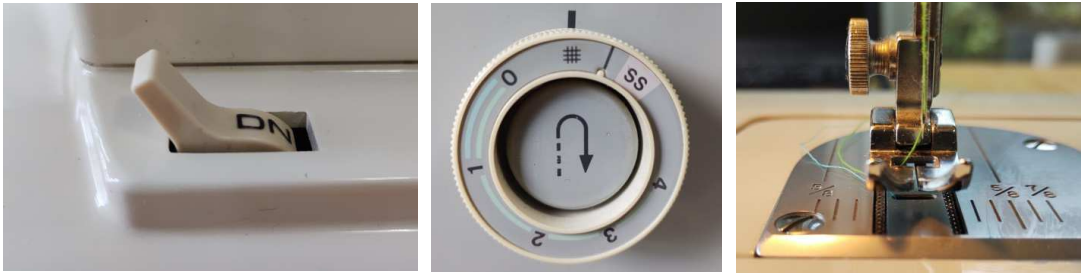


- c. Computerized machines might have this feature in the menu, some machines have a screw to adjust on the top of the machine above the needle and some machines don't have this option.
17. Feed dogs are long narrow textured rectangles in the sole plate just under the needles. They rotate up forward and down back to move the fabric along from underneath while sewing.



- a. On some machines the feed dogs can be covered or lowered (right) by a button/switch (left) when you want to guide the fabric yourself, like during free motion embroidery. Some machines have a dial with a setting like # (centre) for lowering the feed.





- b. On some machines the sole plate needs to be removed and replaced with a different one to do this.
18. There is a dial or method of setting the stitch length on most sewing machines.



19. There is also a dial or method of setting the stitch width if your machine can do a zigzag stitch where the needle moves one side to the other for each stitch.



20. Sewing in reverse is useful to go back and forth on your stitching to anchor the start and end of a seam. There can be a setting, lever that stays in place or a switch you hold down while sewing in reverse.



21. The stitch selector lets you change the stitch pattern sewn by the machine, including things like straight stitch, zigzag, blind hem and stretch. Older sewing machines had cams or small circular disks shaped on the outside circumference that would turn and manually move the needle back and forth.



- a. Some stitches will require a different presser foot so there is an opening wide enough for the needle to pass through in all the positions of the stitch.
22. A free arm is where part of the table of your sewing machine can be removed to make a narrower section for sewing difficult to reach areas in narrow spaces.



23. You might be able to get extension table for your sewing machine. They give more space at the height of your sewing surface to support your project; before (left) and after (right).



24. To change the light bulb on your machine there is usually a compartment that opens for easy access.



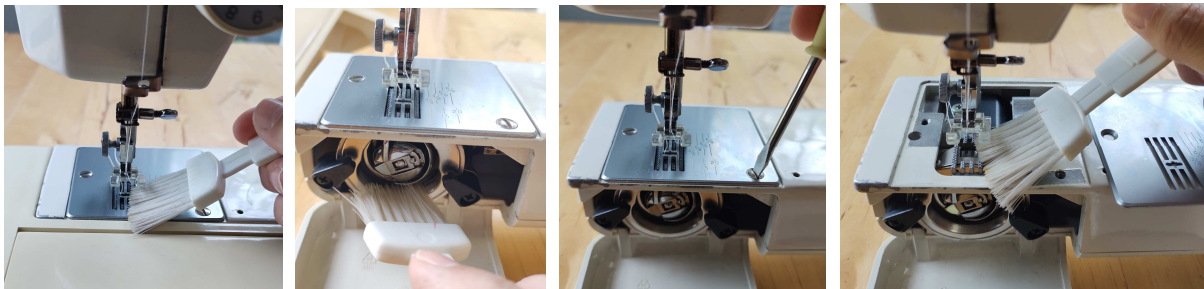
25. Oil your machine periodically to keep it running smoothly. The manual will tell you what kind of oil to use and where to apply it.



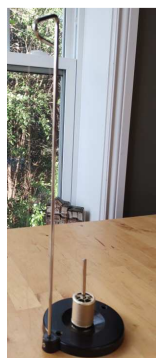
- a. You might need to remove a cover to access some of these areas. Some machines are even oiled from below.



26. A small brush is useful for cleaning lint and debris out of your machine, particularly around the needle and bobbin case areas where it accumulates most.



27. If your machine is missing its spool pin, you can use a separate thread stand with guide and run the thread into your machine.



- a. If you are trying to sew with a twin needle by adding a spool pin this way, check that your sole plate and presser foot have space to accommodate the needle. Check your manual and test with caution.
28. Overlockers are great for sewing stretch and finishing edges on all kinds of fabrics. They have an assortment of top and lower needles that move crosswise on an angle to form stitching that wraps around the edge of your fabric. The machine shown here has 4 threads for 2 top needles and 2 lower needles. Only the upper needles go through the fabric, where the lower needles form loops held in place by the upper needle threads.



- a. Overlockers also have a cutting blade that trims the edge of your fabric to the right width for edge finishing as you go.



- b. This blade can be disengaged for things like blind hemming or flat lock stitching.
29. Happy creating, and please share your knowledge of sewing materials and equipment with the class if you feel comfortable.