

Sewing Machine Guide

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Overview

These general instructions support your self-guided use of the Janome 500E sewing machine located in the Central Branch [MakerSpace](#) and Alton Branch [MakerStation](#).

This guide covers the basics to get you started, but there's so much more to learn. We encourage you to explore beyond and do your own research to keep growing your skills.

Sewing Machine Safety Brief

There are potential hazards with sewing machine use:

- When handling sewing needles, there's a risk of piercing or cutting skin.

- The installed needles and machine foot can pinch and pierce skin when in operation.
- Excessively tugging bunched fabric under the foot can break the needle and cause it to fly towards your face.
- Threads have a risk to slide across skin and create cuts like paper cuts.

Sewing Machine Layout

The basic sections of the Janome 500E sewing machine.

1. Reverse switch
2. Stitch selector dial
3. Stitch length dial
4. Handwheel
5. Thread path and tension dial
6. Foot and bobbin holder location
7. Power switch and plug/foot pedal connector



Sewing Machine Set Up

The sewing machine requires a solid table-like surface with leg room underneath to accommodate the foot pedal used to operate the machine. The tabletop should have enough room to allow for the outfeed of fabric.

1. Place the sewing machine on the table or countertop.
2. Plug in the power cable/foot pedal to the right-hand side of the unit.
3. Plug in the power cord into a power outlet.
4. Turn the power switch to the ON position (located on the right-hand side).

Prepare the Sewing Machine

There are a few things sewers need to do or check before the machine is ready to work.

Basic how-to instructions follow the checklist; however, we recommend reviewing online sewing machine videos or taking our Intro to Sewing Machine class to help you understand how the machine works.

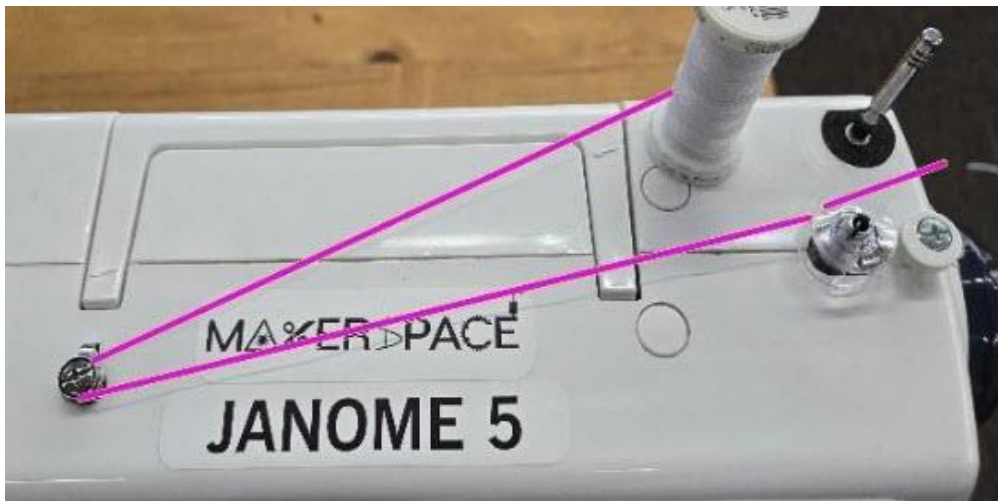
Prepare to Sew Checklist

1. Wind thread onto the bobbin.
2. Place the bobbin into the bobbin holder.
3. Insert the bobbin holder into the sewing machine.
4. Put the thread onto the sewing machine ("thread the machine").
5. Draw up the bobbin thread.

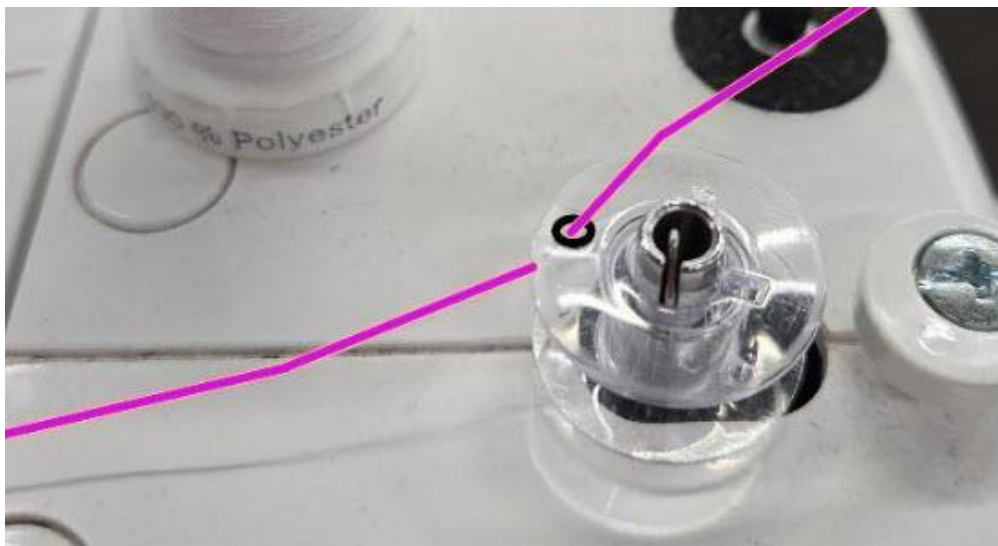
How to Wind Thread on a Bobbin

Begin by placing the empty bobbin on the protruding holder at the top right of the sewing machine and the thread on to the thread post.

1. Run the thread around the silver tension screw and towards the bobbin.



2. Pull the thread toward the centre of the bobbin and up through the small hole in the top of the plastic disk.



3. Carefully pull out the handwheel until it clicks into place and shifts the bobbin along with its post towards the right, locking in place.



4. While holding thread tail that passes through the bobbin, carefully and slowly begin to depress the foot pedal. This drives the motor, allowing the bobbin to wind and fill.
 - The bobbin should automatically turn off as the pressure from the thread pushes the bobbin and post back to the left position.
 - You can also stop winding at any time by releasing the foot pedal and moving the bobbin and post back to the left-most position.

When done, make sure both the bobbin post and the handwheel are returned to the left-most position.

How to Load a Bobbin

The bobbin needs to be placed into the bobbin holder before inserting the bobbin holder into the machine.

1. Arrange the bobbin holder and the bobbin so that the arm of the bobbin holder points to the left and the thread wraps in a clockwise direction with a tail leading off to the right.



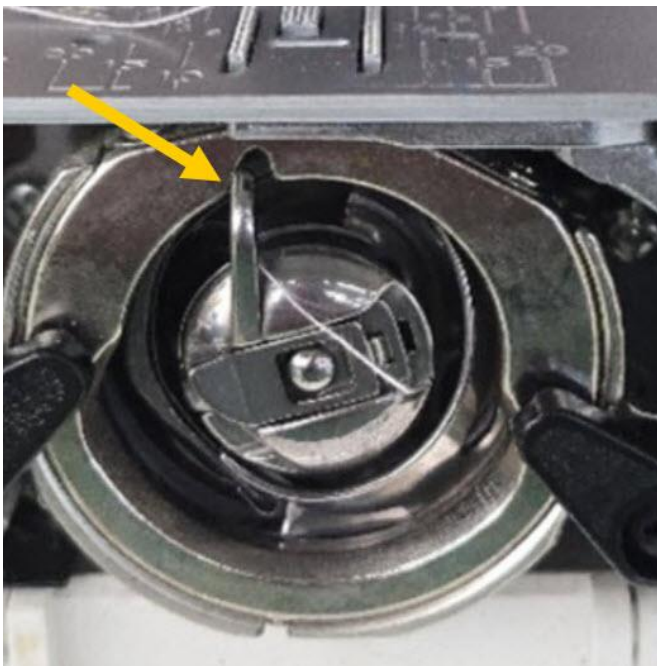
2. There is a thin groove on the bobbin holder to pull the thread tail through. Continue to pull the thread tail through the groove in the direction of the bobbin holder arm and under a thin metal plate.



3. Pull the bobbin thread directly to the left until it enters a space in the centre of the bobbin holder, allowing for 4cm to 6cm of thread to extend out of the opening.



4. Place the bobbin holder into the base of the sewing machine once it is loaded with the bobbin. Make sure that the arm is in an upwards position and that the bobbin holder clicks into place.

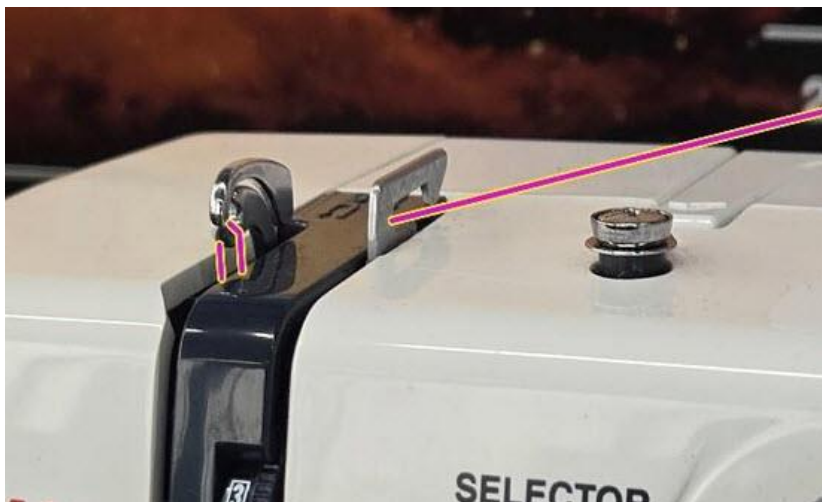


How to Thread the Machine

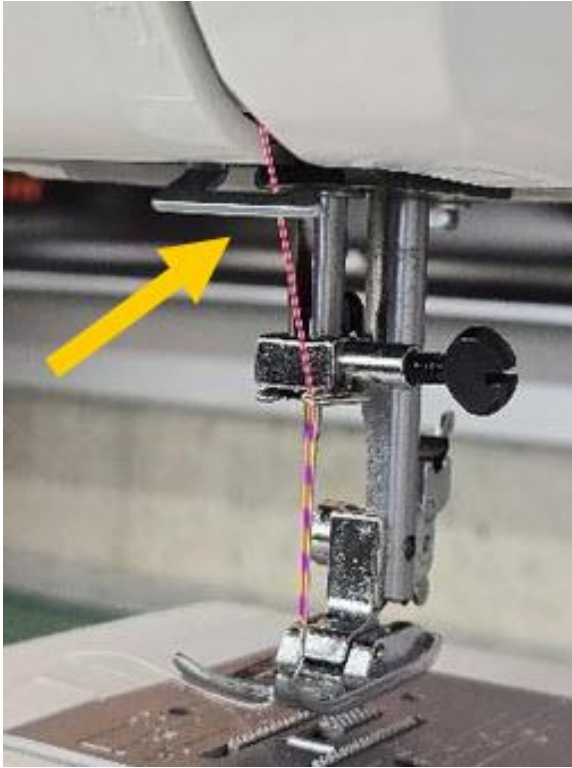
1. The working thread follows a path that passes through a tension hook, then down into a channel at the front of the machine, back up towards the thread arm, and finally down once again terminating at the needle and foot.



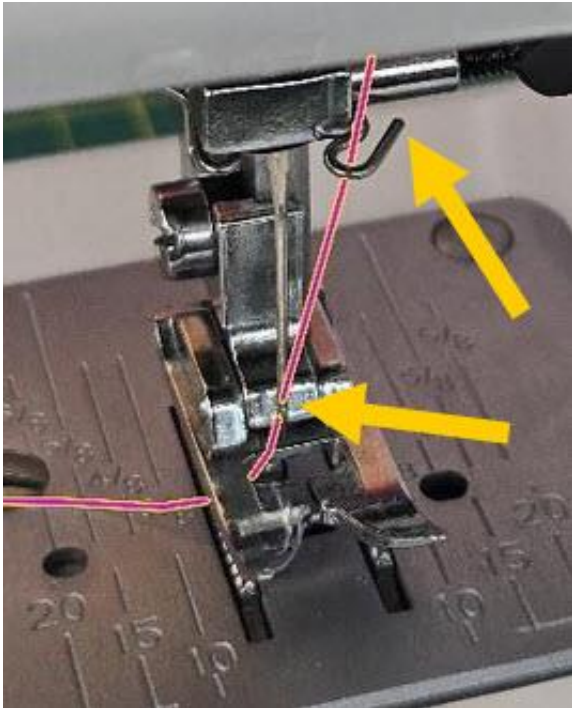
Below, a close look at the working thread passing through the tension hook.



2. As the working thread passes through the channel at the front of the machine and towards the needle, it first needs to be threaded behind a guard,



and then through a clip, and finally through the eye of the needle.



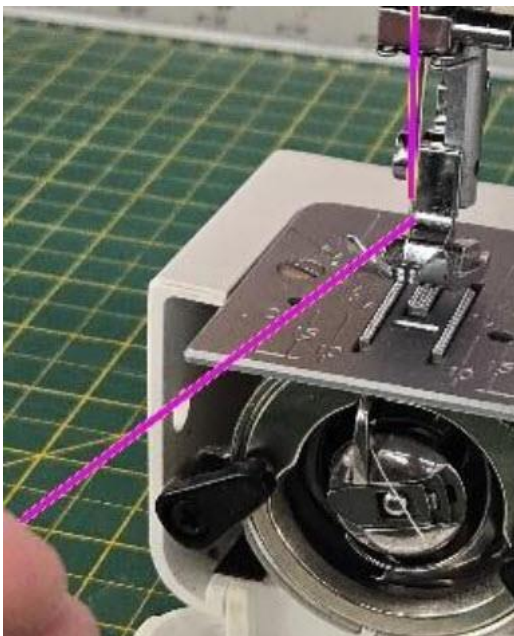
How to Draw Up the Bobbin Thread

After the bobbin holder is in the machine and threaded, the bobbin thread can be drawn up to prime the machine.

1. Ensure the foot is in the elevated position. If it is not raised, the lever located to the back right of the needle can be used to raise the foot.



2. Gently grab the working thread and pull it forward a few inches. You want to maintain a slight tension while avoiding pulling the thread further through the machine.

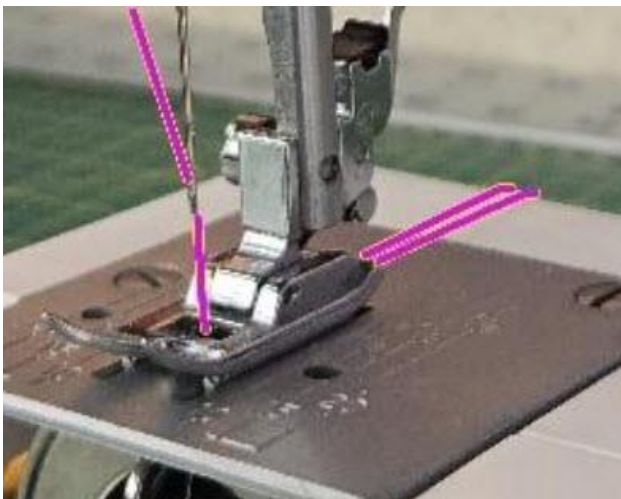


3. While holding the working thread slowly turn the handwheel (right side of the unit) towards you (this is a counterclockwise motion).

The working thread will be drawn in to the lower part of the machine. After a few turns of the handwheel you will see the bobbin thread appear as a loop.



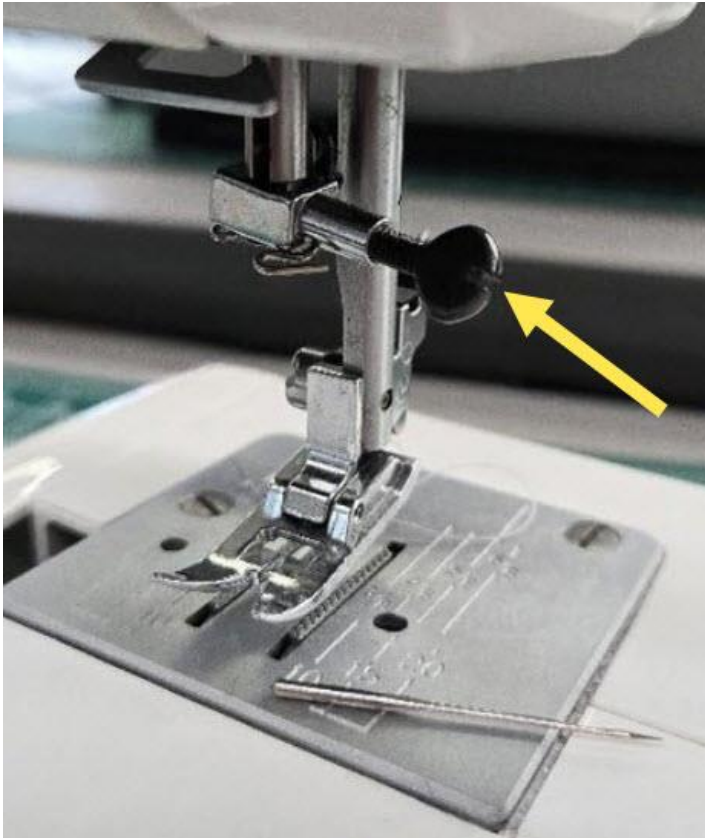
4. With a small stick or similar tool, pull both the bobbin thread and the working thread out toward the back of the machine.



How to Change the Needle

The needle is both sharp and shaped in a way that requires the flat back end of the needle to face away from the user during insertion.

1. First, raise the foot by lifting the foot lever.
2. Rotate the small thumb screw until the needle drops out of its holding shaft.



3. Carefully insert a new needle up and into the shaft.

Fabrics, Threads & Needles

Type 11 needle will work for most sewing projects.

Fabric Weight	Fabric Types	Threads	Needle Type
Light	Tricot, Organdy etc.	Fine Grade	9 or 11
Medium	Linen, Cotton etc.	50-60 Grade	11 or 14

Tension Adjustment

The tension setting should only be done to remedy issues with the thread breaking or how the stitch is laying down. Please refer to the manual for information on how to adjust tension on the Janome 500E sewing machine.

Tips for Success

- If the needle is constantly breaking, it may be due to the wrong type of needle. Try go up a size, for example, 9 to 11, or 11 to 14 etc.
- If the machine is making strange clunking noises, a good cleaning and lubrication may help.
- If the fabric is bunching up (puckering), the tension may be too tight.
- If the stitching is loose and or uneven, the tension may need tightened.
- If thread is breaking quite often, clean the thread path as well and the bobbin holder and compartment. You can use a brush and some paraffin oil cleaner to assist with the cleaning.

Questions?

If you have questions about using the equipment, please talk to branch staff or email us at makerspace@bpl.on.ca.

Central MakerSpace: [905.639.3611](tel:905.639.3611) extension 1302

Alton Branch: [905.634.3686](tel:905.634.3686)

- Date: January 27, 2025
- Amended Dates: July 22, 2025
- Associated Documents: