

Commercial Machine Certification

(Handout)

PRIOR to using the commercial machine, you MUST be certified! This is a very powerful machine and a safety hazard if not used properly!

NOTE: YOU MUST ALREADY KNOW HOW TO SEW AND HOW TO USE A SEWING MACHINE IN ORDER TO BE CERTIFIED ON AND USE THIS MACHINE! **NO EXCEPTIONS!**

- 1) **POWER** - The machine should be turned off AND left unplugged when not in use
- 2) **OILING** - The hook should be oiled before each time it is used (see diagram for oiling point)
 - a. Remove the bobbin case, turn the handwheel towards you and use the oiler with the long spout to place the oil
 - b. Put a drop of oil on the hook just where you see the metal move against metal. Oil is stored at the machine or over the cubbies
- 3) **NEEDLE** - While the machine is still unplugged, check the needle
 - a. This machine does not use standard sewing machine needles
 - b. There is a supply in the drawer at the left side of the table, we have size 14, 16, 18 and some leather needles for this machine
 - c. The top of the needle is round – it does not have a flat side like most domestic sewing machine needles
 - d. To change needles, loosen the screw on the right side of the needle bar, remove the old needle and insert the new one with the eye side to side (not front to back)
 - e. There is a long groove which should face left, and a shorter groove which should face to the right. Insert the needle as far up as it will go and tighten the screw
 - f. Any needle that is bent, rough or broken should be placed in the ‘Sharps’ container (small brown plastic bottles that are labeled – stored on the bottom shelf of the orange shelf unit)
- 4) **THREAD** - Do not use “domestic” thread spools on the industrial machine – the spools are too lightweight and can go flying when the machine is running
 - a. When selecting thread, make sure it is appropriate for the project you are working on
 - b. Use the SAME type of thread for both top thread and bobbin thread
 - c. There is a wide range of threads available – polyester, nylon, UV-resistant, Kevlar, etc. There are also different weights of thread
- 5) **WINDING BOBBIN** - Bobbins are usually wound while you are stitching (see diagram for bobbin winding)
 - a. Thread for winding bobbin should be on the LEFT MOST spool spindle above the machine
 - b. If you need to wind a bobbin first, you can do this before you thread the needle path
 - c. Spare bobbins are located in the drawer on the left side (under the table surface). These bobbins are specific to this machine, do not use any other bobbins
 - d. Because there is no separate winding mechanism, the needle will go up and down, and the feed dogs will be moving as you wind the bobbin
 - e. You can wind the bobbin before you put a needle in OR run some fabric under the presser foot – just don’t run the machine with the presser foot down without fabric underneath, this can damage the feed dogs

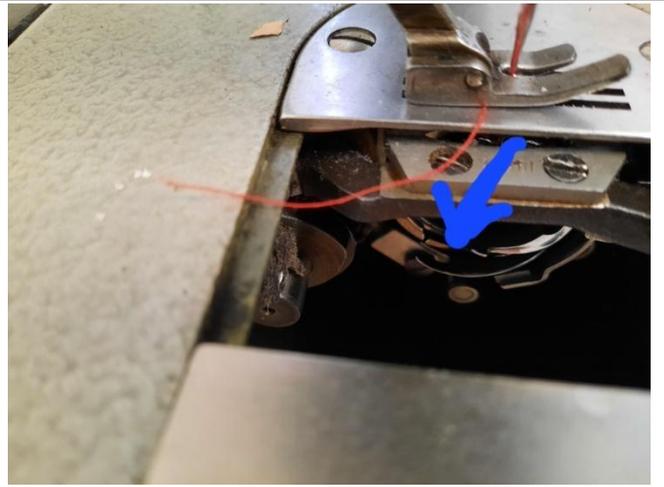
- f. Don't wind a bobbin with the needle threaded unless you are stitching at the same time
- 6) **BOBBIN PLACEMENT** - Once the bobbin is wound, place it in the bobbin case so that ...
- a. It turns clockwise (bobbin facing you) when the thread is pulled,
 - b. The thread tail is set under the tension spring and
 - c. There are 4 inches or so of thread on the outside of the case
 - d. Make sure there is no thread caught on the inside of the case, to possibly restrict the bobbin movement
 - e. Remove the presser foot knee pad to allow you to tilt the machine back to easily access the bobbin placement
 - f. Hold the bobbin case lever and place the bobbin case in the bobbin basket
 - g. Turn the hand wheel toward you to move the needle one full rotation to capture the bobbin thread and pull it up
- 7) **THREADING** – (see diagram for threading)
- a. Thread for sewing should be on the MIDDLE spool spindle above the machine
 - b. Thread the machine using the pictures and directions in the manual
 - c. Notice that the machine was already threaded – be sure to leave it threaded for the next user to see what the actual threading looks like (regardless of thread color)
 - d. If you use the already threaded machine, you should still check the threading to ensure that it was properly threaded
- 8) **POWER** –
- a. Plug the machine in
 - b. Turn the machine on (white switch, located at the front of the machine, under the table surface)
 - c. BE SURE TO TURN OFF MACHINE AND UNPLUG WHEN DONE USING!
- 9) **SEWING** –
- a. Be sure there is a length of thread
 - b. Machine only does straight stitch – no zigzag or other stitches
 - c. There is a reverse lever on the right side of the machine (press and hold to use)
 - d. Stitch length selector is next to reverse lever. Make adjustments as needed (refer to the manual for directions)
 - e. Step on the “top” portion of the foot treadle to stitch. Step on the “bottom” portion of the foot treadle to quickly brake
- 10) TROUBLESHOOTING**
- a. If you break a needle, stop and contact a Lead – needles don't break under normal operating conditions
 - b. Double check the machine threading as a first step if the machine isn't working properly!
 - c. The thread tension – if you have issues with tension, please contact one of the Leads instead of changing the tension dial settings. DO NOT ADJUST THE TENSION

Once you are finished using the industrial machine, turn it off and unplug it!

If you encounter ANY issues, email fiberarts@sparkmakerspace.org

Oiling Point

Hook – before sewing: remove bobbin and place one drop of oil where the hook rotates around the bobbin basket



Bobbin Winding

#1 & #2 are the same locations on both images (just from different angles)



Threading

1.



2.



3.



4.



5.

