

the  
**stitchbook**  
COLLECTIVE 2022

## Workshop 8 of 12

### **Free-motion Machine Embroidery**

These notes should be read in conjunction with the online video



[www.untangledthreads.co.uk/MEMBERS](http://www.untangledthreads.co.uk/MEMBERS)

**Video Password: MACHINE**

## Introduction to Free-motion Machine Embroidery

00:00.00	Introduction	3
01:21	Your sewing machine	4
01:55	Embroidery foot	4
03:00	Feed Dog	4
05:53	Thread tension	5
06:10	Bobbin tension	5
08:12	To hoop or not to hoop?	6
29.00	Stabilisers	7
	Simple Practice Project	8
10:00	Getting started	8
	Doodle, draw or trace?	9
	Line drawing examples	10
17:00	Lettering	11
22:30	Applique and Collage	
	Simple designs	12
	Complex designs	13
	Fabric Painting	14
	Adding Texture	15

# Introduction

## **Some people might think it is strange that we have a workshop on machine embroidery as part of a project which is essentially about slow stitching?**

Although slow stitching is sometimes rather lazily translated as 'hand stitching', you know that that isn't the whole story. I would rather it was translated as 'mindful stitching' or even 'creative stitching'. For me, as a textile artist, using the sewing machine becomes an extension of my artistic activity, an addition to mark-making possibilities and allows me to create textures, surfaces and images which would be virtually impossible to re-create with hand stitching alone. Free-motion machine stitching is about my direct relationship with the machine.

I won't be discussing pre-programmed machine embroidery in this workshop. We will be looking specifically at the potential of 'Free-motion machine stitching' and how you can combine it with collage, slow stitching, painting and drawing etc to create unique surfaces and images.

The other thing that I obviously won't be able to do is to show you the specifics of your particular sewing machine! As a general rule, every sewing machine can be used for 'free-motion' stitching. You simply need an 'embroidery foot' and the ability to disengage the 'feed dog'. More on this later.

The other discussion which often arises is whether or not you need to use an embroidery hoop: I'm going to say 'I very rarely use one.' I'll explain why later, and then it's up to you: it's a bit like the decision to use a hoop for hand-stitching or not: personally I find it too limiting.

So here goes .... If you have never done free-motion machine stitching before you are in for an absolute treat ... don't be afraid of your machine, it will become one of your best friends! Don't forget to watch the video which accompanies this pdf.



Hand stitching



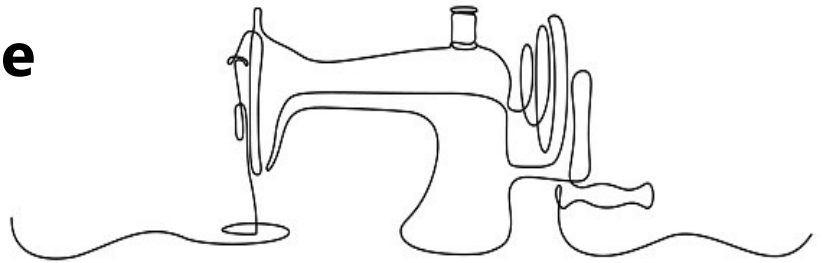
Free-motion machine stitching



Combination of hand and free-machine stitching



# Your Sewing Machine

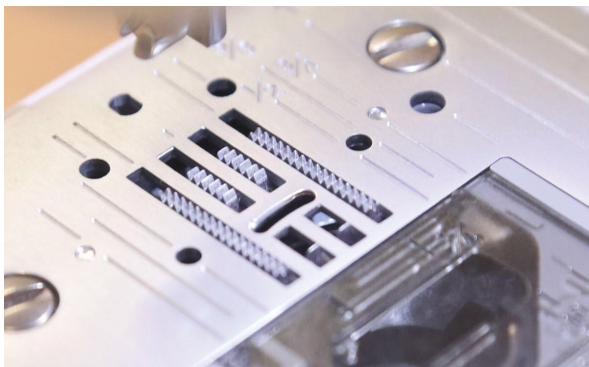


It doesn't matter if your machine is a swanky, new, state of the art machine or a quirky vintage model, or just the workhorse which you've inherited and have recognised all your life. **You have to get to know it, and make friends with it!**

As long as your machine can do straight stitch, embrace it! Relax and be prepared for it to have a mind of its own, which you can train, (given practice and patience.) Your instruction manual is going to be priceless to get you started. If you don't have one, look your make and model up on the internet, and it's highly likely that you'll be able to download it.

## Embroidery Foot

The embroidery foot for your machine might be called a 'darning foot', 'free-motion foot', or even a 'quilting foot'. Basically, it will have a spring mechanism of some sort (so that it can move up and down with the needle), and a round, or open-toe foot. Check which make and model of foot you need to buy if your machine didn't come with one.



## Feed Dog

The feed dog is those little sets of teeth underneath your sewing plate. Normally, when you sew, those teeth move up and down, backwards and forwards, and grip the fabric and 'feed' it through the machine for you. When you are free-motion stitching, you don't want it to do that, so you need to **disengage** the feed dog.

You will need to look at your instruction manual for how to do this. On most modern machines there is a switch or a button (often round the back, near or underneath the bobbin case area). This will drop the teeth and you are ready to go.

*Some older machines may have a darning or mending symbol on the stitch options.* If your machine hasn't got this function or a switch, it may have come with a 'darning plate' which literally clips over the top of the feed dog. If you don't have the switch OR the darning plate, your machine won't be able to play at this workshop! Sorry.

So let's assume that you have now got your embroidery foot in place and you have disengaged or covered the feed dog. We are ready to sew.



# Thread & Bobbin Tension

You can't get proper tension without correct threading.

<https://www.threadsmagazine.com/2008/11/02/understanding-thread-tension>

The above link will take you to a really well written, easy to understand guide about how to tension your thread. The tension which your upper and lower thread needs to be set at will depend on the thickness of your thread and the thickness of your fabric. I have to say that getting the tension right is often a question of trial and error. All machines have basically four tension devices: thread guides, tension discs, tension regulator for upper thread, and bobbin-case spring for bobbin thread. These ensure that the same amount of thread flows simultaneously from the needle and the bobbin, producing a symmetrical stitch. Again, take a look in your instruction manual for details concerning your particular make and model.

For this project I would suggest starting with a standard weight sewing thread or overlocker thread (like MOON). You don't want to be wasting expensive thread on practicing your technique ... and you will need practice!

My advice is DO NOT ADJUST your bobbin tension. It needs a screwdriver and huge amounts of confidence to get it right (and to be able to put it back again!) Adjust your needle thread tension to suit the bobbin!. This photo comes with thanks to <https://www.tillyandthebuttons.com/2020/03/thread-tension-troubleshooting.html>





# To Hoop or Not to Hoop (that is the question?)

As I suggested in the introduction, I very rarely use an embroidery hoop for free-motion machine stitching.

- I find that it is just another thing to think about.
- I feel as if I need at least 2 pair of hands.
- It is too formal and controlled for me.
- It makes me feel restricted in the gestural movements I want to make.

Having said that, if you are wanting to work on very fine or sheer fabric, you will need to stop the fabric from bouncing in response to the needle, and this will require some sort of stabilizer or a hoop.



**To get started, I want you to stitch through a few layers of fabric at the same time, rather than using a hoop.** *The extra layers are acting as a stabilizer. See next page.* This will give you the chance to get a real feel for how you and the sewing machine are working together, and give you a much more organic, closer, more tactile experience, more akin to drawing. If you want to refine your practice, you can always introduce a hoop or removable stabiliser at a later stage, to achieve a particular look. But let's make things easy for ourselves to begin with!





# The Use of Stabilisers

By stitching through several layers of fabric, you are effectively using the lower layer(s) as a stabiliser. Later on, when you have mastered the control of the free-motion stitching, you may want to investigate using commercial stabilizer. It means you can work on a single layer of fabric but still don't have to use a hoop.

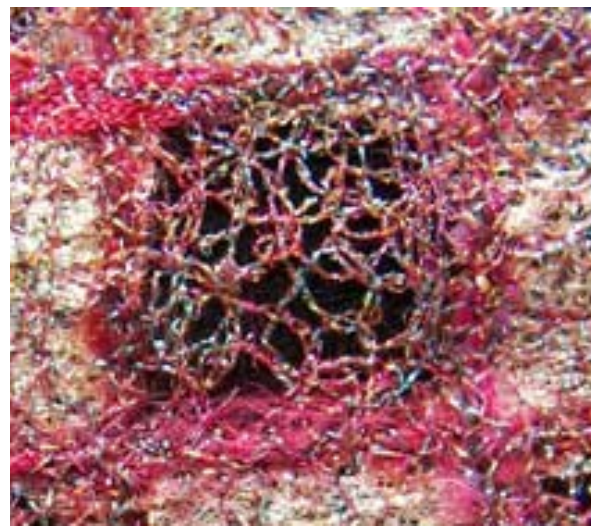
A stabiliser is intended to be removed after stitching. It comes in lots of different forms:

- iron on
- sew in
- woven
- non woven
- various weights from very thin to cardboard stiff
- tear away
- wash away
- cut away

Because there are so many different options, this is really beyond the scope of this particular workshop. If you want to learn more, there are loads of videos on YouTube which you could watch, but **let's get to grips with the free-motion stitching first.**

*... just let me show you this ... to tempt you further at a later stage!*

*If you use JUST the water soluble stabiliser (in a hoop), you can make a network of stitches, and then wash away the stabiliser, leaving you with an open lace-like structure. You will need at least 2 layers of stabilizer in a hoop to stop it from bouncing. I'll show you this more clearly at the end of the accompanying video.*





# Simple Practice Project

## Getting Started: Don't forget to watch the video!

- Make sure that your machine is set up correctly.
  - Embroidery foot attached
  - Feed Dog disengaged or covered
  - Needle and bobbin thread correctly threaded and tensioned
- Take two layers of calico each measuring about 15cm x 20cm
- Cut 9 circles of felt approximately 4cm in diameter.
- Place one of the circles onto the calico, and position underneath the machine needle. Lower the needle to hold the felt in place.
- Make sure that the foot lever is in the downward position.
- Begin to sew.
- Use light pressure on the speed control.
- Move the fabric in various directions.

**REMEMBER: The fabric will not move unless you move it.**

**All that happens is that the needle goes up and down and stitches on the spot. To begin with, it feels really weird being able to move the fabric from side to side as well as from front to back. Stay calm and don't panic. You are in control! Keep reminding yourself that all that is happening is that the needle is stitching up and down in response to your foot on the pedal. When you move the fabric it will make a stitch. The faster you move the fabric the longer your stitches will be. Try to get a consistent needle speed and control your stitches by moving the fabric.**

- Continue adding the felt circles to your design.
  - Try a variety of mark making.
  - See if you can keep the stitching within the confines of the circle.
  - Deliberately stitch over the edge of the circle.
  - Try straight lines and curves lines or spirals.

This might look like you have just scribbled on the fabric, but if you haven't done free-motion machine stitching before, it will undoubtedly be one of the most important pieces you'll ever do. Hopefully you will soon begin to gain some control over the movement of the fabric and therefore the direction and size of your stitches.

Once you have mastered this, there will be no stopping you!!



# Doodle, Draw or Trace?

It is very useful to have a line to follow when you are sewing. Unless your intention is doodling (which it might very well be!), you will find the whole process of free-motion sewing much easier if you mark your design onto the work in some way before you start.

You could do this in a number of ways:

- Draw your design freehand, using a pencil or air erasable marker.
- Use a lightbox to trace the design onto the top layer of your fabric.
- If your top layer is sheer, you could mark the design underneath.
- I tend to copy or trace a loose outline, and then freehand the stitching.



**You can see in this example that I drew a very rough outline of the dog onto the hessian with a pencil, and then fixed some pre-cut shapes in place (using Bondaweb) before I began the freehand stitching.**

As a beginner you may find it useful to use another artists' work as inspiration. That doesn't mean that you should directly copy, but being influenced by the style or design of someone else's work is completely acceptable. Pinterest is a great place to gather ideas.



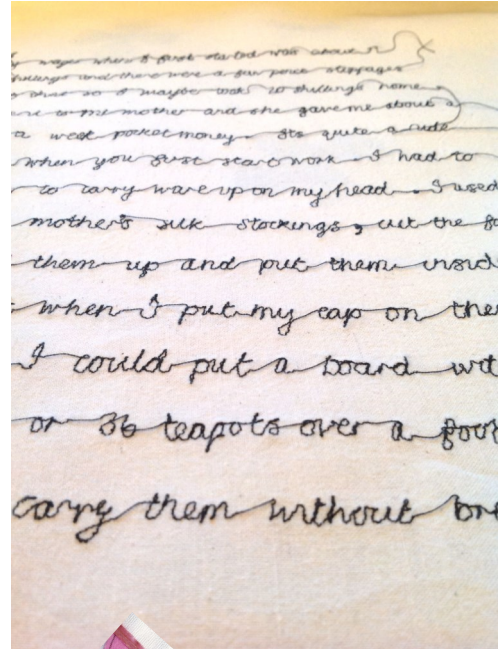
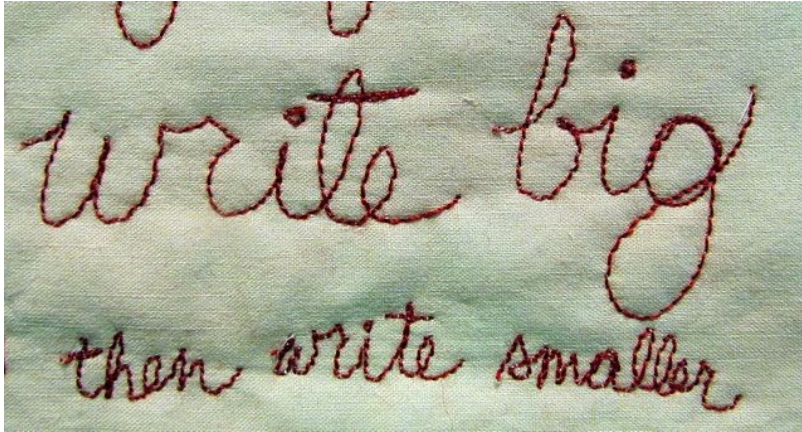






# Lettering

Once you have really mastered control over the foot pedal and the speed and direction you are moving the fabric, lettering simply becomes another mark you can make. Unless you are absolutely confident in being able to freehand lettering, I suggest again, that it is very useful to have a line to follow. Writing with air erasable marker is perfect because if you don't follow the line exactly, the original line won't ultimately be visible.



**This is the best advice I can give you ... start with BIG letters and then get smaller with practice! It takes extraordinary control to be able to sew lettering. Some fancy (very expensive) machines do have a pre-programmable text function.**



**What about making your letters by stitching the background and leaving negative space?**





# Applique and Collage

In my opinion, this is one of the best and most effective ways of using free-motion machine stitching. You can build up layers of fabric, either tack or stick them down and then stitch over them. The possibilities are endless, you are only restricted by your imagination really. To me, it feels like drawing.



Simple Collage

Images from Pinterest





Complex Collage  
Images from Pinterest



# Fabric Painting

In a previous workshop we looked at painting, printing and dyeing fabric. Adding free-motion machine stitching to fabric which you have already worked on is wonderful. My cat, Dr Johnson, became something of a model for me a few years ago. I would lightly sketch his likeness, paint in his patches, and then machine in the outline and details.

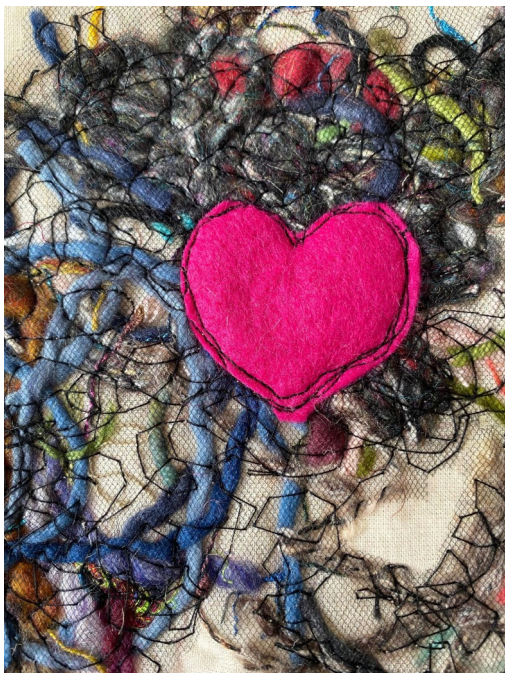


And, of course, my daughters cat, Daisy, gets a look in too!



# Adding Texture

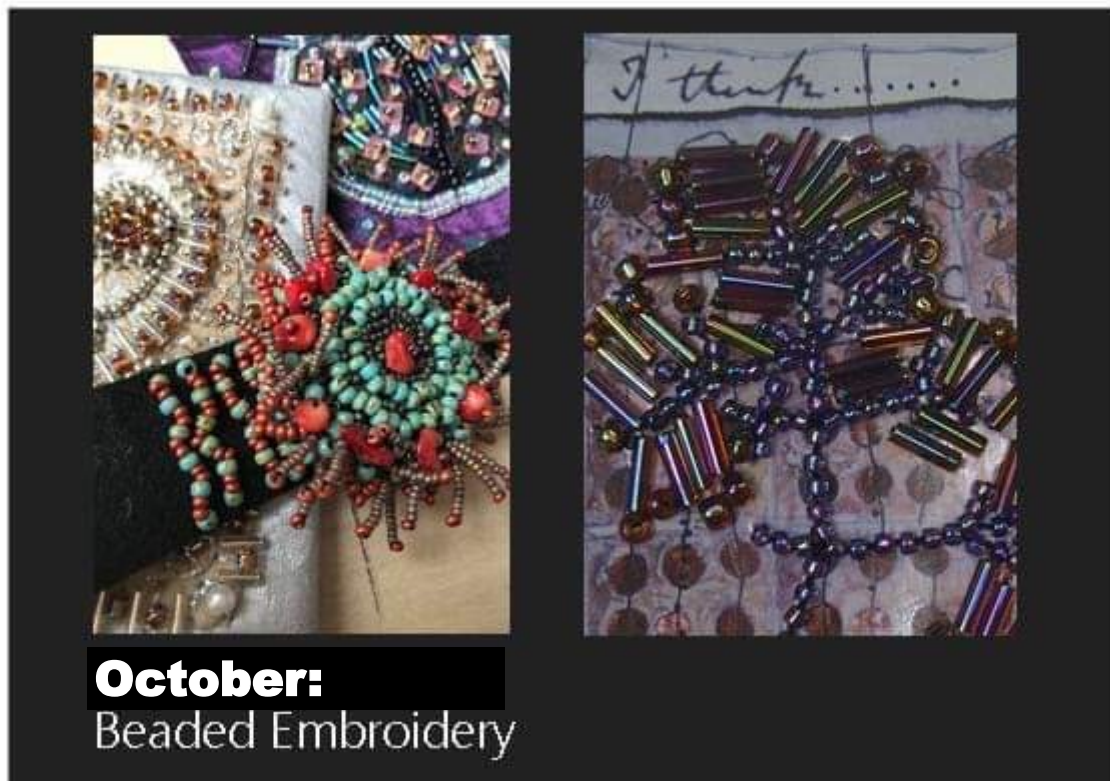
Do you remember the workshop where we used offcuts of yarn and fabric and stitched them down under a piece of netting? This is another technique which is great with free-motion machine stitching ...



**Have fun, and let me know how you get on?**

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Next Workshop



**8th October 2022**

Workshop 8 of 12

**Free-motion Machine Embroidery**

A list of supplies needed for this workshop will be announced in the next Newsletter (September 18th 2022) and online

[www.untangledthreads.co.uk](http://www.untangledthreads.co.uk)