

PLEASE NOTE: If you received this materials list from a source other than RaNae's website, please check for the most up-to-date version at www.FreeMotionMasteryinaMonth.com Click on "Classes & Calendar" in the top bar Select "Workshops & Lectures" in the drop-down menu Click on "Free-Motion Mastery in a Month" Click on "Download Multi-Day Materials List" If you are taking this class through a STORE, please get the materials list from the store, as they may have additional info.

Learning free-motion quilting does not have to take months or years of "practice, practice, practice." Free-Motion Mastery in a Month's unique teaching system will have you quilting successfully from your first day. You'll learn to quilt the fundamental shapes that build all designs, then combine them to quilt any design. You'll quilt individual practice blocks, then join them up to finish a quilt. You'll make a giant leap in your FMQ skills during the class and go home knowing exactly what and how to practice to continue improving. You'll finish this class saying "I can DO this!"



with RaNae Merrill



#### You will learn how to:

- Pre-train your hands anytime, anywhere, before quilting
- Set up your sewing machine for free-motion quilting
- Quilt the 6 Basic Shapes that make up all quilting designs
- Build any quilting design from the 6 Basic Shapes
- Join pre-quilted blocks to make a quilt of any size
- And much more!

#### **Required Materials:**

1. A copy of my book *Free-Motion Mastery in a Month*, 2nd edition. If you have the 1st edition, email me to ask for the update. Purchase the book and get familiar with it before class. The following pages are excerpted from the book to give you the information you need to prepare.

2. The *Free-Motion Mastery in a Month* tool kit, or assemble your own from the list on page 5 of this file (page 32 of the book).

3. Following are some pages from the book that will help you prepare for class. If you have questions you can email me at info@RaNaeMerrillQuilts.com.

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We will be making a quilt from 16 10" x 10" blocks with 5" borders on all sides. Please follow the cutting and sandwiching instructions on the last pages of this materials list to prepare for the class.

About Fabric

Working with the right fabrics is fundamental to the FMM30 learning process, so choose fabrics carefully, based on these descriptions.

**Motif Blocks:** These need to have a large-scale design with clearly outlined figures. Ideally, they should have about 50% empty space. The empty space is used to practice fill patterns. Denser fabrics will work as well; you'll just have less space to practice background fills.

Preprinted blocks often work well but, if you plan to cut up your Motif Blocks in the final layout, an allover design would be a better choice. You don't want blocks with animals that would end up having their heads chopped off!











Large-motif fabrics can be used in different ways. Cut whole blocks featuring a single motif...

...or, cut four identical squares then join them into a Pinwheel block.

Solid Blocks and Borders: These should be cut from one or more solid colors. Solid means absolutely flat color or slight mottling. A print will make it difficult to see clearly what you are quilting, and will hide the quilting when it's finished. The fabric may seem boring at the start, but will let your quilting shine in the end.

**Joining Strips:** These can be solid, a small print or even a stripe. Use more than one color if you wish. If you want to hide them, match the fabric of the blocks they are joining. **Backing:** Any fabric. If you coordinate it with the top fabrics, you can turn some pieces over for more variety.

Hint If you're worried about your quilting looking imperfect, choose a large-motif fabric with a hand-drawn or primitive design. The imperfections of the fabric design will make the quilting look just right!

## FABRIC QUANTITIES

These are minimums based on fabric 44<sup>"</sup> wide. If your fabric is narrower, or if you want "insurance," buy more. Review the cutting charts on page 45 before buying.

Yardages in tables are for domestic sewing machines (DSM) and sit-down longarms (SDL). Yardages for frame-mounted longarms (FML) are at the bottom of the page; the difference is because the same backing fabric is used for all blocks and borders and is mounted whole on the frame.

See pages 65 & 67 for specifics about border format and cutting.

#### FOR 8 MOTIF BLOCKS AND 8 SOLID BLOCKS See Layouts, page 26

Motif Blocks (Fronts)	Whole blocks: <sup>2</sup> / <sub>3</sub> yard or enough for 8 motifs or <b>Pinwheel blocks:</b> Enough for 4 repeats of 8 blocks (see photo, page 28)
Solid Blocks (Fronts)	<sup>2</sup> / <sub>3</sub> yard Can be all one color or different colors
Backing for all blocks	1⅓ yards (2 yards)* <i>Solid or print</i>
Border Fronts & Backs	15⁄8 yards (2½ yards)* Fronts should be solid
Joining Strips	% yard minimum See diagrams next page
Binding	$y_2$ yard Can be same as joining strips
Batting	54″ x 54″ square

# WOF = Width of Fabric LOF = Length of Fabric

\* You may find it helpful to cut backing and batting larger than top fabric by about 1" on each side, to give you some extra fabric to hang onto when quilting edges. If you do this, use the measurements in parentheses.

#### FOR 9 MOTIF BLOCKS AND 7 SOLID BLOCKS See Layouts, page 26

Motif Blocks (Fronts)	Whole blocks: 1 yard or enough for 9 motifs or <b>Pinwheel blocks:</b> Enough for 4 repeats of 9 blocks (see photo, page 28)
Solid Blocks (Fronts)	<sup>2</sup> / <sub>3</sub> yard Can be all one color or different colors
Backing for all blocks	1⅓ yards (2 yards)* <i>Solid or print</i>
Border Fronts & Backs	15⁄8 yards (2½ yards)* Fronts should be solid
Joining Strips	% yard minimum See diagrams next page
Binding	$V_2$ yard Can be same as joining strips
Batting	54″ x 54″ square

Cutting lists & diagrams can be found with their corresponding Daily Lessons:

For Blocks: Day 1, page 45

For Borders: Day 21, page 67

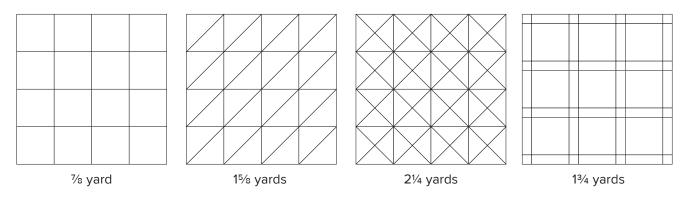
For Joining Strips: Day 26, page 73

#### FOR FRAME-MOUNTED LONGARM MACHINES

Motif Blocks & Solid Block Fronts	Same as yardages for DSMs
Backing for all Blocks & Borders	2½ yards, plus extra length for mounting on frame
Border Fronts	1 yard if front fabric is mounted WOF side-to-side on frame 1½ yards HALF WOF if front is mounted LOF side-to-side on frame (or 15⁄8 yards for mitered corners)

#### YARDAGE FOR JOINING STRIPS

The yardage required for joining strips will vary depending on how much you cut up the blocks in your layout.



After quilting, blocks are trimmed to 10" square.

Joining Strips for horizontal and vertical sides of a block are 10" long. Cut 4 from a WOF strip. Joining Strips for the diagonal side of a ½-square triangle are 14" long. Cut 3 from a WOF strip. Joining Strips for the short sides of a ¼-square triangle are 7" long. Cut 6 from a WOF strip. Joining Strips for a full column or row in the quilt center are 40" long. Cut 1 from a WOF strip.

# FMM30 ON A LONGARM

There are several ways to do FMM30 on a frame-mounted longarm. In each approach, the backing and batting are mounted on the frame. How you handle the top fabric changes.

**1.** If you want to work on other quilts while you do FMM30, mount a strip of backing and batting on one side of the frame, or extend the backing and batting of a quilt you have on the frame. Pin the front fabric for each day's block on the open batting/backing strip to quilt it.

**2.** Mount large pieces of front fabric, then quilt one block or border section each day. When you're finished, cut the large fabric into smaller pieces to combine and assemble into a design.

**3.** Sew the top blocks and border together before quilting, mount it on the longarm, then quilt a block a day. Just remember that it's



important to avoid working on a top that you spent a lot of time piecing and will be afraid of ruining, so keep the design simple.

Jools

#### FOR THE LESSONS

- The Master Trainer tool (or make a simple trainer of your own, see page 33)
- Copies of the Tracing Sheets in Tracing Sheets and Quilting Guides beginning on page 111
  You may want to laminate them. (Tracing Sheets in the FMM30 tool kit are laminated.)
- Dry-erase marker and erasing cloth

- Grippy pads (see page 86)
- Sketchbook (one you can carry with you, so you always have it for doodling)
- Pencil and eraser
- A pair of dice (For what? See page 168)
- A bag to carry everything (with a closure)

# FOR MAKING THE QUILT (ALL MACHINE TYPES)

- Basic sewing tools (scissors, ruler, seam ripper, needle and thread, etc.)
- Domestic sewing machine for assembly
- Sewing machine needles (See Needles, page 89)
- > The instruction manual for your machine
- A small brush for cleaning inside your machine
- Sewing machine oil
- Rotary cutter, mat and ruler
- Square rotary cutting ruler at least 10" x 10" (The FMM30 Square Up Ruler)
- Removable fabric markers
- Masking or painter's tape

#### FOR DOMESTIC SEWING MACHINES

- Quilter's safety pins or basting spray (if you don't use fusible batting)
- Free-motion foot (see page 85)
- ¼<sup>"</sup> foot (for assembling your quilt)
- Quilting gloves, or grippy pads (pieces of padded shelf liner, see page 86).
- Walking foot or dual feed (optional)
- Ruler foot (optional, see Ruler Work, page 164)



The FMM30 Tool Kit contains the Master Trainer, laminated Tracing Sheets, white board, dry erase marker, grippy pads, erasing cloth and tote bag. A video class is also available. See *Resources*, page 174, to purchase.



After quilting your practice blocks, use the FMM30 Square-Up Ruler to trim them to 10" square. It also includes guides for 1/4-, 1/3- and 1/2-block cuts; diagonal cuts; and all joining strip and binding measurements. (See *Resources*, page 174, to purchase.)

# What kind of sewing machine do I need?

FMM30 works for all types of sewing machine—domestic sewing machines (DSM), sit-down longarms (SDL) or framemounted longarms (FML). Use the machine you have. If you have more than one, use the machine you want to improve on.

Thread

#### FOR QUILTING

Top Thread: 50-weight or 40-weight cotton

- For Motif Blocks: A color that is slightly darker or lighter than the background of your Motif Blocks. You should be able to see the thread against the fabric when you are quilting, but without too much contrast, so errors won't be really evident.
- For Solid Blocks & Borders: Thread color(s) should be much darker or lighter than your Solid Block fabric(s). The high contrast allows you to see clearly what you are quilting. (Don't be shy about letting your quilting show—this is to help you learn, not to impress anyone else!) Also, if you are doing an online class, a thread with high contrast is easier to see on screen.

**Bobbin Thread:** Use the same weight and color of thread for the bobbin. This makes it easier to balance tension, and the matching color will help hide small tension errors. If you turn some pieces over when you assemble the quilt, having the same thread on both sides will help unify the pieces.

If you do want to try a different thread in the bobbin, Bottom Line from Superior Threads is quite popular. It is a 60-weight 2-ply polyester and pairs well with just about any thread.

## FOR ASSEMBLY

- A color that matches your joining strips, or a neutral
- A color that will hide against your block fabrics, or invisible polyester thread, for stitching along edges of joining strips

# NOTE

It's important to use fresh, high-quality thread. Aurifil and Superior are two excellent brands. Read more about thread on pages 90-91.

Hint If you're using more than one color of fabric, match thread color to the different fabrics. Then, mix up the thread colors on the fabrics. The contrasting thread will help pull together the fabrics in the design.

Batting

Get Hobbs Heirloom Fusible batting. It is a double-sided fusible that makes sandwiching the blocks easy and secure, without pins to get in the way. It is 80% cotton 20% polyester, slightly tacky before being fused, and repositionable even after being fused. It does not release fumes when ironed, and will not gunk up your sewing machine. (See *Resources*, book page 174.)



Fluffy polyester or wool are not suitable for this project because they are too flexible to provide the body that will make it easy to manage a block in your sewing machine, and the layers will tend to shift because of the loft.

Setting Up Your Sewing Machine

It's really important to have your sewing machine in good working order for free-motion quilting. Here's a pre-flight checklist to get your machine set up and ready to go. Most of this applies to DSMs, SDLs and FMLs; where there are differences I'll mention them as I go.





Remove the throat plate

# Use a soft brush to remove lint and threads



All clean! Oil per manufacturer's instructions

Glad that's out of there!

DSM = Domestic Sewing Machine

FML = Frame-Mounted Longarm

SDL = Sit-Down Longarm

FMQ = Free-Motion Quilting

#### CLEAN & LUBE

Clean and oil your machine before you begin. If it hasn't been serviced in a long time, take it in for a tune-up. Quilting requires a sewing machine to take a lot more stitches than normal sewing, and through a lot more bulk, so don't make it work even harder by having it full of crud and feeling stiff in the joints. Check your instruction manual for directions. Get in the habit of cleaning and lubricating frequently.

Be absolutely sure to use the right oil, or you run the risk of permanently gumming up your machine. Don't use "canned air," as it forces dirt further into the machine. Lift dirt out with a small, soft brush.

#### SEWING MACHINE FEET

For quilting on a DSM, you'll need a quilting foot. They come in a variety of shapes and sizes (see photos at right). All of them float just above the fabric, which allows you to move the quilt freely (see Hint on page 92). Start with what you have available, then try different styles to find which you prefer. For assembling your quilt on a DSM you will also need a <sup>1</sup>/4<sup>"</sup> foot.

## FRESH NEEDLE

Put a fresh needle in the machine. On a DSM, for 50-weight thread, start with a size 80/12; for 40-weight use a 90/14. Start with a Universal, but also try different types to see which you like. If you're having problems with thread breaking or skipped stitches, try a different size or type. (See *Needles*, page 89.)

#### FEED DOGS

On a DSM, you need to drop the feed dogs for free-motion quilting. Check your instruction manual to find out how. The control may be a button on the back of the machine behind the bobbin assembly, or near the on/off switch. Longarm machines don't have feed dogs.

## STITCH LENGTH

With free-motion quilting on a DSM or sit-down longarm, *you*, not the feed dogs, are moving the fabric, so you don't need to set the stitch length (see page 95 for more about stitch length). If you're using a stitch regulator on a longarm or a BERNINA BSR, set the stitch length at 12-15 stitches per inch (see *Stitch Regulators*, page 94).

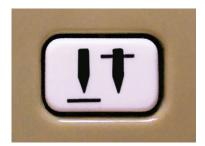
#### NEEDLE-DOWN POSITION

You will often stop with the needle down to hold the quilt in place while you look ahead or reposition your hands. The needle up/down icon will look something like this:

The needle-down function works differently on different machines. If you haven't used it before, get familiar with it now.

#### BOBBIN

Wind a bobbin and load it. (If you know what bobbin thread you're going to use, wind several.) If your machine has a front-loading bobbin (as opposed to a drop-in bobbin), look for a wire loop on the bobbin case or a hole in the bobbin case arm. If it has one, run the thread through it. This helps avoid skipped stitches by keeping the thread in proper alignment during free-motion quilting (and embroidery).





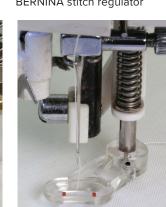
# Quilting Feet



Open-toe darning foot (BERNINA #24)



Closed-toe quilting foot on BERNINA stitch regulator



Clear plastic darning foot comes with many machine brands. It bounces a lot, and it's hard to see the needle.



Echo-quilting foot on BERNINA stitch regulator



Longarm quilting foot (Handiquilter)



1⁄4″ foot. Though not a quilting foot per se, a ¼″ foot is great for quilting lines and shadowing. Use it with dual feed or a walking foot if you have it. For assembling your FMM30 quilt, you'll need a 1/4" foot that is  $\frac{1}{4}$  from the needle to the LEFT OUTSIDE of the foot, as well as to the right outside, to get exact 1/4" seams on the joining strips (The foot above, BERNINA #97D, is  $\frac{1}{4}$  to the right outside and ¼" to the left INSIDE. BERNINA #37 or #57 is better.)



Ruler foot (BERNINA #72)

Cut and Sandwich Blocks

#### Today we'll begin with the 6 Basic Shapes Tracing Sheet and prepare your quilting blocks.



Read The 6 Basic Shapes, page 112.

**Trace** the 6 Basic Shapes Tracing Sheet (page 113) for 5 minutes, 3 times throughout the day.

Cut and sandwich blocks for your quilt.



# SANDWICHING THE BLOCKS (FOR DSMS & SDLS)

Make 16 one-block "sandwiches." Layer a backing piece, a batting and a top piece.

The blocks are 11<sup>°</sup> wide by 12<sup>°</sup> high, so turn the pieces all in the same direction. (You can cut the backing and batting about 1<sup>°</sup> larger on each side if you wish.) If they don't fit exactly, don't worry—you'll square up the blocks and cut them to shape for your layout after they are quilted.

If you are using fusible batting, iron the layers together. Otherwise, use basting spray, quilters' safety pins or basting stitches to hold the layers together. (Very little basting is needed.) On Motif Blocks, pin away from the outlines of the motifs so the pins won't be in the way when you quilt.

# FOR FRAME-MOUNTED LONGARMS (FML)

Mount backing and batting on your frame. If you are using large pieces of front fabric, mount them too. If you're using blocks of front fabric, drop and pin them in place each day as needed.

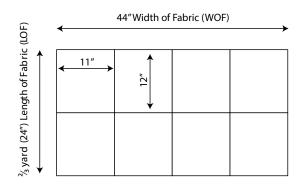
# CUTTING LIST FOR BLOCKS

Motif Block Fabric— Front:	For Whole Blocks: 8/8 Layout: Cut 8 blocks 11" x 12" 9/7 Layout: Cut 9 blocks 11" x 12" or For Pinwheel Blocks: 8/8 Layout: Cut 32 squares 6" x 6" 9/7 Layout: Cut 36 squares 6" x 6" Join square to make 111/2" blocks It's okay to mix whole and pinwheel blocks
Solid Block Fabric— Front:	8/8 Layout: Cut 8 blocks 11″ x 12″ 9/7 Layout: Cut 7 blocks 11″ x 12″
Backing Fabric:	16 blocks 11″ x 12″ Cut 12″ x 14″ if you want extra around the edges. For FMLs, keep backing whole (see page 30)
Batting:	16 blocks 11″ x 12″ or slightly larger For FMLs, keep batting whole

Hint Prepare an extra block or two. Use them for warm-ups and tension testers. And, if you make a cutting mistake later on, you'll already have a replacement.

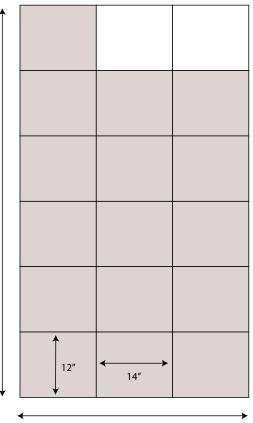
# CUTTING WHOLE BLOCKS

If fabric is  $42^{"}$  wide, cut blocks  $10^{1/2^{"}}$  wide.



#### OVERSIZED BACKING BLOCKS

16 blocks 12" x 14", plus 2 extras.



2 yards 72"