

# Fact and Friction December 7, 2022

# **Supplies**

- Sew Fine Ultra T High Performance Presser Foot Set for Brother/Baby Lock
- Note: These feet are currently available only for Brother/ Baby Lock machines and fit virtually all machines currently made for those brands. Future brands may be added in the future, but are not currently available as of September 2022.

## Instructions

### The Problem with Friction

When we sew, friction builds up between the fabric and the presser foot. This can cause the fabric to feed poorly and the top fabric to push or pull at a different rate than the bottom fabric. The push and/or pull of the fabric results in a seam that does not lie flat, shifts and creates mis-matched seams. "Sticky" materials like vinyl cling to the presser foot and simply do not feed. The answer in the past has been a Teflon<sup>©</sup> or non-stick foot with a coating of very smooth material.

Teflon<sup>©</sup> or non-stick feet have a thin layer of material applied to the bottom of the foot. Quilters commonly sew with a method called strip piecing and will sew between fabric pieces for a short period without fabric under the foot. When we sew without fabric under the foot the diamond cut feed dogs scar the foot and the smooth, thin surface of the non-stick foot is not so smooth anymore. Actually, sewing without fabric will also scar and wear a groove in metal feet as well.

When sewing multiple layers of fabric, such as a quilt, this problem is magnified and a walking foot will release the pressure on the foot to allow for even feeding of the layers. A

walking or even feed foot works very well for multi-layer quilt projects. When the walking foot does release pressure between stitches, any fabric without multiple thick layers tends to drift while sewing. Therefore a walking foot is not practical for thin or slippery fabrics that require constant pressure from the foot to control the fabric.

# Same Feet with a New "High Performance" Material

The Ultra T feet shown in the video are made of a resin material that is actually stronger than steel. The material is non-stick and anti-friction. The set consists of the three most commonly used feet for the Baby Lock and Brother Machines. The feet are the exact size and shape of the original feet with the added benefit of the new amazing material. Feel free to sew off the fabric and use them for all sewing in place of the metal feet that came with the machine. Let's look at these three most common feet and how to use them on the machine.

The "J" foot is the all-purpose foot. It is the foot with the small black button on the left side. This is the foot included with all Bother and Baby Lock machines. When this foot is recommended for a certain stitch, an electronic machine will display the J foot on the screen. Look underneath the foot and notice that the bottom of the foot is flat to allow precise pressure for most all utility stitches. The 7mm opening in the foot allows for the entire range of motion for any stitch. Attach the foot on the machine and notice that there is a small gap on either side of the feed dog area. Notice that the foot will wiggle up and down when pressing on the toe of the raised foot. The black button on the side of the foot locks the foot in a flat position and is used when sewing off of a tall seam, such as when hemming jeans. This flexibility is perfect for most sewing, but can cause a long stitch if allowed to "ski" down a tall seam. When coming to a seam with a "drop off", press and hold the button until the foot clears the seam and drops all at once. Release the button when the foot has cleared and dropped off of the seam.

The "N" foot is used for decorative stitches and is included with almost all Brother / Baby Lock machines. This foot is different in three ways from the J foot and is not interchangeable with that foot. If the machine recommends this foot for a stitch, use it for better results. Turn the foot over to see that this foot has a groove down the middle. This groove allows taller decorative stitches to pass easily under the foot. This foot also has a wide 7mm opening to allow the needle full range of motion. Set the foot side by side with the J foot and notice that this foot is actually a little thicker. This feature allows for the potentiometer switch attached to the presser foot bar on all automatic tension machines to adjust for well-

balanced decorative stitches. Attach the foot to the machine and notice that the foot is wider and completely covers the feed dog area. When sewing extra wide decorative stitches or during directional sewing, this allows the machine to move the fabric efficiently.

The ½" Quilting foot is designed for straight stitching with the needle in the center needle position. The foot is flat on the bottom for maximum control of the fabric. Do NOT use this foot for any stitch other than a straight stitch in the center needle position because the small opening in the center will not allow for any movement of the needle side to side. (The needle will hit the foot and neither the foot, the needle, the machine or you will be happy.) The small center opening does stabilize the fabric as the needle penetrates for a straight stitch with less wobble. If a straight stitch plate is available for your machine, it also has a small opening that will further stabilize the fabric for the perfect straight stitch. The added bonus of the straight stitch needle plate is the machine will not allow the needle to move away from the center position. The plate has a hidden switch underneath. Most electronic Brother or Baby Lock machines allow the machine to turn on with a center needle position and this is very useful for any of us quilters that might forget to move the needle to the center position. This feature, if available, is accessed in the settings pages.