Quilting, Fabric Printing \& Scan N
Cut

## Precise Border Piecing

 with Scan N Cut January I7h $^{\text {th }}, 2023$Adding a pieced border around the center of a quilt or fabric panel can be challenging if the quilt center or block is a unique size and you are designing without a pattern to guide you. Even if the blocks in the border are a unique size, the accuracy of the Scan $N$ Cut will help you with the perfect size for the perfect fit. In the video, a picture printed with
 PrintModa Fabric Studio presented a unique size challenge for the border blocks. $23 / 4$ " finished blocks to the rescue!

## Supplies Shown in Video

- Scan N Cut (instructions assume a DX model with an auto blade, but other models that are manually adjusted can be used)
- Scan N Cut Fabric Mat (use a DX mat for DX machines)
- Scan N Cut Rotary Auto Blade (Determine if your machine will accept a Rotary Auto Blade) or Thin Fabric Blade
- Brayer and Spatula tools for the Scan N Cut
- PrintModa Fabric Studio and Fabric Roll for Printing
- Photograph or Photo of Photograph
- Cellophane in color to "tint" the photo
- Cotton fabric for piecing
- Optional: Terial Magic or Best Press 2 to add body to fabric
- Sheet of Paper larger than the size of the finished block (can be taped together)
- Mechanical Pencil or Pencil with sharp point
- Clear Ruler with both Imperial (inches) and Metric
- Scan N Cut mat scraper, lint free cloth or fragrance and oil free wet wipe and LA's Totally Awesome cleaner (available at most "Dollar" stores)


## Instructions

## Decide the size of the Quilt Block Border Needed

Measure the outer edges of the center panel. Determine the finished border length and width around the panel. If measuring from raw edge to raw edge and assuming that the border will be sewn with a $1 / 4$ " seam, subtract $1 / 2^{\prime \prime}$ from both measurements to determine the finished size of the complete border. We will work with the finished size of the border for our calculations. We will add seam allowance using the automatic $1 / 4$ " seam feature on the Scan $N$ Cut. Find a block size that will work for all four sides. Sometimes this requires some creative thinking.

- The center can be trimmed a little in either direction if possible without compromising the design.
- Consider making custom rectangle blocks for the width and a different size for the length.
- Use two different block designs of different sizes.
- Add fabric strips as spacers between the blocks.
- Sew a small border around the block to change the size.
- Create corners without blocks that are adjustable or
 plain borders with a block in the corner.
- Put a single block or group of blocks in the center of each side.


## Set Up the Scan N Cut for Cutting Quilt Blocks

There are several methods for cutting a single layer of fabric for piecing on the Scan $N$ Cut:

- Use a fabric mat to support the material for cutting. The fabric mat is very, very sticky and is suitable only for fabric. Never put paper on the fabric mat because it will not want to come off (although it can be cleaned off using the mat cleaning method described at the end of the handout). Secure the fabric well to a sticky mat and press down all around and/or use a brayer to remove any air bubbles. Fabric can be lightly
treated with Terial Magic or Best Press 2 to add body and reduce shredding on the edges. A Fabric Support Sheet is available to use on a Standard or Low Tack to provide extra sticky. The sheet is adhered to the mat and changes the mat to a very sticky one. This is ideal for mats that are older and may have deeper cuts that can otherwise not be repaired.
- Use a Rotary Auto Blade to cut the fabric. For machines that can accommodate this blade it is ideal for cutting quilt pieces from a single layer of fabric. It was designed for cutting difficult fabrics like lace or organza. This blade will slightly increase the cutting time because the machine must periodically orient the blade for cutting. The machine will appear to "hop" around the design as it re-orients the blade.
- Use a Thin Fabric Blade to cut the fabric. This blade has a shallow depth built in and the blade is thinner than the standard blade. Use this blade only for single layers of thinner fabrics.
- Use a Standard Blade reserved only for fabric. Many users keep a separate standard blade labeled for cutting fabric only. Just like having "fabric Scissors" and "paper scissors" the blade stays sharper longer without cutting all the materials that the Scan N Cut will accommodate.


## Quilt Block Cutting Files are Built into the Scan N Cut

Most Scan $N$ Cut machines have quilt block designs that are built-in. These files include all the parts to make the block and are resizable. The flies contain both the seam line in the block as a drawing design and the cutting line outside the $1 / 4$ " seam. The size of the quilt block designs varies for each individual block. The size shown for the quilt designs is the finished size and automatically contain $1 / 4$ " seam allowances added to all the pieces. They can be re-sized larger or smaller by changing the size using the plus and minus keys. The proportions are locked to keep both sides the same by default. The block size can also be changed using the percentage key. The block size can be adjusted to the $100^{\text {th }}$ of an inch. When changing the size of the block all the pieces are automatically adjusted to the new size and the $1 / 4 "$ seams are added. The maximum reduction using both the size keys or
proportion keys is generally $50 \%$, but that varies on the block. After cutting, remove the waste fabric and lift the cut pieces using a spatula. Lift from the largest portion of the piece instead of a corner to avoid stretching the fabric piece. This method of changing the block size is the easiest to use. Every part of the block is size adjusted automatically and the individual block pieces are precisely sized with seam allowance. This is also the optimum method for re-sizing blocks with unique shapes. This method is not simple for finished blocks under 4". Individual block parts can be size adjusted after the design is set, but each must be sized separately with or without the added seam allowance. For small blocks there is a different method using the built in shapes to create the individual pieces of simple blocks.

The Rotary Auto Blade Kit contains additional block designs including curved designs that can be activated for your machine using the free computer app CanvasWorkspace. The designs will be available after activation on one registered Scan N Cut machine and can be transferred to a new machine one time. The cutting files for the kit can be accessed two ways. Through CanvasWorkspace app when it is wirelessly connected to the Scan N Cut and the internet. When selecting the designs in CanvasWorkspace under the Premium Designs tab, the computer will open CanvasWorkspace on the internet through your browser. A simpler way to access the designs is to download them onto a USB drive and access them through the Retrieve icon and USB. The files can only be opened on the machine that the activation code was registered to.

## Creating Small Quilt Blocks Using Built-in Shapes

To create a simple block in a size smaller than 4 " or a block that is not proportional, begin by drawing the block on a piece of paper. Use a ruler and a mechanical or sharp pencil to accurately draw the block in the finished size. Measure the finished size of the block to make sure it is accurate. Do not add seam allowances because the Scan N Cut will after we have created our shapes. Measure all of the shapes in the using a clear ruler and make a note on

the paper. If the block is small, or the measurements are difficult using the Imperial system (inches and fractions of inches), switch to the more accurate (and fewer fractions) metric system. In the settings page accessible when setting the size of the block, switch the Scan N Cut to "mm". Look in the shapes folder of the Scan N Cut to find shapes that will work in your block. If the shapes are there, draft the block in the actual size on a piece of paper. Select the first shape to be sized. On the size page arrows will indicate the direction of the measurements. They will adjust proportionally if the lock icon is closed and can be separately adjusted when the lock icon is open. Use the metric side of the clear ruler to measure the size needed for the block. Select OK to send the sized piece to the workspace. Select Edit Object to add seam allowances.
 Select Add to create another piece for the block and repeat for all the pieces needed. Save the pieces to the memory of the machine.


This process of creating individual pieces can also be done using the CanvasWorkspace app on a computer with a much larger screen. There are many more controls in the CanvasWorkspace app than are available on the screen of the machine.

The biggest advantage for creating quilt block pieces is the ability to create new shapes by drawing or welding together additional shapes. Images and .svg files can also be imported to trace or modify. To create an odd shaped piece, select shapes that when joined together will for that shape. For example a "chisel" shaped piece as shown in the image, consists of a triangle joined with a square or rectangle. After selecting shapes from the menu, adjust them for size and align them so
 they just touch or overlap. Select both by holding the Ctl key on the computer and selecting each. Use the Weld icon at the bottom of the Edit menu. Repeat for all the shapes and move them on the workspace to verify that they line up with adjacent pieces. Remember that you are creating pieces in the finished size and the seam allowance is easily added at the screen of the Scan N Cut! Transfer the designs from CanvasWorkspace to the Scan N Cut wirelessly or with a USB depending on the capabilities of your machine.

At the Scan N Cut, select one of the pieces of the block that will be the same color and use the duplicate key on the Edit Object screen to create the number of pieces needed for the individual block or fill the mat with the maximum number of pieces. Different fabrics can be placed on the mat to cut multiple pieces at once. Use the Scan feature to place the pieces on the different fabrics. Save any variations in mat placement to the memory of the machine or onto a USB.

## Cleaning a Scan N Cut Mat

When a mat becomes covered in waste products, paper or even dust it decreases the stickiness of the mat and the right amount of stick is essential for a good cut. To clean a mat, lightly spray the soiled surface with LA's Totally Awesome cleaner and let the product sit for about 30 seconds. Use a lint-free cloth or generic wet wipe (without oil or lotion) to gently loosen the debris on the surface. Wipe the surface off and use the scraper to gently loosen any stubborn debris and to squeegee off the cleaner. Repeat if necessary with cleaner.
 Mat will feel very slick while it is wet. Allow the mat to dry completely and the stickiness will return. After the mat is completely dry, re-cover with the plastic dust cover to keep dust off the mat. If a new mat is too sticky, gently touch the mat briefly to clothing to gather lint and reduce the stick.

## Modify the Tint of a Photo

There are lots of photo editing apps for both the computer and mobile devices. Some are simple and built-in to our devices and some are very advanced with lots of features. If only a simple editing app is available, try to modify the image while taking the photo. For this project a photo of a pencil sketch with a yellow background was taken. To tint the photo a light green to match the fabrics a piece of teal blue cellophane was secured in front of the light source. The blue-ish light was picked up by the camera and the yellow in the photo was transformed into a pale green.

