Quilters Dream of a Quarter Inch Seam

For the Baby Lock Altair and similar machines

Getting this seam right is very important to making quilt pieces fit together and making quilting fun without frustration. Following a couple of easy steps and setting up your machine for sewing success takes only a few minutes.

CONSIDER THE FOLLOWING SEWING TECH FEATURES ON THE ALTAIR TO HELP YOU ACHIEVE YOUR PERFECT QUARTER INCH SEAM:

- Width key and L/R Shift The width key moves needle position .5 mm in a straight stitch. The L/R shift key moves the needle position for a straight stitch a scant .25 mm for more
 Width Length L/R Shift Tension Retrieve
- precise needle positioning.
 J foot is the standard foot that comes with the machine and is used for general sewing. The left and right sides of this foot are used as a guide with the piecing stitches Q - 01 and Q - 03.



- N foot is the foot used for decorative stitching and is not the best choice for quilt piecing. It is included with the machine.
- Straight stitch foot this foot has a small opening and can only be used with a straight stitch in the center needle position. There are markings on the right side of the foot as a visual reference for guiding the fabric. This foot is included with the machine.



Top row left to right: J foot N foot Straight stitch foot Quarter inch foot with guide Bottom row left to right: BabyLock quarter inch foot with guide BabyLock quarter inch foot

- Quarter inch foot with guide this foot has a physical guide that touches the bed of the machine that prevents you from sewing too large a seam. This foot is included with the machine. It also has convenient marks for 1/4" and for 1/8" piecing.
- BabyLock Quarter inch foot with guide this foot also has a physical guide that touches the bed of the machine that prevents you from sewing too large a seam and has a wider profile. It is available as an optional accessory. The wider profile helps to control the fabric. It also has convenient marks for 1/4" and for 1/8" piecing.
- BabyLock Quarter inch foot this is the same foot as above without the guide. It is ideal for sewing across fabric as in sewing half or quarter square triangles before cutting them apart as shown in the video. It is available as an optional accessory. The wider profile helps to control the fabric. It also has convenient marks for 1/4" and for 1/8" piecing.

• LED guide light- projects a line of light that extends in the front of the foot and is adjustable to help you guide the fabric. This is especially helpful when sewing a quarter

inch seam prior to cutting the fabric as in sewing quarter square triangles. Use the plus or minus keys to move the light. The arrow key to the right of the plus key moves the light to the opposite side of the stitch. The guide light can also be placed exactly on the stitch line and used for perfectly matching triangles.

- Bobbin cover and plate cover has 1/4" marks for a quarter inch seam using both left and center inch needle positions.
- Straight stitch plate this stitch plate has a smaller



opening for the needle and supports the fabric better than the wide opening of the zig zag stitch plate. This plate keeps the needle position in the middle no matter which straight stitch is selected. Use this plate with a quarter inch foot to avoid accidentally changing

needle position and breaking a needle on the foot. Any stitch other than a straight stitch cannot be selected when this plate is on the machine.

 Initial needle position - on page 2 of the settings pages you can select the default needle position when turning on the machine. Use this when keeping a quarter inch or straight stitch foot on the machine to avoid accidentally breaking a needle on the foot. This is the same page to customize the settings for the optional Multi Function foot control.



PIECING STITCHES ON THE ALTAIR:



1-01 - straight stitch left. This stitch will sew in reverse when the reverse stitch button is pressed. It is adjustable with width and the L/R shift button. The stitch length is 2.5mm and is adjustable.
1-02 - straight stitch left. This stitch will sew a reinforcement stitch when the reverse stitch

button is pressed. This stitch will sew in the middle position and Is adjustable with width and the L/R shift button. The stitch length is 2.5mm and is adjustable.

• 1-03 - straight stitch middle. This stitch will sew in reverse when the reverse stitch button is pressed. This stitch will sew a reinforcement stitch when the reverse stitch button is pressed.



This stitch will sew in the middle position and Is adjustable with width and the L/R shift button. The stitch length is 2.5mm and is adjustable.

- Q-01 or 1-30 P this piecing stitch will sew 6.5 mm from the **right** side of the J foot. It is adjustable with the L/R shift button. The stitch length is 2.0mm and is adjustable.
- Q-02 or 1-31 P this piecing stitch will sew in the middle stitch position and the position is not adjustable. The stitch length is 2.0mm and is adjustable.
- Q-03 or 1-32 P this piecing stitch will sew 6.5 mm from the **left** side of the J foot. It is adjustable with the L/R shift button. The stitch length is 2.0mm and is adjustable.

FIND YOUR PERFECT QUARTER INCH SEAM:

The ideal quarter inch seam is the one that results in the accuracy of the final measurement of the finished pieces. The seam itself is generally smaller than 1/4" and is called a "scant" quarter inch seam. In quilting, both of the seam allowances are **generally** pressed to one side

rather than open. Because of this method of pressing the seams, one side of the fabric is riding over the top of bulk of the seam resulting in more fabric taken up. A smaller seam is needed to compensate for this turn of the fabric when the seam is pressed open even if it takes up only a couple of threads.



Set up your machine by sewing a test seam with two accurately cut squares of fabric. Cut several 2" squares out of the fabric you will be using in the project. Layer two squares right sides together and raw edges even. Set up machine for piecing with the thread you are using in your project and a machine needle made for quilting. Select the stitch and the foot of your choice. (See the many choices above.) Sew one edge of the squares and then press the squares open with both of the seams to one side. Measure the sewn squares from raw edge to raw edge across the seam. It should measure 3 1/2" from edge to edge. If it doesn't, adjust the settings of the machine and keep sewing squares till they are exactly 3 1/2". Now is the time to be very, very picky. When you have a perfect seam, put the settings into the memory of the machine and remember which stitch is your perfect seam for that project.

To place a stitch setting into the memory of the machine, adjust the settings and then touch the memory key in the lower right of the screen. When selecting that stitch again the settings will automatically be those in the most recent settings placed in memory. Each utility stitch has five memory combinations. To retrieve any of the five combinations, touch the retrieve key in the lower right corner of the screen. Select a combination by touching it and then touch retrieve. Settings can be removed from memory by touching delete in the retrieve screen. Touch the stitch, touch retrieve, touch the option you wish to remove and ten touch delete. Touch cancel to leave the Retrieve screen.

There are many choices and combinations of stitch and foot. Try different combinations to see what works best for you. Perfect piecing for projects may be easier with different set ups, so try a few to see what give you the results you are looking for. Different types of fabrics may need different settings. Thicker fabrics will require a smaller seam. It takes only a few minutes to test your seam before each project with the materials you will be using.

MY FAVORITE QUARTER INCH SEAM SETTINGS:

- Stitch:
- Width:
- Length:
- L/R shift:
- Foot:
- Led Guide Light Position:

NESTLED SEAMS AND MATCHING TRIANGLES:

The turn of the fabric can be used to your advantage. By pressing seams in opposite directions, the turn of the fabric will nestle up the the turn of the opposite layer. You can "wiggle match" the two pieces and match seams perfectly.



When piecing triangles the points will not be cut off if the quarter inch seam is sewn just to the right of the "X" where the two seams of the triangle meet. The triangle on the bottom layer of fabric can is impossible to see, but the LED quite light will shine through the fabric so you can check it just prior to stitching it. It's like having X Ray vision!

