



How to Build a Sneaker with The Shoemakers Academy DIY Build Kit

Watch the video before your build!



Step 1: Tracing, Punching, and Cutting

Organize the paper pattern parts. Make sure you have all five: tongue, toe tip, quarter side panels (left and right), and footbed pattern. Remember, you will need two sets of parts that mirror each other to make the left and right shoes.

Lay out the pattern parts on the pre-cut leather parts. You will use the footbed pattern to cut the EVA footbed and the pink colored lasting board.

Tape the pattern parts to the leather. Trace the outlines and punch the stitching holes. You can pre-punch the paper pattern or

punch directly through the paper pattern into the leather. Make sure your holes are punched cleanly through the leather, as this will make your stitching much easier.

Build tip: You can punch right through the pattern don't worry, use clear tape to repair any tears.

Build tip: The EVA foam part does not need punched holes; only mark and cut the outline.

The toe tip is symmetrical, you can cut the pair with the printed side of the pattern facing up.

Build tip: Cut this part very carefully, as this will be front and center on the finished shoe. The Tongue part is NOT symmetrical. The printed side of the pattern is the left side tongue. To create the right side part flip the tongue pattern print side down.

Build tip: Punch the 4-square holes after you have attached the tongue to the shoe.

To create the quarters and footbed for the right-side shoe, mark and cut the parts with the printed side of the pattern facing up. To make the left-side parts, flip the pattern face down

Build tip: Mark your parts left and right; keeping them separated is best. Also, mark your quarters medial (inside) and lateral (outside).

Cut your parts with scissors or a razor blade.

Build tip Cut just inside the line. If you cut outside the line, your shoe will be oversized.

Build tip: Leave a little extra material above the heel seam. After stitching, this extra material will allow you to trim a smooth and even top line.

Step 2: Lace hardware

Use the 5mm punch to create eyelet holes.

Push the rivet shaft into the 5mm hole and place it on the rivet setting base with the outside face of the rivet facing down. Add the rivet back to the setting post. Set the rivet with the setting punch and hammer.

Build tip: Practice with scrap leather to find the hammering force required. Hint: It's not too much.

Step 3: Sewing the Upper

Use a cross stitch or overlay seam to join the back seam together. Using one thread and two needle technique, connect Part A to A. After sewing, trim the top edge to make it smooth and round.

Join the toe tip part to the quarter panel parts. Parts B to B and C to C. Wait to attach the tongue! You will do that later. Leave the tongue off to allow easy sole bonding and sole stitching.

Step 4: Strobel stitching the upper to the pink lasting board

Make sure you have the right upper and right lasting board. Start with the back seam A-A in the middle of the heel. On the bottom pattern, you will see the two dots that mark the heel.

Make your Strobel stitching a little bit loose. You should have 1/8" (2 mm) between the bottom edge of the leather upper and the edge of the lasting board. If the strobel stitching is too tight your upper will not fit the outsole easily, it will be too narrow.

Build tip: When looking the bottom of the shoe you should see the leather along the outside of the edge lasting board . Not on top.

Step 5: Fitting the sole unit

Test fit your upper to the outsole.

Press the upper into the outsole, you should be able to press the leather against the side wall of the sole unit. If you can't, you may need to release some tension and re sew parts of the Strobel stitch. With your parts fitting, it's time to glue.

Step 6: Glueing the outsole

Press the upper into the outsole and mark the top edge. Use a pencil or disappearing ink pen. This is your glue line.

Clean your outsole to ensure the parts are dust-free and dry. Apply contact cement to the upper (below the glue line) and to the inside of the outsole. Apply two light coats and make sure the bonding surface is fully covered.

Build tip: Take a five-minute break! Let the glue get tacky and dry to the touch. To speed up the drying, you can use a heat gun or hair dryer.

When the glue is dry, carefully press the parts together. Make sure the upper is sitting straight on the sole. Use your fingers to

squeeze the parts together. You can move around the side wall. Work this for a few minutes to make sure the entire perimeter is bonded. You can also use your hammer handle to press the lasting board down into the sole.

You can use rubber bands to secure the upper to the outsole. If you have a shoe last, this a great time to insert the last and hammer the upper into place.

Now, set this aside for a few hours or overnight. It's best to let the glue fully cure before stitching.

If you see some small gaps around the top edge of the edge don't worry. You can use a needle to apply some glue into the gaps, then when you are channel stitching take extra care to pull the gap closed.

Step 7: Stitching the outsole

Use the punch needle or sewing awl to attach the outsole.

Starting on the medial arch, insert the needle and feed the thread into the shoe. You will need a length of thread equal to 4 loops around the shoe sole. For your first stitch punch the needle into the groove and pull the thread inside your equal to one loop around. To complete your first stitch Punch the needle into the stitching groove. Slowly withdraw, leaving a small loop inside the shoe.

Feed the inner thread into the loop and pull both the inside and outside threads to secure the stitch. On the last stitch, pull the outside thread into the shoe and secure it with a knot.

Step 8: Stitching the vamp

Using the one thread and two needle technique, start on the first hole of the vamp and the top hole of the toe-tip connection. D-D.

Build tip: Make sure to start at the very first hole at the end of the toe tip part.

This hole is the top of the connection stitch line. Yes it will have a stitch already. No Problem!

Work your way around the vamp, trying to keep the tension even to avoid wrinkles on this important seam. You will be looking down on this when you wear your new shoes, so make sure it is your best work!

When you reach the end, secure the thread with a knot. You can hide the knot in between the layers.

Your final sewing operation will be the cross or square stitching to secure the quarter to the tongue. Use the 4 holes on the quarter as a guide and mark the holes on the tongue. You can punch these with your sewing needle or the awl. Use the double needle technique to make your stitches. When you have finished stitching, You can feed the needle between the layers and hide your final knot.

Insert the footbed and add laces.

Congratulations! You did it!

We love to see the work of our shoemaking friends!

Don't forget to Email a photo to

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