CREATING
CUSTOM APPAREL

Learn how to make unique DIY
clothing and accessories.

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Introduction

Customizing apparel is one of the many versatile uses of your Silhouette machine. In this eBook, you'll learn about a variety of materials and techniques you can use to alter items you can wear as we move step-by-step through six projects.

You'll find ideas on what kind of media you can use with your Silhouette machine and how to cut and apply each one. You can adapt these projects to suit your own style to make your apparel personalized and unique!

The projects and instructions in this book use the Silhouette Cameo® 3, but any Silhouette digital cutter can cut the media used in these projects.

Materials

Here are some of the apparel-related materials you can use with your machine.

- ▶ Fabric
- ▶ Heat Transfer
- ▶ Fabric Ink
- ▶ Rhinestones
- ▶ Silkscreen
- ▶ Mixed media (combine any of the above)

Fabric Applique on a T-shirt

You can cut fabric with your Silhouette machine to customize clothing, such as a t-shirt. This is a great way to use your designs in Silhouette Studio® to alter clothes in cases where it may be hard to find the perfect design on clothes you can purchase. Just make a design you love and apply it yourself!

Tools:

▶ Cut & Sew Fusible Fabric Stabilizer
▶ Fabric blade
▶ Spatula
▶ Iron
▶ Sewing machine (or supplies to hand stitch)
▶ Sticky mat
▶ Scissors

How-To:

Start by opening Silhouette Studio® and setting up a design that you can turn into an applique with the Cut & Sew Fusible Fabric Stabilizer.

There are a few kinds of fabric stabilizer, but the design and cutting processes in Silhouette Studio® are basically the same with each type. But the application process between stabilizers can be a little different. First, start with creating and cutting a design.

Open your chosen design and decide on the size of design you want on your shirt. Delete any shapes you don't need. In this example you can resize this turtle design to about 7 inches wide with the Scale tool. Click the lock symbol, if necessary, so that the proportions are locked in place when you are inputting dimensions.
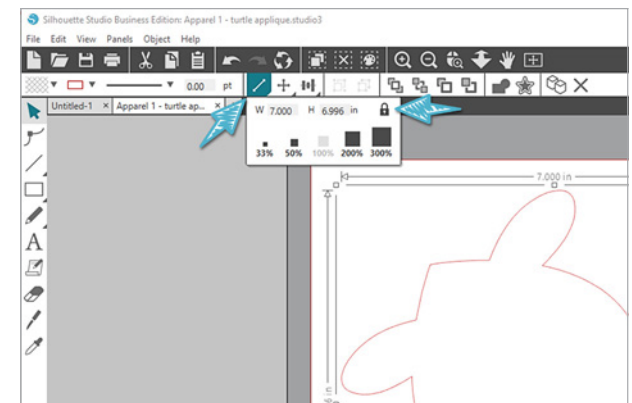
Set your page size in the Page Setup panel to be about 1 inch bigger than the design itself. We have it set to 8 inches by 8 inches for this design. Also make sure you have the correct mat selected for your machine.
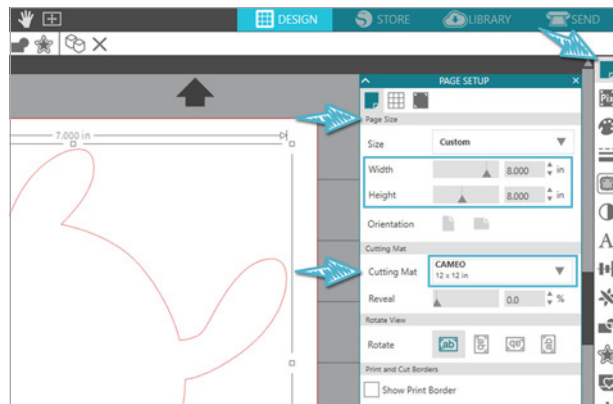
This page size is also the size of the piece of fabric stabilizer you'll cut. Keep in mind that the piece of fabric you'll use needs to be bigger than the stabilizer so that none of the adhesive sticks out beyond the edge of the fabric.

Trim a piece of Cut & Sew Fusible Fabric Stabilizer to 8 inches by 8 inches. This should match the page size you set in Silhouette Studio®.
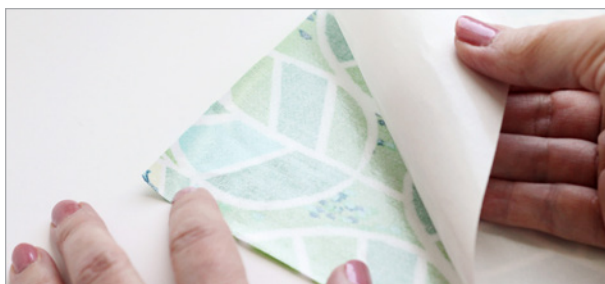
With a hot iron (on the cotton setting with no steam), place the rough side of the fabric stabilizer against the back side of the fabric, and iron it for just a couple of seconds to get it to bond.

Trim down the fabric to match the stabilizer piece.

Remove the paper liner from the fabric stabilizer.

Place the fabric with the stabilizer onto the mat as shown on your virtual mat in the software. Since we set a custom page size, just line the fabric up in the upper left corner of the grid.

The soft fabric faces up, and the glossy stabilizer rests on the sticky mat.

Use a dedicated fabric blade that's never been used with paper or else the blade won't remain sharp enough to cut fabric. A very sticky mat helps provide the best cutting results as well.

Back in Silhouette Studio®, go to the Send tab and choose

- ▶ **Material:** Fabric, Thin (Cotton Print)

- ▶ **Action:** Cut

- ▶ **Tool:** Ratchet Blade

Tip: If you normally cut with an AutoBlade, be sure to switch the blade to a Ratchet Blade when you are using the fabric ratchet blade.
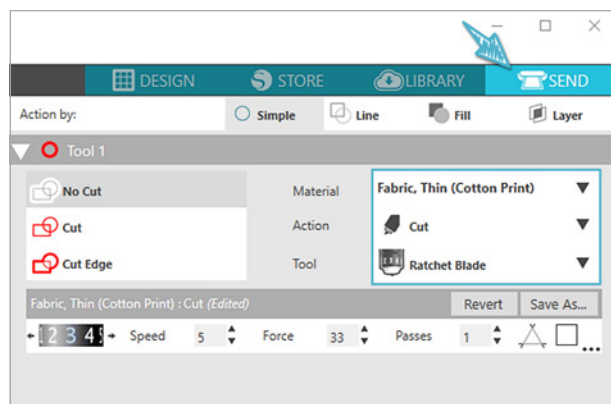
Manually adjust the fabric blade to the setting shown, which is a 3. Place the blade in your machine and lock it in place.

If necessary, adjust the right roller on your machine to its right-most position to accept the mat.

To adjust the Cameo's rollers, lower the release lever. On a Cameo 3, twist the roller body to the unlocked position. Slide the roller over to the desired groove so it settles in place. Twist to lock the roller again. Pull the release lever up so that it's pointing up and locks the bar in place.

Note: Only the Cameo has adjustable rollers.

Load the mat, then press Send in the software's Send panel.

When the Silhouette is done cutting, carefully peel up your design from the mat. You may find a spatula tool helpful here. Use scissors to snip any random threads that haven't been cut through.

This applique is now ready to be applied to a shirt.

When you use the Cut & Sew fabric stabilizer, you can iron it onto the fabric of your choice and it will stay in place while you machine or hand sew around the design. You should secure any design with Cut & Sew fabric stabilizer with stitching if you plan to wash whatever you apply it to.

If you don't like the bit of stiffness that remains with Cut & Sew stabilizer, you can use the Wash-Away fabric stabilizer instead. In the same way described earlier, set the design up in the software, iron the stabilizer to the blank side of the fabric, and cut both the fabric and the stabilizer on the mat with your machine. The fuse from the Wash-Away fabric stabilizer can be washed out so that you are just left with the fabric cutout.

The application for Wash-Away fabric stabilizer is a bit different as well. The cutout can't be ironed onto the fabric's surface to hold it in place while sewing, so you'll have to use pins or some other method to secure the applique while you are sewing it in place.

Note: that Clean Cut Fusible Fabric Stabilizer should be used only on items that won't be washed, so it's not appropriate for most clothing.

Heat Transfer on Exercise Clothes

Look at how you can use heat transfer to personalize some active wear. This project will use blue reflective heat transfer that you'll apply to the leg of some exercise pants. However, you can use any variety of heat transfer you want. Reflective heat transfer is great for exercise clothes because it bounces back bright light when you look at it from certain angles.

Tools:

▶ Reflective heat transfer
▶ Hook tool
▶ Iron
▶ Cloth or parchment paper
▶ Cutting mat (optional)

How-To:

Starting in Silhouette Studio®, open your chosen design. Resize it to fit into the space available on your surface.

You'll always need to mirror your design if you're using heat transfer as your material because you cut on the back side of heat transfer, and the front part of the heat transfer sticks to the transfer liner. Go to Object > Mirror > Flip Horizontally or right click and choose Flip Horizontally.
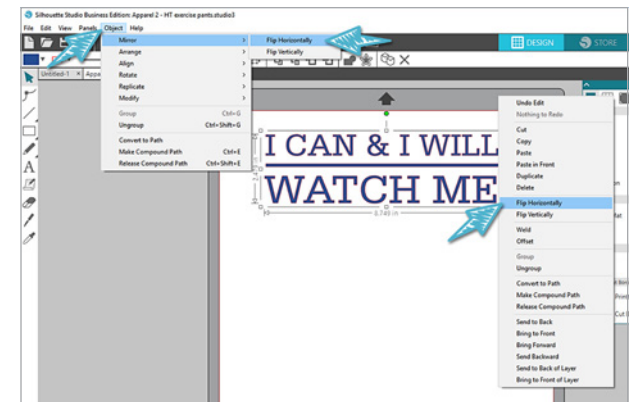
Set the Page Setup panel to match the reflective heat transfer. You can cut directly from the heat transfer roll or opt to use a cutting mat. This example uses the Cameo mat in order to use the full 9-in. width of material.

Set the page size to 9 inches wide by 3 inches high, and choose the Cameo 12 inch by 12 inch cutting mat.
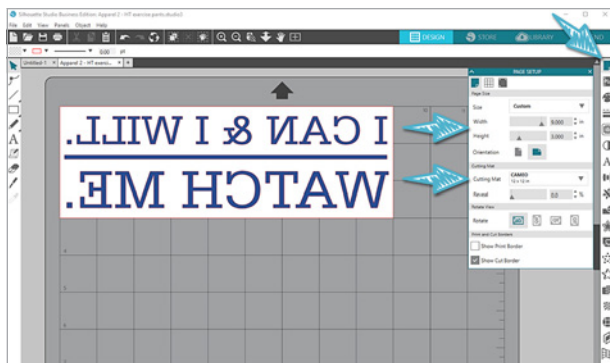
Note: If you choose to cut your heat transfer directly from the roll, be sure to select "None" as your cutting mat choice.

Trim your heat transfer to match the page size of 9 inches by 3 inches. Place the heat transfer glossy-side down on the mat just like you see it on the virtual mat in the software. The glossy side of heat transfer is a built-in transfer liner.

The blade will cut into the back side, which is the dull side, of the heat transfer.

Load the mat into your cutter after verifying the rollers are set to accept the mat, and then go to the Send tab in Silhouette Studio®.
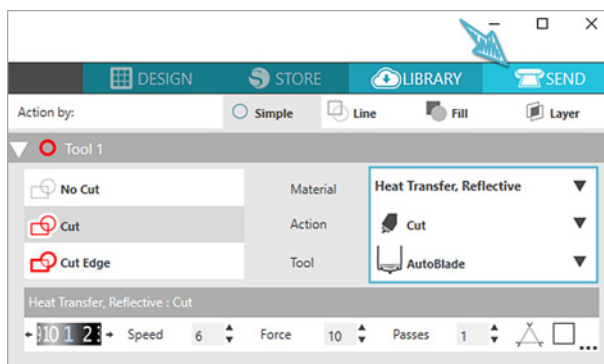
For your settings, choose

▶ **Material:** Heat Transfer, Reflective

▶ **Action:** Cut

▶ **Tool:** AutoBlade

Perform a test cut and, if necessary, adjust the settings. When you are ready, press Send in the Send panel.

When you select heat transfer as your material, the software triggers a reminder to mirror the design, but since you've already mirrored the design, select the Send As-Is option.

When the Silhouette machine is done cutting, unload the mat and weed away the parts of the heat transfer you don't need with a hook tool. Most heat transfer liners are sticky, but the reflective heat transfer liner is frosted and is not sticky.

Flip the weeded design over and position it over the area of the pants where you want to apply it. Now the design should be right-side up and any text should read normally.

Try to move any seams out from underneath so that you're ironing on a flat, level area of the fabric.

Use parchment paper or a protective cloth on top of the liner, and then press and hold the iron (set to the cotton setting with no steam) over the reflective heat transfer for 45–60 seconds. Make sure to iron all of the design with a fairly equal amount of time and pressure.

The frosted liner of reflective heat transfer turns clear as it heats. Most heat transfer liners are clear to begin with.

Carefully peel away the liner, leaving the heat transfer design fused to the pants. If the heat transfer doesn't stick to the fabric, replace the liner and iron it more.

Iron the heat transfer again (with no liner) with the protective cover in place to smooth it out, if necessary. Never iron directly on exposed heat transfer once the liner has been removed.

For more instruction on using heat transfer, check out our heat transfer class or our heat transfer eBook.

Fabric Ink with Stencil Vinyl on a Night Shirt

Spreading some fabric ink through a stencil is another great alternative for customizing your apparel. This is great when you want to

- ▶ Add a design to fabric that may not work well as a heat transfer or fabric applique design.
- ▶ Create a design with a custom color.
- ▶ Achieve a distressed look on the design.

In this project, we'll put a design on a night shirt using fabric ink and stencil vinyl.

Tools:

- ▶ Fabric ink
- ▶ Stencil vinyl
- ▶ Transfer tape (included with stencil vinyl)
- ▶ Hook tool
- ▶ Scraper tool
- ▶ Protective layers to prevent the ink from bleeding

How To:

In Silhouette Studio®, open your chosen design.

Ungroup and rearrange the design to suit your preference, and then resize all of the pieces together to ensure that they will fit on your shirt. You can also rotate the design to fit better on the stencil vinyl, which is limited to 9-in. wide.

Draw a rectangle around the design to complete what's called a stencil mask. You'll want the rectangle to be large enough to protect the fabric from any stray ink. A good rule of thumb is to make the stencil mask about 1 inch larger than the design on all sides and then adjust it so it is larger or smaller based on your particular project.
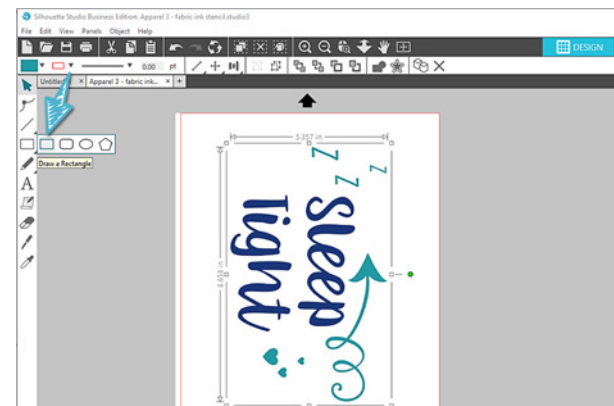
Because the design in this example is about 5.5 inches by 8.5 inches, draw the rectangle to be 7.5 inches by 10.5 inches.

Center the design inside the rectangle by selecting both the (grouped) design and the rectangle and using the centering options in the Quick Access Toolbar.
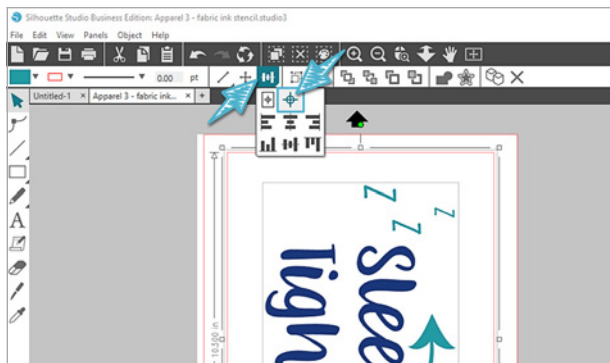
You can cut stencil vinyl directly from the roll without a mat by adjusting the Cameo's rollers to accommodate the 9-inch roll, or you can cut the stencil vinyl on the mat if you are using smaller pieces.

To adjust the Cameo's rollers for 9-inch vinyl, move the right roller two notches to the left from the far-right position.

Lower the release lever. On the Cameo 3, twist the roller body to the unlocked position. Slide the roller over to the desired groove so it settles in place. Twist to lock the roller again. Pull the release lever up so it's pointing up and locks the bar in place.

Note: Only the Cameo has adjustable rollers.

To continue preparing the design, set up whatever size your vinyl is in the Page Setup panel, and make sure to choose the correct mat. In this example, to cut directly from a 9-inch piece of stencil vinyl, choose a page size of 9 inches wide by 12.5 inches high and set the cutting mat to "None."

When your cutting space is ready, go to the Send tab to adjust the settings. For stencil vinyl, choose either glossy or matte vinyl as the material.

Make a test cut if the stencil vinyl is a new material for you, and adjust the settings if necessary.

Load the stencil vinyl into your machine after trimming the material to make sure you have a perfectly straight front edge. Verify the leading edge has loaded completely straight across the Silhouette machine, and then select Send in the Send panel to cut the material.

When the Silhouette is done cutting, weed away the DESIGN (not the negative space), and discard the design pieces where you want the fabric ink

to go. Get rid of the letters, but keep the letter centers and the outer rectangle in place on the liner. In addition, discard the outside edge of vinyl that's not part of the design or mask.

Apply the transfer tape that comes with stencil vinyl onto the design and rub the design with the scraper tool.

Tip: You can make the transfer tape less sticky before applying it to the stencil design by pressing it against the t-shirt a few times. This makes it easier to release the transfer tape once the design is applied.

Lift up the transfer tape and the stencil mask with it.

Line up the design, press it against your fabric surface, and then rub again with a scraper tool so that the stencil vinyl gets a firm seal.

Carefully and slowly lift away the transfer tape, leaving the mask and inner pieces in place. Watch those inner pieces to make sure they don't lift up with the transfer tape!

Press down to make sure you have a good seal to mask off the paint area.

Place some kind of protective layer underneath the stencil area to protect the fabric from any fabric ink that may seep through to the other side. This can be a paper sack, chipboard, or anything large enough and thick enough to prevent any fabric ink from getting on the other side of the fabric.

Apply fabric ink with a foam or stippling brush in an up-down motion. You can go with a distressed look or fill the stencil in completely.

Note: This example uses two colors. You can cut separate stencils to avoid mixing colors in adjacent exposed areas, or simply use a piece of paper while applying fabric ink to help block off the exposed areas for the separate colors.

Once the fabric ink is applied, let it mostly dry, and then remove and discard the stencil mask. Heat set the fabric ink with an iron for the most permanent result.

Other Examples:

Here are two other examples of fabric ink on apparel. If you try applying fabric ink onto soft surfaces, such as these shoes, try to work with as flat and as firm of an area as possible.

We stuffed these shoes with paper to create a firm surface and applied three colors, with a different stencil for each color.

To create a firm surface under this hat, we put a small mixing bowl underneath. Notice the distressed look we achieved by using a large open sponge (from the Fabric Ink Starter Kit) instead of a foam brush.

Rhinestones on a Shirt

Rhinestones are a great way to add a little bling to your outfits. In this project, we'll add a rhinestone frog to a shirt. Silhouette rhinestones have heat-activated glue on the back of each stone that melts and fuses to fabric when heat is applied.

Tools:

▶ Rhinestone template material
▶ Rhinestone transfer sheet
▶ Cardboard backing board
▶ Rhinestones
▶ Pick-Me-Up® tool
▶ Iron
▶ Protective layer (parchment paper)
▶ Sticky transfer tape or other tape

How-To:

In Silhouette Studio®, open your design. For this example, we chose the upper right frog from the Design ID #72601 set. Set aside or delete the unused frogs.

Rhinestone designs from the Design Store should NOT be resized because they already fit existing rhinestone sizes.

Note: Some rhinestone designs have text that reminds you not to resize the design; you can delete this text.

In the Page Setup panel, set the page size to 4 inches wide by 6 inches high, and choose the Cameo cutting mat. Reposition the frog design to the center of the page.
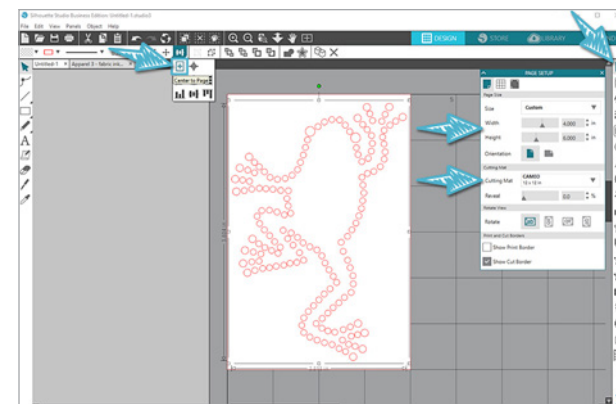
In the Send panel, choose

▶ **Material:** Rhinestone Template Material

▶ **Action:** Cut

▶ **Tool:** AutoBlade

Perform a test cut, and adjust the settings if necessary.

Trim a piece of the rhinestone template material to 4 inches by 6 inches and place it on your mat as shown in the software. Load the mat and click Send in the software to cut the material.

When the cutting is complete, remove the template material and its backing from the mat.

You can peel the material away from the backing and try to leave the little cutout holes behind, but a simple trick to remove all the little circle cutouts at once is to use a piece of regular transfer tape or other wide sticky tape to press against the material to lift the dots away.


Lift the rhinestone template material up from its backing liner and place it on the cardboard backing board. Now you can save this template to use the same design over and over again. You can also apply multiple rhinestone designs to the backing board.

Now it's time to place the rhinestones on the template. When your design has more than one size of rhinestones, like this frog design, place the larger rhinestones first.

Pour the rhinestones out onto the template and brush them with the soft rhinestone brush into place them in the correct holes.
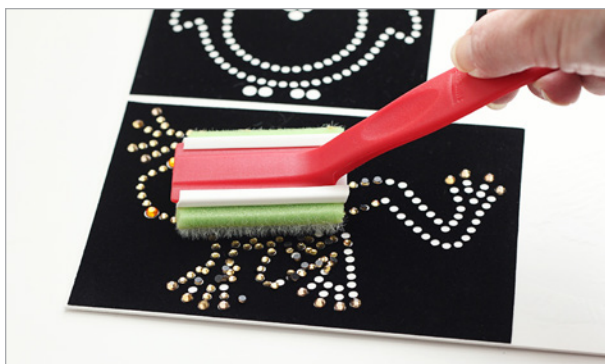
Most of the rhinestones will fall into place the right way. You can use the Pick-Me-Up™ tool to place any of the stragglers.

When the larger stones are in place, repeat the same process with any of the smaller rhinestones.
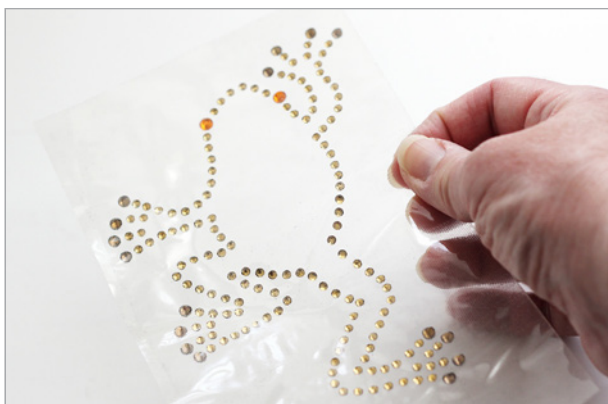
Now press a piece of heat-resistant rhinestone transfer tape (also trimmed to 4 inches by 6 inches) against the rhinestones to pick up the entire design at once and keep the rhinestones in their place.

Save the backing board for future use.

Position the rhinestone frog onto your fabric surface. This example uses a lightweight shirt.

Tip: If your fabric is thin, place something like parchment paper underneath the fabric in case the heated glue seeps through.

Iron the rhinestones onto the special heat-resistant transfer tape to heat the rhinestones and activate the glue that is on the back of each one. The iron should be set on the cotton settings with no steam. Use a piece of parchment paper or cloth as a barrier between the transfer tape and the hot iron surface.

Let the rhinestones cool slightly, and then careful remove the transfer tape. If any rhinestones lift up with the tape, press them back down and iron them some more. You may wish to turn the garment inside-out and iron on the back side of the design to make sure all the glue is hot enough to melt and fuse to the fabric.

Rhinestone designs can be machine washed inside-out in cool water.

How-To:

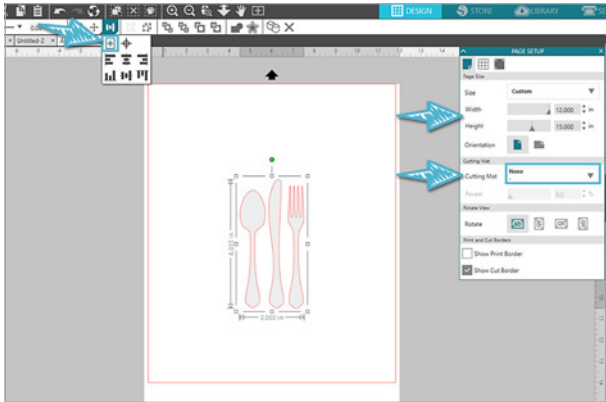Assemble the frame. The slots go on the outside and the numbers match up with each other.

In Silhouette Studio®, set up your page size in the Page Setup panel to match the heat transfer and silkscreen sheets, which are 12 inches wide by 15 inches high. Set the cutting mat to "None" because you'll cut the heat transfer sheet with no mat.

The design itself should be no larger than 8.5 inches by 11 inches so that it fits within the frame.

Open your chosen design and resize it proportionately to 3 inches wide.

Center the design on the page so that it will be centered within the frame by selecting the design and choosing the Center to Page option in the Quick Access Toolbar.

Silkscreen Print on Apron

Another way to apply fabric ink is with the Silkscreen Starter Kit. Using fabric ink with a vinyl stencil is great for a one-time application, but the silkscreen kit allows you to use one cutout design on multiple surfaces. This project will use gold fabric ink on an apron.

Tools:

▶ Silkscreen Starter Kit
▶ Gold fabric ink
▶ Hook tool
▶ Iron
▶ Scissors
▶ Protective layers

Just like with normal heat transfer, you'll want to mirror the design because you'll be flipping it over to apply it to the silk mesh material. The heat transfer side will remain facing up once the liner is removed. To mirror the design, right-click the design with your mouse, and choose Flip Horizontally.

In the Send panel, choose

▶ **Material:** Heat Transfer, Smooth

▶ **Action:** Cut

▶ **Tool:** AutoBlade

Adjust the settings as necessary based on your test cuts.

Load the heat transfer into your machine (glossy side down) without a mat, and click Send in the Send panel to cut your design.

Unload your heat transfer after cutting it and weed away the DESIGN (not the negative space) from the heat transfer material to create your stencil.

Lay down a heat-resistant barrier and work on a large, flat surface.

Flip the heat transfer over and iron it onto the silkscreen sheet using the standard cotton settings on your iron for 20–30 seconds. Be sure to spend enough time on the entire sheet, and then remove the heat transfer liner. Make sure you get a good fusion, especially around the design itself so that no ink can creep under the edges.
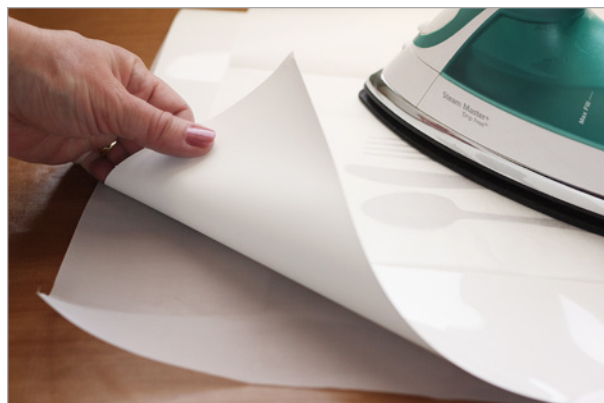
With scissors, cut away a 2-inch square from each stencil corner.

Tip: As an alternative to cutting away the entire square, stop just short of the corner and cut diagonally across. This helps prevent a potential gap in the corners of the frame where ink could get through. If you do end up with a gap in the corners after the screen is secured in the frame, then cover those gaps inside the frame with painter's tape.

Lay the stencil silk-side down, heat-transfer side up, and lay the frame on top. The numbers on the frame should be oriented right-side up with the groove closest to the heat transfer surface.

Lay the frame onto the stencil so that the design is perfectly centered.

Secure the stencil in place with the frame inserts and make it as tight as possible. While you put downward pressure on the frame, lift the stencil flap up and press it into the groove with the round part of the insert first. Then roll the flat portion upward.

Start by adding the inserts on the two short sides first. Then add the two longer inserts. Make sure the entire stencil is secure.

Put a protective layer under your fabric surface so that no ink bleeds through. If you are adding the design to multiple articles of clothing, place them all out so you can quickly go from one surface to the next before the ink dries.

Place the frame with the secured stencil onto the apron. The silkscreen side should be against your surface and the heat transfer side should be inside the well of the frame.

Apply a generous line of fabric ink that spans the width of the image horizontally above the design. You'll want to work quickly before the ink dries. Do not let the frame shift while you are working.

With the wide squeegee tool that comes in the starter kit, firmly scrape the ink down in a smooth, uninterrupted motion so that the ink is spread out across the entire stencil design. If needed, repeat the process of spreading ink in the same vertical direction until the stencil design is filled. Don't spread the ink in a sideways motion.

The final pass should scrape away most of the excess ink from the stencil's surface.

Lift the frame and stencil off your fabric and repeat with any subsequent fabric surfaces if you are creating multiples. Rinse the stencil with water or wipe it with a damp cloth every few uses to avoid clogs in the silkscreen.

When you are finished, carefully remove the frame inserts to release the stencil. Wash the stencil with warm soapy water and properly store it if you want to reuse it.

Allow the ink on your fabric to dry completely.

Mixed Media on Onesie

Now that you have all of these different mediums to customize your apparel, why not mix and match? We'll make a project that uses both fabric ink and heat transfer, and hopefully you can see ways to mix in other media as well.

Tools:

▶ Stencil vinyl
▶ Stencil vinyl transfer tape
▶ Hook tool
▶ Fabric ink
▶ Sponge applicator
▶ Heat transfer
▶ Protective layers

How To:

In Silhouette Studio®, open your chosen design. Then reposition the pieces appropriately and add fill colors to any parts of the design. Also delete any unused shapes.

Group any parts of the design together to hold them in place while you resize and move them as you proceed.

In this example, resize the star design and all its components to approximately 4 inches wide to fit on a onesie.

In the Page Setup panel, set the page size to 9 inches wide by 12.5 inches high for the stencil vinyl. Choose "None" as the cutting mat so that you can cut the vinyl directly from the roll.

Draw a square with the rectangle drawing tool and leave about 1 inch around the design to protect the surface from extra paint when it is applied. A 6-inch square is appropriate for this example.

Center the star within the square by selecting both and choosing Center from the Quick Access Toolbar.
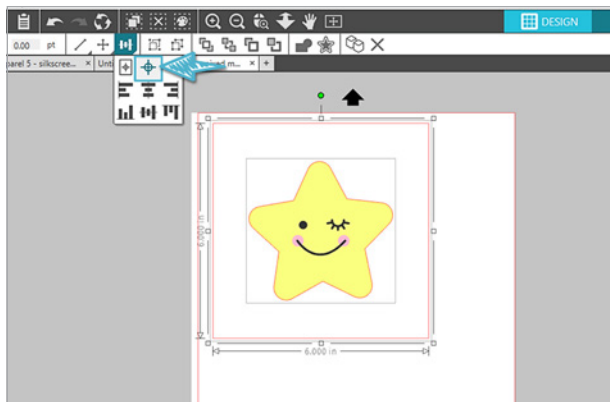
Now create a stencil mask for each paint color. You will need holes for the correct color and a border around the design to block off excess paint.

For the star design, ungroup the design to release the face and cheeks.

Move the face pieces away from the cutting area to cut them separately from smooth black heat transfer. Mirror the face pieces now so that you don't forget to do it before you cut the heat transfer.

For the pink cheeks, make a duplicate of the star and cheeks together and place them below the original star and square. Group them together. This star outline will both act as a mask around the small holes for the pink fabric ink and provide

a reference for placing the stencil to position the cheeks correctly on the star.

To complete the star stencil, delete the pink cheeks so that only the star and its square outline remain. Group the star and the square together.

Position the stencils on the page so that they stay within the cut borders, and give them all a blank fill color again (optional). Objects in the holding area outside of the cut borders will not cut.

Your design page should look something like this.
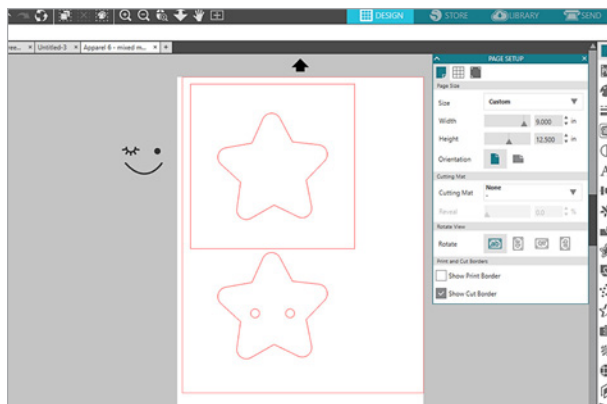
Cut the stencil vinyl with the vinyl cut settings, as described previously with the fabric ink stencil.

Once the stencils are cut, simply move them away from the cut area in Silhouette Studio® and place the face onto the cut area instead.

Set your page size and cutting mat selection in the Page Setup panel to match the size of the heat

transfer you'll use, whether you're using a small scrap on the mat or cutting directly from the roll.

Cut the face from smooth black heat transfer after adjusting the material type in the Send panel.

Once all the stencils and heat transfer are cut, weed away the excess material with a hook tool. Remember to leave the heat transfer design on the liner and to leave only the masks with the stencil vinyl (expose where you want the paint to go).

Beginning with the star stencil mask, place it on the onesie so the fabric is exposed where you're going to paint in the star.

Place a protective layer, like chipboard, inside the onesie to keep the ink from bleeding through to the back side.

Apply yellow fabric ink inside the star stencil. You can mix custom colors if you want; just make sure you mix enough for the entire design.

Let the fabric ink dry, and then remove the stencil.

> **Tip:** Using a hairdryer to blow warm air on the garment between ink layers helps speed up the drying process.

Use the cheek stencil with pink ink for the next layer. Place the star-shaped stencil with the cutout cheeks on top of the painted yellow star.

Let the fabric ink dry completely.

Apply the heat transfer face design with an iron or heat press. The heat will also help the fabric ink set.

You can keep things as simple or as complex as you would like with mixed media. Using multiple materials adds another dimension to your designs. Here are a few other ideas to spark your creativity.

- ▶ Add rhinestone accents to any project with heat transfer, fabric ink, or fabric applique.
- ▶ Add heat transfer or stenciled fabric ink to a plain applique.
- ▶ Just be creative and see where it takes you!

Conclusion

We hope you can see how many different materials you can use with your Silhouette machine to dress up and enhance your apparel. It's great to be able to personalize your own clothes or make customized gifts for any occasion.

For more help on using the software or materials, check out the Silhouette YouTube channel and the Silhouette Blog or reach out to customer support at SilhouetteAmerica.com.

Have fun customizing your apparel with your Silhouette machine!

Designs Used:

Turtle | Design ID: 2361 | Page 4

I can and I will | Design ID: 259496 | Page 7

Sleep tight quote | Design ID: 142034 | Page 10

Stand tall Flamingo | Design ID: 142034 | Page 13

#Tired | Design ID: 229238 | Page 13

Rhinestone - three frogs | Design ID: 72601 | Page 14

Kitchen set 12 | Design ID: 72021 | Page 17

Cute heart & star | Design ID: 76047 | Page 21