

FREE SPEECH*Design: Mike Weikert**Model: Joel Bobeck**All photography:**Nancy Froehlich*

T-Shirts

Ellen Lupton

The basic cotton undershirt went public in 1955, when James Dean wore a plain white t-shirt in *Rebel without a Cause*. Shirts printed with pictures and slogans became essential street wear in the 1960s, and some of today's most creative graphic designers view the t-shirt as a vital form of art and communication. Fashion designers continually experiment with the shape, drape, and proportions of this utilitarian classic. You can use a variety of techniques—geared for short-run and long-run production—to try your own hand at t-shirt design.

SILKSCREEN Most commercially-printed shirts are produced with a silkscreen, a device consisting of a fine-meshed fabric stretched tautly around a frame. Parts of the screen are blocked off, and ink is pressed through the open areas. Each color requires its own screen. You will pay a one-time set-up charge for each screen in addition to the cost of printing each shirt. The set-up charge is

spread out across the print run, becoming less significant the more shirts you print.

There are companies in every metropolitan area that provide printed shirts (as well as bags, hats, and other items) to schools, businesses, clubs, and individuals. The printer will provide you with the shirts at a wholesale price as well as printing them for you. You can also learn to screenprint with your own equipment.

DESIGNING FOR THE SILKSCREEN PROCESS

- Unlike iron-on transfer paper, a silkscreened design will print cleanly, without any background texture.
- Whereas transfer film is transparent, silkscreen ink is opaque, making it possible to print light inks on dark fabrics. (You will pay a little more for this, however, because an extra hit of white is needed to make the color completely opaque.)

- Avoid tiny type and finely detailed, high-resolution images and designs.
- Communicate with your printer throughout the job so there are no surprises at the end. Printing over seams or onto pockets, for example, can raise the cost of your project.
- Silkscreen printers usually want a vector file, with type converted to outlines. Adobe Illustrator and Macromedia

Freehand are typical software applications for making such files.

- Always provide your printer with a paper proof of your graphic at the exact size that it will be reproduced. Tape a printout of the graphic to a sample shirt to indicate positioning. (Your printer may assume that you want a monster-sized graphic across the

middle of the shirt, when what you really want is a discreet image just above the bustline.)

- For an extra cost, you can order a printed sample before proceeding with the whole job. This cost is worthwhile for a big project. You would hate to foot the bill for dozens of misprinted t-shirts.



IRON-ON TRANSFERS are an economical way to apply your own graphics or photographic images to a t-shirt. Just create a graphic with the software of your choice and print onto transfer paper with an ink-jet printer. Apply to shirt following the manufacturer's instructions.

DESIGNING FOR THE TRANSFER PROCESS

- Transfer paper is available for dark or light colored fabric. Light fabric transfers are transparent, so the color of the shirt will always show through. Dark fabric transfers are opaque.
- When using light fabric transfers, flip your design horizontally to print. With dark fabric transfers, don't flip the art.
- If applying your graphic close to the seam or on a tricky location like the arm (see designs to left) put a piece of cardboard inside the shirt before ironing. This will keep seams on the other side from getting in the way.
- The transfer material has its own texture, which you need to account for in your design. Putting a border around a block of text or a line drawing, for example, draws attention away from the background surface of the transfer film.
- Test your design on an actual shirt before printing it out in quantity.
- Transfer designs are less durable than silkscreened ones. If you are selling your shirts or giving them as gifts, include washing instructions (found in manufacturer's directions).
- Ironing requires time and patience, so a large-volume project should be silkscreened. Alternatively, a commercial shirt company can produce the transfers and apply them with an industrial heat press.
- Share your transfer designs with other people by posting PDFs on the Web.



NO-TAG

Designer and model:
Michelle Brooks

MOM TATTOO

Designers and models:
Mike and Maya Weikert



IRON-ON TRANSFERS

DO-IT-YOURSELF

Design: Zvezdena Rogic
Model: Viviane von der Heydt

FOLLOW THESE INSTRUCTIONS TO A TEE

Designer and Model:
Alissa Faden

MAKE ART NOT WAR

Design: Allen Harrison
Models: Andrew Newman and
Sonam Sapra

BUSHOCCHIO

Design: Kristen Spilman
Model: Seth Rosati



**BLEACHED TEXT**

Materials: household bleach, cotton swabs and/or natural-haired paintbrush

1. Plan your design on paper and test on a scrap shirt.
2. Put cardboard inside shirt to protect opposite side. Work in a well-ventilated area.
3. Paint your design onto the shirt with undiluted bleach, using either cotton swabs or a natural-haired paintbrush. (A synthetic brush disintegrates in the bleach.) Wear gloves.
3. It may take a few minutes to see results. As the bleach dries, the effect will become more dramatic.
4. Flush bleach down drain with plenty of water. Allow the shirt to completely dry before handling. Wash separately before wearing.

Designer and model:
Kimberly Bost

Photography: Nancy Froehlich

**YOU ARE WHERE YOU WORK**

Materials: rubber stamp, ink pad

1. Go to work.
2. Find a rubber stamp ("Draft," "Return to Sender," "Original," "Paid," "Void," etc.). Date and mail-routing stamps may also be available.
2. Stamp your shirt at work, or borrow stamps for later.
3. Put stamp(s) back where you found them.
4. The ink will disappear after a few washings. Print a new shirt every week or two.

Design: Spence Holman

**DE-BRANDED**

Materials: tracing paper, contact paper, acrylic matte medium (used for thinning acrylic artist's paint), paint brush, screen printing ink, printed t-shirt

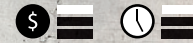
1. Trace image on t-shirt with tracing paper. Cut out and transfer to contact paper.

2. Cut shape out of the contact paper, leaving a 3 inch border.
3. Adhere contact paper, so image area becomes the only space available for painting. Apply 3-4 layers of matte medium around edge of image area, painting from the outside in (this seals contact

paper to shirt). Allow each layer to dry completely.

4. Paint screenprinting ink to image area until covered.
5. Let dry completely before removing stencil.

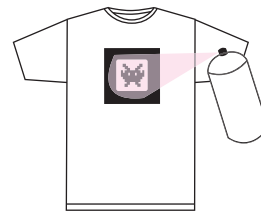
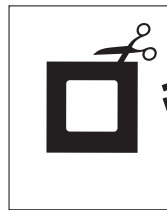
Design: Chris Jackson
Model: Adam Savermilch

**BITMAP ALIEN**

Materials: spray paint, graph paper, Xacto knife, double-sided tape, dye (optional)

1. Design your own alien by marking off a 6-inch square on graph paper. Fill squares to create alien. Leave 1 inch around edge.
2. Cut out alien with an Xacto knife. Then cut out the square window around alien.
3. Dye shirt (optional). Dye is available in the detergent aisle at the supermarket.
4. Lay shirt flat in a spray paint-safe area. Using double-sided tape, attach alien and square onto shirt.
5. Spray paint and let dry.

Design: Adam Palmer
Model: Elina Asanti



OTHER TECHNIQUES In addition to these standard printing methods, there are other ways to apply imagery to a t-shirt.

- See MACHINE EMBROIDERY chapter for guidelines concerning this intriguing industrial process.
- Sew an image onto a shirt, bag, or other object to give the surface a physical character. The image itself could be silkscreened, transfer printed, or "found" on existing fabric.
- Fabric markers, Sharpies, and ballpoint pen are better for tote bags than t-shirts, as they don't withstand repeated washing.

**EMERGENCY VELCRO**

Materials: emergency item, Velcro, needle and thread

1. Choose an emergency item for your shirt (aspirin, pencil, post-it, etc), or assemble a collection of items and exchange them as needed.
2. Cut a piece of Velcro, about 1/2 x 1/2 inches.
3. Stitch the soft side of the Velcro to the shirt.
4. Sew or glue other side of the Velcro to the emergency item.

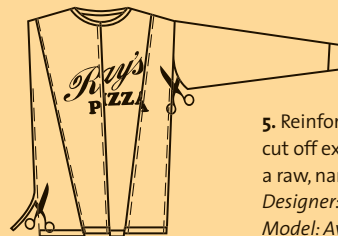
Designer and model:
Veronica Semeco

ALTERING THE SHIRT ITSELF A t-shirt is a generic industrial product that can be altered to fit your body and personal style. It is the fashion equivalent of 8.5 x 11 paper. You can approach these projects with subtle tailoring (no one will know the shirt wasn't manufactured that way), or you can let it be obvious that you did it yourself.

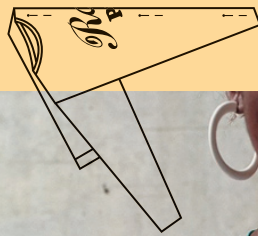


DESIGNING A CUSTOM-CUT SHIRT

- Women like to cut the thick, ribbed collars out of standard t-shirts to make a sexier neckline. Neatly follow the edge of the existing collar, or devise your own shape. (Practice first on a worn-out shirt.)
- Use simple cuts to adjust the shape of the sleeves and the overall length of the shirt. Hem the edges, or leave them raw.
- To make a men's sleeveless ribbed undershirt fit a woman's body better, fold over the fabric on the shoulders, creating smaller arm holes.
- You can choose to make stitches discreet, decorative, or brutally obvious.
- Try asymmetrical as well as symmetrical designs.



5. Reinforce each seam, and cut off excess material, leaving a raw, narrow seam.
- Designer: Nancy Froehlich
Model: Avelina Dougan



MAKE IT FIT

Materials: thread, sewing machine, safety pins

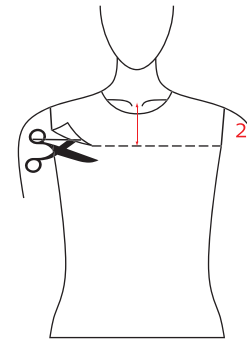
1. On an oversized sweatshirt, gather and pin one inch of fabric along the front from the neck down to the waist.
2. Sew along line. Repeat steps 1 and 2 on the back of shirt.
3. Try on the shirt, and continue to sew in one-inch (or so) increments until it fits, keeping an equal number of seams on the front and back.
4. Cut the neckline and sleeves. (Use your favorite t-shirt as a template.)



KNITTED SHOULDER WRAP

Materials: yarn, knitting needles (or old scarf), elastic, safety pins, needle, thread

1. Choose spot on chest for the top of the knitted shoulder wrap, about 2-3 inches below collarbone. From there, measure around your body. This length is n .
2. Knit a shoulder wrap that is 6 inches wide and n inches long. Attach ends.



3. Cut a 1-inch-wide elastic band at n . Sew ends together. Sew a piece of scrap fabric around elastic.
 4. Cut off the top portion of a sleeveless t-shirt at spot of first n measurement.
 5. Sew the top of shoulder wrap to elastic banding. Attach piece to t-shirt with safety pins. Detach the shoulder wrap when washing. (Don't know how to knit? Alter an old scarf.)
- Designer and model:
Katherine Cornelius



FLOWER ACCESSORY

Materials: needle, thread

1. Draw a 10 x 20 rectangle on an old T-shirt and cut it out.
2. Cut a wavy pattern around the edge of the rectangle and an oval from the middle.
3. Gather fabric as you weave needle through the bottom of the petal shapes. Halfway

through the pattern, tie off to form the inner petals.

4. Bring the remaining fabric up and around the inner petals. Gather and shift the fabric into place until the desired look is achieved.
 5. Stitch back and forth across the bottom area of your flower to secure the outer petals and the total flower. Tie off.
 6. Use a safety pin to secure it to a garment or bag.
- Designer and model:
Ida Woldemichael

