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Patent #5,934,210
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The Ultimate Hooping Tool!™

Ingredients for Successful Embroidery

HOOPING

Standard Industry
PLACEMENT

EMBROIDERY SPECIFICS

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Hooping Tidbits

Selecting hoops and learning to use them can be challenging. Use these tips to get a grip on hooping.

You've heard the expression, "It's all in the stitch." Well, hooping plays an equally important role in the embroidery process. In fact, improper hooping can cause a number of problems with stitching. For example, if a knit shirt is hooped too loosely, the design elements may not line up correctly, causing the registration to be off. If hooped too tightly, embroidery on the same shirt would likely pucker, or there may be needle cutting along the stitching edges.

Besides tension, there are a number of other variables that factor into hooping and, ultimately, your embroidery results. Identifying the proper hoop style and size for a specific job, learning tricks for hooping difficult fabrics and finding hooping aids that help make the process easier are all important factors in giving your embroidery the best possible foundation.

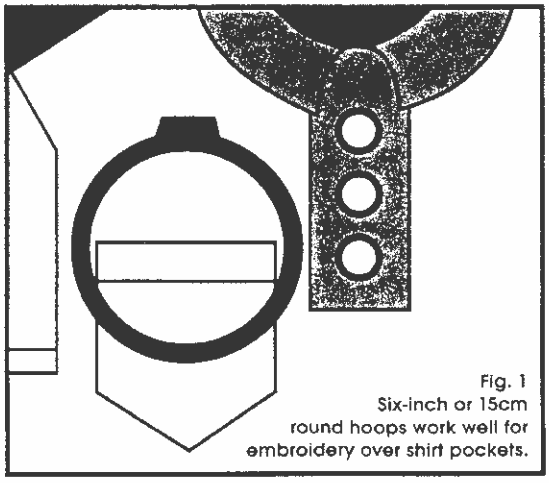


Fig. 1
Six-inch or 15cm round hoops work well for embroidery over shirt pockets.

Following are a few hooping tips, some "no-hoop" hooping tips and information about hooping devices designed to make your foray into embroidery successful.

Hooping Tips

Frame Selection:

• Select the smallest frame that will comfortably accommodate the size of the embroidery design. Using the correct hoop size creates an even tension on the area being sewn, which leads to good design registration. You need approximately one inch on each side of the design for the presser foot. In other words, if your design is a four-inch square, four plus two (one inch on each side of the hoop) equals six, and you need a six-inch hoop.

• Choose a hoop size that is a close fit, but not *too* crowded. (The back of the presser foot needs more room to clear the hoop than the front or sides, because it is larger.)

Hoop Shape:

• Round or oval hoops provide the most even tensioning on fabric.

• When round hoops are made of wood, rather than metal or plastic, both parts may need to be marked with alignment marks. This will ensure that this shaped, rather than molded, hoop will match up to its best fit.

Hoop Materials:

• Though plastic has been a popular production hoop for years, wooden hoops are gaining in popularity, especially for larger hoop sizes.

• The most popular wooden hoops are called *double-high hoops*. Their sides are roughly twice as tall as conventional plastic or wooden hoops. These hoops grip slippery or bulky goods better by providing a bite on a larger surface area. (Because jacket backs are a primary item embroidered in large hoops, double-high wooden or plastic hoops are worth their higher price tag.)

• Metal is also used for certain specialty hoops and in most of the hoops in the Meistergram machine accessory line.

Hoop Inventory:

Your machine starter kit will include hoops, which will work fine until you determine your day-to-day order requests. Here are some popular hoop sizes and their recommended uses:

• **Four-inch or 12cm round hoops.** These hoops are used for small shirt or jacket-front embroidery, including personalization, hemmed sleeves, shorts and other common garment applications.

• **Six-inch or 15cm round hoops.** These are often preferred for embroidery over shirt pockets, because they allow the embroiderer to keep the bulky pocket seams inside the hoop. In other words, even when a logo will fit inside a four-inch hoop, the pocket area can be hooped straighter and flatter when the hoop falls outside the pocket corners. *(See Fig. 1.)* These hoops are also used for blazer crests, aprons and jackets.

• **Eight-inch or 19cm round hoops.** These are most commonly used as a base to hold a spider, or distancing insert, for quick-change hooping systems. In this system, the hoop that holds the garment is snapped into (not screwed into) the spider, which holds it securely without additional hardware.

• **12-inch square, round, oval or rectangular hoop.** There is a lot of variance in larger hoop sizes and shapes. Large round hoops are probably the least used, because they are generally used for such unstable goods as knit shirts. Many of the items that routinely require a larger hoop, however, such as jackets, tote bags, and so on, are stable woven goods.

Rectangular, square or oval jacket-back hoops are more common, and many different dimensions are available. Try choosing two sizes to cover your large design needs. You will need one size to accommodate the majority of large designs, say 12 inches by 13 inches. You might also want to select a hoop for oversized designs. There are hoops available as large as 12 inches by 18 inches, but it is hard to apply so large a hoop to some garments. The 18-inch dimension usually extends over sleeve seams on small jacket sizes, and better results may be achieved by using a narrower hoop.

• It's a good idea to maintain three sets of four-inch or other small hoops per machine head. The designs or lettering sewn in these hoop sizes often have a low stitch count, which means they run quickly. If

all three hoops for each head are loaded early in a production run, you will have a *draw pile* of pre-hooped pieces to speed production along.

• Keep a spare hoop of each size on hand in case a hoop breaks. Hoops aren't that expensive, and it's better to be prepared and avoid downtime. You can repair broken hardware or other hoop components with replacements from your equipment supplier.

Techniques:

• There should be a light surface tension to the hooped piece. If the hoop is properly adjusted before it is applied, then the tension is created automatically.

• Tightening the adjusting screw after the inner hoop is applied doesn't help add tension, but it could leave a hoop impression on the goods once the hoop is removed.

• If hoops are adjusted too tightly, surface ripples can appear from the inner hoop, pushing the fabric toward the center of the hoop. But if the hoop is adjusted too loosely, design elements may not line up.

Hooping Soft Goods:

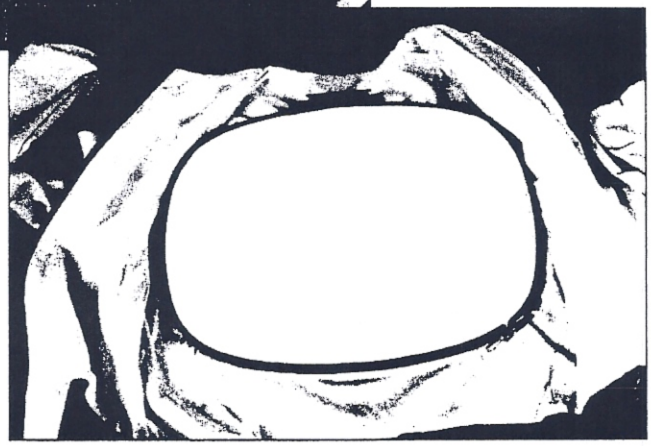
Knits:

• First, determine in which direction the fabric has the most stretch. When hooping, apply a slight tension with your free hand in the direction having the *least stretch.* Done correctly, this won't stress or distort the knit. (Stretching too much results in fiber bursting and possible needle cutting.)

• Overtightening the adjusting screw can result in *hoop burn,* or a hoop mark left around the design after the hoop is removed.

• When the inner ring doesn't slip easily into the outer ring, it is usually forced in. This pushes excess fabric toward the center of the hoop, resulting in surface ripples. Rather than pulling on the edges of the fabric to relieve the wrinkles, try recessing the inner hoop so that it is slightly lower than the outer hoop. This places a gentle amount of tension on the knit, removes the surface wrinkles and places the garment flatter to the machine table.

• The framed piece should rest completely flat against the machine table. Air between the framed goods and the table results in *flagging,* an up and down motion of the fabric. Press on the fabric; if you must push it down to the tabletop, the hoop needs to be placed flatter to the machine table.



The surface ripples on the hooped garment shown at left could have been caused by the hoops being adjusted too tightly, which made the inner hoop push the fabric toward the center. A properly hooped piece, such as the one shown below, has a light surface tension.

• On two-way stretch knits, stress them to the extent that they will be stretched when they are worn during hooping. For example, slightly stretch bike shorts and socks, but not turtlenecks.

Bulky Items:

• Bulky goods may be held best with holding fixtures, not hoops. Magnetic holders and other devices have been created for just such items. Horse blankets and sheepskin-lined jackets are better secured in conventional hoops, however.

• Hooping bulky items is the only time you should consider tightening the hoop *after* it has been applied.

• Loosen the hoop's adjusting screw to accommodate the thickness of the goods. Sometimes the screw isn't long enough to allow the outer hoop to open wide enough, but if you are able to open the screw sufficiently, apply the top of the hoop first, then the bottom. With the adjusting screw at the bottom of the hoop, it is usually possible to press the bottom of the inner ring into place. It may now be necessary to tighten the screw to hold the piece securely throughout the stitching process.

Satin & Nylon:

• Because these slippery goods can be hard to hoop, many embroiderers wrap the inner hoop with athletic gauze, which is slightly tacky. The gauze provides a cushioned grip for hard-to-hold goods and is easily removed when finished.

• Try hooping tissue paper right on top of the garment, with the glossy side toward the garment and the matte side toward the hoop. Then, tear out a window where the embroidery will be applied. The hoop grips the tissue, which provides a buffer, preventing the fabric from making direct contact with the hoop. This works great, especially if your wooden hoops have splinters or nicks that could damage delicate fabrics.

No-Hoop Hooping

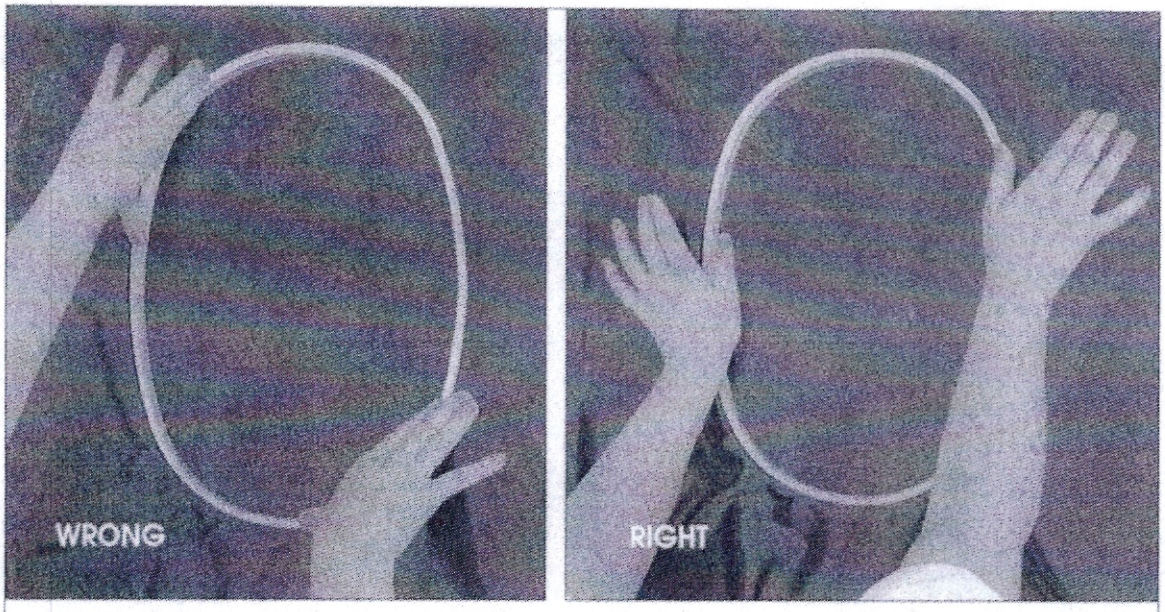
Puffy, napped goods are often susceptible to hoop impressions that last after stitching is completed. But there are alternative holding methods for such items. Though it may cost more in terms of supplies and materials, these alternative methods are usually just as efficient as conventional hooping.

• *Spray adhesive* really works, but you must spray the adhesive outside of the immediate embroidery area and out of the way of the machine. Hoop a piece of backing in your selected hoop to serve as a carrier for the goods to be embroidered. Spray either the goods or the backing in the targeted area. Press the garment into place onto the backing and embroider away. Spray adhesive works best for small, lightweight items with low stitch counts.

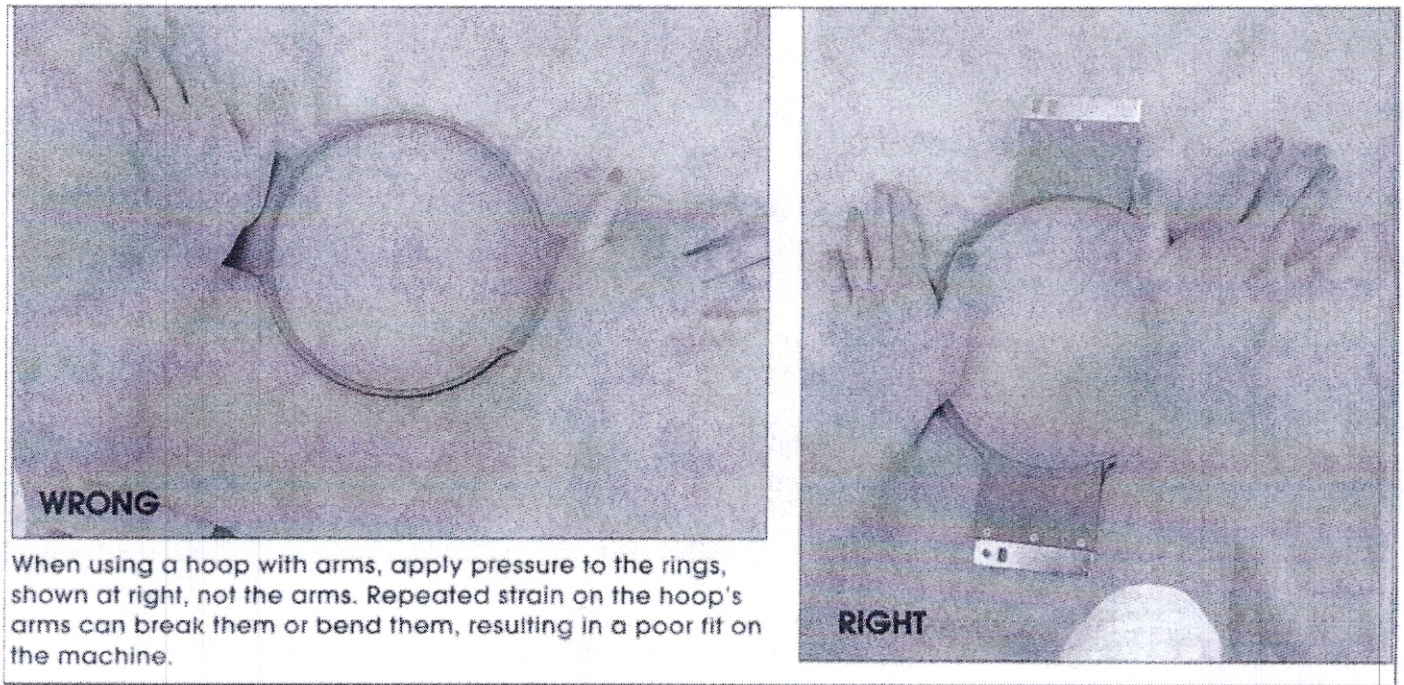
• *Taping* is an excellent holding method for cap and garment panels, but you must use a base carrier.

HOOPING 101

BASIC TIPS AND TRICKS



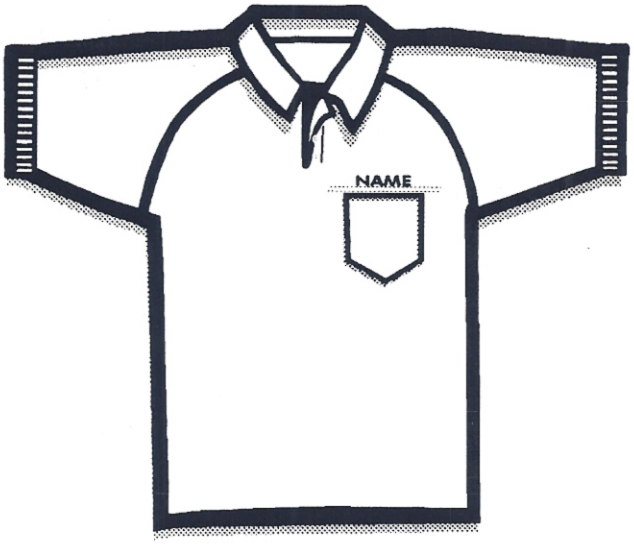
The correct way to hoop is by using the base of your hands, as shown at right. Although this method can cause pain after repetition, the alternative—using the fingertips—is ergonomically incorrect.



When using a hoop with arms, apply pressure to the rings, shown at right, not the arms. Repeated strain on the hoop's arms can break them or bend them, resulting in a poor fit on the machine.

POLO SHIRTS

KNIT SHIRT WITH POCKET



Bottom of design should be 1/4“ above pocket

Design or lettering should never be longer than pocket

KNIT SHIRT WITH OUT POCKET

MEN -----Design or lettering 7 ½ “ - 9” down from shoulder 4“ - 6” over from center of placket

WOMAN------ 7 “ - 8” down from shoulder 4“ - 6” over from center of placket

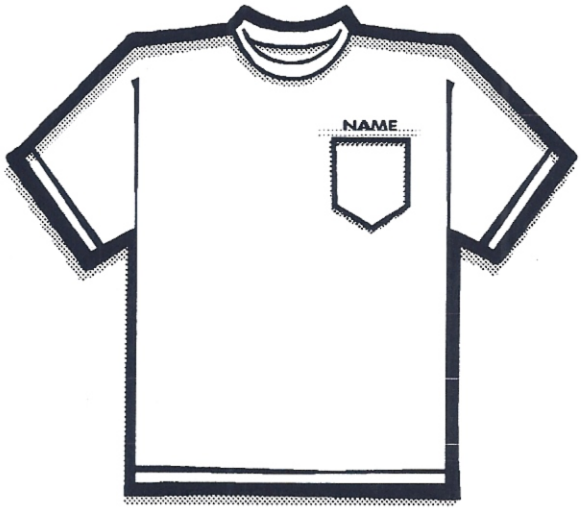
Ingredients for Knits

Needle type	Backing /Topping	Special
70/10 Sm Ball *75/11 Sm Ball* *80/12 Sm Ball*	*1-Cutaway / Solvy optional*	*add column width*

TEE SHIRTS / JERSEYS

T-SHIRT WITH POCKET

LONG OR SHORT SLEEVES



Bottom of design should be 1/4“ above pocket

Design or lettering should never be longer than pocket

T-SHIRT WITH OUT POCKET

Design or lettering 3“ - 4” down from neck line to top of design

Ingredients for T-shirts

Needle type	Backing /Topping	Special
70/10 Sm Ball *75/11 Sm Ball* *80/12 Sm Ball*	*1-Cutaway* *1-Nylon-Poly mesh*	*add column width*

SWEATSHIRTS

SWEATSHIRT CENTER

3" - 4" down to top of design or lettering from bottom of crew neck

SWEATSHIRT LEFT CHEST

3" - 4" down from bottom of crew neck

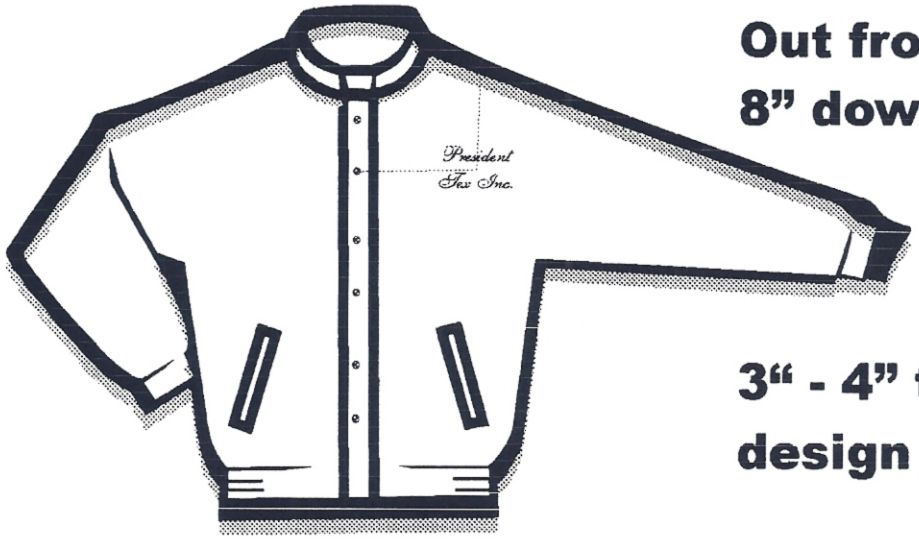
4" to 5" out to center of design or lettering

Ingredients for Fleece

Needle type	Backing /Topping	Special
70/10 Sm Ball *75/11 Sm Ball* *80/12 Sm Ball*	*1-2 cut-away / solvy*	*make columns wider*

JACKET FRONTS / BACKS

JACKET FRONT



Out from 2nd snap or 6“ - 8” down from shoulder

3“ - 4” to center of design or lettering

JACKET BACK

Center of design or lettering 6“ - 8” down from the collar

2 ½“ down from collar to top of design or lettering

Ingredients for Satin

Needle type	Backing /Topping	Special
70/10 Sm Ball *75/11 Sm Ball* *80/12 Sm Ball*	*Quilted lined 1 tear-away* *Unlined 2 tear-away*	*hoop garment tight stops slippage*

V-NECK SHIRTS

LONG OR SHORT SLEEVES

V-NECK SHIRTS

Design or lettering
7 ½ " - 9" down from shoulder

4" - 6" over from bottom of v neck line to center

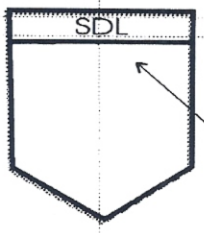
Ingredients for Knits

Needle type	Backing /Topping	Special
70/10 Sm Ball *75/11 Sm Ball* *80/12 Sm Ball*	*1-Cutaway* *1-Nylon-Poly mesh*	*add column width*

DRESS SHIRT *Monograms*

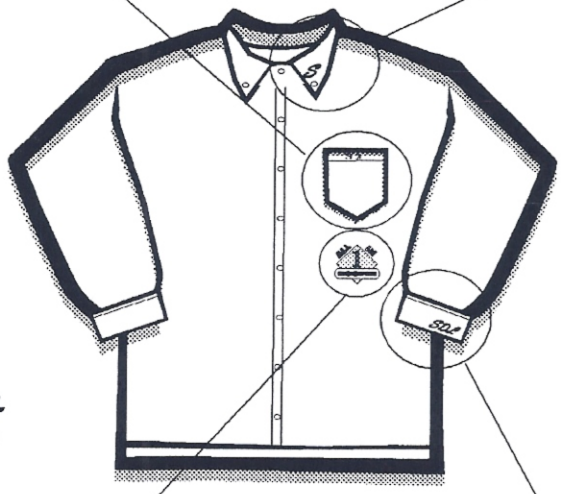
Center of pocket
on lip 1/4" - 1/2" down

1/4" above button hole



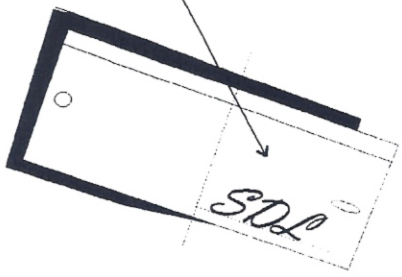
Pocket

Collar



Euro Pocket

Cuff

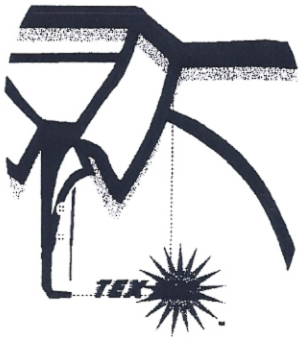


Center of pocket
straight down 4" from tip
to center of design

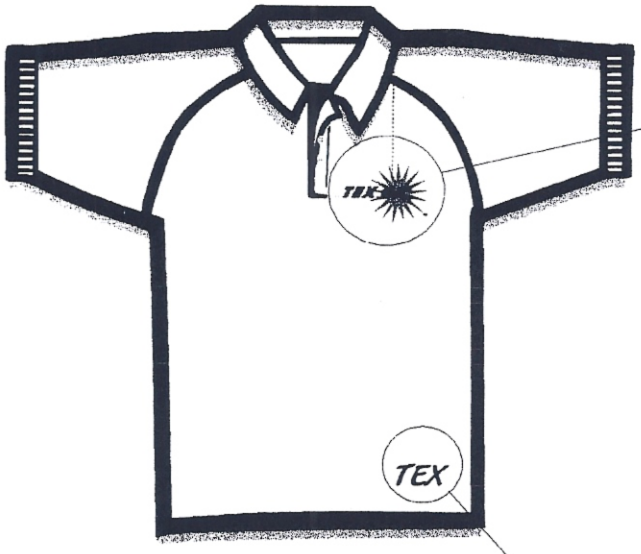
1/4" up from edge of cuff
1" over from center of cuff

CASUAL SHIRT *Monograms*

3“ - 4“ from placket
7“ - 8” down from shoulder (men) 4“ - 6” down from shoulder(women)

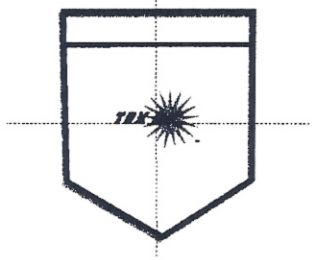


Chest

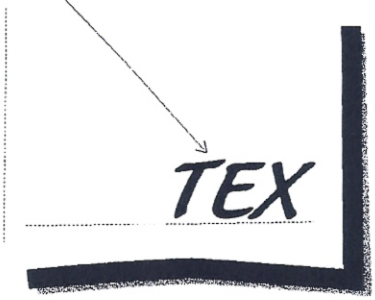


Euro Tail

Center of pocket top to bottom



On Pocket



7” from shirt center
1 ½ ” up from shirt hem

MISC ITEMS

SHORTS / BOXERS

Find center of left leg
Design or lettering should be to the left of center

Ingredients for Cotton

Needle type	Backing /Topping	Special
70/10 Sharp *75/11 Sharp* *80/12 Sharp*	*1 tear-away*	*edge run underlay adds crispness*

SWEAT PANTS

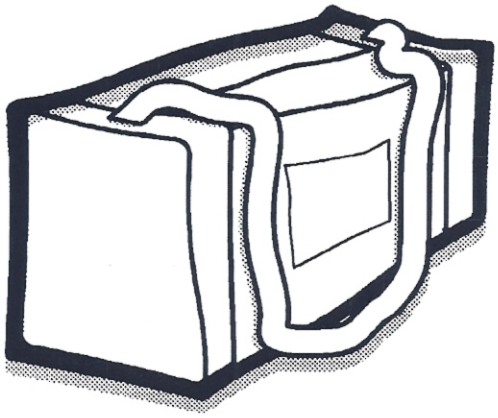
2" from side seams at crotch level

Ingredients for Fleece

Needle type	Backing /Topping	Special
70/10 Sm Ball *75/11 Sm Ball*	*1-2 cut-away / solvy*	*make columns wider*

MISC ITEMS

TOTE BAG



Placement anywhere
Sides / front / back / strap

Ingredients for Nylon

Needle type	Backing /Topping	Special
70/10 Sm Ball *75/11 Sm Ball* *80/12 Sm Ball*	*1 tear-away*	*hoop tightly to prevent puckering*

CAP

Placement anywhere
Sides / front / back

Ingredients for Caps

Needle type	Backing /Topping	Special
75/11 Sharp	*no backing* *1 tear-away*	*standard frames* *270 degree frames*