

Common Embroidery Quality Defects

Poor Registration



DESCRIPTION: Where the stitches and design elements do not line up correctly. The embroidery sewing process sews different colors at different times. If the fabric shifts while one color is being sewn, then poor registration will occur when the next color is sewn. Sometimes it is difficult to tell the difference between poor registration, poor digitizing, and fabric “grin-through” or “gapping” due to thread “pull”.

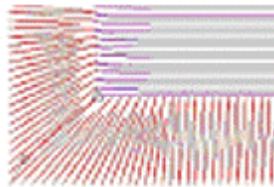
SUGGESTED SOLUTIONS: Generally can be corrected by: 1) Digitizing properly (using appropriate underlay stitches); and 2) Hooping properly (using correct backing to prevent excessive material flagging).

Fabric Grin Through or Gapping

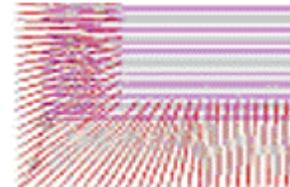


DESCRIPTION: Where the fabric is seen through the embroidery design either in the middle of the pattern or on the edge.

Not Digitized To Compensate For “Pull” of Thread



Digitized To Compensate For “Pull” of Thread



SUGGESTED SOLUTIONS: Generally, can be corrected by: 1) Digitizing properly (Using appropriate underlay stitches, increasing stitch density, using different fill stitch pattern or direction, or compensating for “Pull” of thread by overlapping fill and satin border stitches); and 2) Using appropriate topping.

Missed Trim



DESCRIPTION: Where threads are left on the embroidery pattern between images or lettering. Thread trims are digitized when changing colors and when moving from one location to another using “jump” stitches.

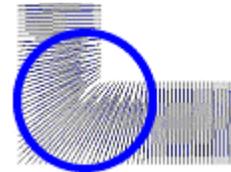


SUGGESTED SOLUTIONS: Generally, can be corrected by: 1) Digitizing properly (Using appropriate number of trims, using appropriate tie-off stitches, or replacing trimming knives when necessary); and 2) Hand trimming missed trims using trimming snips.

Bunching at Corners

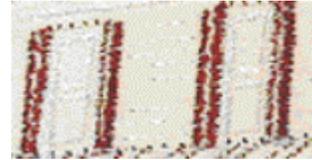
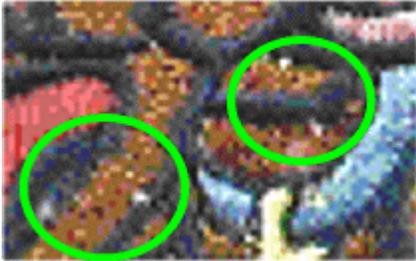


DESCRIPTION: Where the corners of lettering or shapes are not sharp and crisp but are bunched up or distorted. Usually caused by too much thread in the corners due to poor digitizing. This includes: 1) Not using appropriate stitch selection, 2) Not using “Short” stitches in corner, and 3) Poor stitch balance – thread too loose..



SUGGESTED SOLUTIONS: Generally, can be corrected by digitizing properly: 1) Using appropriate stitch selection, and 2) Using “short” stitch cornering, and 3) Correcting stitch balance.

Poor Stitch Balance



DESCRIPTION: where white bobbin thread shows on the topside of the embroidery. Ideally, the needle thread should be held on the underside of the seam, and not ever be pulled up to the topside. Proper stitch balance can be checked on the underneath or backing side of the embroidery by looking for 2/3 needle thread to 1/3 bobbin thread on Satin stitches.

SUGGESTED SOLUTIONS: Generally, can be corrected by: 1) Using quality embroidery needle thread, 2) Using quality pre-wound bobbins, and 3) Setting machine thread tensions correctly.

Fabric Damage – Needle Holes

DESCRIPTION: Where the fabric is damaged around the corners of the embroidery. Caused by: 1) Not using the correct type and size of needle; 2) Putting too many stitches in the same location; and 3) Not tearing tearaway backing properly, allowing the fabric to be damaged as the stitches are pulled out.

SUGGESTED SOLUTIONS: Generally, can be corrected by: 1) Digitizing properly; 2) Reducing the stitch count in the corners; 3) Using the correct type and size of needle; and 3) Using a ball point needle as small as possible.

Embroidery Too Thick



DESCRIPTION: Where the embroidery is too thick and uncomfortable. Can be caused by too high of a stitch density or not using the correct backing for the application.

SUGGESTED SOLUTIONS: Generally, can be corrected by: 1) Digitizing properly (Using appropriate stitch selection, using fewer stitches, and using “short” stitches on corners); 2) Making sure stitch is balanced properly; 3) Using smaller thread size; and 4) Using the correct backing (Using correct type and weight).

Poor Coverage – Poor Stitch Density



DESCRIPTION: Where the stitch density is not thick enough and you can see through the embroidery stitching.

SUGGESTED SOLUTIONS: Generally, can be corrected by: 1) Digitizing properly (Using appropriate stitch selection, using more stitches, and using underlay stitches); and 2) Using appropriate backing & topping.

Poor Hooping



DESCRIPTION: Where the fabric around the embroidery looks distorted and does not lay flat.

SOLUTIONS: Generally, can be corrected by: 1) Using appropriate backing & topping, 2) Making sure sewing operators hoop the garment properly without stretching the fabric too much prior to putting it in the hoop, and 3) Pressing or steaming hoop marks.