

On Your Way to the Masters

Tension Problems

by Arenda Holladay

Inconsistent tension in simple patterns is a problem that plagues knitters at all levels. While reviewing swatches for the Master Knitter Program, I have noticed that knitters who can produce flawless lace patterns and intricate cables can have difficulty executing passable Stockinette, Seed stitch, and ribbing.

Although these are the first patterns we learn, they can be the most difficult to do correctly. The goal when working with these patterns is to produce a consistent fabric where the stitches are uniform—stitch after stitch, row after row. This is one of the things we are looking for in the swatches submitted for the Master Knitter Program. Swatches 1, 2, 4, 6 and 8 illustrate the types of problems that can occur in these simple patterns.

Stockinette Stitch Swatches

Swatch 1 shows the right side of Stockinette stitch. Notice how it appears



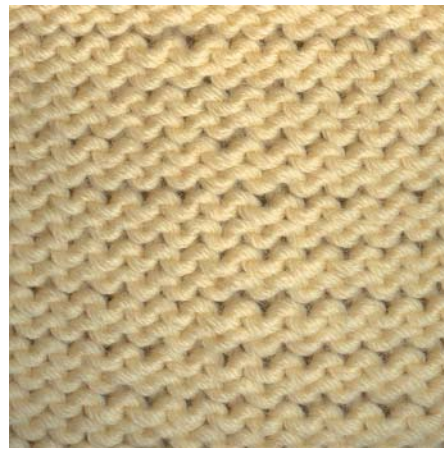
"Striped" Stockinette stitch - swatch 1

striped and bumpy due to the larger stitches on alternate rows. Swatch 2 shows the wrong side of the same swatch where you can see distinct gutters between the rows. Swatch 3 shows acceptable Stockinette fabric where all the stitches are of a consistent size, giving the swatch a smooth all-over appearance.

Textured Patterns Swatches

Swatches 4, 6 and 8 illustrate simple textured patterns where the tension is inconsistent. Swatch 4, worked in Seed stitch, has large gaps between some of the stitches, and the knit and purl stitches are not the same size. Swatch 5 shows acceptable seed stitch. Although it's impossible not to have some space between the stitches, this space should be the same throughout the piece.

Swatches 6 and 8 show the same problem. The knit stitches immediately to the right of the purl stitches are



Wrong side of Stockinette stitch - swatch 2

enlarged and distorted in both the ribbing and cable samples. Swatches 7 and 9 show the same patterns where the problem has been corrected.

Problems and Solutions

What causes tension problems like these and how do you solve them? The cause is simple: the relationship between knit and purl stitches. The solutions vary depending on the problem.

First, you need to look at your work critically. It is not enough, when knitting a swatch, to be content to cast on the right number of stitches, follow the pattern, and measure the dimensions before binding off. You must also evaluate the quality of the swatch. If the stitches in the swatch aren't consistent you can practice a variety of techniques to improve the quality.

Problem 1: Striped Stockinette

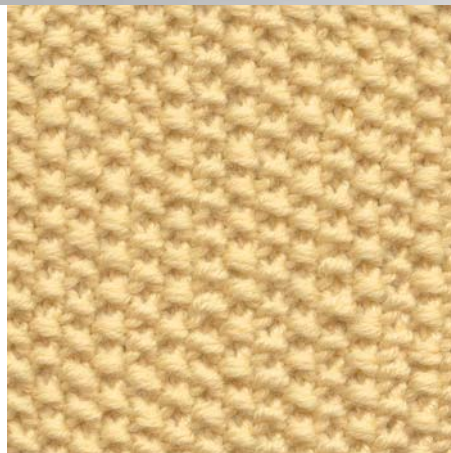
This problem is caused by the purl rows



Acceptable Stockinette stitch - swatch 3



Uneven Seed stitch - swatch 4



Even Seed stitch - swatch 5



Loose knit stitch before purling - swatch 6

being worked looser than the knit rows. Two major factors contribute to this problem: the nature of the purl stitch and how the knitter holds the working yarn.

Look closely the next time you pick up your needles to knit. Whether you use your right or left hand to hold your working yarn, you bring it up from the base of the previous stitch, then under and over the needle to form the next knit stitch. Now look when you purl. You throw the yarn over then under the needle to form the purl stitch. Unless you carefully control your tension, the extra yarn in the purl stitch can make the stitches in that row larger.

How you hold your working yarn can contribute to larger stitches in purl rows. I do not plan to join the debate on the proper way to hold working yarn. Too many books, all expounding one or the other method as the only way to knit, have already been written. How you hold your working yarn is a matter of personal preference as long as you are comfortable and you can produce consistent stitches. But, it is a fact that knitters who hold their working yarn in their left hand are more prone to this problem since it is more difficult to control the tension in the purl stitch. Knitters who hold the yarn in their right hand have to “throw” the yarn to purl which puts more tension on the yarn, keeping the stitches smaller.

This does not mean that if you hold the yarn in your left hand that the knitting police will confiscate your straight needles and force you to knit in the round so you can produce smooth and consistent Stockinette stitch. Those of us who have this problem can experiment with several different techniques until we find a solution.

Solutions

For most, awareness is the solution. “Oh, I purl looser than I knit. I must change my tension when I purl.” Problem solved. If this doesn’t work, you may want to try using two different size needles when knitting in Stockinette stitch.

Another, more drastic, solution is to change the way you form the purl stitch. Instead of bringing the working yarn over the needle to purl, bring it under the needle. This more closely matches how the knit stitch is formed. If you use this method, you must, on the next row, knit the stitches through the back loops or the stitches will be twisted. Although this sounds like heresy, it isn’t difficult and after a few rows it even feels natural.

Fiber Choices

Sometimes even the most experienced knitter can have difficulty with uneven rows. Choice of fiber is often the problem. The elasticity of wool makes it very forgiving to tension problems. Cotton, linen, and some synthetics accentuate tension problems. If you have difficulty with tension and are

planning a Stockinette stitch project, you may want to consider wool over cotton. Also nubby, textured, tweedy and variegated yarns can help camouflage uneven tension.

Problem #2: Selvages

Occasionally we see swatches where the rows are uneven only at the selvedge edge. In some cases the problem is caused by the difference in the amount of yarn used by the knit stitch at the end of the row and the purl at the beginning. The excess yarn works its way into the adjacent stitches.

Solutions

To solve the problem, bring the yarn from the bottom to form the purl stitch at the beginning and end of the purl rows. You must then remember to knit those first and last stitches through the back loop.

In other cases, the knitter begins rows with a tighter tension. Experimenting with tension at the beginning and end of rows should improve those selvedge edges.

Problem #3: Textured Knitting

The problem in Swatches 4 and 6, and 8 all have the same cause. Many knitters, when changing from a knit stitch to a purl stitch in Seed stitch, ribbing, or cables, do not bring the yarn completely forward before forming the purl stitch. The excess yarn works its way back into the previous knit stitch, enlarging and distorting it.



Acceptable knit stitch before purling - swatch 7



Loose knit stitch before purling - swatch 8



Acceptable knit stitch before purling - swatch 9

Solutions

Just give the yarn a slight tug when you bring it forward to purl, making sure there is no slack. This soon becomes an automatic movement.

Sometimes this may not be enough. For example, ribbing or cables worked in cotton or linen may require extra help. As described previously, when working in Stockinette stitch, form the first purl stitch after a knit stitch by wrapping the yarn under the needle. Again, remember to knit this stitch through the back loop on the next row.

Conclusion

Don't assume your simple swatches are fine as long as they contain the correct number of stitches and are the correct length. Take the time to evaluate the quality of your work as you are working and work on correcting any problems as you go along. This will guarantee the quality of your swatches for the Master Knitter Hand Program as well as any project you may undertake.

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