## FIREFIGHTERS' SOCKS

## A knitting pattern

© Kim Salazar, 1999, 2001, 2012; http://www.string-or-nothing.com


These socks will fit people wearing women's shoe size 7-10, and men's shoe size 6-9. They are called "Firefighters' Socks" because the stitch on the ankle reminded me of ladders; they are warm enough to wear under boots or as house slippers; and they are quick enough to knit in between emergencies. Plus the first pair I knit were bright red.
Stahl Wolle's "Big" and "Big Print" were soft and airy worsted weight yarns, with a nice loft. They have been discontinued, but both were $100 \%$ wool and machine washable. Anything that produces a comparable gauge may be substituted.

## Materials

- 3 skeins Stahl Wolle's Big or Big Print (50g, 85 yards each)
- US \#5 double pointed needles - one set of five
- US \#4 double pointed needles - one set of five (optional, needed only if you prefer tight ribbing at the top of your socks)
- Tapestry or yarn needle for weaving in the ends


## Gauge:

6 st = 1 inch in stockinette on US \#5 needles; 9 rows $=1$ inch in stockinette on US \#5 needles

## Special Instructions

These abbreviations and symbols are used in this pattern.

Make One - Pick up the bar running between
M1 the stitches on each needle, knit through the back of this new "loop" to make an invisible nohole increase.
Yarn Forward - bring the yarn to the front of the
yf work WITHOUT making a loop over top of the needle.

## No-Sew Toe Cast-On

Take two of the needles and wrap the yarn around them, figure-eight style. The yarn should loop around the bottom needle and cross to the opposite side of the top needle. Loop over it and then return between the two. The result should look something like this:

Figure-8 Cast-On -


## Firefighters' Socks

Continue wrapping the yarn this way until you have 10 loops on each needle. Let the end dangle free with no knots or other securings - you'll need to work looseness in the first row out towards the end later. Knots will interfere with this in-flight adjustment.
Take a third dpn and knit across the top needle. Take the fourth dpn and knit across the bottom needle. Be careful not to twist stitches - one needle's loops will be "backward" with the leading edge of the loop on the rear side of the needle. Make sure you knit into the rear side of these "backward" loops.
You now have a very narrow and slightly awkward strip of knitting suspended between two needles. There should be 10 stitches on each needle. Don't worry if the stitches running down the center are loose, in a couple of rows you can tighten them up by carefully working the excess down towards the dangling tail end.

## Toe Shaping

- Row 1: k1, M1, k4. Using another dpn, k4, M1, k1. Using a third dpn, k1, M1, K4. Using the fourth dpn - K4, M1, K1. You should now have 4 live needles in your work, each with 6 stitches on it.
- Row 2: Knit all stitches on the first needle. Mark the first stitch on the second needle by inserting a scrap of yarn or safety pin in it as you knit it. This marks the center bottom of the sock. Knit all stitches on remaining needles.
- Row 3: *k1, M1, k5. K5, M1, K1* repeat
- Row 4: Knit
- Row 5 and subsequent odd rows: Continue adding one stitch after the first stitch of the first and third needles, and one stitch just before the last stitch of the second and fourth needles.
- Row 6 and subsequent even rows: Knit.

When you have 12 stitches on each needle (48 stitches total) the toe is done..

## Foot

Continue knitting around with 12 stitches on each needle. For my women's size 10 feet I knit until my sock foot measures 6.75 inches (approx. 16.25 cm ) from the tip of the toe. People less endowed in the foot department should knit until the growing foot when tried on is long enough to generously reach to the point where their ankle meets their foot. The sock foot should not be tightly stretched when measuring. Once you have enough foot length you can begin the heel.

## Heel

Find the column of the stitch you marked as the center bottom of your foot. The needles to the right and left of it (needles \#1 and \#2 respectively) will be the ones on which you work your heel. The other two needles (\#3 and \#4) will lie dormant until the heel is finished. If you like you can move the stitches from \#3 and \#4 onto a stitch holder or spare piece of string if you are more comfortable working that way.
Start the heel with needle \#1 and work the following directions across both needles as if they were a single unit. I prefer NOT to move these stitches onto one needle because using two creates less stress at the ends and tends to minimize any top-ofgusset holes when the foot top stitches are rejoined to the heel.

- Row 1 of decrease: K23, yf, slip next stitch purlwise onto right needle. Turn work.
- Row 2: Yf (wrapping the yarn around the slipped stitch that was just slipped and return it to the right hand needle - it should look like it has been lassoed by a noose), p22, slip the next stitch purlwise (keeping the yarn in front of the work). Turn work.
- Row 3: Yf (wrapping the yarn around the stitch you just slipped and returning it to the right hand needle), K21, yf, slip the next stitch knitwise onto the right needle. Turn work.
Continue in this manner, working one less stitch per row before doing the yf/wrap/turn. THERE WILL ALWAYS BE 12 STITCHES ON EACH NEEDLE.

Each row the number of wrapped and retained stitches (as opposed to "live" stitches) will grow by one. Eventually you will have only 10 "live" stitches - 5 on each needle. The remaining 7 stitches on each needle will each have a wrap around them. At this point the heel will look triangle with the top cut off. Along the left and right sides of the triangle will be the wrapped stitches, evenly placed.
The last row before you begin increasing again is the row in which you purl 10 live stitches. When that's completed it's time to begin increasing.

- Row 1 of increase: K10, knit the next stitch through the back along with the wrapped loop around its base. (I do this by picking up the loop on the point of my right hand needle, then knitting the loop and the stitch together), yf, slip next stitch knitwise onto the right needle. Turn work.
- Row 2: Yf, (wrapping the yarn around the slipped stitch so that there are now TWO wraps at its base), p10, purl the next stitch along with the loop wrapped around its base, slip next stitch purlwise (keeping the yarn in the front of the work). Turn work.
- Row 3: Yf (wrapping the yarn around the base of the slipped stitch), k11, knit the next stitch


## Firefighters' Socks

through the back of the loop along with the two loops wrapped around its base, yf, slip next stitch knitwise onto right needle, K11, turn work.
Continue in this manner, working across the rows, knitting through the back of the loop (or purling on purl side rows) the next slipped and reserved stitch along with all loops around its base; then slipping and wrapping the stitch after it until you have "reclaimed" all of the reserved stitches and all 12 stitches on each needle are again "live."
When all 12 stitches are "live" the heel is finished and it's time to begin working the stitches on the top of the foot again.

## Ankle Join

Knit two rows around all 48 stitches.
IMPORTANT NOTE: There is a small tendency for a little hole to form at the top of the diagonal line made by picking up the reserved stitches. I counteract this on the first row of my rejoin by picking up a stitch at the top of each of the diagonals, then knitting one of them together with the first stitch on Needle \#3 and doing a ssk with the other picked up stitch and the last stitch of Needle \#4.

## Ankle Pattern

Begin the broken rib ankle pattern:

- Row 1: *K3, P3* repeat
- Row 2: *K1, P1* repeat

Repeat these two rows until the length of the ankle when folded along the heel shaping is approximately 1 to 1.5 inches less than the length of the foot.
If you like tight ribbing, now is the time to switch to the smaller needles. I don't like tight sock tops so I don't bother.

## Ribbing

- Row 1: *K1, P1* repeat.

Continue knitting in $\mathrm{K} 1, \mathrm{P} 1$ rib for about 1.5 inches. Mary Thomas in her Knitting Book (a venerable guide to knitting) suggests that socks when folded along the heel shaping should measure the same from toe tip to heel that they do from top ribbing to heel. I find this length to be quite comfortable. You can make yours a tad longer if you're aimed at a "slouch sock" effect, or shorter if you like abbreviated anklets.
Work sock \#2 to match. Counting rows is the best way to ensure uniform length between the two.

## Finishing

When both socks are done, use the tapestry needle to weave in the loose ends at toe and top

