# **Toe-Up Magic Loop Socks**

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There are several reasons why one would choose to knit socks from the toe up rather than from the cuff down. Working from the toe up makes it easier to try on socks as you knit them and can eliminate the need for a gauge swatch. You can knit until you run out of yarn without worrying if you will have enough to close the toe. Using the Magic Loop method has its advantages too – no risk of lost DPNs, fewer chances for laddering between needle joins, easier distribution of stitches, no second circular needle to buy, and no risk of using the wrong needle when using two circulars together. But really it's all just a matter of preference and I prefer this method. ^\_^

### **Materials Needed**

2 50g or 1 100g skein of fingering weight yarn, 40" circular needle with flexible cable of appropriate size for yarn, 2 stitch markers, 1 locking stitch marker, tape measure, tapestry needle, scissors, sock worksheet, calculator.

# Gauge

Knit at a gauge recommended for the yarn, usually 7 to 9 stitches per inch. Stitch count will be determined after knitting the toe, so a gauge swatch is not needed for a plain stockinette or a designed on the fly sock.

# **Special Stitches**

- M1R Make 1 Right using right needle, pick up stitch below active stitch on left needle, place on left needle and knit.
- M1L Make 1 Left using left needle, pick up second stitch below active stitch on right needle and knit through the back loop.
- KFB Knit Front and Back knit into the front and back of the stitch.
- W&T Wrap and turn On the right (knit) side, bring yarn forward, slip 1 stitch knitwise to right needle, bring yarn back, slip stitch back to left needle, turn work. On the wrong (purl) side, bring yarn back, slip 1 stitch purlwise to the right needle, bring yarn forward, slip stitch back to the left needle, turn work.
- Work Wrapped Stitch use the right needle to lift the front of the wrap up and over the wrapped stitch onto the left needle. The front of the wrap is always on the knit side. On the right (knit) side, knit the two stitches together through the back loops. On the wrong (purl) side, purl the two stitches together.
- SSK Slip Slip Knit slip 1 stitch as if to knit, slip 1 stitch as if to purl, place left needle back through both and knit the two stitches together.
- P2Tog Purl 2 together.

#### Toe

Using Judy's Magic Cast On, cast on 8 stitches per needle, 16 stitches total. The Spring 2006 issue of Knitty has an article on how to do this cast on:

http://www.knitty.com/ISSUEspring06/FEATmagiccaston.html

Or you can search on YouTube for videos of the cast on.

Turn the needles around to begin knitting. The last stitch cast on should be the first stitch that is knit. After the first few rows are knit, place a locking stitch marker on one side of the toe to indicate the start of the round.

Row 1: K across all stitches on front needle. Pull the cable so that the back stitches are on the needle, pull the front needle so that the stitches move to the cable. Turn work and use the loose needle to K across all stitches on the back. This is the Magic Loop technique.

Row 2: [K1, M1R, K to last stitch, M1L, K1] repeat for other needle. If you prefer, substitute KFB increases for the M1R/M1L.

Repeat rows 1 and 2 until you have knit about an inch and a half of the toe. This will be your gauge swatch for the socks. Measure the number of stitches per inch and fill the number in on the sock worksheet. Fill in the rest of the worksheet with your measurements and calculations. Continue repeating rows 1 and 2 until you have (C) stitches. Knit row 1 once more.

#### Foot

To make a plain stockinette sock, continue knitting evenly until work measures (E) inches from the cast on. Be aware that for your first time trying the Magic Loop technique, your gauge may change once you start knitting evenly with no increases and as you get more comfortable with the technique. There is a possibility that your gauge will be so off that you'll have to re-knit the toe, so check your gauge after knitting a short portion of the foot. With experience, this risk diminishes.

If you're feeling adventurous, you can add a stitch pattern to your sock. To add a stitch pattern to your sock, calculate the factors of the stitch count of the top of the foot. For example, if (C) is 60 then you have 30 stitches on the top of your sock. The factors of 30 are numbers that 30 is evenly divisible by, or 30, 15, 10, 6, 5, 3, 2, and 1. Choose a stitch pattern with a number of stitches that is equal to one of the factors and repeat it across the top of the sock as many times as will fit. For example, on a 30 stitch top a 6 stitch pattern will fit 5 repeats, a 3 stitch pattern will fit 10 repeats, etcetera. Depending on what stitch pattern you choose, you may wish to add an additional stitch to one side. Adding one stitch will not significantly alter the size of your sock and can help create symmetry when using stitch patterns that have one knit or purl stitch intended as a border stitch between columns. Continue knitting evenly using your stitch pattern on the top of the sock and stockinette on the sole of the sock until work measures (E) inches from the cast on.

The class sample 56 stitch sock uses a 4 stitch pattern from a Japanese stitch pattern dictionary: Setup row, complete only once: [P1, K3] repeat to end of top, K all sole stitches.

Row 1: [P1, slip three stitches purlwise, use left needle to pass first slipped stitch over second two slipped stitches, slip two stitches from right needle back to left needle without twisting them, K1, YO, K1] repeat to end of top, K all sole stitches.

Rows 2-4: [P1, K3] repeat to end of top, K all sole stitches.

#### **Gusset Increases**

Begin the gusset increases on the sole stitches. If working a stitch pattern, note the number of pattern repeats completed before beginning the increases to ensure that the socks match well.

Row 1: K across top of sock in pattern, on sole stitches K1, M1R, K to last stitch, M1L, K1. If you prefer, substitute KFB increases for the M1R/M1L.

Row 2: K across top of sock in pattern, K all sole stitches.

Repeat rows 1 and 2 until you have knit row 1 (F) times. You should have (G) stitches total, with twice as many stitches on the sole of the sock as there are on the top of the sock. End after knitting row 1.

The next step is to begin the short row shaping that will turn the heel. The setup row places the markers that will separate the gusset stitches from the heel turn.

Short row setup row: Knit across top of sock in pattern, on sole stitches K(F stitches), place marker, K(half of C stitches), place second marker, K(F stitches).

# **Short Row Heel Shaping**

Row 1: K across top of sock in pattern, on sole stitches knit to 1 stitch before the second marker, W&T. After this row you will be knitting back and forth on only the sole stitches, so be sure to note what row of your stitch pattern you completed before beginning the shaping.

Row 2: (wrong side) P to 1 stitch before the marker, W&T.

Row 3: (right side) K to 1 stitch before the last wrapped stitch, W&T.

Row 4: (wrong side) P to 1 stitch before the last wrapped stitch, W&T.

Repeat rows 3 and 4 until there are (H) wrapped stitches on each side with 10 unwrapped stitches in between, end after a wrong side row.

With RS facing, knit the 10 unwrapped stitches, work the (H) wrapped stitches up to the marker. Leaving the marker in place, turn work. Slip the first stitch and purl the next 20 stitches, work the (H) wrapped stitches up to the marker. Leave the marker in place on the left needle, turn work. There should be (half of C) stitches waiting to be worked on the left needle before the marker. These stitches will be the heel flap.

## **Heel Flap**

The next step is to knit the heel flap while decreasing away the side gusset increases. The heel flap is knit with slipped stitches to reinforce the fabric. The slipped stitches are worked on the wrong side or purl row to minimize the amount of purling that needs to be done. When slipping the stitches in rows 2

and 4, slip them purlwise and be sure to hold the yarn to the front as if to purl. When slipping the stitches in rows 1 and 3, hold the yarn in back as if to knit.

Row 1: (RS) K to 1 stitch before second marker, slip the next stitch, remove the marker, slip the stitch back to the left needle, SSK, turn.

Row 2: (WS) [Slip 1, P1] to 1 stitch before the first marker, slip the next stitch, remove the marker, slip the stitch back to the left needle, P2Tog, turn.

Row 3: (RS) Slip 1, K to stitch before the gap (the gap should be very noticeable), SSK, turn.

Row 4: (WS) [Slip 1, P1] to stitch before the gap, P2Tog, turn.

Repeat rows 3 and 4 until all gusset stitches have been incorporated, end after completing row 4, then turn and knit back across heel stitches to get back to the beginning of the round. You should be back at C total stitches.

## Leg

Beginning with appropriate round in the stitch pattern, continue working even in desired pattern on all stitches until the leg measures the desired length. If working a plain stockinette sock, work even until the leg measures the desired length. To close up gaps at the rendezvous points (where the leg, heel flap, and top of gusset meet), it may be necessary to pick up and twist additional stitches and knit them together with end stitches on the first round of the leg.

#### Cuff

Once the leg is the desired length, decide what kind of cuff you want for your socks. I almost always do a 1 inch long twisted 1x1 rib for my sock cuffs because it is very stretchy and neat in appearance. To work twisted 1x1 rib, [K1 through the back loop, P1] around all stitches. There are several other cuff options to choose from depending on the look you are trying to achieve.

#### **Bind Off**

Choosing the correct bind off for toe up socks is very important because it needs to be stretchy enough to fit over the largest part of your foot. Three good options, though there are surely others, are Elizabeth Zimmermann's sewn bind off, the yarn over bind off, and Jeny's Surprisingly Stretchy Bind Off. Each has its advantages – the sewn bind off uses less yarn, the yarn over bind off is simpler to execute, and JSSBO is a perfect match for 1x1 ribbing. My favorite is JSSBO, this is the bind off used on the sample sock.

#### Sewn Bind Off:

Cut yarn leaving a long tail – approximately .5 inches for every stitch to be bound off. Thread onto tapestry needle.

Step 1: Insert tapestry needle through 2 stitches as if to purl, leaving stitches on the needle and pull yarn through.

Step 2: Insert tapestry needle through 1 stitch as if to knit, slip the stitch off the needle and pull yarn through.

Repeat steps 1 and 2 until all stitches are bound off, picking up an extra stitch to complete the final stitch.

Yarn Over Bind Off:

Step 1: Knit 1 stitch, YO

Step 2: Knit 1 stitch, pass first stitch and YO over second knit stitch

Step 3: YO

Repeat steps 2 and 3 until all stitches are bound off.

Directions for Jeny's Surprisingly Stretchy Bind Off can be found in the Fall 2009 issue of Knitty: http://www.knitty.com/ISSUEfall09/FEATjssbo.php

# **Finishing**

Cut yarn tail and pull through last stitch. Thread tapestry needle and close the gap between the first bound off stitch and the last by sewing the two stitches together. Weave in ends and block if desired.

Your first sock is finished! Now to knit the second... you're not suffering from Second Sock Syndrome, right? ^\_^ The best way to combat SSS – once you bind off the first sock, cast on for the second immediately. Even if you only cast on and knit one row, the second sock is started and your needles are already unavailable for other projects that seek to destroy your sock project monogamy. Or you could learn how to do two Magic Loop toe up socks at once and eliminate the possibility of SSS altogether!

# **Sock Worksheet**

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Stitches per inch (A) :
Knit the toe until you have enough fabric to lay it flat and measure your gauge.
Circumference at ball of foot in inches (B):
Total sock stitches (C): (A x B) x .9 = Multiply your stitch gauge by the circumference of your foot then multiply by .9. To ensure a snug fit, you should use 10% less stitches than needed to meet your foot measurement. If you prefer very snug socks or are using a stretchy stitch pattern such as lace or twisted ribbing, you may want to subtract 15% or multiply by .85. If you are using a pattern without a lot of stretch such as fair-isle or chevrons, you may want to subtract only 5% (multiply by .95) or not subtract any stitches at all (use A x B only). Ideally this will be an even number divisible by 4 – round to the nearest stitch add or subtract a stitch or two to meet this requirement. Half of C is the number of stitches on the top of the foot or on the sole prior to increasing for the gusset.
Foot length in inches (D) :
Length to knit foot of sock (E): $D-4.5 = $ E is the length that you will knit the foot evenly, including the toe, before beginning the side gusset increases. The gusset knit very early for these socks, so measure frequently while knitting to ensure the best fit.
Number of gusset increase rounds to knit (F): C/4 =  Divide the total number of stitches by 4 to calculate the number of gusset increase rounds to knit. Each increase round adds 2 stitches. This number will also be the number of gusset stitches per side.
Total sock stitches after completing gusset increases (G): $C \times 1.5 = $ After all increases are completed there will be twice as many sole stitches as there are on the top of the sock.
Number of stitches to wrap (H): $[(C/2) - 10]/2 = $ Divide C by 2 to calculate the number of sole stitches. Subtract 10 from the sole stitches – these stitches will remain unwrapped at the center of the heel turn. Divide the remaining stitches by 2 to calculate the number of stitches that will be wrapped on each side. This should be a whole number.
A: E: B: F: C: G: D: H: