

Steep Learning Curve Socks: Perfect Toe-Up Socks on Magic Loop

Techniques

- Magic Loop
- Turkish cast-on
- Patricia Gibson-Roberts' short-row method
- Two socks at the same time
- Stretchy bind-off

Magic Loop

I like to knit socks using one long circular needle -- 40 inch or longer. When knitting, the back half of your sock will hang in the middle of your needle cable. There will be two big loops of cable on either side, and you'll work across the front of your sock with the ends of the circular needle.



Yarn = _____

Target gauge = ___ stitches per inch

Circumference = ___ inches / ___ stitches

Length of foot = ___ inches

Width of toe ($C \div 5$) = ___ stitches

Needles, Yarn, Gauge, & Fit

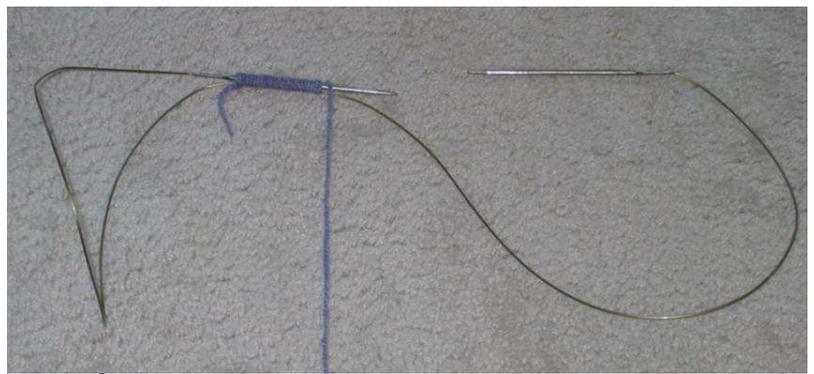
This will vary of course, and *Simple Socks, Plain & Fancy* has great charts for making any size sock with any gauge. I like Bearfoot yarn on size 3 needles, so socks are 52/56/60 stitches around. With a sport weight yarn, my socks are 48/52/56 stitches around.

Fill in the blanks on the chart for your own preferred yarn, needles, and gauge.

Turkish Cast-On

Starting these socks couldn't be easier. Hold the ends of your needle together, and wrap the yarn.

- Attach the end of the yarn with a slip knot to one of the ends of your needle.
- Hold the ends of the needle together, with the yarn attached to the "bottom" needle.
- Take the yarn up around the back, over the top, and down across the front.
- Repeat until you've made half the loops of your total sock circumference.



Begin Short Row Shaping

Slide the bottom needle to the right so the loops are wrapped around the cord and one end (the "left" end) of your circular needle. Begin knitting short rows.

- Knit up to the last stitch on the needle. (One loop remains; the knot on the cord helps hold it in place). Turn.
- Yarnover and purl up to last stitch on needle. Turn.
- Yarnover and knit up to the YO/stitch pair. Turn.
- Yarnover and purl up to the YO/stitch pair. Turn.

A Note about Yarnovers

These yarnovers may be a little different than you're used to, especially on the purl side. To make them, first take the working yarn between the needles to the other side.

When you work the stitch, bring the yarn up over your working needle, creating a snug yarnover/stitch pair.

Repeat until there are 10/12/14 purl stitches after the yarnover.

Reverse Short Row Shaping

Now for the hard part: you'll knit gradually *longer* rows, separating the yarnover/stitch pairs and joining the yarnovers with the next stitches.

- YO and knit 9/11/13 (up to the first YO/stitch pair)
- Knit the stitch, leaving the YO on the needle (notice that it's mounted the wrong way)
- Correct the stitch mount, then **K2tog**, separating the next stitch from its own paired YO). Turn

- YO and purl 11/13/15 (up to the first YO/stitch pair)
- Purl the stitch, leaving the YO on the needle
- Awkward move: **SSP**
 - Slip the YO as if to knit
 - Slip the next stitch as if to knit
 - Transfer both stitches back to the left needle
 - Take the right needle *behind* these two stitches and enter them from left to right, through the backs of their loops. The tip of the working needle should poke out so you can purl the two stitches together.

Take a moment to make sure you understand what we're doing: joining the yarnovers with the *next* stitches helps close the gap made by the short rows. If you don't do this right, there will be holes.

Do you get how the SSP works? Soon you'll have to do a SSSP, which is even more awkward.

- YO and knit 11/13/15 (or up to the YO/stitch pair)
- Knit the stitch. The next two loops on the needle are yarnovers, mounted backwards.
- Correct the stitch mounts, then **K3tog**. Turn.

- YO and purl 12/14/16 (or up to the YO/stitch pair)
- Purl the stitch. The next two loops on the needle are yarnovers.
- Very awkward move: **SSSP**
 - Slip the next three stitches, one at a time, as if to knit.
 - Transfer all three stitches back to the left needle.
 - Take the right needle *behind* these three stitches and enter them from left to right. Purl all three together through their back loops.

Repeat these last two sets of steps, working longer rows each time, until all YO's have been worked, and you're back with your original number of stitches. Remember: **every time you turn to work back the other way, you begin with a YO.**

Approaching the end of the toe: the last two rows

At some point, your K3tog will join two yarnovers and the last stitch on your needle, which has been held in place by the knot around the cord.

Last purl row

- Undo the knot. (You'll work this loose yarn in later.)
- Before purling, loop the working yarn around the cord, next to the dormant stitches. *This takes the place of the yarnover.*
- Purl 23; SSSP. Turn.

Last knit row

- Loop the working yarn around the cord like you did before.
- Knit 24.

You have the 24 stitches on the side of the sock you're working, and 26 stitches on the "dormant" side -- 24 stitches plus the loops you just made at either end.

The toe is complete, and you're ready to begin knitting the foot. **If something isn't right, it's best to just start over.** The hardest part of these socks is at the beginning, and if you're not happy with your work now, there's no point in continuing with a sock you don't like.

Practice Practice Practice

If this is your first time, you'll want to keep making practice toes until you're comfortable. I call these "Steep Learning Curve Socks" because, just by making the toe, you've learned almost everything you need to know to make toe-up socks on circular needles, and it begins with the hardest part. We haven't wasted a lot of yarn, and it's better to scrap what you're doing and start over rather than try to fix mistakes.

I recommend the book *Simple Socks, Plain and Fancy* by Priscilla Gibson-Roberts. I learned this short row technique from that book, and her explanation is more thorough and technical. The book also has great charts for making any size sock with any gauge. Fundamentally, this sock pattern is from that book -- I've just added the Magic Loop and Turkish Cast-On techniques.



Knitting the Foot

Now, instead of knitting back and forth on one side of the sock, you'll knit around on all 48 stitches. Adjust your Magic Loop so you can knit the stitches that have sat dormant while you made the toe.

Remember to knit the first two stitches (a stitch and the extra loop) and the last two stitches together. (To be perfectly correct, you should join the last two stitches with a SSK).

Now you just keep knitting around until you've reached the desired length (to the middle of the ankle bone protrusion on the outside of the foot, or perhaps just a little longer).

Bonus advice: It's only slightly trickier to do both socks at the same time. The tubes sit side by side on your needles. You knit across the front stitches of one tube, drop the yarn, then knit across the front stitches of the other. No more second sock syndrome!

My advice is to make one toe, set it aside, make the second toe, and then work on both socks at the same time. I do the same thing when I come to the heel, making one at a time. It's too much trouble to try and do both at once.

Knit the heel exactly as you made the toe. After you've finished the heel, knit a few more rounds plain, then begin knitting your favorite ribbing or pattern for the ankle. (My standard is K2P2).

Stretchy Bind-Off

Nothing ruins your work on a pair of socks like binding off too tightly. There are a few techniques you can use to make sure socks aren't too tight at the top:

- A. Bind off with a needle a few sizes larger.
- B. Add yarn-over stitches to your binding, about every third stitch. For example, in K2P2 ribbing:
 1. Knit two stitches. Pass first stitch over second.
 2. Yarn-over. Pass knit stitch over yarn-over stitch.
 3. Purl one stitch. Pass yarn-over stitch over purl.
 4. Purl one. Pass first purl stitch over second.
 5. Yarn-over. Pass purl stitch over yarn-over.
 6. Knit one. Pass yarn-over stitch over.
- C. Elizabeth Zimmerman's Sewn Cast-off: With yarn about 4 times the length of your circumference, sew forward (right to left) through two stitches, leaving them on the needle. Sew backward (left to right) through the first stitch and remove it.
- D. Knit two stitches, then slide them both back over to the left needle and knit them together through the back loops. Knit the next stitch, slide the two active stitches back to the left hand needle and knit *them* together through the back loop.



Continue until finished. Break yarn, weave in the ends, and enjoy your perfect socks.

Bibliography -- Other Toe-Up Sock Patterns

Wendy Johnson's "Generic Toe-Up Sock Pattern"

<http://www.wendyjohnson.net/blog/sockpattern.htm>

Uses short-row heels and toes, like my pattern. A similar, but more detailed pattern, the "Universal Toe-Up Sock Formula," was created by Amy Swenson for Knitty.com, <http://www.knitty.com/issuesummer06/PATTuniversalsock.html>.

Kim Salazar's Patterns

<http://www.wiseneedle.com/sock-patterns.asp>

Salazar's method creates a toe that is more like the one you see in top-down socks. Many people prefer it, because there are no loops on the inside.

Judy Gibson's "You're Putting Me On" Socks.

<http://tiajudy.com/putmeon.htm>

This was the first toe-up sock pattern I ever encountered, and it's a good one. Its one flaw is that you pick up stitches under the heel, and you can feel that ridge when wearing them. But the gussets help improve the fit for some people.

Brook Chenoweth Creel's "Widdershins" Socks.

<http://www.knitty.com/issuesummer06/PATTwiddershins.html>

Very similar to Gibson's pattern. Heel is better, but trickier. I recommend Mel Vassey's generic version of Widdershins since it's adaptable to different sizing options.

<http://cabezalana.blogspot.com/2007/01/widdershins-generic-version.html>

Kelly Petkun's "Two at Once, Toe-Up Sock"

<http://www.knitpicks.com/kpimages/pdf/50417220.pdf>

This sock uses an "Afterthought Heel," which is extremely easy and very attractive with self-patterning sock yarns. However, I think the heel cup in these instructions is too shallow. Dawn Brocco's adaption fits much better, <http://www.dawnbrocco.com/techniques.html#heels>.

Mary Lycan's "Sherman Sock"

<http://www.knitlist.com/2002/ToeUpSock.htm>

Another short row heel method, using stitch "encroachment." I didn't care for the final product, but it's worth trying for yourself. As with Widdershins, I recommend Mel Vassey's Sherman Sock Pictorial, <http://cabezalana.blogspot.com/2007/04/sherman-short-row-sock-pictorial-tour.html>

Short Rows

There are many methods for closing the gaps that form when you knit short rows. Véronik Avery wrote a great article for *Interweave Knits* (Winter 2004, p96) that describes them in detail. I thought the Japanese Method -- using a safety pin to mark the turning yarn -- looked the best, but all those pins hanging there make it cumbersome to do. Some online instructions:

- http://nonaknits.typepad.com/nonaknits/2005/04/japanese_short_.html
- <http://www.knittinguniverse.com/xrx/athena/tipdetail.php?ID=3310>
- http://www.purlwise.com/2004/08/japanese_shortr.html