

Rotary Potato Knits

Knitting recipe for Ember Crop



Designed and drafted by Rotary Potato

Ember Crop is a quick and easy backless crop top with a little bit of bold texture, a little bit of mosaic colorwork, and a lot of i-cord.

I had some yarn I loved and too much work to do anything other than ignore it and start a new project. From that spark of love and procrastination came the Ember Crop. It is worked flat, from the top down, and is the epitome of cool and comfortable summer lounge wear.

This recipe is just a slightly cleaned up version of my working notes, to help you along if you want to make your own Ember Crop. This is not a carefully crafted, edited, or tested pattern. Your mileage will vary.

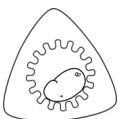
Before you begin

Needles

US 4 for main work, US 2 for I-cord straps and bindoff (or 2 sizes smaller than the main needle size)

Yarn

Size Medium took about 230 yards total in sport weight yarn, approximately equal amounts of each color. 2 colors. Yarn characteristics: approx 130yd/50g, sport weight yarn that is next-to-skin soft and reasonably strong.



I used stash yarn that had been calling out to me for over a year to be paired together into something, but I only had 50g of each so it needed to be a small project.

MC: Lang Yarns Omega, 50% nylon/50% acrylic, plied yarn, 130m/50g. Unknown color name, but it looks like a medium heather grey.

CC: Schoeller+Stahl Bahia, 50% viscose/50% acrylic, plied yarn, 106m/50g. Unknown color name, but it looks like a deep tangerine.

Gauge

My gauge was about 6 st/in (24 stitches per 4in or 10cm) and 8 R/in (32 rows in 4in or 10cm), and the numbers in this recipe are based on getting a gauge close to that. This recipe is flexible, and the nature of the garment means that the fit is highly flexible by just adjusting the way you tie the straps when you wear it, so you don't have to be super accurate about getting this gauge.

If your gauge is significantly different, you may need to adjust some numbers accordingly. I give customizable measurements in the pattern so you can work according to the gauge you get when you use the yarn and needles you want, rather than being locked into matching mine.

Size

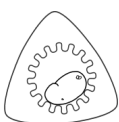
Flexible fit that is based on your actual chest measurement, trying on as you go, and adjustable straps in the final garment. My chest is about 36 inches (I typically wear a US Medium), and I think you are likely to get a good fit from this recipe if your chest is within about 10 inches of that size. But I haven't tested it, so no promises.

If your chest circumference is larger than about 46", you may need to make some more significant modifications. I am looking to learn more about designing to fit larger bodies, so I am eager for feedback on fit with this recipe, and I may be able to help with knitting math if you want support with making adjustments for a larger chest.

Please DM me on instagram @rotary.potato or email me at armadillidiidae [at] gmail [dot] com if you are crafting for a chest of about 45 inches or larger and want to work with me on adjusting this design to fit you. I am a one-person operation and a fairly new knitting designer, so I can't promise anything but I will do my best.

Abbreviations

p, k	purl, knit (as in k6 = knit 6; p2 = purl 2)
st, sts	stitch, stitches
R, SR	Row, Short Row
BE, BM	Before End, Before Marker (as in, k to 3BE = knit to 3 stitches before end; k to 2BM = knit to 2 stitches before marker)



sl1^	In German short row: with yarn in front, slip the first stitch on the passive needle to the active needle, and pull yarn tight up and over the active needle to be behind the work, making the stitch look kind of doubled
p1^, k1^	In German short row: purl or knit the sl1^ as one stitch (even though it looks kind of like 2 stitches)
pm, rm	place marker, remove marker
m1	make 1 by pulling up a loop from the yarn that runs between the last stitch worked and the next stitch on the passive needle, and knitting or purling into that loop
kfb	knit into the front and back of the stitch to increase 1
k2tog, ssk	knit 2 together, slip-slip-knit; either of these makes a 1-stitch decrease
MC, CC	Main Color yarn, Contrast Color yarn

Recipe

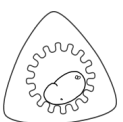
A lot of i-cord

This design uses long i-cord straps, and the final bind off is an i-cord bind off. The initial i-cord length is approximate, so keep the stitches live to allow for easy adjustment when you are fitting the final garment.

- Using the **smaller needles and MC, provisionally cast on 2 stitches** (I did a simple wrap around a safety pin held against my needle, so the pin secured the live side of the stitches.
- Work a 2-stitch i-cord long enough to wrap loosely around fullest part of chest (for me ~3')
- Increase to 3 stitches (I used a kfb) & place locking marker to indicate which row the increase happened. The upcoming 3-stitch i-cord section will be the basis for the picked up neck stitches to begin the front of the garment.
 - Easy neck measurement: wrap tail of i-cord loosely around base of neck to measure circumference. Fold in half and place marker to mark that half length from the tail, to temporarily record the length of half your neck circumference. (for me ~6")
- Work at 3 stitch i-cord for length of half neck circumference and place locking marker to mark end of neck (can remove the marker from the tail: once 3-stitch section is worked and marked at half neck circumference, no longer need the measurement on the 2-stitch tail)
- Decrease to 2 stitches (I used a k2tog), work 2-stitch i-cord to match the length of the other 2-stitch leg, pin live stitches and cut yarn

Top-down front panel

→ boldface used below to visually highlight **rows that will be referenced later** in pattern



I-cord cast on

Ok, it's really just a pick up and knit from the icord you already made

MC, still using the smaller needles: pick up and knit 3 of every 4 stitches (PUK 3:4 sts) between the neck markers on the 3-st section (I picked up 37sts), then switch to the larger needles for the body of the garment

Short row shaping for neckline

w = k if in first 4sts of row, otherwise w = p

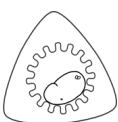
- SR1: w2, turn
- **SR2: sl1^, pm, k to E**
- **SR3: w to m, rm, w1^, w3, turn**
- SR4-9: repeat SR2-3 thrice more (last sl1^ is on the 11th stitch in)
- SR10: k4, p to m, rm, p to 4BE, k4
- SR11: k2, turn
- **SR12: sl1^, pm, w to E**
- **SR13: k to m, rm, k1^, k3, turn**
- SR14-19: repeat SR12-13 thrice more

Main Color dominant

- R1 (RS): **K4, m1, K to 4BE, m1, K4** (work sl1^ as k1^ and remove marker)
- R2 (WS): **k first and last 4 sts, p the rest**
- R3: **K all stitches**
- even rows R4-16: as R2
- R5: as R1
- R7: as R3
- odd rows R9-15: as R1
- **R17-18, Garter ridge: hold CC and MC together, k all stitches both rows**
 - The held-double yarn can make the garter bump at the edge more prominent. to minimize this, the first and/or last stitch or two of the row can be knit with just the MC, then add in CC for the remaining stitches

Throughout the garment, you'll work a garter ridge every 1.5-2 inches. For your particular row gauge, count up how many stitches are in your desired gap size, and continue to work that number of rows between each garter ridge. These recipe notes are based on my own row gauge (about 8 stitches per inch) and preferred gap size (a garter ridge every 2 inches), so I place a garter ridge every 16 rows. If yours is significantly different, you will want to adjust the row count between garter ridges accordingly.

- R19-32: odd rows as R1, even rows as R2
- R33-34, garter ridge: as R17-18
- 35-50: as R17-34



- R51-54: as R1-2

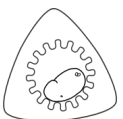
Mosaic transition

Begin mosaic section to transition colors from MC dominant to CC dominant



Notes:

- If you don't want to do mosaic, it's definitely fine to simplify this for yourself and do simple stripes alternating between MC and CC (as R1-2 for each stripe) for a few rows, or even just to do an abrupt transition by dropping the MC after an even row and switching to CC for the remaining rows. Regardless of how you transition, there are the same number of rows in this section between garter ridges as there have been in the previous sections.
- Depending on how many stitches you actually have at this point, you may need to work different partial repeats at the beginning and end of the pattern section in each row (between the 4-st garter borders) to achieve the intended design. See guidance below each row instruction for how that row's repeat should align with the previous row's repeat.
- When worn, this part of the work is almost to the largest part of your chest, so you want to be extra sure the 3-stitch float isn't going to restrict the stretch of the garment here. When you k1 after sl3, spread the 3 slipped stitches out on the active needle to ensure the float will be long enough to accommodate the distance those 3 stitches want to stretch.
- All slipped stitches should be slipped purlwise (without twisting), with the yarn held on the WS of the work. None of the floats should appear on the RS.



- R55, long float mosaic row, CC: k4, m1. Begin 4-stitch repeat: * k1, sl3. Repeat to 4BE, m1, k4
 - If desired, count the stitches between the garter borders and divide by 4. The remainder is how many stitches you have to balance at the beginning and end of the row to center the pattern. This is such a short repeat that I find it doesn't really change the appearance much if you choose not to bother centering the pattern. Wing it if you're lazy like me - it may not look "perfect" but it will still look good.
- R56, short float mosaic row, CC: k4, *1-3 stitch partial repeat if needed*. Begin 4-stitch repeat: sl1, p3. Repeat to 4BE, k4.
 - The sl1 in the repeats in this row should line up with the center of the 3 slipped stitches from the repeats in the previous row, and the center of the p3 in this row should line up with the k1 from the repeats in the previous row.
- R57, short float mosaic, MC: k4, m1, *1-3 stitch partial repeat if needed*. Begin 4-stitch repeat: sl1, k3. Repeat to 4BE, m1, k4.
 - The sl1 lines up with the center of every other cluster of 3 CC sts from the previous row.
- R58, short float mosaic, MC: k4, *1-3 stitch partial repeat if needed*. Begin 8-stitch repeat: sl1, p7. Repeat to 4BE, k4.
 - The sl1 lines up with every other slipped CC stitches from the previous row.
- R59, short float mosaic, CC: k4, m1, *1-3 stitch partial repeat if needed*. Begin 4-stitch repeat: sl1, k3. Repeat to 4BE, m1, k4.
 - The sl1 lines up with the MC post that goes between the CC clusters.
- R60, short float mosaic, CC: k1, *1-3 stitch partial repeat if needed*. Begin 4-stitch repeat: sl1, p3. Repeat to 4BE, k4.
 - The sl1 lines up with the sl1 from the previous row.

Cast on underarm stitches at end of R60, CC: Take one of the i-cord straps and fold it in half to give approximately half your chest circumference, and compare to the width of the work so far. At the end of R60, Cast On half the difference in stitches.

- Example: For me, the full length of a strap (my full chest circumference) is about 3 feet, so half of that is about 18 inches.

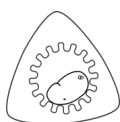
I loosely spread my live stitches out on the cable of my needle to approximate the width it would be at this point when finished. I lined up the end of the strap with one end of my live stitches, the half strap (~18") extended about 14 stitches beyond the other end of my live stitches (the difference was ~14 sts).

Half of 14 stitches is 7 stitches, so I cast 7 stitches onto my active needle at the end of R60, and again at the end of R61.

Contrast Color dominant

Mosaic transition done, use only CC from now on unless otherwise noted.

- R61: k to end, cast on the same number of stitches as CO at end of R60.



- R62: k the newly CO sts plus 2 of the sts from the established 4-st garter border. p the last 2 sts in the established border section, and p to the beginning of the next border. p the first 2 sts in the established border section, and k to end.
 - On every even row for the next few rows, decrease the width of the garter border section by 2 more sts until you are back to a 4 st-wide garter border

Buttonholes

- For the rest of the work, add buttonholes to the garter stitch border every half inch to one inch, depending on your preference and how long you intend to make the crop top. You ideally want to end up with an even number of buttonholes on each edge, but there's an easy cheat for fudging an extra buttonhole during bindoff if you've wound up with an odd number.

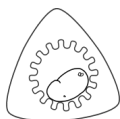
This is a two row buttonhole over the 2 center stitches of each garter border.

Instructions cover the first 4 or the last 4 stitches of a given row.:

- Buttonhole row 1: k2. Begin repeat: k1 and pass the second stitch on the active needle over the k1 (bind off). Repeat once (bind off a total of 2 stitches).
 - After completing this row, the 4-stitch garter stitch border at each edge should have the middle two stitches bound off, with stitch 1 and stitch 4 still active.
- Buttonhole row 2: k1, backwards loop cast on 2, k1.
- R63-64, buttonhole:
 - Work buttonhole as above in the first 4 and the last 4 stitches of the row
 - Otherwise, work R63-64 as R3-4
- R65-98, CC: Continue established frequency for garter ridges (R65-66 , R81-82, and R97-98: work as R17-18) Otherwise:
 - Odd rows: knit all stitches
 - Even rows: Continue reducing width of garter border if needed, as instructed after R62, until it is 4 stitches wide. Otherwise work as R2.
 - Continue working buttonholes every ½ to 1 inch as instructed above
- Depending on your row gauge and how long you want the finished garment to be, you may perform more or fewer repeats of the R65-80 section. End with a garter ridge about 2-3 inches shorter than you want the finished top to be.

Optional body shaping

The straps of the tie back for this top mean there is a lot of room for adjustment and fit customization each time you wear the top. If you prefer a top with more shaping in the garment itself, here are some pattern adjustments you can make for that. (For me, the difference between the fullest part of my chest and my underbust is about 3 inches, and I decreased in every other odd row in the last 16-row stockinette section.)



If the difference between your chest measurements at the fullest point of your chest and your underbust or waist is about 3 inches or more, you may want add some shaping after the work is long enough to hang about an inch or so past the fullest part of your chest when you hold the neck where you want the neckline to lie.

Shaping: decrease one stitch on each edge (just inside the garter border, to mirror the increases in the top half of the garment) on every odd row or every other odd row. If you will be going for a longer total length of the top, or if the measurement difference is on the smaller side, decrease less frequently. If you will be going for a shorter total length of the top, or if the measurement difference is on the larger side, decrease more frequently.

Once the top is nearly as long as you want it to end up, and you have worked the last garter ridge about 2-3 inches shorter than finished length, work the 2x2 rib hem.

2x2 rib hem

This will help keep the bottom of the crop top from rolling, and functions to pull in the bottom of the work slightly, to counterbalance the stretch pressure from the back tie.

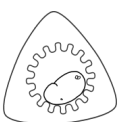
Ideally you want the first three and last three stitches to be knit columns on the RS, with everything in between as 2x2 rib. This means you want the total stitch count to be a multiple of 4. If you care about the symmetry of your hem, count your stitches here and use the following transition row to decrease or increase the stitch count accordingly.

I had 83 stitches, which is a multiple of 4, plus 3. So I decreased 3 stitches in R99 by using k2tog for the first 2 decreases and ssk for the 3rd decrease.

- R99, transition row: knit all stitches, with evenly spaced increases or decreases if desired, to end with a stitch total equal to a multiple of four.
- R100: p3, k2. Begin repeat: p2, k2. Repeat to 3BE, p3.
- R101: k3, p2. Begin repeat: k2, p2. Repeat to 3BE, k3.
- Repeat R100-101 until hem is about 2-3 inches, or total garment length is pretty much as long as you want it. Continue adding buttonholes at your desired frequency.
- Repeat R100, but work the last stitch as kfb.
- Count your buttonholes. If you have an even number on each side, good! You paid better attention than I did! Skip the rest of this step and move on to the Bind Off instructions.

If you have an odd number, not to fret, you can use the i-cord bind off to fudge a last buttonhole at each end of the row:

- Beginning of row: Work a 2-stitch icord starting with the kfb stitches you got from the last stitch in the last row before bind off. Work for about 5 rows, then move right into the icord bind off below. This creates a small loop at the start of the bindoff: bonus buttonhole!
- When you get to the end of the bind off row, instead of k2tog the last 2 active stitches, work a few more icord rows to match the number worked in the loop at



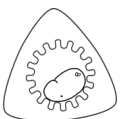
the beginning of the row. When long enough, slip the 2 stitches back to the passive needle and k2tog. Cut the yarn leaving at least a 2-3 inch tail, and pull through the loops to secure. Use the tail to secure the end of the icord to the edge of the garment to create a buttonhole loop matching the one at the beginning of the row.

- Bind Off: 2-st icord BO. Use the smaller needle size for your active needle. Because of this size difference, when you slip the stitches from your active needle to the passive needle, you may want to keep them near the tip of the passive needle so they are still on the taper rather than pushing them up onto the full circumference of the larger needle.
 - Begin repeat: k1, k2tog, slip the two stitches just worked back to the passive needle. Repeat thrice. K2, slip the 2 stitches back to the passive needle.
 - Repeat the above process of binding off 4 stitches then adding a 5th i-cord row that doesn't bind another stitch off, until no live stitches remain on the passive needle (before slipping the just-worked stitches back over).
 - Slip the 2 stitches just worked back to the passive needle, and k2tog. Cut the yarn and pull through the loops to secure.

Almost done! Block, then weave in ends, and try on.

To wear: drape the garment over your chest-region, roughly where you want to wear it. Cross the neck straps in the back two or three times, and thread through the buttonholes on the side, from top to bottom. Either tie at the sides here, or bring the straps to meet in the back and tie behind you.

Finally, adjust the length of the straps. If the current length already works for you, slide the yarn tails through the live stitches at the end of each strap and tie off. Otherwise, it's super easy to unravel a few stitches to shorten the final strap or pick up the live stitches and work more rows to lengthen the strap.



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