## Chapter 432

## OPTIONAL SHAPING TWEAKS

This chapter is completely optional. If your shaping preferences have already been explained in chapter 430, then just skip this chapter or save it for a rainy day.

If we want to tweak a project's shaping in some way, then we can use charts to help us change the shaping to our preferences. This chapter will continue to use the size small vest from chapter 410 and its original charts from chapter 430.

## Binding Off at Both Ends of a Row

If we don't mind weaving in extra ends, or if we're working in bulky yarn where it will be obvious even to non-knitters that the heights of the left and right shoulders differ by one row, there is an alternative to binding off only at the beginning of consecutive rows.

## The Vest Back Shoulder Shaping

We can * bind off at the beginning of the first public-side shoulder shaping row in the normal way, work most of the way across the row, then bind off the last stitches of the same row. We will then have to break the yarn to secure the final stitch. We start the private-side row at the stitch closest to the broken-off tail, and work the row evenly. We turn, then repeat from *.

In this method, the chart would show bind-offs at the beginning and end of the publicside rows, and the private-side rows would be worked evenly.


To bind off the last few stitches of a row, we have to leave one less stitch on the source needle. So since we bind off three in the size small vest, we work until two stitches remain on the source needle. Let's refer to those two stitches as Wilma (the one closest to the source needle's tip) and Fred. The third stitch from the end of the row is already on the working needle. We'll call that stitch Pebbles. We work Wilma, then bind off Pebbles over Wilma. Then we work Fred, and bind off Wilma over Fred. We finish by breaking the yarn and pulling the tail through Fred.

Once we bind off the last stitch, we break the yarn for two reasons. First, we need a tail to pull through and thus secure the final stitch. Second, the nearest live stitch is, in this case, three stitches away. If we don't break the yarn, and even assuming we secure the last stitch with a separate piece of yarn instead of the broken-off tail, we'll have a long strand across the private side from the end of the row back to where we'll start the next row at the closest
live stitch. We could somehow catch or otherwise bury that strand in a seam, assuming one is nearby. But if we're doing this technique because we're working with a bulky yarn, we wouldn't want that extra strand.

So we have to rejoin to one of the live stitches at either end. If we ${ }^{* *}$ rejoin at the end of the row (that is, in the stitch closest to where we broke off the yarn), we work evenly the private-side row, turn, and bind off at the beginning and end of the public-side row. We break the yarn, and repeat from ${ }^{* *}$.

This technique can be substituted in any situation where we bind off at the beginning of consecutive public- and private-side rows, like in shoulder shaping or at underarms. ${ }^{1}$

## The Vest Front Shoulder Shaping

We could do the same technique on the front if we really need to have the same number of rows on both the left and right front shoulders. On one front shoulder we'll $\dagger$ bind off at the beginning of a public-side row close to the armhole, work to the neck edge, turn, work evenly, turn, and repeat from $\dagger$. In other words, one shoulder will be worked the exact same way as we did before in chapters 410 and 430.

But to work the other front shoulder, we'll $\dagger \dagger$ work a public-side row starting at the neck edge and bind off at armhole edge. There we'll break the yarn and pull the tail through the final stitch. We restart with the stitch closest to the broken-off tail, work the private-side row evenly to the neck edge, turn, and repeat from $\dagger \dagger$.

## Smoothing Out Shoulder Bind-Off Stairsteps

Some knitters like to do a decrease at the end of a row when stitches will be bound off at the beginning of the following row. Doing the decrease at the end of a row helps smooth out the shoulder shaping. This variation is easy to chart, especially if, like me, you would be inclined to forget to do the decrease. When we decrease at the end of a row, we bind off one less stitch at the beginning of the next row, since that one stitch was already decreased away.

The easiest way to chart this variation is to start with the original chart that shows the full number of bind-offs at the beginning of each row.

${ }^{1}$ I think. My knitting imagination can go only so far, and this technique is right at the edge.

Let's just look at the right edge of the chart, from stitches fourteen through twentyeight, showing the as-written instructions.


What we want to show is that at the end of a row just before a row that starts with bound-off stitches, we will decrease one stitch. We'll show that by changing the symbol below the first bound-off stitch to a decrease slanting in the proper direction (we chose to make the decrease slant point at the diagonal edge of the fabric).


Since that decrease means we have one less stitch to bind off, we'll turn the bind-off symbol above each decrease to a blank space, indicating that that stitch is no longer there and that we bind off one less stitch.


Note that row B8 does not end with a decrease, since that's the last row we work on the back; there will be no row B9.

We can do the exact same modifications at the left edge of the chart, indicating the back's left shoulder shaping. The next chart shows the last fifteen stitches of the as-written shoulder shaping.


First we change the final knit symbol on each odd-numbered row to be a decrease pointing in the direction we want.


Then we change the bind-off symbol above each decrease to be a blank space, since we'll only bind off two stitches at the beginning of the even rows.


Here's the complete chart with smoothed shoulder decreases.


Compare the chart above to the complete shoulder shaping chart at the beginning of
this section, where three stitches were bound off at the beginning of the eight rows. Even on paper, the end-of-row decreases make the shoulder shaping look less jagged. ${ }^{2}$

## Short-Row Shoulders

For knitters who like to short-row the shoulders in preparation for a three-needle bind-off or to Kitchener/weave/graft the live stitches together, we can also chart that technique.

Here we'll look at wrap-and-turn short rows, using the symbols under the $<$ and $>$ keys. There are two ways we might think of to convert from bind-offs to wrap-and-turn short rows, but only one will give the correct stitch count at the end.

## Option 1: Leave One More Stitch Than We'd Bind Off

Since we're supposed to bind off three stitches at the beginning of eight rows for the size small, we might decide to stop short with four stitches to go, then wrap that fourth stitch, which means we leave unworked the three stitches past the wrapped stitch, the three stitches that we'd have bound off on the next row.


Note that we worked the first few stitches of row B1 in the ordinary way because short rows shift the shaping from the beginning of a row to its end. And even though we're keeping on the needle the three stitches at the end of row B1, we're not showing them in the chart because they remain unworked for the moment. (The same blank area will appear at the end of all the rows, indicating all the stitches left waiting.)

We turn and work back, where we'll again leave the last four stitches (one more than we would have bound off on the next row) unworked, wrapping the fourth stitch from the end so that the three stitches we would have bound off remain past the unwrapped stitch.


For the next six rows, we keep stopping four stitches (one more than we're supposed to bind off on every row) before the previous turning point, so that when we're done, there are three stitches between all the wrapped stitches. Let's now look at the shoulders and back neck.

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Counting between the wrapped stitches on the last two shaping rows, the back neck goes from stitch thirty through stitch sixty-two inclusive, which is only thirty-three stitches, eight stitches narrower than it's supposed to be per the instructions in chapter 410. At our design gauge of five stitches per inch, the back neck will be roughly an inch and a half narrower than the schematic shows, at just 4.5 inches wide after the neck ribbing is added. That almost certainly won't be wide enough to fit even a small adult comfortably (though it may possibly work if we want a sort of mock turtleneck back there).

## Option 2: Leave the Same Number of Stitches We'd Bind Off

Since our directions are to bind off three stitches at the beginning of eight rows, in this option we will work to that same number of stitches before the end of the row, wrap the next stitch (leaving only two stitches past the wrapped one), then turn.

Again, we're not doing the shaping at the beginning of each shoulder row. That's why row B 1 shows its first few stitches worked.


The wrap symbol is in the place of the third stitch from the end, leaving the two stitches past it unworked. They're still there on our needles, but since we don't work them on row B1, they are not shown in the chart.

We turn and work row B2 almost to the end, where we again stop with three stitches to go (the number of stitches we're supposed to bind off at the beginning of the next row). We wrap that third stitch and turn, leaving the two stitches past the wrapped one unworked for the time being.


We continue working this way, counting back to the third stitch before the one wrapped previously, wrapping it, and turning. In this option, we wind up with two stitches (one less than we'd bind off) between all the wrapped ones.


Note that the back of the neck, which we again measure between the wrapped stitches of the last two shaping rows, goes from stitch twenty-six to stitch sixty-six inclusive, which is forty-one stitches, exactly as the instructions specify (and the same as the original bind-off chart shows).

## Conclusion for Wrap-and-Turn Short Rows

We can see from charting both options that for wrap-and-turn short rows, we need to use option two: we stop short the same number of stitches we're supposed to bind off on the following row, wrap the next stitch, and turn.

In the larger sizes, we sometimes bind off four stitches. On those rows, we would work to four stitches before the last wrapped stitch, wrap that fourth stitch (and thus leave the three after it unworked), then turn.

## Slipping the First Stitch After Turning

Some knitters like to slip the first stitch after wrapping and turning, because the slipped stitch stretches upward to help smooth the transition point where one row becomes two rows. We can chart that detail as well by simply changing the first knit symbol on each row to the slip symbol under the s key.


## Other Short-Row Techniques

Some knitters loathe wrap and turn, so they will use other types of short rows. Those techniques can be charted as well so that we can make sure we turn at the proper spots. ${ }^{3}$

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## Tweaking the V-Neck Slope

What if we want our V-neck's diagonal slope to continue all the way to the shoulder instead of having a vertical segment between the end of the neck decreases and the top of the shoulder? If we know our row gauge and the exact armhole depth we want, we can adjust the rate of decreases to make the neck edge go straight from one spot to the other.

Let's keep our armhole depth of nine inches and our working gauge of seven rows per inch, which means we need sixty-three rows. As before, we'll bump that to sixty-four, and when we add the number of shoulder rows, we have a total of seventy-two rows from the bottom of the V to the very top of the front neck. We still have the same number of decreases, twenty, to make on both sides of the front neck, but we have to space them farther apart so that it takes more rows to complete the V-neck decreases. So the question is, How often do we now make the decreases?

We know that decreasing every other row uses forty (technically thirty-nine) rows.
If we decrease every third row, so that we work a decrease row then work two rows evenly (working evenly only at the neck edge, that is, since we'll still be doing underarm decreases on the first few rows), we'll need twenty decrease rows times three, which is sixty rows (technically fifty-eight, since we wouldn't do the two plain rows after the final decrease row).
迫 If we decrease every four rows (one decrease row followed by three rows worked evenly at the neck edge), then we need twenty decrease rows times four, for a total of eighty rows (technically seventy-seven, because we wouldn't do the three plain rows after the final decrease row).

We can't do any of these options exactly as written in the seventy-two rows we have available, so let's put on our designer hats and figure out what we can do.

## Option 1: Deepen the Armhole

We can make the armholes several rows deeper-six, as it turns out-while we do the neck decreases every fourth row. With those six extra rows, the new armhole will be deeper by a bit less than an inch at our working gauge of seven rows per inch. Since it's a vest that we may well want to wear over a shirt, the additional rows give the shirtsleeve's fabric some extra space at the underarm.

Note that in row seventy-seven, while doing the bind-offs on the left shoulder, we SSK the last two stitches as we bind them off.


If there's any chance we'll ever want to wear the vest without a shirt, though, then the extra depth in the armhole may, well, show things we don't really want to show.

## Option 2: Do an In-Between Decrease Rate

If we want to keep a nine-inch armhole and therefore the original seventy-two rows, that means we have to decrease one stitch every 3.6 rows (seventy-two rows divided by twenty). That's very close to one stitch every 3.5 rows, which we could achieve by doing a decrease row followed by two plain rows, then a decrease row followed by three plain rows. That combination would decrease two stitches every seven rows. If we do ten such combinations, we will decrease twenty stitches in seventy rows. Close enough!

Since we chose to do SSKs on the left neck's public-side rows, we'll do SSPs there on private-side rows. On the right neck, where we do K2togs on the public-side rows to mirrorimage the left neck, we'll do P2togs on the private-side rows (see chapter 160 for directional purl decreases).


## Option 3: Change the Shoulder Stitch Count

We could adjust the final stitch count on the tops of the shoulders (stitch count $s$ in appendix 528) so that we have a narrower shoulder width when we finish the neck decreases. If we switch the decrease rate to one stitch every third row for all seventy-two armhole rows, that will decrease twenty-four stitches (seventy-two rows divided by three). That's just four stitches more than designed, so the shoulders will each be narrower by just over three-quarters of an inch at our working gauge of five stitches per inch.

In the designed shoulder shaping, we have twelve stitches on each front shoulder and bind off three stitches at the beginning of the eight rows that start near the armhole edges. Losing four stitches on each shoulder to allow neck decreases to continue all the way up means we have only eight stitches left at the top of each shoulder. We would have to adjust the shoulder shaping, and one way to do so would be to continue to bind off three stitches at the armhole end of each shoulder row, which we could do twice, then bind off the last two shoulder stitches and the last neck stitch during the final row on each shoulder.

That means we're now doing the shoulder shaping over only six rows instead of eight. Losing two rows on the shoulder shaping in turn goes back into the total number of armhole rows (!), so we now have only seventy rows at the top of the neck. Seventy rows divided by
decreases every third row means we'll actually decrease only twenty-three stitches on each side. Close enough!

Note that in the next chart, four of the shoulder stitches on each side have been moved to the adjacent column containing the neck stitches. That change reflects the fact that we'll have four fewer stitches at the top of the shoulder and that we're decreasing more stitches along the neckline.

Also, we have to do directional purl decreases on private-side rows, as described in option two.


We could also change the shoulder shaping to bind off just two stitches at the beginning of each row, which would use exactly the eight stitches we have left and also fit perfectly in the original eight rows. Since we add those two rows back to the shoulder shaping, we also get to do the twenty-fourth decrease on each neck edge.


## A Different Kind of Option: Start the V-Neck Decreases Later

We could delay the V-neck's starting point so that it ends at the last shoulder row instead of
starting at the first armhole row. The designed twenty decreases every other row are completed in forty rows. So where do we begin the front neck decreases? Since the neck edge of the armhole will be seventy-two rows tall and the neck decreases use forty rows, we subtract forty rows from seventy-two rows, then add one to get the inclusive row number. We there fore start the neck decreases on armhole row thirty-three instead of armhole row one.

As in option one, we have to work an SSK as we bind off the final two stitches on the left shoulder.


However, the wearer's head may or may not fit through this raised neckline, especially after the neck ribbing is added. ${ }^{4}$

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[^0]:    ${ }^{2}$ Some of you may have done some counting in this smoothed shoulder shaping chart. Yes, you're correct; this chart, like the original bind-off shaping chart it comes from, is technically wrong in how many knit symbols are shown. If you really want the gory details, then check out appendix 529 .

[^1]:    ${ }^{3}$ Charting other short-row techniques is—cough—left as an exercise for the reader. And nope, there are no answers in appendix 510.

[^2]:    ${ }^{4}$ My imagination simply fails me in this situation.

