

Chapter 11

THE NO-STITCH SYMBOL

If you need immediate help with working from a chart with No Stitch symbols, skip to the section “Working from the Tweak Two Chart.”



One of the most important advantages of charts is that they show us how stitches are positioned relative to one another from row to row. Seeing those relationships helps us work each stitch of the current row above the correct stitch of the previous row.

In “Decreases” and “Increases,” we saw that for items that get narrower or wider smoothly and regularly, like mitten fingertips and toe-up sock toes, we can chart those shapings very simply. In situations where the shaping is more complicated, often because the shapings occur away from the edge of the piece, we might want to tweak the way we chart.

A Small Swatch

Let’s chart the following instructions.

SIMPLE CABLE

C6L: sl 3 sts to cn and hold to front, K3, K3 from cn.

C0 8.

Rows 1, 3, and 5 (RS): P2, K4, P2.

Rows 2, 4, and 6 (WS): K2, P4, K2.

Row 7: P2, K1, inc, K2, inc, K1, P2.

Rows 8, 10, and 12: K2, P6, K2.

Row 9: P2, C6L, P2.

Row 11: P2, K6, P2.

Row 13: P2, K2tog, K2, SSK, P2.

Rows 14 and 16: Rpt row 2.

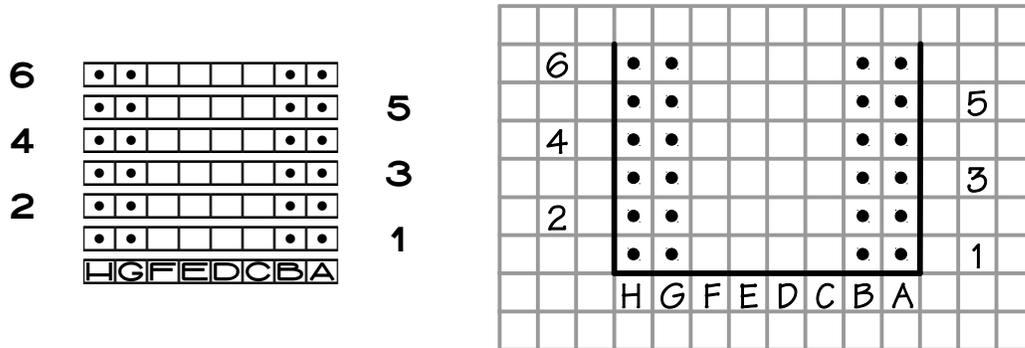
Row 15: Rpt row 1.

B0.

Starting the Chart

The first six rows are all easy, four stitches of stockinette with two stitches of reverse stockinette on the left and right edges.

The paper chart, which uses the grid cells themselves for public-side knit symbols, looks very similar to the computer version.

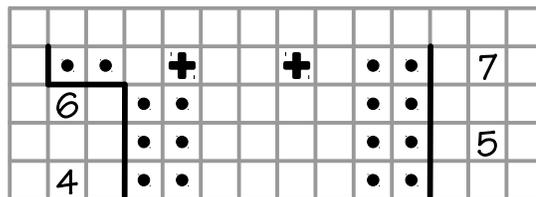


Row seven does a couple of increases, and since the written-out instructions merely have “inc” instead of a specific increase, we’ll use a generic symbol. Note that the stitch count is now up to ten.



A Hiccup on Paper

If we’re charting on paper and put row seven’s row number exactly above the previous public-side row numbers, then when we get to the end of the row, it will stick out two grid cells past row six.



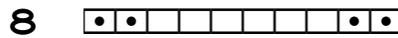
What do we do?

It would probably make sense to finish the entire chart first, because the uneven edges might not look as bad as we think they will. At that point, we would decide whether or not the chart is so intolerable that we must change it. That’s what we’ll do here: finish the chart, then look in detail at several possible adjustments.

Finishing the Chart

If we're charting on paper, the remaining rows will look very similar to these rows charted in the computer.

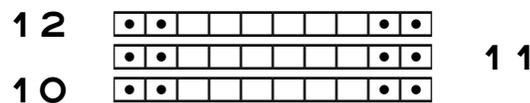
Row eight is the last private-side row before the cable.



The cable definition tells us to hold the cable needle to the front, which makes a left-slanting cable for traditional knitters. Since the unwritten assumption in written-out instructions is that we're all traditional knitters, then we **all**, traditional and mirror-image knitters, must **chart** the crossing as slanting to the left.



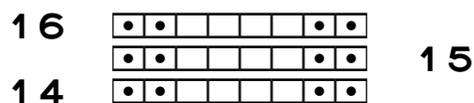
The three rows after the crossing just continue the central stockinette bordered by reverse stockinette to help minimize curling on the left and right edges of the swatch.



In row thirteen we do mirror-image decreases to get back to eight stitches. As with the cable crossing, all knitters must chart a “K2tog” as a right-leaning decrease and an “SSK” (or “SKP” or similar) as a left-leaning decrease.



Rows fourteen through sixteen repeat three of the first six rows so the top and bottom of the swatch are mirror-image.

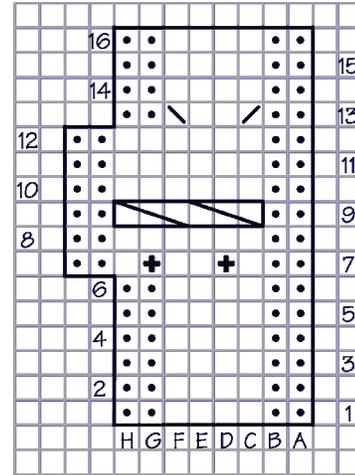
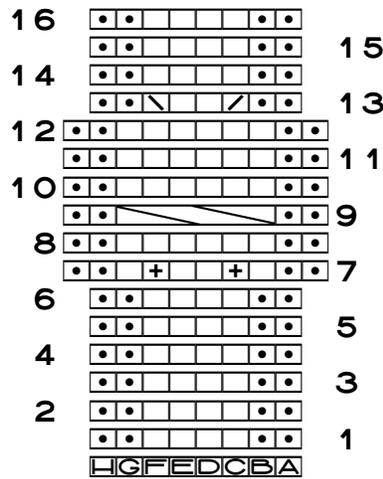


The Charts and the Swatch

The computer chart's rows are center-aligned, which is why the borders on rows seven through twelve stick out by only one stitch but do so on both the left and right edges. The computer chart rows could also have been either left- or right-aligned; the latter would look quite like the paper chart.

The paper chart reflects our decision to complete it with the right edge straight up and down, so we could see how bad it looked before deciding if we need to tweak it.

The charts' symbol key is straightforward.



<input type="checkbox"/>	Knit on RS, purl on WS
<input checked="" type="checkbox"/>	Purl on RS, knit on WS
<input checked="" type="checkbox"/>	Increase (any method)
	Cable 3/3 Left

Traditional Knitters	Mirror-Image Knitters
K2tog	SSK/SKP
SSK/SKP	K2tog

For Mirror-Image Knitters

While mirror-image knitters must **draw** the chart as though they were traditional knitters, when they pick up needles and yarn to **work from** the chart, there are two changes they must **always** make.

- MIKs must swap the decrease symbols' meanings, as shown in their part of the symbol key.
- MIKs must hold the cable needle to the opposite side of the work compared to traditional knitters. For this left-slanting cable, MIKs must hold the cable needle to the **back** of the work.

Optional Changes Yield a Big Advantage

If MIKs make both of these optional changes, they'll be able to discuss charts in detail with traditional knitters, as we'll see a bit later.

- MIKs may swap the locations of the row numbers, putting public-side numbers on the left edge of the chart and private-side row numbers on the right. (If they later need to check the chart against the written-out instructions, they must remember to

check both public- and private-side rows in the directions they were charted, not the directions they'll be worked.)

- ☉ MIKs can start stitch labels at the lower left corner of the chart, to match the direction they work public-side rows.

Observations

Both versions of the chart have some interesting details.

- ☉ Rows one through six are eight stitches wide, with eight boxed stitch letters labeling them.
- ☉ Rows seven through twelve are ten stitches wide because of the two increases on row seven. On the computer chart, there are no boxed letters labeling the first and last stitches of those rows. On the paper chart, those six rows' two left-most stitches aren't labeled.
- ☉ Rows thirteen through sixteen are only eight stitches wide because of the decreases on row thirteen.
- ☉ The chart implies that rows seven through twelve will be slightly wider than the other rows.

Against that last bullet point, however, we know that cables pull the fabric narrower than stockinette would be when made on the same number of stitches as the cable.

The swatch confirms the cable's pulling-in effect, since the swatch's left and right edges are almost perfectly straight, even though rows seven through twelve are two stitches wider than the other rows. In this yarn at this gauge, the cable pulled in enough to narrow the six-stitch cable to the width of right at four stitches of plain old stockinette.

The swatch resembles the chart to some extent. Is there any way to make the chart look more like what we get in yarn?

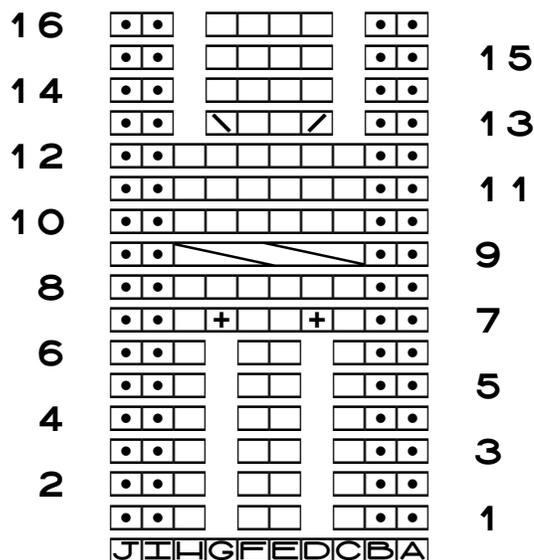
Tweak 1: Use Spaces to Spread the Symbols

Since the increases in row seven are what cause the misalignments in the reverse stockinette borders (both borders in the computer chart and only the left border in the paper chart), we'll spread out the stitches in the first six rows to indicate where the new stitches will eventually be made. We'll do the same on the last four rows to align the borders after the decreases on row thirteen.

We'll also add two more boxed stitch letters, because the widest chart row has ten stitches.

In the Computer

It's easy to make these adjustments when we chart in the computer. We simply click in the appropriate places and add the needed space characters.



The chart's reverse stockinette edges are now perfectly aligned for two reasons.

1. The stitches that don't exist before the increases are made on row seven have been indicated by vertical gaps in the first six rows.
2. The appropriate columns of knit symbols have been replaced with columns of spaces on the last four rows because of the decreases made on row thirteen. The decrease symbol's slant points at the stitch column that disappears.

On Paper

In the computer chart, there is a clear difference between the knit symbols' empty rectangles and the spots where we added ordinary space characters. Unless the font size is very small, it would be pretty hard to get confused about whether there are actual stitches in those blank areas.

On paper, though, the way we show the difference between knit symbols and grid cells used solely to align other symbols depends on how we chart knit stitches.

- ☉ If we put some kind of mark inside grid cells that indicate public-side knit stitches, then we simply omit those marks in cells that are merely aligning the surrounding symbols.

- ☉ If we use the empty grid cells themselves to indicate public-side knits, we need to mark the cells used to align the other symbols.

Let's look at several ways to handle the second bullet. Here's the same little scrap of chart showing how we initially drew row seven.

	•	•	+		+		•	•				7	
6			•	•					•	•			
			•	•					•	•		5	
4			•	•					•	•			

Since we know that we need empty columns in all the rows below the increase symbols, we push the left ends of rows one through six to the left by two grid cells.

		•	•	+		+		•	•			7	
6		•	•					•	•				
		•	•					•	•			5	
4		•	•					•	•				

Now that we have the left border stitches nicely aligned, how do we indicate that the cells below the increase symbols aren't actually knit stitches in needles and yarn? We can't leave them empty, because they look like the knit symbols we get for free from the grid.

If we're drawing all the grid lines ourselves, we still have the same problem: any cell with lines drawn on all four sides will look exactly like a knit symbol.

		•	•	+		+		•	•			7	
6		•	•					•	•				
		•	•					•	•			5	
4		•	•					•	•				

We can't simply use blank grid cells on paper like we can use space characters in the computer. The best we could do would be to somehow go back and erase the grid lines in the areas where we don't actually work a public-side knit.

		•	•	+			+			•	•						7
6		•	•							•	•						
		•	•							•	•						5
4		•	•							•	•						

Depending on how dark our drawn grid lines are, it may be hard to tell that we haven't drawn horizontal grid lines below the two increase symbols.

Our paper chart, therefore, may need to look more like the next version of the computer chart.

Tweak 2: Using No-Stitch Symbols

Now for the scary tweak. Instead of ordinary spaces, let's use...the No Stitch symbol.

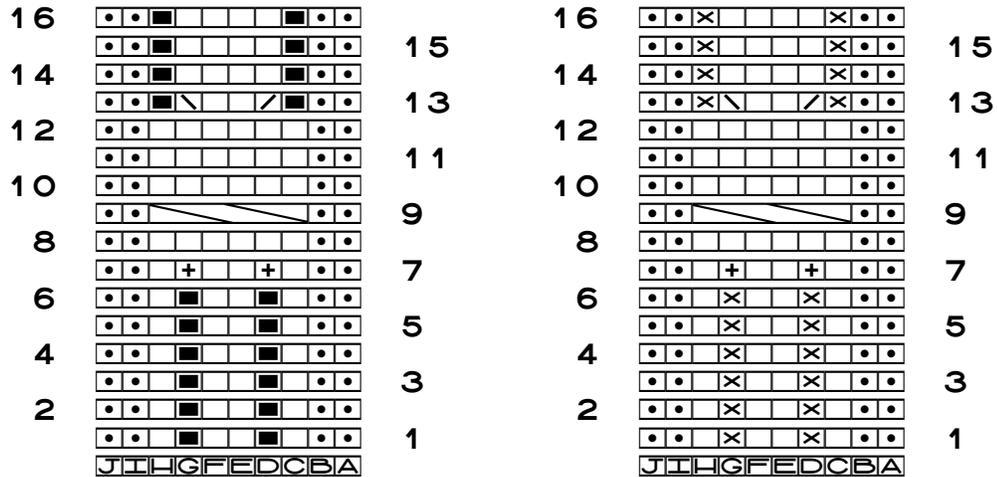
We have to add one more entry to the symbol key.

	Knit on RS, purl on WS	Traditional Knitters		Mirror-Image Knitters
	Purl on RS, knit on WS		K2tog	 SSK/SKP
	Increase (any method)		SSK/SKP	 K2tog
	Cable 3/3 Left			
	No stitch			

In the Computer

As before, adjusting a chart in the computer is a simple matter. If we start with the original chart, we click in the proper places and add No Stitch symbols. If we start with the tweak one chart, we select each space and replace it with the No Stitch symbol.

Some of us might prefer to use a different symbol. Here's the chart with a boxed lower-case x, for example.



On Paper

We had decided to finish drawing the entire chart before thinking about tweaking it. Now that it's done, let's suppose we do think it's intolerable. We have several options for improving it.

- ☞ We re-draw the entire chart. This option is impractical for large- or even medium-size charts.
- ☞ If we want the rows to be centered across the width of the entire chart, similar to the original computer chart, we now know where we should have started all the rows.
 - ✓ If the shorter rows outnumber the longer rows, as they do in this chart, we alter the longer rows.
 - ✓ If the longer rows outnumber the shorter rows, we alter the shorter rows.

Either way, we erase and re-chart the affected rows. We would also need to bend the left and right boundaries back and forth to separate them from the rest of the grid paper.

This option might best be used only on small charts or if there are relatively few rows that we need to alter.

- ☞ We can do the same kind of trick we did in the Aran sampler. There, we charted each of the stitch patterns on its own vertical strip of grid paper. Here, we cut the chart into **horizontal strips**, cutting between chart rows that don't have the same number of grid cells. Then we slide the strips left and right to the positions we want and tape them together.

If we complete the entire chart first, we'll minimize the number of strips we have to

cut, because there would be no need to cut between **all** rows, just adjoining rows that aren't the same width.

As a practical matter, if we want the rows to all be centered **while** we're constructing the chart, then we have to read through the current row's instructions and count how many grid cells it needs before we start drawing it.

- ☉ If we want the left and right edges to be aligned, we have to first cut the chart **horizontally** as in the previous option, then cut **vertically** at the places where the blocks of symbols need to be spread apart. We'll look at this option in detail in a moment, because it will raise an extra issue.

- ☉ We chart in the computer.

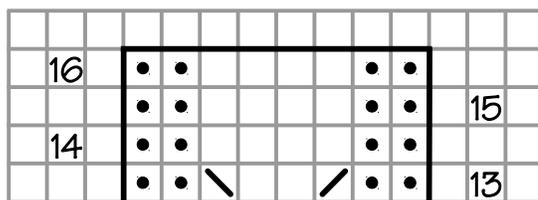
Ultimately, each of us will decide to use one of these ideas, combine some of them, or devise our own solution.

Let's look at details for the fourth option, since it will probably be the one we want to use if the project has more than a handful of stitches and rows.

Spreading Symbols Apart Horizontally

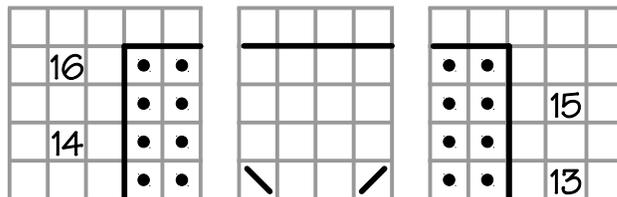
To get started, we need to cut the chart horizontally at the places where the number of symbols on adjacent rows is different.

For this chart, that means we cut below rows thirteen and seven. Here's the top part of the chart.



Now we make vertical cuts where we need to spread the stitch symbols apart, which is between the reverse stockinette borders and the center four grid cells.

Once we have these four rows in three separate pieces



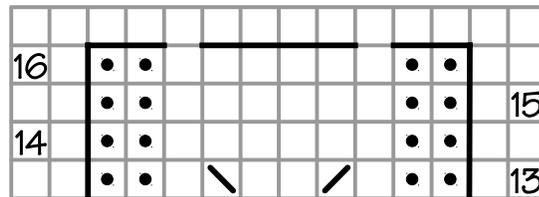
we tape them down on an extra piece of paper, leaving the width of a single grid column between them since each decrease eliminates just one stitch.¹

Use Duplicate Grid or Unlined Paper?

We could tape the chart pieces to a second sheet of matching grid paper, or we could use a sheet of unlined paper. The previous drawing shows the pieces on a regular sheet of paper.

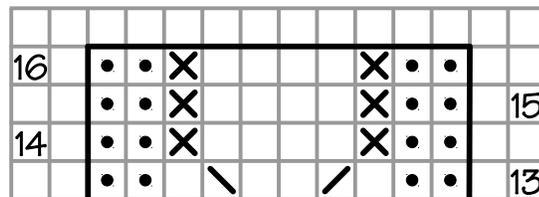
- ☉ If we use unlined paper, we must be careful to position the three pieces accurately. The easiest way to do so would be to first tape down a piece of the chart that remained whole across its width, one that we didn't have to cut vertically (or at least one that's uncut in the area where we're spreading apart adjoining pieces of the chart). Then we can use its vertical grid lines to help us spread apart smaller pieces above and below it.

- ☉ If we tape the pieces to a matching sheet of grid paper



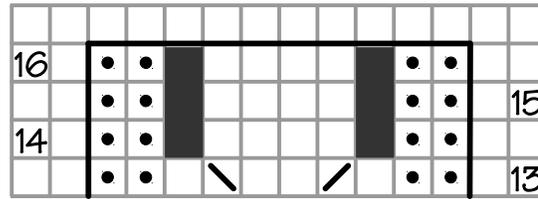
it's a cinch to position the pieces accurately, but then we have to indicate which grid cells are or are not public-side knits if we're letting the grid itself represent knits.

- ✓ We could draw the top border all the way across, then put an X in each grid cell that isn't a stitch.

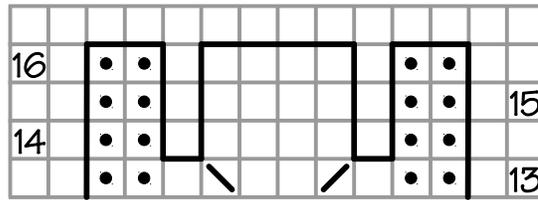


- ✓ We could fill in completely the grid cells that won't actually be stitches in needles and yarn.

¹ In other charts, we might have to spread the pieces out by two or more stitches, and the gaps between the pieces may not always be equal.



- ✓ If a blank area touches one of the chart's external boundary lines, we could draw the boundary to exclude the grid cells that aren't actual stitches.

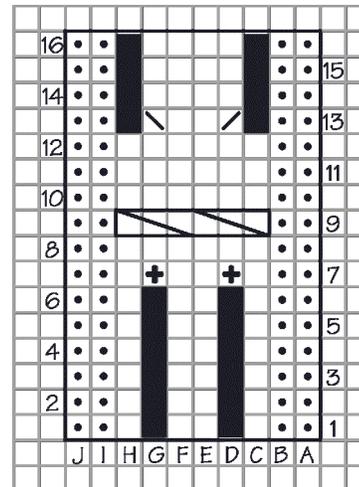


Finishing the Paper Chart

The middle section, whose six rows are all ten stitches wide, doesn't need to be cut vertically into separate pieces, so we just tape it in place below row thirteen (if we didn't already tape it down to help us position accurately the top pieces of the chart).

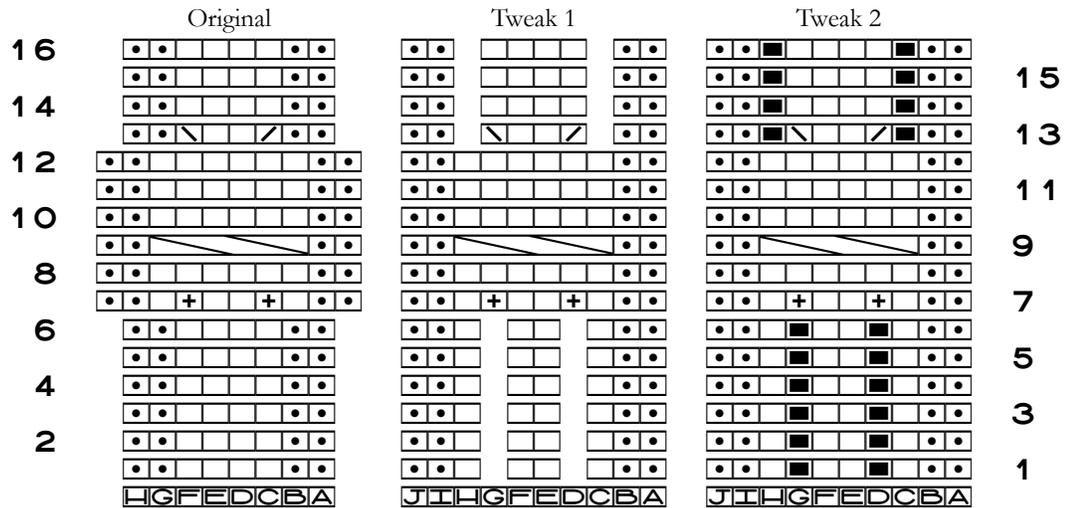
We had already cut below row seven, so now we do with chart rows one through six whatever we did with chart rows thirteen through sixteen. We cut vertically at the places where the symbols need to be separated, then tape them down below the middle section, using it to help us spread them by the proper distance.

In this version of the full chart, the grid cells that are not public-side knit stitches have been shaded in.



Compare the Charts

Let's look at all three computer charts next to one another. The tweak two chart can stand in for our final paper chart, since they look so similar.



In all three charts, we see that the essential elements are the same. The charts have two stitches of reverse stockinette on the left and right edges, with a six-stitch cable between them. The—*cough*—designer allowed for the way the cable pulls the fabric in by having fewer stitches at the top and bottom of the swatch.

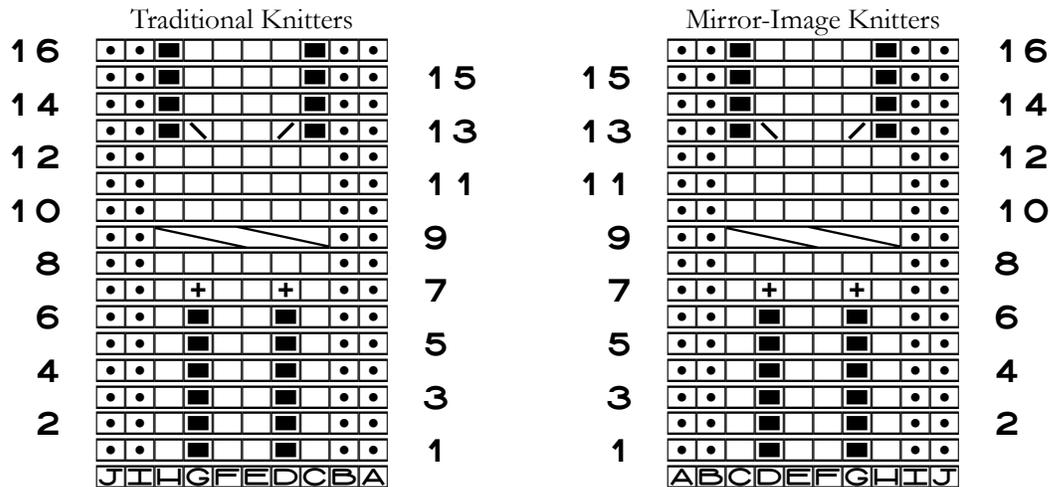
The original chart has misaligned stitches, though the misalignment is minimized because the chart rows are centered. If the chart rows were all the way to either the left or the right, they'd have one border aligned and the other border off by two stitches, just as the original paper chart had one border aligned and the other border off by two stitches.

The tweak one chart aligns the left and right borders by putting ordinary spaces between stitch symbols to spread them apart. Tweak two is the same as tweak one, except that it uses No Stitch symbols.

If we're charting on paper, the tweak one option might work if we tape the pieces to a sheet of unlined paper. Since there would be no grid lines in the gaps, it might be clear that there are no stitches there. If we tape the pieces to a piece of grid paper that matches the sheet we drew on initially and if we let empty grid cells represent public-side knit stitches, then we have to do some kind of marking in the gaps to make it completely clear that those cells aren't actual stitches.

Working from the Tweak Two Chart

Let's work through the tweak two chart row by row to see how we interpret the No Stitch symbols with needles and yarn.



	Knit on RS, purl on WS
	Purl on RS, knit on WS
	Increase (any method)
	Cable 3/3 Left
	No stitch

Traditional Knitters	Mirror-Image Knitters
K2tog	SSK/SKP
SSK/SKP	K2tog

Note that the mirror-image knitter’s chart is identical to the traditional knitter’s chart, except for two completely optional changes:

- ☉ the row numbers have swapped places
- ☉ the boxed stitch letters run the opposite direction

MIKs cannot, however, ignore the reversed definitions of the decrease symbols. They must work a K2tog to get a left-leaning decrease and an SSK/SKP (or similar) for a right-leaning decrease.

The Big Advantage If MIKs Do the Optional Changes

If MIKs do both optional changes, then **all** knitters, traditional and mirror-image, can talk in quite explicit detail about the same chart while avoiding all the annoying switching between “left” and “right” everywhere.

We can all, traditional and mirror-image knitters, make the exact same statements about this chart.

- ☉ “We start public-side rows at stitch A and private-side rows at stitch J.”

- ☉ “On row seven, we do an increase after stitch C, work two more stitches, then do a second increase.”
- ☉ “On row nine, we do a Cable 3/3 Left between the left and right borders.”
- ☉ “At location D on row thirteen, we do a K2tog, which makes the stitch at location C disappear.”
- ☉ “At location G on row thirteen, we do an SSK/SKP (or similar), which makes the stitch at location H disappear.”

Now, it’s true that **how** both kinds of knitters **perform** these operations won’t be the same, but all the **results** will be identical.

Row One

When we start working according to the chart, we read row one in the normal direction for the way we knit and see that we do P2–K1 on the first three stitches, which are sensibly labeled as A, B, and C. Then at “stitch” D, we do...what? Nothing?

Exactly. We do nothing at all. We sail grandly past that non-stitch at location D, and we knit stitches at locations E and F.

What do we do when we get to “stitch” G? Absolutely nothing, just as before. Since there’s no actual knitting operation to be performed there, we go to the next place where a symbol actually **is** a stitch instruction, which is at location H. We knit that stitch, then purl the last two stitches, at locations I and J.

Row Two

We turn the piece to the private side. We start at stitch J, either turning the chart upside-down or just reading the row in the opposite direction. Since it’s a private-side row, what looks like P2–K1 in the chart in locations J through H actually has to be worked as K2–P1, since we have to swap knits and purls on private-side rows.

After we work the first three stitches, we again bump into the No Stitch symbol at, well, location G. We can’t really call it “stitch” G since the symbol key says it’s not a stitch. What do we do?

We simply go right past that symbol like it’s not even there. We purl stitches at F and E since they’re supposed to be public-side knits, hop over location D because it isn’t any kind of actual knitting instruction, and work the last three stitches as P1–K2 to get K1–P2 on the public side.

Working to the Cable Crossing

We work rows three through six the same way we worked rows one and two.

Row seven is a little interesting. We see two increases spaced approximately equally, and the symbol key says we can do whatever type of increase we like. Since it's a swatch with a cable, as opposed to being some kind of lace where yarnover holes would be deliberate and decorative, we probably ought to do some kind of mostly invisible increase.

We work back on private-side row eight, including the two new stitches in the center section, and turn back to the public side. We do the cable crossing on row nine in between the pairs of purl stitches that form the left and right borders.

Traditional knitters will hold the cable needle to the front for the left-slanting cable (**left** and **front** both have an **f**), and mirror-image knitters will hold the cable needle to the back for the left-slanting cable (**back** and **left** are both **four** letters long).²

Finishing the Swatch

Rows ten through twelve are simple enough, so we work them the same way we did rows one through six, except that there are two extra stitches in the center section of each row.

On row thirteen, we see that we do two single decreases, which means we will have two fewer stitches after we complete the row. But there are still ten symbols on the row, because of those stupid No Stitch symbols.

Well, let's just muddle through the best we can. On row thirteen we purl two, then hit the No Stitch symbol at C. We simply go past it until we find a symbol for an actual knitting operation. That's at location D, where there's a decrease.

If MIKs switch the positions of the row numbers and reverse the order of the stitch labels after they complete the chart, **we all, traditional and mirror-image knitters, work a K2tog at location D**. For traditional knitters a K2tog leans to the right, and for mirror-image knitters it leans to the left.

We knit the next two stitches, then do a decrease that leans the opposite direction. **At location G, both traditional and mirror-image knitters do an SSK/SKP** (or similar). Again, we can **all** do the same decrease, but it will lean in opposite directions for traditional and mirror-image knitters.

We find another No Stitch symbol at location H. We do what we've done every other time we've come to one, so we just skip right over it, since there's nothing we do with needles and yarn for a No Stitch symbol. We purl the final two stitches.

² The chapter "Cables and Twists" explains this reversal of the cable needle's position and gives corresponding mnemonics for right-slanting cables.

We now have just eight stitches on our needles, since we decreased away two stitches with the K2tog and SSK/SKP (or preferred decrease).

Rows fourteen through sixteen will all be worked the same way we worked rows one through six: two stitches of reverse stockinette, four stitches of stockinette, and two more stitches of reverse stockinette.

Working from the Tweak One Chart

Some knitters may think this chart is more straightforward. In one sense, this version of the chart is simpler. Instead of having to skip over a symbol that to all intents and purposes says “Move along, nothing to see here,” there are just blank areas. We work in the normal way the symbols that are in the chart while we simply ignore the blank spaces.

Working from the Original Chart

In the original version of both the computer and paper chart, the rows all have the number of symbols that exactly corresponds to the number of stitches we’ll have **after** we complete each row, which means there are no blank areas between any of the symbols to force alignment of the reverse stockinette left and right borders in the chart.

As we work from either original chart, we’re working a tiny bit blind in a few places, since some of the symbols on rows seven and thirteen aren’t positioned on top of one another as they will be in yarn. We will simply have to be aware of this misalignment and make some adjustments mentally.³

More Chart Options

There are at least two more things we can do to make it easier for us to work from a chart.

Add More Stitch Labels

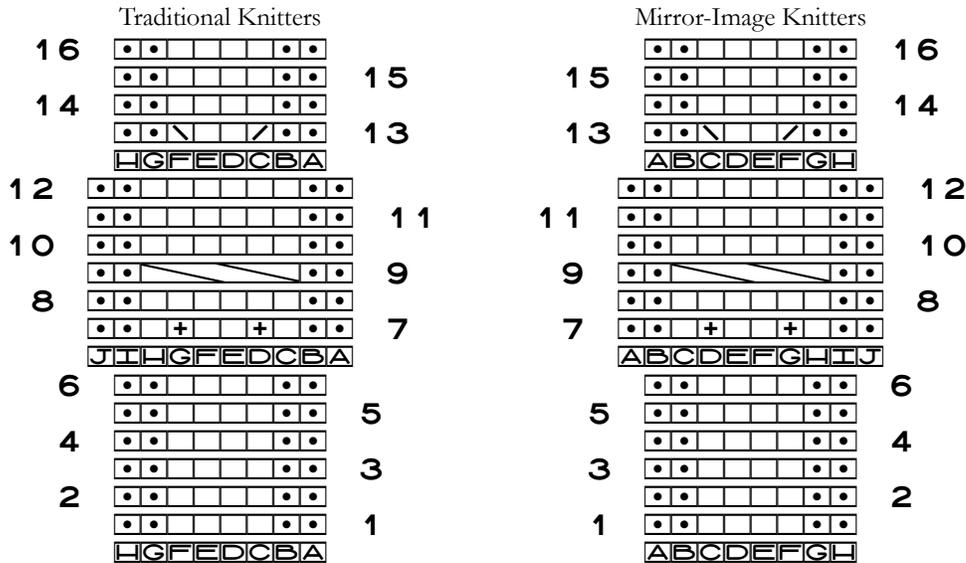
The boxed letters, or numbers if we prefer them or if we have more than twenty-six stitches (or fifty-two, if we place lowercase a through z after capital Z), help us describe what happens at different places on various rows.⁴

³ In some charts, the misalignments may seriously hamper our ability to work accurately. We should definitely consider altering those charts.

⁴ We can copy and paste complete sets of boxed capital and lowercase letters and boxed numbers from one to a hundred, running in both directions (A–Z, Z–A, 1–100, and 100–1), from the knitting font catalog at the end of part four.

Should the labels run just through H, omitting I and J? Or is it better to go through J after all, since we do have ten stitches on several rows?

Or maybe we should have A through H below rows one and thirteen, then have A through J below row seven, since those groups of rows have a different number of stitches on them, as the next variations show.

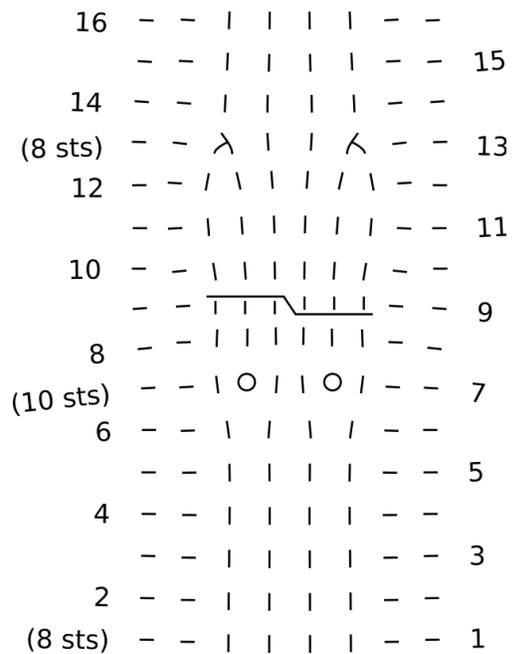


Obviously, this chart is simple enough that we don't need the boxed stitch labels below row one, let alone anywhere else, but other charts might benefit greatly from them. In a more complicated chart, we might well want to repeat in key places boxed letters or numbers to help highlight something that happens at a particular spot and/or on a particular row.

A Different Kind of Chart

We can chart the written-out instructions at [JC Briar's stitch maps website](#). Stitch map symbols move and tilt based on how stitches interact with one another in yarn instead of forcing all the symbols into the rigid grid of columns and rows that we have in this book.

Here's the stitch map for our simple swatch.



Because stitch maps know that cables pull the fabric in, the stitch map's left and right edges are nearly straight, despite the fact that six rows are two stitches wider than the rest.

The Bottom Line

All these charting variations are valid, and we should all use the one that helps us work the most easily and accurately. If none of these versions seems helpful to you, you can devise your own way to chart, one that's perfect for you.

Two of the variations here, the one with blank spaces within the fields of the actual stitch symbols and the one with the No Stitch symbols, show how the rows before the increases and after the decreases position their stitches relative to one another as we work our way through the chart. They don't indicate any knitting operation we need to do with needles and yarn.

Charting Rule

The only thing No Stitch symbols or ordinary spaces (or other symbols that don't represent a knitting operation) do in a chart is **keep all the symbols aligned with one another when the number of stitches varies from row to row.**

The No-Stitch Symbol: Just Move Along

When we see a No Stitch symbol in a chart, we simply skip over it (or them, if there are several next to one another) until we come to a symbol that represents an actual knitting operation we must work with needles and yarn.

On Paper

We may need to experiment with how we mark a cell to indicate that there's not actually a stitch or other action needed at that spot. Our goal should be a mark that's clear at a glance, because puzzling over a knitting chart's marks does not make knitting more fun.

In the Computer

Some knitters (I am one of them) find the No Stitch symbol distracting, because it's so much

denser than all the other symbols. When such a chart is in my peripheral vision, those dark rectangles jump off the page. If there are lots of No Stitch symbols, they can simply overwhelm the rest of the chart, to the point of doing more harm than good.

So if we typed up our chart with two, or two hundred, No Stitch symbols that now bother us, we have at least two options to make them less annoying, both of which are explained at length in the part four chapter “More Charting Tips.”

- ☉ The section “Change One Symbol to Another” describes how we can change all the No Stitch symbols at the same time by using our word processor’s Find and Replace.
- ☉ The section “Change a Symbol’s Color” explains an alternative if we like, or at least don’t mind, the No Stitch symbol but we want it to be a different color.

Two Last Suggestions

In [responding to a question posted on Ravelry, Isabeau](#) (Rav handle isabeautiful) used a different phrase when explaining how to interpret this symbol: *no action*. Since we take **no action** at the position of the symbol, we move on to the next symbol that **does** indicate some kind of knitting action.

In a similar thread, Nessie (Rav handle nessie-jp) suggested that ordinary spaces spreading apart actual knitting symbols in a chart are just like the spaces between words: “**They are just there sowedon’t havetoreadstufflikethat!**” We simply skip over spaces in charts the same way we skip over spaces between words.

For some of us, giving this troublesome little symbol a different name or phrasing may be all it takes.