## Chapter 320

## CONVERTING A CHART FROM ORDINARY LINES TO A MULTI-ROW, MULTI-COLUMN TABLE

The charts in the purl-diamond project chapter had been created on ordinary lines like this one, though of course the font was the knitting font.

When I duplicated the motif rows to make the motif taller, the left and right seed-stitch borders were then wrong, as they did not maintain their checkerboard of knits and purls. To fix the side borders in the corrected chart, I had to very laboriously fix each incorrect group of seed stitch one at a time, by hand. I copied a correct group of $\mathrm{K}-\mathrm{P}-\mathrm{K}-\mathrm{P}-\mathrm{K}$, then pasted it over each incorrect $\mathrm{P}-\mathrm{K}-\mathrm{P}-\mathrm{K}-\mathrm{P}$. Then I copied a correct $\mathrm{P}-\mathrm{K}-\mathrm{P}-\mathrm{K}-\mathrm{P}$ and pasted it over every incorrect group of $\mathrm{K}-\mathrm{P}-\mathrm{K}-\mathrm{P}-\mathrm{K}$. But selecting each incorrect group individually to paste a correct group over it was very slow and caused some wrist strain from all the clicking and dragging.

If the whole chart had been in a table with the side borders in their own columns, it would have been very easy and much faster to fix the seed stitch.

So if you've made a chart on ordinary lines and now need to alter it drastically, here's how to put your hard-won chart into a multi-row, multi-column table with the least amount of work.

## Making the Switch from Lines to Tables

Here are the easy steps to change a chart on regular lines to one that's in a table, then fix the incorrect portions of the chart.

## Step 1: Put Tabs Between Each Section's Symbols

While it's true that we could just select the whole chart and have the word processor put each line in a single table row, that quick step will force us to do a lot of selecting, copying, and pasting ourselves, since the table will only have one column. We will have to add columns for the private-side row numbers, the left border, one for each of the various patterns we might be combining, the right border, and the public-side row numbers. Adding columns is very easy to do with a couple of mouse clicks. But then we come to hard part.

We will have select each row number and move it to its own column, we will have to select the border stitches to move them their own columns, and we have to select the stitches of each pattern and move them to their own columns.

All that selecting and moving will be slooooooow, and we will strain our wrists to the
point of carpal-tunnel syndrome, possibly accompanied by saying bad words in our heads, or even out loud.

## The Better Way

Before we convert the chart to a table, we will first put tabs in several places on each line, using the tabs to separate the various parts of the chart into their own groups.

For the purl-diamond project variation with the doubled-up motif rows, we will separate each row's symbols into four distinct groups:
before the first stitch, stitch Y, to isolate the private-side row numbers
between stitches U and T , to isolate the left border
between stitches F and E , to isolate the right border
after stitch A , to isolate the public-side row numbers
Yes, this involves a certain amount of clicking with the mouse, but it's much less effort than would be necessary if we let the word processor throw each pattern line into a table with only one column, so that we have to move by hand groups of symbols to the other columns on each row.

Why tabs? Because when we select all the chart lines and have the word processor put them into a table, we can tell the word processor to start a new column at each tab character.

## Existing Tab Stops

As we add tabs, the part of the line to the right of each tab may or may not move. How much that part of the line moves (or even if it doesn't move at all) is completely immaterial. Whether the ordinary chart lines have our word processor's default tab settings-or any other tab settings-makes absolutely no difference. The only thing that matters is the presence of a single tab character between each group on each chart line.

So if a particular added tab doesn't seem to move the stitch symbols to its right, do not add a second tab at that spot. Again, the horizontal shift that may or may not occur during this step is irrelevant.

We merely need the presence of exactly one tab character at the same exact places in every ordinary line.

## The Modified Chart

So here are the ordinary lines of the chart with the duplicated motif rows with tabs added.


Here's the chart in Courier with hidden characters showing.

|  |  | kpkpk | $\rightarrow$ | pkpkpkpkpkpkpkp | $\rightarrow$ | kpkpk | $\rightarrow$ | 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 24. | $\rightarrow$ | pkpkp | $\rightarrow$ | kpkpkpkpkpkpkpk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | pkpkpkpkpkpkpkp | $\rightarrow$ | kpkpk | $\rightarrow$ | 23 |
| 22 | $\rightarrow$ | pkpkp | $\rightarrow$ | kpkpkpkpkpkpkpk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | pkpkpkpkpkpkpkp | $\rightarrow$ | kpkpk | $\rightarrow$ | 21 |
| 20 | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 19 |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkpkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 19 |
| 18 | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
| 18. | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkpkpkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 17 |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkpkkkpkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 17 |
| 16 | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
| 16. | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkpkkkkkpkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 15 |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkpkkkkkkkpkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 15 |
| 14 | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
| 14 | $\rightarrow$ | pkpkp | $\rightarrow$ | kkpkkkkkkkkkpkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 13 |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kpkkkkkkkkkkkpk | $\rightarrow$ | kpkpk | $\rightarrow$ | 3 |
| 12 | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
| 12 . | $\rightarrow$ | pkpkp | $\rightarrow$ | kkpkkkkkkkkkpkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 11 |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkpkkkkkkkpkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 11 |
| 10 | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
| 10 - | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkpkkkkkpkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 9 |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkpkkkpkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 9 |
| -8 | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
| - 8 - | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkpkpkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 7 |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | kkkkkkkpkkkkkkk | $\rightarrow$ | kpkpk | $\rightarrow$ | 7 |
| -6. | $\rightarrow$ | pkpkp | $\rightarrow$ | kkkkkkkkkkkkkkk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | pkpkpkpkpkpkpkp | $\rightarrow$ | kpkpk | $\rightarrow$ | 5 |
| - 4 | $\rightarrow$ | pkpkp | $\rightarrow$ | kpkpkpkpkpkpkpk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | pkpkpkpkpkpkpkp | $\rightarrow$ | kpkpk | $\rightarrow$ | - 3 |
| - $2 \cdot$ | $\rightarrow$ | pkpkp | $\rightarrow$ | kpkpkpkpkpkpkpk | $\rightarrow$ | pkpkp | $\rightarrow$ |  |
|  | $\rightarrow$ | kpkpk | $\rightarrow$ | pkpkpkpkpkpkpkp | $\rightarrow$ | kpkpk | $\rightarrow$ | $\cdot 1$. |
|  | $\rightarrow$ | $\frac{3 / 4}{1 / 2} 2^{1 / 4}>^{\circ}$ | $\rightarrow$ |  | $\rightarrow$ | \| $¥ £$ ¢ ${ }_{\text {; }}$ | $\rightarrow$ |  |

(The last line's weird characters show where the knitting font's boxed capital letters live in an ordinary font.)

## Step 2: Convert the Ordinary Text Lines to a Table

We now select all the chart lines and use whatever method our word processor requires to turn the selection into a table.

We may have to select a menu item like Table | Convert Text to Table, or we may be able to simply click on a Table button in a toolbar.

Regardless of the particular technique we use, we wind up with a table with five columns.

(If your table doesn't have the correct thing in each column, you may have omitted a tab character or added an extra one by mistake. Undo the conversion to the table, fix the tabs,
and convert the lines to a table again. It will be easier to check for missing, misplaced, and extra tabs if you make hidden characters visible.)

The table still has all the spaces around, above, and below the row numbers that were needed to make the stitches be aligned properly when the chart was in ordinary lines. We'll ignore those unneeded spaces for now since they don't matter. ${ }^{1}$

Let's now concentrate on the technique to fix the left and right seed-stitch borders.

## Step 3: Find and Select a Group of Correct Stitches

This ability to correct groups of stitches quickly is one of the main advantages of using multi-row tables instead of ordinary lines to make charts.

First, we figure out where the stitches are correct.
For the left and right borders, the stitches are correct in rows one through six, as well as in the lowest row seven. The left and right borders are wrong starting in the second, duplicated row seven.

The cells containing stitches U through Y in rows one through six are correct. We select these six cells, outlined with the dark box in the partial chart.


[^0]
## Step 4: Copy the Group

Make a copy of the selected table cells.

## Step 5: Paste the Copied Cells Over the Incorrect Cells

We have two options for this step.

## Option A: Click in the Proper Cell and Paste

Our word processor probably won't make us select all six cells that we want to paste over, so we should be able to simply click in the correct table cell and paste. Since we are copying six vertical cells, we have to count to the sixth cell above chart row six, then put the cursor there before we paste.

The dark box below shows the cell we clicked in, and that cell and the five below it now have the correct arrangement of seed stitch.


But what if we miscount and paste the selection in the wrong place?
In the chart below, I clicked in the cell in the lower row nine before I pasted the six cells. The cells that were pasted in are surrounded by the dark box.


Look at rows five and six in that column. The seed stitch is now off by one row, because I pasted in the wrong place.

To paste in the correct place, which is one cell higher than outlined above (in the upper row nine), hover the mouse over the correct cell, undo the paste, click where the cursor is hovering, then paste again.

## Option B: Select the Incorrect Cells and Paste

If we highlight all the cells we want to paste into, then we can be sure we'll paste the symbols in the correct place.

It may be easier to select the proper cells by starting with the lowest cell and counting upwards, instead of starting with the highest cell and counting downwards.

## Continue to Paste Correct Stitches Over Incorrect Ones

Once we've copied a correct block of stitches, we just keep clicking in the appropriate cells one at a time and pasting the correct, already-copied symbols.

## Other Tips for Correcting Charts in Tables

There are a few other things we could do to help us fix charts in tables.
(1) If we fix the row numbers before we start fixing the stitches, then those correct row numbers will make it much easier to determine the proper cell we need to click in so we paste the correct stitches into the proper cells.

We can also delete all the incorrect stitches first, before we start pasting in the correct ones.
If our word processor filled an entire column with two purl stitches in the Aran sampler, we can use that same technique here. We would type in two correct rows of seed stitch at the top of the left or right edge, select them, and copy them. Then we select the rest of the edge border, and paste. The two rows should be copied into each pair of cells all the way down.

## Lessons Learned: Converting a Chart from Ordinary Lines to a Multi-Row, Multi-Column Table

We had already talked about having three columns when we put charts in tables: the left column holds the private-side row numbers, the middle column holds the pattern stitches themselves, and the right column holds the public-side row numbers.

Now we add one more lesson:
Pe Put left and right borders in their own table columns, between the row-number and the pattern-stitch columns.
That means for the purl-diamond project, we have five columns, as shown in the charts in this chapter.


[^0]:    ${ }^{1}$ But if we want to get rid of them, we open our word processor's Find and Replace tool, type a single space in the Find box, leave the Replace box empty, and click Replace All only if our entire file consists of the chart. If we have regular text in the file also, like the pattern name or book title that's the source of the pattern, we click Find on spaces between words and click Replace on spaces in the chart.

