## **Embroidered Jigsaw Puzzle Stitch Counts**

Carol A. Brown

These designs are available in .dst, .exp, .hus, .jef, .pes, .vip, .vp3, and .xxx formats. Please check your own hoop collection to determine which design sizes you can use.

The design names listed below correspond to the designs displayed in my collection at *AnnTheGran.com*. Each puzzle includes three design files: (1) a design with 1.6 mm triple stitch outlines of puzzle pieces and lines digitized for special cutwork needles; (2) a design with 3.0 mm triple stitch outlines of puzzle pieces and lines digitized for special cutwork needles; and (3) a running stitch outline of the puzzle pieces for stitching on a pouch.

These outline designs can be combined with your own embroidery designs, drawings, or printed fabric to create unique new puzzles. (I recommend using designs at least 5mm smaller in each dimension than the corresponding puzzle designs.) To add the puzzle outlines to another embroidery designs, open your own design to the hoop first. Make sure it is centered in the hoop. Add the *Cutlines\_A* design in the appropriate size, make sure it is also centered in the hoop, and then combine and save the design with a new file name. If you will draw directly on your felt or fuse printed fabric to felt, you do not need such tiny stitches in the puzzle outlines; use the appropriate *Cutlines\_B* design instead. For the pouch, you can use the same embroidery design or a simplified version. Add the appropriate *Outlines* design, centering both designs and saving as for the puzzle. Save with a file name that shows it has outlines only.

Cutwork needle packs for Husqvarna Viking and Pfaff machines include four color coded needles that each cut at a different angle: red /, yellow -, green \, and blue |. My embroidery software matches the angle of the cutwork needle to the angle of the line being cut. Bernina offers a single device that includes four cutters. If you use this cutter, make sure the angle corresponds to the color indicated in the thread list. The cutwork needle colors appear in the order shown at the beginning of this paragraph.

You may be tempted to flip or rotate the puzzle outline in order to avoid cutting through an important detail of your picture. If you rotate the puzzle outline 180 degrees the cutwork needles will still be correct. If you flip (i.e., mirror) the design horizontally OR vertically, the vertical and horizontal cuts will still be correct, but the diagonals will be wrong; use cutwork needle green where red is specified, and red for green. If you rotate the square design 90 degrees, the yellow and blue cutwork needles will need to be swapped, as well as red and green. If you are not sure which needle to use where, draw the 4 needle angles, along with their colors, on two pieces of paper. Flip or rotate one paper as you plan to change the design, and compare the angles to those on the other piece of paper. You will see which needles need to be swapped. You can change the needle colors in your software or make a note of which needle to use when.

		Design Size		Stitch Counts	
File Name	Design Name	Width	Length	Total	Cut Lines
				Stitches	
Cutlines_A_100x100	Mini Puzzle	3.75" (95.3 mm)	3.76" (95.5 mm)	3,111	1,149
Cutlines_B_100x100		3.75" (95.3 mm)	3.76" (95.5 mm)	2,224	1,149
Outlines_100x100		3.75" (95.3 mm)	3.76" (95.5 mm)	553	
Cutlines_A_130x180	Small Puzzle	4.72" (119.8 mm)	6.7" (170.3 mm)	7,807	3,390
Cutlines_B_130x180		4.72" (119.8 mm)	6.7" (170.3 mm)	5,835	3,390
Outlines_130x180		4.72" (119.8 mm)	6.7" (170.3 mm)	1,221	
Cutlines_A_150x240	Medium Puzzle	5.69" (144.5 mm)	9.24" (234.6 mm)	17,350	6,278
Cutlines_B_150x240		5.69" (144.5 mm)	9.24" (234.6 mm)	10,479	6,278
Outlines_150x240		5.69" (144.5 mm)	9.24" (234.6 mm)	2,610	
Cutlines_A_200x260	Large Puzzle	7.7" (195.6 mm)	10.05" (255.3 mm)	17,350	7,827
Cutlines_B_200x260		7.7" (195.6 mm)	10.05" (255.3 mm)	13,019	7,827
Outlines_200x260		7.7" (195.6 mm)	10.05" (255.3 mm)	2,745	