

Chapter 3 VARIOUS STITCHES

Stitch Chart

Utility stitches

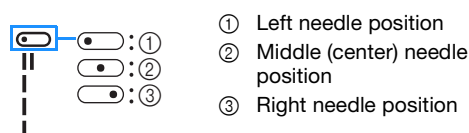
Memo

- When any of the following stitches are selected, pressing  (Reverse/Reinforcement stitch button) will sew reverse stitches.

No.	1-01	1-03	1-08
Stitch			

When any other stitch is selected, pressing  (Reverse/Reinforcement stitch button) will sew reinforcement stitches.

- , , or  in some of the illustrations shows the needle position of the stitch.



* Twin needle can be used by attaching zigzag foot “J”.

Stitch (Presser foot)	No.	Stitch name/Applications	Stitch width (mm (inch)) Auto. Manual	Stitch length (mm (inch)) Auto. Manual
 (J)	1-01*	Straight stitch (Left) General sewing, gather, pintuck, etc.	0.0 (0) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.2 - 5.0 (1/64 - 3/16)
 (J)	1-02*	Straight stitch (Left) General sewing, gather, pintuck, etc.	0.0 (0) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.2 - 5.0 (1/64 - 3/16)
 (J)	1-03*	Straight stitch (Middle) General sewing, gather, pintuck, etc.	3.5 (1/8) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.2 - 5.0 (1/64 - 3/16)
 (J)	1-04*	Straight stitch (Middle) General sewing, gather, pintuck, etc.	3.5 (1/8) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.2 - 5.0 (1/64 - 3/16)
 (J)	1-05*	Triple stretch stitch General sewing for reinforcement and decorative topstitching	0.0 (0) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
 (J)	1-06*	Stem stitch Reinforced stitching, sewing and decorative applications	1.0 (1/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)

Stitch (Presser foot)	No.	Stitch name/Applications	Stitch width (mm (inch)) Auto. Manual	Stitch length (mm (inch)) Auto. Manual
 (J)	1-07	Basting stitch For basting. If the basting threads fall out of the fabric, pull up the bobbin thread before sewing, and then pull the upper thread and bobbin thread under the presser foot toward the back of the machine (page 26). Hold the upper thread and bobbin thread when beginning to sew, and when finished sewing, cut the threads leaving an excess amount of thread. Finally, hold the upper thread and bobbin thread at the beginning of the stitching while arranging the fabric.	0.0 (0) 0.0 - 7.0 (0 - 1/4)	-
 (J)	1-08*	Zigzag stitch For overcasting, mending.	3.5 (1/8) 0.0 - 7.0 (0 - 1/4)	1.4 (1/16) 0.0 - 5.0 (0 - 3/16)
 (J)	1-09*	Zigzag stitch For overcasting, mending.	3.5 (1/8) 0.0 - 7.0 (0 - 1/4)	1.4 (1/16) 0.0 - 5.0 (0 - 3/16)
 (J)	1-10*	Zigzag stitch (Right) Start from right needle position, zigzag sews to left.	3.5 (1/8) 2.5 - 5.0 (3/32 - 3/16)	1.4 (1/16) 0.3 - 5.0 (1/64 - 3/16)
 (J)	1-11*	2 steps elastic zigzag stitch Overcasting (medium weight and stretch fabrics), tape and elastic	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	1.0 (1/16) 0.2 - 5.0 (1/64 - 3/16)
 (J)	1-12*	3 steps elastic zigzag stitch Overcasting (medium, heavyweight and stretch fabrics), tape and elastic	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	1.0 (1/16) 0.2 - 5.0 (1/64 - 3/16)
 (G)	1-13	Overcasting stitch Reinforcing of light and medium weight fabrics	3.5 (1/8) 2.5 - 5.0 (3/32 - 3/16)	2.0 (1/16) 0.4 - 5.0 (1/64 - 3/16)
 (G)	1-14	Overcasting stitch Reinforcing of heavyweight fabric	5.0 (3/16) 2.5 - 5.0 (3/32 - 3/16)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
 (G)	1-15	Overcasting stitch Reinforcing of medium, heavyweight and easily friable fabrics or decorative stitching.	5.0 (3/16) 3.5 - 5.0 (1/8 - 3/16)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
 (J)	1-16*	Overcasting stitch Reinforced seaming of stretch fabric	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)

Stitch (Presser foot)	No.	Stitch name/Applications	Stitch width (mm (inch)) Auto. Manual	Stitch length (mm (inch)) Auto. Manual
	1-17*	Overcasting stitch Reinforcing of medium stretch fabric and heavyweight fabric, decorative stitching	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	1-18*	Overcasting stitch Reinforcement of stretch fabric or decorative stitching	4.0 (3/16) 0.0 - 7.0 (0 - 1/4)	4.0 (3/16) 0.4 - 5.0 (1/64 - 3/16)
	1-19	Overcasting stitch Stretch knit seam	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	4.0 (3/16) 0.4 - 5.0 (1/64 - 3/16)
	1-20	With side cutter Straight stitch while cutting fabrics	0.0 (0) 0.0 - 2.5 (0 - 3/32)	2.5 (3/32) 0.2 - 5.0 (1/64 - 3/16)
	1-21	With side cutter Zigzag stitch while cutting fabrics	3.5 (1/8) 3.5 - 5.0 (1/8 - 3/16)	1.4 (1/16) 0.0 - 5.0 (0 - 3/16)
	1-22	With side cutter Overcasting stitch while cutting fabrics	3.5 (1/8) 3.5 - 5.0 (1/8 - 3/16)	2.0 (1/16) 0.4 - 5.0 (1/64 - 3/16)
	1-23	With side cutter Overcasting stitch while cutting fabrics	5.0 (3/16) 3.5 - 5.0 (1/8 - 3/16)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	1-24	With side cutter Overcasting stitch while cutting fabrics	5.0 (3/16) 3.5 - 5.0 (1/8 - 3/16)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	1-25	Piecing stitch (Right) Piecework/patchwork 6.5 mm (approx. 1/4 inch) right seam allowance	5.5 (7/32) 0.0 - 7.0 (0 - 1/4)	2.0 (1/16) 0.2 - 5.0 (1/64 - 3/16)
	1-26	Piecing stitch (Middle) Piecework/patchwork	-	2.0 (1/16) 0.2 - 5.0 (1/64 - 3/16)
	1-27	Hand-look quilting stitch Quilting stitch made to look like hand quilting when using transparent nylon thread for the upper thread and a thread color matching the quilt for the bobbin thread. Sew with a tight thread tension so that the bobbin thread is visible from the right side of the fabric. Use a needle between 90/14 and 100/16.	0.0 (0) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	1-28	Quilting appliqué zigzag stitch Zigzag stitch for quilting and sewing on appliqué quilt pieces	3.5 (1/8) 0.0 - 7.0 (0 - 1/4)	1.4 (1/16) 0.0 - 5.0 (0 - 3/16)
	1-29	Quilting appliqué stitch Quilting stitch for invisible appliqué or attaching binding	1.5 (1/16) 0.0 - 3.5 (0 - 1/8)	1.8 (1/16) 0.4 - 5.0 (1/64 - 3/16)
	1-30	Quilting stippling stitch Background quilting	7.0 (1/4) 0.0 - 7.0 (0 - 1/4)	1.6 (1/16) 0.4 - 5.0 (1/64 - 3/16)

Stitch (Presser foot)	No.	Stitch name/Applications	Stitch width (mm (inch)) Auto. Manual	Stitch length (mm (inch)) Auto. Manual
	2-01	Blind hem stitch Hemming woven fabrics * The stitch width setting is in neither millimeters nor inches.	00 3← - →3	2.0 (1/16) 0.4 - 5.0 (1/64 - 3/16)
	2-02	Blind hem stretch stitch Hemming stretch fabric * The stitch width setting is in neither millimeters nor inches.	00 3← - →3	2.0 (1/16) 0.4 - 5.0 (1/64 - 3/16)
	2-03*	Blanket stitch Appliqués, decorative blanket stitch	3.5 (1/8) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	2-04*	Blanket stitch Appliqués, decorative blanket stitch	2.5 (3/32) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	2-05*	Shell tuck edge stitch Shell tuck edge finish on fabrics	4.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.2 - 5.0 (1/64 - 3/16)
	2-06*	Satin scallop stitch Decorating collar of blouse, edge of handkerchief	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	0.5 (1/32) 0.1 - 5.0 (1/64 - 3/16)
	2-07*	Patchwork join stitch Patchwork stitches, decorative stitching	4.0 (3/16) 0.0 - 7.0 (0 - 1/4)	1.2 (1/16) 0.2 - 5.0 (1/64 - 3/16)
	2-08*	Patchwork double overlock stitch Patchwork stitches, decorative stitching	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	2-09*	Couching stitch Decorative stitching, attaching cord and couching	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	1.2 (1/16) 0.2 - 5.0 (1/64 - 3/16)
	2-10*	Smocking stitch Smocking, decorative stitching	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	1.6 (1/16) 0.4 - 5.0 (1/64 - 3/16)
	2-11*	Feather stitch Fagoting, decorative stitching	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	2-12*	Fagoting cross stitch Fagoting, bridging and decorative stitching	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	2-13*	Tape attaching stitch Attaching tape to seam in stretch fabric	4.0 (3/16) 0.0 - 7.0 (0 - 1/4)	1.0 (1/16) 0.2 - 5.0 (1/64 - 3/16)
	2-14	Ladder stitch Decorative stitching	4.0 (3/16) 0.0 - 7.0 (0 - 1/4)	3.0 (1/8) 0.4 - 5.0 (1/64 - 3/16)
	2-15*	Rick-rack stitch Decorative top stitching	4.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	2-16*	Decorative stitch Decorative stitching	5.5 (7/32) 0.0 - 7.0 (0 - 1/4)	1.6 (1/16) 0.4 - 5.0 (1/64 - 3/16)
	2-17*	Serpentine stitch Decorative stitching and attaching elastic	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	1.0 (1/16) 0.2 - 5.0 (1/64 - 3/16)

Stitch (Presser foot)	No.	Stitch name/Applications	Stitch width (mm (inch)) Auto. Manual	Stitch length (mm (inch)) Auto. Manual
	3-01*	Hemstitching zigzag Decorative hems, top stitching	6.0 (15/64) 0.0 - 7.0 (0 - 1/4)	3.0 (1/8) 0.4 - 5.0 (1/64 - 3/16)
	3-02	Hemstitching Decorative hems, lace attaching pin stitch	3.5 (1/8) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	3-03	Hemstitching Decorative hems	3.0 (1/8) 0.0 - 7.0 (0 - 1/4)	3.5 (1/8) 0.4 - 5.0 (1/64 - 3/16)
	3-04	Hemstitching Decorative hems, daisy stitch	6.0 (15/64) 0.0 - 7.0 (0 - 1/4)	3.0 (1/8) 0.4 - 5.0 (1/64 - 3/16)
	3-05	Hemstitching Heirloom, decorative hems	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	3.5 (1/8) 0.4 - 5.0 (1/64 - 3/16)
	3-06*	Hemstitching Heirloom, decorative hems	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	4.0 (3/16) 0.4 - 5.0 (1/64 - 3/16)
	3-07*	Hemstitching Heirloom, decorative hems	6.0 (15/64) 0.0 - 7.0 (0 - 1/4)	1.6 (1/16) 0.4 - 5.0 (1/64 - 3/16)
	3-08	Hemstitching Heirloom, decorative hems	6.0 (15/64) 0.0 - 7.0 (0 - 1/4)	3.0 (1/8) 0.4 - 5.0 (1/64 - 3/16)
	3-09	Hemstitching Heirloom, decorative hems	4.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.5 (3/32) 0.4 - 5.0 (1/64 - 3/16)
	3-10*	Hemstitching Heirloom, decorative hems	5.0 (3/16) 0.0 - 7.0 (0 - 1/4)	2.0 (1/16) 0.4 - 5.0 (1/64 - 3/16)
	4-01	Narrow rounded buttonhole stitch Buttonhole on light to medium weight fabrics	5.0 (3/16) 3.0 - 6.0 (1/8 - 15/64)	0.4 (1/64) 0.2 - 1.0 (1/64 - 1/16)
	4-02	Tapered round ended buttonhole stitch Reinforced waist tapered buttonholes	5.0 (3/16) 3.0 - 6.0 (1/8 - 15/64)	0.4 (1/64) 0.2 - 1.0 (1/64 - 1/16)
	4-03	Round ended buttonhole stitch Buttonholes with vertical bar tack in heavyweight fabrics	5.0 (3/16) 3.0 - 6.0 (1/8 - 15/64)	0.4 (1/64) 0.2 - 1.0 (1/64 - 1/16)
	4-04	Narrow squared buttonhole stitch Buttonholes for light to medium weight fabrics	5.0 (3/16) 3.0 - 6.0 (1/8 - 15/64)	0.4 (1/64) 0.2 - 1.0 (1/64 - 1/16)
	4-05	Stretch buttonhole stitch Buttonholes for stretch or woven fabrics	6.0 (15/64) 3.0 - 6.0 (1/8 - 15/64)	1.0 (1/16) 0.5 - 2.0 (1/32 - 1/16)
	4-06	Heirloom buttonhole stitch Buttonholes for heirloom and stretch fabrics	6.0 (15/64) 3.0 - 6.0 (1/8 - 15/64)	1.5 (1/16) 1.0 - 3.0 (1/16 - 1/8)
	4-07	Bound buttonhole stitch The first step in making bound buttonholes	5.0 (3/16) 0.0 - 6.0 (0 - 15/64)	2.0 (1/16) 0.2 - 4.0 (1/64 - 3/16)

Stitch (Presser foot)	No.	Stitch name/Applications	Stitch width (mm (inch)) Auto. Manual	Stitch length (mm (inch)) Auto. Manual
	4-08	Keyhole buttonhole stitch Buttonholes in heavyweight or thick fabrics for larger flat buttons	7.0 (1/4) 3.0 - 7.0 (1/8 - 1/4)	0.5 (1/32) 0.3 - 1.0 (1/64 - 1/16)
	4-09	Tapered keyhole buttonhole stitch Buttonholes in medium to heavy weight fabrics for larger flat buttons	7.0 (1/4) 3.0 - 7.0 (1/8 - 1/4)	0.5 (1/32) 0.3 - 1.0 (1/64 - 1/16)
	4-10	Keyhole buttonhole stitch Buttonholes with vertical bar tack for reinforcement in heavyweight or thick fabrics	7.0 (1/4) 3.0 - 7.0 (1/8 - 1/4)	0.5 (1/32) 0.3 - 1.0 (1/64 - 1/16)
	4-11	Darning stitch Darning of medium weight fabric	7.0 (1/4) 2.5 - 7.0 (3/32 - 1/4)	2.0 (1/16) 0.4 - 2.5 (1/64 - 3/32)
	4-12	Darning stitch Darning of heavyweight fabric	7.0 (1/4) 2.5 - 7.0 (3/32 - 1/4)	2.0 (1/16) 0.4 - 2.5 (1/64 - 3/32)
	4-13	Bar tack stitch Reinforcement at opening of pocket, etc.	2.0 (1/16) 1.0 - 3.0 (1/16 - 1/8)	0.4 (1/64) 0.3 - 1.0 (1/64 - 1/16)
	4-14	Button sewing stitch Attaching buttons	3.5 (1/8) 2.5 - 4.5 (3/32 - 3/16)	-
	4-15	Eyelet stitch For making eyelets, holes on belts, etc.	7.0 (1/4) 7.0 6.0 5.0 (1/4 15/64 3/16)	7.0 (1/4) 7.0 6.0 5.0 (1/4 15/64 3/16)

Decorative stitches

Use monogramming foot "N".

The twin needle can only be used with satin stitch . In addition, be sure to attach zigzag foot "J" when using the twin needle.

Decorative stitches						
5-01	5-02	5-03	5-04	5-05	5-06	5-07
						
5-08	5-09	5-10	5-11	5-12	5-13	5-14
						
5-15	5-16	5-17	5-18	5-19	5-20	5-21
						
5-22	5-23	5-24	5-25	5-26	5-27	5-28
						
5-29	5-30	5-31				
						

Decorative satin stitches						
6-01	6-02	6-03	6-04	6-05	6-06	6-07
6-08	6-09	6-10				
Satin stitches						
7-01	7-02	7-03	7-04	7-05	7-06	7-07
7-08	7-09	7-10	7-11	7-12	7-13	7-14
7-15	7-16	7-17				
Cross stitch stitches						
8-01	8-02	8-03	8-04	8-05	8-06	8-07
8-08	8-09	8-10	8-11			
Utility decorative stitches						
9-01	9-02	9-03	9-04	9-05	9-06	9-07
9-08	9-09	9-10	9-11	9-12	9-13	9-14
9-15	9-16	9-17	9-18	9-19	9-20	9-21
9-22	9-23	9-24	9-25	9-26	9-27	9-28
9-29	9-30	9-31	9-32	9-33	9-34	9-35
9-36	9-37	9-38	9-39	9-40		

Character stitches

Use monogramming foot "N".

The twin needle cannot be used.

Character stitches (Gothic font)																											
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	_	
0	1	2	3	4	5	6	7	8	9	#	%	—	+	×	÷	=	*	.	,	&	?	!	@	<	>	(	)
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Character stitches (Handwriting font)																											
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	_	
0	1	2	3	4	5	6	7	8	9	#	%	—	+	×	÷	=	*	.	,	&	?	!	@	<	>	(	)
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Ä	Å	Æ	Ç	Ð	Ñ	Ö	Ø	Œ	Ù	ß	_																
Character stitches (Outline)																											
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0	1	2	3	4	5	6	7	8	9	#	%	—	+	×	÷	=	*	.	,	&	?	!	@	<	>	(	)
[	]	/	\	~	©	®	™	“	”	”	’	‘	’	—													
Ä	Å	Æ	Ç	Ð	Ñ	Ö	Ø	Œ	Ù	ß	_																

Character stitches (Japanese font)

あ い う え お あ い う え お
 か き く け こ が ぎ ぐ げ ご
 さ し す せ そ ざ じ ず ぜ ぞ
 た ち つ て と だ ぢ づ で ど っ
 な に ぬ ね の は ひ ふ へ ほ
 ば び ぶ べ ぼ ぱ ぴ ぷ ぺ ぽ
 ま み む め も や ゆ よ や ゆ よ
 ら り る れ ろ わ を ん ー
 ア イ ウ エ オ ァ ィ ゥ ェ ヲ ヱ
 カ キ ク ケ コ ガ ギ グ ゲ ゴ
 サ シ ス セ ソ ザ ジ ズ セ ソ
 タ チ ツ テ ト ダ チ ヅ デ ト ッ
 ナ ニ ヌ ネ ノ ハ ヒ フ ヘ ホ
 バ ビ ブ ベ ボ パ ピ プ ペ ポ
 マ ミ ム メ モ ヤ ュ ヨ ヤ ュ ヨ
 ラ リ ル レ ロ ワ ヲ ン ー
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 学 校 組 部 火 水 木 金 土 ー

Utility Stitches

CAUTION

- Before replacing the presser foot, be sure to touch  (Presser foot/Needle exchange key) on the operation panel to lock all keys and buttons, otherwise injuries may occur if the "Start/Stop" button or any other button is pressed and the machine starts. For details on changing the presser foot, refer to "Replacing the Presser Foot" on page 29.

Overcasting stitches

Sew overcasting stitches along the edges of cut fabric to prevent them from fraying.

■ Using overcasting foot "G"

- 1 Attach overcasting foot "G".



- 2 Select a stitch.

No.	1-13	1-14	1-15
Stitch			

- For details, refer to "Stitch Chart" on page 41.

CAUTION

- When using overcasting foot "G", be sure to select a stitch that can be used with overcasting foot "G". If you sew with the incorrect stitch, the needle may hit the presser foot. The needle may break, possibly resulting in injury.

- 3 Position the fabric with the edge of the fabric against the guide of the presser foot, and then lower the presser foot lever.

① Guide

