KE-430HX/HS
Electronic Direct Drive Lockstitch Bar Tacker (Short Remaining Thread Spec.)

BE-438HX
Electronic Direct Drive Lockstitch Button Sewer (Short Remaining Thread Spec.)

With the world's top-class sewing speed and prevention of thread breakage with a Needle Cooler, the machine has increased productivity.
It also has superior sewing quality, usability, and reduces maintenance cost.

- Productivity Improvement by World's Fastest Sewing Speed and IoT
- Beautiful and Highly-reproducible Sewing Quality
- Superior Usability as Everyone can Use Easily and Reliably

（KE-430H）

L-pattern tacking

No.	Sewing pattern	No. of stitches	Length x Width（mm）	No.	Sewing pattern	No. of stitches	Length x Width（mm）
52		60	11.3×11.2	54		78	15.3×15.2
53		60	11.3×11.2	55		78	15.3×15.2

Circular stitching

No.	Sewing pattern	No. of stitches	Length x Width（mm）	No.	Sewing pattern	No. of stitches	Length x Width（mm）	No.	Sewing pattern	No. of stitches	Length x Width（mm）
56		106	9×9	58		127	9×9	60		114	10×10
57		116	9×9	59		104	10×10	61		124	10×10

For eyelet buttonhole

No.	Sewing pattern	No. of stitches	Length x Width（mm）	No.	Sewing pattern	No. of stitches	Length x Width（mm）	No.	Sewing pattern	No. of stitches	Length x Width（mm）
86		21	6×2	87		28	6×2	88		35	6×2

If you want to sew a sewing pattern other than standard sewing patterns, you can create your original pattern using PS-300B. Consult with your local Brother sales office for details.

Peripheral Equipment and Option

●Sewing data programming software PS-300B

With the KE-430H, BE-438H sewing can be done using sewing patterns other than preset ones. PS-300B is software for creating sewing patterns on a personal computer.

●50x40 Sewing area set（SB7777001）
（SB77770E1:for WEEE）

Sewing area can be expanded to 50x40mm. It enables to sew more applications such as hook and loop fastener and applique.

●Double-pedal foot switch（SA6038101）

The right and left pedals are provided for separated operation functions. This allows even more precise positioning of materials.

When using the Double-pedal foot switch, Conversion Harness Foot SW（SB1565001）is necessary.

Sewing Patterns List（BE-438H）

The sewing patterns shown below have been preset into the sewing machine. Any sewing pattern can be selected as long as the needle will drop into the holes of the buttons.
When sewing patterns that do not have crossover stitches, the thread is trimmed after sewing of one side is completed, and then the other side is sewn.

No.	No. of button holes	Sewing pattern	No. of threads	No. of crossover stitches	No. of stitches	Sewing size X × Y (mm)
1	2	（—）	6	—	12	3.4×0
54[*1]			6	—	12	
2			8	—	14	
55[*1]			8	—	14	
3			10	—	16	
4			12	—	18	
5[*2]			16	—	22	
6[*2]			20	—	26	
56[*1]		（ǀ）	6	—	11	0×3.4
7[*3]			6	—	12	
23[*3]			10	—	16	
8[*3]			12	—	18	
9[*3]	3	（▽）	5-5-5	—	21	2.6×2.4
24[*3]			7-7-7	—	27	
25[*3]		（△）	5-5-5	—	21	
26[*3]			7-7-7	—	27	
57[*1]	4	（□）	6-6	1	18	3.4×3.4
10			6-6	1	19	
58[*1]			8-8	1	22	
11			8-8	1	23	
12			8-8	3	25	
13			10-10	1	27	
27			12-12	1	31	
14[*4]		（=）	6-6	0	24	
36[*4]			6-6	0	24	
28[*4]			8-8	0	28	
37[*4]			8-8	0	28	
15[*4]			10-10	0	32	
38[*4]			10-10	0	32	
29[*4]			12-12	0	36	
39[*4]			12-12	0	36	
59[*1]	4	（Ɀ）	6-5	1	17	3.4×3.4
16			6-5	1	18	
60[*1]			8-7	1	21	
17			8-7	1	22	
30			10-9	1	26	
61[*1]		（Ɐ）	6-6	1	18	
18			6-6	1	19	
62[*1]			8-8	1	22	
19			8-8	1	23	
63[*1]			10-10	1	26	
31			10-10	1	27	
45			12-12	1	31	
20[*4]		（×）	6-6	0	24	
40[*4]			6-6	0	24	
32[*4]			8-8	0	28	
41[*4]			8-8	0	28	
33[*4]			10-10	0	32	
42[*4]			10-10	0	32	

No.	No. of button holes	Sewing pattern	No. of threads	No. of crossover stitches	No. of stitches	Sewing size X × Y (mm)
64[*1]	4	（Ⅱ）	6-6	1	18	3.4×3.4
21[*3]			6-6	1	19	
34[*3]			10-10	1	27	
22[*3]			6-6	0	24	2.4×3.4
43[*3]		（Ⅱ）	6-6	0	24	
35[*3]			10-10	0	32	
44[*3]			10-10	0	32	
46		（×）	6-7	1	19	3.4×3.4
47			8-9	1	23	
48			10-11	1	27	
49			12-13	1	31	

*1 Use for buttons with small holes.
*2 Check that the diameter or the holes in the buttons is 2mm or greater before using the programs.
*3 Do not use the button lifter spring.
*4 When sewing of one side is completed, the button clamp rises and the thread is trimmed. To finish sewing, press the foot switch until sewing of the other side starts, or press the foot switch again after sewing of the other side is completed.
*5 When sewing of one side is completed, the thread will be trimmed without the button clamp rising, and then the other side will be sewn.

Options

●Large button（20-30mm）
Button clamp assy L（SA9303201）
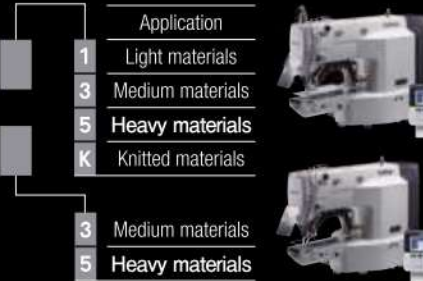
●Shank button
Shank device（SB7900001）

No.	Sewing pattern	No. of threads	No. of stitches	Length x Width（mm）
50		6	12	
51		8	14	
52		10	16	
53		12	18	

When sewing this program, use a sewing speed of 1,600 sti/min or less.

Specifications/

KE-430HX-0□
KE-430HS-0□

	Application
1	Light materials
3	Medium materials
5	Heavy materials
K	Knitted materials

3	Medium materials
5	Heavy materials

BE-438HX

Model	KE-430HX				KE-430HS		BE-438HX
Application	Light materials	Medium materials	Heavy materials	Knitted materials	Medium materials	Heavy materials	Button attaching
Lubrication	Semi-dry				Minimum lubrication		Semi-dry
Max. sewing speed	3,300sti/min						2,800sti/min
Sewing area	Max.40×30mm[*1]						Max.6.4x6.4mm
Dimensions of buttons that can be Sewn	—						Outer diameter of buttons 8-30mm[*2]
Stitch length	0.05∼12.7mm						0.05∼6.4mm
Feed mechanism	Y-θ intermittent feed mechanism (pulse-motor driven mechanism)						
No. of stitches	Variable (Refer to "Program List" for details on the number of stitches for sewing patterns that are already preset.)						
Max. No. of stitches	5,000 stitches/pattern						
Work clamp lifter	Pulse motor drive system						
Work clamp height / Button clamp height	Max. 17mm						Max. 13mm
Rotary hook	Shuttle hook (double shuttle hook, optional)						
Digital tension	Standard equipment				—		Standard equipment
Thread wiper	Standard equipment						
Thread trimmer	Standard equipment						
Thread nipper	-01, -03, -0K:Standard equipment（-05:Option）						Option
Data storage method	Internal flash memory (Data addition is available with external memory)						
No. of cycle programs	30 cycle (50 programs for each cycle)						
No. of stored data	89 sewing patterns are set already						64 sewing pattern are set already
	(Up to 500 patterns can be added. Total number of stitches of stored data which can be added is within 500,000.[*3])						
Motor	AC servo motor 550W (Direct Drive)						
Weight	Machine head: Approx. 58kg, Operation panel: Approx. 0.5kg, Control box: Approx. 7kg						
Power supply	Single-phase 100V/220V, 3-phase 220V/380V/400V 400VA（For single-phase 100V and 3-phase 380V/400V, the trans box is required.）						

*1 Use the optional 50X40 SEWING AREA SET (SB7777001) for wide area of 50x40 mm.
*2 Use the optional button clamp (SA9303201) for diameters of 20 mm or grater.
*3 The number of sewing patterns and number of stitches that can be recorded will vary depending on the number of stitches in each sewing pattern.

World's Fastest Sewing[*1]

With the world's top-class sewing speed and prevention of thread breakage with a Needle Cooler, the machine has increased productivity.
It also has superior sewing quality, usability, and reduces maintenance cost.

*1 Electronic Direct Drive Lockstitch Bar Tacker, According to Brother survey, 08.2017

Productivity Improvement by World's Fastest Sewing[*2] and IoT

1 Overwhelmingly superior productivity with sewing speed 3,300sti/min

KE-430H provides 3,300sti/min (BE-438H: 2,800sti/min) and contributes to enhance productivity.
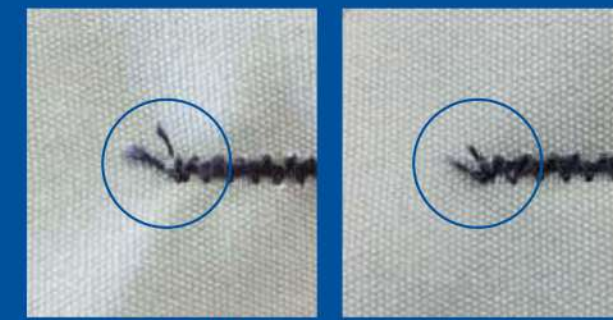
2 Needle Cooler prevents thread breakage

Needle Cooler[*3] prevents thread breakage, it enhances actual sewing speed by 10% compared with current model, F series. It provides high productivity and quality.

3 Productivity improvement with IoT

NEXIO series are IoT applicable models. The visualization by connecting sewing machine and computer technology enables the customer to analyze, manage processes, speed up productivity improvement and maintenance work.

4 Reduction of disposition of thread ends (short remaining thread)

Thread trimmer driven by stepping motor cuts the thread shorter, stable and quietly than conventional mechanical thread trimmer. It reduces hand trimming work after sewing.
Also, the thread nipper, equipped as standard[*4], minimizes thread cast off at sewing start and bird's nest.

Conventional Model KE-430H

*2 Electronic Direct Drive Lockstitch Bar Tacker, According to Brother survey, 08.2017
*3 KE-430HX *4 KE-430HX-1, -3, -K spec.

Beautiful and Highly-reproducible Sewing Quality

5 Thread tension can be set as numerical value by digital tension

You can adjust the tension appropriately for the material being sewn without relying on individual feel.
It provides higher production management and sewing reproducibility.

6 Clean sewing without Oil staining

HX models are semi-dry type and they supply constant clean oil only to the shuttle hook, there is no concern of oil staining. HS models are minimum lubrication and they supply limited oil only to the needle bar and thread take-up to prevent oil from being dispersed, realizing clean sewing for your valued product.

Superior Usability as Everyone can Use Easily and Reliably

7 User- intuitive Color LCD with touch panel

Equipped the Color LCD with touch panel that indicates display items with illustration icons, offering use-intuitive operation. It is very easy to set the cycle program, along with sewing patterns, sewing speed, and magnification. The upper thread tension can be stored easily as user programs.

USB port is equipped

Data transfer to other sewing machines and software upgrade can be done easily with USB memory.

8 Reduction of maintenance cost as there is no need for grease-up work.

There is no need for grease-up work at the connecting rod because it adopts oil lubricating, and reduces maintenance work.

9 Low noise and low vibration for stress-free operation

The noise and vibration are minimized by reducing impact during thread trimming. Operators can sew conformably without fatigue and stress.

10 Set button smoothly

BE-438H's renewed button clamp enables to set a button more smoothly.

11 Wide variety of sewing capability due to enlarged sewing area (50x40mm)

Sewing area can be expanded from 40x30mm to 50x40mm as option. It enables to sew more applications such as hook and loop fastener and applique.

Sewing Patterns List (KE-430H)

The sewing patterns shown below have been preset into the sewing machine and can be selected according to specifications. (Any sewing pattern is available as long as it is within the work clamp and feed plate in size.)
Use the work clamp and feed plate that match the respective sewing pattern selected.

(KE-430H)

For medium materials (-03)

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
8		21	7×2	5		29	10×2	64[*1]		30	16×2
68[*1]		22	7×2	67[*1]		30	10×2	4		31	16×2
20		28	7×2	13		35	10×2	66[*1]		32	16×2
71[*1]		29	7×2	69[*1]		36	10×2	1		42	16×2
21		35	7×2	15		42	10×2	65[*1]		43	16×2
72[*1]		36	7×2	70[*1]		43	10×2	89		90	24×2

For heavy materials (-05)

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
6		30	16×3	3		35	20×3	17		42	24×3
80[*1]		31	16×3	63		35	20×3	83[*1]		43	24×3
14		35	16×3	79[*1]		36	20×3	18		56	24×3
81[*1]		36	16×3	2		42	20×3	64[*1]		57	24×3
16		43	16×3	62		42	20×3	19		64	24×3
82[*1]		44	16×3	78[*1]		43	20×3	85[*1]		65	24×3

For knitted materials (-0K) and light materials (-01)

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
22		14	7×2	33[*2]		15	8×2	31[*2]		28	8×2
75[*1]		15	7×2	32[*2]		22	8×2	73		29	8×2
9		21	7×2	7[*2]		23	8×2	76[*1]		29	8×2
74[*1]		22	7×2	7		28	8×2				

*1 Use with the thread nipper device. *2 The sewing start and sewing end are in the middle pattern

Straight bar tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)
10		21	10×0.3
11		28	10×0.3
12		28	20×0.3
23		35	25×0.3
24		42	25×0.3
25		45	25×0.3

Vertical zigzag stitching

No.	Sewing pattern	No. of stitches	Length x Width (mm)
44		46	9×15
45		70	9×25

Vertical bar tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
26		28	3×10	41		36	3×16
27		35	3×10	42		44	3×20
40		32	3×16	43		68	3×24

Vertical straight bar tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
28		19	0.3×10	42		32	16×2
				46		27	0.3×20
29		21	0.3×10	43		16×2
30		28	0.3×10	47		44	0.3×25

Crescent bar tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)	No.	Sewing pattern	No. of stitches	Length x Width (mm)
34		35	12×7	36		57	7×12	38		53	7×10
35		58	12×7	37		57	7×12	39		53	7×10

Crossed stitching

No.	Sewing pattern	No. of stitches	Length x Width (mm)
48		70	10×10
49		93	9.6×9.6

Crossed tacking

No.	Sewing pattern	No. of stitches	Length x Width (mm)
50		84	16×16
51		105	30×26