

BUTTON SEWING BARTACKING MACHINE

Computer-controlled, High-speed, Lockstitch, Bartacking Machine
Computer-controlled, High-speed, Lockstitch, Button Sewing Machine

LKS - 190 □ AN - S S - □

機種別 Model
0 套結縫紉 Bartacking
2 釘褲耳 Belt-loop attaching
3 釘釦 Button sewing

電控系統 Control System
AN 原有系統 Original System
P 一體機 Mechatronic

壓腳 Work clamp foot
S 標準 Standard
H 厚料 Heavy material

縫製區分 Application
S 標準 Standard
H 厚料 Heavy material
F 內衣 Foundation

釘扣配件 Button sewing Attachment
301 極小扣、小扣 Extra small, small button
302 中扣 Medium button
ABF 自動扣 Automatic Button Feeding

LKS-1900AN



LKS-1900P



特點 / FEATURE

高效地生產性能

現了高速的縫製速度3,200rpm，通過高速的性能，能快速啟動和終止縫製，通過高速的切線速度以及自動抬壓腳操作，大幅度縮短了套筒循環時間。

優質的縫製品質

配備面線夾線機構。它可防止起縫時的鬆線，以及布料反面的鳥巢現象，還消除了面線被污染的情況。通過進一步改進切線機構，使切線後留在布料反面的線殘量變短。



廣闊的縫製範圍和多樣化地縫製花樣

具備了縱30mm × 橫40mm 的縫製範圍，可對應多樣化地套結形狀，包括一般套結形狀和半月套結，圓型套結及菊花孔鎖眼等50多個種類的縫製花樣。在LK-1900，LK-1900AN上使用的資料(EP-ROM, EEP-ROM)也能進行縫製使用。

消除了油污

通過採用先進的乾機頭化技術，面部（針杆部・挑線杆部）實現了無機油化。擺梭部是通過油箱來提供微量的乾淨的機油。

標準裝備了電子夾線器

可在操作盤上設定能對應各種縫製條件（線・布料・縫製速度等）的面線張力，同時此資料也可保存或者再使用。可分別設定起縫・暗縫・曲折縫以及縫製結束時（固定縫）各部位的面線張力。如果使用了操作控制盤IP-420B，可設定每一針的面線張力。它改善了高低段部以及縫製方向的收線不良，提高了縫製品質。



電子夾線器
Active tension

標準裝備了新型的脈衝馬達式自動抬壓腳機構

可以切換從1段行程到2段行程，使車縫操作容易手持定位。2段行程可通過操作控制盤來設定中間停止的高度。壓腳上升量通過與僅轉抬針機能並用，最大可達到17mm。

Higher productivity

The machine realizes high speed 3,200rpm. In addition to the high speed sewing performance, cycle time can be substantially decreased.

Excellent seam quality

With needle thread nipper, which prevents thread slipping off from the needle hole at the beginning of sewing, and bird-nest problem on the bottom side, and also oil stain problem. For the advanced thread trimming mechanism, the remained thread-end can be shortened.

Wider sewing area and many different sewing patterns

The With 30mm X 40mm (L x W) sewing area, the machine can sew 50 patterns of bartacks, including common shapes, half-moon, round, radical tacking. The machine can sew by the same data of LK-1900 and LK-1900AN (EP-ROM, EEP-ROM).

Oil stains are eliminated

With dry-head technology, the frame (needle bar, thread take-up) no longer requires oil-lubrication. Just a small quantity of clean oil is supplied from the oil tank to the shuttle hook.

Electronic thread tension controller is standard equipped.

With active tension mechanism, it can set a needle thread tension that matches various sewing conditions (such as thread, material, sewing speed...) on the operation panel, store the data in memory or reuse. The needle thread tension can be separated according to stitching type or portion of a seam, such as the beginning part, base part, zigzag part and ending part (fastening stitch). With operation panel IP-410B, the tension can be set on a stitch-by-stitch basis. This eliminates undesired thread tension variations at a multi-layered part of material or with sewing direction, which upgrades seam quality.

Stepping motor type auto-lifter is standard equipped

Auto-lifter can be set as one-step stroke or double-step stroke, which offers easier sewing material handling. For the double-step stroke, an intermediate stopping height can be set on the operation panel. The presser foot lifter can be set to 17mm Max. by using the reverse-rotation needle-up function in combination with the auto-lifter mechanism.

優越的操作性能

通過小型AC伺服馬達直接連結的直接驅動式機頭(無皮帶)·實現了優越的應答性能及精確的剎停精度。即使是在高速運轉下也能創造出低振動、低噪音的舒適的工作環境。在機頭部設置了手輪·能更容易確認針的落針點。

可在起縫點處進行調整

起縫點可向X、Y方向移動。配合壓腳形狀可以調整縫製花樣的位置。

Excellent workability and operability

The direct-drive head (without belt), which is driven by compact AC servo motor, realizes outstanding responsiveness and improved stop accuracy, which provides a comfortable working condition with low vibration and noise. The arm section is equipped with a hand wheel. Operators can visually check the needle entry points.

The sewing starting point can be corrected.

The sewing starting point can be shifted in X/Y direction. This enables the correction of a sewing pattern in accordance with the presser foot configuration.

LKS-1902AN

特點 / FEATURE

可通過單鍵操作來選擇縫製花樣

標準裝備了6個種類的線套結花樣。由於可分別使用最適合褲帶環寬度的針數以及縫製尺寸·因此可簡便的變更縫製尺寸。

重視操作性的機頭設計

大彎曲的送布台(壓腳臂)更易於面料的安放。此外·寬闊的機台和細長型的機床形狀等這些頭部設計·即使是揮動布料或者連續的工序都能發揮優越的操作性·提高了褲帶環縫的生產效率。



The sewing pattern can be selected by single-key operation

With 6 patterns of linear bartacks. Since the sewing size can be easily changed, the optimal number of stitches and sewing size can be speedily selected according to the belt-loop width.

Operability-oriented design

With its broadly curved feed bracket (presser arm), the machine provides easy placing of sewing material. The slim shape bed and head design makes free space under the arm demonstrates greater operability in handling sewing materials, which increases production efficiency.

LKS-1903AN

特點 / FEATURE

高效的生產性能，多種的縫製花樣

最快縫製速度2,700sti/min·能快速地啟動和結束縫製·標準配備了50種縫製花樣·能簡單地進行切換·方便應對多種縫製花樣。任選配ABF自動送扣裝置·可以得到最高生產效率。



Higher productivity, many sewing patterns.

The machine achieves sewing speed as 2,700rpm Max. with quick starting and stopping. Providing 50 sewing patterns, which changeover is easy to be set. With optionally equipping ABF auto-button feeder, LKS-1903AN can reach the highest production efficiency.



• ABF

規格 SPECIFICATIONS

機種名 Model name	套結 Bartacking			釘褲耳 Belt-loop Attaching		釘扣 Button Sewing
	LKS-1900AN-SS	LKS-1900AN-HS	LKS-1900AN-FS	LKS-1902AN-SS	LKS-1902AN-HS	LKS-1903AN-SS
規格 Application	標準 Standard	厚料 For heavy-weight materials	內衣 For foundation	標準 Standard	厚料 For heavy-weight materials	標準 Standard
最高縫製速度 Max.sewing speed	3,200sti/min*			3,000sti/min*		2,700sti/min*
可縫尺寸 Sewing area	縱30mmX橫40mm 30mm(L)X40mm(W)					鈕扣尺寸: 圓型平扣 Φ8-Φ32mm 標準(Φ8-Φ20mm) Button size: Round-shaped, flat button Size :Φ8-Φ32mm (standard Φ8-Φ20mm)
縫跡長度 Stitch length	0.1~10mm(0.1mm 單位) 0.1~10mm(0.1mm step)					
針杆行程 Needle bar stroke	41.2mm					45.7mm
壓腳上升量 Lift of the work clamp foot	標準14mm(反轉針上升時17mm) Standard 14mm(17mm when the reverse-rotation needle-up function)					最大13mm MAX. 13mm
自動抬壓腳裝置 Auto-lifter	標準裝備(脈衝馬達) Provided as standard (stepping motor type)					
面線張力 Needle thread tension	電子夾線器(電子夾線機構) Active tension (electronic thread tension control system)					
機針 Needle	DPX5(#14)	DPX17(#21)	DPX5(#11)	DPX5(#14)	DPX17(#21)	DPX17(#14)
旋梭 Hook	半旋轉標示旋梭 standard shuttle hook					
記憶容量 Number of stitches that can be stored in memory	最多20,000針 Max. 20,000 stitches					
標準花樣數 Number of standard patterns	50個花樣 50 patterns			17,18(19,20,21,22*)出廠時為「禁止 呼叫顯示」 17,18(19,20,21,22*)*This device has been factory-set to "invoking prohibited" status at the time of delivery.		50個花樣 50 patterns
可記憶數據 Number of data that can be input	200個個花樣(最多可追加至150個花樣縫製數據) 200 patterns (for up to 150 patterns,sewing data can be added.)					
擴大、縮小機能 Enlarging/Reducing facility	20~200%(1%單位)、縫製長度增減方式 20~200%(1% step), Pattern enlargement/reduction can be done by increasing/ decreasing the stitch length					
記憶媒體 Memory media	EEP-ROM · EP-ROM					
底線計數 Bobbin thread counter	標準裝備(上增、下減方式) Provided as standard(up/down method)					
加油方式 Lubrication	旋梭部；微量加油 Hook: minute-quantity lubrication					
機油 Lubricating oil	白礦油#32 ISO VG32					
機器馬達 Sewing machine motor	小型AC伺服馬達(直驅式) Compact AC servo motor(direct-drive system)					
消費電力 Power consumption	450VA					530VA
重量 Weight	頭部(搭載馬達)42kg · 電子裝置16.5kg Machine head (include motor)42kg · Control box 16.5kg					機頭 (搭載馬達47.3Kg · 電控箱11.3Kg) Machine head (include moto)47.3kg · Control box 11.3kg

*sti/min是Stitches per Minute (針/分)的省略

*快閃記憶體卡(TM)請使用符合CFA規格產品

*快閃記憶體卡(TM)是美國Sandisk商標

*sti/min stands for "Stitches per Minute"

*Compact Flash TM or CFA specification compatible media.

*Compact Flash TM is a registered trademark of SanDisk Corporation, U.S.A.

*使用專用壓腳時，請確認縫製圖案的形狀。萬一，壓腳突出縫製圖案，縫製途中機針就有碰到壓腳，發生斷針的危險。

*In case of using an exclusive work clamp foot, make sure of the shape of the sewing pattern. If the sewing pattern extends outside the work clamp foot, the needle interferes with the work clamp foot during sewing, resulting in the danger of the needle breakage or the like.

NO.	1	2	3	4
壓腳 Work clamp foot	P801JK-A(組件) P801JK-A(asm.)		P802JK-A(組件) P802JK-A(asm.)	
壓腳下板 Feed plate	D801JK 有齒牙 With knurl	D811JK 無齒牙 Without knurl	D821JK 無齒牙 Without knurl	D802JK 有齒牙 With knurl
縫製規格 Application code	S	F	F	H/W
手指保護器 Finger guard				
備註 Remark	(S)規格機頭上標準配備 Installed on machine head		(F)規格機頭上標準配備 Installed on machine head	
				選購品 Option

NO.	5	6	7	8	9
壓腳 Work clamp foot	P804JK-A		P805JK-A(組件) P805JK-A(asm.)	P806JK-A(組件) P806JK-A(asm.)	
壓腳下板 Feed plate	D804JK 有齒牙 With knurl	D814JK 有齒牙 With knurl	D832JK 有齒牙 With knurl	D838JK 無齒牙 Without knurl	D816JK 無齒牙 Without knurl
縫製規格 Application code	S	H/W	S	F	F
手指保護器 Finger guard	BF867JK		-	BF897JK	
備註 Remark	(S)規格機頭上標準配備 Installed on machine head	(H/W)規格機頭上標準配備 Installed on machine head	選購品 Option	(F)規格機頭上標準配備 Installed on machine head	

*更換壓腳時，請安裝適合壓腳的手指保護器

*Install a Finger guard suitable for each work clamp foot when replacing the work clamp foot.

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壓腳一覽表

TABLE OF THE WORK CLAMP FOOT

NO.	10	11	12	13	14
壓腳 Work clamp foot	P808RJK P808LJK	P810RJK P810LJK	P811RJK P811LJK	P812RJK P812LJK	P813RJK P813LJK
壓腳下板 Feed plate	D808JK 無齒牙 Without knurl	D827JK 有齒牙 With knurl	D828JK 有齒牙 With knurl	D829JK 有齒牙 With knurl	D830JK 有齒牙 With knurl
縫製規格 Application code	F	S	S	S	S
手指保護器 Finger guard	BF898JK	-			
備註 Remark	選購品 Option				

*更換壓腳時，請安裝適合壓腳的手指保護器

*Install a Finger guard suitable for each work clamp foot when replacing the work clamp foot.

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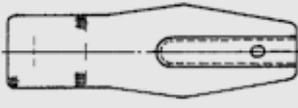
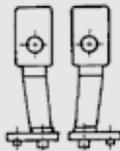
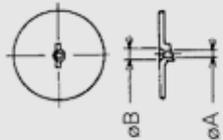
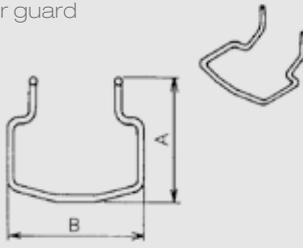
壓腳一覽表

TABLE OF THE WORK CLAMP FOOT

	標準 Standard LKS-1902ANSS LKS-1902ANHS	選購品/大尺寸用 (特別訂製零件) Option/For Larger size (Special order part)	選購品/特大尺寸用 (特別訂製零件) Option/For Larger size (Special order part)	
壓腳 Work clamp foot	P815JK-A 	P817JK-A 	P816JK-A 	
壓腳下板 Feed plate	D833JK 	D823JK 	D824JK 	D825JK
花樣號數 Number of pattern	17,18	19,20,21	22	

選購件一覽表

TABLE OF THE WORK CLAMP FOOT

零件名稱 Part name	說明 Description	貨號 Part No.	
布壓腳下板夾 Feed plate blank  t=1.2 *不銹鋼 t=0.5 *stainless steel t=0.5	無牙齒/有表面處理 Without knurl / with plating	縫製範圍 縱20X橫40 Sewing area 20X40	D818JK
	有牙齒/有表面處理 With knurl / with plating	縫製範圍 縱 20X橫40 Sewing area 20X40	D819JK
	無牙齒/不銹鋼 Without knurl / stainless steel	縫製範圍 縱 20X橫40 Sewing area 20X40	D820JK
	有牙齒/有表面處理 With knurl / with plating	縫製範圍 縱 30X橫40 Sewing area 30X40	D839JK
	有牙齒/有表面處理 With knurl / with plating	縫製範圍 縱 30X橫40 Sewing area 30X40	D822JK
壓腳滑板 Work clamp foot face plate 	布壓腳夾用滑板(右) Face plate for presser blank(right)		P814RJK-E
	布壓腳夾用滑板(組件) Face plate for presser blank(asm.)		P814JK-A
	布壓腳夾用滑板(左) Face plate for presser blank(left)		P814LJK-E
壓腳夾 Presser blank  t=3.2	有牙齒/有表面處理(右) With knurl / with plating (right)	縫製範圍 縱20X橫40 Sewing area 20X40	D835RJK
	有牙齒/有表面處理(左) With knurl / with plating (left)	縫製範圍 縱20X橫40 Sewing area 20X40	D835LJK
	有牙齒/有表面處理(右) With knurl / with plating (right)	縫製範圍 縱30X橫40 Sewing area 30X40	D836RJK
	有牙齒/有表面處理(左) With knurl / with plating (left)	縫製範圍 縱30X橫40 Sewing area 30X40	D836LJK
	有牙齒/無表面處理(右) With knurl / without plating (right)	縫製範圍 縱30X橫40 Sewing area 30X40	D837RJK
	有牙齒/無表面處理(左) With knurl / without plating(left)	縫製範圍 縱30X橫40 Sewing area 30X40	D837LJK
針孔導向器 Needle hole guide 	A=2.3 B=4.0 無槽 A=2.3 B=4.0 Without relief slit	H.W規格 H and W types	E152JK
手指保護器 Finger guard 	A=59 B=74	大擺動用 For large size bartacking	BF867JK

標準花樣一覽表

TABLE OF THE STANDARD PATTERNS

	圈號 No.	落針圖 Stitch diagram	針數 Number of stitches	縫製尺寸 Sewing size (mm)		(註二) 壓腳編號 (Note 2) No. of Work clamp foot	
				縱 Length- wise	橫 Cross- wise		
大加固 Large size bartacking	1		42	2.0	16	1	
						2	
						3	
		2		42	2.0	10	1
			2				
			3				
		3*		42	2.5	16	1
			4				
		4*		42	3.0	24	6
			7				
	5		28	2.0	10	1	
						2	
						3	
	6		28	2.5	16	1	
						4	
	7		36	2.0	10	1	
						2	
						3	
	8*		36	2.0	16	1	
						4	
	9*		56	3.0	24	6	
						7	
	10*		64	3.0	24	6	
						7	
小加固 Small size bartacking	11		21	2.5	6	8	
	12		28	2.5	6		
	13		36	2.5	6		
針織加固 Knit goods bartacking	14		14	2.0	8	5	
	15		21	2.0	8		
	16		28	2.0	8		

	圈號 No.	落針圖 Stitch diagram	針數 Number of stitches	縫製尺寸 Sewing size (mm)		(註二) 壓腳編號 (Note 2) No. of Work clamp foot	
				縱 Length- wise	橫 Cross- wise		
線加固 Straight line bartacking	17		21	0	10	1	
						2	
						3	
		18		28	0	10	1
			2				
			3				
		19		36	0	25	6
	20		7				
	21		41	0	25	6	
	22					7	
縱線加固 Lengthwise bartacking	23		28	20	4.0	9	
						10	
	24		36	20	4.0	9	
						10	
	25		42	20	4.0	9	
		10					
26		56	20	4.0	9		
針織加固 Lengthwise linear bartacking	27		18	20	0	11	
	28		21	10	0		
	29						
30		28	20	0			

- 1.縫製尺寸為放大率100%的尺寸
- 2.壓腳號碼請參照壓腳附件一覽表
- 3.NO.22為加工半成品時使用
- 4.* 標記圖案為牛仔布料用

- 1.Sewing size shows the dimensions when the scale rate is 100%
- 2.Refer the No. of work clamp foot to the separate table of work clamp foot.
- 3.For No.22 modify the work clamp foot blank for use.
4. Use the patterns with * marks for sewing denim.

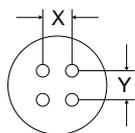
	圈號 No.	落針圖 Stitch diagram	針數 Number of stitches	縫製尺寸 Sewing size (mm)		(註二) 壓腳編號 (Note 2) No. of Work clamp foot
				縱 Length- wise	橫 Cross- wise	
半月形加固 Semilunar bartacking	31		52	7	10	13
	32		63	7	12	13
	33		24	6	10	13
	32		31	6	12	13
	35		48	10	7	14
	36		48	10	7	14
大加固 Large size bartacking	37		90	3	24	6 7
針織加固 Knit goods bartacking	38		28	2	8	5
圓形加固 Round bartacking	39		28	ø12		16
	40		48	ø12		16

	圈號 No.	落針圖 Stitch diagram	針數 Number of stitches	縫製尺寸 Sewing size (mm)		(註二) 壓腳編號 (Note 2) No. of Work clamp foot
				縱 Length- wise	橫 Cross- wise	
縱線加固 Lengthwise bartacking	41		29	20	2.5	12
	42		39	25	2.5	12
	43		45	25	2.5	12
	44		48	30	2.5	12
	45		75	30	2.5	12
	46		42	30	2.5	12
	菊花鎖眼 Radial tacking	47		91	ø8	
48		99				
49		148				
50		164				

LKS-1903AN

鈕扣縫制花樣一覽表

TABLE OF THE BUTTON SEWING PATTERNS



花樣 No.	縫製形狀 Sewing patterns	縫線(根) Sewing thread (PCS.)	標準長度 X(mm)	標準長度 Y(mm)
1, 34		6-6	3.4	3.4
2, 35		8-8		
3		10-10		
4		12-12		
5, 36		6-6		
6, 37		8-8		
7		10-10		
8		12-12		
9, 38		6-6		
10, 39		8-8		
11		10-10		
12, 40		6-6	3.4	3.4
13, 41		8-8		
14		10-10		
15, 42		6-6		
16, 43		8-8		
17		10-10		

花樣 No.	縫製形狀 Sewing patterns	縫線(根) Sewing thread (PCS.)	標準長度 X(mm)	標準長度 Y(mm)
18, 44		6	3.4	0
19, 45		8		
20		10		
21		12		
22		16		
23, 46		6		
24		10		
25		12		
26, 47		6-6	3.4	3.4
27		10-10		
28, 48		6-6		
29		10-10	3.0	2.5
30, 49		5-5-5		
31		8-8-8		
32, 50		5-5-5		
33		8-8-8		

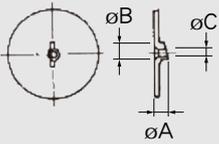
1.標準縫製長度X、Y、為擴大縮小率100%時。
 2.花樣NO.34~NO.50、請在孔小時候(Φ1.5mm以下)使用

1. Standard sewing lengths X and Y given above are given assuming that the scales is 100%
 2. Use the patterns No. 34~50 with hole diameter 1.5mm or less.

LKS-1903AN

各鈕扣尺寸的機種區分

MODELS CLASSIFIED BY BUTTON SIZES

機種名 Model name		LKS-1903AN-301			LKS-1903AN-302	
鈕扣尺寸區分 Button size		極小扣用 For extra-small button		小扣用(附屬品) For small button(accessory)	中扣用 For medium-size button	
可縫制的鈕扣外徑(mm) Outside diameter that can be adjusted(mm)		Φ8~Φ9	Φ9~Φ10	Φ10~Φ15	Φ10~Φ20	Φ10~Φ20
縫製尺寸 Sewing size	縱 Length-wise	0~2.5	0~3.0	0~3.5	0~3.5	0~4.5
	橫 Cross-wise	0~2.5	0~3.0	0~3.5	0~3.5	0~4.5
鈕夾(組合圖) Button clamp jaw lever (combination)		厚度(mm) Thickness (mm)		"1.7 (2.2)"	"1.7 (2.2) (2.7) (0.9)"	"2.0 (2.2) (2.7)"
		型號 Part no.	右 Right	BF916RJK-A1	BF916RJK-A2	BF916RJK-A
			左 Left	BF916LJK-A1	BF916LJK-A2	BF916LJK-A
小針板(mm) Needle hole guide (mm) 		A		1.6	1.6	1.6
		B		Φ2.8	(Φ3.5)	(Φ3.5)
		C		Φ1.6	(Φ1.6)	(Φ2.0)
		型號 Part no.		E155JK	E156JK	E154JK
壓腳下板 Feed plate		D826JK		-	D840JK	

LKS-1903AN

立扣用選購零件

OPTIONAL PART FOR SHANK BUTTON

型號 Part no.	品名 Name of part
BF839JK-A1	夾具套件 Very small clamp Pick-up device complete
BC810JK	針棒 (適用TQ-1) Needle bar(for TQ-1)
BE880JK	撥線器 Wiper asm.
BF929JK	活動板連接件 Moving plate link A
BF930JK	襯套 Bushing
SK955	螺絲(X2) Screw(X2)

型號 Part no.	品名 Name of part
BF928JK	鈕扣座連杆 Button support link
SK360	螺絲 Screw
BF831JK	連桿 Connecting link
SM4844	螺絲 M_screw
E157JK	針板 Needle hole guide
TQX3#14-E	針 NEEDLE TQx3#14-E