

### LK-1900A SERIES

Computer-controlled, High-speed, Bartacking Machine



LK-1900A-SS (Table stand is optionally available.)

# LK-1900A SERIES

The machine is provided with an active tension mechanism which enables the electronic control of "stitching."

## LK-1900A SERIES

The machine runs at 3,000rpm, faster than any other sewing machine ever made.

The proven computer-controlled

bartacking machine has been dramatically evolved to be an easier-to-use machine.



- ■The machine runs at 3,000rpm, faster than any other sewing machine ever made.
- ■In addition to the high-speed sewing performance, the machine's starting, stopping, thread-trimming and automatic presser lifting speeds have been increased to significantly shorten total cycle time (reduced approximately 30% compared to our predecessor model: For 42-stitch large bartacks).

#### **Excellent seam quality.**

- ■The machine comes with a newly developed needle thread grasping mechanism. The mechanism prevents thread from slipping off from the needle eyelet at the beginning of sewing, from tangling on the wrong side of the material and also being stained during sewing.
- ■The thread trimming mechanism has been further improved to shorten the length of thread remaining on the wrong side of the material after thread trimming.

### Wider sewing area and many different sewing patterns.

- ■With its 30mm (length) by 40mm (width) sewing area, the machine can sew many different shapes of bartacks.
- The machine is provided as standard with as many as 50 different types of sewing patterns including semilunar bartacking, round bartacking, radial tacking as well as conventional bartacks.
- The LK-1900A is also able to sew bartacks using the same data used for the LK-1900 (EP-ROM).



LK-1900A-SS (Table stand is optionally available.)

### Oil stains are eliminated.

- Thanks to our advanced dry-head technology, the frame (needle bar and thread take-up) no longer requires lubrication. This prevents the material from being stained with lubricating oil.
- Just a small quantity of just clean oil is supplied from the oil tank to the hook.

### The machine is provided as standard with the active tension (electronic thread tension control mechanism).

- Since the machine is provided with an active tension mechanism, it is able to set a needle thread tension that matches various sewing conditions (such as thread, material and sewing speed) on the operation panel, store the data in memory and reproduce it.
- ■The needle thread tension can be separated according to stitching type or portion of a seam, such as the beginning part of the seam, base stitched part, zigzag stitched part and end of the seam (fastening stitch).
- When the operation panel IP-410B is used in combination with the active tension, the needle thread tension can be set on a stitch-by-stitch basis. This helps eliminate undesired thread tension variations at a multi-layered part of a material or with sewing direction, thereby contributing to upgraded seam quality.



#### The machine is provided as standard with an auto-lifter that uses a new stepping-motor system.

- It is also possible to change over the stroke of the auto-lifter from a one-step stroke to a double-step stroke, which offers easier positioning of a material on the machine. For the double-step stroke, an intermediate stopping height can be established on the operation panel.
- ■The presser foot lift can be set to a maximum of 17mm by using the reverse-rotation needle-up function in combination with the auto lifter mechanism.

#### **Excellent workability and operability.**

- The direct-drive head (with no belt), which is directly connected to a compact AC servomotor, achieves outstanding responsiveness and improved stop accuracy. This head helps create a comfortable working environment with reduced vibration and noise.
- The arm section of the machine head is fitted with a hand pulley. This allows the operator to visually check the needle entry points.

#### The sewing starting point can be corrected.

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

#### A wide choice of subclass models of LK-1900A

- The LK-1900A model comes in five different subclass models, such as S type (standard), H type (for heavy-weight materials), F type (for foundation), M type (for knits and knitted materials) and W type (with a large shuttle hook for heavy-weight materials), to offer a choice according to any application.
- The needle's penetrating force into the material has been increased. This provides an improved responsiveness to heavyweight materials for the H type machine.
- The W type has adopted a large shuttle hook, which reduces the frequency of bobbin-thread changing to enable highly efficient sewing work.



S type (Bartacking pocket lip of suits)



H type (Bartacking crotch of jeans)



**F type** (Attaching the shoulder straps to brassier)

\* Presser foot for vertical bartacking is supplied with the unit as an accessory.



M type (Bartacking shoulder of running shirt)

#### Computer-controlled, High-speed Bartacking Machine for Eyelet Buttonholes

### LK-1901A



LK-1901A-SS (Table stand is optionally available.)



### The machine ensures high-quality bartacks on eyelet buttonholes.

- ■The machine is provided with a material-drawing mechanism which draws the right and left parallel portions of an eyelet buttonhole near to one another.
- The machine performs bartacking with the right and left parallel portions of the eyelet buttonhole drawn near to one another after the buttonhole is clamped under the work clamp foot, thereby finishing highly durable and well-tensed eyelet buttonholes.

### The sewing pattern best suited to the sewing product to be bartacked can be selected by single-key operation.

- Three different sewing patterns are prepared to enable easy switchover of sewing sizes. If the sewing patterns are assigned to the pattern keys on the operation panel, the sewing patterns can be called up or changed with single-key operation.
- The machine sews the most optimally suited bartacks on eyelet buttonholes on the front bodies of garments and straight buttonholes that differ in stitch number and size on jacket lapels, thereby improving the finished quality of sewing products.

### The material drawing mechanism can be switched to ON/OFF.

■ The material drawing amount can be adjusted to 3mm at maximum. The material drawing mechanism can be switched ON/OFF in accordance with the setting of the memory switch. With these features, the material drawing mechanism can be used with greater flexibility.

### Computer-controlled, High-speed Belt-loop-attaching Machine

### LK-1902A



LK-1902A-SS (Table stand is optionally available.)



### The sewing pattern best suited to the sewing product to be bartacked can be selected by single-key operation.

The machine is provided as standard with six different linear bartacking patterns. 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. If the normally used patterns are assigned to the patterns keys, a desired pattern can be called up or changed with single-key operation.

### The machine head has been designed with an emphasis on operability.

With its broadly curved feed bracket (presser arm), the machine permits easy placement of the material to be sewn. The slimly shaped bed and head design that allows free space under the arm demonstrates greater operability in handling materials on the machine and continuous processes. These features contribute substantially to increased productivity in belt-loop attachment processes.

### ■ WORK CLAMP FOOT AND FEED PLATE FOR LK-1902A (for belt-loop attaching)

	Work clamp foot	Feed plate	Number of pattern
Provided as standard LK-1902A-SS LK-1902A-HS	13544465	14143002	17 18
Option For large size	13545660	13545504	19 20 21
Option For extra	13547161	13545801	22
For extra large size	37 41.5	13547005	22

#### STANDARD PANEL

- ■Functional settings, such as pattern numbers, enlargement/reduction scales, swing speeds and needle thread tensions can be established through the operation panel with ease.
- Standard sewing patterns can be assigned to pattern keys P1 to P50. Any of the sewing patterns assigned to the P1 to P25 pattern keys can be activated with a touch of the corresponding key. This means that workability is improved by assigning 25 sewing patterns that are most frequently used to those pattern keys.
- ■As many as 20 different cycle sewing patterns, each of which combines a maximum of 30 different sewing patterns, can be stored in the memory.
- ■The operation panel has been installed at an angle and can be placed at the top, bottom, right or left part of the table according to the operator's preference.



### IP-410B Operation panel provided with programmable functions

#### The IP-410B is a new operation panel configured with a "input function" not available in conventional panels.

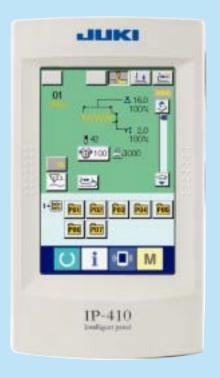
Input and edit data while observing the needle-entry points visually.

The operator can easily check the shape of the pattern displayed on the wide liquid crystal panel. Make minor adjustments to data quickly and efficiently. Overall use is easier than ever before.



LK-1900A-SS/IP-410B (Table stand is optionally available.)

The color LCD unit displays sewing data such as stitch shape, needle thread tension, enlargement/reduction ratio, maximum sewing speed and the number of stitches at a glance. For data edit operations, detailed data is shown on the screen simply by lightly pressing the display icon, thus contributing to dramatically enhanced efficiency.



### The data storing capacity of the main body of the sewing machine has been substantially enhanced.

Sewing data created with the IP-410B can be stored in the memory of the main body of the sewing machine. The memory capacity is a maximum of 200 different patterns (max. 20,000 stitches). When external media (CompactFlash $^{\text{TM}}$ ) is used, as many as 999 different patterns (max. 20,000 stitches/pattern and the max. number of stitches that can be stored in the memory is 24,000,000) can be stored.



#### **■ TABLE OF THE STANDARD PATTERNS**

			er of	Sewin	g size m)	(Note 2) No. of
	No.	Stitch diagram	Number of stitches	Length- wise	Cross- wise	work clamp foot
						1
	1	**************************************		2.0	16	2
						3
						1
	2	<b>*************************************</b>		2.0	10	2
			42			3
	<b>*</b> 3	<del>₹</del> ₩₩₩₩₩		2.5	16	1
	3	* * * * * * * * * * * * * * * * * * *		2.5	10	4
	*	8-8				6
	4			3.0	24	7
						1
ing	5	<b>%\^\^\</b>		2.0	10	2
tack	0	8888888		2.0	10	3
Large bartacking	*		28			1
arge	6			2.5	16	'
Ľ		0 0 0 0 0 0 0 0 0				4
		_8000000000000		2.0	10	1
	7	**************************************				2
			36	2.5	16	3
	*	   8≈8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8				1
	8					4
	*					6
	9	<b>₩₩₩₩₩₩₩</b>		3.0	24	
						7
	*	######################################			24	6
	10	4444444444444	64	3.0		7
	11	<b> </b>	21	2.5	6	
ing						
tack		©4888888 <b>8</b>				
bar	12	*\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	28	2.5	6	8
Small bartacking				2.5	6	
S	13		36			
	15	18382838888	50	2.0		
	14	14		2.0	8	
ding						
Large bartacking		RR ROFF R R	21	2.0	8	
bai	15					5
arge						
_	16	<b>*******</b>	28	2.0	8	
	. 3	5 5 5 5 5 5 5 5	28	2.0	8	

			er of hes	Sewin	g size m)	(Note 2) No. of		
	No.	Stitch diagram	Number of stitches	Length- wise	Cross- wise	work clamp foot		
						1		
	17		21	0	10	2		
						3		
		•				1		
	18			0	10	2		
			28			3		
king	19			0	25	6		
Linear bartacking						7		
ar ba		°				6		
Line	20		36	0	25	7		
						6		
	21		41	0	25			
						7		
	22		44	0	35	(Note 2)		
	22		44		33	(Note 3)		
		(E						
	23	Bottom Bottom	28	20	4.0			
рu			0					
acki	24	<u>ag</u> ₩₩₩₩ <u>ag</u>	36	20	4.0			
Lengthwise bartacking	27	E AAAAAAAAAA B	30	20	1.0			
vise		ê				9, 10		
gthv	25	(B) WWWW (B)	42	20	4.0			
Len		(E						
	27	(Top)	F/	20	4.0			
	26	(B) MMMMMM (B)	56	20	4.0			
		<u> </u>						
	27	(Top)	18	20	0			
king		(B)						
ırtac		(d — (mo			-			
Lengthwise linear bartacking	28	(Top)		10	0			
		9	21			11		
wise	29	(Top)		20	0			
gth√		(Bc						
Len		Œ Œ						
	30	(Top)	28	20	0			
(Not	(Note) 1. Sewing size shows the dimensions when the scale rate							

(Note) 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.

	B1-	Chihala dia amana	er of hes	Sewin	g size m)	(Note 2) No. of
	No.	Stitch diagram	Number of stitches	Length- wise	Cross- wise	work clamp foot
	31		52	7	10	13
	32	₩₩₩₩	63	7	12	13
	33		24	6	10	13
bartacking	34	<b>1</b> J	31	6	12	13
Semilunar bartacking	35		48	10	7	14
	36		48	10	7	14
bartacking	37	<del>1</del> //////	90	3	24	6
Large size				_		7
Round bartacking   Knit goods bartacking   Large size bartacking	38	<b>14 1 1 1 1 1 1 1 1 1 1</b>		8	5	
artacking	39		28	- ø12		16
Round b	40		48			10

			er of hes	Sewing size (mm)		(Note 2) No. of
	No.	Stitch diagram	Number of stitches	Length- wise	Cross- wise	work clamp foot
	41		29	20	2.5	
	42	\$ <del>\$\$\$\$\$\$\$</del> \$	39	25	2.5	
bartacking	43	\$	45	25	2.5	12
Lengthwise bartacking	44	***************************************	58	30	2.5	12
	45		75	30	2.5	
	46	\$	42 30 2.5			
D.	47	944	91			
tackinį	48		99	ø	8	15
Radial tacking	49		148	S	,	10
	50	9 8 9	164			

### **■ TABLE OF THE WORK CLAMP FOOT**

Work clamp foot		13518659 (asm.)		04	13542964 (asm.)	135481		13542451 (asm.)
clamp		20 4		4	33.4		₩.	
	14116107			27	10 4.6	9 2	97 5	10 23.8
		14116404	14116800	14116305	14116206	13548003	13554803	14116602
	25	(without knurl)	(without knurl)	21.2	11.4	25	27.4	24 ± 24
Application code	S	F	F	Н	М	S	Н	S
Finger guard*			13533104			1354		13533104
Remarks S	standard accessory for a (standard) aype machine aead.	★(3)	Standard accessory for F (foundation) type machine head. *(1)	Option	Standard accessory for M (knit and knitting fabric) type machine head.	Option	Standard accessory for H (heavy-weight material) and W (with large hook for heavy- weight materials) type machine head.	Option
No. of work								
clamp foot	9	10	11	12	13	14	15	16
_	1357195	55 (asm.)	13561360 (asm.)	14137509 (Right) 14137608 (Left)	40021871 (Right) 40021872 (Left)	40021874 (Right) 40021875 (Left)		40021880 (Right) 40021881 (Left)
Work clamp foot	5.6	23 24.1	2	0g	14 6 23 23 23 23 23 23 23 23 23 23 23 23 23	45	45	45 45 45 45 45 45 45 45 45 45 45 45 45 4
	14116503	14116909	14116701	14137707	40021873	40021876	40021879	40021882
Feed plate	without knurl)	(without knurl)	(without knurl)	(without knurl)	(with knurl)	(with knurl)	(with knurl)	(with knurl)
Application code	F	F	F	F	S	S	S	S
Finger guard*		1413	5305			1353	3104	
Remarks	Option ★(2)	For lengthwise bartacking (packed together with accessories supplied with F-type machine head) *(1)	Option	Option	Option	Option	Option	Option

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

For JE: ★(1) Option

★(2) Packed together with accessories supplied with F-type machine head.

★(3) Standard accessory for F (foundation) type machine head.



• Conventionally, the front plate has to be removed to change the work clamp. With the new work clamp kit, the work clamp can be changed without removing the plate.



- •The lever for lifting the work clamp can be independently slid back and forth.
- •The machine parts can be adjusted and replaced entirely by hand without screwdrivers or others tools. Changing parts is now a "clean-hands" procedure.
- Simple work clamp kit

Part No.: 40057279

\*The work clamp cover plates (right and left) are not included in the kit.

#### Foot pedal for standing work (optional)



- 2-pedal unit for standing work\* [Part No. M85205800A0]
- \* To connect the cable asm. to the electrical box, conversion cable (separately available) is necessary.
- Pedal switch conversion cable asm. [Part No. M90125900A0]



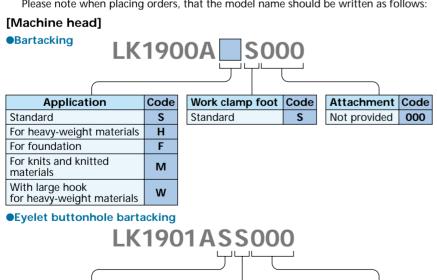
PK-57\* [Part No. GPK570010B0]

#### **■ TABLE OF THE OPTIONAL PARTS**

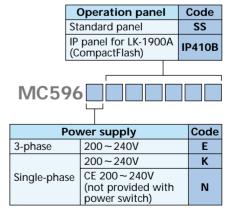
Part name	Туре	Part No.
Feed plate blank	Without knurl/with plating Sewing area 20×40	14120109
	With knurl/with plating Sewing area 20×40	14120307
	Without knurl/stainless steel* Sewing area 20×40	14120505
	Without knurl/with plating Sewing area 30×40	40021855
	Without knurl/without plating Sewing area 30×40	40021856
t=1.2	Without knurl/stainless steel* Sewing area 30×40	40021857
*Stainless steel t=0.5	With knurl/with plating Sewing area 30×40	40021858
	With knurl/without plating Sewing area 30×40	40021859
Work clamp foot face plate (asm.)	Face plate for presser blank	14121263
Presser blank	With knurl/with plating (right) Sewing area 20×40	14121701
	With knurl/with plating (left) Sewing area 20×40	14121800
	With knurl/with plating (right) Sewing area 30×40	40021851
	With knurl/with plating (left) Sewing area 30×40	40021852
t=3.2	With knurl/without plating (right) Sewing area 30×40	40021853
	With knurl/without plating (left) Sewing area 30×40	40021854
Work clamp foot blank	With knurl/with plating (right)	40021869
1414	With knurl/with plating (left)	40021870
Needle hole guide	A=1.6 B=2.6 With relief slit Standard type	B2426280000
	A=1.6 B=2.0 Without relief slit F and M types	D2426282C00
	A=2.3 B=4.0 Without relief slit for heavy-weight material	14109607
øB øA	A=2.7 B=3.7 Without relief slit for extra heavy-weight material	D2426MMCK00
Finger guard (1)	A=56.5 B=64	13533104
B	A=59 B=74 For extra-large bartacking	13548300
Finger guard (2)	A=66.5 B=43 For lengthwise bartacking	13573407
Finger guard (3)  SM8040302TP	A=21.5 B=35.5 L=67 For lengthwise bartacking	14135305
Finger guard (4)	A=21.5 B=35.5 L=58.5 For specially ordered work clamp	14120000

#### **■ WHEN YOU PLACE ORDERS**

Please note when placing orders, that the model name should be written as follows:

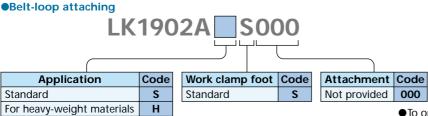


### [Control box]



Standard

**Application** 



Standard

Code

Work clamp foot Code

Attachment Code

Not provided 000

● To order, please contact your nearest JUKI distributor.

### **■ SPECIFICATIONS**

Model name	LK-1900A-SS	LK-1900A-HS	LK-1900A-FS	LK-1900A-MS	LK-1900A-WS		
Application	Standard	For heavy-weight materials	For foundation	For knits and knitted materials	With large hook for heavy-weight materials		
Max. sewing speed	3,000rpm 2,700rpm						
Sewing area			30mm (L)×40mm (W)				
Stitch length		0.	1 ~ 10mm (0.1mm ste	ep)			
Needle bar stroke			41.2mm				
Lift of the work clamp foot	Sta	ndard 14mm (17mm	when the reverse-rota	ition needle-up functi	on)		
Auto-lifter		Provided as	s standard (stepping r	notor type)			
Needle thread tension	Active tension (electronic thread tension control system)						
Needle (at the time of delivery)	DPX5 (#14)				DP×17 (#21)		
Hook		Standard sl	nuttle hook		Large shuttle hook		
Number of stitches that can be stored in memory			Max. 20,000 stitches				
Number of standard patterns			50 patterns				
Number of data that can be input		200 patterns (for up t	o 150 patterns, sewin	g data can be added.	)		
Enlarging/Reducing facility	20~200% (1% step	o), Pattern enlargement	/reduction can be done	by increasing/decreas	ing the stitch length		
Memory medium	EEP-ROM, EP-ROM						
Bobbin thread counter	Provided as standard (up/down method)						
Lubrication	Hook: minute-quantity lubrication						
Lubricating oil	JUKI New Defrix Oil No.2 (equivalent to ISO VG32)						
Sewing machine motor	450W compact AC servomotor (direct-drive system)						
Power consumption			320W				
Weight		Machine head (in	clude motor) 42kg, Co	ontrol box 16.5kg			

Model name	Eyelet buttonhole bartacking machine	Belt-loop attac	ching machine		
	LK-1901A-SS	LK-1902A-SS	LK-1902A-HS		
Application	Standard	For heavy-weight materials			
Max. sewing speed		3,000rpm			
Sewing area		30mm (L)×40mm (W)			
Stitch length		0.1~10mm			
Needle bar stroke		41.2mm			
Lift of the work clamp foot	` , ,	Standard 14mm rse-rotation needle-up	,		
Auto-lifter	Provided as	s standard (stepping r	notor type)		
Needle thread tension	Active tension (electronic thread tension control mechanis				
Needle (at the time of delivery)	DP×5 (#16) DP×5 (#16) DP×17 (#2				
Hook	Standard shuttle hook				
Number of stitches that can be stored in memory		Max. 20,000 stitches			
Applicable pattern number	11, 12, 13	17, 18 (19, 20, 21, 22*)  *This device has been factory-set to "invoking prohibited"  status at the time of delivery.			
Number of data that can be input	200 patterns (for up	to 150 patterns, sewing	g data can be added.)		
Enlarging/Reducing facility		o (1% step), Pattern enl ne by increasing/decrea			
Memory medium		EEP-ROM, EP-ROM			
Material drawing amount	Max. 3mm —				
Bobbin thread counter	Provided	as standard (up/down	method)		
Lubrication	Hook:	minute-quantity lubri	cation		
Lubricating oil	JUKI New Defrix Oil No.2 (equivalent to ISO VG32)				
Sewing machine motor	450W compact AC servomotor (direct-drive system)				
Power consumption	320W				
Weight	Machine head (in	clude motor) 42kg, Co	ontrol box 16.5kg		

CompactFlash™ or CFA specification compatible media.
 "CompactFlash™" is a registered trademark of SanDisk Corporation, U.S.A.







JUKI CORPORATION HEAD OFFICE

JUKI CORPORATION HEAD OFFICE

Juki Corporation operates an environmental management system
to promote and conduct the following as the company engages in
the research, development, design, sales, distribution, and
the research, development design, sales, distribution and
machines, industrial robots, etc., and in the provision of sales and
maintenance services for data entry systems:

(The development of products and engineering processes that
are safe to the environment?

Green procurement and green purchasing

Green procurement and green purchasing

Green procurement and green purchasion,

Green purchas



8-2-1, KOKURYO-CHO, CHOFU-SHI, TOKYO 182-8655, JAPAN

PHONE: (81) 3-3480-2357, 2358 FAX: (81) 3-3430-4909

http://www.juki.com \* Specifications and appearance are subject to change without prior notice for improvement.

\* Read the instruction manual before putting the machine into service to ensure safety.

\* This catalogue prints with environment-friendly soy ink on recycle paper.