

Computer-controlled, High-speed, Bartacking Machine

# LK-1900A SERIES



LK-1900ASS (Table stand is optionally available.)



# LK-1900A SERIES

**The world's highest sewing speed of 3,000rpm!  
The proven computer-controlled  
bartacking machine  
has been dramatically  
evolved to be an  
easier-to-use machine.**



LK-1900ASS (Table stand is optionally available.)

## Higher productivity.

- The machine achieves the world's highest sewing speed of 3,000rpm.
- 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).

## 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-200B) 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.

## 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.



## 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.



● Bartacking pocket lip of suits (S type)

■ The needle's penetrating force into the material has been increased. This provides an improved responsiveness to heavy-weight 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.



● Bartacking crotch of jeans (H type)



● Attaching the shoulder straps to brassier (F type)

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



● Bartacking shoulder of running shirt (M type)

## Auto-lifter mechanism utilizing a new system.

■ The machine is provided as standard with an auto-lifter that uses a new stepping-motor system. This helps reduce operator fatigue.

■ 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.

## 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.

## 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.

## Highly reliable electrical system.

■ The machine has adopted a highly reliable and safe transformer-less switching power system with an increased resistance to voltage fluctuations.

■ Detailed error indications prevent trouble from occurring.

## OPERATION PANEL (You can choose operation panel.)

### 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-200B

- A large color LCD touch panel has been adopted for the display. It gives clear displays that allow the operator to understand operating procedures.
- The IP-200B panel can be connected to a personal computer and can store data on SmartMedia. This allows data to be exchanged or shared among sewing machines installed in a factory or among remote factories.
- The IP-200B panel has been provided with a process improvement supporting feature through the indication of the operational state of the sewing machine, and a maintenance and management feature for indicating the needle changing timing and cleaning timing.



LK-1900ASS/Installation of the IP-200B  
(Table stand is optionally available.)



SmartMedia card



Connected to a personal computer



Communication screen



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

# LK-1901A



LK-1901ASS (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 (21-, 36- and 48-stitch bartacking) 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-1902ASS (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-1902ASS LK-1902AHS	13544465	14143002	17 18
	Option For large size	13545504	19 20 21
Option For extra large size	13547161	13545801	22
		13547005	22

\* A finger guard is included in the presser foot.

**■ TABLE OF THE STANDARD PATTERNS**

	No.	Stitch diagram	Number of stitches	Sewing size (mm)		(Note 2) No. of work clamp foot	
				Length-wise	Cross-wise		
Large bartacking	1		42	2.0	16	1	
						2	
						3	
		2		42	2.0	10	1
			2				
			3				
		*		42	2.5	16	1
			4				
		*		42	3.0	24	6
			7				
	5		28	2.0	10	1	
						2	
						3	
	*		28	2.5	16	1	
						4	
	7		36	2.0	10	1	
						2	
						3	
	*		36	2.5	16	1	
						4	
	*		56	3.0	24	6	
						7	
	*		64	3.0	24	6	
						7	
Small bartacking	11		21	2.5	6	8	
	12		28	2.5	6		
	13		36	2.5	6		
Large bartacking	14		14	2.0	8	5	
	15		21	2.0	8		
	16		28	2.0	8		

	No.	Stitch diagram	Number of stitches	Sewing size (mm)		(Note 2) No. of work clamp foot	
				Length-wise	Cross-wise		
Linear bartacking	17		21	0	10	1	
						2	
						3	
		18		28	0	10	1
							2
							3
	19		28	0	25	6	
						7	
	20		36	0	25	6	
						7	
	21		41	0	25	6	
						7	
	22		44	0	35	(Note 3)	
Lengthwise bartacking	23		28	20	4.0	9, 10	
	24		36	20	4.0		
25		42	20	4.0			
26		56	20	4.0			
Lengthwise linear bartacking	27		18	20	0	11	
	28		21	10	0		
29		21	20	0			
30		28	20	0			

- (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.  
 5. Presser foot attached with a  sign is available by special order.

	No.	Stitch diagram	Number of stitches	Sewing size (mm)		(Note 2) No. of work clamp foot
				Length-wise	Cross-wise	
Semilunar bartacking	31		52	7	10	
	32		63	7	12	
	33		24	6	10	
	34		31	6	12	
	35		48	10	7	
	36		48	10	7	
Large size bartacking	37		90	3	24	6 7
Knit goods bartacking	38		28	2	8	5
Round bartacking	39		28	ø12		
	40		48			

	No.	Stitch diagram	Number of stitches	Sewing size (mm)		(Note 2) No. of work clamp foot	
				Length-wise	Cross-wise		
Lengthwise bartacking	41		29	20	2.5	12	
	42		39	25	2.5		
	43		45	25	2.5		
	44		58	30	2.5		
	45		75	30	2.5		
	46		42	30	2.5		
	Radial tacking	47		91	ø8		
		48		99			
		49		148			
		50		164			

**■ TABLE OF THE WORK CLAMP FOOT**

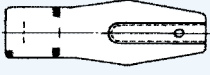
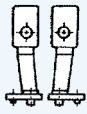

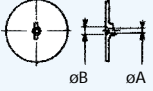
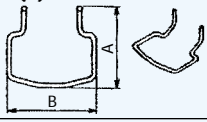
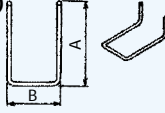

No. of work clamp foot	1	2	3	4	5
Work clamp foot	13518659 (asm.)			13548557 (asm.)	13542964 (asm.)
Feed plate	14116107	14116404	14116800	14116305	14116206
		(without knurl)	(without knurl)		
Application code	S	F	F	H	M
Finger guard*	13533104				
Remarks	Standard accessory for S (standard) type machine head.	Option (3)	Standard accessory for F (foundation) type machine head. (1)	Option	Standard accessory for M (knit and knitting fabric) type machine head.

No. of work clamp foot	6	7	8	9	10	11	12
Work clamp foot	13548151 (asm.)		13542451 (asm.)	13571955 (asm.)		13561360 (asm.)	14137509 (Light) 14137608 (Left)
Feed plate	13548003	13554803	14116602	14116503	14116909	14116701	14137707
				(without knurl)	(without knurl)	(without knurl)	(without knurl)
Application code	S	H	S	F	F	F	F
Finger guard*	13548300		13533104	14135305			
Remarks	Option	Standard accessory for H (heavy-weight material) type machine head.	Option	Option (2)	For lengthwise bartacking (packed together with accessories supplied with F-type machine head) (1)	Option	Option

For JE: (1) Option  
 (2) Packed together with accessories supplied with F-type machine head.  
 (3) Standard accessory for F (foundation) type machine head.

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

## ■ TABLE OF THE OPTIONAL PARTS

Name of parts	Type	Part No.
<b>Feed plate blank</b>  t=1.2	Without knurl	14120109
	With knurl	14120307
	Without knurl/stainless steel t=0.8	14120505
<b>Work clamp foot face plate (asm.)</b> 	Face plate for presser blank	14121263
<b>Presser blank</b>  t=3.2	With knurl/Processed (right)	14121701
	With knurl/Processed (left)	14121800
<b>Needle hole guide</b> 	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
	A=2.7 B=3.7 Without relief slit For extra heavy-weight material	D2426MMCK00
<b>Finger guard (1)</b> 	A=56.5 B=64	13533104
	A=59 B=74 For extra-large bartacking	13548300
<b>Finger guard (2)</b> 	A=66.5 B=43 For lengthwise bartacking	13573407
<b>Finger guard (3)</b>  SM8040302TP	A=21.5 B=35.5 For specially ordered work clamp	14120000

## ● Foot pedal for standing work (optional)



● **2-pedal unit for standing work\***  
[Part No. M85205800A0]

● **Pedal switch conversion cable asm.**  
[Part No. M90125900A0]



● **PK-57\***  
[Part No. GPK570010B0]

● **Pedal switch conversion cable asm.**  
[Part No. M90135900A0]

\*To connect the cable asm. to the electrical box, a conversion cable (separately available) is necessary.

## ■ WHEN YOU PLACE ORDERS Please note when placing orders, that the model name should be written as follows:

[Machine head]

### ● Bartacking

LK1900A S000

Application	Code	Work clamp foot	Code	Attachment	Code
Standard	S	Standard	S	Not provided	000
For heavy-weight materials	H				
For foundation	F				
For knits and knitted materials	M				
With a large hook for heavy-weight materials	W				

### ● Eyelet buttonhole bartacking

LK1901A SS000

Application	Code	Work clamp foot	Code	Attachment	Code
Standard	S	Standard	S	Not provided	000

### ● Belt-loop attaching

LK1902A S000

Application	Code	Work clamp foot	Code	Attachment	Code
Standard	S	Standard	S	Not provided	000
For heavy-weight materials	H				

[Control box]

Operation panel	Code
Standard panel	SS
IP-200B	PB

MC596 S S S

Power supply		Code
3-phase	200 ~ 240V	E
	200 ~ 240V	K
Single-phase	CE 200 ~ 240V (not provided with a power switch)	N

● To order, please contact your nearest JUKI distributor.

## ■ SPECIFICATIONS

Model name	LK-1900ASS	LK-1900AHS	LK-1900AFS	LK-1900AMS	LK-1900AWS
Application	Standard	For heavy-weight materials	For foundation	For knits and knitted materials	With a 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 step)				
Needle bar stroke	41.2mm				
Lift of the work clamp foot	Standard 14mm (17mm when the reverse-rotation needle-up function)				
Auto-lifter	Provided as standard (stepping motor type)				
Needle thread tension	Active tension (electronic thread tension control system)				
Needle (at the time of delivery)	DP × 5 (#14)	DP × 17 (#21)	DP × 5 (#11)	DP × 5 (#11)	DP × 17 (#21)
Hook	Standard shuttle 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 to 150 patterns, sewing data can be added.)				
Enlarging/Reducing facility	20 ~ 200% (1% step), Pattern enlargement/reduction can be done by increasing/decreasing 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 (include motor) 42kg, Control box 16.5kg				

Model name	Eyelet buttonhole bartacking machine		Belt-loop attaching machine	
	LK-1901AS	LK-1902AS	LK-1902AH	
Application	Standard	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 (by using the reverse-rotation needle-up function 17mm)			
Auto-lifter	Provided as standard (stepping motor type)			
Needle thread tension	Active tension (electronic thread tension control mechanism)			
Needle (at the time of delivery)	DP × 5 (#16)	DP × 5 (#16)	DP × 17 (#21)	
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 data can be added.)			
Enlarging/Reducing facility	20 ~ 200% (1% step), Pattern enlargement/reduction can be done by increasing/decreasing the stitch length			
Memory medium	EEP-ROM, EP-ROM			
Material drawing amount	Max. 3mm	-		
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 (include motor) 42kg, Control box 16.5kg			



**JUKI CORPORATION HEAD OFFICE**  
 The environmental management system to promote and conduct  
 ① the technological and technical research, the development and design of the products in which the environmental impact is considered,  
 ② the conservation of the energy and resources, and the recycling in the research, development, design, distribution, sale and maintenance service of the industrial sewing machines, household sewing machines and industrial-use robots, etc. and in the purchase, distribution and sale of the household commodities including the healthcare products.

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<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 catalog is printed on recycle paper.