

JUKI®



LK-1900AN Series

Computer-controlled, High-speed, Bartacking Machine

The sewing machine achieves the highest sewing speed of 3,200sti/min in the industrial sewing machine industry.



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

LK-1900AN Series

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

LK-1900AN SERIES

The machine runs at 3,200sti/min, 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.

Higher productivity.

- The machine runs at 3,200sti/min, faster than any other sewing machine ever made.
- In addition to the high-speed sewing performance, cycle time can be substantially decreased (reduced approximately 30% compared to our predecessor model: For 42-stitch large bartacks).

Reduction of noise and vibration

- The main shaft and the thread take-up lever mechanism have been reworked to enable the reduction of noise and vibration. As compared with the conventional model LK-1900A, the noise is reduced by 3.9 dB and the vibration is reduced by 1.65 dB.

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-1900AN 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-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.



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

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.

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.



JUKI ECO PRODUCTS



The LK-1900AN series is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment

- The sewing machine complies with the "Juki Group Green Procurement Guidelines" on the use of hazardous substances, which is stricter than other restrictions, such as those of the RoHS Directive.
- As compared with the conventional model, the LK-1900AN reduces noise by 3.9dB and vibration by 1.65dB. For details of JUKI ECO PRODUCTS, refer to: http://www.juki.co.jp/eco_e/index.html

*The RoHS Directive is an EU Directive limiting the use of 6 hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) in electrical and electronic equipment. The Juki Green Procurement Guideline is the voluntarily established criteria to eliminate not only the aforementioned six substances, but also other ones which also adversely affect the environment.

The machine is provided as standard with an auto-lifter that uses a 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.

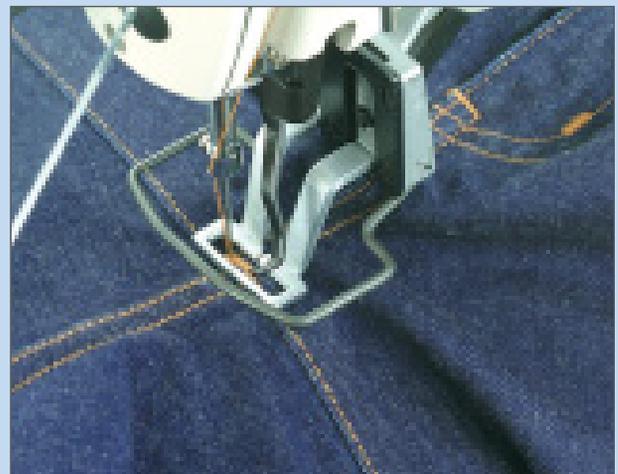
- The sewing starting point can be shifted in the X/Y direction. This enables the correction of a sewing pattern in accordance with the presser foot configuration.

Many different models are prepared according to the type of materials.

- The LK-1900AN model comes in five different type 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 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.



✦ **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-1901AN



LK-1901AN-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-1902AN



LK-1902AN-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-1902AN (for belt-loop attaching)

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

*A finger guard is included in the presser foot.

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-420B Operation panel provided with programmable functions

The IP-420B is a new operation panel configured with a "input function " not available in standard panel.

- 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.
- The memory storage capability of the main body of the sewing machine has been dramatically enhanced. Now the USB-ready main body of the sewing machine uses many different kinds of media. In addition to the Compact Flash card, the main body of the sewing machine is provided as standard with a USB connector. Now, data can be input/output to/from various kinds of media (SD (Secure Digital Card), CF (Compact Flash), SM (Smart Media), FD (floppy disks) etc.) by means of a USB thumb device and a card reader.



LK-1900AN-SS/IP-420B
(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-420B 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 and 20,000 stitches/pattern). When external media [128MB]* 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 20,000,000) can be stored.

*999 patterns can be stored in memory at the maximum on a 128 MB memory medium. More patterns can be stored by changing the memory medium with a new one.



※IP-420B should be ordered as a part.
[IP-420B:40114089]



USB card reader

■ 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		28	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		28	0	10	1	
						2	
						3	
		18		36	0	25	1
			2				
			3				
	19		41	0	25	6	
		7					
	20		44	0	35	6	
		7					
Lengthwise bartacking	21		28	20	4.0	6	
						7	
						(Note 3)	
		22		36	20	4.0	9, 10
	23		42	20	4.0	9, 10	
	24		56	20	4.0	9, 10	
Lengthwise linear bartacking	25		18	20	0	11	
		26		21	10		0
	27		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.

	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	13
	32		63	7	12	13
	33		24	6	10	13
	34		31	6	12	13
	35		48	10	7	14
	36		48	10	7	14
Large size bartacking	37		90	3	24	6
						7
Knit goods bartacking	38		28	2	8	5
Round bartacking	39		28	ø12		16
	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			15
		48		99				
		49		148				
		50		164				

■ TABLE OF THE WORK CLAMP FOOT

No. of work clamp foot	1	2	3	4	5	6	7	8
Work clamp foot	13518659 (asm.)			13548557 (asm.)	13542964 (asm.)	13548151 (asm.)		13542451 (asm.)
Feed plate	14116107	14116404	14116800	14116305	14116206	13548003	13554803	14116602
Finger guard*	13533104			13548300		13548300		13533104
Application code	S	F	F	H	M	S	H	S
S (standard)	Installed on machine head	—	—	—	—	Option	—	Option
H (heavy-weight materials)	—	—	—	Option	—	—	Installed on machine head	—
F (foundation)	—	Option★	Installed on machine head★	—	—	—	—	—
M (knits and knitted materials)	—	—	—	—	Installed on machine head	—	—	—
W (with large hook, heavy-weight materials)	—	—	—	—	—	—	Installed on machine head	—

No. of work clamp foot	9	10	11	12	13	14	15	16
Work clamp foot	13571955 (asm.)		13561360 (asm.)	14137509 (Right) 14137608 (Left)	40021871 (Right) 40021872 (Left)	40021874 (Right) 40021875 (Left)	40021877 (Right) 40021878 (Left)	40021880 (Right) 40021881 (Left)
Feed plate	14116503	14116909	14116701	14137707	40021873	40021876	40021879	40021882
Finger guard*	14135305				13533104			
Application code	F	F	F	F	S	S	S	S
S (standard)	—	—	—	—	Option	Option	Option	Option
H (heavy-weight materials)	—	—	—	—	—	—	—	—
F (foundation)	Option★	Supplied with machine as accessory★	Option	Option	—	—	—	—
M (knits and knitted materials)	—	—	—	—	—	—	—	—
W (with large hook, heavy-weight materials)	—	—	—	—	—	—	—	—

★For the foundation type (F-type) sewing machine for the European market, the work clamp foot No. 2 is installed on the machine head and the work clamp foot No. 9 is supplied with the machine as an accessory (packed together) (note that the work clamp feet No. 3 and No. 10 are not supplied with the machine).

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

■ OPTION

Simple work clamp kit

for the LK-1900AN Series



·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]

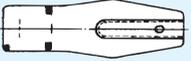
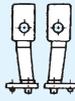
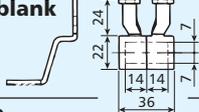
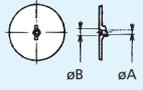
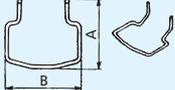
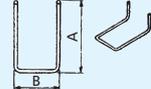
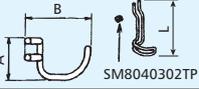
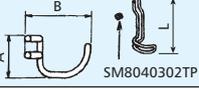
* To connect the cable asm. to the electrical box, conversion cable (separately available) is necessary.

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



● **PK-57***
[Part No. GPK570010B0]

TABLE OF THE OPTIONAL PARTS

Part name	Type	Part No.	
Feed plate blank  t=1.2 *Stainless steel t=0.5	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
	Without knurl/stainless steel*	Sewing area 30×40	40021857
	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  t=3.2	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
	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
	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
	A=2.7 B=3.7 Without relief slit for extra heavy-weight material		D2426MMCK00
Finger guard (1) 	A=56.5 B=64		13533104
	A=59 B=74 For extra-large bartacking		13548300
Finger guard (2) 	A=66.5 B=43 For lengthwise bartacking		13573407
Finger guard (3) 	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:

[Machine head]

●Bartacking

LK1900AN 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 large hook for heavy-weight materials	W				

●Eyelet buttonhole bartacking

LK1901ANS S000

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

●Belt-loop attaching

LK1902AN 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

MC598

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

●To order, please contact your nearest JUKI distributor.

■ SPECIFICATIONS

Model name	LK-1900AN-SS	LK-1900AN-HS	LK-1900AN-FS	LK-1900AN-MS	LK-1900AN-WS
Application	Standard	For heavy-weight materials	For foundation	For knits and knitted materials	With large hook for heavy-weight materials
Max. sewing speed	3,200sti/min*				2,700sti/min*
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	Compact AC servomotor (direct-drive system)				
Power consumption	450VA				
Weight	Machine head (include motor) 47.3kg, Control box 11.3kg				

Model name	Eyelet buttonhole bartacking machine	Belt-loop attaching machine	
	LK-1901AN-SS	LK-1902AN-SS	LK-1902AN-HS
Application	Standard	Standard	For heavy-weight materials
Max. sewing speed	3,000sti/min*		
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	Compact AC servomotor (direct-drive system)		
Power consumption	450VA		
Weight	Machine head (include motor) 47.3kg, Control box 11.3kg		

* "sti/min" stands for "Stiches per Minute"

* CompactFlash™ or CFA specification compatible media.

* "CompactFlash™" is a registered trademark of SanDisk Corporation, U.S.A.

* Other company names and product names/brand names are trademarks or registered trademarks of the respective companies.

● To order, please contact your nearest JUKI distributor.

JUKI[®]
JUKI CORPORATION
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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 catalogue prints with environment-friendly soy ink on recycle paper.



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 maintenance of industrial sewing machines, household sewing machines, industrial robots, etc., and in the provision of sales and maintenance services for data entry systems:

- (1) The development of products and engineering processes that are safe to the environment.
- (2) Green procurement and green purchasing
- (3) Energy conservation (reduction in carbon-dioxide emissions)
- (4) Resource saving (reduction of papers purchased, etc.)
- (5) Reduction and recycling of waste
- (6) Improvement of logistics efficiency (modal shift and improvement of packaging, packing, etc.)