

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

# LK-1903A



**LK-1903ASS-301** (Table stand is optionally available.)



# LK-1903A

## Higher productivity.

- The machine achieves sewing speed of 2,700rpm. The machine's starting, stopping, thread-trimming and automatic presser lifting speeds have been increased to significantly shorten total cycle time.

## Many different sewing patterns.

- The machine is provided as standard with 50 different sewing patterns. The machine permits easy changeover of sewing patterns for effortless execution of an inexhaustible range of sewing specifications.
- The LK-1903A is also able to sew buttons using the same data used for the LK-1903 (EP-ROM).

## Excellent seam quality.

- Newly developed needle thread grasping mechanism helps produce consistent knot tying at the beginning of sewing. (This device has been factory-set to "invoking prohibited" status at the time of delivery.)

## 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 work clamp foot lift can be set to a maximum of 13mm.

## The sewing starting point can be corrected.

- In cases where the needle entry point for button sewing is to be corrected, the sewing starting point can be corrected without the adjustment of the relevant mechanism.

## 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 clean oil is supplied from the oil tank to the hook.



LK-1903ASS-301

## 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 set separately according to the portion of a seam, such as the beginning of a seam, during sewing and end of the seam (fastening stitch).
- When the operation panel IP-200B is used with the machine, the needle thread tension can be established on a stitch-by-stitch basis for upgraded seam quality.



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

### STANDARD PANEL

- Functional settings, such as pattern numbers and needle thread tensions can be established through the operation panel with ease. Distance between holes in a button can be easily changed by means of pattern enlargement/reduction feature.
- 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.

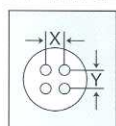


### IP-200B

- 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.



# TABLE OF THE SEWING PATTERNS



Pattern No.	Stitch shape	Sewing thread (pcs.)	Standard length X (mm)	Standard length Y (mm)	Pattern No.	Stitch shape	Sewing thread (pcs.)	Standard length X (mm)	Standard length Y (mm)
1 · 34		6-6	3.4	3.4	18 · 44		6	3.4	0
2 · 35		8-8			19 · 45		8		
3		10-10			20		10		
4		12-12			21		12		
5 · 36		6-6			22		16		
6 · 37		8-8			23 · 46		6	0	3.4
7		10-10			24		10		
8		12-12			25		12		
9 · 38		6-6			26 · 47		6-6	3.4	3.4
10 · 39		8-8			27		10-10		
11		10-10			28 · 48		6-6		
12 · 40		6-6			29		10-10		
13 · 41		8-8			30 · 49		5-5-5	3.0	2.5
14		10-10			31		8-8-8		
15 · 42		6-6			32 · 50		5-5-5		
16 · 43		8-8			33		8-8-8		
17		10-10							

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

## MODELS CLASSIFIED BY BUTTON SIZES

Model name		LK-1903A-301				LK-1903A-302				Option			
Button size		For extra-small button			For small button (accessory)		For medium-size button			For large button			
Outside diameter that can be adjusted (mm)		φ8~φ9	φ9~φ10	φ10~φ15	φ10~φ20		φ10~φ20			φ15~φ32			
Sewing size (mm)	Length (Y)	0~2.5	0~3.0	0~3.5	0~3.5		0~4.5			0~6.5			
	Width (X)	0~2.5	0~3.0	0~3.5	0~3.5		0~4.5			0~6.5			
Button clamp jaw lever (combination)	Thickness (mm)	1.7 (2.2)			1.7 (2.2) (2.7) (0.9)		2.0 (2.2) (2.7)			2.7 (3.2)			
					*	*				*			
	Part No.	Right	MAZ158070BB (MAZ158070BA)		G (F)	14148852 (MAZ155070B0) (MAZ156070B0)		K (B)	14149058 (MAZ155070B0) (MAZ156070B0)		L (B)	MAZ157070BB (MAZ157070BA)	D (E)
			Left	MAZ158080BB (MAZ158080BA)		G (F)	14148951 (MAZ155080B0) (MAZ156080B0)		K (B)	14149157 (MAZ155080B0) (MAZ156080B0)		L (B)	MAZ157080BB (MAZ157080BA)
		—		—	(B25553720A0)		—	—		—	—	—	
		—		—	(B25573720A0)		—	—		—	—	—	
Needle hole guide (mm)	A	1.6 (1.8)			(1.6) (1.8) (1.1)		1.6			1.4			
	B	φ2.8			(φ3.5)		φ3.5			φ3.5			
	C	φ1.6			(φ1.6)		φ2.0			φ2.0			
Part No.	MAZ15801000 (14149900)		(MAZ15501000) (14149603)		MAZ15601000			MAZ15701000					
	—		(D2426284Y00)		—			—					
	—		—		—			—					
Feed plate		MAZ15502000(□8.5)			←		MAZ15602000(□10)			MAZ15702000(□12.5)			

● Parts shown in parentheses ( ) are optional. \* Engraved marker

Model name	Option														
Button type	For shank button														
Max. sewing speed	1,500rpm														
Button configuration	Outside diameter	φ8~φ20													
	Diameter of hole in button	φ1.5 or more													
Position of hole in button															
	1.5mm or more														
Configuration of shank															
	<table border="1"> <thead> <tr> <th rowspan="2">B (mm)</th> <th colspan="2">A (mm)</th> </tr> <tr> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4</td> <td>9</td> </tr> <tr> <td>3</td> <td>3</td> <td>8</td> </tr> <tr> <td>5</td> <td>—</td> <td>7</td> </tr> </tbody> </table>		B (mm)	A (mm)		Min	Max	1	4	9	3	3	8	5	—
B (mm)	A (mm)														
	Min	Max													
1	4	9													
3	3	8													
5	—	7													
Pattern No.	18, 19, 20, 21, 22														

Optional part for shank button	
Part No.	Name of part
14146054	Pick-up device complete
D1401M1YC0A	Needle bar (for TQ-1)
MAZ160170A0	Wiper (asm.)
40015434	Moving plate link A
14148209	Bushing
SL6030892TN (2 pcs.)	Screw
MAZ16015000	Button support link
SD0640321TP	Hinge screw
40010103	Connecting link
SL6040892TN (2 pcs.)	Screw
MAZ16021000	Needle hole guide
MTQ300B1400	Needle TQ×3 #14

## ■ SPECIFICATIONS

Model name	<b>LK-1903A</b>
Max. sewing speed	2,700rpm
Button size	Type: Round-shaped, flat button Size: $\phi 8 \sim \phi 32$ mm, standard ( $\phi 8 \sim \phi 20$ mm)
Stitch length	0.1~10mm (0.1mm step)
Needle bar stroke	45.7mm
Lift of the work clamp foot	Max. 13mm
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×17 (#14)
Hook	Standard 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

## ■ WHEN YOU PLACE ORDERS

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

### [Machine head]

Button clamp jaw lever	Code
For extra-small, small button	<b>301</b>
For medium-size button	<b>302</b>

**LK1903ASS**

Application	Code	Work clamp foot	Code
Standard	<b>S</b>	Standard	<b>S</b>

### [Control box]

Operation panel	Code
Standard panel	<b>SS</b>
IP-200B	<b>PB</b>

**MC596**

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

● To order, please contact your nearest JUKI distributor.



**LK-1903ASS/Installation of the IP-200B**  
(Table stand is optionally available.)

**JUKI**<sup>®</sup>  
JUKI CORPORATION  
INTERNATIONAL SALES H.Q.

8-2-1, KOKURYO-CHO, CHOFU-SHI,  
TOKYO 182-8655, JAPAN  
PHONE : (81) 3-3480-2357, 2358  
FAX : (81) 3-3430-4909, 4914  
<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.



### 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.