

LH-4500C Series

Semi-dry head, 2-needle Lockstitch Sewing System

Inspire the Knowledge in Sewing Adjustment Epoch-making Sewing Systems in history





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* Specifications and appearance are subject to change without prior notice for improvement.

 $\ensuremath{\bigstar} \ensuremath{\mathsf{Read}} \ensuremath{\mathsf{the}} \ensuremath{\mathsf{into}} \ensuremath{\mathsf{service}} \ensuremath{\mathsf{to}} \ensuremath{\mathsf{ensure}} \ensuremath{\mathsf{safety}}.$

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* Paper from responsible sources FSC™ C001712

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Digital sewing system proposes the production process added with a computerized new value to all the people who engage in production.

Semi-dry head, 2-needle Lockstitch Sewing System

H-4500C Series



Active tension mechanism is adopted

Seam quality is improved by introducing the separately-driven right and left active tension mechanisms.

- The needle thread tension is automatically corrected according the sewing speed. Consistently seam quality is, therefore, achieved regardless of changes in sewing speed.
- The needle thread tension is automatically corrected according to the remaining amount of bobbin thread. Seam quality is, therefore, stabilized even when the remaining amount of bobbin thread has reduced.
- In the case of using the automatic needle thread tension correction feature according to the remaining amount of bobbin thread, the bobbin-thread change notification signal is provided to warn the operator when the remaining amount of bobbin thread has reduced to the predetermined level.

Active presser foot mechanism is adopted

Thanks to the adoption of the active presser foot, the presser foot pressure can now be corrected according to the sewing speed.







Multilayered portion detection device (only for the G type)

The sewing machine is provided as standard with the multilayered portion detection device.

This device contributes to the realization of stable pitch / well-tensed seam when sewing the multilayered portion. Since the sewing correction can be respectively set the multilayered portion run-on portion and for the top of multilayered portion, stitch gathering at the multilayered portion can be improved.







Corner stitching capability has been improved (only for the LH-4588C)

Changeover from the normal stitching to the corner stitching is carried out semi-automatically using the lever while ensuring ease of operation. The operator only needs to input data on the needle gauge/stitching angle through the operation panel. Then, the operator can start the corner stitching only by operating the lever during sewing.

Thereafter, the sewing machine automatically changes the sewing mode between the normal stitching and the

This means that even the nexperienced operator can produce consistent seam quality while improving productivity.

Reduction of setup changing time





- A large hook of 1.8-fold capacity (as compared with the standard size hook) is adopted. As a result, frequency of thread changing is reduced in half. This is the world's first sewing machine not only for jeans and heavy-weight materials but also for foundation that is provided with a large hook. This sewing machine provides further stable seam quality.
- Motor-controlled horizontal feed is introduced. Stitch pitch can be set on the operation panel.

Reduction in time required for adjustment of hook timing

Hook timing adjustment is required in the case of changing the needle gauge. The time required for this adjustment is reduced. Adoption of the hook timing adjustment mode that can be activated by operating the operation panel as well as new hook driving shaft saddle achieves substantial reduction in workload required at the time of changing the needle gauge. Needle guard of the hook can be adjusted with screw with ease.









Various digitalized functions

Data and sewing machine management with IoT (Internet of Things)

A "Two-way" contactless communication for parameter adjustment data can be conducted with the sewing machine by a commercial Android terminal.

This feature allows sewing machines in a sewing line to be uniformly set and status checked quickly, thereby contributing to stabilization in product quality.

Control panel is standardized with USB ports, promising simplicity in data management and system updates.



JUKI Smart APP allows you to send and confirm various data

In the application, there are items of management setting (terminal registration), sewing machine data (sewing data), problem-solution chart.

In the problem-solution chart, we can generate production graphs, the availability chart, etc. for each in gardined sewing machine data so it can be used for checking the current situation and analyzing it.



*Android OS Version 6.0 is recommended to use JUKI Smart APP.

(Operation is confirmed with respect to Versions 5.0 and later.)

Contact JUKI distributor in your area for how to use the application software.

N The sewing machine can be paired with equipment which supports NFC (Near Field Communication) only by holding the equipment over the sewing machine.

Work environment

Operator fatigue reduction

For the LED hand light, the improved toning function with two additional colors (white / light bulb color) is provided. This LED hand light helps reduce the operator's eye fatigue who is engaged in sewing work for a long time.







Mixed color

Vhite

Light bulb color

Energy-saving effect

Automatic OFF function of the operation-panel backlight

The operation-panel light can be turned OFF after a lapse of the preset time. can be automatically turned OFF. (The setting is from 1 to 20 minutes.)

Sleep mode (Automatic power-OFF function)

If no operation is carried out for a predetermined period of time, power supply such as motor can be turned off. (The setting is from 1 to 50 minutes.)

*These options can be set up on the operation panel.

Reduction in noise and vibration

Textile machine Reduction in power consumption

Since the LH-4500C is provided with a compact AC servomotor, optimized presser foot lifting control method and the actuator with increased power efficiency, its power consumption is reduced by 30.8 % as compared with the LH-3500A. In addition, the power consumption during standby state is reduced by 50.8 % due to the operation panel screen on which display can be turned OFF.

Reduction in noise / vibration

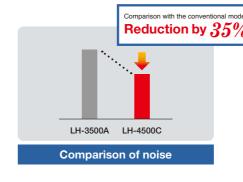
Noise / vibration produced by the LH-4500C is reduced by various improvements such as the adoption of 1/2 opener system. The LH-4500C provides the work environment that helps reduce the operator's fatigue.

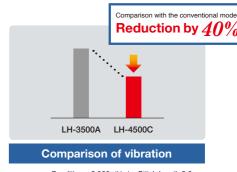




Bobbin case opening lever (open)

Bobbin case opening lever (close)





Conditions: 3,000 sti/min, Stitch length 3.0mm

JUKI ECO PRODUCTS

The LH-4500C 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.

For details of JUKI ECO PRODUCTS, refer to: https://www.juki.co.jp/en/company/eco

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

^{*}N-Mark is the trademark or registered registered mark of NFC Forum Inc. in the US and other countries.

Large hook (1.8-fold capacity hook) is adopted for attaching tape to foundation

A large hook (1.8-fold capacity hook) is adopted for the sewing machine for attaching tape to brassiere consumes a large amount of thread. This is the world's first brassiere sewing machine that comes with a large hook.

As a result, the frequency of thread changing is reduced by approximately 40%, the work hours are reduced and the operator's fatigue is reduced. In addition, the bobbin thread remaining amount correction function of this machine contributes to more consistent seam quality.

Brassier tape attaching process

Type of hook	Large hook (1.8-fold capacity hook)	Regular hook		
Amount of thread wound on a bobbin / time	108m	60m		
Number of times of bobbin changing / day	11 times	19 times		
Number of times of bobbin changing / month	550 times (two bobbins)	950 times (two bobbins)		

^{*8} hours / day; 25 days /month; Replacing a bobbin requires approximately one minutes.

Tape attaching gauge LH-4578CFF: For foundation

The tape attaching gauge that is best-suited to the foundation tape attaching process is now available as a part. The standard model of sewing machine can be changed to the tape-attaching sewing machine by replacing the standard gauge with the aforementioned specific gauge. The tape attaching gauge is composed of the tape attaching throat plate, presser foot with guide and the bed slide.





Tape attaching throat plate

Presser foot with guide

This throat plate has a recess on the operator side to help smoothly guide the tape to be attached.

Part number

inch	mm	Tape attaching throat plate	Presser foot with guide
1/8	3.2	40232772	22647051
3/16	4.8	40232774	22647150
7/32	5.6	40232775	22647259
1/4	6.4	40221496	22647358



Sewing & Textile machines a

WHEN YOU PLACE ORDERS

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

Machine head

without automatic thread trimmer

L H 4 5 7 8 C F F F 0 B

Digital	Seam	Code	Needle gauge C			per and	
Specifications	application	Code	6.4mm (1/4)	F	one-touch ty	one-touch type reverse feed	
Full digital type	Foundation	FF			Nipper	One-touch type	Code
					Nippei	reverse feed	
					Not Provided	Provided	0B

with automatic thread trimmer



Machine head	Code	Digital	Seam
ge hooks	7	Specifications	application
ganized split needle bar, ge hooks	8	Full digital type	Jeans and heavy-weight

		_						
Needle gauge	Code					Nipper and one-touch type reverse feed		
6.4mm (1/4)	F		one-touch typ					
0.411111 (1/4)		_	Nipper	One-touch type reverse feed	Со	de		
			Not Provided	Provided	0	В		
			Provided	Provided	N	B		

Needle gauge size

[○: A gauge designed for factory-installation at delivery. △: A gauge available as a part.]

Code	Code Needle gauge	LH-4578CF	LH-4578CF-7	LH-4588CF-7	
inu raris	inch	mm	F	G	G
Α	3/32	2.4			
В	1/8	3.2	Δ	Δ	Δ
С	5/32	4.0		Δ	Δ
D	3/16	4.8	Δ	Δ	Δ
E	7/32	5.6	Δ	Δ	Δ
F	1/4	6.4	0	0	0
G	9/32	7.1	Δ	Δ	Δ
Н	5/16	7.9	Δ	Δ	Δ
K	3/8	9.5		Δ	Δ
W	7/16	11.1		Δ	
$V \leq V \otimes V$	1/2	12.7		Δ	Δ
M -	5/8	15.9		Δ	Δ
N	3/4	19.1		Δ	Δ
Р	7/8	22.2		Δ	Δ
Q	1	25.4		Δ	Δ
R	1-1/8	28.6		Δ	
S	1-1/4	31.8		Δ	
Т	1-3/8	34.9			
U	1-1/2	38.1			

Refer to the Parts List for details

S C 9 5 6 B

Power supply	Со	de
Single-phase 100~120V	,	3
3-phase 200~240V	[)
Single-phase 200~240V	ŀ	(
Single-phase 200~240V (for CE)	1	V
Single-phase 200~240V (for China)	ι	J

SPECIFICATIONS

Model name	LH-4578CFF	LH-4578CFG-7	LH-4588CFG-7			
Specification		Full digital	HOTI	TNIE .	0982	A.
Application	Foundation	Jeans and heavy	-weight materials	TIATE.	U20%	U
Corner stitching (Organized split needle bar mechanism)	Not pr	ovided	Provided			
Lubricating system	Semi-dry / Ho	ook section: Minute-quantity lubrication	(tank system)			
Feed system		Needle feed				
Max. sewing speed		3,000 sti/min*				
Max. stitch length	4mm	7n	nm			
Thread take-up lever		Slide type				
Needle bar stroke		33.4mm				
Needle thread tension	Indepe	endent right and left active tension mecl	nanism			
Active presser foot		Provided				
Lift of the presser foot (max.)		13mm				
Multilayered portion detection	Not provided	Prov	vided			
Knee lifter		Optional				
Reverse feed stitching lever	Not provided	Prov	vided			
Needle	DP x 5 #10 (#9~#16)	DP x 5 #10 (#9 ~ #16)				
Thread used	#80 - #30 #30 - #3 (for #8 - #3, bobbin thread count should be #20)					
Hook		Vertical-axis large hook (1.8 - fold)				
Free space under the arm	120 mm (height) x 266 mr	m (distance from machine arm to needle) x 87	mm (height of the jaw section)			
Lubricating oil	JUKI	New Defri x Oil No.1 (Equivalent to ISC	VG7)			

^{*} sti/min is the abbreviation for "stitches per minute"