### SPECIFICATIONS

Model name	LH-3528A-A	LH-3528A-F	LH-3528A-S	LH-3528A-G	LH-3568A-S	LH-3568A-G	LH-3578A-G	LH-3588A-G		
Application	Light-weight	Foundation	Medium- weight	Jeans and heavy-weight	Medium- weight	Jeans and heavy-weight	Jeans and heavy-weight	Jeans and heavy-weight		
Organized split needle bar mechanism		Not pr	s standard	Not provided Provided standard						
Hook				Vertical axis 1.8 times large hook						
Lubrication	Semi-dry / hook section: minute-quantity lubrication (tank system)									
Max. sewing speed				3,000s	sti/min*					
Distance from needle to machine arm	120mm (H) × 266mm (W) × 87mm (height of jaw part)									
Feed system	Changeover between the needle feed and bottom feed Needle-feed									
Max. stitch length	5mm 4mm 5mm									
Needle bar stroke	33.4mm									
Thread take-up	Slide type									
Tensioner	Independer left needles type	nt right and (lockstitch type)		Standa	Standard type					
Thread winder	Built-in the machine head									
Lift of the presser foot	7mm (by hand), 13mm (by knee)									
Oiling method	Eco-oil method (circulation type), Clean oil method									
Tank capacity	280cm³									
Lubricating oil	JUKI New Defrix Oil No.1 (equivalent to ISO VG7)									
Needle	DP×5(#9) #9~#16	DP×5(#10) #9~#16	DP×5(#14) #9~#16	DP×5(#21) #16~#23	DP×5(#14) #9~#16	DP×5(#21) #16~#23	DP×5(#21) #16~#23	DP×5(#21) #16~#23		
Outside dimensions of package (mm)			8A/3568A/3578A 8A-7/3568A-7/3		: 718mm (H) × 3 : 768mm (H) × 3	` '	· /			
Machine head weight (including the package)		LH-3528A/3568A/3578A/3588A:48kg LH-3528A-7/3568A-7/3578A-7/3588A-7: 61kg (with AK: 63kg) LH-3528A-F-0B:50kg (with AK: 63kg)								

<sup>\*&</sup>quot;sti/min" stands for "Stitches per Minute."

### **■ MOTOR BELT SELECTION TABLE (for sewing machines without thread trimmer)**

Sewing speed (sti//min)		Mote	or pulley	Belt			
50Hz	60Hz	Outside diameter (mm)	Part No.	Length (inch)	Part No.		
3,000	_	75	MTKP0070000	40	MTJVM00430A		
2,790	_	70	MTKP0065000	43			
2,580	3,000	65	MTKP0060000	40	MTJVM00420A		
2,370	2,740	60	MTKP0055000	42			

<sup>★</sup> The table shown above represents the case of the clutch motor with an output power of 400W (2P). The V belt should be used with the clutch motor.

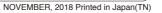






2-11-1, TSURUMAKI, TAMA-SHI, TOKYO 206-8551, JAPAN PHONE: (81) 42-357-2370 FAX: (81) 42-357-2274 http://www.juki.com

- \* 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 soyink on recycle paper.





# **LH-3500A Series** Semi-dry head, 2-needle Lockstitch Machine



LH-3528A / LH-3528A-7 LH-3578A / LH-3578A-7

(with organized split needle bar) LH-3568A / LH-3568A-7 LH-3588A / LH-3588A-7

Adoption of the direct-drive mechanism promises energy-saving and increased workability.



The LH-3500A Series which improves 2-needle sewing machine's seam quality is now launched.



Adoption of the direct-drive mechanism enhances energy conservation and workability, and increases the needle's material penetrating force.



### Reduced by 21%

Adoption of a compact motor for the direct-drive mechanism and the newly developed control box (SC-920A\*) decrease power consumption by approximately 21%.

# **Operability**

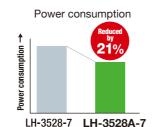
Adoption of the direct-drive mechanism improves stop accuracy and responsiveness, leading to increased working

# **Material penetrating force**

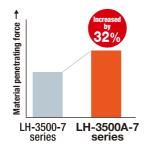
### Increased by 32%

**Direct-drive** 

Adoption of a high-torque type 550W motor promises added material penetrating force when the sewing machine sews multi-layered parts of heavy-weight material.



\*When the sewing machine availability factor is 25%



\* The newly-developed control box SC-920A is the first control box to come with a power saving mode for the sewing machine and to withstand voltage fluctuations, noise and vibration.

## A semi-dry head is now installed in all of the models of the LH-3500A Series.

All models of the LH-3500A Series are provided with a semi-dry head to eliminate staining with oil from the frame (the needle bar part).

sewing machine which comes with substantially enhanced mechanisms such as the

The semi-dry head sewing machine with organized split needle bars is only available from JUKI.

The sewing machine with organized split needle bars is the only sewing machine in the industry that comes with the semi-dry head. It helps reduce poor-quality products due to oil stains even in the case of product items which have corner stitching sections.

The "large-hook type" uses a hook 1.8 times larger than standard.

This increase in size reduces the frequency of bobbin-thread changes.

The sewing machine has been designed to eliminate waste time and the operator's stress. \*LH-3578A/3578A-7 · LH-3588A/3588A-7

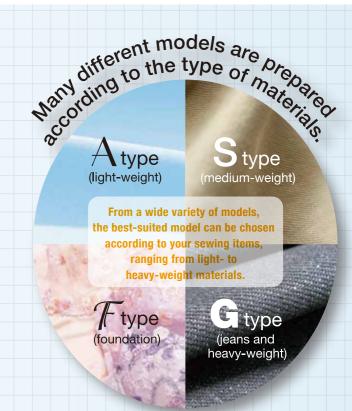


\* The bobbin and bobbin case shown in the upper part of the picture are those for the large hook.





★ The drive method is the V-belt method by means of an externally-mounted motor.



The LH-3528A-7 is an eco-friendly product which complies with JUKI ECO PRODUCTS JUKI ECO PRODUCTS standards for protecting the environment.



- This sewing machine reduces power consumption by 21% as compared with the conventional models
- The sewing machine satisfies the requirements stipulated in the "Juki Group Green Procurement Guidelines\*. And it certainly complies with the RoHS Directive\*.
- The LH-3528A-7 uses more common parts than the conventional models. In addition, the total number of parts has been reduced by 4%. As compared with the conventional models, the new LH-3528A-7 Series has reduced its weight by 11% and its packing material weight by 18%.
- 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 equipmen 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 environmen
- ★ The aforementioned description applies to the LH-3528A-7 (direct-drive sewing machine with automatic thread trimmer. Large-hooks type). Other LH-3500A-7 series (i.e., LH-3568A-7/3578A-7/3578A-7/3578A-7/3588A-7) and the LH-3500A series (without thread trimmer such as LH-3528A/3568A/3578A/3588A) are also JUKI ECO PRODUCTS certified products.

# Responsiveness to materials has been thoroughly investigated to improve "seam" quality.

A thread tension control mechanism has been developed for each type of sewing machine in order to achieve the best-suited thread tension for its purpose. The sewing machine for jeans and heavy-weight materials (G type) produces well-tensed seams by the optimization of the feed mechanism. Furthermore, the G type machine comes with the new thread trimmer mechanism which promises increased reliability.

### The best-suited thread tension is achieved according to the sewing specifications



### **○** Two different types of thread tension controllers have been developed.

The needle tension controller comes in two different mechanisms according to the type of sewing machine. For the A and F types, seam quality free from puckering and irregular stitches is promised. For the S and G types, the sewing range has been broadened to produce well-tensed seams even when thick thread is used.

# A and F type

Independent right and left needles type

S and G type



Standard type thread tension controller

### Highly reliable thread-trimming mechanism

Our direct-acting thread trimmer mechanism, which spreads thread without fail, has been further improved. The thread trimmer trims the needle thread and bobbin thread without fail even when thick thread is used. In addition, the thread trimmer's bobbin thread retaining force has been increased.

### O Wire type and round-hole type needle bar thread guide

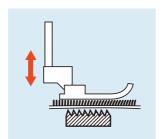
Two different kinds of needle bar thread guides (needle clamps), the wire type and round-hole type, have been developed according to the type of sewing machine. The wire-type needle bar thread guide has been adopted for the A and F types which require the sewing capability to sew light-weight materials and foundations without puckering or irregular stitches. The round-hole type needle bar thread guide has been adopted for the S and G types which sew materials requiring well-tensed seams. In addition, the G type is provided as standard with the presser foot with guide which is effective for the topstitching process.





### Material-friendly micro-lifter mechanism

The presser foot can be lifted by a minute amount by adjusting the eccentric pin located in the presser lifter lever section. When sewing shaggy and elastic fabrics, the load applied to the material is reduced by slightly lifting the presser foot. Materials are handled more easily and are finished without sacrificing the inherent texture of the material.



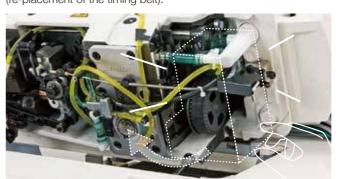
The internal mechanism of the sewing machine has been thoroughly re-investigated to achieve further improvement of maintainability and workability. JUKI does not cut corners on the quality of those parts which are normally invisible, such as in the internal section of the sewing machine. This represents JUKI's craftsmanship.

### The feed method can be easily changed over



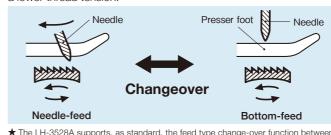


The location of the oil tank has been changed to the inside of the sewing machine through our re-investigation of the lubricating method. As a result, space is secured under the bed surface to facilitate changeover of the feed method between the "needle feed" and "bottom feed" and changeover of the feed timing (re-placement of the timing belt).



### O Changeover between the needle feed and bottom feed

For the process of sewing light-weight materials or the like, puckering has to be prevented. In this case, the feed method can be changed over to the bottom feed through an easy adjustment and change of the gauge. In comparison with the needle feed, the bottom feed works to prevent puckering and enables sewing with a lower thread tension.



the needle feed and bottom feed the feed type change-over function between the needle feed and bottom feed. Contact JUKI for information on the models other than the LH-3528A



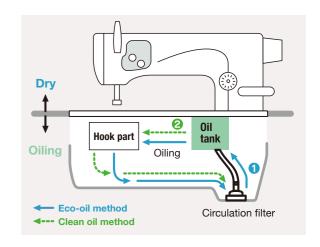
### 1 Eco-oil method (circulation type)

The oil dropped from the hook and its surrounding sections into the under-cover is filtered to remove dirt and dust and is then returned to the oil tank. This method saves the effort of oiling and reduces oil consumption.

### ② Clean oil method

The oil dropped from the hook and its surrounding sections into the under-cover is not returned to the oil tank, but only clean oil is supplied to the hook at all times.

★ The oiling method can be changed over as desired.



### Gauge for tape attaching (corresponding attachment classification code "T" for tape attaching; LH-3528A-F: Only the sewing machine for foundation)

Gauge for tape attaching (corresponding attachment classification code "T" for tape attaching; LH-3528A-F: Only the sewing machine for foundation) The sewing machine is provided as standard with the gauge for tape attaching which is best-suited to the process for attaching tape to foundation. The gauge for tape attaching consists of the throat plate for tape attaching, presser foot with guide and bed slide. The sewing machine with the standard gauge can be changed to the tape attaching type sewing machine by changing the gauge with the gauge for tape attaching.

### Throat plate for tape attaching

The throat plate is designed with a hollow on the side facing the operator. This hollow helps smooth the feeding of tape.

### Guide presser

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rait No.									
inch	mm	Throat plate for tape attaching	Guide presser						
1/8	3.2	22628002	22647051						
3/16	4.8	22628200	22647150						
7/32	5.6	22628309	22647259						
1/4	6.4	22628408	22647358						
9/32	7.1	22628507	22647457						
5/16	7.9	22628606	22647556						

### Slide plate (this side): Part No. 23206709

This reduces the height when the tape-attaching holder is fixed on the machine.

The operation panels CP-18A and CP-180A are provided with a production support function.

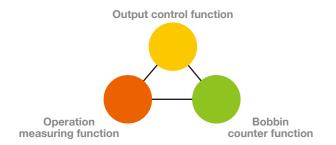




**■ CP-18A** 

■ CP-180A

The production support function actually consists of three different functions (six different modes), which are the output control function, operation measuring function and bobbin counter function. Each with its own production support effect. An appropriate function (mode) can be selected as required. The parameter setting can be done on the panel located on the top of the sewing machine, thereby helping reduce operator fatigue during setup changing.



### Three different functions

(Six different modes)

### Output control function

### · Target No. of products display mode

Under the target No. of products display mode, the target number of products and the actual number of products produced according to the work hours are displayed.

### · Target-actual result difference display mode

In the under target-actual result difference display mode, the difference between the target number of products and the actual number of products produced is displayed.

Since operators are able to work while checking their actual number of products on the panel at all times, they can strengthen their sense of purpose of achieving the target, thereby increasing productivity. Operators can visually check the progress of their work in real time, leading to the early detection of any problems and the execution of early corrective measures.

### Operation measuring function

### · Sewing machine availability display mode

Under the sewing machine availability display mode, the average sewing machine availability in the previous cycle and the current cycle is displayed.

LILLICE CP-180

### · Pitch time display mode

Under the pitch time display mode, the average process machining time in the previous cycle and the current cycle is displayed.

### · Average speed of stitch display mode

Under the average speed of stitch display mode, the accumulated speed of stitch in the previous cycle and the current cycle is displayed.

Since the sewing machine operation status, pitch time (process machining time), can be automatically measured, process analysis, line arrangement and confirmation of facility efficiency can be obtained with ease. As a result, the man-hours required for production control are reduced.

### **Bobbin counter function**

### · Bobbin counter display mode

The operator is notified that the bobbin needs to be replaced before the bobbin thread runs out.

Since the operator is notified of the time to replace the bobbin, the operator is no longer required to carry out the re-sewing of seams sewn without bobbin thread, thereby increasing working efficiency. In addition, the operator carries out his/her work under a stress-free environment without worrying about needle-hole damage to the material, which is likely to be made when sewing without bobbin thread.

### WHEN YOU PLACE ORDERS

With automatic thread trimmer

Machine head Code Standard hooks 28 \* Only the seam application "G" is available for the Organized split needle bar. LH-3578A-7 and LH-3588A-68 standard hooks Seam application Code Large hooks 78 Medium-weight S Organized split needle bar, 88 G Jeans and heavy-weight large hooks  $A \sqcap \Gamma$ LH35 Code Wiper One-touch type reverse feed Code Auto-lifter Provided Provided WB Not provided Provided AK135

Control box

Machine head

Organized split needle

bar, standard hooks

Organized split needle

Standard hooks

Large hooks

bar, large hooks

LH35

Feed system

Needle-feed

Bottom-feed

Not provided



Power supply	Code
Single-phase 100~120V	s
3-phase 200~240V	D
Single-phase 200~240V (for General Export)	К
Single-phase 200~240V (for CE)	N
Single-phase 200~240V (for China)	U

Without automatic thread trimmer

Code

28

68

78

88

Code

Α

B\*

★The model designations beyond the classification by feed type only apply to the LH-3528A.

\* Feed system "B" (bottom feed) is applicable to all models LH-3528A-A (for light-weight materials) and LH-3528A-F (for foundation) is only applicable

to the needle gauge system "B", "D" or "F

application

0B\*

Light-weight

Foundation

Jeans and

heavy-weight

Medium-weight

U 1-1/2 38.1 : A gauge designed for factory-installation at delivery ∴ : A gauge available as a part. Refer to the Parts List for details.

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

Needle gauge

A 3/32

1/8

9/32 G

3/8

7/16 W

1/2

5/8

7/8

1-1/8

1-3/8

В

С 5/32

D 3/16

Е 7/32

F

Н

Κ

L

М

N 3/4

Q

R

S 1-1/4 mm

3.2

4.0  $\triangle$ 

48

5.6  $\triangle$ 

7.9  $\triangle$ 

9.5

12.7  $\triangle$ 

15.9  $\triangle$ 

19.1  $\triangle$ 

22.2  $\triangle$ 

25.4

28.6

31.8

34.9

 $\circ$ 

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Seam application

LH-3528A-7 LH-3568A-7 LH-3578A-7 LH-3588A-7

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S G

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Operation panel

**CP180A** CP18A

Code								Seam application								
ŀ	05004					Code	Needle gauge			LH-3	528A	28A		568A	LH-3578A	LH-3588
	LH-3528A	LH-3568A	LH-35/8A	LH-3588A			inch	mm	Α	F	S	G	s	G	G	G
	Α	_	_	_		Α	3/32	2.4	$\triangle$							
	F	_	_	_		В	1/8	3.2	0	0	$\triangle$	$\triangle$	$\triangle$	$\triangle$	Δ	$\triangle$
	s	s	_	_		С	5/32	4.0	$\triangle$		$\triangle$	$\triangle$		$\triangle$	Δ	$\triangle$
						D	3/16	4.8	0	0	0	0	0	0	0	0
	G	G	G	G		Е	7/32	5.6		0	$\triangle$	$\triangle$	0	$\triangle$	$\triangle$	$\triangle$
					'	F	1/4	6.4	0	0	0	0	0	0	0	0
		-				G	9/32	7.1	$\triangle$	0	$\triangle$	$\triangle$	$\triangle$	$\triangle$	$\triangle$	$\triangle$
					Н	5/16	7.9	$\triangle$	0	0	$\triangle$		$\triangle$	Δ	$\triangle$	
					K	3/8	9.5	$\triangle$		0	$\triangle$	0	$\triangle$	Δ	$\triangle$	
						W	7/16	11.1			$\triangle$	$\triangle$		$\triangle$	Δ	$\triangle$
	ШЦ	$\sqcup \sqcup$	ШЦ	$\sqcup \sqcup \sqcup$		L	1/2	12.7	$\triangle$		$\triangle$	$\triangle$		$\triangle$	Δ	$\triangle$
1		ДЩ				М	5/8	15.9			$\triangle$	$\triangle$		$\triangle$	$\triangle$	
I						N	3/4	19.1	$\triangle$		$\triangle$	$\triangle$		$\triangle$	$\triangle$	
						Р	7/8	22.2	0		$\triangle$	$\triangle$		$\triangle$	$\triangle$	$\triangle$
						Q	1	25.4	0		0	$\triangle$		$\triangle$	Δ	$\triangle$
						R	1-1/8	28.6	$\triangle$		$\triangle$	Δ			$\triangle$	
						S	1-1/4	31.8	$\triangle$		$\triangle$	Δ			Δ	
						Т	1-3/8	34.9			$\triangle$	Δ			$\triangle$	
						U	1-1/2	38.1			$\triangle$				$\triangle$	1

- Wiper and one-touch type reverse feed Wiper One-touch type reverse feed Not provided Not provided 00
- "0B" is only applicable to the LH-3528A-F (for foundation).
- T" represents the presser foot with quide, throat plate of sewing tape and bed slide for sewing tape, and only applies to the LH-3528A-F (for foundation).

Code

s

Attachment

Standard

For tape attaching

AK135\* The AK device is applicable only when "0B" is

and one-touch type reverse feed mechanism

Code

★ The needle gauge up to 47.0mm is applicable. \* Refer to the Parts List for details

Auto-lifter

Not provided

To order, please contact your nearest JUKI distributor