

DDL-9000C Series

Direct-drive, high-speed, lockstitch sewing system with automatic thread trimmer

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



JUKI ECO PRODUCTS The DDL-9000C 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: http://www.juki.co.jp/eco_e/index.html



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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 soyink on recycle paper. * Paper from responsible sources FSC™ C001712

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Direct-drive, high-speed, lockstitch sewing system with automatic thread trimmer

DDL-9000C Series

Creation of "sewing"

Direct-drive, high-speed, lockstitch sewing system with automatic thread trimmer

DDL-9000C Series

A state-of-the-art sewing system that revolutionizes the perfection for "sewing".

Succeeding the traditionally required experience and instincts, digitalized setting capability in JUKI's all new DDL-9000C digital sewing system presents the best sewing conditions everywhere and anywhere.





Management of sewing performance and sewing machineby the utilization of IoT (Internet of Things)

Management, browsing and editing of data can be carried out on the application software

Data on sewing machine adjustments made according to the product to be sewn can be transferred to a commercially-available Android tablet in contactless mode. This enables quick check for uniform settings as well as confirmation of conditions of sewing machines in a sewing line, thereby facilitating setup changes.

The operation panel is also provided as standard with a USB port.

Data management and software update can be carried out with ease using a USB thumb drive.

Data items of sewing can be numerically managed to ensure "stable quality" and "reduction in time required for setup changes".

Quantified sewing data can be externally taken from the sewing machine using an Android tablet or USB thumb drive.

t to Versions 5.0 and later.)

Contact JUKI distributor in your

JUKI Smart APP allows you to send and confirm various data

or how to use the application software

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

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



DDL-9000C





lextile machines and Parts Digitalized control panel DDL-9000C Series comes in three different types.

These three types of the DDL-9000C Series are environmentally friendly sewing machines that prevent the material from being stained with oil.

FD Fully-dry head type

DDL-9000C-D Max. sewing speed: 4,000sti/min

The machine prevents the material being sewn from being stained with oil.

The DDL-9000C is the comfort sewing machine that prevents oil stains on the material during sewing.

It totally supports the improvement of finished seam quality.

FM,SM Semi-dry head type

DDL-9000C-M Max. sewing speed : 5,000sti/mir

Sewing work free from oil stains by means of our leading-edge dry-head technology.

With the advanced dry technology of enabling operation without being lubricated, a frame which does not need lubrication has been developed.

It is provided with not only a high-speed sewing capability, but also a safety feature for preventing oil stains.

FS,SS Minute-quantity lubrication type

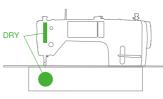
DDL-9000C-S Max. sewing speed : 5,000sti/min The sewing speed of 5000sti/min, which is the

highest speed of any direct-drive lockstitch machines, contributes to increased productivity.

The DDL-9000C-S is the standard model developed with the emphasis on durability.

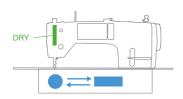
It produces seams with consistency when run at speeds which falls in the range of the highest sewing speeds

*"sti/min" stands for "Stitches per Minute.



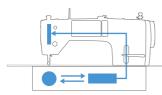


The section around the needle bar.





• The needle bar and thread take-up components are not lubricated.





 The needle bar and thread take-up components are lubricated th the minimum required quantity of oil. For the hook section the standard method of lubrication is employ

Two different modes; i.e., the operator mode which prioritize ease of operation and the serviceperson mode, are prepared to respectively display indications according to the user.

In addition, installation of NFC enables data transfer to an Android tablet. Data transferred from the sewing machine to an Android tablet can be edited on the tablet

Full Digital Type

deption of a 4-3-inch large color quid crystal touch panel ensures easy operation.

The touch panel is provided with JUKI's unique intelligent sewing system features.



Digital Type

Adoption of a black-and-white liquid crystal switch panel ensures easy operation. Since, unlike the CP panel, the black-and-white liquid crystal panel provides verbal explanation of its operation, it is easier for the operator to understand how to operate it.



Main functions of the full-digital model and digital model

	Full-digital model	Digital model
Digital feed (Horizontal direction)	0	0
Digital feed (Vertical direction)	0	0
Active presser foot	0	×
Active tension	0	×
Support to an Android tablet	0	0
Network	0	(Support through an Android tablet)
Shorter-thread remaining type thread trimming	0	0
Color touch panel	0	×



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



Vertically-and horizontally-driven digital feed mechanism (World first)

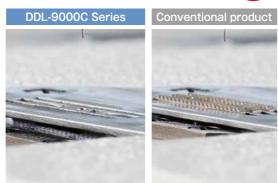


Thanks to the world's first vertically-driven digital feed mechanism, the feed dog height can be adjusted with ease according to the material fabric of product to be sewn, thereby improving seam quality.

Thanks to this digital feed mechanism, thread trimming is carried out with the feed dog lowered in the case the shorter-thread remaining thread trimming function is enabled.

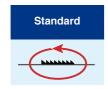
As a result, the clearance provided between the throat plate and the material is eliminated, thereby stabilizing the length of thread remaining after thread trimming.

The feed dog does not protrude the top surface of throat plate when the sewing machine stops with its needle bar up, thereby facilitating placement/removal of the material on/from the top surface of throat plate and preventing the material from being damaged by the feed dog.



Various kinds of feed locus can be selected.

Digitalized vertically- and horizontally-driven feed mechanism allows easy adjustment of settings such as the feed locus only on the operation panel according to the material to



Digital functions which accentuate excellent "seam" quality





The active presser foot pressure mechanism

demonstrates its effectiveness in prevention

The needle thread tension, presser foot pressure,

changed to link their adjustments appropriately.

pitch, feed locus and feed dog height can be totally

of stitch gathering and loose stitches.





be sewn.

Full-digital type

I .Adoption of the needle-thread active tension Needle tension is digitally controlled

Needle thread tension which matches sewing conditions given can be set on the operation panel and stored in memory.

The needle thread tension adjustment needs experience. However, for this sewing machine, thread tension data stored in memory is reproducible, thereby reducing the setup time when the product to be sewn is changed.

Example: Needle-thread active tension demonstrates its effectiveness in the topstitching process.

For welting shoulders of a difficult-to-sew material, uniform stitches can be produced continuously by appropriately changing the sewing conditions even if the right and left material fabric differ in texture grain.

II. Active presser foot pressure mechanism

The presser foot pressure is digitally controlled

Digital control system controls the presser foot pressure. Under the automatic mode, the multi-layered section detection function detects changes in material thickness to increase/decrease the presser foot pressure accordingly.

Under the manual mode, the presser foot pressure control function is assigned to the hand switch to enable operation with the hand switch.

Full-digital type Digital type

III.Needle thread clamp

The device clamps the needle thread and draws it under the material at the beginning of sewing. The needle thread clamp device works to reduce the size of thread tangling in on the wrong side of the material. This expands the area around the needle entry, thereby allowing the use of various gauge components.

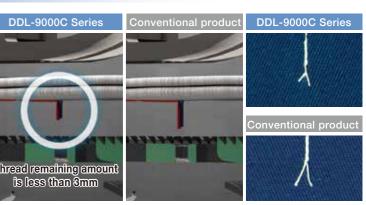
Remaining thread at the end of sewing reduced to 3 mm

Double-edge driven rotary knife system is adopted. The double edges of the knife intersect with each other directly under the needle entry point to trim the thread.

Achievement of thread length remaining on the material after thread trimming as short as 3 mm The grooved cam system is adopted to enable forcible release of the thread trimmer even if the thread trimmer locks.

The picker device is also adopted.

The picker device secures a sufficient length of needle thread, as well as it stabilizes the length of thread remaining on the material.

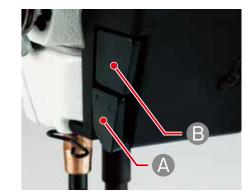


With reverse stitching (Wrong side)

Functions necessary for sewing machine operation can be used with the hand switch

Functions of two hand switches can be set through the operation panel. Since the reverse-feed stitching lever's provided as standard, added functions can be customized 20 different functions (needle-up/down correction sewing, reverse-feed correction sewing, 1-time reverse-feed stitching cancellation function, etc.) are available. Highly convenient operation is enabled by setting the functions which available, Highly convenient operation is er match the sewing process in combination.

> The hand switches have been factory-assigned respectively with (A) Touch-back switch" and B Custom switch (to be set by the customer) at the time of shipment. The customer may assign other functions to these two hand switches.



Hand switch (in the case it is assigned with the multi-layered section changeover function)

Full-digital type

Detect Multi-layered section of material and automatically carry out the changeover of multi-layered section <Automatic mode>

- · Manually carry out the changeover of multi-layered section at an arbitrary timing with the hand switch <Manual mode>
- ·Set thread tension, presser foot pressure, pitch, feed locus and feed dog height separately for the normal section and multi-layered section of material
- Digitally control presser foot pressure

Digital type

- ·Manually carry out the changeover of multi-layered section at an arbitrary timing with the hand switch
- ·Set thread tension, presser foot pressure, pitch, feed locus and feed dog height separately for the normal section and multi-layered section of material

Auto-lifter AK-154 Full-digital type

Newly-developed auto-lifter device comes with a stepping motor. This not only increases the amount of lift of the presser foot from 8.5 mm to 13.5 mm at the maximum but also reduces the operating noise.

After the thread cutting of the sewing machine, thanks to the feature of the world's first top and bottom drive electronic feed mechanism to prevent the feed dog from protruding the top of throat plate, the material can be placed under presser foot and removed from there with ease and is not easily damaged.

*To lift the presser foot to its maximum amount of lift, it is necessary to set the amount of lift in two stages. *For the full-digital type model, the auto-lifter function is provided as standard.



Commitment to seam quality "Reverse-feed stitching function by means of the reverse feed lever" is provided as standard.

The operator carries out fine adjustment of correction sewing (within the stitch length of 1 pitch) using the reverse feed lever, thereby achieving "further improved seam quality".



LED light

The LED light illuminates the needle entry area in the just-under direction from the right and left sides of the needle bar. In comparison with the single-direction illumination, this LED light helps the operator carry out sewing more easily. Illuminance of the LED light is adjustable in five levels. It can also be used as an auxiliary lamp for working.



OPTIONS

- Non-lubricated hook 22890206
- Non-lubricated hook(with a needle guard) 22890404



Non-lubricated hook

The hook is used with the lubrication stopped, thereby preventing oil stains. The non-lubricated hook has a lace made of special plastic. a lace made of special plastic.

★The following two parts must be added to enable use of the non-lubricated hook in semi-dry head type machines or minute-quantity lubrication type machines.

Hook driving shaft stop-plug screw: 11079506 O-ring: RO036080200

■ Auto-lifter AK-154 (foot-pedal type) 40174617 Digital type

■ Non-rotary bobbin

Hook: 27003557 Bobbin case: 27003755 Bobbin: 27003805 Sewing & Textile machines and Parts



The non-rotary bobbin eliminates irregular st have a tendency to occur at some sewing speeds and bobbin-thread tension fluctuations which have a tendency to occur according to the bobbin thread remaining on the hook. Since the bobbin thread is fed without rotating the bobbin, the bobbin never idles

★The non-rotary bobbin requires an exclusive hook, bobbin and bobbin case.

Newly-developed auto-lifter device comes with a stepping motor. This not only increases the amount of lift of the presser foot from 8.5 mm to 13.5 mm at the maximum but also reduces the operating noise.

- ★To lift the presser foot to its maximum amount of lift, it is necessary to set the amount of lift in two stages.
- ★For the full-digital type model, the auto-lifter function is provided as standard.
- Electric-fan hook cooling device 40065571

SPECIFICATIONS

MODEL	DDL-9000C-FDS	DDL-9000C-FMS	DDL-9000C-FSH	DDL-9000C-SMS	DDL-9000C-SSH		
Туре		Full Digital Type	Digital Type				
Application	Medium	-weight	Heavy-weight	Medium-weight	Heavy-weight		
Lubrication	Fully-dry head type	Semi-dry	Minute-quantity lubrication	Semi-dry	Minute-quantity lubrication		
Max. sewing speed	4,000sti/min*	4,000sti/min* 5,000sti/min*1		5,000sti/min*1	4,500sti/min*2		
Hand switch	Provided as standard (At the time of shipment : Hand switches are assigned respectively with the touch-back switch function and the one-touch changeover switch function.) 5mm						
Max. stitch length							
Thread trimming method	Double-edge rotary syste			m			
Needle bar stroke	30.7	mm	35.0mm	30.7mm	35.0mm		
Feed dog height	0.8	0.8mm		0.8mm	1.2mm		
Needle thread tension		Active tension			Spring type		
Presser foot pressure	Electronic control			Spring type			
Lift of the presser foot	By hand: 5.5mm, By knee: 15mm Auto: 1st stage 5.0 mm (*0.1~8.5mm), 2nd stage 8.5 mm (*8.5mm~13.5mm) * Adjustable on the operation pan						
Needle*3	DB×1•DE #9~18 (Nr	- '	DB×1•DB×5(#21) #20~23(Nm125~160)	DB×1•DB×5 (#11) #9~18 (Nm65~110)	DB×1•DB×5(#21) #20~23(Nm125~160)		
Bobbin thread winder Built in the top of machine head (provided with the bobbin thr					olate)		
Lubricating oil	Size of bed 517×178mm (distance from needle to machine arm:303mm)						
Size of bed							
Machine head drive							
Power consumption	520VA						
E Nei weight	Machine head: 40.5kg(with AK-154)						

- *"sti/min" stands for "Stitches per Minute.
- *1 Stitch length of 4.00 mm or less: 5,000 sti/min; Stitch length of 4,05 5.00 mm: 4,000 sti/min *2 Stitch length of 4.00 or less: 4,500sti/min; Stitch length of 4.05 5.00mm: 4,000sti/min

WHEN YOU PLACE ORDERS

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

DDL9000C Wiper Code

Digital Specifications	al Specifications Machine head Sewing specifications		Code	
Full digital type	Fully-dry head type	Midium-weight	FDS	
Full digital type	Semi-dry head	Midium-weight	FMS	
Full digital type	Minute-quantity lubrication	Heavy weight materials	FSH	
Digital type Semi-dry head Midium-weight				
Digital type	Minute-quantity lubrication	Heavy weight materials	SSH	

FDS	Not provided	ОВ
FMS	provided	NB
FSH		
SMS		

Not provided Provided (driven by pedal) AK15	Automa
Provided (driven by pedal) AK15	No
Air 13	Provided

^{*}AK154 can be selected only digital spec= S(Digital type)only

Control box

					L
	Head		Code		
	Full digital ty	pe	0	Sing	le
	Digital type	Э	1	3-	p
•				Single-phase 2	C
				Single-pl	1
					_

PSC box	Code
Single-phase 100~120V	S
3-phase 200~240V	D
Single-phase 200~240V(For General Export)	K
Single-phase 200~240V(For CE)	N
Single-phase 200~240V(For CHINA)	U

To order, please contact your nearest JUKI distributor

^{*}For the full-digital type model, the auto-lifter