JUKI®

DDL-9000B Series

Direct-drive, High-speed, 1-needle Lockstitch Machine with Automatic Thread Trimmer

JUKI ECO PRODUCTS

The DDL-9000B Series is the premier model of the 1-needle lockstitch machine with respect to functions, performance and design.

DDL-9000B-MS-WB/CP-180A

DDL-9000B Series

Energy saving

DRY

Direct-drive, High-speed, 1-needle Lockstitch Machine with Automatic Thread Trimmer

This 1-needle lockstitch machine is JUKI's highly advanced model provided with a thread trimmer which operates at the highest speed of its kind, a mechanism which promises silent operation and various technical features which promise power saving.

JUKI pursues the highest seam quality, highest productivity, easiest operation and smallest power consumption at all times.
Now, JUKI has launched its cutting-edge 1-needle lockstitch machine which is a successor model of the DDL-9000 and DDL-9000A. The DDL-9000B is the top of the line lockstitch machine developed by JUKI, a company which always strives toward the achievement of genuine quality.

JUKI ECO PRODUCTS	The DDL-9000B is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.

JUKI ECO PRODUCTS

- This sewing machine reduces power consumption by 15% 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 DDL-9000B uses more common parts than the conventional models. In addition, the total number of parts has been reduced by 15%.
- The mass ratio of unrecyclable parts has been reduced by 4% and the mass of the product has been reduced by 14% as compared with the conventional models.

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.

DDL-9000B Series

Direct-drive, High-speed, 1-needle Lockstitch Machine with Automatic Thread Trimmer

The line-up of the DDL-9000B series in terms of lubricating method of the machine head consists of: S: Minute-quantity lubrication, M: Semi-dry head type and D: Fully-dry head type.
All of the three machine head types are friendly to the environment since they prevent oil stains and minimize the quantity of stain remover used. Select one of the three different machine heads according to your sewing applications.

DDL-9000B-MS-WB/CP-180A

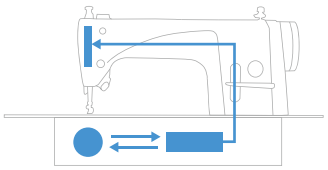
S Minute-quantity lubrication type

DDL-9000B-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-9000B-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.



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

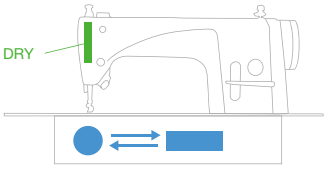
M Semi-dry head type

DDL-9000B-M

Max. sewing speed: 5,000sti/min

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.



· The needle bar and thread take-up components are not lubricated.
· For the hook section, the standard method of lubrication is employed.

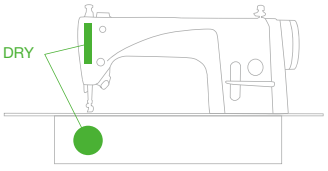
D Fully-dry head type

DDL-9000B-D

Max. sewing speed: 4,000sti/min

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

As its designation indicates, the dry-head type machine ensures convenience of use by totally preventing the oil from staining the material being sewn. The machine wholly contributes to improved quality of finished products.



· The section around the needle bar, the thread take-up lever and the hook are not lubricated.

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

Further evolved

Energy-saving techniques —— Power consumption is substantially decreased.

The sewing machine reduces power consumption with its advanced energy-saving techniques.

■The latest compact-size servomotor has been adopted.

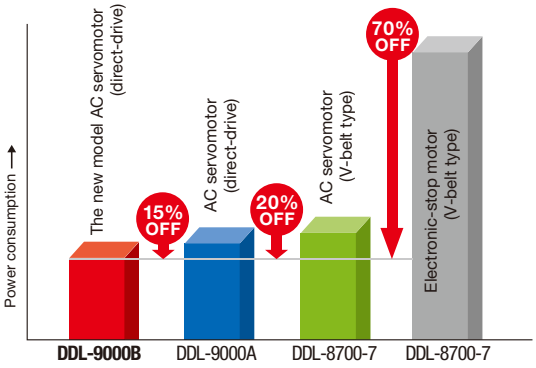
The DDL-9000B has adopted the latest compact-size servomotor as its driving source. This latest compact-size servomotor is an energy-saving, highly efficient motor which is able to run under a high torque and has a broader range of speed. In addition, the servomotor is installed with a direct-drive system to transmit the motor power directly to the sewing machine, thereby achieving improved power-consumption saving, quicker response, quicker startup, increased accuracy of the stop position and stronger material penetrating force of the needle.

■The latest compact-size servomotor

■The new model control box, which energy-saving mode is provided.

The new model control box SC-920, which consists of an energy-saving mode, has been developed. This control box is the first one which provides an energy-saving mode for the sewing machine. The power consumption during standby, when the motor is at rest, is reduced by approximately 20%.
In addition, abundantly incorporated state-of-the-art energy-saving features such as a compact-in-size solenoid for the auto-lifter (optional) allow the DDL-9000B to reduce power consumption, to increase productivity and to be friendly to the environment.

Energy-saving mode is provided



*When the DDL-9000B runs under the energy-saving mode, the sewing machine availability factor is 25 %

Comparison of power consumption

When the sewing machine availability factor is 25%, the DDL-9000B reduces power consumption by 70% or more as compared with the conventional model incorporating a V-belt type electronic stop motor, by 20% or more as compared with the conventional model incorporating a V-belt type servomotor, or by 15% as compared with its predecessor model (DDL-9000A).

Further evolved

Dry technology —— Oil stains on the material being sewn are reduced, thereby improving product quality.

The advanced dry technology helps prevent oil stains on the material being sewn. The main source of oil stains is the frame. The semi-dry head type sewing machine comes with a frame which does not need lubrication. The fully-dry head type sewing machine is an even further evolved dry-head type which comes with a frame and a hook section which do not need lubrication.

The needle bar mechanism is finished with a special surface treatment (DLC, Diamond Like Carbon Coating) and uses JUKI's unique special grease for lubrication. Grease-filled bearings have been adopted for the sections requiring bearings.
The frame mechanism of the sewing machine demonstrates superb durability even with no oil. Oil stains on the material being sewn are reduced. As a result the frequency of stain removal work or re-sewing work is dramatically reduced, thereby improving the finished quality of the product.

Needle bar finished with a special surface treatment

Further evolved

Design for achieving silent operation —— The operating noise generated by the mechanisms is reduced, helping reduce operator fatigue.

One of the eternal challenges of a sewing plant is the improvement of the work environment. One of the factors to be improved is noise within the plant. The DDL-9000B 1-needle lockstitch machine is the sewing machine which is used most frequently in the sewing plant. For this reason, the noise generating mechanisms have been attuned to eliminate any harsh noise.

The major sources of noise are the one-touch type reverse feed device, the wiper and the auto-lifter, which have been designed aiming at the reduction of noise.
The resulting mechanisms' operating noise is reduced, thus helping reduce operator fatigue.

One-touch type reverse feed device

Appearance configuration of the DDL-9000B when the auto-lifter AK-141 (optional) is installed

Wiper

Further evolved

Thread trimming mechanism —— Thread trimming speed has been doubled or more that of the conventional model!

Analysis of operator work has revealed that the working rhythm substantially affects the productivity.Based on the aforementioned fact, JUKI focused on the thread trimming speed. By maximizing the thread trimming speed, the operating rhythm can be improved.

The DDL-9000B trims thread at least two times faster than the conventional thread trimmer, thanks to the improved thread-trimmer driving mechanism.
This improves the responsiveness of the sewing machine during changeovers between sewing and thread trimming operations.
The length of time elapsing from thread trimming at the end of sewing to the start of a subsequent operation can be shortened, thereby improving operator rhythm.

Thread trimming speed has been doubled or more that of the conventional mode

Further evolved

Production support function —— The operation panel is provided with a production support function.

Two different operation panels, the CP-18A and CP-180A are applicable to the DDL-9000B. Both operation panels are provided with the production support function.

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.

Production support function is provided

■Output control function

〈Target No. of products display mode/Target-actual result difference 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.
◎ 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/Pitch time display mode /Average speed of stitch display mode〉

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

■CP-180A

■CP-18A

The CP-180A is recommended if you use the DDL-9000B for a difficult sewing process.

The CP-180 is recommended for sewing difficult-to-sew materials, hard-to-sew parts or for processes in which lots of setup changes are required. With the CP-180A, in addition to the functions of the CP-18A, the speed of stitch adjustment, ON/OFF of the automatic thread trimmer, automatic reverse stitching, double-reverse stitching, constant-dimension sewing, rectangular stitching and multi-layer stitching can be changed over with a finger-tip control, thereby substantially reducing the length of time required for setup changing.

OPTIONS

◎Optional switch: 23632656

The switch is mounted above the one-touch type reverse feed switch. With this handy switch, the operator is able use various functions with ease. The switch is helpful especially in standing work.

★With the option switch, the operator can select one of various optional features, which include the needle up/down compensation, 1-stitch compensation, reverse-stitch compensation, auto-lifter, thread trimming, and cancellation of automatic reverse stitching at the ending of sewing.

◎Micro-lifter: 40056622

The micro-lifter works to prevent damage to the material or a slip between two plies when sewing a shaggy or elastic material.
The micro-lifter is finely adjustable in its height without using a tool.

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

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.
(provided as standard for the fully-dry head type)

★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-141 (foot-pedal type):40089370

The auto-lifter is a device for automatically lifting the presser foot (by the knee). It is helpful also in standing work.

◎Non-rotary bobbin

The non-rotary bobbin eliminates irregular stitches which 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.

◎Lubricated hook C: 11141355

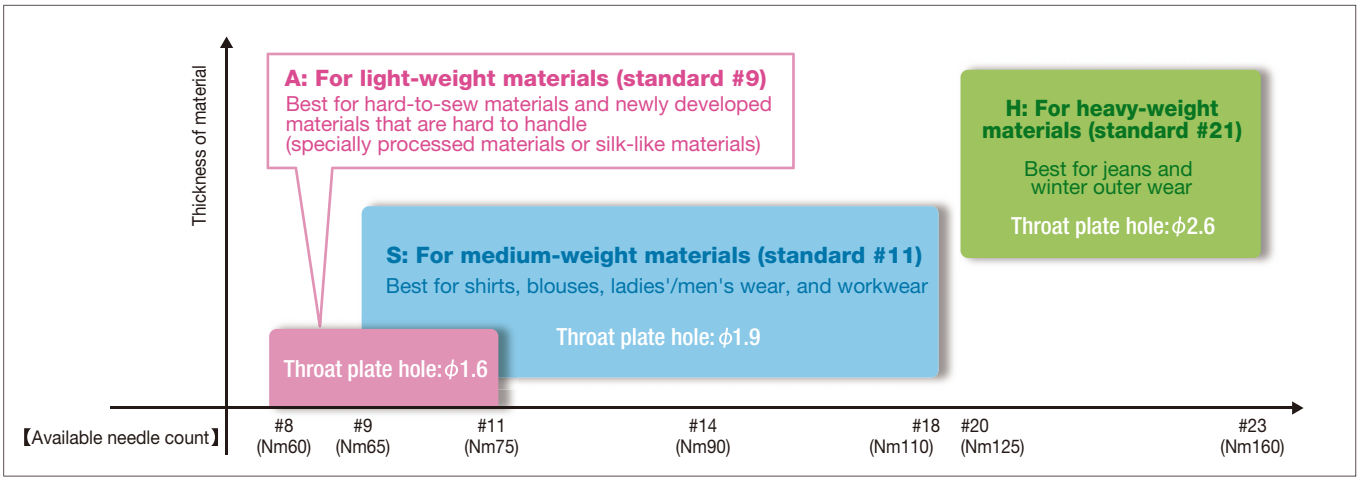
Lubricated hook C

As compared with the regular hook, the lubricated hook C has a structure which has been designed giving a higher priority to the high-speed sewing capability. The hook has a shaper blade point which is provided with a needle guard.

◎Lubricated hook K: 23621303

The hook is effective when used in processes for sewing rigid parts of fabric with a thin needle (such as a foundation sewing process). The hook has a hard blade point which is provided with a needle guard.
(applicable needle count: #8 to #10)

ADAPTABLE RANGE OF SEWING



【The sewing range in which the machine can sew with the factory-attached standard gauge】

SPECIFICATIONS

Model name	DDL-9000B-SS	DDL-9000B-SH	DDL-9000B-MA	DDL-9000B-MS	DDL-9000B-DS
Application	Medium-weight	Heavy-weight	Light-weight	Medium-weight	Medium-weight
Lubrication	Minute-quantity lubrication		Semi-dry		Fully-dry
Lubricating oil	JUKI Machine Oil 7 (equivalent to ISO VG7)				—
Max. sewing speed	5,000sti/min*	4,500sti/min*	5,000sti/min*	5,000sti/min*	4,000sti/min*
Max. stitch length	5mm*		4mm	5mm*	
Needle bar stroke	30.7mm	35mm	29mm	30.7mm	
Feed dog height	0.8mm	1.2mm	0.8mm		
Needle	DB×1(#11) #9~18 (Nm65~110)	DB×1(#21) #20~23 (Nm125~160)	DB×1(#9) #8~11 (Nm60~75)	DB×1(#11) #9~18 (Nm65~110)	
Lift of the presser foot	By hand: 5.5mm, By knee: 15mm, Auto: 8.5mm				
Size of bed	517×178mm (distance from needle to machine arm: 303mm)				
Bobbin thread winder	Built-in the machine head				
Machine head drive	Compact AC servomotor (450W) that is directly connected to the main shaft (direct-drive system)				
Automatic reverse feed function	Provided as standard				
Power consumption	320VA				
Gross package weight	51kg / 53kg (with AK-141)				
Net weight	Machine head: 38kg / 40kg (with AK-141), Control box: 3.2kg				
Outside dimensions of package (mm)	713×313×767(0.171m^3)				

*The maximum sewing speed should be set at 4,000sti/min or less when the machine is used with a stitch length of more than 4mm.
*"sti/min" stands for "Stitches per Minute."

WHEN YOU PLACE ORDERS

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

Machine head

Wiper	Code
Not provided	0B
Provided	WB

Auto-lifter	Code
Not provided	
Provided (pedal-driven)	AK141

DDL9000B □ □ □ □ □ □ □ □ □ □

Machine head	Application	Code
Minute-quantity lubrication head type	Medium-weight	SS
Minute-quantity lubrication head type	Heavy-weight	SH
Semi-dry head type	Light-weight	MA
Semi-dry head type	Medium-weight	MS
Fully-dry head type	Medium-weight	DS

Power supply	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

Operation panel

CP18A
CP180A

● To order, please contact your nearest JUKI distributor.

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.)

JUKI®

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✻ 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.

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