DDT-9000A Series
Direct-drive, High-speed, Lockstitch Machine with Automatic Thread Trimmer
A genuine sewing machine which makes the best out of professional sewing machine operators

What is satisfactory seam quality?
Which is the best performance or design to achieve ease-of-use?
JUKI is continually making efforts to pursue genuine quality to find the answers to these questions, which have ultimately led to the development of the DDL-9000A, JUKI’s top-end lockstitch machine.
JUKI’s direct-drive lockstitch machines have been evolving toward improved quality. Now, the DDL Series line-up has been renewed by adding a "semi-dry head" type to make the DDL-9000A Series.

**DDL-9000A-S**
- **Minute-quantity lubrication head type**
- **Max. sewing speed**: 5,000rpm

The sewing speed of 5,000rpm, which is the highest speed of any direct-drive lockstitch machines, contributes to increased productivity.

The DDL-9000A-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.

**DDL-9000A-M**
- **Semi-dry head type**
- **Max. sewing speed**: 5,000rpm

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

A newly added high-performance model of the DDL Series. 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.

**DDL-9000A-D**
- **Fully-dry head type**
- **Max. number of revolutions**: 4,000rpm
- **Max. sewing speed**: 4,000rpm

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 needle bar and thread take-up components are not lubricated.
- The hook part is not lubricated.
Increase in the "efficiency of feed", broadening of the "sewing range" and prevention of sewing troubles such as "stitch gathering " and “thread flapping or slackening” are some of the challenges to contribute to an upgrade of the six major elements of a sewing machine.

JUKI has gone back to the basics to perform a thorough review of the six major elements of a sewing machine, which has ultimately lead to the development of the DDL-9000A Series machines, with a quality that will more than satisfy our customers.

**Six elements**

**Feed**

The efficiency of feed has increased by 50% as compared with the conventional models.

The difference in efficiency of feed is particularly apparent when using a special-purpose gauge such as the compensating foot, presser foot for hemming or binding foot.

**Presser foot**

Stitch-gathering is reduced under an extra-low presser foot pressure.

For example, when an extra-light weight material is used, the machine is able to sew the material from its edge and to perform reverse stitching at the end of a seam, thereby reducing stitch-gathering and maintaining the correct stitch length.

**Hook**

The DDL-9000A Series is provided with a hook which is interchangeable with that for the conventional models.

The hook for the DDL-9000A Series models is interchangeable with that for the conventional models. This means no spare hooks are required to be prepared. In addition, consumable parts such as moving-knife, counter-knife are compatible with conventional models.

※ Exclusive parts are required only for the H-type counter knife.

※ Special-purpose hooks are listed in the option column.

**Thread tension**

The machine has a range of sewing capabilities which is 30% broader than that of the conventional models.

The machine produces uniformly-tensed seams with consistency without any adjustments, even when it is used for a sewing process consisting of steps which handle different materials or different-in-thickness materials. As a result, the machine not only upgrades the basic seam quality, but also reduces the time required by adjusting the machine at setup changing.

**Thread take-up lever**

The thread take-up lever reduces thread flapping or loosening, which otherwise results in stitching failures.

The thread take-up lever has been designed specifically for the respective seam specifications.

**Needle bar**

Three different types of needle bar strokes are readily available.

The needle bar stroke is set ideal to reduce fabric damage for light-weight materials and to increase penetrating force for heavy-weight materials.

<table>
<thead>
<tr>
<th>Type</th>
<th>Needle bar stroke</th>
<th>Thread take-up stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Light-weight</td>
<td>29.0mm</td>
<td>110mm</td>
</tr>
<tr>
<td>S: Medium-weight</td>
<td>30.7mm</td>
<td>110mm</td>
</tr>
<tr>
<td>H: Heavy-weight</td>
<td>35.0mm</td>
<td>113mm</td>
</tr>
</tbody>
</table>

Cross-sectional view of stitches: Thread knots are located at the center of stitches, with no thread-tension adjustments, regardless of whether light-weight or heavy-weight material is used.

Comparison of efficiency of feed with conventional models

- Example: When a turret presser foot is used (4,000rpm)
A sewing machine developed with the emphasis on ease-of-use for the customers. The machine places the highest priority on ease of setup and maintainability.

JUKI has aimed to achieve "Quick, comfortable and simple operation" in the course of the development of the DDL-9000A Series machines. The results of our endeavor are evident in the machine's user-friendly shape, in the materials used in the construction, and in a structure and arrangement, designed for good viewability and easy adjustment.

The machine provides stress-free maintenance to achieve ease of use.

- The machine pulley is a larger one which is easy to turn. (with thread tangle prevention mechanism)
- The machine no longer uses the higher/lower needle-position adjusting magnet. The needle bar position is now electronically controlled. In addition, the machine arm has notches to achieve an easy-to-carry and slip-resistant shape.

Maintainability of parts which are frequently removed and attached for adjusting the presser foot have been further improved.

- The frame’s rubber cap is frequently removed and reattached during maintenance to adjust the presser foot or the needle-bar height. Now, the rubber cap is designed to ensure easy removal/reattaching. The rubber cap has been improved primarily because of its frequent use.

A steplessly adjustable stitch dial has been adopted to enable stitch-length setting with added accuracy.

- The conventional click-type stitch dial is now provided with a stepless adjustment feature. This stitch dial enables fine stitch-length setting with added accuracy. In addition, the dial has a new mechanism which prevents the dial from shifting from the set position even when the machine is being operated for a long time.

The machine adopts a new picker mechanism and a bobbin-friendly material for the picker tip.

- The picker tip of the newly-designed picker mechanism is now made from a bobbin-friendly softer material so as to protect the bobbin against flaws due to the picker. In addition, the picker provides dramatically-increased durability.

The micro-lifter screw is located on the front of the operation panel. This allows the operator to frequently adjust the micro-lifter by adjusting the screw without ever moving from his or her seat.

- The micro-lifter works to prevent damage to the material or a slip between two plies when sewing a shaggy or elastic material. For the DDL-9000A Series, the micro-lifter screw is located on the front of the operation panel to allow the operator to frequently adjust the screw without standing up.

Simple lubrication keeps the operator’s hands clean.

- Oil can be filled with ease from the front of the machine. The ability to view the quantity of oil in the tank is also improved.

※ A very convenient micro-lifter which permits adjustments without needing a tool is also available. (See option for more information)

※ D-type head does not need oiling.
What is the greatest benefit in using a direct-drive motor?

The "direct-drive motor", which transfers the motor power to the machine with no energy loss, not only offers economical benefits due to the power reduction, but also reduces the machine’s vibration and operating noise, thereby helping reduce operator fatigue.

Comparison of power consumption by motor

Since the direct-drive motor transfers the motor power to the machine with no energy loss, a significant reduction in power consumption is achieved, offering remarkable economical benefits.

Comparison of the amount of vibration by motor

The direct-drive motor is a compact servomotor which is directly coupled with the main shaft. The motor is housed inside the machine and has no mechanisms, such as a V-belt, which transmit vibrations and noise. Thus, the motor runs without vibration and noise helping reduce operator fatigue if the machine is used for a long period of time.

Options

- **Optional switch: 23632656**
  The switch is mounted above the reverse feed switch. With this handy switch, the operator can 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 starting and 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.

- **JUKI grease A: 40006323**
  (The tube capacity is 20g.)
  **JUKI grease A, large tube type: 23640204**
  (The tube capacity is 100g for a substantial saving.)
  It is JUKI’s exclusive grease for maintenance.

- **Auto-lifter AK138 (foot-pedal type): 40056719**
  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 the irregular stitches prone to occur at certain sewing speeds and the fluctuations in bobbin-thread tension resulting from the amount of bobbin thread remaining in 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 K: 23621303**
  The hook is effective when used in processes for sewing rigid parts of fabric with a thin needle (e.g., the sewing process for foundation garments.) The hook has a hard blade point which is provided with a needle guard. (applicable needle size: #8 to #10)

- **Non-lubricated hook: 22890206**
  Non-lubricated hook: 22890404  (with a needle guard)
  The hook is used with the lubrication stopped, thereby preventing oil stains. The non-lubricated hook has a lace made of special plastic. (The non-lubricated hook is equipped as standard for the dry-head type sewing machines.)
  ※ The following two parts must be added to enable use of the non-lubricated hook in semi-dry type machines or minute-quantity lubrication type machines.
  - Hook driving shaft stop-plug screw: 11079506
  - O-ring: RO036080200

- **Lubricated hook C: 11141355**
  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.
### ADAPTABLE RANGE OF SEWING

#### A: For light-weight materials (Standard #9)
Best for hard-to-sew materials and newly developed materials that are hard to handle (specially processed materials or silk-like materials)

#### S: For medium-weight materials (Standard #11)
Best for shirts, blouses, ladies’/men’s wear, and workwear

#### H: For heavy-weight materials (Standard #21)
Best for jeans and winter outer wear

**Throat plate hole:** 2.6

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### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model name</th>
<th>DDL-9000A-MA</th>
<th>DDL-9000A-DS</th>
<th>DDL-9000A-MS</th>
<th>DDL-9000A-SS</th>
<th>DDL-9000A-SH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>A: Light-weight</td>
<td>S: Medium-weight</td>
<td>H: Heavy-weight</td>
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<tr>
<td>Lubrication system</td>
<td>S: Minute-quantity lubrication type, M: Semi-dry type, D: Dry type</td>
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<tr>
<td>Lubricating oil</td>
<td>JUKI New Defrix Oil No.1, D-type head does not need oiling</td>
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<tr>
<td>Max. sewing speed</td>
<td>DS: 4,000rpm, SH: 4,500rpm, MA/MS/SS: 5,000rpm</td>
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<tr>
<td>Max. stitch length</td>
<td>MA: 4mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Needle bar stroke</td>
<td>29mm 30.7mm 35mm</td>
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<tr>
<td>Feed dog height</td>
<td>0.8mm 1.2mm</td>
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<tr>
<td>Needle</td>
<td>DBx1(#9) #8 ~ 11</td>
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<tr>
<td>Lift of the presser foot</td>
<td>By hand: 5.5mm, By knee: 15mm, Auto: 8.5mm</td>
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<tr>
<td>Size of bed</td>
<td>517x178mm (distance from needle to machine arm: 300mm)</td>
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<tr>
<td>Bobbin thread winder</td>
<td>Built-in the machine head</td>
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<tr>
<td>Machine head drive</td>
<td>Compact AC servomotor (450W) that is directly connected to the main shaft (Direct-drive system)</td>
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<tr>
<td>Automatic reverse feed function</td>
<td>Provided as standard</td>
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<tr>
<td>Power consumption</td>
<td>400VA</td>
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<tr>
<td>Net weight (machine head only)</td>
<td>43.5kg, 46.5kg (with AK138)</td>
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<tr>
<td>Gross package weight</td>
<td>52kg, 56.5kg (with AK138)</td>
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<tr>
<td>Outside dimensions of package(mm)</td>
<td>713x313x677 (0.151m³), 713x378x677 (0.182m³) (with AK138)</td>
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</table>

**Note:** The max. sewing speed should be set at 4,000rpm or less when the machine is used with a stitch length of more than 4mm.

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### WHEN YOU PLACE ORDERS

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

- **Machine head Code**
  - Minute-quantity lubrication head type: S
  - Semi-dry head type: M
  - Fully-dry head type: D

- **Application Code**
  - Light-weight: A
  - Medium-weight: S
  - Heavy-weight: H

- **Wiper Code**
  - Not provided: 0B
  - Provided: WB

- **Auto-lifter Code**
  - Not provided
  - Provided (pedal-driven): AK138

To order, please contact your nearest JUKI distributor.