1-needle, Needle-feed, Lockstitch Machine

DLN-5410N
DLN-5410N-7
(with automatic thread trimmer)
With its needle feed mechanism, the machine supports the operator, promotes efficiency in production, and upgrades the quality of finished products.

The moving knife has been designed so that it can be easily replaced, thus facilitating machine maintenance.

Sure thread trimming mechanism.

Sewing mechanism that demonstrates outstanding responsiveness to materials to be sewn.

The machine head has been redesigned to improve the performance of each component. Thanks to the machine's low-tension sewing capability and the adjustment function for the needle feed amount (≦15%), uneven material feeding and puckering rarely occur, thus enhancing the machine's ability to respond to any change in the material to be sewn.

The optimally balanced design of the machine head and the stronger frame structure significantly reduce machine vibration and noise while the machine is being operated.

Higher lift of the presser foot.

This machine is equipped with various devices that reduce the operator's fatigue and allow the operator to easily operate the machine. These devices include the following: The foot pedal needs only light pressure to be operated. The presser foot can be lifted as high as 13mm. The shape of the machine arm has been designed to allow the operator to handle any material with ease.

Durability and reliability of the machine are improved.

It is designed to reinforce the feed components, lubrication components, and frame, and to seal hermetically the needle bar frame. As a result, durability and reliability of the machine are improved and economical efficiency will be remarkably enhanced.
When the amount of remaining bobbin thread reaches the setting, the buzzer will sound to warn the operator not to press on the front part of the foot pedal. With this function, the operator doesn’t have to look away from the sewing work to check the bobbin thread.

- For DLN-5410NJ-7, select AE-5
- Part No.: GAE-050000A0

To retrofit the AE-4 or AE-5 to your existing machine, I/O unit A (part number: 400-06080), which is separately available, is required.

When the sensor detects a material edge, it immediately stops the sewing machine and actuates the thread trimmer. This enhances productivity by allowing the operator to conduct sewing work without running to look out for missing stitches.

Newly developed control box/Compact motor unit

**SC-910/M91**

- SC-910 model control box is resistant to voltage fluctuations. It comes with a compact and energy-saving type switching power supply system that does not use a transformer. This contributes to improved reliability.
- The M91 model compact motor unit featuring low vibration and low noise capabilities is installed on the control box.
- The number of revolutions can be selected from among three different types (standard, slow and fast) according to the preference of the operator. In addition to this feature, the control box incorporates many different functions for upgraded workability.

The operation panel can be selected according to the process.

**IP-100C**

- The operation panel has been provided with a large user-friendly LCD. A pictograph and set values are shown on the same screen, which promises improved operability of the panel.
- The operation panel has been provided with a variety of communication and maintenance control features and is able to store data on a SmartMedia or personal computer.
- The features of the operation panel can be updated without the need for changing the PWB/ROM.

**CP-160A**

- Pattern sewing can be performed by the number of stitch control feature.
- Four different kinds of pattern sewing are possible: automatic reverse stitching, constant-dimension sewing, rectangle-shape sewing, and multi-layer stitching. The maximum number of stitches that can be set for automatic reverse stitching (single or double) is 19.

- **Auto-lifter AK85** (pedal-driven)
- **Remaining bobbin thread detector AE-4** Part No.: GAE-040000A0
- **Material edge sensor ED-2**

- **Micro-lifter**
  - Part No.: 112-43763
  This device can be installed on the back of the faceplate. It is very convenient for frequent use.

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## SPECIFICATIONS

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<tr>
<th></th>
<th>DLN-5410N</th>
<th>DLN-5410NH</th>
<th>DLN-5410NL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model name</strong></td>
<td>DLN-5410N</td>
<td>DLN-5410NH</td>
<td>DLN-5410NL</td>
</tr>
<tr>
<td><strong>Application</strong></td>
<td>For light- to medium-weight materials</td>
<td>For heavy-weight materials</td>
<td>For heavy-weight materials (long stitch length type)</td>
</tr>
<tr>
<td><strong>Max. sewing speed</strong></td>
<td>5,000rpm</td>
<td>4,000rpm</td>
<td>3,000rpm</td>
</tr>
<tr>
<td><strong>Max. stitch length</strong></td>
<td>4mm</td>
<td>4.5mm</td>
<td>6mm</td>
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<tr>
<td><strong>Needle bar stroke</strong></td>
<td></td>
<td>30.7mm</td>
<td></td>
</tr>
<tr>
<td><strong>Lift of the presser foot</strong></td>
<td>By hand: 5.5mm, By knee: 13mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Needle (at the time of delivery)</strong></td>
<td>DB ø1 (#14) For JE: 134 (Nm90)</td>
<td>DB ø1 (#21) For JE: 134 (Nm130)</td>
<td>DB ø1 (#21) For JE: 134 (Nm130)</td>
</tr>
<tr>
<td><strong>Hook</strong></td>
<td>Automatic-lubricating full-rotary hook</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lubrication</strong></td>
<td>Automatic</td>
<td></td>
<td></td>
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<tr>
<td><strong>Lubricating oil</strong></td>
<td>JUKI New Defrix Oil No.1 (equivalent to ISO VG7)</td>
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### Additional Information

#### WHEN YOU PLACE ORDERS

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

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</thead>
</table>

- For light- to medium-weight materials
- For heavy-weight materials
- For jeans

| Max. sewing speed | 5,000rpm | 4,000rpm |            |
| Max. stitch length | 4mm | 4.5mm |            |
| Needle bar stroke | 30.7mm | 33mm |            |
| Lift of the presser foot | By hand: 5.5mm, By knee: 13mm |            |            |
| Needle (at the time of delivery) | DB ø1 (#14) For JE: 134 (Nm90) | DB ø1 (#21) For JE: 134 (Nm130) | DB ø1 (#21) For JE: 134 (Nm130) |
| Hook | Automatic-lubricating full-rotary hook | Automatic-lubricating double-capacity full-rotary hook |

#### Application Code

- For light- to medium-weight materials
- For heavy-weight materials
- For jeans

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<tr>
<th>Hook Code</th>
<th>SC910</th>
<th>M91S</th>
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<tbody>
<tr>
<td>PSC box</td>
<td></td>
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<tr>
<td>Operation panel</td>
<td>IP-100C</td>
<td>IP100C</td>
</tr>
<tr>
<td>Control box</td>
<td></td>
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<tr>
<td>Pulley belt</td>
<td></td>
<td></td>
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<tr>
<td>Auto-lifter (optional)</td>
<td></td>
<td></td>
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<tr>
<td>Motor for SC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- JUKI Corporation Head Office
  - EMS Accreditation: RE005 089
  - ISO14001:1996
  - REG.NO.JSAE389

* 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 catalog is printed on recycle paper.