MEB-3900 Series
Computer-controlled, Eyelet Buttonholing Sewing System
(for jeans and cotton pants)

The machine is a newly developed highly-durable eyelet buttonholing Sewing System for jeans/cotton pants.
Increased productivity

Machine time is substantially reduced
The MEB-3900 reduces the machine time due to its maximum sewing speed of 2,500 sti/min and its speed-up cloth cutting knife, thereby demonstrating increased productivity. Then newly adopted direct-driven main shaft by means of a compact AC servomotor not only achieves enhanced responsiveness, but also achieves both reduced noise and reduced vibration. In addition, the machine has adopted an air-driven cloth cutting knife which promises excellent responsiveness and operates faster than the conventional knife.

Quality improvement

An active tension mechanism that electronically controls the needle thread tensions
Needle thread tensions can be digitally established on the operation panel according to sewing conditions. Data can be registered on a pattern-by-pattern basis to easily reproduce the same sewing conditions.

Using conventional machines, it's often quite difficult to reproduce the same sewing conditions. This machine does it with ease. With this capability, the MEB-3900 responds immediately to material changes, significantly reducing the time required for setup changes or adjustments. The machine also ensures the consistent production of high-quality seams.

Needle thread tension can be separately established for various sections of a buttonhole such as eyelet sections and parallel sections
The machine promises high-quality seams by smoothly responding to changes in stitch formation and allowing the operator to set a separate thread tension for the bartacking sections of buttonholes.

Thread tensions for the beginning and end of sewing can also be separately established. This helps prevent loose stitches or slip-off or raveling of thread at the beginning of sewing.

Threading work can be more easily
Since fewer parts need to be threaded, the machine can be threaded more quickly and easily than conventional buttonholing machines.

Reliable overall thread-trimming and needle thread-trimming mechanism
Two different thread trimmers are prepared. One of them can be selected according to the customer's needs. The overall thread trimmer has been putting importance on productivity. It promises thread trimming without fail and trims the thread in a short time. The operator is no longer required to carry out fine adjustments of the thread trimmer when changing the sewing length.

A sewing machine with a needle thread tracer (Needle thread trimming type) has been the MEB Series in response to customer needs.

Direct-drive motor is adopted
The machine has adopted a direct-drive method that connects a compact AC servomotor directly to the main shaft. The quick startup and increased stopping accuracy obtained as a result guarantees outstanding responsiveness. In addition, the direct-drive motor does not use a V-belt to reduce power consumption.

Management of sewing performance and sewing machine by 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.

Various data can be obtained by using the Smart APP.
The data obtained by the APP are reflected in the graph.

Thanks to the computer control, many different eyelet shapes and straight buttonhole shapes can be selected or established on the operation panel.
The machine is provided as standard with 12 different stitching shape patterns. As many as 87 different patterns can be stored in memory and selected.
**Improved workability and operability**

**Corresponds to that efficiently sews longitudinal buttonholes**
- The machine head has a wider space under the work clamps to permit easy placement of a sewing product, thereby improving workability.
- The semi-sunken machine head promises easy placement and smooth handling of sewing products. Pistol pocket sewing of finished product became easier.
- The amount of material opened can be easily adjusted using the screw mounted outside the machine head.

**Improved viewability around the needle entry**
Projection of the arm frame of the machine head has been reduced. In addition, the cloth cutting knife is located closer to the operator side as compared with the conventional model. Viewability, when placing the material on the sewing machine, is improved, thereby contributing to improved workability. In addition, the thread clamp mechanism of the needle thread clamp (optional) has been improved for better viewability.

**Adjustment of Cloth Cutting knife**
When the blade of the cloth cutting knife wears, it can be adjusted by changing the height of the spacer.

**Latch type bottom cover**
A latch type bottom cover is adopted. Daily maintenance (threading, adjustment of the looper thread, cleaning, etc.) can be carried out without raising the machine head.

**Excellent maintainability**
- The computer controlled design eliminates most of the complicated mechanisms. This dramatically improves maintainability.
- The machine head is supported by a gas-spring that makes it easy to raise for smoother cleaning and threading. The tilted up machine head can safely take down thanks to the mechanical lock.

**The machine is provided as standard with an LED light**
An LED light is provided as standard on the underside of the jaw of the machine head. The area around the needle entry is this brightened to improve workability. The brightness of LED can be adjusted to 20 levels.

**Improvements of working environment**
- Adoption of a direct-driven main shaft and a revamping of the curve sections of the thread take-up cam and looper cam contribute to remarkably reduced vibration and noise.
- The machine automatically reclaims cloth chips after cloth cutting action to keep the working environment cleaner.

**Options**

**MEB-3900A1, provided with needle thread clamp device**
- The needle thread clamp device eliminates the thread securing procedure by licking the needle thread in the finished seams.
- [Part No.32024481(Pedal switch, asm.)]
- The needle thread clamp device retains the needle thread to ensure neat seam formation from the very first stitch.
- The needle thread clamp device can be retrofitted to the sunken head setup.

**2-pedal switch**
[Part No.40033831(Pedal switch, asm.)]
The work clamp can be lifted/lowered and the machine can be started using the pedal switch.
- To use the 2-pedal unit, pedal switch cable asm. (Part No.40114433) is required.

**Sub table asm** (for sunken head setup)
[Part No.40115994]
The table top specification can be used as a half sunken type.
MEB-3900 is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.

Application:

- Jeans
- Cotton pants and working wear

Stitching shape patterns:
- Buttonhole with a straight bartack
- Buttonhole with a taper bar
- Buttonhole with a hank stitch
- Radial stitch eyelet

The machine is provided as standard with 12 different stitching shape patterns of eyelet buttonhole. As many as 87 different patterns can be stored in memory and selected.

List of the Replacement Gauges

<table>
<thead>
<tr>
<th>Application</th>
<th>Code</th>
<th>Accessory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buttonhole with a straight bartack</td>
<td>MEB3900J</td>
<td>No symbol</td>
</tr>
<tr>
<td>Buttonhole with a taper bar</td>
<td>MEB3900C</td>
<td>Optional</td>
</tr>
<tr>
<td>Radial stitch eyelet</td>
<td>-</td>
<td>Optional</td>
</tr>
</tbody>
</table>

Specifications

Model name
- MEB-3900J
- MEB-3900C

Application
- Jeans
- Cotton pants and working wear

Stitching shape patterns:
- 1 needle, double chariot stitch (with one stitch)

Sewing speed
- 4,000 - 5,000 mm/min

Sewing length
- 10 - 39 mm (Needle thread trimming type)
- 10 - 34 mm (Overshot thread trimming type)

Needle thread width
- Mechanical adjustment of the needle thread width: 2.0 - 4.0 mm
- Compensation of the needle thread width (by direct feeding table): 1.0 - 5.0 mm

Taper bar length
- 30 - 150 mm

Work clamp height
- Method for changing stitch shape: By selecting a program

Buttonhole cutting method:
- By cut-before knife or cut-after or without buttonhole cutting

Cloth cutting knife drive system: Pneumatic

Needle: (at the time of delivery) JUKI MACHINE QC, No. 18 (equivalent to ISO 508)

Cutting oil: JUKI MACHINE OIL No. 18 (equivalent to ISO VG 18)

Main regulator: -0.5 MPa

Harmer pressure regulator: -0.35 MPa (standard), 0.4 MPa (Max)

Air consumption: 48.5 l/min (1.6 cfm)

Power requirement and power consumption:
- Single-phase 200 - 240V, 350VA

Weight:
- Machine head: 110Kg, Operation panel: 0.3Kg, Control Box: 5Kg

Dimensions:
- Machine head: 580mm (W) × 650mm (D) × 584mm (H)
- Operation panel: 410mm (W) × 260mm (D) × 190mm (H)
- Control Box: 220mm (W) × 230mm (D) × 135mm (H)

Other devices:
- Type: 3 phase 240V - 240V (for Service Expiry) / 3 phase 200V - 200V (for India)