MOL-254
Automatic 2-needle Belt-Loop Attaching Machine

Shortened machine time and consistent loop feeding help increase productivity.

OPTIONS

- Belt-loop feeding device
  - Belt-loop slackener
  - Needle cooler
  - Air gun assembly

MAJOR SPARE PARTS

<table>
<thead>
<tr>
<th>Part name</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Initial stop knock</td>
<td>D5412256000</td>
</tr>
<tr>
<td>Shutter</td>
<td>B10119210003</td>
</tr>
<tr>
<td>Shutter silent ring, C type</td>
<td>00117270054</td>
</tr>
<tr>
<td>Needle pusher</td>
<td>19362051</td>
</tr>
<tr>
<td>Needle plate, A type</td>
<td>53441506</td>
</tr>
<tr>
<td>Needle plate, B type</td>
<td>53443000</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model name</th>
<th>MOL-254</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine type</td>
<td>Computer control, 2-needle, 1-belt, attaching machine</td>
</tr>
<tr>
<td>Max. warp speed</td>
<td>3,000 rpm</td>
</tr>
<tr>
<td>Thread take-up</td>
<td>1 type</td>
</tr>
<tr>
<td>Needle bar angle</td>
<td>67.70 deg</td>
</tr>
<tr>
<td>Thread</td>
<td>Spool thread, cotton thread (266), 700 deg, R = 35, B = 60</td>
</tr>
<tr>
<td>Number of stitches</td>
<td>(26/4, 4 stitches each on the front surface)</td>
</tr>
<tr>
<td>Needle gauge</td>
<td>40-70G (70G is standard)</td>
</tr>
<tr>
<td>Tack-stitching length</td>
<td>1-2 pen drive (64-148T, adjustable in increments of 0.5 mm)</td>
</tr>
<tr>
<td>Number of points of backstitching that the belt is driven to release</td>
<td>9-10 points (5 optional EP/CM is added)</td>
</tr>
<tr>
<td>Belt loop width</td>
<td>3-15 mm (0.126-0.590)</td>
</tr>
<tr>
<td>Feed length of belt loop</td>
<td>4,000 mm (1.6084 ft)</td>
</tr>
<tr>
<td>Machine time</td>
<td>1.8 sec, belt loop (55150)</td>
</tr>
<tr>
<td>Positioning of the front loop</td>
<td>60 mm (difference between the box and the upper box in increments of 0.5 mm)</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Oil injection (only in front loop and loop head)</td>
</tr>
<tr>
<td>Oil</td>
<td>Automatic lubrication system</td>
</tr>
<tr>
<td>Lubrication oil</td>
<td>Oil (oil contained in oil tray)</td>
</tr>
<tr>
<td>Power requirement and power consumption</td>
<td>Single-phase, 200-240V/50Hz</td>
</tr>
<tr>
<td>Compressed air and air consumption</td>
<td>0.63 m³/min (22 ft³/min)</td>
</tr>
<tr>
<td>Total weight</td>
<td>68 kg</td>
</tr>
<tr>
<td>Dimensions</td>
<td>1,200mm (W) x 850mm (D) x 1,150mm (H) (in the lower end)</td>
</tr>
<tr>
<td>Height of the back surface of the front plate at the front surface</td>
<td>920 ± 10 (in compliance with the adjustable tilting capability)</td>
</tr>
</tbody>
</table>

WHEN YOU PLACE ORDERS

Please order when placing orders, as the model name should be written as follows.

MOL-254

JUKI CORPORATION

3-1-11, Tsuchiura, Ibaraki 300-0861, Japan
Tel: +81-294-11-5000
Fax: +81-294-11-5001
http://www.juki.com

In order, please contact your nearest JUKI distributor.

MOL-254 (equipped with full options)
MACHINE TIME 1.2 SEC./BELT-LOOP

The machine time is 1.2 seconds per belt-loop (with 28 stitches).

The new machine head specially developed for belt-loops attaching machines runs at a maximum sewing speed of 3,000 loops per minute, which improves machine performance and shortens sewing time. The 8-blade feeding device is now provided with a high-speed, high-capacity feed for subsequent belt-loops and is designed to eliminate the need for supplying belt-loops and helps speed up the machine time to 1.2 seconds per belt-loop (with 28 stitches).

With the improved consistency in belt-loop supply action and re-try capability, the machine down time is substantially reduced.

Belt-loops are set out by the conventional gear-feeding mechanism and are drawn out by the new sewing mechanism on the clamp device. Supported by these two mechanisms, the folding fork catches “closed” or “crossed” belt-loops every time and supplies them to the head. In addition, the runner of the clamp device prevents the occurrence of belt-loops. If it detects a faulty belt-loop feed, the clamp device automatically repeats the clamping action. Since the operator does not have to operate the re-take switch, time is saved.

THE MACHINE OFFERS IMPROVED FLEXIBILITY.

The newly developed machine head comes with a computer-controlled X-Y linear feeding system which enables to program the number of stitches and size of bartacking.

The number of stitches in sew a belt-loop can be switched between 21, 26, and 42-stitches, and the bartacking size can be easily changed through the operating panel. What’s more, the user can create his/her own original sewing patterns in addition to the standard ones using 2,500 points programming software developed for computer-controlled sewing machines.

Simple adjustment of the machine enables changeover of the cutting method between cross-cutting and straight cutting.

The applicable loop width for the cross-cutting device is increased. In this model, both the cross-cutting device and the straight-cutting device can now be cut by 1.2mm width.

FINISHED BELT-LOOP STITCH SIZE

With the improved consistency in belt-loop supply action and re-try capability, the machine down time is substantially reduced.

Belt-loops are set out by the conventional gear-feeding mechanism and are drawn out by the new sewing mechanism on the clamp device. Supported by these two mechanisms, the folding fork catches “closed” or “crossed” belt-loops every time and supplies them to the head. In addition, the runner of the clamp device prevents the occurrence of belt-loops. If it detects a faulty belt-loop feed, the clamp device automatically repeats the clamping action. Since the operator does not have to operate the re-take switch, time is saved.

THE MACHINE OFFERS IMPROVED OPERABILITY, WORKABILITY, AND MAINTAINABILITY.

An electric sliding mechanism is installed in the front hook (near the operator).

To enable computer-controlled belt-loop supply performance, the machine has adopted a servomotor-driven belt-loop feeding device that feeds the belt-loops to the sewing position (i.e., under the presser foot).

The belt-loop feeding position is automatically adjusted to the belt-loop width. With this capability, the belt-loop width can be easily changed without mechanical adjustment. In addition, when feeding the belt-loop under the presser foot, the low-profile position of the belt-loop can be easier through simple manipulation of the operating panel.

To improve workability in replacing belt-loops, the belt-loops insertion opening through which belt-loops are supplied to the feeding device is now located on the front side of the main unit.

The operator can easily check how the belt-loops are fed during sewing and prevent possible troubles in the belt-loop feeding due to faulty loop feeding performance.

The machine is equipped as standard with an adjustable stand.

The height of the working table can be easily adjusted to match the operator’s height.

The operator can easily set sewing work on a comfortable position with less physical strain and fatigue.
The machine quickly and reliably disposes splices without any delays in cycle time. The machine predetermines each splice in the belt-loop and efficiently disposers them. This means that even when the machine operates at a high-speed production, the belt-loop feeding device can complete its belt-loop supply action and supply the next belt-loop without the machine start-up. This significantly improves production efficiency and therefore reduced cost.

With the improved consistency in belt-loop supply action and re-try capability, the machine down time is substantially reduced. Belt-loops are fed out by the conventional gear-type feeding mechanism and are drawn out by the new design mechanism on the clamp device. Supported by these two mechanisms, the feeding fork catches "corrected" or "corrected" belt-loops even more tightly and supplies them to the feed. In addition, the timing of the clamp device detects the presence of belt-loops. If it detects a faulty belt-loop feed, the clamp device automatically repeats the clamping action. Since the operator does not have to operate the set-back switch, time loss is drastically reduced.

The newly developed machine head comes with a computer-controlled X-Y linear feeding system which enables to program the number of stitches and size of bartacking. The number of stitches to sew a belt-loop can be switched between 20, 36, and 42 stitches, and the bartacking size can be easily changed through the operation panel. What’s more, the user can create his/her own original sewing pattern in addition to the standard ones using 2,500,000 programming software developed for computer-controlled sewing machine.

Simple adjustment of the machine enables changeover of the cutting method between cross cutting and straight cutting. The applicable loop width for the cross-cutting device is increased. In this model, both the cross-cutting device and the straight-cutting device can now cut up to 50mm width.

The machine offers improved flexibility.

With the improved belt-loop supply action and re-try capability, the machine down time is substantially reduced. Belt-loops are fed out by the conventional gear-type feeding mechanism and are drawn out by the new design mechanism on the clamp device. Supported by these two mechanisms, the feeding fork catches "corrected" or "corrected" belt-loops even more tightly and supplies them to the feed. In addition, the timing of the clamp device detects the presence of belt-loops. If it detects a faulty belt-loop feed, the clamp device automatically repeats the clamping action. Since the operator does not have to operate the set-back switch, time loss is drastically reduced.

The newly developed machine head comes with a computer-controlled X-Y linear feeding system which enables to program the number of stitches and size of bartacking. The number of stitches to sew a belt-loop can be switched between 20, 36, and 42 stitches, and the bartacking size can be easily changed through the operation panel. What’s more, the user can create his/her own original sewing pattern in addition to the standard ones using 2,500,000 programming software developed for computer-controlled sewing machine.

Simple adjustment of the machine enables changeover of the cutting method between cross cutting and straight cutting. The applicable loop width for the cross-cutting device is increased. In this model, both the cross-cutting device and the straight-cutting device can now cut up to 50mm width.

The machine offers improved flexibility.
The machine quickly and reliably dispenses splices without any delays in cycle time. The machine automatically detects each splice in the belt-loops and efficiently dispenses them. This means that even when the machine operates at the specified speed projection, the belt-loop feeding device can successfully deliver all belt-loops in the specified time and supply the feed time to the sewing position. The belt-loop feeding device is designed to minimize any delays in cycle time.

An electric sliding mechanism is installed in the front hook (near the operator) to enable computer-controlled belt-loop supply performance, the machine has adopted a servomotor-driven belt-loop feeding device that feeds the belt-loops to the sewing position (i.e., under the presser foot).

The newly developed machine head comes with a computer-controlled X-Y linear feeding system which enables to program the number of stitches and size of bartacking. To enable computer-controlled belt-loop supply performance, the machine has adopted a servomotor-driven belt-loop feeding device that feeds the belt-loops to the sewing position (i.e., under the presser foot).

With the improved consistency in belt-loop supply action and re-try capability, the machine down time is substantially reduced. Belt-loops are set out by the conventional pin-feed feeding mechanism and are driven out by the new developed mechanism on the clamp device. Supported by these two mechanisms, the folding has a “stitch” of one belt-loop every time and supplies them to the belt. In addition, the center of the clamp device detects the presence of belt-loop. If it detects a faulty belt-loop feed, the clamp device automatically repeats the clamping action. Since the operator does not have to operate the stitch switch, time is not lost.

Simple adjustment of the machine enables changeover of the cutting method between cross cutting and straight cutting.

The newly developed machine head comes with a computer-controlled X-Y linear feeding system which enables to program the number of stitches and size of bartacking.

Simple adjustment of the machine enables changeover of the cutting method between cross cutting and straight cutting. The applicable loop width for the cross-cutting device is increased. In this model, both the cross-cutting device and the straight-cutting device can now cut up to 22mm width.

The newly developed machine head comes with a computer-controlled X-Y linear feeding system which enables to program the number of stitches and size of bartacking.
**MOL-254**

**Automatic 2-needle Belt-Loop Attaching Machine**

Shortened machine time and consistent loop feeding help increase productivity.

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**OPTIONS**

- **Belt-loop feeding device**
  - Device employs the rotary feeding device
  - Supports belt-loop feeding of the material

- **Belt-loop tension releasing device (Belt-loop slackener)**
  - Device adopts the belt-loop when attaching it to other garment parts

- **Needle cooler**
  - Device cools the needle point, generated by the needle during sewing

- **Needle thread breakage detector**
  - Device detects breakages in the needle thread by means of a threshold clockwise.
  - If a needle thread breakage is detected, the device halts the sewing of the next loop.

- **Air gun assembly**
  - A bellows, threaded, cross-air, cloth-tip suction device, and adjustable stand are installed standard on the machine.

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**MAJOR SPARE PARTS**

- Part name | Part No.
---|---
Upper belt loop (belt loop) | 035412250000
Shuttle | 039187610000
Shuttle main ring (C type) | 138477150000
Needle plate guide | 138430610000
Moving link passage | 1384312500
Cover plate (S) | 1384305000
GT-0001 for cover | L-0551232000

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**SPECIFICATIONS**

- **Model name**: MOL-254
- **Machine type**: Automatic 2-needle belt loop attaching machine

**Features and appearance**

- Belt-loop feeding device
- Belt-loop tension releasing device (Belt-loop slackener)
- Needle cooler
- Needle thread breakage detector
- Air gun assembly

**A bellows, threaded, cross-air, cloth-tip suction device, and adjustable stand are installed standard on the machine.**

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**WHEN YOU PLACE ORDERS**

*Please write when placing orders, that the model name should be written as follows.*

**MOL-254**

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**JUKI CORPORATION**

**SEWING MACHINERY BUSINESS UNIT**

*Specifications and appearance are subject to change without prior notice for improvement.*

*This catalogue prints with environment-friendly soy ink on recycle paper. OCTOBER, 2014 Printed in Japan (A)
MOL-254
Automatic 2-needle Belt-Loop Attaching Machine

Shortened machine time and consistent loop feeding help increase productivity.

**OPTIONS**

- Belt-loop feeding device (Belt-loop slackener)
  - Part No.: G710-254-0A0
  - The cylindrical type belt-loop feeding device supports the belt-loop feeding of the mockup.

- Belt-loop tension releasing device (Fullness)
  - Part No.: G710-254-0A0
  - The device detects the belt-loop when attaching it to the mockup.

- Needle cooler
  - Part No.: G712-254-0A0
  - The device cools the thread heat generated by the needle rotating winding.

- Needle thread breakage detector
  - Part No.: G710-254-0A0
  - The device detects the breakage in the needle thread by means of a threshold-up spring. If a needle thread breakage is detected, the device holds the tensioning of the belt loop.

- Air gun assembly
  - Part No.: G710-254-0A0
  - A bubble type counter, cross air cloth feedcut device, and adjustable stand are installed standard on the machine.

**MAJOR SPARE PARTS**

<table>
<thead>
<tr>
<th>Part No.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>6512241600</td>
<td>6512241600</td>
</tr>
<tr>
<td>B11 18610 00</td>
<td>B11 18610 00</td>
</tr>
<tr>
<td>21874280</td>
<td>21874280</td>
</tr>
<tr>
<td>13811520</td>
<td>13811520</td>
</tr>
<tr>
<td>1-L009422000</td>
<td>1-L009422000</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

- Model name: MOL-254
- Sewing type: Automatic feeding, 2-needle 6-motion sewing machine
- Max. sew (loop-end): 2,500 stitches/min
- Threading up: Line type
- Needle bar angle: 60°, T-shaped
- Thread: Spool thread, cotton thread A: 50/2, B: 50/2, 1.62 x 0.00 (12-20)
- Needle (at the time of delivery): 110 x Far, 110 x Far
- Height: Horizontal: 128 mm, vertical: 128 mm
- Lift of the needle bar: 28 mm
- Number of stitches: 21, 32, 43, 54, 65, 76
- Needle pitch: 42.70 mm ± 0.01 mm
- Threading length: 126 mm (2 1/2 inches), 246 mm (9 1/2 inches)
- Belt loop width: 25 mm (0.980 inches)
- Belt loop length: 40 mm (1 1/2 inches)
- Machine time: 1.8 sec. (belt loop: 8815s)
- Pocketing of the front edge: 15 mm (0.591 inches)
- Elaboration: 1.200 mm (0.040 inches)
- Height of the lower surface of the front plate as from the floor surface: 960 ± 1.8 mm (37 1/2 inches with the adjustable travel capability)

**WHEN YOU PLACE ORDERS**

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

MOL-254

**JUKI CORPORATION**

**SEWING MACHINERY BUSINESS UNIT**

2-11-1, TSURUMAKI, TAMA-SHI, TOSHIMA-KU, TOKYO

Tel: (03) 3875-1211 Fax: (03) 3875-1212

http://www.juki.com

Registered Organization
Head Office

The activities of research, development, design, sales, distribution, and maintenance services of industrial sewing machines, household sewing machines and industrial robots, etc., including sales and maintenance services of data entry systems.

MOL-254 (equipped with full options)

**OPTIONS**

- Belt-loop feeding device
- Belt-loop tension releasing device
- Needle cooler
- Needle thread breakage detector
- Air gun assembly

**MAJOR SPARE PARTS**

<table>
<thead>
<tr>
<th>Part name</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper belt loop (C type)</td>
<td>6512241600</td>
</tr>
<tr>
<td>Shuttle, 1 type</td>
<td>B11 18610 00</td>
</tr>
<tr>
<td>Shuttle rosette, 3 types</td>
<td>21874280</td>
</tr>
<tr>
<td>Needles die head</td>
<td>1-38442151</td>
</tr>
<tr>
<td>Moving belt pulley</td>
<td>13811520</td>
</tr>
<tr>
<td>Upper plate (U type)</td>
<td>13811520</td>
</tr>
<tr>
<td>1-L009422000</td>
<td>1-L009422000</td>
</tr>
</tbody>
</table>