Operating Manual

Belt band attachment

Version 1.0

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1. Belt band attachment

The belt band attachment is used to embroider belts and similar, such as belt band, twill tape and Velcro tape. It is designed to process:
- max. belt width 25 mm
- max. length 25 m Velcro tape, 100 m twill tape

1.1 Overview

Figure 1:
Overview, belt band attachment

Take-off reel

Take-up reel, motorized

Top deflector

Bottom deflector

Embroidery frame with eccentric clamps

Dancing roller
1.2 Needle plate for belt band embroidery

**WARNING**

Switch off the embroidery machine before setting it up for belt band embroidery.

**CAUTION**

Before using the embroidery machine with the belt band attachment, make certain that the proper needle plate for this type of operation is installed.

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Figure 2: Needle plate, belt band attachment

2.1

**Installing needle plate**

- Remove the two fixing screws (2.1) from the belt band needle plate.
- Detach the needle plate from the cylinder arm.
- Install the needle plate for belt band embroidery (*Fig. 2*).
- Insert and tighten the needle plate fixing screws.
1.3 Mounting band reels

**WARNING**

Switch off the embroidery machine before setting it up for belt band embroidery.

- Press in the stop pins and pull the front reel discs off the take-off and take-up reels.

**NOTE**

- Slide the reel containing the band onto the reel disc core, observing the correct direction of rotation.

The band is taken off and taken up by each reel rotating clockwise.

- Slide the front reel disc onto the take-off shaft until it is heard to engage.
At the top right deflector, push down the spring-loaded bottom roller and thread the band between the two rollers.

Take the band over the stop bar and pull it underneath the plastic roller.

Run the band down through the bottom right deflector towards the frame.
NOTE

To thread the band at the two eccentric rollers, push the operating lever for the relevant magnet to the right.

• Thread the band in the embroidery frame as follows:
  - take the band under the right eccentric clamp on the frame
  - then between the frame and under the right plastic guide
  - then under the holder
  - then between the frame and under the left plastic guide
  - then under the left eccentric clamp.

Figure 6:
Embroidery frame, fixing the band

Plastic guide
Magnetically operated eccentric clamp

Holder
Operating lever
Magnet

• Run the band between the roller and the stirrup of the dancing roller.

Figure 7:
Dancing roller and bottom deflector, threading the band

Dancing roller
Bottom deflector, left

• Run the band down and under the bottom left deflector.
• Run the band over the top deflector (8.1).

Figure 8:
Top deflector

8.1

To fix the band to the take-up reel, the reel must be freely rotatable by hand.

• Release the fixing screw Fig. 9 on the back of the take-up reel.

⇒ The take-up reel can now be rotated freely by hand for the purpose of attaching the band.

Figure 9:
Take-up reel,
motorized

Band, winding clockwise

Motor

Fixing screw
• Wind the band in a clockwise direction around the plastic core (10.1) of the take-up reel.

• Form a loop (10.3) by taking the band around the pin (10.2) next to the plastic core.

**NOTE**

Make certain that the fixing screw (11.2) for the take-up reel is located vertically above the fastening surface (11.1) on the take-up reel shaft.

• Lightly tighten the fixing screw.
• Slide the front disc onto the take-up reel shaft until it is heard to engage.

Figure 12:
Take-up reel, adjusting

12.1
12.2
12.3

• Carefully slacken off the take-off reel fixing screw and slide the back disc (12.1) on the take-off reel shaft to obtain a gap of 1 mm between the band (12.2) and front disc (12.3).

• Fully tighten the fixing screw.
Adjusting the belt band attachment

To ensure uninterrupted production, the belt band attachment has to be set up as described below.

Dancing roller

- The dancing roller must be located at the highest switching position.

Figure 13: Adjusting dancing roller

Top switching position

Winding band forward

- Take sufficient band off the take-off reel so that a loop of about \( \frac{2}{3} \) the frame length forms to the right of the embroidery frame.

Figure 14: Forming a loop

Loop
**Shutdown at end of band**

A stop device is tripped when the end of the band is reached. The device is installed in the top deflector on the take-off side. It can operate properly only if the stop bar is in the bottom position while the machine is embroidering. When the end of the band is reached, the stop bar is located in the top position.

- Rotate the take-off reel (containing band) counter-clockwise until the **stop bar** reaches the **bottom (embroidery) position**.

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Figure 15: Adjusting stop bar

Top switching position
(end of band)

Bottom position
(embroidery position)
Adjusting eccentric clamps

**WARNING**

Do not touch the eccentric clamping magnets because they become very hot during embroidering.

The eccentric clamps may need to be adjusted, depending on the thickness of the band and the type of embroidery design.

- Slacken off the two fixing screws (16.3) for the right eccentric clamp (16.2) until it is just free to move.
- Push the eccentric clamp down against the band with the thumb.
- Move the operating lever (16.1) of the eccentric clamp to an almost vertical position (< 90° and > 85°).
- Fully tighten fixing screws (16.3).
NOTE

If the embroidery field of the belt band attachment is exploited more or less completely (if only a small part of the band is not to be embroidered), the left eccentric clamp must be adjusted a little looser than the right one.

- Adjust the left eccentric clamp as described above.
1.4 Disabling belt band attachment for different embroidery technique

Figure 18:
Embroidery frame connection to pantograph drive carriage

18.1
18.2

**WARNING**

- Slacken off the retaining screws in plug (18.2).
- Carefully disconnect the plug by pulling it off.
- Secure the plug at the place provided on the back of the machine girder.
- Remove the two knurled screws on the underside of the guard.
- Take out the holder.
- Remove the two knurled screws (18.1) on the pantograph drive carriage.
- Pull out the complete embroidery frame (a little to the side and to the front) underneath the needle unit.

**CAUTION**

When removing the embroidery frame, make sure that it does not get caught on the catching device or needle unit because their settings could be inadvertently adjusted.

Consult the embroidery machine operating manual for a description of the other measures that need to be taken to set up the machine for a different embroidery technique.