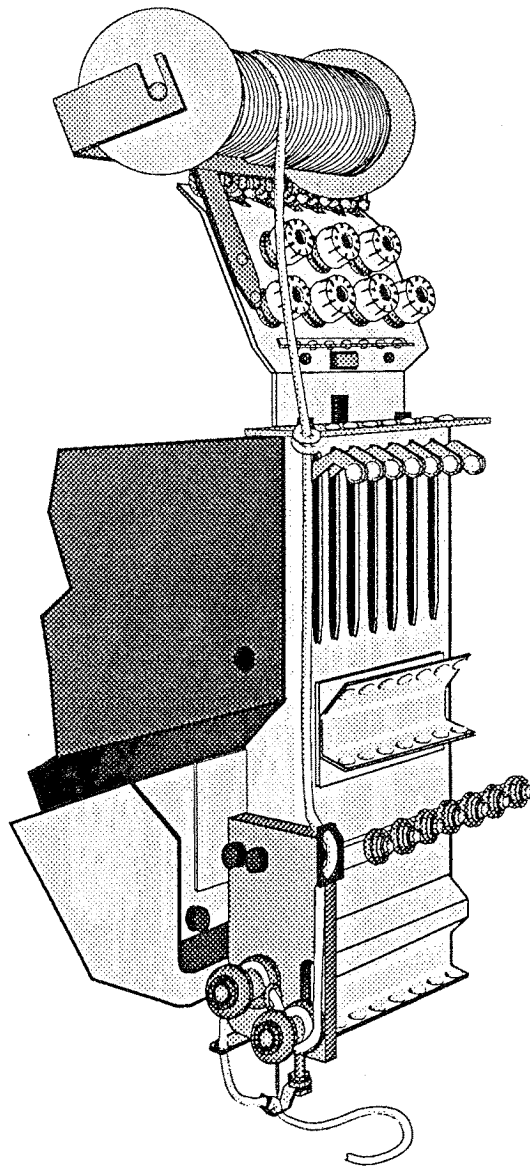


Operating manual



Double-roller cord embroidery device

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Cord embroidery

Definition

Cord embroidery involves embroidering a cord onto predetermined contours. The cord is secured with a monofilament transparent or decorative thread.

In contrast to the previous cord/loop device, the new double-roller cord embroidery device is purely for cord embroidery.

Enhancements

- The cord embroidery device feeds the cord to the material with very little tension. This prevents material distortion and results in uniformly executed embroidery work.
- Moreover, both tight and elastic cords can be worked.
- An additional tensioning device permits the use of cones as well as cylinders.

Various presettings must be made before operating the cord embroidery device.

CAUTION

Set the rocker switch in the embroidery machine switch box to 'I' before commencing presetting and threading. The machine cannot then be started unintentionally, e.g. by a third party, during this preparatory work.

Keep hands well clear of moving machine parts once the machine has been started.

Description of the cord embroidery device

The cord embroidery device is positioned on the left or right side of the embroidery head and, in each case, replaces the two end needles. This manual describes the device as installed on the left side (also see Fig. 1.0). When installed on the right, the components are mounted as a mirror image. Otherwise the two versions are identical.

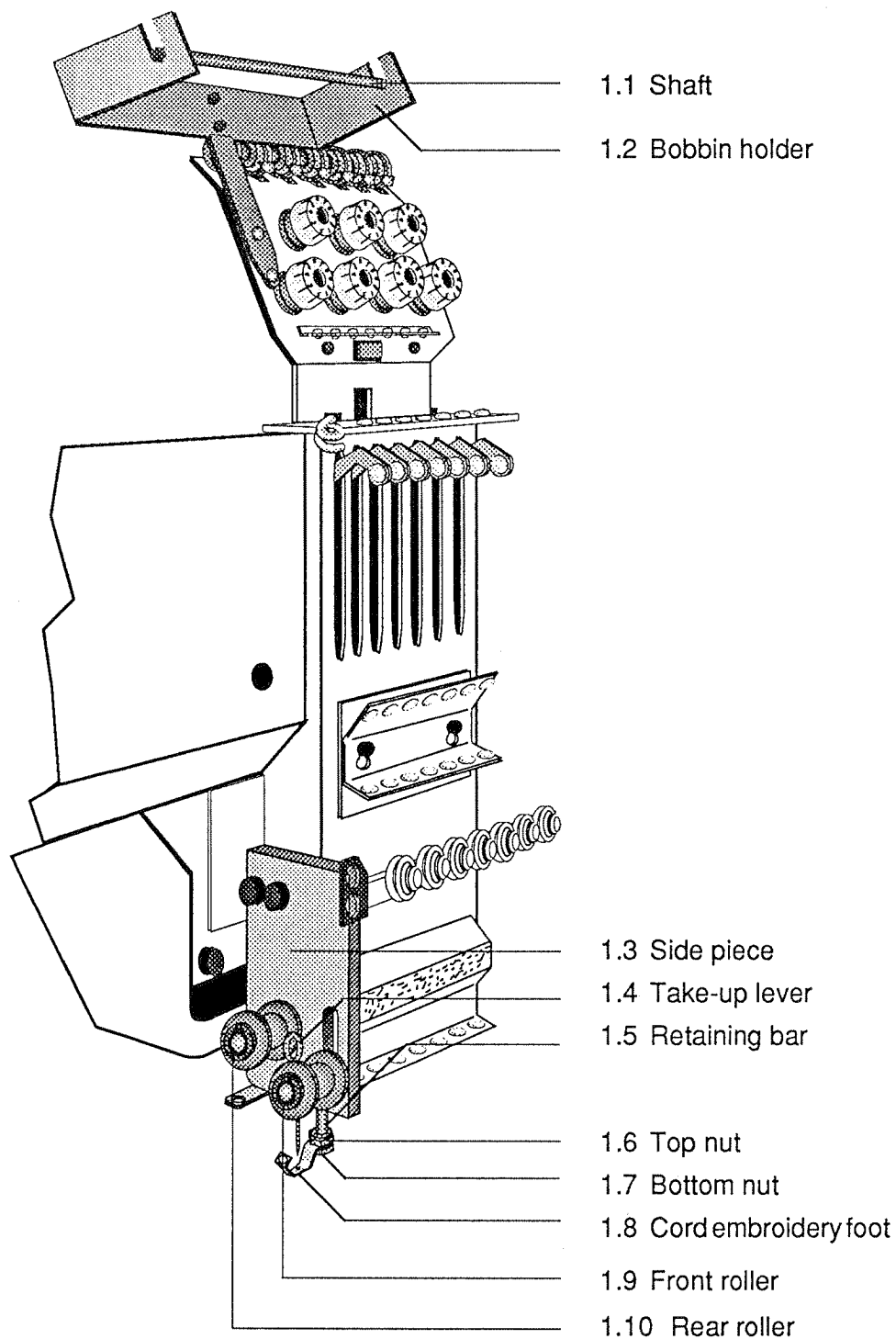


Fig. 1.0
Double-roller cord embroidery device (left-hand version)

With the left-hand version the 6th needle is replaced by a retaining bar (1.5). The cord embroidery foot (1.8) is attached to this retaining bar. Two nuts (1.6, 1.7) are located on the retaining bar above and below the cord embroidery foot. The cord embroidery foot is adjusted by means of these nuts.

Two rollers (1.9, 1.10) are located on the side of the cord embroidery device. The cord is guided over these rollers. The height of the front roller can be adjusted. The adjusting screw is on the inside of the side piece (1.3).

Accessories

Fig. 2.0
Test template for cord thicknesses

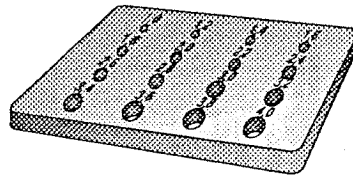
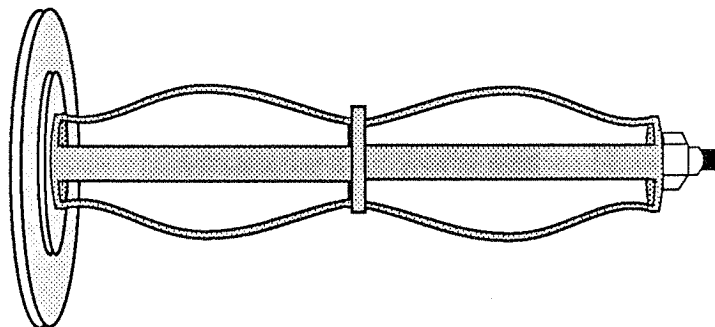


Fig. 3.0
Clamping device for cones

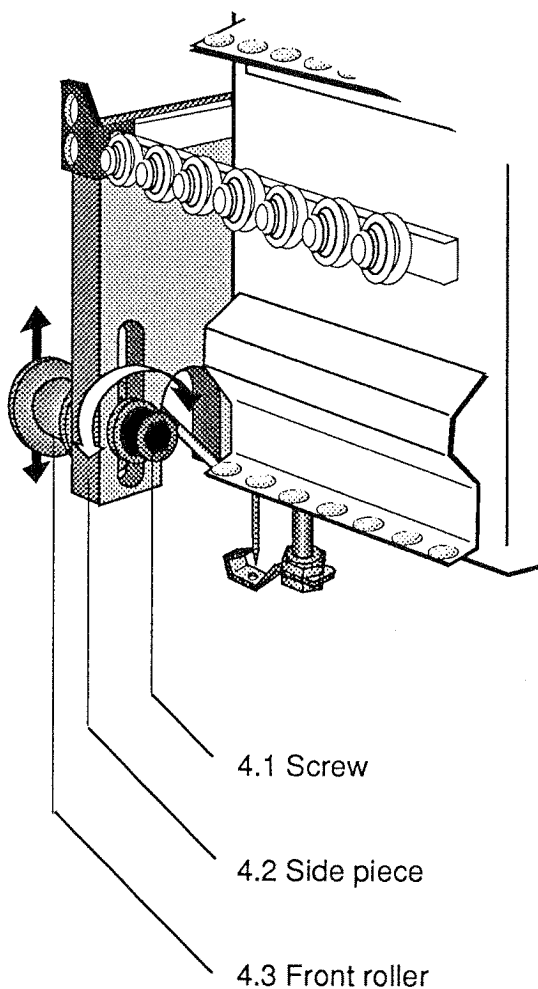


Presettings

Height of the front roller

The height of the front roller is determined by the type of cord. It should be set to its lowest position with tight cords and accordingly higher when working with elastic cords. Run tests to ascertain the correct height setting.

- Slacken off the screw (4.1) on the inside of the cord embroidery device side piece (4.2).
- Slide the front roller (4.3) up or down depending on the cord elasticity.
- Retighten the screw when the roller is at the desired height.



Tight or elastic cords

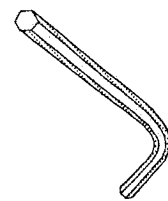
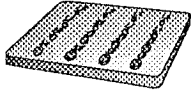


Fig. 4.0
Height adjustment of
front roller

Varying cord thicknesses



Height of cord embroidery foot

The height of the cord embroidery foot is determined by the cord thickness. The gap between the embroidery material and the bottom edge of the cord embroidery foot must be at least equivalent to the thickness of the cord.

- Determine the cord diameter with the template for cord thickness.

The height of the cord embroidery foot can be adjusted as required with the two nuts (5.1, 5.2).

- To raise the foot, first set the top nut to the desired height. Secure the foot again with the bottom nut.
- To lower the foot, first set the bottom nut to the desired height and secure the foot again with the top nut.

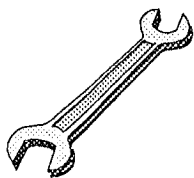
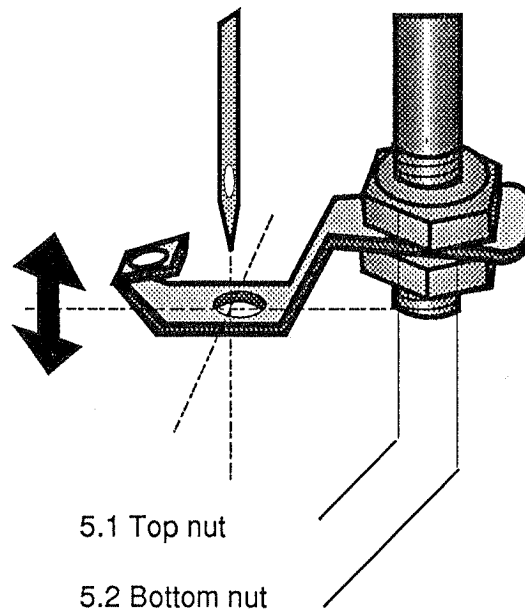


Fig. 5.0
Setting the height of
the cord embroidery
foot



CAUTION

Check the position of the cord embroidery foot relative to the needle each time the height is altered (see page 6).

Position of cord embroidery foot relative to needle

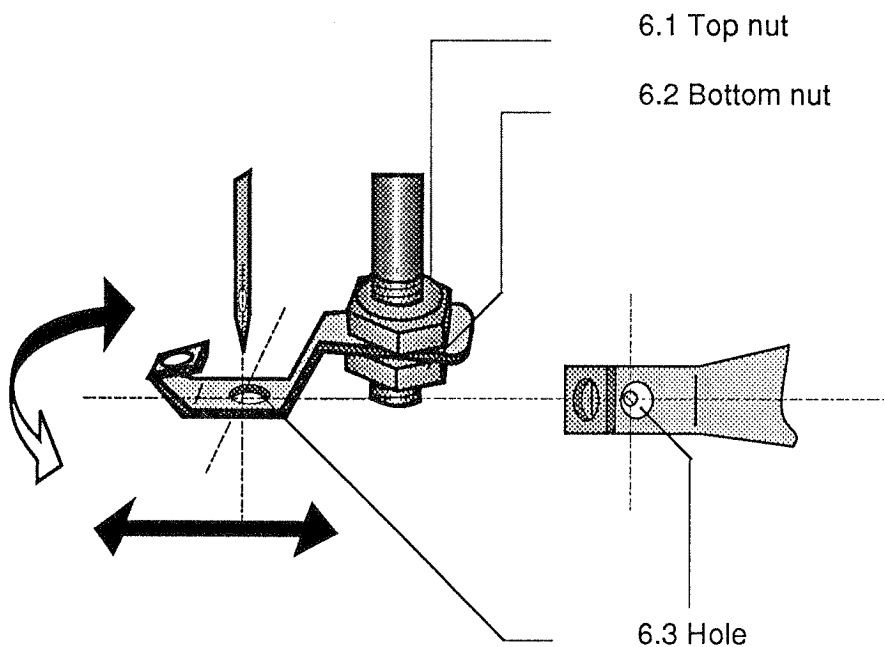
In order to embroider a cord securely, the needle must enter the hole (6.3) in the cord embroidery foot at a specific position.

With the cord embroidery device installed on the left, the needle must enter the hole slightly to the left. With a right-hand cord embroidery device, it must enter the hole slightly to the right.

- Slacken off the bottom nut (6.2), at the same time preventing the top nut (6.1) from turning with an open-ended spanner (also called open-ended wrench).

The cord embroidery foot will fall down if the bottom nut is removed.

- The cord embroidery foot can now be swivelled and moved so that the needle enters at the described position. In order to provide a clearer illustration, the figure below shows the position of the cord embroidery foot relative to the needle as seen from the front and from above.



- Finally retighten the bottom nut.

Make sure that the foot does not move from its set position when tightening the bottom nut.

NOTE

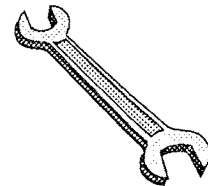
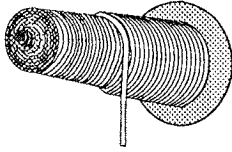


Fig. 6.0
Setting the cord embroidery foot relative to the needle. View from the front and from above (left-hand version)

CAUTION

Threading

Cones

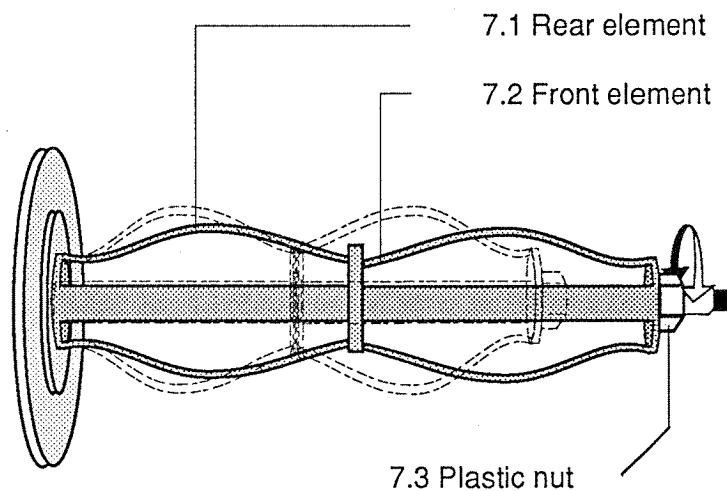


The clamping device is required for cones. It comprises two clamping elements (7.1, 7.2) which are stressed by means of a plastic nut (7.3). The use of two clamping elements permits installation of cones of varying shapes and sizes.

Large/long cones:

- Stress both elements by tightening the plastic nut.
- Slide the cone onto the clamping device. The tension must be set so that the tension device adjusts to the shape of the cone inner wall.

Fig. 7.0
Clamping device



Small/short cones:

- Unscrew and remove the plastic nut.
- Take the front element off the clamping device.
- Screw the plastic nut back on and tighten it as far as just in front of the rear element.
- Now the clamping device can be stressed as described above ready for use with small or short cones.

Cylinders

The clamping device is not required with cylinders. The cylinder can be placed directly on the bobbin holder shaft.

Cord threading

Thread the cord from top to bottom as follows:

- Place the cylinder or clamping device with cone on the bobbin holder shaft (8.1) (also see Fig. 1.0).
- Place the shaft on the bobbin holder in such a way that the end of the cord is fed off to the front.
- Feed the cord from top to bottom through the eyelet (8.3).

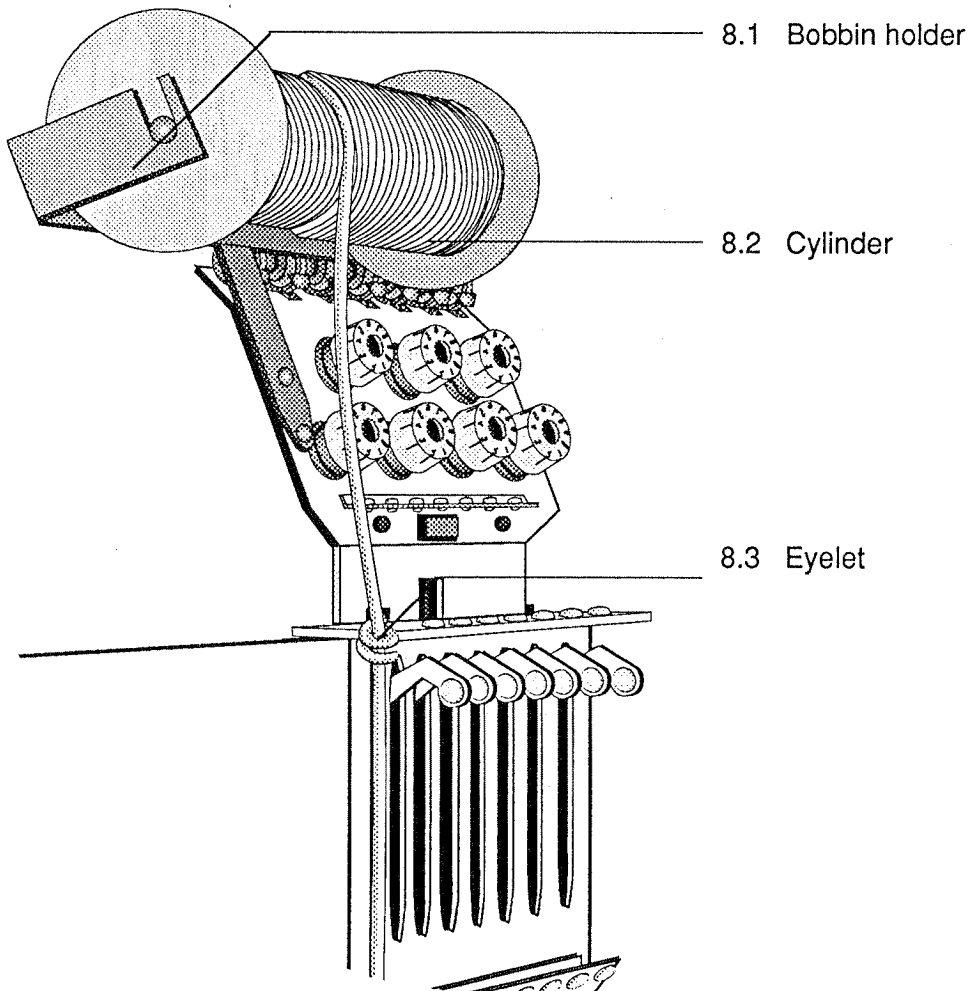
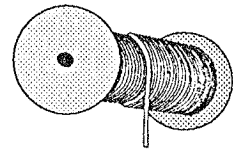


Fig. 8.0
Threading the cord at
the top

- Feed the cord through the two holes in the eyelet (9.1), from the rear to the front then from the front to the rear.
- Feed the cord to the front of the roller (9.5), wind it round one-and-a-half times and then lead it away to the rear.
- Thread it through the eyelet (9.3) on the take-up lever, from the front to the rear.
- Then lay it over the rear roller (9.2) and feed through the rear eyelet (9.4), from the top to the bottom.
- Thread the cord from left to right through the eyelet (9.6) in the cord embroidery foot, then from top to bottom through the hole (9.7) in the cord embroidery foot.
- Run the cord to the front ready for embroidery to start.

9.1 Eyelet

9.2 Rear roller

9.3 Eyelet on take-up lever

9.4 Eyelet

9.5 Front roller

9.6 Eyelet in cord embroidery foot

9.7 Hole in cord embroidery foot

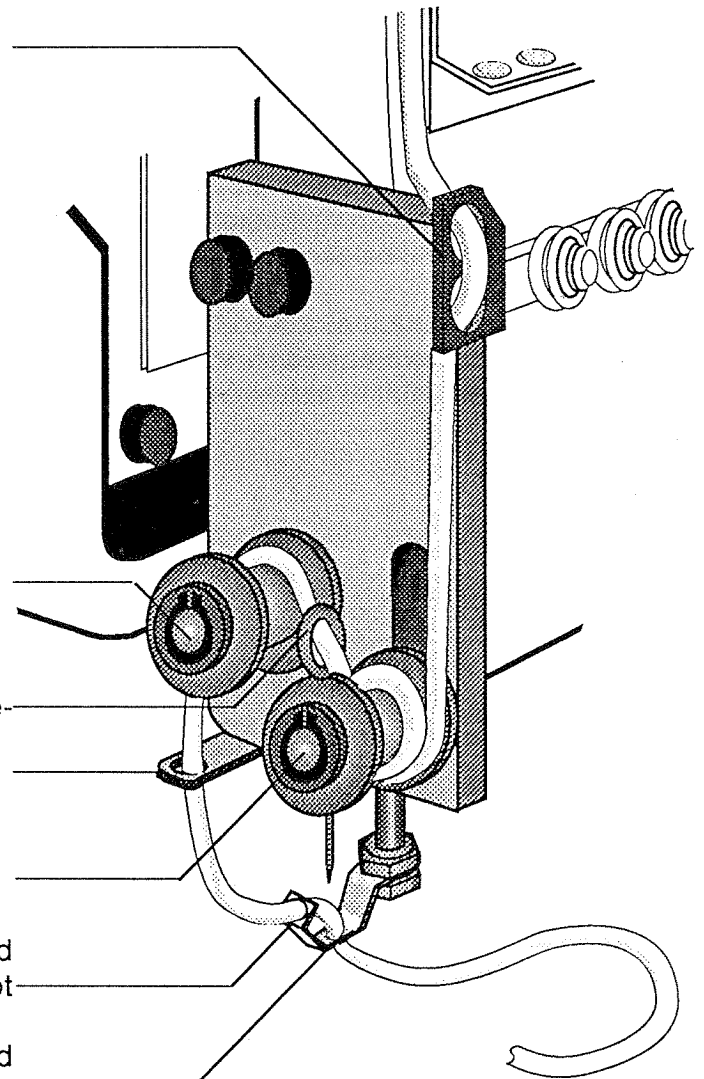


Fig. 9.0
Threading the cord at
the bottom

Transparent/decorative threads

Thread the needle to be used for embroidering the cord with the transparent or decorative thread.

Thread in the same way as when working with needle thread (see operating manual).

Notes on operation

The double-roller cord embroidery device described above feeds the cord to the material with very little tension.

The cord guides take the form of rollers, each of which can rotate in only one direction. The **front roller rotates only in a clockwise direction** and the **rear roller rotates only in a counter-clockwise direction**.

Each roller functions as an interlock in the opposite direction. This prevents the cord being fed back from the embroidery foot to the take-up lever and from the take-up lever to the bobbin.

The **direction of rotation of the rollers is thus fundamental to proper operation of the cord embroidery device**. When mounting the rollers, therefore, it is essential to observe the correct direction of rotation of the rollers.

NOTE

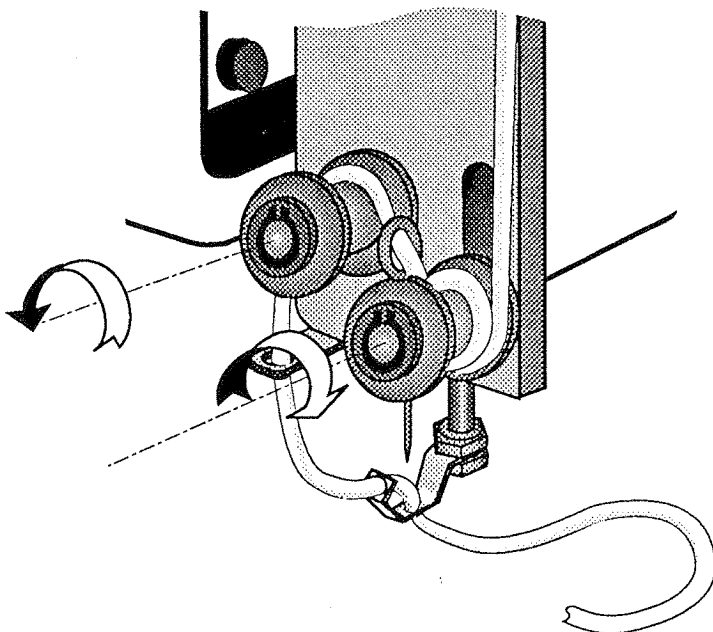


Fig. 10.0
Direction of rotation of
the rollers

