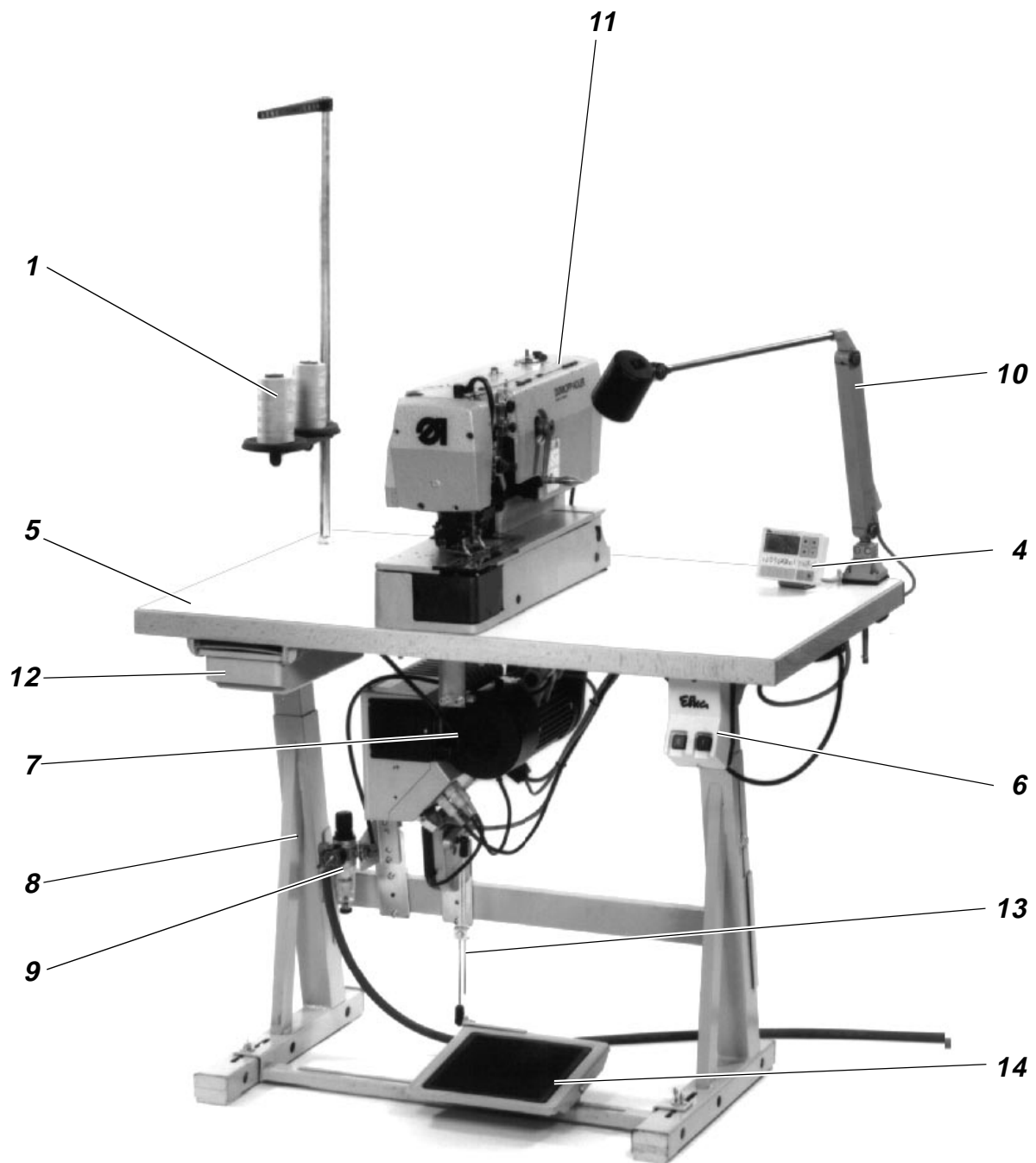


Part 2: Installation Instructions cl. 577-1111

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Fig. A





1. Scope of delivery

The scope of delivery depends on your order. Before proceeding to the installation, check whether all the necessary parts are available.

- Reel stand **1**
- Position transmitter **2**
- Belt guard **3**
- Control panel **4**
- Table top **5**
- Main switch **6**
- Sewing motor **7**
- Stand **8**
- Conditioning unit **9**
- Machine head **11**
- Drawer **12**
- Pedal rods **13**
- Pedal **14**
- Auxiliary equipment (depending on the order, e.g. sewing light **10**)
- Tools and small parts in the accessories

The automatic unit can be supplied with three different stand types:

- Stand set for transversal installation (Fig. A)
- Stand set for longitudinal installation (Fig. B)
- Stand set for transversal/longitudinal operation (Fig. C)

Fig. B

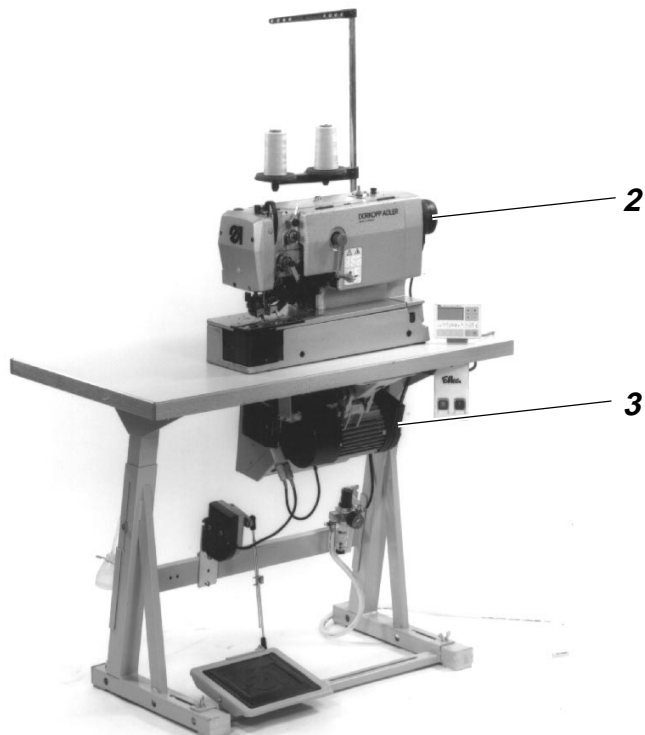
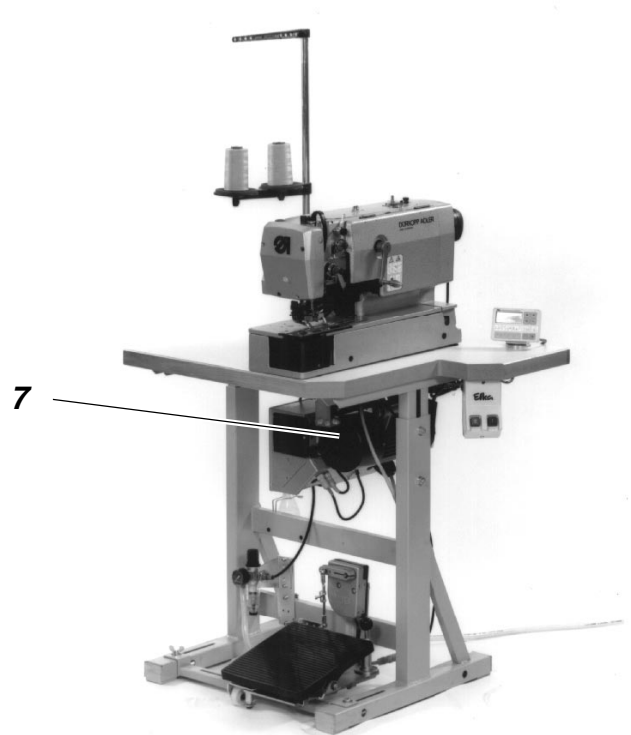


Fig. C





2. General and Transportation Safety



NOTE !

The automatic sewing unit should be installed exclusively by a properly qualified staff.

2.1 Transportation safety

Remove the safety bands and the wood borders from the machine head, from the machine table – and from the stand.

3. Completing the stand

3.1 Completing the table top

- Introduce the reel stand **1** into the borehole in the table top and fasten by the available nuts and washers.

In case of not fully-assembled automatic sewing units:

- Fasten the main switch **2** under the table top.
- Fasten the electrical connection cables under the table top.

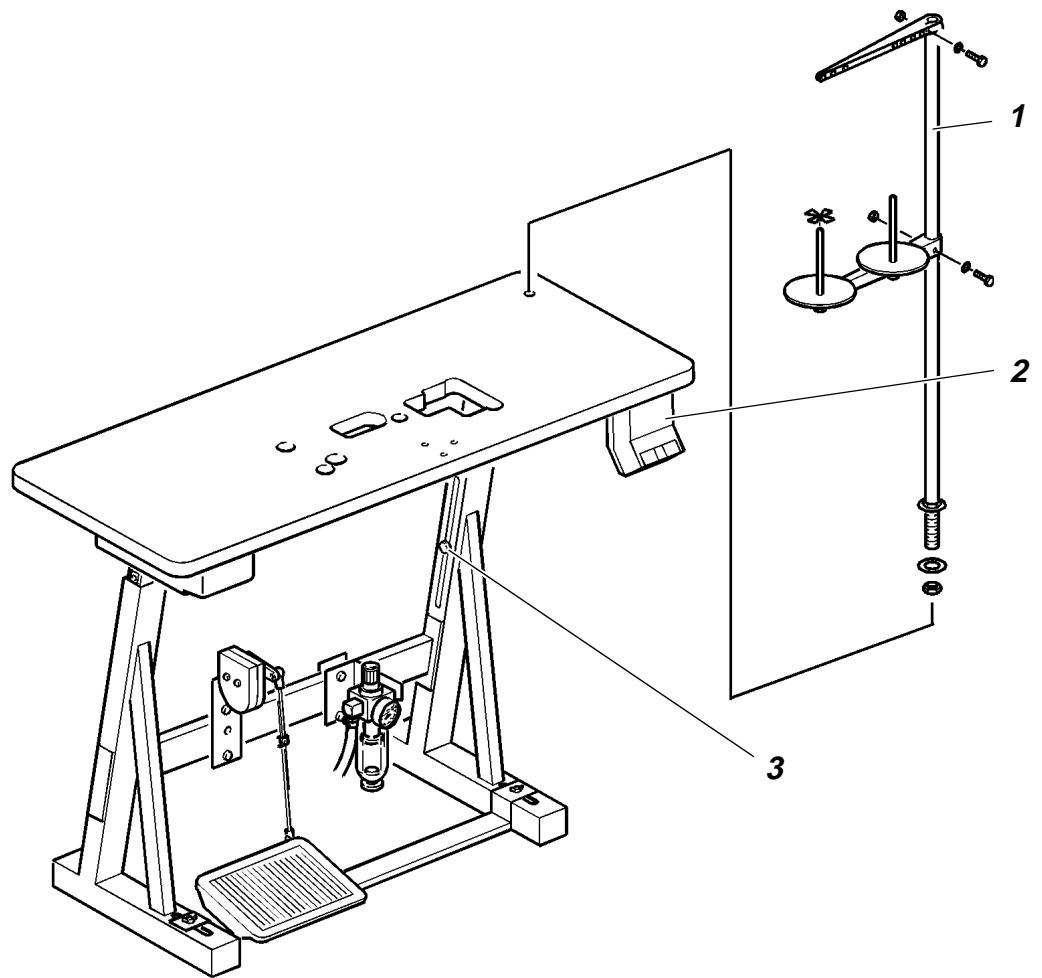
3.2 Setting the working level

The working level can be set between **750 and 895 mm** (Measured up to the table top).

In order to avoid a jamming of the stand, push the table top in and out equally on both sides.

The scales on the sleepers can be used as adjustment aids..

- Loosen the screws **3** on both sides of the stand.
- Set the tabletop so that it is at the desired level and in horizontal position.
- Tighten both screws **3**.





4. Installing and connecting the sewing motor

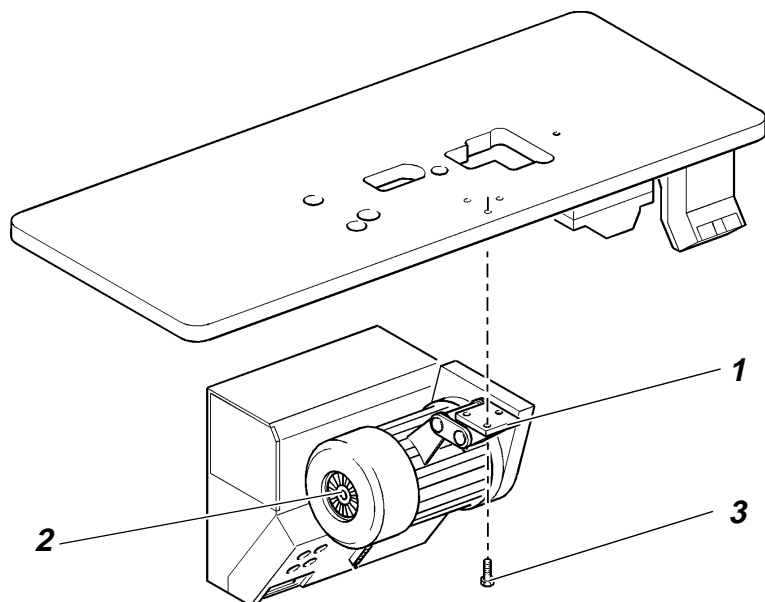
4.1 General

Driver package

A complete driver package, depending on the order, can be supplied for the automatic sewing unit cl. 577-1111:

- Sewing motor
- Control panel
- Set point generator
- Belt pulley
- V-belt
- Wiring diagram
- Fastening and connection material

4.2 Installing the sewing motor under the table top



- Fasten the base **1** of the sewing motor **2** by 3 screws **3** (M8 x 35) on the underside of the table top.



4.3 Connecting the sewing motor



NOTE !

Any work on the electrical equipment of the automatic sewing unit should be carried out exclusively by the properly qualified electricians or by the properly qualified staff!

The mains plug must be pulled out!

It is absolutely necessary to respect the manufacturer's instructions, supplied together with the sewing motor!

- Pass the cable 4 from the control box 5 to the main switch 6.
- Introduce the plug 7 of the motor cable into the bush 8 on the control box.

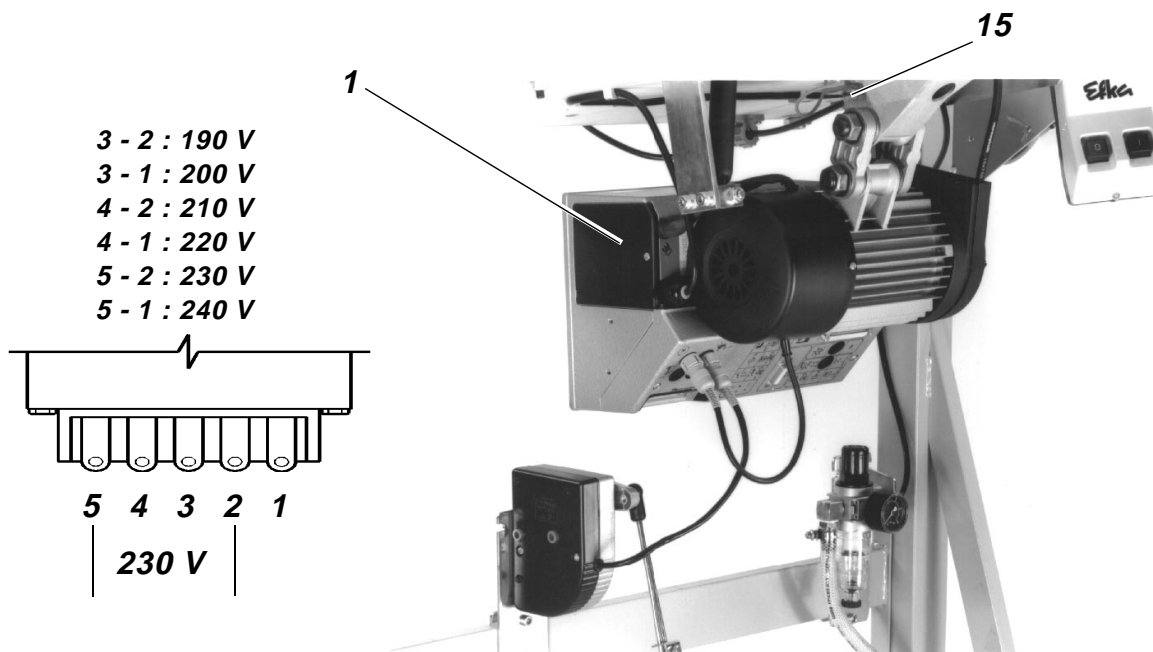


4.4 Checking the nominal voltage



NOTE !

The nominal voltage, stated on the type plate. Should agree with the local voltage!



Use the terminals 1 to 5 on the transformer **1** of the sewing unit- for adapting to the local voltage.

At the moment of delivery, the sewing motor is set to a mains voltage of 230 V (terminals 5 and 2).

- Check the arrangement of connections on the transformer of the sewing motor.
- If necessary, change the connections according to the local voltage.

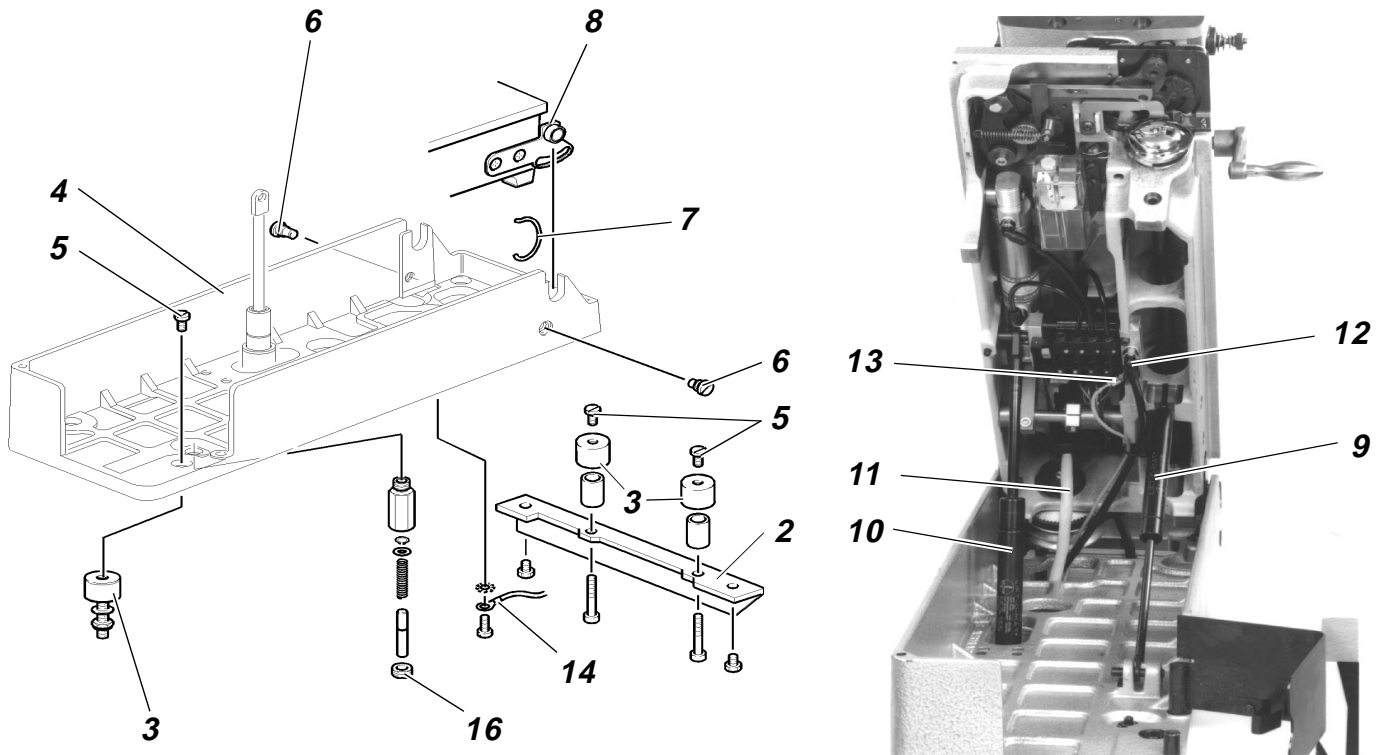
The direct current sewing drives are operated by a single-phase a.c. current.

In order to avoid an overload of a single phase when connecting several machines to a threephase current, - please note the following:

- The connections of the single machines must be evenly distributed onto the phases of the threephase line.
- The wiring of the connection to the threephase line is shown in the wiring diagram.



5. Placing the automatic sewing unit



5.1 Placing the base on the table top in position

- Fasten the square **2** to the threaded bushes of the table top.
- Screw slightly the rubber-metal connection **3** from below.
- Place the base **4** in position and fasten by screws **5**.
- Tighten the rubber-metal connection from below.
- Screw the earthing cable **14** to the base **4** and to the motor **15**.

5.2 Place machine head in position and connect

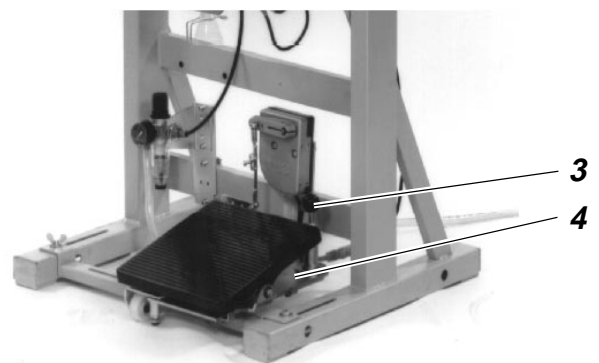
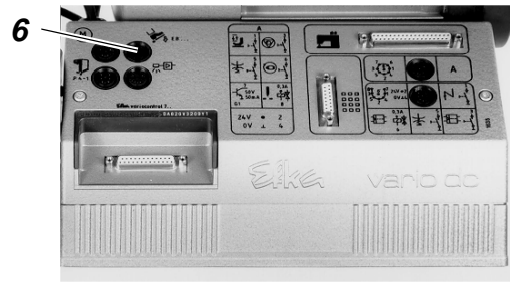
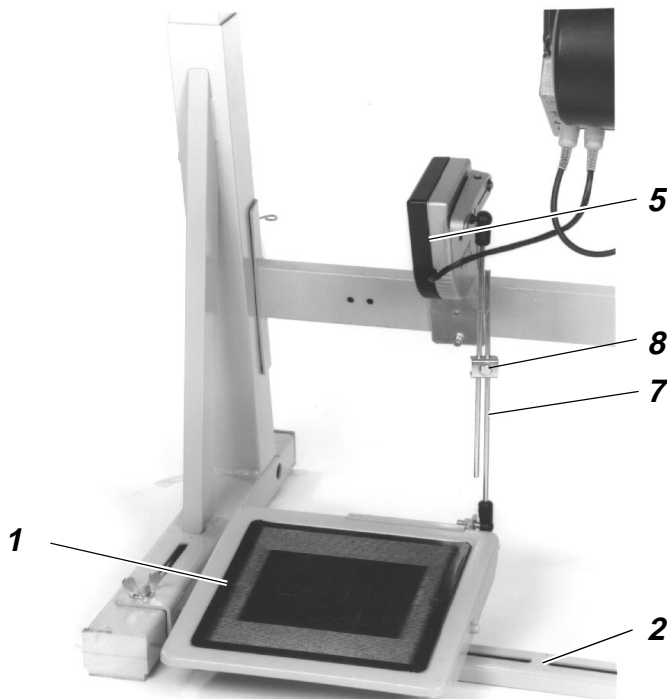
- The machine head should be removed from the shipping box by two persons, who should seize it at the shaft end and under the base plate, but not in the area of the needle thread cutter.
- Hang the machine head into the base **4** and turn-in the screws **6**.
- Clamp the link **7** under the screw **6** and under the pin **8**.
- Hang-in first the spring **9** and then the spring **10**.
- Introduce the supply cable **11** of the control and fasten by a screw.
- Connect the pneumatic hose **12**.
- Screw the earthing cable **13** to the head and then to the motor foot **15**.

5.3 Adjusting the damping

- Turn the screw **16** so that the bottom of the base plate is parallel to the top of the base when the machine is in its lowered position.



5.4 Adjusting and connecting the pedal



Stand set for longitudinal installation and stand set for transversal installation

- Adjust the pedal 1 on the stand strut 2 sideways so that the middle of the pedal stands more or less under the middle of the needle.
- Screw the pedal 1 to the stand strut.

Stand set for transversal/longitudinal operation

When using this stand set, the pedal can be adapted to the different working positions as follows:

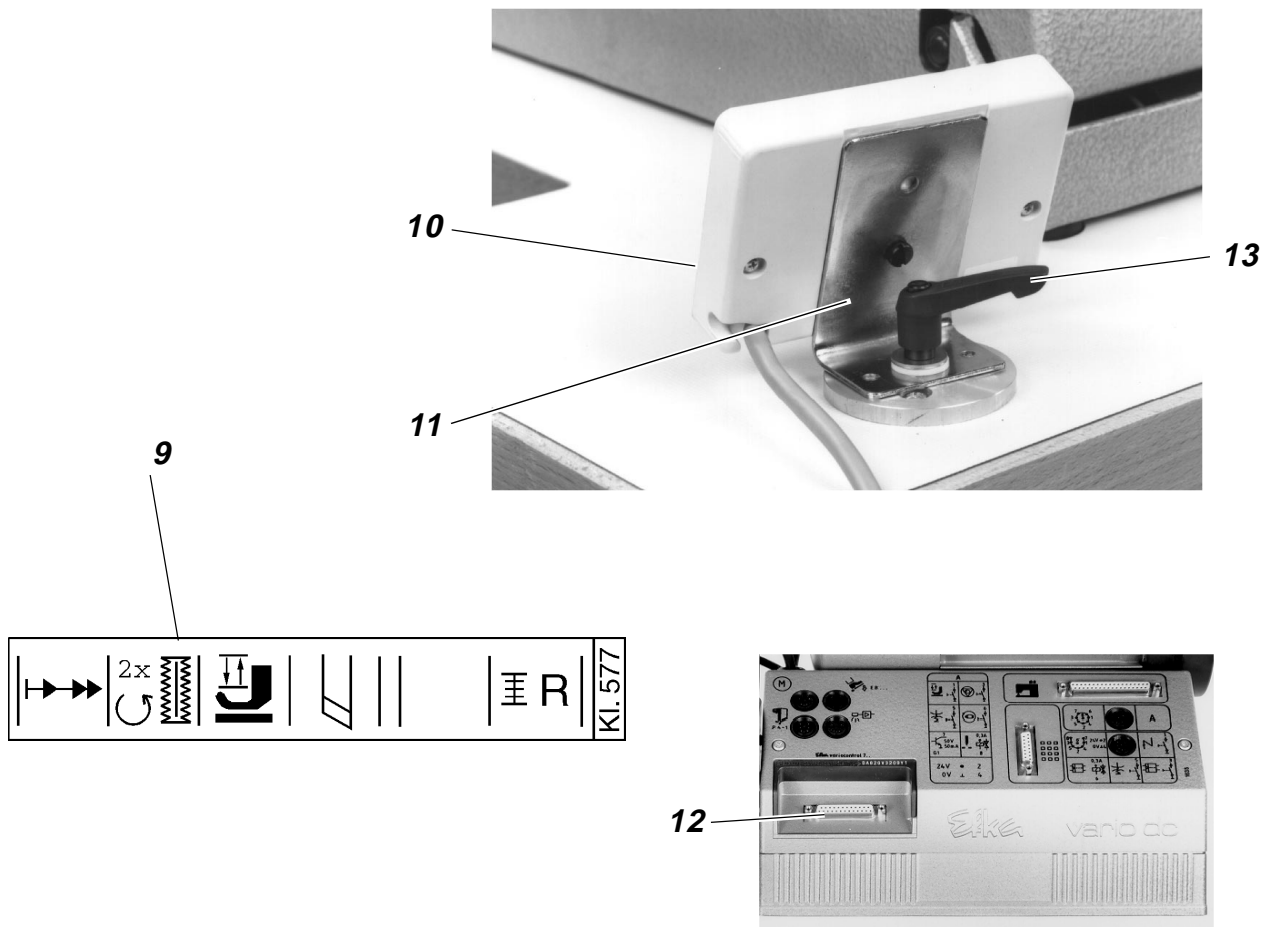
- Lift the ball handle 3.
- Turn the pedal platform 4 according to the working position and let the ball handle 3 engage in the end position.

For all stand sets

- Screw set point generator 5 to the stand.
- Introduce the plug of the set point generator 5 into the bush 6 of the control box.
- Suspend the pedal rods 7 in the set point generator 5.
- Loosen slightly the clamping screw 8.
- Adjust the pedal rods so that the released pedal 1 has an inclination of **about. 10°**.
- Tighten the clamping screw.



5.5 Installing and connecting the control panel



- Remove the designation strip **9** of the cl. 577 from the driver package and introduce it into the control panel.
- By using the available fastening material, fasten first the control panel **10** to the square **11**.
- Then install the square **11**, together with the control panel **10**, on the table top.
- Lead the connecting cable of the control panel to the control box, by passing it through the hole in the table top.
- Introduce the plug of the control panel into the bush **12** and fasten by a screw.

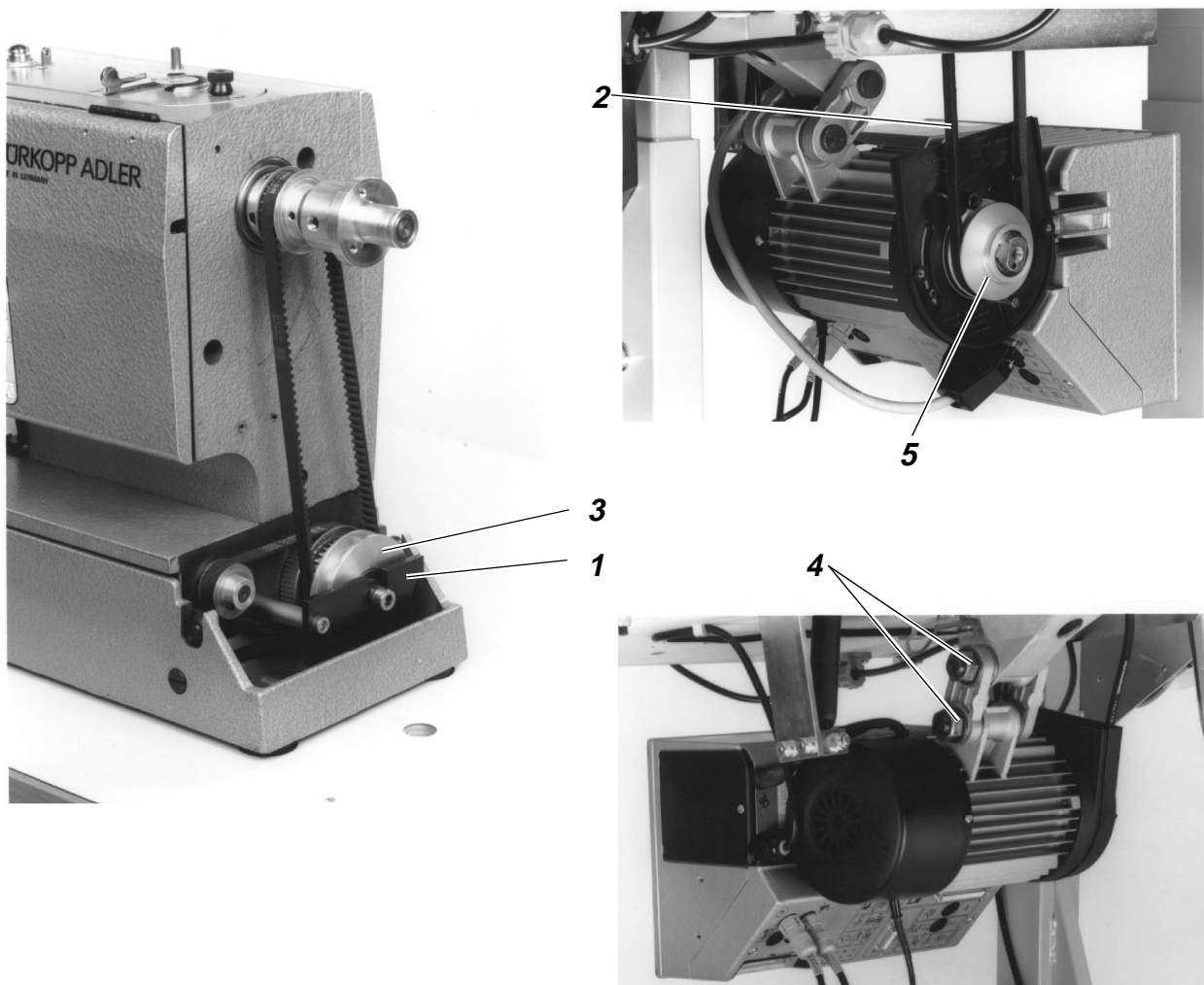
The illustration shows the rotary connection of the control panel when using a stand for transversal/longitudinal operation.

Turning the control panel

- Loosen the clamping lever **13**.
- Turn the control panel in the desired position.
- Tighten clamping lever **13**.



5.6 Placing and tensioning the V-belt

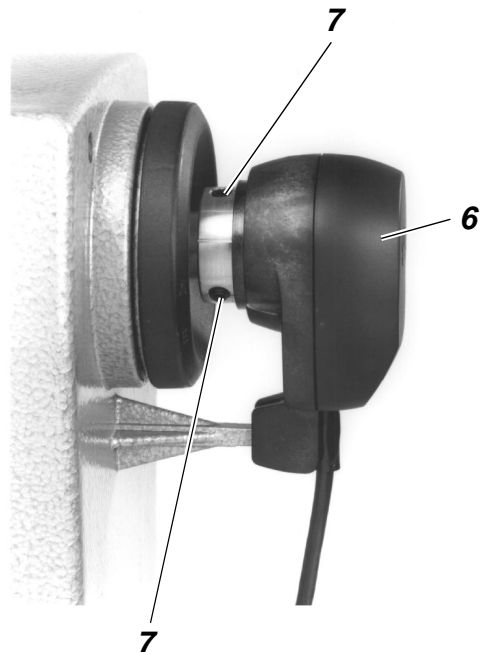


- Remove the handwheel and the housing cover from the machine head.
- Remove the skip guard **1**.
- Place the V-belt **2** onto its pulley **3** and pass it down through the cutout in the table top.
- Install again the skip guard **1**.
- Remove the V-belt covering from the sewing drive.
- Loosen the motor fastening nuts **4** and place the V-belt **2** onto its pulley **5** on the sewing drive.
- By swinging the entire sewing motor, adjust the tension of the V-belt so that it can be lowered in its middle **about 10 mm** when exerting a slight pressure.
- Tighten the nuts **4**.
- Fit the V-belt covering on the sewing motor as well as the housing cover and the handwheel on the machine head.



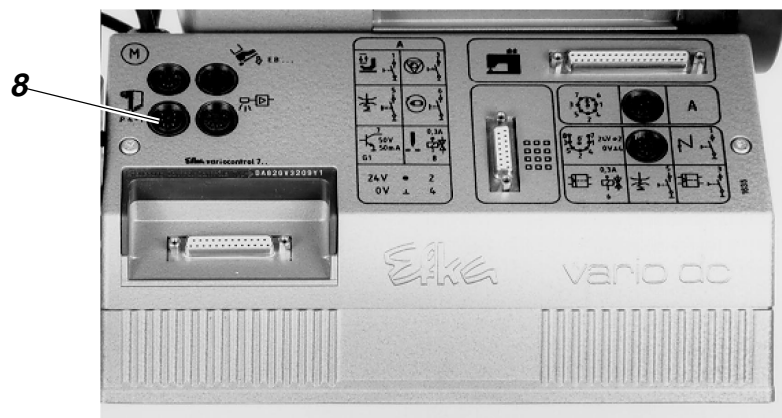
6. Fitting, connecting and adjusting the position transmitter

6.1 Fitting the position transmitter



- Slip the position transmitter **6** onto the shaft.
- Tighten the screws **7**.
- Set the positions (see chapter 6.3).

6.2 Connecting the position transmitter



- Pass the connecting cable of the position transmitter through the hole in the table top and introduce the plug into the bush **8** in the control box.



6.3 Checking ands adjusting the positions

There is no need to make any mechanical adjustments on the position transmitter. It is only necessary to check the stop position and, if required, to set the reference position before the first use of the machine..

| Position | Position of the automatic sewing unit |
|---------------|---------------------------------------------------------------------------------------------------------------------------------|
| 0 | Reference position Thread take-up lever short before its top dead centre, Rig pin 1 in the groove of the arm shaft |
| 1 | Needle bottom position (bottom dead centre) |
| 2 | Thread take-up lever short before the top dead centre, Rig pin 1 in the groove of the arm shaft (= Position 0) |
| Stop position | Thread take-up lever in its top dead centre, The needle does not project under the sewing basket. (short after Position 2) |

Check stop position

- Connect main switch.
The machine runs into stop position or it is already in the stop position, i.e.:
 - The thread take-up lever stands in the top dead centre.
 - The needle does not project under the sewing basket.
 - **0 position** can be reached by a slight rotation of the handwheel against the arrow direction. The rig pin 1 will then snap into the groove of the arm shaft..
- Complete a full sewing sequence.
If the stop position is not reached, the display of the control panel will present the error message "**_0 0 1 0**".
Then it will be necessary to set the reference position as follows:

Setting the reference position

Call up correction mode

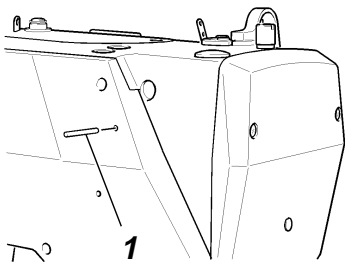
- Disconnect main switch.
- Hold the key "**P**" on the control panel pressed down and connect main switch.
- Release the key "**P**".

Change over to the technician level

- Enter Code-Number "**1907**".
(See Operating Instructions of the manufacturer.)
- Press the key "**E**".
The control will change over to the technician,
the parameter "**F - 100**" will be displayed.

Enter reference position

- Select parameter number "**F - 170**".
- Press the key "**E**".
The display will show "**Sr 1**".





>>

- Press the key **Taste B**.
The display will show "**Pos 0** together with a circular symbol.
- Turn the handwheel in the direction of rotation (see the arrow on the belt quad) until the displayed symbol disappears and the position **Position 0** (reference position) is reached.

E

- Press the key "**E**".
The reference position will be accepted and the display will show the parameter - **171**".
- Repeat the setting process (Parameter "**F - 170**"), if the reference position has not been memorised and the display shows the error message "**in A3**".

Quit the correction mode

E

- Press the key "**P**" **two times**.
The sewing basket will be lifted.

Memorise the setting

- Lower the pedal forwards and release a complete sewing cycle.
The control will memorise the new setting.

Control the setting

- When turning back via the **Position 0** (reference position), it is necessary to lower the sewing basket (see the Service Instructions).



NOTE !

The setting will be lost if no complete sewing cycle has been performed before switching off the main switch!



7. Pneumatic connections

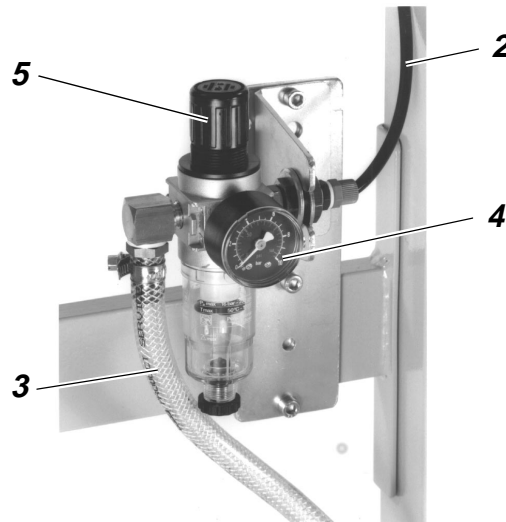


NOTE !

A perfect function of the pneumatic elements will only be ensured if the line pressure ranges between **8 and 10 bar**.

The service pressure of the automatic sewing unit amounts to **6 bar**.

The pneumatic system of the automatic sewing unit and the auxiliary equipment must be supplied with water-free and oil-free compressed air.



7.1 Connecting the conditioning unit

- Install the conditioning unit possibly on the stand.
- Connect the hose **2** of the machine head.
- Connect the conditioning unit by a connection hose ($\varnothing = 9 \text{ mm}$) **3** to the compressed air line.

Pneumatic connection package

Under the **reference number. 0797 003031** it is possible to obtain a pneumatic connection package for the stand with conditioning unit and for the auxiliary equipment:

- Connection hose, 5 m long, $\varnothing = 9 \text{ mm}$
- Hose nozzles and hose binders
- Coupling socket and coupling cover R 1/4"

7.2 Adjusting the service pressure

- The service pressure is shown by the manometer **4**. It must amount to **6 bar**.
- For adjusting the service pressure, lift and rotary handle **5** and turn it accordingly.
 - Turn clockwise = for increasing the air pressure.
 - Turn counter clockwise = for reducing the air pressure



8. Lubrication



CAUTION: DANGER OF ACCIDENTS !

Oil can irritate the skin.

Avoid long contacts with the skin!

Following a contact, wash the skin thoroughly!



NOTE !

The handling and the disposal of mineral oils is subject to legal regulations.

Deliver waste oil exclusively to an authorized reception center!
Protect your environment, do not spill any oil!

For filling the oil supply containers, used exclusively the lubrication oil **ESSO SP-NK 10** or an equivalent oil with the following specification:

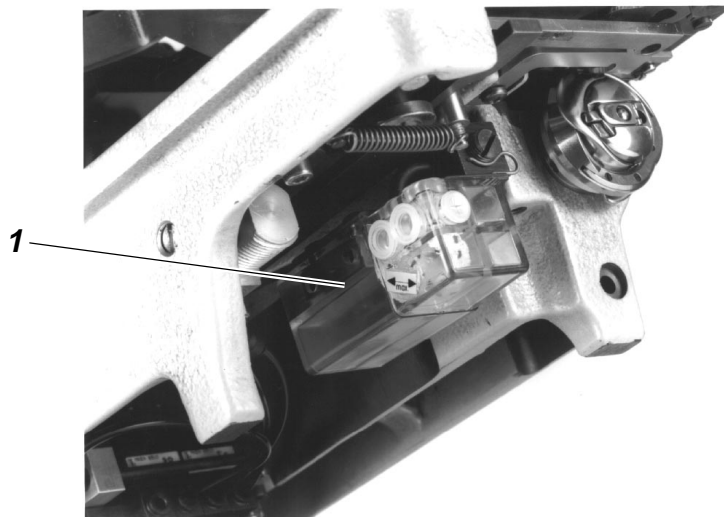
- Viscosity at 40°C: 10 mm²/s
- Point of inflammation: 150°C

The oil can be obtained from the sales centres of DÜRKOPP ADLER AG under the following reference numbers:

- 2-Litre container: 9047 000013
- 5-Litre container: 9047 000014

8.1 Filling the oil supply container

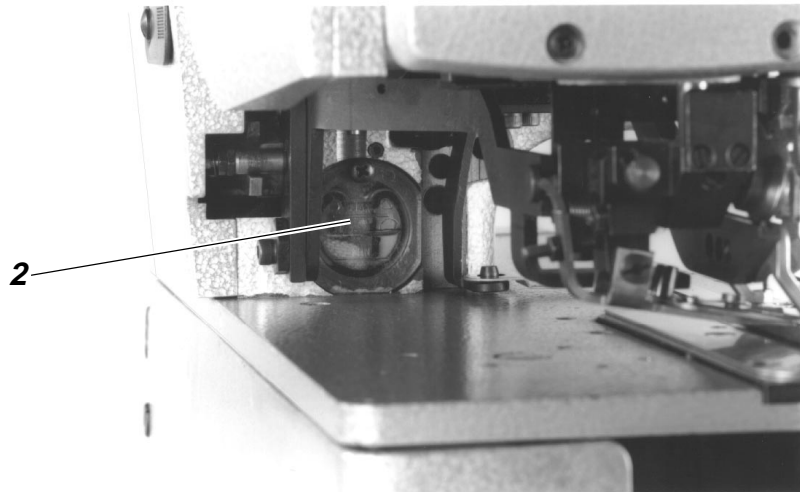
Lubricate the hook



- Lift the machine head.
- Fill the supply container **1** through the filling hole up to the mark "**max**".
- Lower the machine head.



Lubricate the machine head



- Fill the supply container **2** through the filling hole up to the mark "max".

8.2 Lubricate the wicks and the felt parts

Before the first use of the machine and after its long stops it is advisable to slightly lubricate the wicks and the felt parts.

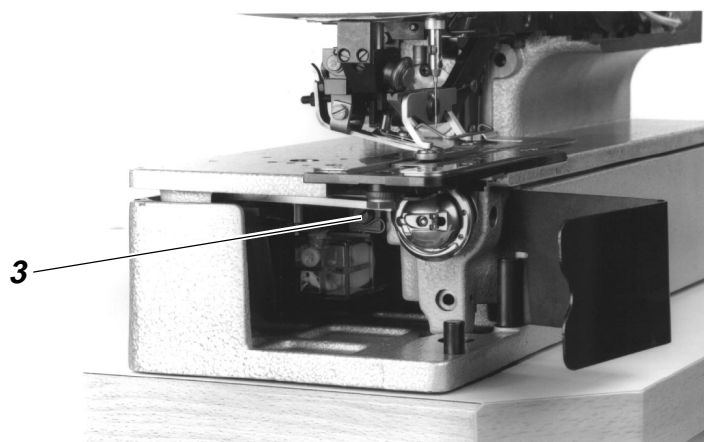
8.3 Regulating the hook lubrication



NOTE !

For ensuring a sufficient lubrication during the run-in period, a rather high oil supply quantity has been set by the factory.

Check the setting and correct it after the run-in period, if necessary (see the Service Instructions).



- The oil supply quantity can be regulated by the screw **3** (see the Service Instructions).



9. Sewing test

Following the installation work, carry out a sewing test as follows:

- Insert the mains plug.



CAUTION: DANGER OF ACCIDENTS !

Switch off the main switch!

Switch off the machine before threading the hook!

- Thread the hook for winding (see the Service Instructions).
- Switch on the main switch.
- Wind the bobbin at low speed.



CAUTION: DANGER OF ACCIDENTS !

Switch off the main switch!

Switch off the machine before threading the needle and the hook!

- Threading the needle and the hook (see the Service Instructions).
- Insert the material to be sewn.
- Start the sewing test at low speed and increase the speed continuously.
(keys "+" / "-" on the control panel of the machine)
- Check whether the buttonhole meets the expectations.



If the expected results are not met:

- Alter the thread tension (see the Service Instructions).
- If required, check and correct the settings specified in the Service Instructions.