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Part 2: Installation Instructions

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1. Delivery

The scope of delivery depends on your order.

Prior to installation, please check whether all required parts have been supplied.

Equipment:

- 1 yarn stand
- 2 sewing machine head
- 3 operating panel
- 4 sewing lamp (optional)
- 5 material clamp support
- 6 material clamp (optional)
- 7 waste bin with suction control
- 8 drawer
- Separately packed small components

2. Introduction



CAUTION!

The sewing machine must be installed by suitably trained specialised personnel.

Work at electrical components must be carried out by electricians or other suitably trained staff.

Prior to such work, always disconnect unit from the power supply.

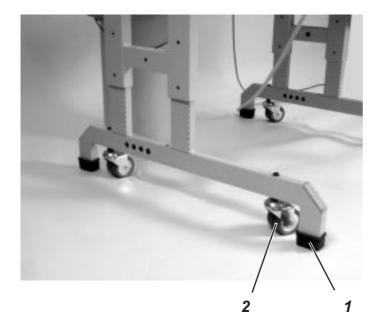
Always comply with the instructions given by the manufacturer of the step motors in the enclosed operating manual.

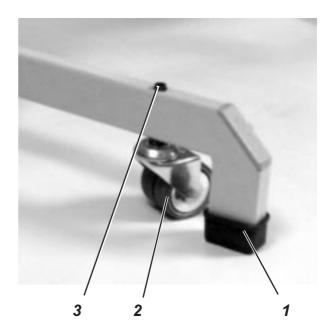
3. Installation of sewing machine

3.1 Removing of transport packaging

 Remove transport packaging and securing devices at the sewing machine head.

3.2 Transport





The unit is equipped with four castors for easy mobility within your premises.



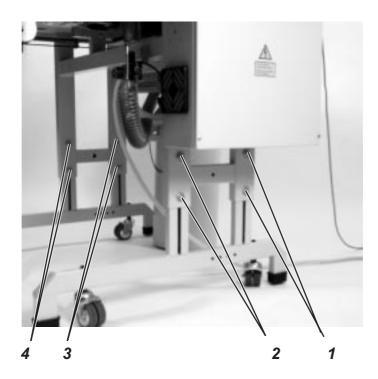
Caution!

Prior to the commissioning of the sewing unit, slide the rubber caps 1 over the feet of the frame.

For the operation of the sewing machine, the castors 2 must be lifted so that the unit is standing on its feet.

- Lower the castors to transport the unit within your premises by turing the set screws 3 anticlockwise.
 For transport, ensure that the frame feet 1 are sufficiently lifted from the ground.
- After transport, lower the sewing machine until it stands firmly on its feet
 - by turning the set screws 3 in clockwise direction.

3.3 Adjustment of working height

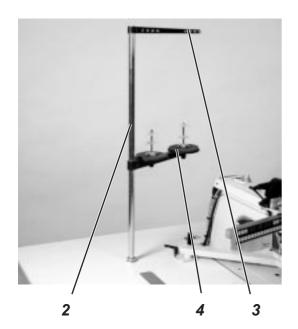


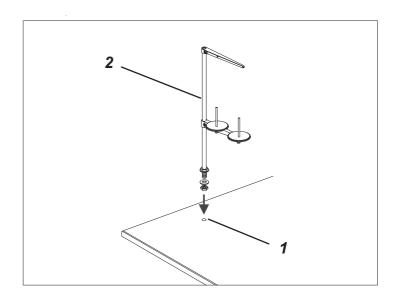
The working table can be adjusted continuously to a height between 820 mm and 1080 mm. Upon delivery, the sewing unit is set to the lowest working height.

To adjust the working height, proceed as follows:

- Loosen locking screws 1, 2, 3 and 4 at the struts of the frame.
- Adjust working height to desired level by using suitable tools.
 To prevent jamming, simultaneously lift table at both sides.
- Tighten locking screws 1, 2, 3 and 4 at the struts

3.4 Installation of yarn stand

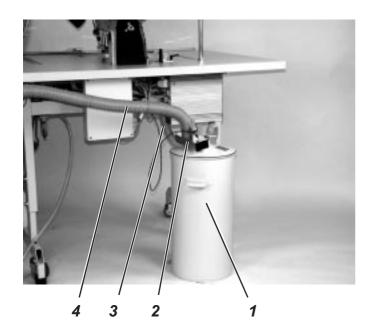


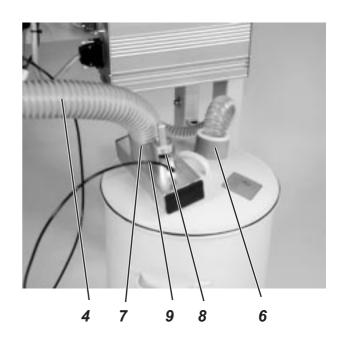


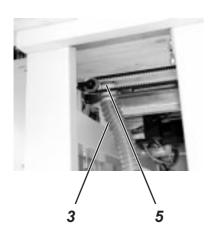
Ensure that the yarn stand 4 and the unwinding bracket 3 are positioned at the maximum possible distance from each other and vertically aligned.

- Insert yarn stand 2 in hole 1 and secure with nuts and washers.
- Mount and align yarn stand 3 and unwinding bracket 4 as shown in the above figure.

3.5 Installation of suction unit







The suction unit consists of a waste bin 1, the vacuum valve 2, the suction hose 3 and the vacuum hose 4. The device ensures that cut-offs are constantly removed from the edge cutter.

The suction unit is equipped with adapters for connection to the vacuum unit in the premises. If there is no such unit, install the centrifugal blower 10, which is available as an optional device.

- Place waste bin 1 behind the sewing unit.
- Push suction hose 3 onto the suction connectors below the table top.
- Connect the other end of the suction hose 5 to the socket 6 of the waste bin.
- Insert vacuum hose 4 into the socket 7 and connect the other end of the hose to the internal vacuum unit or a centrifugal blower.
- Connect control hose 9 to pneumatic cylinder 8.



3.6 Power connection



CAUTION!

Work at electrical components must be carried out by electricians or other suitably trained staff.

Prior to such work, always disconnect unit from the power supply.

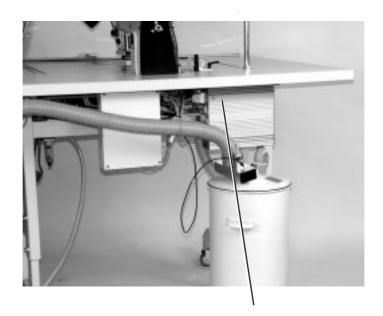
Always comply with the instructions given by the manufacturer of the step motors in the enclosed operating manual.

3.6.1 Checking of power supply voltage



CAUTION!

The nominal voltage indicated at the type plate and the power supply voltage must correspond!



Type plate at Efka control unit.

3.6.2 Connection to power supply

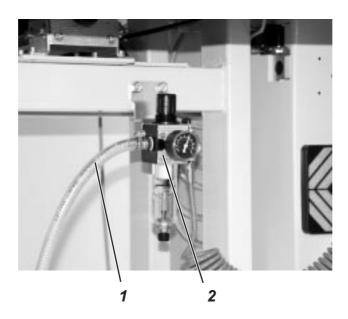
Plug in power plug.

3.6.3 Direction of motor rotation

The sewing machine is equipped with state-of-the art step motors.
 It is therefore *not* necessary to test the motors as regards their direction of rotation, as it is automatically set by the control system.

3.7 Pneumatic connection

3.7.1 Connection to compressed air maintenance unit



For the operation of the pneumatic devices, the sewing machine must be supplied with dry compressed air.

CAUTION!



To cater for correct pneumatic control processes, the compressed air supply must be set up as follows:

"At the moment of max. air consumption, the minimum operating pressure may not be below 5 bar."

The supplied compressed air may not contain any lubricants. After the air has passed the filters, cleaned compressed air is brought to the machine for the blowing out of sewing pieces.

If the air were to contain lubricants, they would contaminate the sewing part and result in disruptions.

 Connect compressed air maintenance unit 2 to the maintenance unit by means of the connecting hose (Ø = 9 mm) and the G1/4" hose coupling.

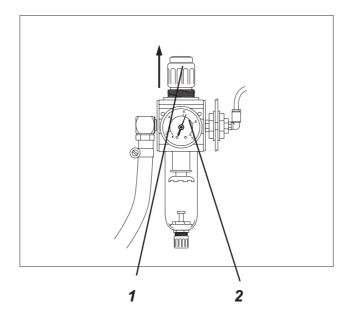
Pneumatic connection set

The pneumatic connection set is available as item no. 0797 003031 and is a pneumatic adapter set for frames with compressed air maintenance units.

It contains the following components:

- connecting hose, 5 m long, $(\emptyset = 9 \text{ mm})$
- hose socket and connectors
- coupling socket and plug

3.7.2 Adjustment of operating pressure

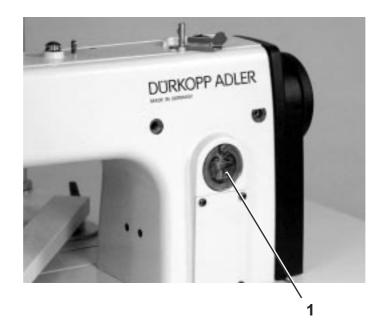


The operating pressure of the sewing machine is 6 bar.

This pressure is displayed on manometer 2.

To adjust the operating pressure, pull handle 1 up and turn.
 Increase pressure = turn handle 1 clockwise
 Reduce pressure = turn handle 1 anticlockwise

3.8 Lubrication





Caution risk of injury!

Oil might cause allergic reactions on skin. Avoid any contact with skin. If skin has been in contact with oil, wash thoroughly.





The handling and disposal of mineral oils are governed by statutory regulations.

Dispose of the oil through the proper channels. Protect the environment and ensure

that no oil is spilt.

To refill the oil tank, use only **ESSO-SP-NK 1**0 lubricant or a similar product of the following specification:

Viscosity at 40° C: 10 mm²/sIgnition point: 150° C

ESSO SP-NK 10 is available from all **DÜRKOPP ADLER AG** agencies with the following part number:

2 litre container: 9047 000013 5 litre container: 9047 000014

Oil tank for lubrication of the sewing machine head

The sewing machine head is equipped with a central oil wick. All bearings are lubricated from oil tank 1.

 Fill oil tank 1 through the opening in the glass panel to the "MAX" level mark.

3.9 Commissioning

After the installation is completed, configure the control system of the sewing machine and carry out a sewing text at a low rotating speed.

Plug in power supply.



Caution risk of injury!

Switch off main switch.

Never insert the needle thread or bobbin thread while the main switch is on.

- Insert needle thread (see operating instructions).
- Insert bobbin thread (see operating instructions).
- Switch on main switch.

The control system is initialised.

The sewing unit must now be adjusted to a reference point.

The following display indicates that a reference run must be carried out.



Press the "OK" key.

The reference run is carried out.

After successful referencing the display changes to:



- After 0.5 seconds, the machine programme changes to operating mode.
- Insert material in material clamp.
- Position material clamp onto the guide.
- Press "S".

The sewing operation is started.

- Check whether the seams conform to the set requirements.