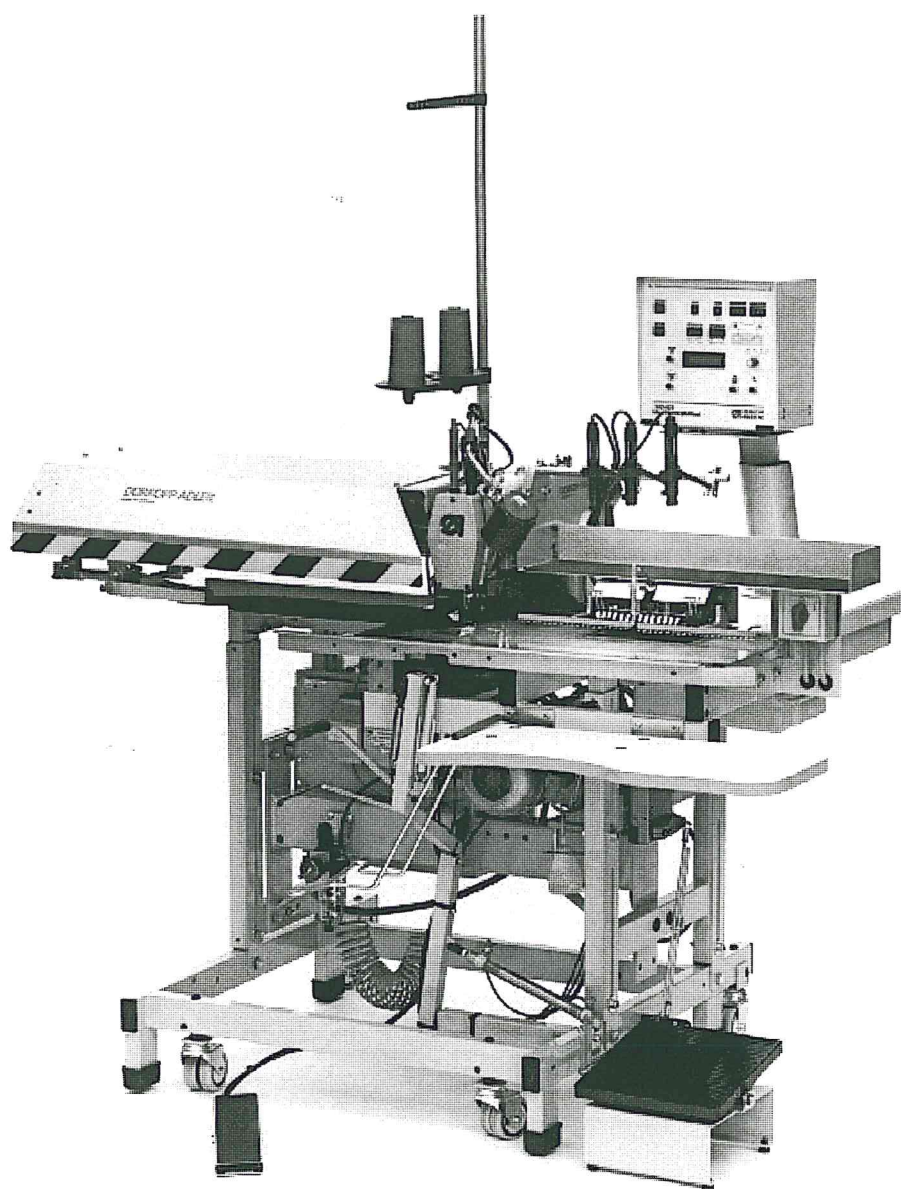


**Part 2: Installation Instructions cl. 743-422**

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## 1. Scope of Delivery

- Frame with sewing drive and collar storage table
- Placing table with bundle clamp for the trimming
- Sewing machine with integrated spooler
- Remover for Gorge seams
- Stacker for collar stay seams
- Microcontrol unit
- Compressed air maintenance unit with compressed air gun
- Thread stand
- Pedal
- Sewing light
- Tools and small parts in the accessories package

## 2. Installing the Sewing Unit



### ATTENTION !

The unit may only be installed by trained personnel.

### 2.1 Removing the Transport Fastenings

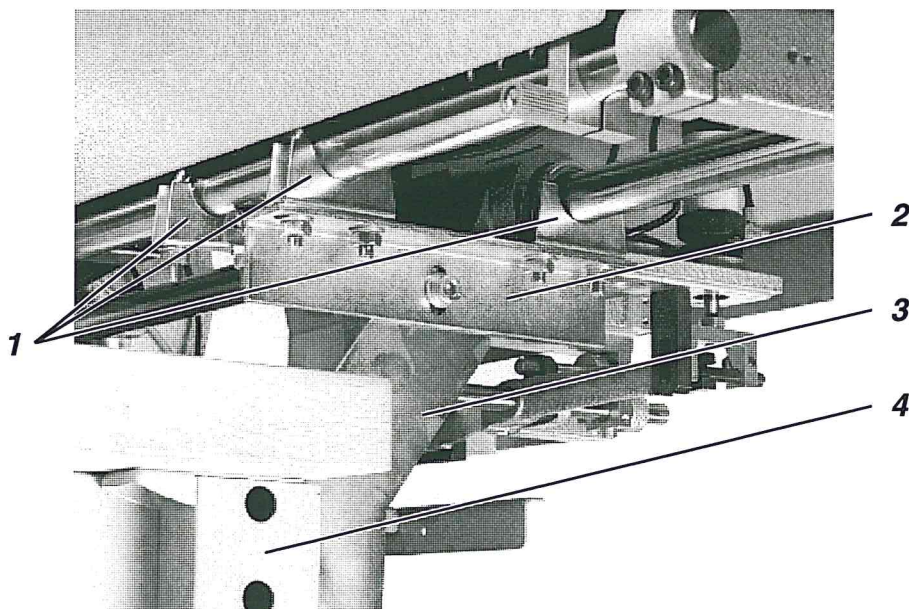
Machine head, machine plate and transport carriage are mounted together as one unit for shipping.

The transport fastenings 2 hinder

- the machine head swinging up
- the transport carriage running back through centrifugal force.

Before installing the sewing unit remove the transport fastenings 2:

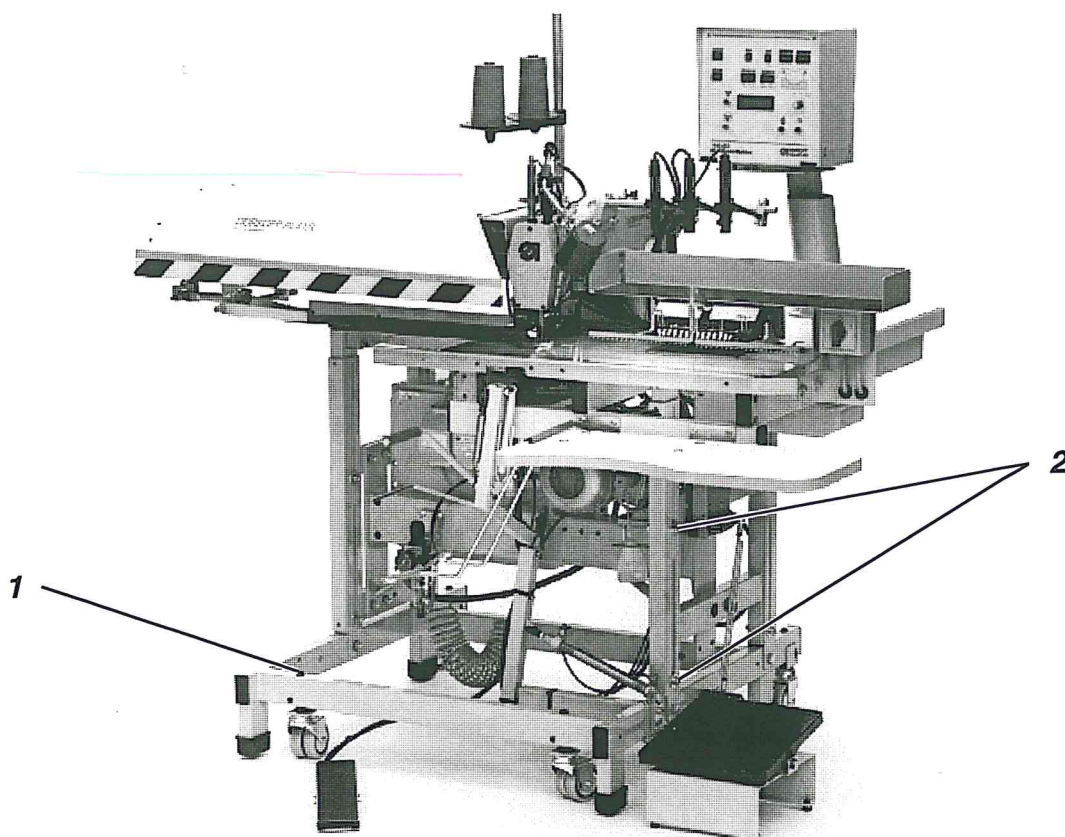
- Loosen brace 3 on spar 4.
- Loosen brackets 1.
- Remove transport fastenings 2.





## 2.2 Transport

The frame of the sewing unit is equipped with four rollers for in-house movement.



### ATTENTION !

Before commissioning the sewing unit screw in the rollers far enough so that it stands securely.

- For moving run the rollers out by turning the set screws 1 to the left.  
The frame feet must have enough floor clearance for movement.
- After movement lower the sewing unit by turning the set screws 1 to the right.  
The feet must rest firmly on the floor.

## 2.3 Setting the Work Height

The work height can be set between 87 cm and 110 cm (measured to the table top).

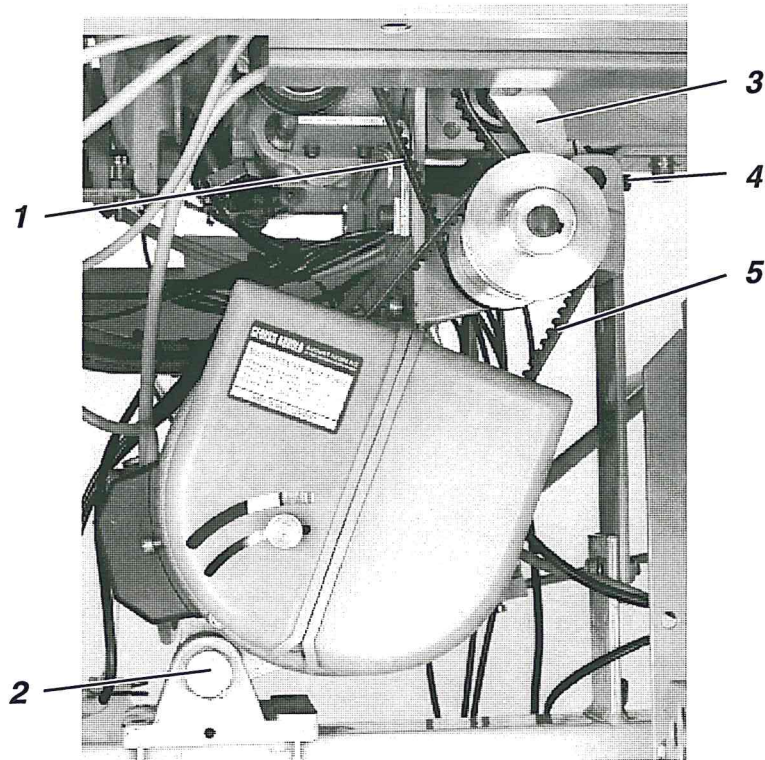
The sewing unit is set at the lowest work height of 87 cm at the factory.

- Loosen the set screws 2 on all four spars of the frame.
- Set the base plate horizontal at the desired work height.  
In order to avoid tilting pull out or push in the base plate on both sides equally.
- Tighten the set screws 2.
- Adjust the length of the pedal rod and remover.

## 2.4 Checking the V-belt Tension

After delivery the V-belt tension set at the factory is to be checked.

By correct tensioning the V-belts 5 (from the sewing drive to the gear reducer) and 1 (from the gear reducer to the machine head) can be pressed in at the center under finger pressure about 10 mm.



Tensioning the V-belt 5:

- Remove the belt guard after loosening the mounting screws.
- Loosen screw 2.
- Slew the sewing drive until the desired V-belt tension is achieved.
- Tighten screw 2.

Tensioning the V-belt 1:

- Loosen the clamping screw 4.
- Press the belt tensioner 3 onto V-belt 1 until the correct V-belt tension is reached.
- In this position tighten the clamping screw 4.

## 2.5 Filling Oil

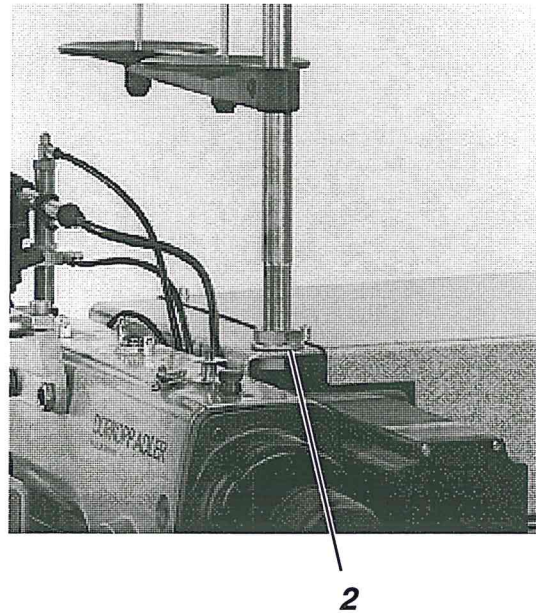
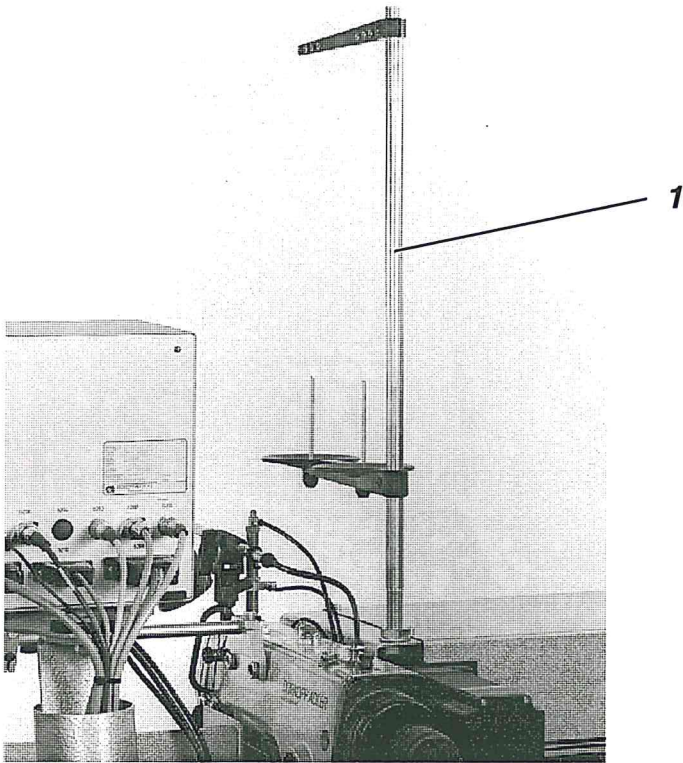
To fill the oil reservoir use only **ESSO SP-NK 10** lubrication oil. SP-NK 10 is available at all **DÜRKOPP ADLER AG** sales offices.

- Fill the oil reservoir for the hook lubrication and the reservoir for the central oil wick lubrication up to the "Max" marking with oil (see Chapter 3.2 of the Operating Instructions).



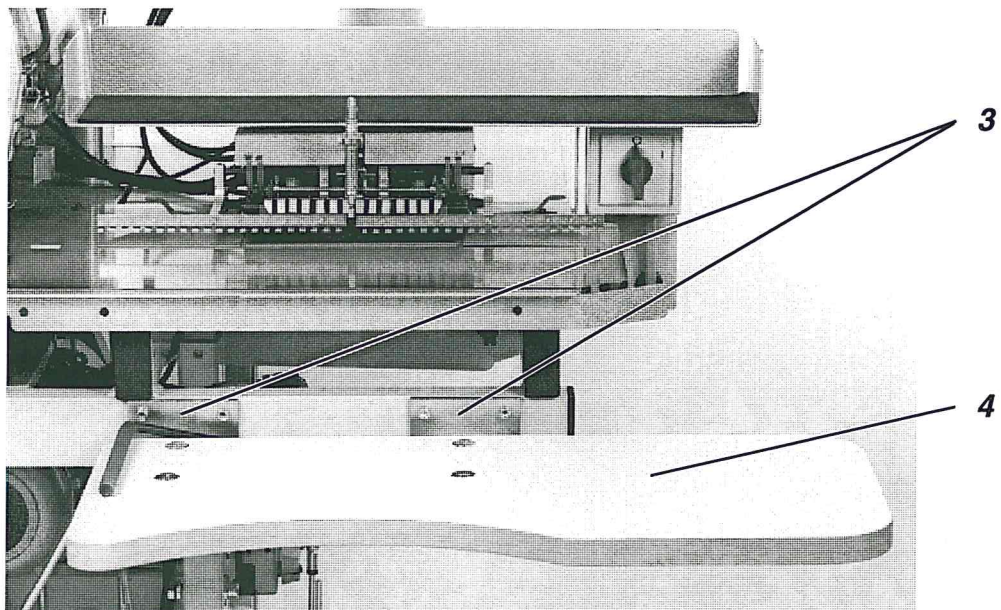
### 3. Mounting the Machine Parts Removed for Shipping

#### 3.1 Thread Stand



- Insert thread stand 1 into the hole in the housing 2 and fasten with nuts and washers.
- Mount and align the thread disc and unwinding arms as shown in the illustration.

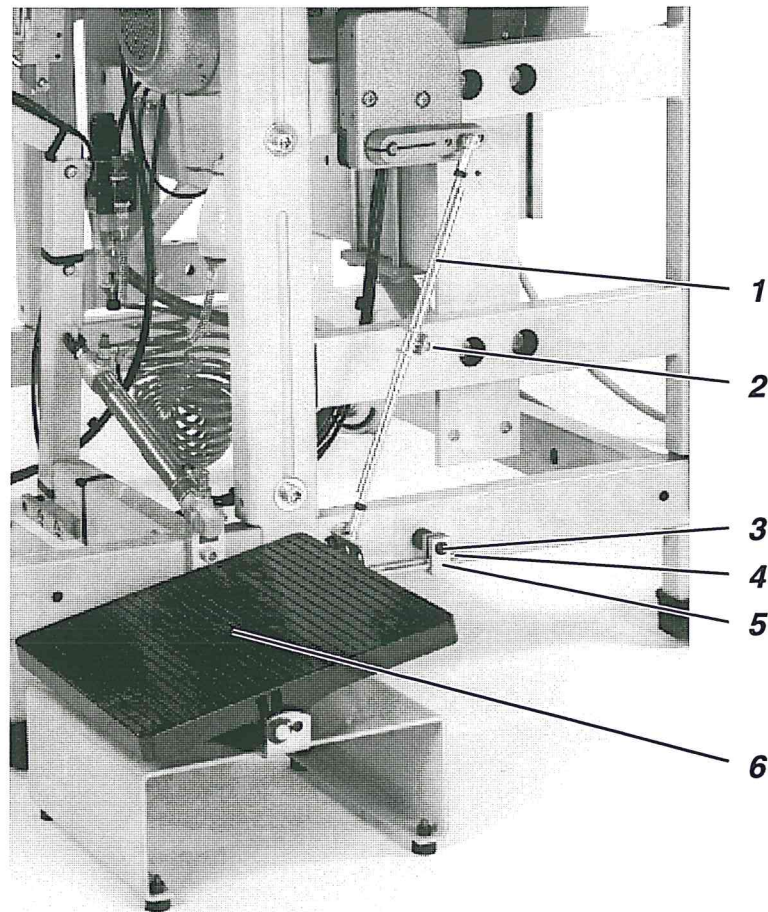
#### 3.2 Storage Table



- Fasten the mounting angles 3 of the storage table 4 to the frame with screws as shown in the illustration.

### 3.3 Pedal

The pedal 6 is attached to the lower right spar.



- Insert rod 4 into the clamping piece 5.
- Align pedal 6 so that it can be optimally operated.
- Tighten clamping screw 3 on the inside of the spar.
- Hang in pedal rod 1.
- Set pedal rod 1 so that the switching function when stepping forward and back on the pedal is achieved.
- Tighten clamping screw 2.



## 4. Electrical Connection

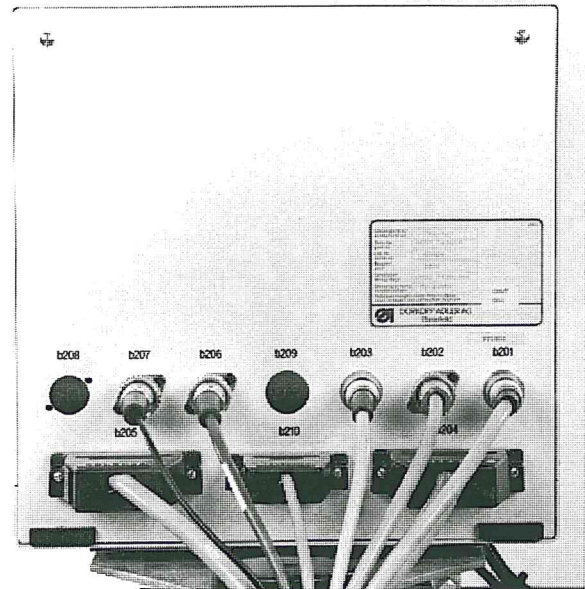
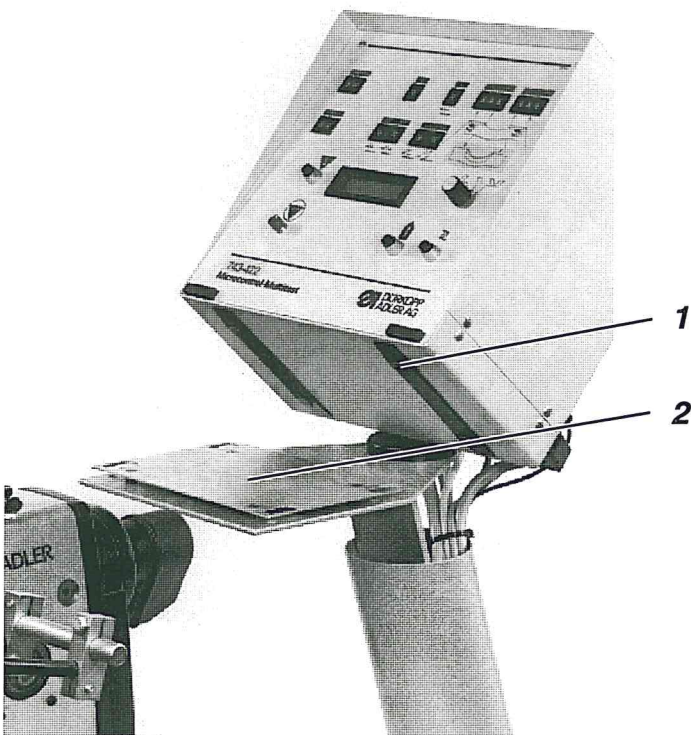


### ATTENTION !

All work on the electrical equipment of the sewing unit may only be conducted by electricians or appropriately trained personnel.  
The mains plug must be disconnected.

### 4.1 Connecting the Microcontrol Unit

The Microcontrol unit is equipped with the screws 1 and the catch plate 2 for quick attachment and release.



- Set the Microcontrol unit on the catch plate 2 and by pushing back let it catch on screws 1.

- Make the cable connections.

#### Attention !

Push the plug carefully into the back of the control unit.  
If present, compare the designations on the cable and the back of the unit.

Also pay attention to the differing equipment of the plugs with contact pins and contact jacks, as well as their number and arrangement.

- Tighten the screws on the plugs.



## 4.2 Checking the Nominal Voltage

The nominal voltage listed on the motor rating plate of the sewing drive and the mains voltage must be the same !

In order to convert to a different mains voltage the corresponding voltage set must be attached.

The voltage set consists of:  
V-belt pulley, V-belt, safety switch insert

### Nominal Voltage:

3 ~ 380 - 400 V + N, 50 Hz

3 ~ 220 - 230 V, 50 Hz

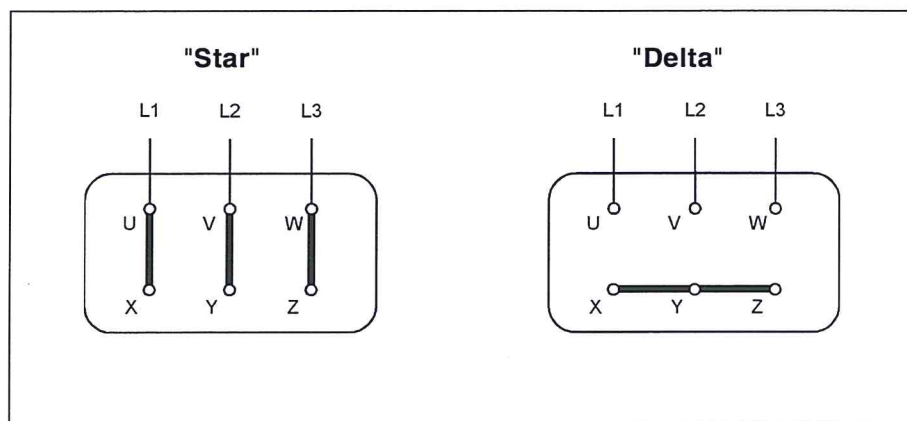
3 ~ 220 - 230 V, 60 Hz

### Order No.:

743 100114

743 100154

743 100194



When converting to a different mains voltage the wiring must be changed. The wiring is shown in the hook-up diagram.

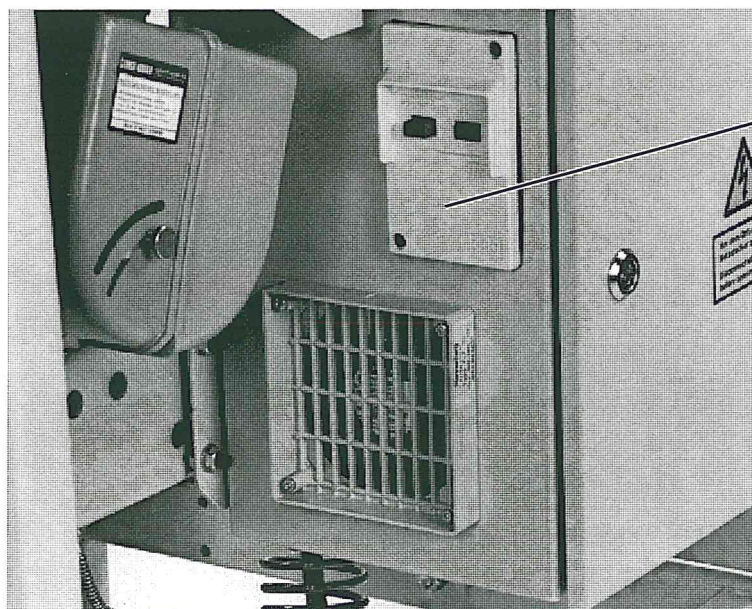
The bridges in the motor terminal box are to be switched "**Star**" or "**Delta**", depending on the mains voltage.

## 4.3 Setting the Motor Protection Switch

The motor protection switch 1 must be set according to the mains voltage.

220 - 230 V: 4,0 - 6,3 A

380 - 400 V: 1,6 - 2,5 A



#### 4.4 Checking the Run Direction of the Motor

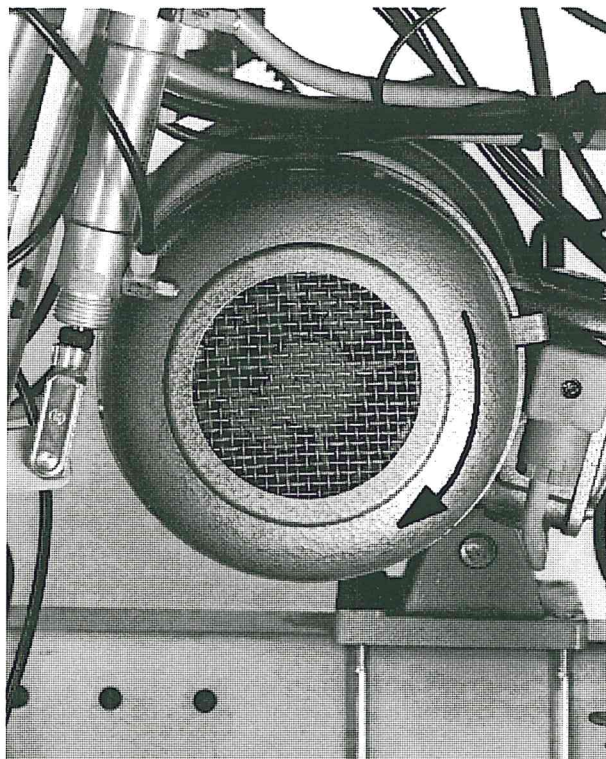


##### **ATTENTION !**

Before commissioning the sewing unit it is essential that the run direction of the motor be checked.

Operation with an incorrect run direction can cause damage to the sewing unit.

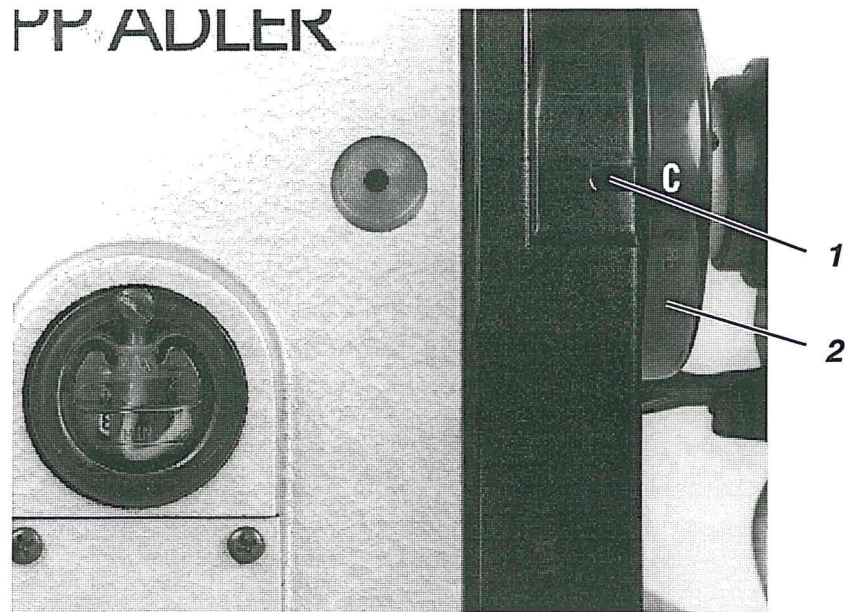
The run direction of the ventilation fan on the sewing drive must agree with the run direction shown in the illustration (clockwise).



- Plug in mains plug.
- Check the run direction of the ventilation fan by turning on the main switch for a short period.
- With an incorrect run direction check if the voltage supply creates a right-handed rotary field.  
If this is the case two phases on the mains plug must be interchanged.

## 4.5 Checking Positioning

Before commissioning the positioning set at the factory must be checked.



- The stopping of the machine head after thread trimming must occur in position **C** of the adjustment disc 2 (thread lever high position).  
Check if the "**C**" on adjustment disc 2 is opposite notch 1.
- If the "**C**" is not opposite notch 1, the positioning must be corrected (see Service Instructions).



## 5. Pneumatic Connection

For the operation of the bundle clamp, stacker, etc. the sewing unit must be supplied with water-free compressed air.



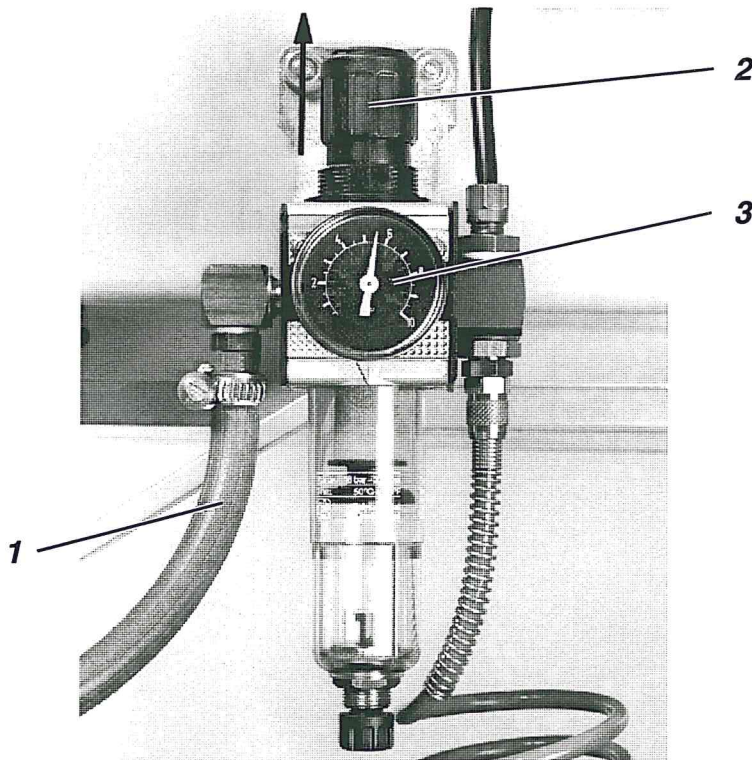
### ATTENTION !

For a flawless functioning of the pneumatic controls, the compressed air line must be laid out as follows:

Even at the moment of greatest air consumption the minimum operating pressure may not fall below **5 bar**.

With a too high compressed air dropage:

- Increase the compressor capacity.
- Increase the diameter of the compressed air line.



### Connecting the compressed air maintenance unit

- Connect the connecting hose 1 (Order no. 797 3031) with the enclosed hose coupling to the compressed air line.

### Setting the operating pressure

- The operating pressure is **6 bar**.  
It can be seen at pressure gauge 3.
- To set the operating pressure pull out knob 2 and turn.
  - Turning clockwise = Increase pressure
  - Turning counter-clockwise = Decrease pressure



### ATTENTION !

The compressed air line may not supply oiled compressed air.

Purified compressed air extracted behind the filter is used for cleaning machine parts and for blowing out sewing pieces.

Oil particles in the blower air can cause malfunctions and a soiling of the sewing pieces.