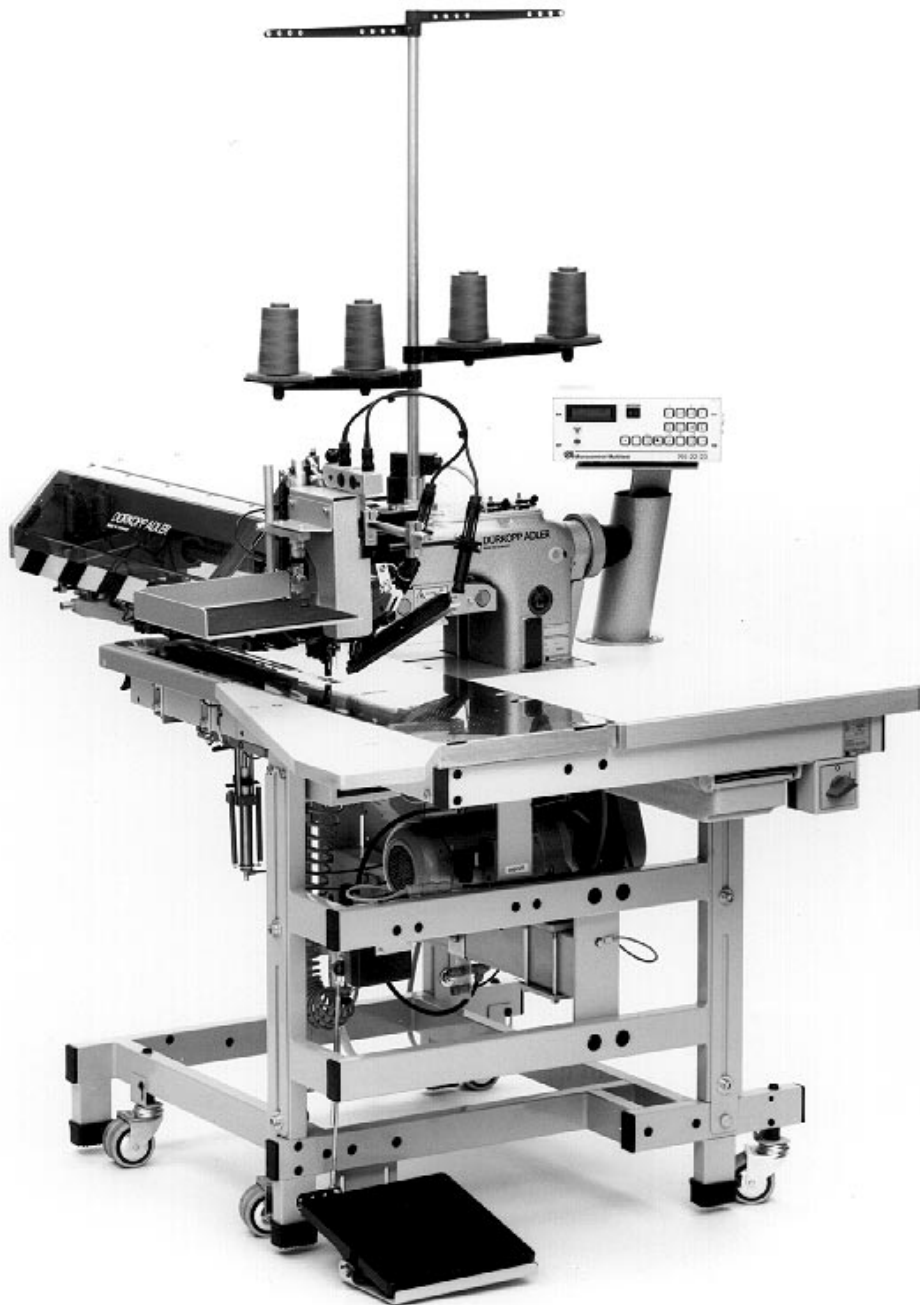


**Part 2: Installation Instructions Cl. 745-22; -23; -24**

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## 1. Scope of Delivery

- Stand with sewing drive
- Step motor for the material transport
- Two needle-double saddle stitch machine Class 935-246-00  
**745-22;-23:** with parts set 935 745301 for the common switching of the needle bars  
**745-24:** with parts set 935 745310 for the independent switching of the needle bars
- Microcontrol control unit
- Right and left transport clamps with folding plate
- Folder for dual piping
- Two marking lights as positioning aids
- Compressed air maintenance unit with compressed air gun
- Yarn stand
- Tools and small parts in the accessories pack

## 2. Installing the Sewing Unit



### ATTENTION !

The machine may only be installed by trained, skilled personnel.

### 2.1 Removing the Transport Fastening

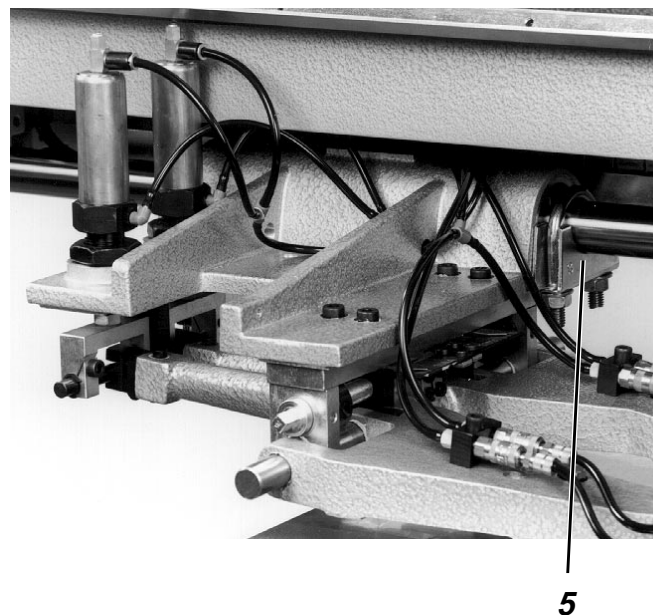
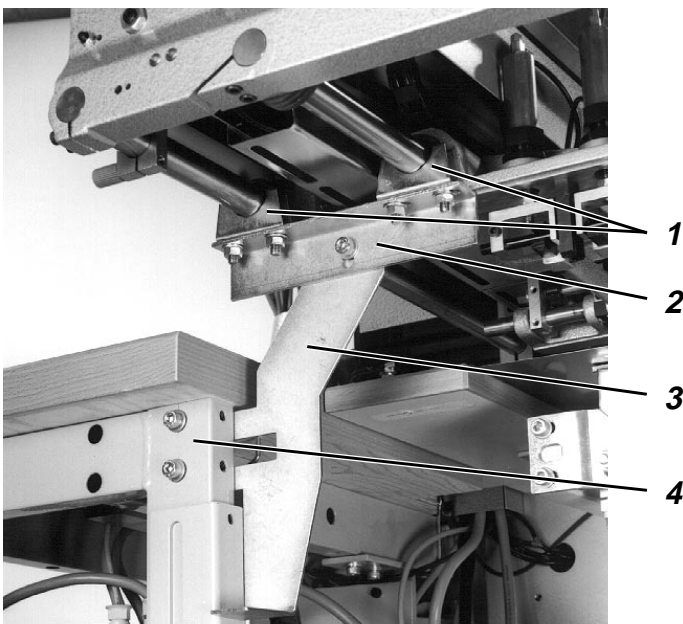
The machine head, machine plate and transport carriage are assembled as a unit for delivery.

The transport fastening 2 prevents

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

Before installing the sewing unit remove the transport fastening 2:

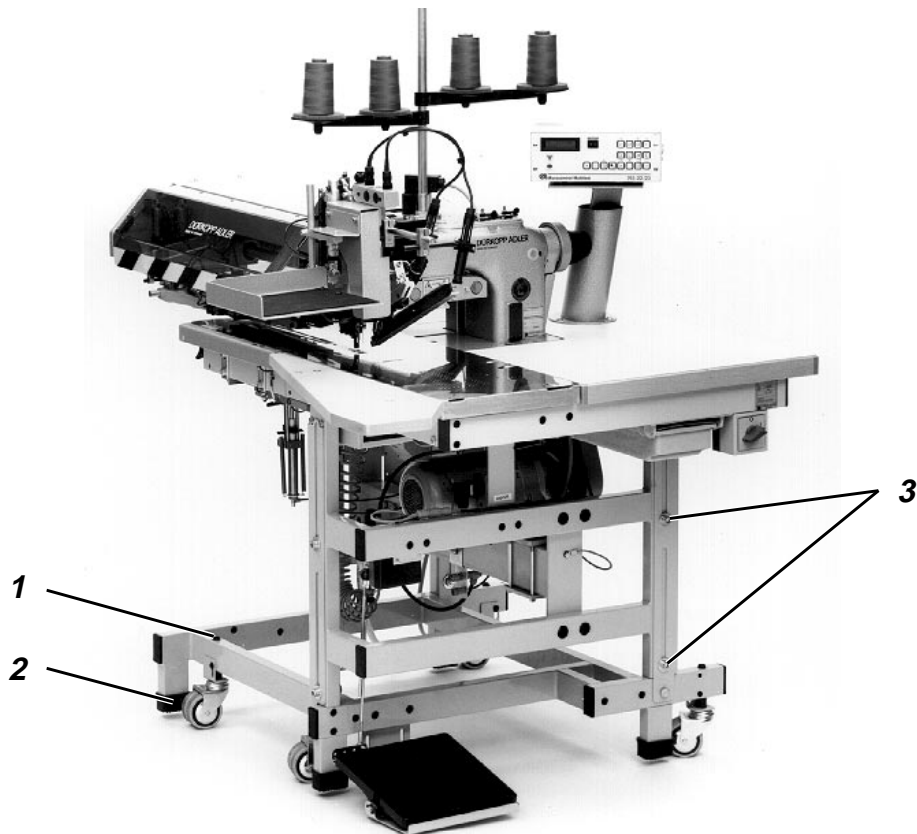
- Loosen brace 3 on spar 4.
- Loosen brackets 1 and 5.
- Remove the transport fastening 2.





## 2.2 Transport

The stand of the sewing unit is equipped with four castors for in-house transport.



### ATTENTION !

Before commissioning the sewing unit place the sound absorbers 2 (in the accessories pack) on the four feet of the stand. Turn in the castors until the stand is stable.

- Run the castors out for transport by turning the setting screws 1 to the left. The feet of the stand must have sufficient ground clearance for transport.
- After transport lower the sewing unit by turning the setting screws 1 to the right. The feet of the stand must be firmly on the ground.

## 2.3 Setting the Work Height

The work height is adjustable between 87 cm and 110 cm (measured to the upper edge of the table).

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

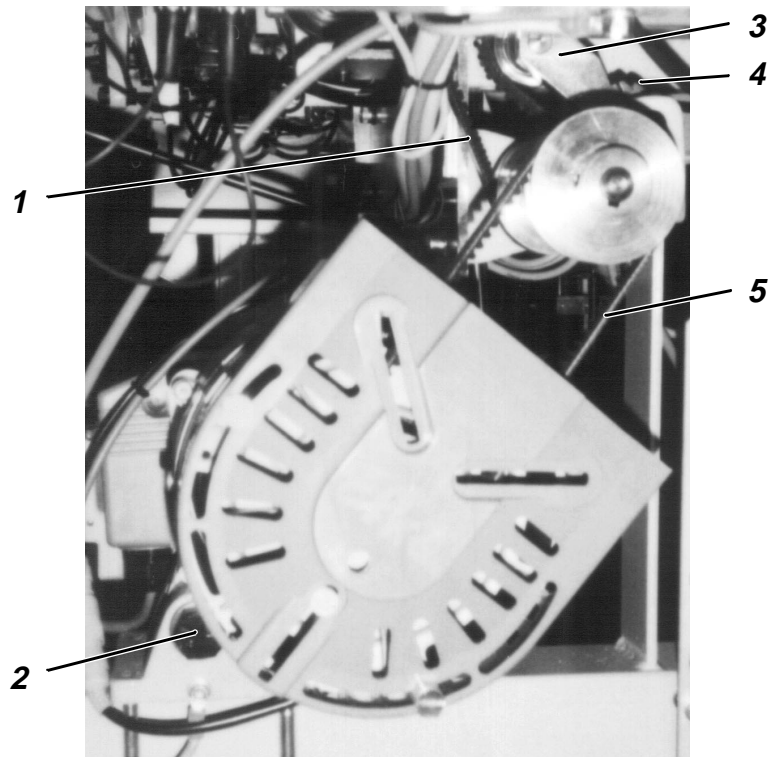
- Loosen the fastening screws 3 on all four spars of the stand.
- Set the base plate horizontally to the desired work height. In order to prevent twisting pull out or push in the base plate uniformly on both sides.
- Tighten the fastening screws 3.



## 2.4 Checking the V-belt Tension

After transport check the V-belt tension set at the factory.

With correct tension the V-belts 5 (from the sewing drive to the intermediate gear) and 1 (from the intermediate gear to the machine head) can still be pressed in approx. 10 mm at the center with finger pressure.



Tensioning V-belt 5:

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

Tensioning V-belt 1:

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

## 2.5 Filling Oil

Use only **ESSO SP-NK 10** lubricating oil for filling the oil reservoir. SP-NK 10 is available from the **DÜRKOPP ADLER AG** sales offices.

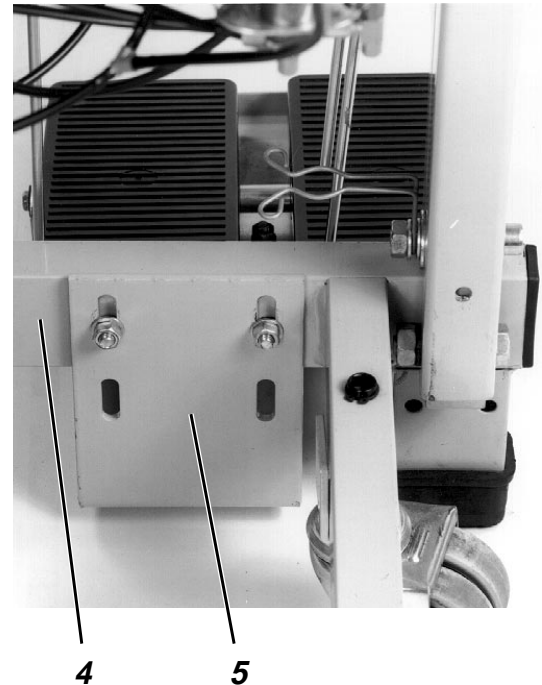
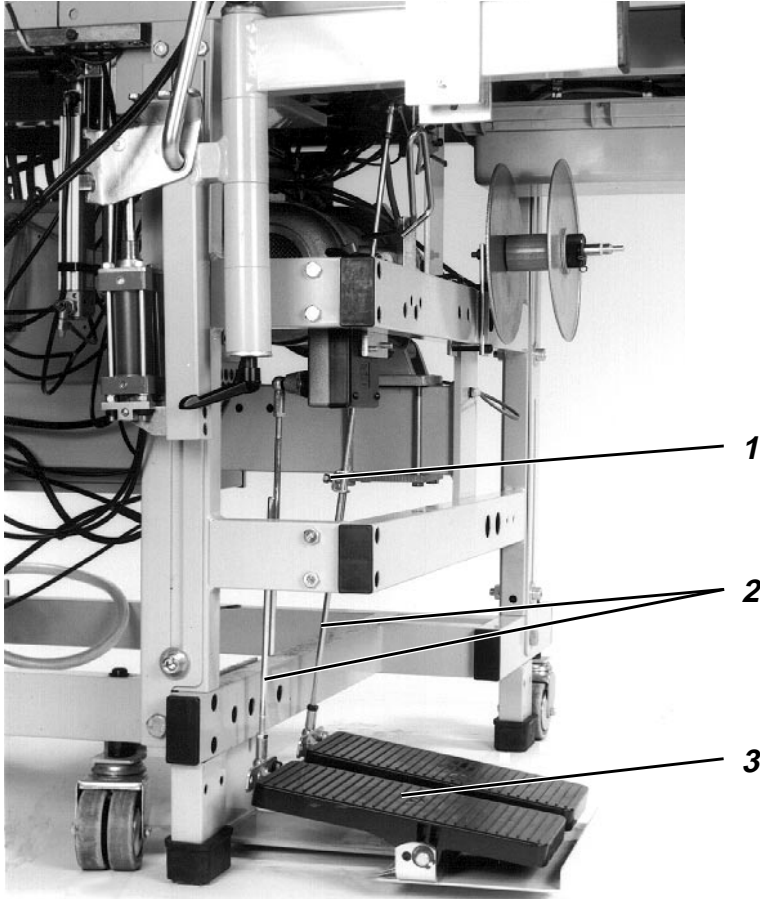
- Fill the oil reservoir for the hook lubrication and the reservoir for the lubrication of the machine head up to the "Max" mark with oil (see Chapter 3.2 of the Operating Instructions).



### 3. Attaching the Machine Parts Removed for Shipment

#### 3.1 Pedal

Sewing units for jacket fabrication are equipped with only one pedal. Those equipped for trouser fabrication have a left and a right pedal.



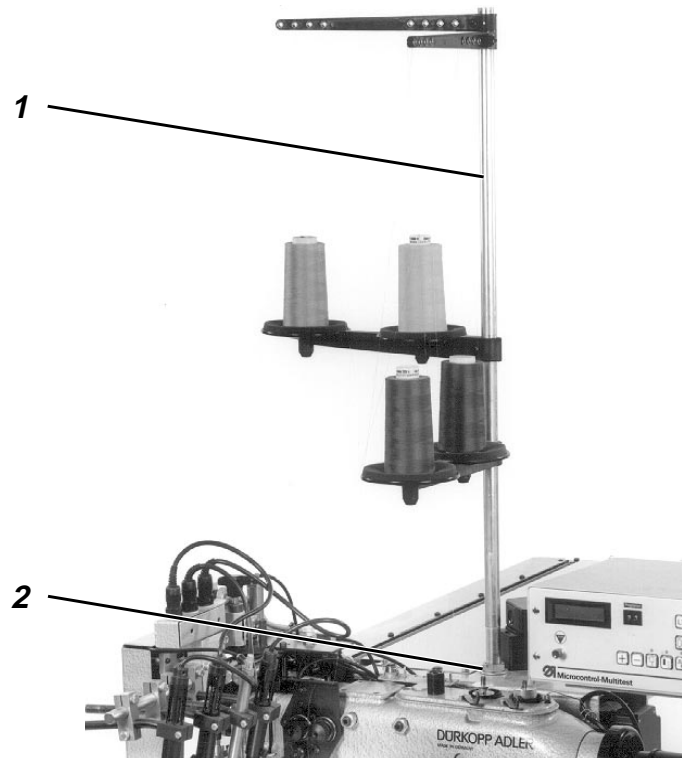
The pedal 3 is to be attached at the lower cross spar 4:

- Attach pedal 3 with the angle 5 on the lower cross spar 4. The slots in angle 5 make possible an adaption to different work heights. Align the height of angle 5 so that pedal 3 can be optimally operated.
- Hook in the pedal bar 2.
- Loosen clamping screw 1 slightly.
- Set the height of the pedal bar 2 so that the pedal is horizontal when stepped down to the stop.
- Tighten clamping screw 1.



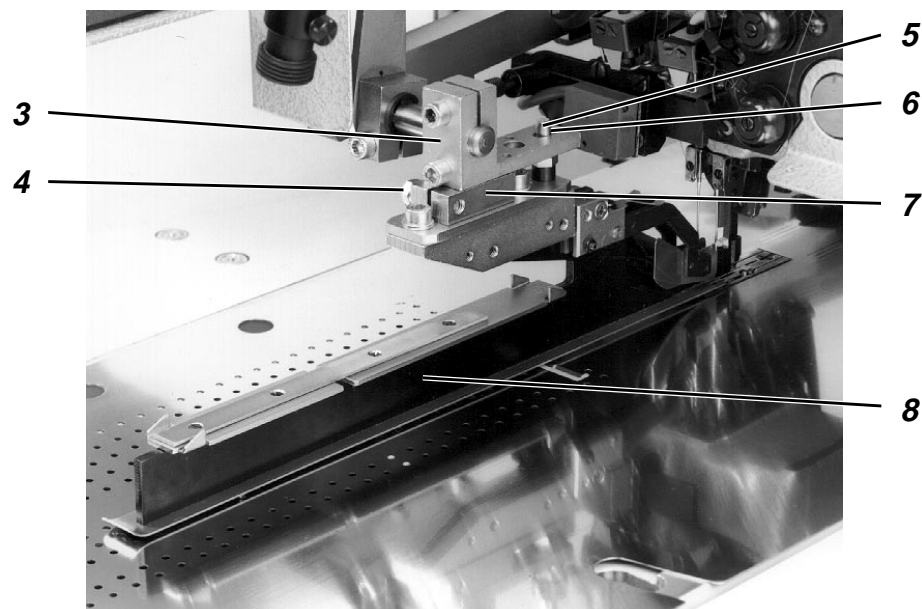


### 3.2 Yarn Stand



- Place the yarn stand 1 in the drilled hole 2 of the housing and attach with nuts and washers.
- Mount and align the yarn plates and take-off arms as shown in the illustration.

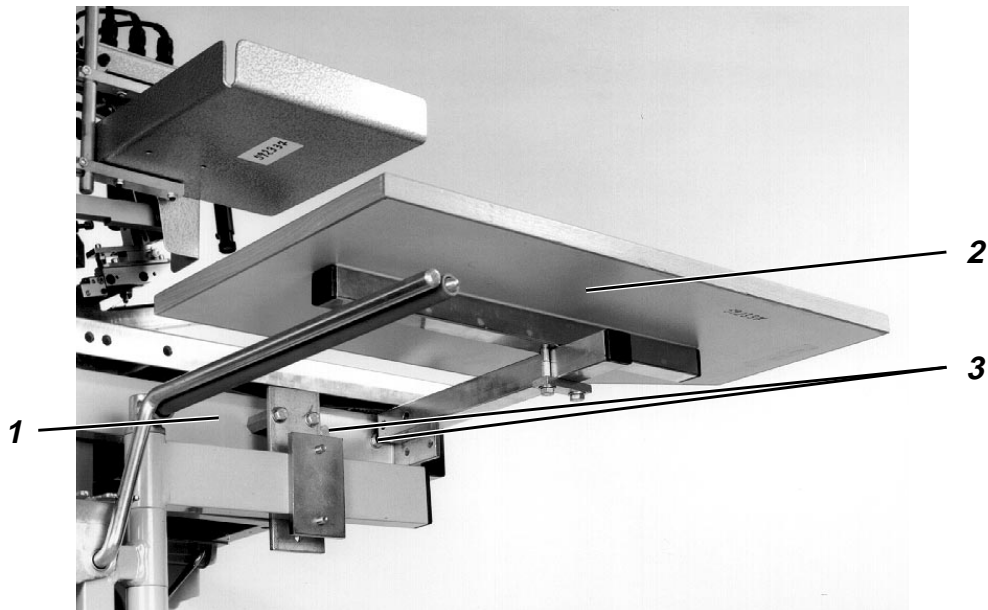
### 3.3 Folder



- Insert the folder 8 with block 7 up to the stop on the accepting bolt of the clamping piece 3.  
Pin 5 must catch in the slot 6.
- Tighten clamping screw 4.  
This results in the factory setting.

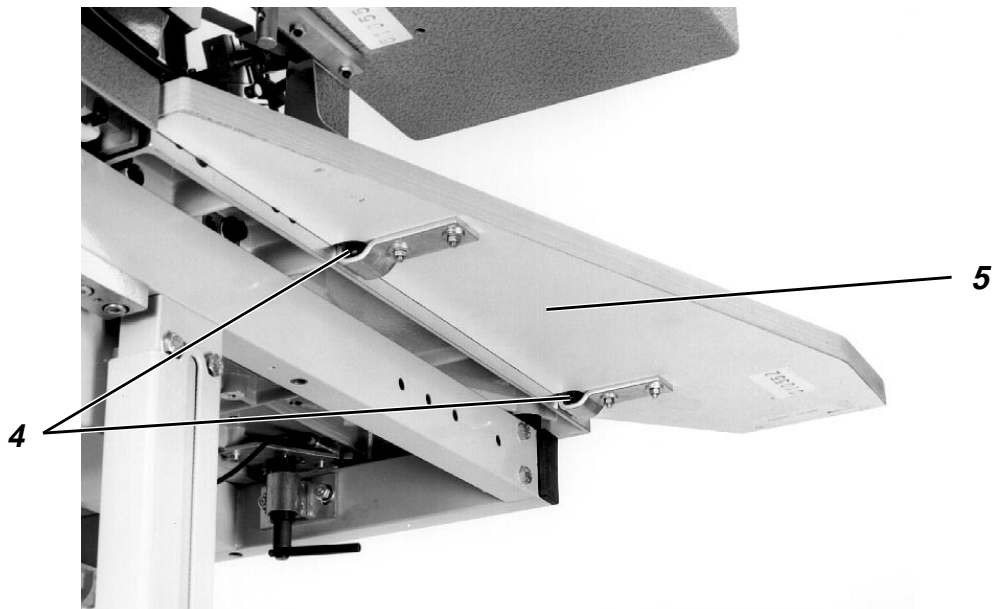


### 3.4 Table Extensions (Optional Equipment)



#### Table extension for trouser seat pieces

- Fasten the table extension 2 with the screws 3 and the bracket to be found behind spar 1.
- Loosen the screws on the table top slightly.  
By sliding the table extension 2 establish a clearance to the table.  
This clearance is necessary for the free movement of the positioned pocket bag.



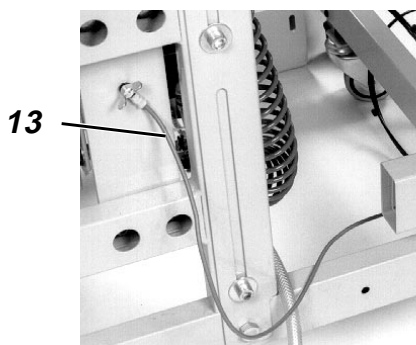
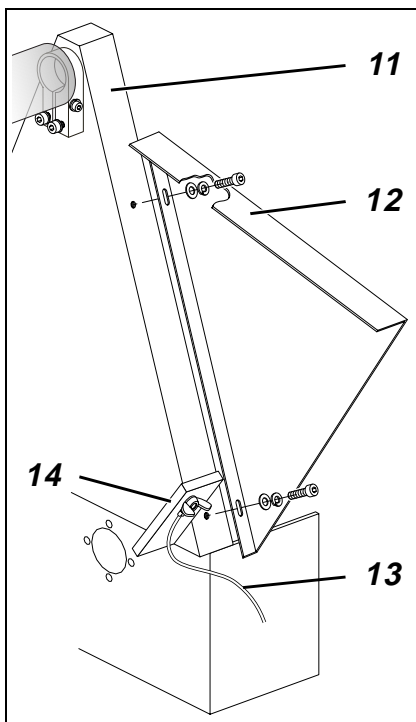
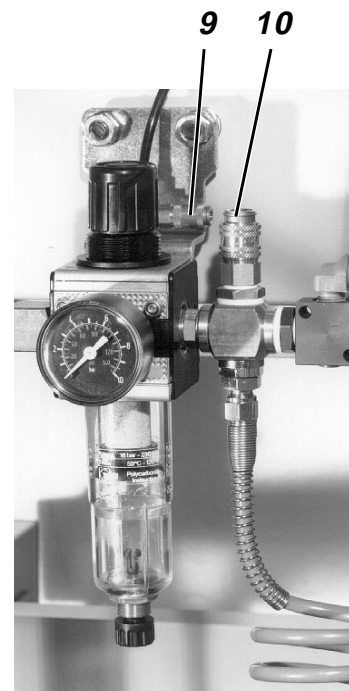
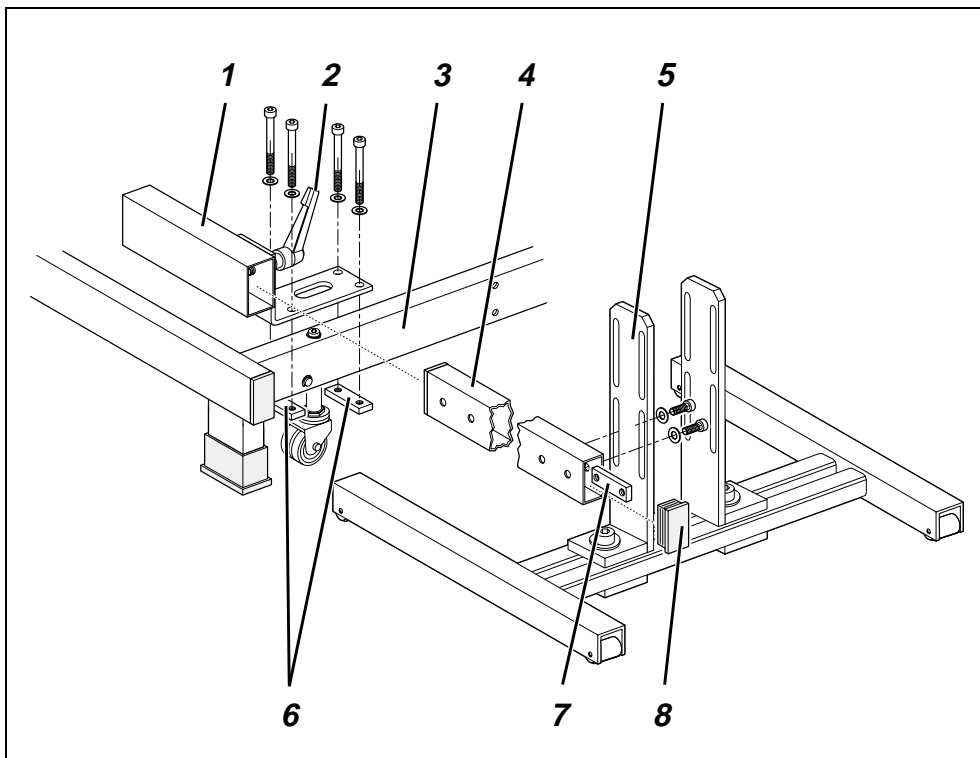
#### Table extension for jacket front pieces

- Fasten the table extension 5 to the support table with the screws 4.





### 3.5 Throw-over Stacker (Optional Equipment)



The throw-over stacker (Order no. Z112 427514) is attached to the frame of the sewing unit with holder pipe 1.

At delivery of the sewing unit the holder pipe 1 is already premounted on the frame brace 3.

If the throw-over stacker is delivered separately packed, the holder pipe 1 must first be attached to the frame brace 3 of the sewing unit.

- Mount guard plate 12 on the housing 11 of the throw-over stacker with screws, washers and spring washers.
- Fasten holder pipe 1 on the frame brace 3 of the sewing unit with screws, washers and brackets 6.
- Fasten spar 4 on the brace 5 of the stacker stand with screws, washers and bracket 7.
- Insert the ribbed plug 8 in spar 4.
- Push the throw-over stacker toward the frame of the sewing unit so that spar 4 catches in the holder pipe 1.
- The height of spar 4 is adapted to the holder pipe 1 via the slots in brace 5 of the stacker stand.
- Insert the coupling plug of the compressed air feed into hose coupling 10.
- Insert the coupling plug of the control lead into hose coupling 9.
- Attach one end of the potential cable 13 to the stopper plate 14 of the throw-over stacker with the enclosed wing nut.
- Attach the other end to the frame of the sewing unit with the existing wing nut.
- The potential cable 13 serves to conduct static charges to ground.
- After starting the sewing unit with the throw-over stacker open, set the clearance to the sewing unit.
- The sewing pieces must securely enter the opening between the smoother and the stacked-goods support.
- Tighten clamping lever 2.



## 4. Electrical Connection

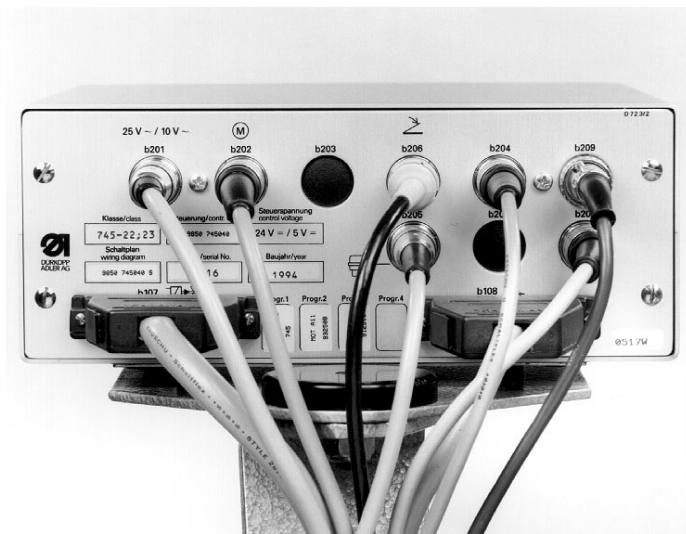


### ATTENTION !

All work on the electrical components of the sewing unit may only be conducted by electricians or appropriately instructed persons.  
The mains plug must be pulled.

### 4.1 Attaching the Microcontrol Control Unit

The Microcontrol control unit is fastened onto plate 1 with the set screws 2.



- Place the Microcontrol control unit on the plate 1.
- Secure the set screws 2 on the underside of plate 1 with washers and nuts.
- Make the cable connection.  
**Attention !**  
Carefully insert the plugs into the back of the control unit.  
In as far as these exist observe the same designations on the cables and the back.  
Also observe the differing outfitting of the plugs with contact pins and contact sockets, as well as their number and arrangement.
- Tighten the screws of the plugs.



## 4.2 Checking the Nominal Voltage

The nominal voltage given on the rating plate of the sewing drive and the mains voltage must agree!

For conversion to a different mains voltage the appropriate voltage kit must be mounted.

The voltage kit consists of:

V-belt pulley, V-belt, protection switch insert

### Nominal voltage:

3 ~ 380 - 415 V + N, 50 Hz

3 ~ 220 - 240 V, 50 Hz

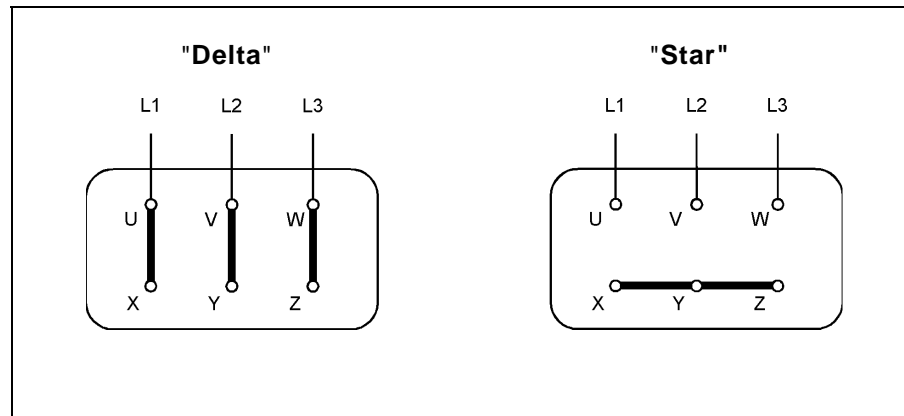
3 ~ 220 - 240 V, 60 Hz

### Order no.:

0745 004464

0745 004504

0745 004544



By conversion to a different mains voltage the wiring must be changed. The wiring is given in the components connection diagram.

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

## 4.3 Setting the Motor Protection Switch

Dependent on the voltage kit one of the following motor protection switch inserts is to be mounted:

220 - 240 V: 2.5 - 4 A

380 - 415 V: 4 - 6.3 A

The motor protection switch insert must be set appropriate to the mains voltage:

220 - 230 V: 4.2 A

380 - 415 V: 2.5 A



## 4.4 Checking the Direction of Turn of the Motor

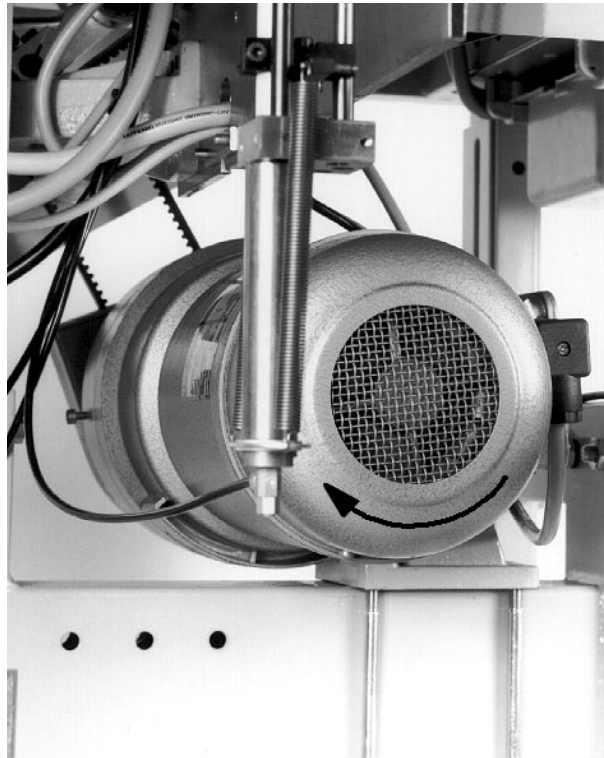


### ATTENTION !

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

Turning the machine on with an incorrect direction of turn can lead to damage to the sewing unit.

The direction of turn of the ventilator wheel on the sewing drive must agree with the direction of turn shown in the illustration (clockwise).

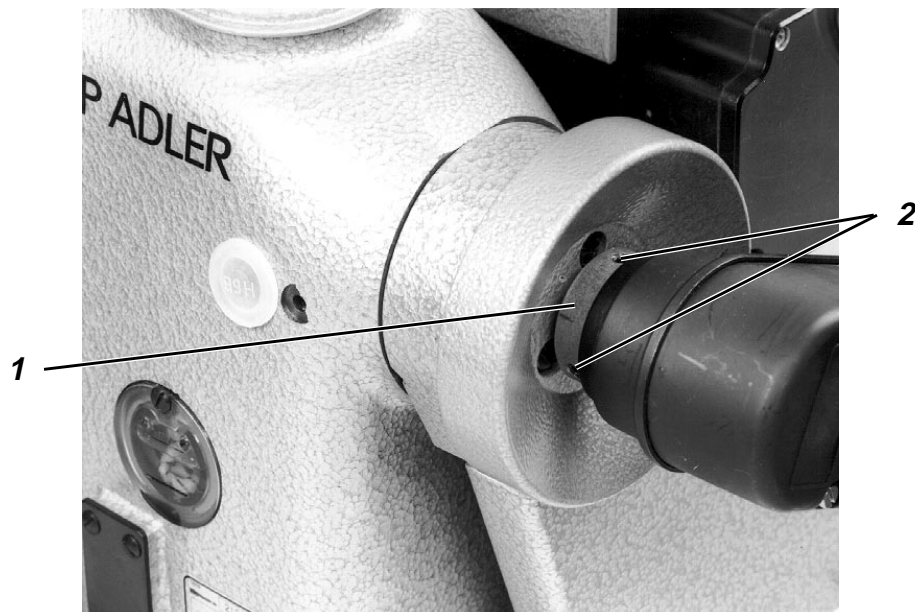


- Insert the mains plug.
- By briefly turning on the main switch check the direction of turn of the ventilator wheel.
- With an incorrect direction of turn check if the voltage supply creates a right-hand rotary field.  
If this is the case two phases in the mains plug must be interchanged.



## 4.5 Checking the Positioning

Before commissioning check the positioning set at the factory.



After turning on the main switch the sewing unit must position in the needle high position (Position 2).

### Checking the positioning

- Turn the main switch off.
- Bring the thread lever into a middle position by turning the handwheel.
- Turn the main switch on.  
The sewing unit positions in needle high position (Position 2).  
The thread lever must lie 2 mm behind its upper dead center.
- Check the position of the thread lever.  
If necessary correct the positioning.

### Correcting the positioning

- Loosen clamping screws 2 on the synchronizer.
- Hold the synchronizer collar 1 tight.
- Move the thread lever to 2 mm behind its upper dead center by turning the handwheel.
- Tighten the clamping screws 2.
- Check the positioning again.

For the setting of the 1st needle position (needle low position) see Service Instructions.





## 5. Pneumatic Connection

The sewing unit must be supplied with water-free compressed air for the operation of the pneumatic components.



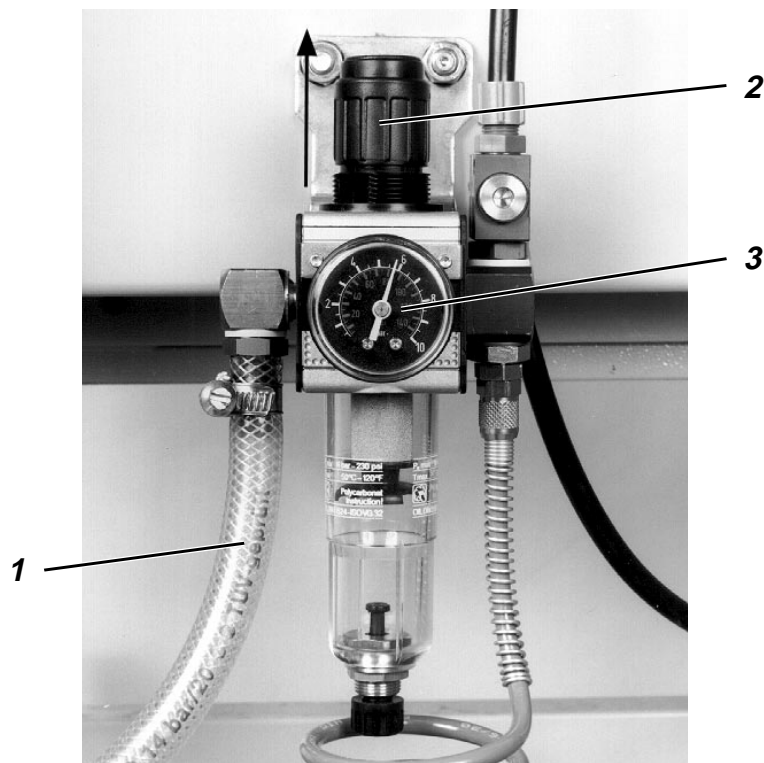
### ATTENTION !

For a flawless functioning of the pneumatic control procedures the compressed air supply must be laid out as follows:

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

With too great a pressure drop:

- Increase the compressor output.
- Increase the diameter of the compressed air lines.



### Connecting the compressed air maintenance unit

- Attach the connection hose 1 (Order no. 0797 003031) with a R 1/4" hose coupling to the compressed air supply.

### Setting the operating pressure

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



### ATTENTION !

No oiled compressed air should be delivered by the compressed air supply.

Behind the filter, cleaned compressed air is exited as blower air for the cleaning of machine parts and for the blowing out of sewing pieces. Oil particles in the blower air lead to malfunctions and to soiling of the sewing pieces.