

**Part 2: Installation Instructions Cl. 506**

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## 1. Scope of Delivery

- Frame with sewing drive and table 1100 x 736 mm
- Sewing machine with integrated bobbin winder
- Microcontrol control unit
- Compressed air maintenance unit
- Yarn stand
- Foot switches
- Sewing light
- Tools and small parts in the accessories pack

## 2. Installation of the Unit



### ATTENTION !

The unit may only be set up by trained personnel.

Before installing the unit it is essential that all transport fastenings be removed!

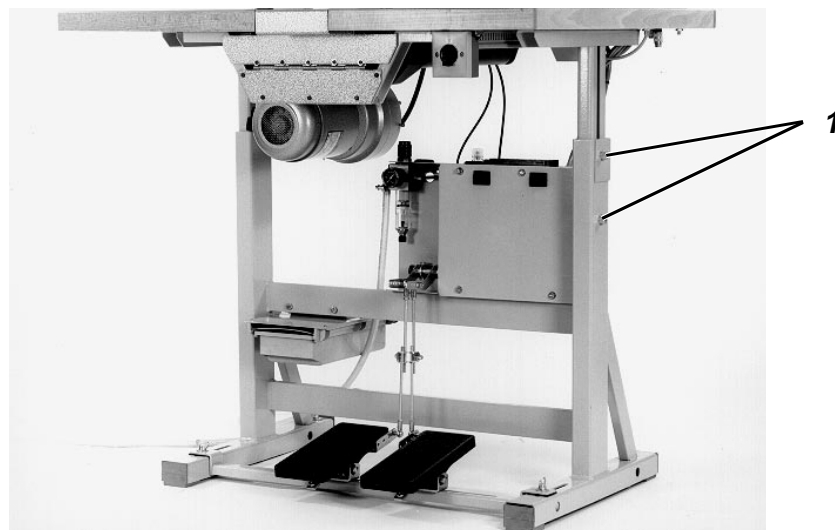
### 2.1 Transport

For in-house transport lift the unit and transport on a suitable wagon (e.g. lift truck).

### 2.2 Setting the Work Height

The work height can be set between 76 cm and 106 cm (measured to the upper edge of the table).

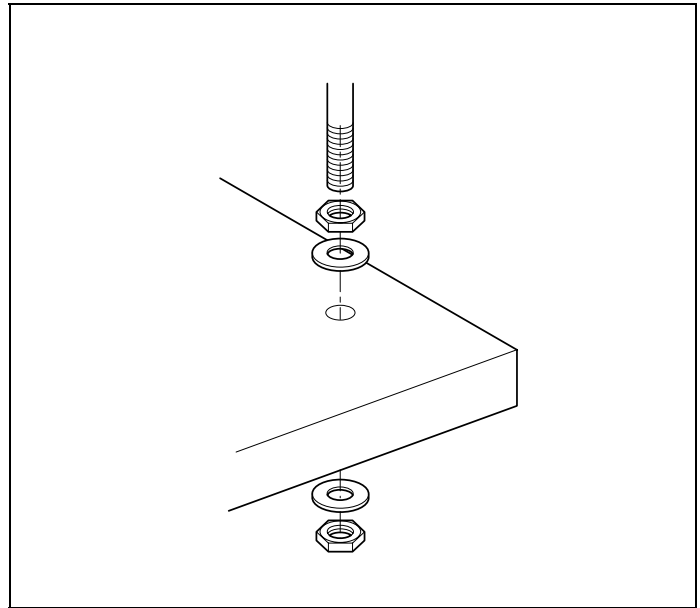
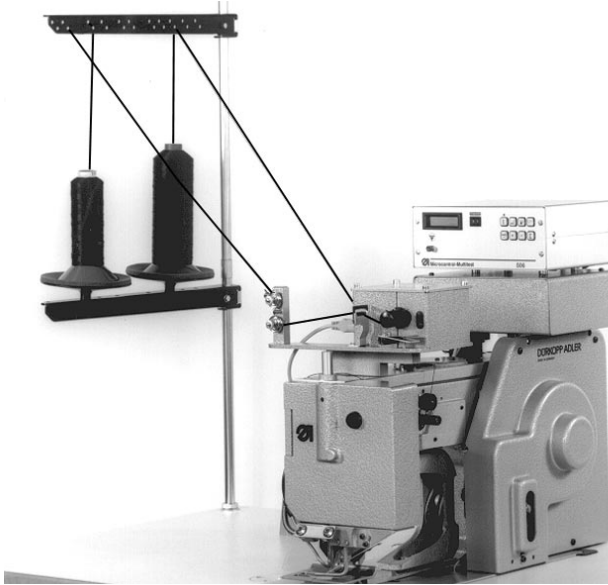
The unit is set at a work height of 82 at the factory.



- Loosen the locking screws 1 on both sides of the frame.
- Set the base plate horizontally at the desired work height. In order to avoid a tilt pull out or push in the base plate uniformly on both sides.
- Tighten the locking screws 1.



## 2.3 Attaching the Yarn Stand

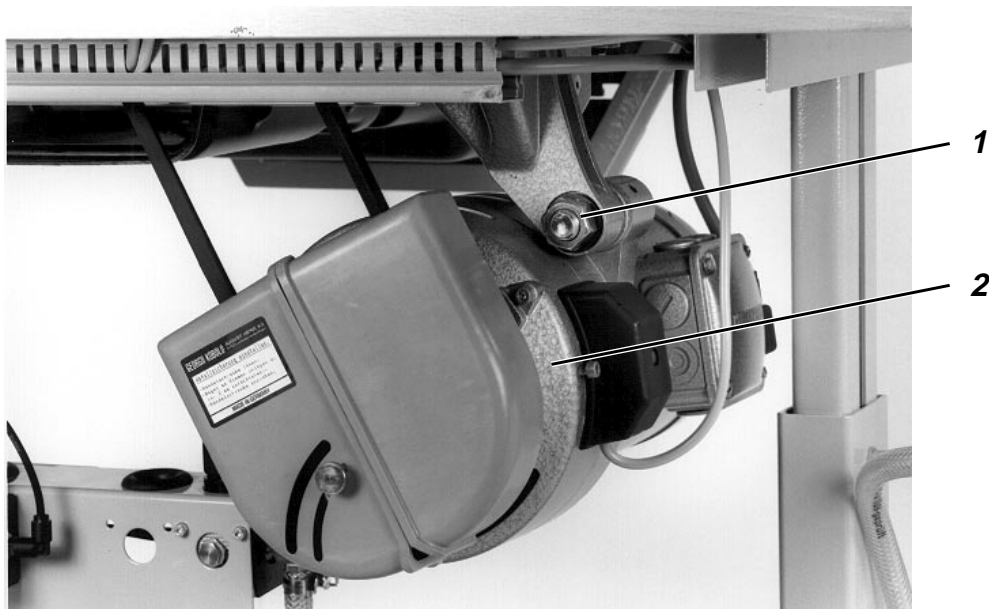


- Insert the yarn stand into the appropriate hole in the table and attach with the nuts and washers.

## 2.4 Checking the V-belt Tension

After transport the V-belt tension set at the factory is to be checked. The notched V-belt must be under sufficient tension for the unit to run softly into the end position.

Tension the V-belt so that it can be pushed in at the center approx. 10 mm by finger pressure.



Correcting the V-belt tension:

- Loosen nut 1.
- Swing the sewing drive 2 until the desired V-belt tension is achieved.
- Tighten nut 1.



### 3. Electrical Connection



#### ATTENTION !

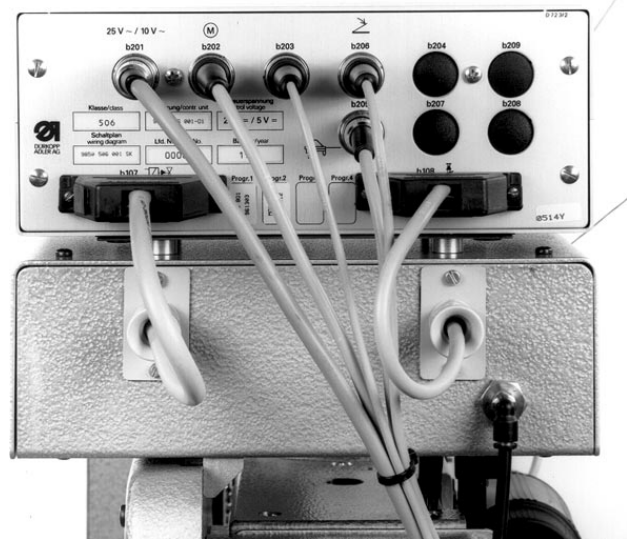
All work on the electrical components of the sewing unit may be carried out only by electricians or appropriately trained personnel. The mains plug must be pulled.

#### 3.1 Connecting the Microcontrol Control Unit

The Microcontrol control unit is equipped with the catch plate 1 for quick attachment and removal.



1



- Place the Microcontrol control unit on the catch plate 1 and push back until it catches.
- Make the cable connections.  
**Attention !**  
Insert the plugs carefully into the back of the control unit. In as far as these are present, match the designations on the cables and the unit back.  
Also observe the different outfitting of the plugs with contact pins or contact sockets, as well as their number and arrangement.
- Tighten the screws on the plugs.



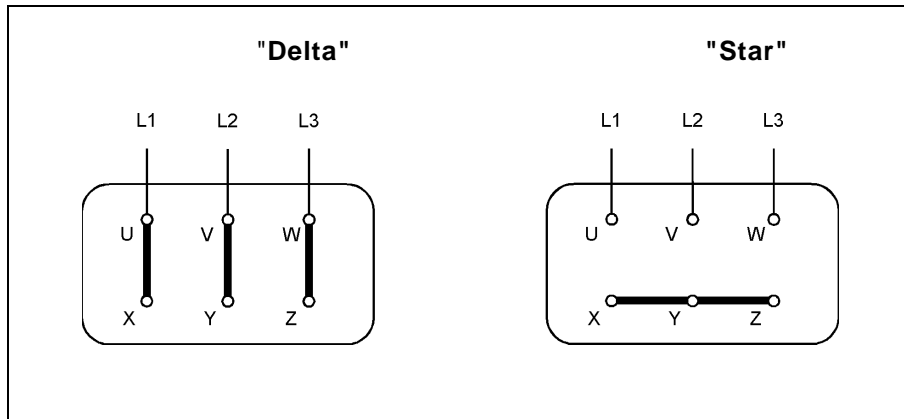
### 3.2 Checking the Nominal Voltage

The nominal voltage listed 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:	Order no.:
3 ~ 380 - 415 V + N, 50 Hz	9880 506001
3 ~ 220 - 240 V, 50 Hz	9880 506002
3 ~ 220 - 240 V, 60 Hz	9880 506003



When converting to a different mains voltage the wiring must be changed. The wiring is shown in the components connection schematic.

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

### 3.3 Setting the Motor Protection Switch

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

220 - 240 V:	2.5 - 4 A
380 - 415 V:	4 - 6.3 A





### 3.4 Checking the Direction of Rotation of the Motor



#### **ATTENTION !**

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

Turning the unit on with an incorrect direction of rotation can cause damage to the unit.

The direction of rotation of the ventilator fan on the sewing drive must agree with the direction of rotation shown in the picture (clockwise).

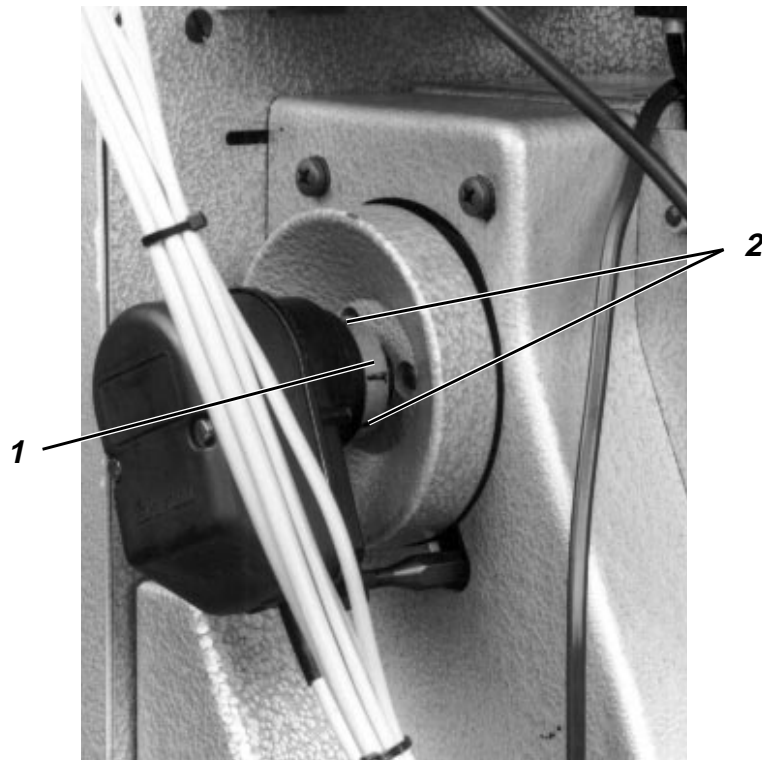


- Insert the mains plug.
- By turning on the main switch for a brief period check the direction of rotation of the ventilator fan.
- With an incorrect direction of rotation check if the current supply creates a right-hand rotary field. In this case 2 phases on the mains plug must be interchanged.



### 3.5 Checking the Positioning

Before commissioning check the positioning set at the factory.



After being turned on the unit must position in the 2nd needle position (thread lever high position).

#### Checking the positioning

- Turn the main switch off.
- By turning the handwheel bring the thread lever into a middle position.
- Turn the main switch on.  
The unit positions in the 2nd needle position (thread lever high position).
- Check the position of the thread lever.  
Correct the positioning if necessary.

#### Correcting the positioning

- Loosen the clamping screws 2 on the synchronizer ring 1.
- Hold the synchronizer ring 1 tight.
- By turning the handwheel bring the thread lever into its upper dead center.
- Tighten the clamping screws 2.
- Check the positioning again.

For setting the 1st and 3rd needle positions see the Service Instructions.



## 4. Pneumatic Connection

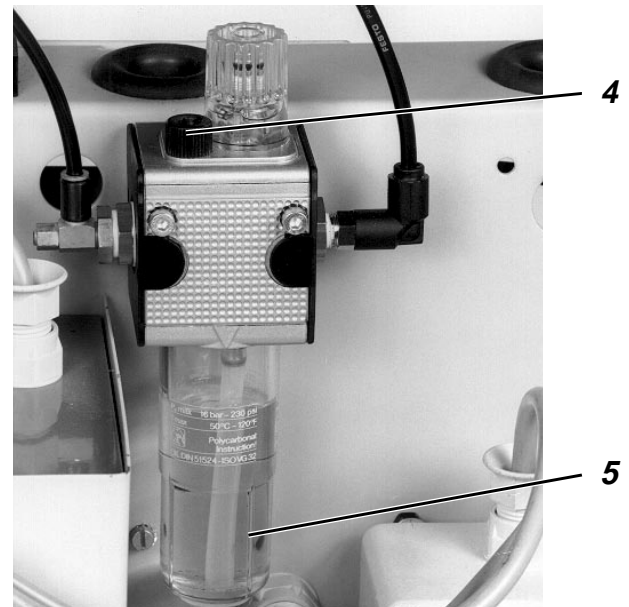
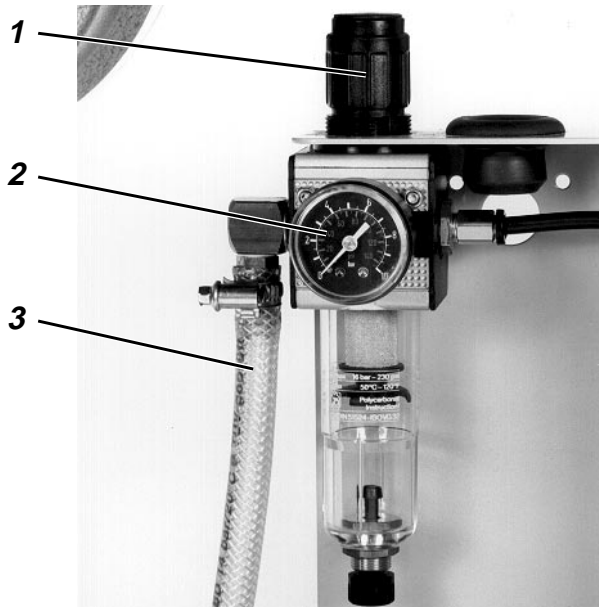
For the operation of the clamp lifting, thread tension opening, needle cooling, etc. the unit must be supplied with water-free, lightly oiled compressed air.



### ATTENTION !

For a flawless functioning of the pneumatic control processes 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**.



### Connecting the compressed air maintenance unit

- Connect the connection hose 3 for the maintenance unit to the compressed air supply with the enclosed coupling.

### Filling the oil reservoir of the oil mister

For filling the oil reservoir use only **ESSO SP-NK 10** lubricating oil. SP-NK 10 can be obtained from **DÜRKOPP ADLER AG** sales offices.

- Shut the compressed air off completely by turning the knob 1 counterclockwise.
- Screw out the oil filler screw 4.
- Fill the oil reservoir 5 up to the groove marking with **ESSO SP-NK 10** lubricating oil.
- After filling the oil release the compressed air again by pulling up on and turning the knob 1 clockwise.

### Setting the operating pressure

- The operating pressure is **6 bar**.  
It can be seen on the pressure gauge 2.
- For setting the operating pressure pull knob 1 up and turn.
  - Turning clockwise = Increase pressure
  - Turning counterclockwise = Decrease pressure