

Part 2: Installation Instructions Cl. 744-122

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Installing the 744-122

Installation is to occur as described in the following information. All necessary parts can be found in the attached package.



Important Notice!

The mains voltage and the nominal voltage (operating voltage) specified on the spar below the table top must be identical.

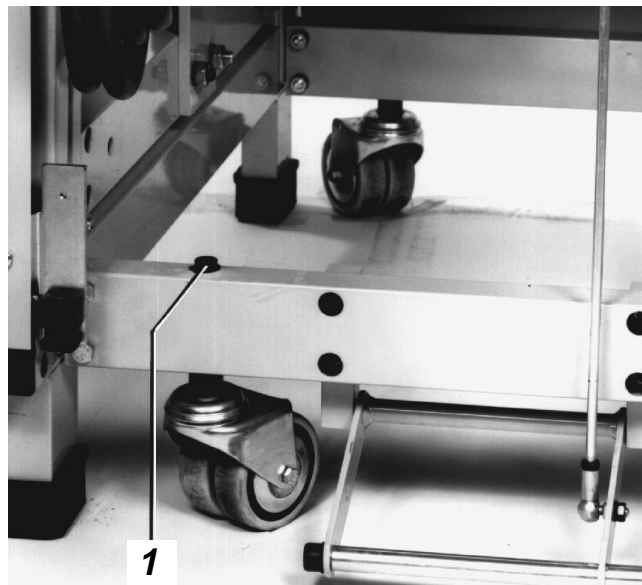
All work on the electrical components is to be conducted by authorized personnel and with the mains plug pulled.

The safety instructions are to be observed!

1. Mobile Stand

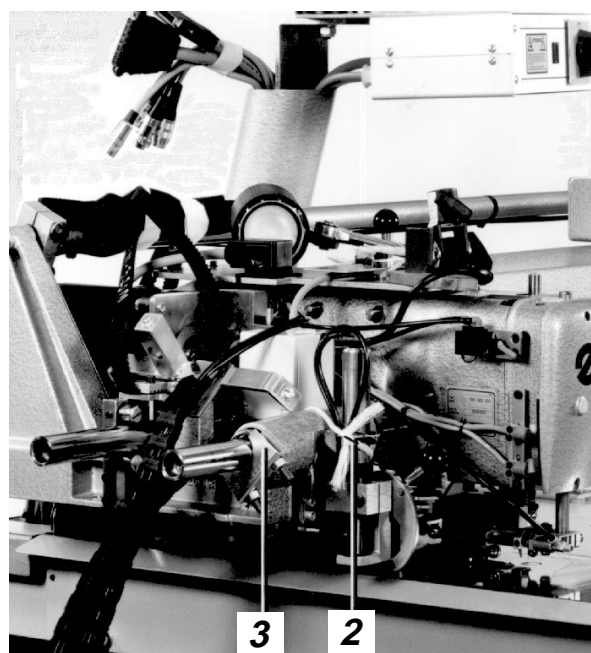
The stand is equipped with castors for moving the sewing unit in-house.

When being set up the sewing unit can be lowered for stable positioning by turning the screws 1 to the left.



2. Securing for Transport

For the duration of shipping the transport carriage is held in place by the safety device 3 and the binding 2. It is essential that both parts be removed before further work is performed and before starting operation.



3. Height of the Table Top (Work Height)

The work height is adjustable between 920 and 1140 mm. The lower height set at the factory is in most cases the correct height for standing operation.

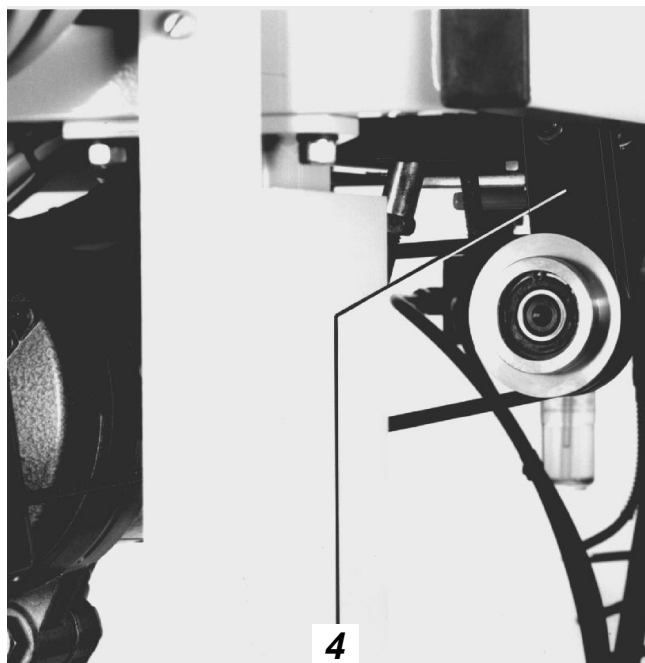
After loosening the four feet the raising of the stand on each side of the unit must be done in one operation. Use a water level for alignment.

4. Checking the V-Belt Tension

The V-belt tensions from the sewing drive to the reducer gear and from there to the machine head have been set at the factory, but must be checked when setting up after delivery.

With proper tension the V-belts can still be pressed together in the middle by about 10 mm.

If necessary make an appropriate adjustment after loosening the sewing drive mounting and the reducer gear 4.



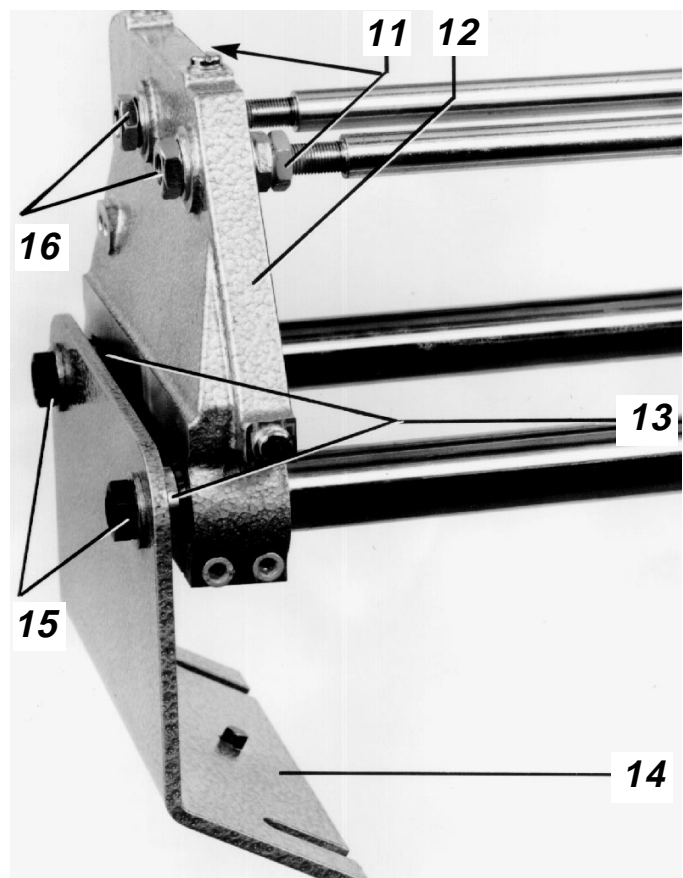
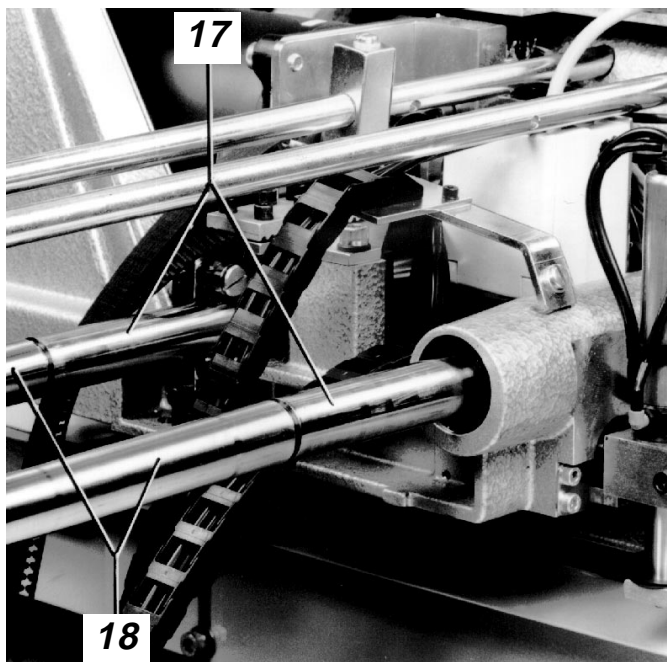
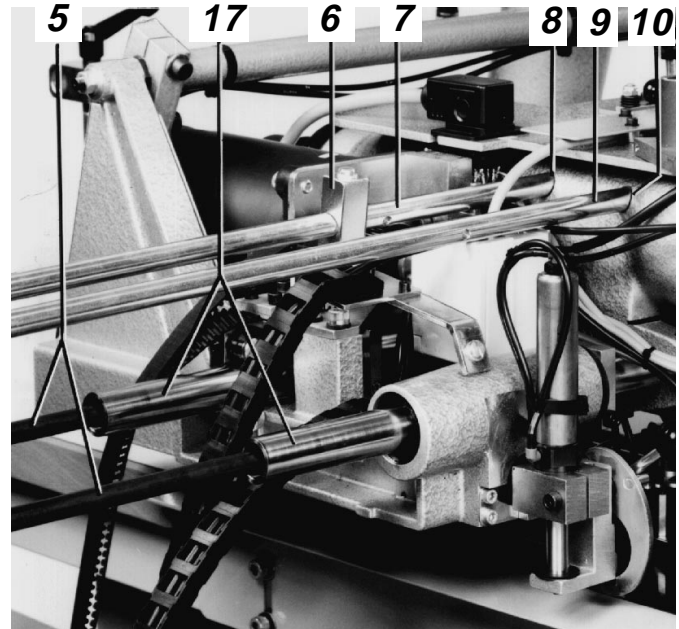


5. Attaching the Machine Parts removed for Shipping

For reasons of transport the sewing unit was dis-assembled to about half of its total length. The parts are to be re-attached in the following order:

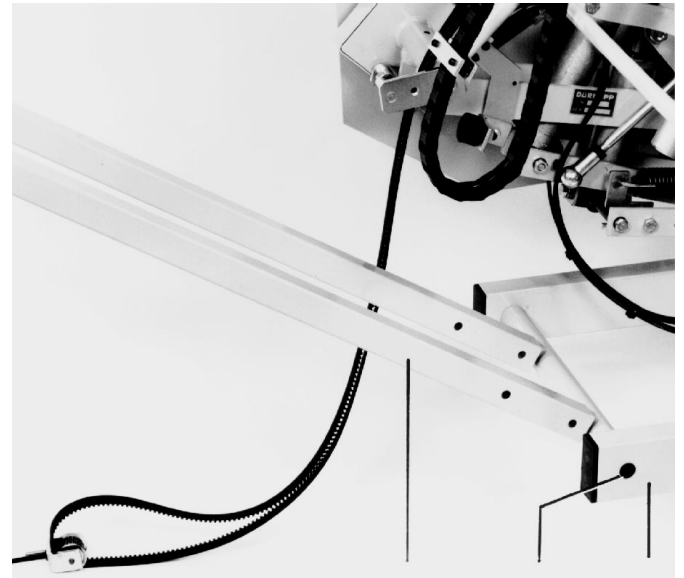
5.1 Left guide for the transport carriage

- Screw the red-marked right mounting rod 9 into the red-marked hole 10 on the machine arm. Screw the left mounting rod 7 into the hole 8 on the machine arm.
Prior to this the mounting for the protective plate must be affixed.
Attention! The position of the yellow sealed lock nuts 11 at the end of the rods must not be changed.
- Screw the black rods 5 into the pipe brackets 17.
- Push the guide pipes 18, held clamped in the cast part 12, onto the black rods. Then plug the guide pipes onto the pipe brackets 17.
- Plug the plate 14 on to the ends of the black rods 5. At the same time place the spacer washers 13 between the cast part 12 and the plate.
Tighten all parts with the black nuts 15 so that the guide pipes lie tightly on the pipe brackets.
- Tighten the support rods with the nuts 16.



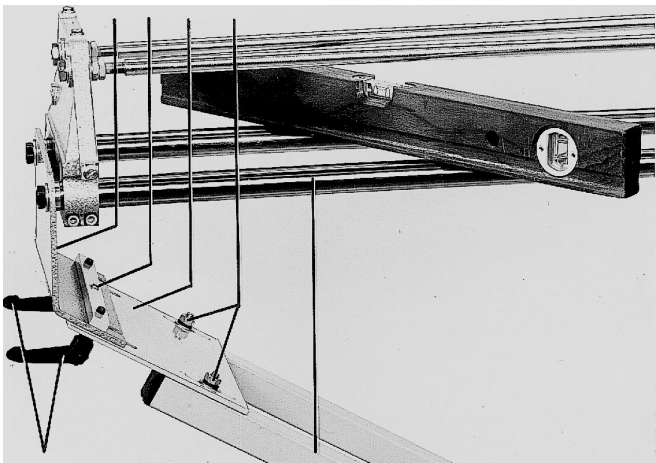


- Mount the support 1 between the spars 3 with the screws 2.
Swing the support 1 up. The hole in the support plate 6 must fit over the seating pin 5 located on the bottom of the angle 4.
Align the guide rods 8 horizontally in the longitudinal (direction of the carriage transport) as well as the transverse direction. Use a water level.
Tighten the clamp levers 9 and the nuts 7 in the appropriate position.
- Insert the belt tensioner 11 and tighten the self-locking nut 10 so that at the middle of the frame length S the timing belt can be shifted from its straight path under a test load of $F_v = 2500g$ so far that the upper half of the belt just barely touches the lower half of the belt under the test load. See sketch.
Testing can be conducted with a spring balance.
Unnecessary high tensioning reduces the life of the timing belt and causes running noise.
A too low tensioning can lead to the belt teeth not gripping properly in the sprocket teeth or that the belt jumps under load.



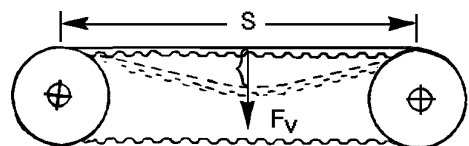
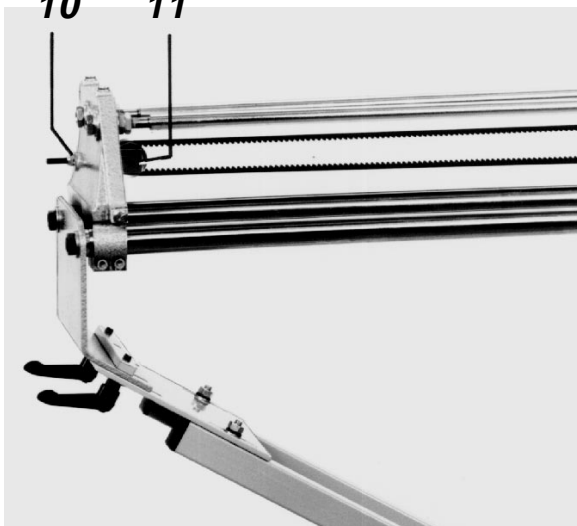
1 2 3

4 5 6 7



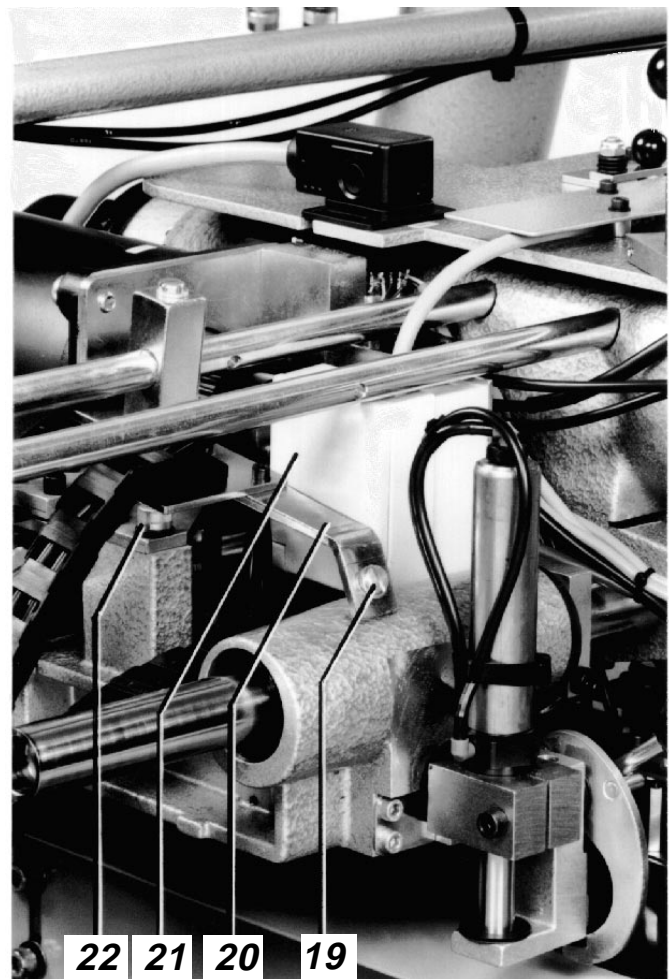
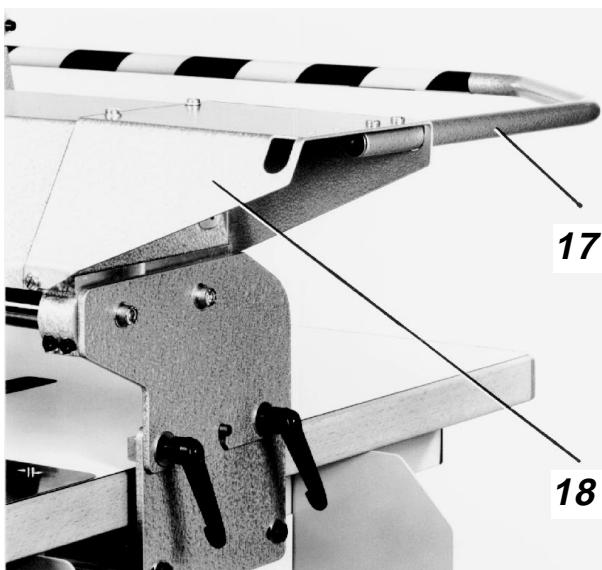
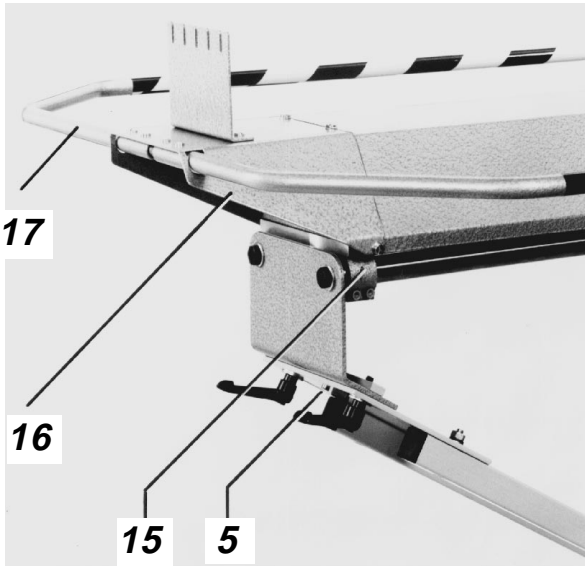
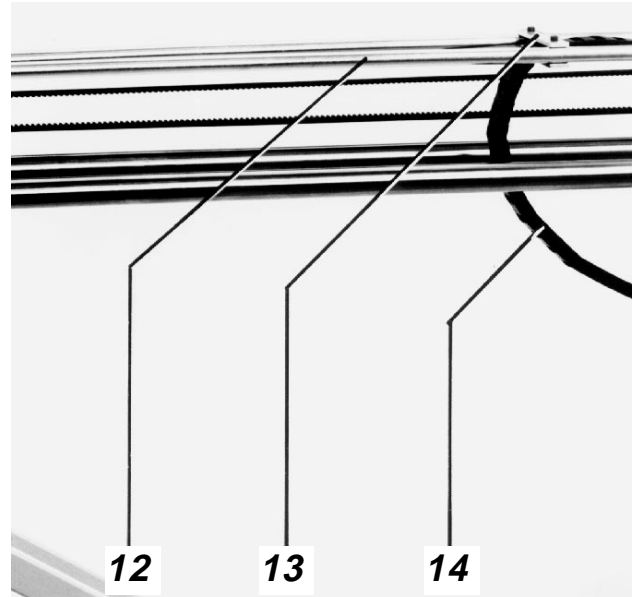
9 8

10 11





- Fasten the hose chain 14 to the mounting rods 12 with the brackets 13. When doing this let the hose chain hang through a bit so that there is enough lead length even with the transport carriage in its extreme right end position.
- Position the left half of the covering hood. Screw in four screws at the left on the cast part 15. At the same time position the left hood end piece 16 and fasten. Align the right mounting 20 so that the safety hood can be fastened by the three screws 19. Take care that the opening of the lid for the socket 21 is unimpaired. Tighten the fastening screws 22 of the mounting 20. These can be reached from underneath.
- Attach the right hood end piece 18 and all of the safety bars 17 as shown in the illustration.





5.2 Control unit

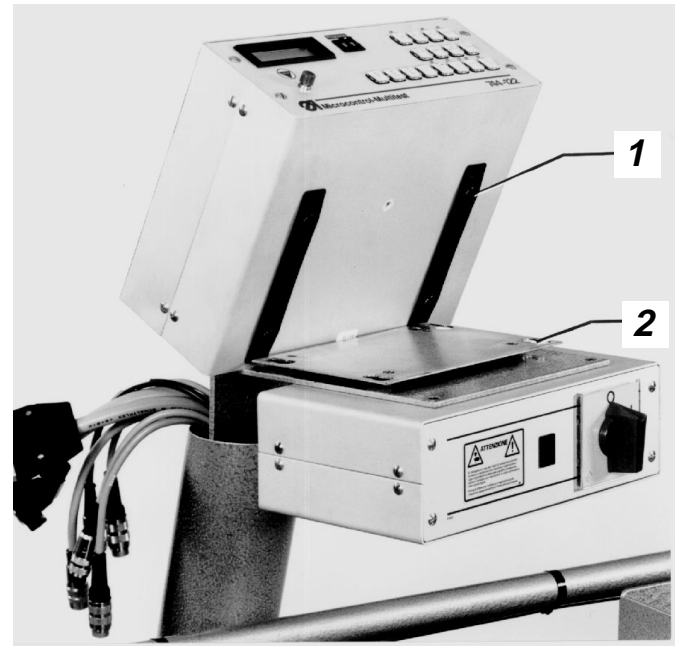
The control unit is equipped with the screws 1 and the locking plate 2 for quick attachment and removal.

Please note!

Carefully insert the plugs into the back of the control unit. In as far as these are present, match the markings on the cables to those on the back of the unit.

Also note that the plugs are variously equipped with contact pins and sockets. Take care as to their arrangement and number when making connections.

Tighten the plug screws.

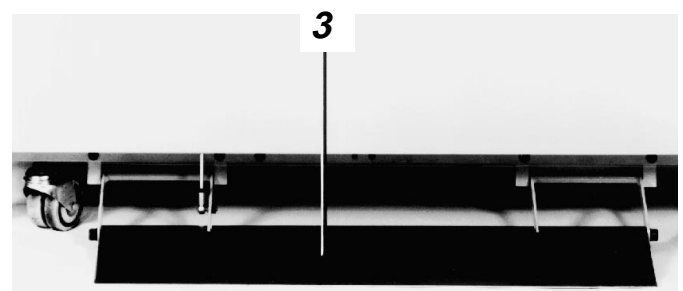
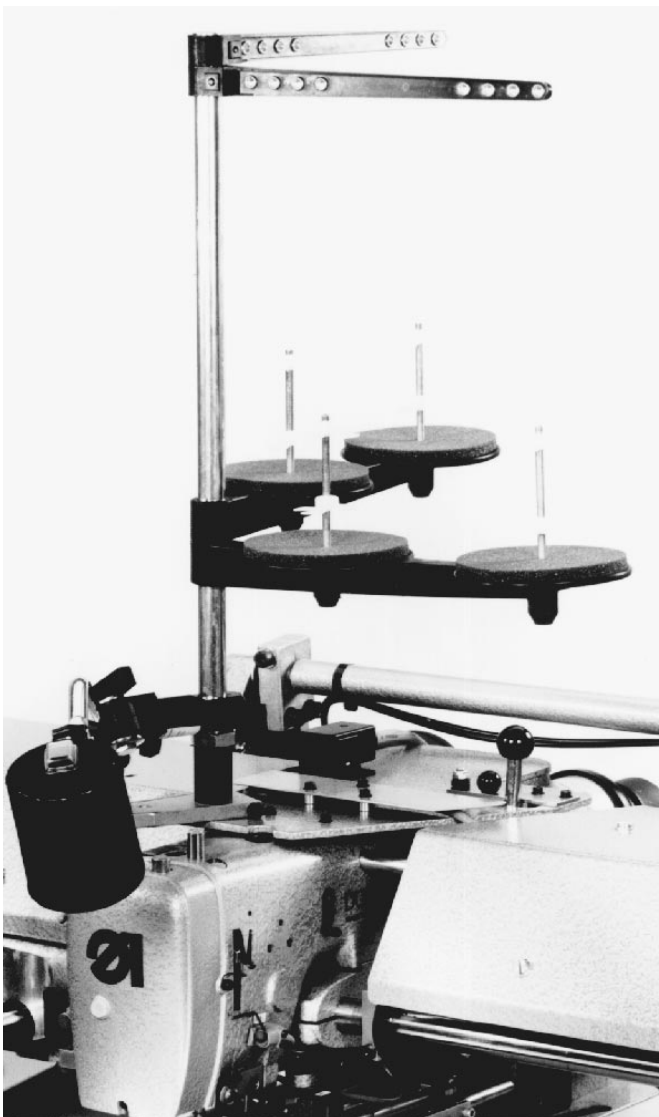


5.3 Thread stand

As shown in the illustration screw in the thread stand rod and lock in place. Attach the thread spool holder, the unwinder arm and, if required, the clamp piston.

5.4 Step plate on the pedal

Hang in the step plate 3 as shown in the illustration.





6. Connection to the compressed air supply

For a fault-free operation of the pneumatic controls observance of the following instructions and a supply of water-free, lubricated compressed air is essential.

Operating Pressure and Air Consumption

Operating pressure = 6 bar
Air consumption of the sewing unit

approx. 9,0 NI¹⁾ per work cycle
approx. 60 NI per minute

¹⁾ NI = air quantity by normal atmospheric pressure



At the time of maximum air consumption a minimum pressure below 5 bar is not allowable.

Therefore the indicator on the pressure gauge 2 must be checked when the sewing unit is in operation.

If the compressed air pressure drop is too great then a higher compressor output and compressed air lines with greater diameters are to be used.

Behind the filter 5 cleaned compressed air is released for use as blower air for cleaning machine parts and blowing out sewing pieces. Oil particles remaining in the blower air lead to malfunctions and soiling of the sewing pieces.

Set the operating pressure of 6 bar by turning the setting wheel 1 on the pressure regulator.

Turn to the left = Pressure reduction
Turn to the right = Pressure increase

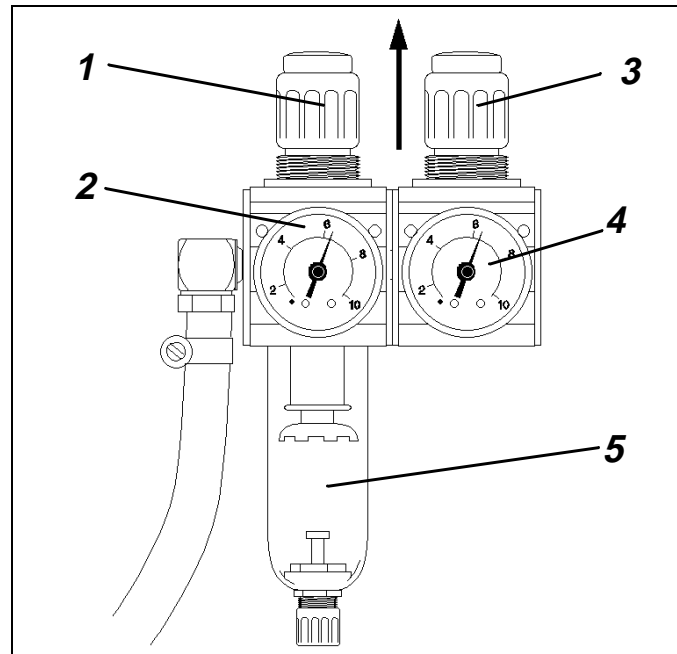
Seating Pressure of the Material Guide Rail

Depending on the material to be sewn the seating pressure for the material guide rail should be set between 2 and 3 bar with the pressure regulator 3. The adjustable pressure can be seen at the manometer 4.

Connecting the Maintenance Unit

Customer-supplied material is used for the connection to the compressed air lines.

Connection accessories, order no. 0797 003031, can be supplied on request.





7. Connection to the electrical mains supply and checking the direction of rotation



Work on the electrical components of this sewing unit should only be conducted by authorized personnel and with the mains plug pulled.
The mains voltage and the nominal voltage (operating voltage) must be identical.

The plate specifying the nominal voltage can be found at the front on the spar under the table top.

Before starting the unit observe the specified nominal voltage!
For operation with other mains voltages the information in the enclosed construction circuit diagram 9870 744001 B is to be noted and the appropriate connection alterations made.
Also see 1.2 Technical Specification.



Danger of breakage due to wrong direction of rotation!

It is essential that the direction of rotation be checked before operation as follows:

- Move the machine head out of its upper needle position by turning the handwheel.
- Insert plug into mains socket.
- Switch on main switch while observing the handwheel.
- The handwheel must move in the indicated machine rotation direction to the 2nd needle position (needle high position).
By wrong needle position see Section 6 of the Service instructions.



8. Starting operation

After each switching on of the main switch the display <-----> appears.

After operating the key on the control unit a reference run is made which defines the exact initial position of the transport carriage.

Then the display shows the last program status entered into the control unit.

Switching the individual steps of the feed procedure and the sewing start occurs by tapping the pedal.

When starting sewing material must lie under the material guide rail.
Transport without material damages the coating of the material guide rail.

Sewing program and feed procedure are to be set according to work procedure used.
See the enclosed operating card and Section 4.5 of the Microcontrol summary in the annex to the instructions.