For the professional user

Operating Instructions

Für den professionellen Anwender

Betriebsanleitung

Class:	**VEB100-2**	**Ausf. 5**
Klasse:	**VEB100-4**	**Ausf. 3**
	VEB100-5	**Ausf. 3**
Model:		
Ausführung:		
Dated:		
Stand:		

STROBEL
Spezialmaschinen GmbH

The sign of quality

You find the Strobel trademark on every Strobel machine leaving our works. And with good reason. This symbol is a guarantee of the high quality of our products. Quality which creates trust – trust in our technology, our service and, not least of all, in our good name.

Im Zeichen der Qualität

Sie finden die Strobel-Schutzmarke auf jeder Strobel-Maschine, die unser Werk verlässt. Und das aus gutem Grund. Denn dieses Zeichen garantiert Ihnen die hohe Qualität unserer Produkte. Qualität, die Vertrauen schafft – in unsere Technik, unseren Service und nicht zuletzt in unseren guten Namen.

A decision with future

Strobel clients know that they can expect a particularly high standard of performance from our company and our machines. Now you have settled for one of our products. For us this is a source of encouragement and of obligation to Justify your trust.

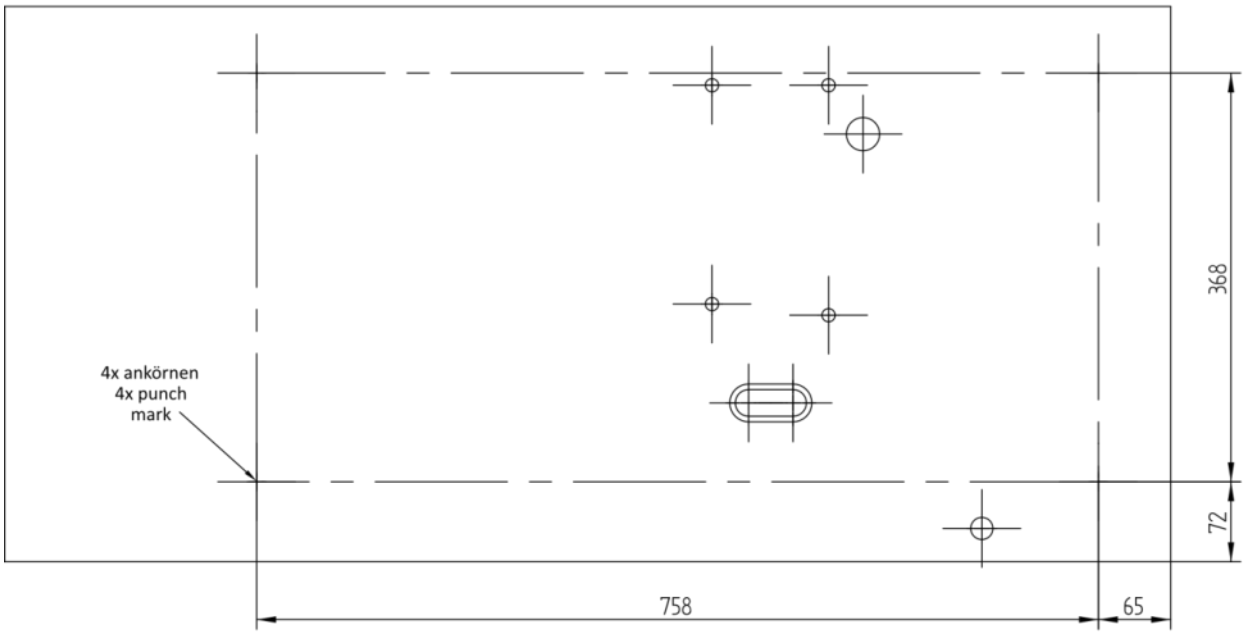
If you wish to profit from the performance and efficiency of your Strobel machine as long as possible, exact handling and thorough care is necessary. For this reason we kindly request that you read the operating instructions closely.
It provides all the information you need for trouble free operation.

And if you do happen to need a spare part the enclosed spare parts list gives a complete overview. It is clearly classified according to components so that you can find the required part quickly and easily. In order to avoid errors we request you to quote machine class, machine number and part number completely on your spare part order.

We wish you lots of success in your work with your new Strobel machine.

STROBEL
Spezialmaschinen GmbH

Unterseite/underside



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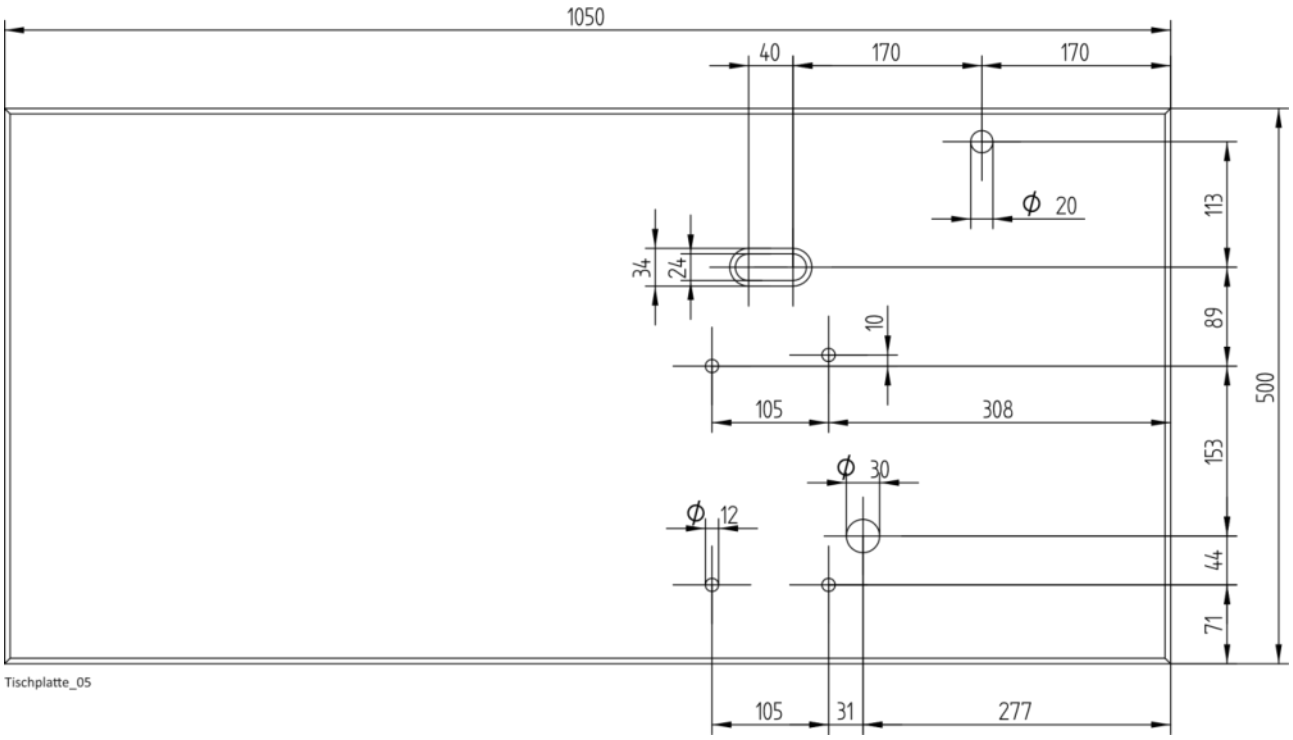

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STROBEL

Operating instructions
VEB100-2, -4, -5

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Subject to change without prior notice

1 General notes on safety

Manuals and additional information can be found on the STROBEL website at:

http://www.strobel.biz

Every person in charge of setting up, operating, servicing and repairing the machine must first read and understand the operating instructions and particularly the safety instructions before starting up the machine.

Failure to comply with the following safety instructions can lead to physical injuries or damage to the machine.

1. The machine must only be operated by persons familiar with the relevant operating instructions and who have been instructed accordingly.
2. Before commissioning also read the notes on safety and the operating instructions of the sewing drive manufacturer.
3. Only use the machine in the intended manner and never without the provided guards. Always observe the pertinent safety regulations.
4. Switch off the main switch or pull the power plug for threading, changing the bobbin, exchanging sewing tools such as needle, hook, stitch plate, transport devices, trimming knive and cutting block, for cleaning and when leaving the workplace as well as for maintenance.
5. General maintenance tasks may be carried out only by properly trained persons in accordance with the operating instructions.
6. Repair work, retrofitting and maintenance may be carried out only by technicians or specially trained personnel.
7. When servicing or repairing pneumatic equipment, the machine must be disconnected from the pneumatic supply. Exceptions are only allowed for adjustment work and tests of functionality performed by specially trained technicians.
8. Only specially qualified technicians may work on the electrical equipment.
9. It is forbidden to work on electrically live components! Exemptions are covered by the EN50110 (DIN VDE0105) regulations.
10. Any retrofitting or alterations to the machine may only be performed under strict compliance with all pertinent safety regulations.
11. Only use our approved spare parts when servicing and/or repairing the machine.
12. It is forbidden to operate the sewing head until it is determined that the entire sewing unit complies with EU provisions.

13. It is essential that you observe and follow these instructions as well as the generally valid safety regulations.

14. Warning instructions given in the operating instructions that pertain to especially dangerous parts of the machine must be indicated at these positions using a safety symbol.

Warning instructions given in the operating instructions that pertain to special injury hazards for operating personnel or technicians must be indicated at these positions using a safety symbol.

2 General notes

2.1 Operating instructions

Every person in charge of setting up, operating, servicing and repairing the machine must first read and understand the operating instructions and particularly the safety instructions before starting up the machine.

2.2 Class description, serial number and initial basis for description

For side-referenced descriptions, the operating side of the machine is the starting base.

The class descriptions (type), the serial and model number (after the hyphen) can be found on the rating plate on the back of the machine.

2.3 Range of application and intended use

Class VEB100-2 are universal hemming machines for thin and medium weight material with cross seams.

Class VEB100-4 serves specifically for uniform, delicate rolling and sewing of the edges on silk scarves, pochettes, etc. made of thinnest, thin and medium fabrics.
The roll seam width can be varied by exchanging the seamer size.

Class VEB100-5 is suitable for attaching the folded side back and centre back seams of half-lined sack coats. 6 different folder sizes are available.

Exchanging the variable sewing tools, i.e., can extend the range of applications of the different machines that other fabric qualities than the above mentioned ones could be sewn as well.

Variable sewing tools please see point 8.

2.4 Power supply

2.4.1 General notes

C A U T I O N !

Work on the sewing machine's electrical equipment or sewing drive may only be done by electricians!

There is the **D A N G E R** of a fatal electrical shock.

When working on the electrical equipment, the machine with the S1 power switch has to be switched off and the power plug pulled out!

The operating instructions (including safety instructions) of the sewing machine and sewing drive must be observed!

2.5 Function sequence, machine class and operating concept

2.5.1 General function sequence

The DAC Classic control contains the suitable function sequence for almost all VEB machine classes.

The exact function sequence for a machine class is determined at the control by the function sequence (basic function sequence and machine selection), the function parameters and the switchable functions. The control is optimally control-technically adapted to the respective machine class by correct settings.

On delivery, all function parameters and functions are already set correctly.

2.6 Technical data of machines

2.6.1 Class VEB100-2

	Empfohlene Nennstichzahl / Recommended rated speed	1800 min-1
	Stichlänge / stitch length	3,0 - 7,0 mm (abhängig vom Nähmaterial / depend on fabric) Auslieferzustand / delivery condition 7,0 mm
	Obertransport / top feed	Pyramidenverzahnung / pyramid thoothing Sägeverzahnung / saw thoothing optional
	gefederter Drücker / spring loaded plunger	Drückervariation optional / plunger variation optional
	Stichplattenöffnung / stitch plate opening	6,0 mm 4,5 mm optional
	Stichtiefenanzeige / stitch depth display	digital display optional
	Intervall mit Stichtiefenregulierung / skip stitch with depth regulation	1:2
	Nadelsystem / needle system Nadelstärke / needle size	GROZ-BECKERT 1669 EEO 80/12
	Fadenabschneider / thread trimmer	optional
	Fadenspannung / thread tension Faden / thread	Auslieferzustand / delivery condition 20 cN Polyester, endlos gezwirnt / polyester continuous filament 120/2
	Freiarm / support arm	Durchmesser / diameter 55 mm
	Durchgangsraum / arm space	150 mm
	Abschwenkbare Arbeitsplatte / swing away workplate	
	LED Leuchte / LED sewing lamp	

Technischer Auslieferzustand / delivery condition:	
Riemenscheibendurchmesser Maschine/ machine pulley diameter	dw 80 mm
Motor-Leistung min. / min. motor power	500 W
Keilriemen-Profil / V-belt profile	10 x 6 mm
Zahnriemenscheibe Maschine / toothed belt pulley/machine	Z = 38
Zahnriemenprofil / toothed belt profile	HTD 5M-9
Stichart / stitch type	Einfaden-Kettenstich-Blindstich Typ 103 / single thread chain stitch type103
Anschluss pneumatisch / pneumatic connection	6 bar
Luftverbrauch, Mittelwert / avarage air consumption	abhängig von der Ausstattung / depending on the equipement
Stellfläche / foot print	0,5 m x 1,1 m
Arbeitsgeräusch / operating noise at 2200 min-1 nach DIN 45635-48-1 KL3	LpAm 71 dB(A)

2.6.2 Class VEB100-4

	Empfohlene Nennstichzahl / Recommended rated speed	1800 min-1
	Stichlänge / stitch length	3,0 - 7,0 mm (abhängig vom Nähmaterial / depend on fabric) Auslieferzustand / delivery condition 3,0 mm
	Obertransport / top feed	Sägeverzahnung / saw thoothing optional
	starrer Drücker / fixed plunger	
	Stichplattenöffnung / stitch plate opening	4,5 mm
	Stichtiefenanzeige / stitch depth display	digital display optional
	Intervall mit Stichtiefenregulierung / skip stitch with depth regulation	1:2
	Nadelsystem / needle system Nadelstärke / needle size	GROZ-BECKERT 1669 EEO 70/10
	Fadenabschneider / thread trimmer	optional
	Fadenspannung / thread tension Faden / thread	Auslieferzustand / delivery condition 25 cN Polyester, endlos gezwirnt / polyester continuous filament 200/2
	Freiarm / support arm	Durchmesser / diameter 55 mm
	Durchgangsraum / arm space	150 mm
	Rollsäumer / roll hemmer	No. 1 leichte - mittlere Stoffe / light - medium fabrics andere Säumer auf Anfrage / different folders on request
	LED Leuchte / LED sewing lamp	

Technischer Auslieferzustand / delivery condition:	
Riemenscheibendurchmesser Maschine/ machine pulley diameter	dw 80 mm
Motor-Leistung min. / min. motor power	500 W
Keilriemen-Profil / V-belt profile	10 x 6 mm
Zahnriemenscheibe Maschine / toothed belt pulley/machine	Z = 38
Zahnriemenprofil / toothed belt profile	HTD 5M-9
Stichart / stitch type	Einfaden-Kettenstich-Blindstich Typ 103 / single thread chain stitch type 103
Anschluss pneumatisch / pneumatic connection	6 bar
Luftverbrauch, Mittelwert / avarage air consumption	abhängig von der Ausstattung / depending on the equipement
Stellfläche / foot print	0,5 m x 1,1 m
Arbeitsgeräusch / operating noise at 1800 min-1 nach DIN 45635-48-1 KL3	LpAm 70 dB(A)

2.6.3 Class VEB100-5

	Empfohlene Nennstichzahl / Recommended rated speed	1800 min-1
	Stichlänge / stitch length	3,0 - 7,0 mm (abhängig vom Nähmaterial / depend on fabric) Auslieferzustand / delivery condition 6,0 mm
	Obertransport / top feed	Pyramidenverzahnung / pyramid thoothing
	starrer Drücker / fixed plunger	
	Stichplattenöffnung / stitch plate opening	7,0 mm
	Stichtiefenanzeige / stitch depth display	digital display optional
	Nadelsystem / needle system Nadelstärke / needle size	GROZ-BECKERT 1669 EEO 80/12
	Fadenabschneider / thread trimmer	optional
	Fadenspannung / thread tension Faden / thread	Auslieferzustand / delivery condition 40 cN Polyester, endlos gezwirnt / polyester continuous filament 120/2
	Freiarm / support arm	Durchmesser / diameter 55 mm
	Durchgangsraum / arm space	150 mm
	Abschwenkbare Arbeitsplatte / swing away workplate	
	Säumer / hemmer standard dünne Stoffe / thin fabrics andere Säumer auf Anfrage / different folders on request	Saumbreite / hem width 6 mm
	LED Leuchte / LED sewing lamp	

Technischer Auslieferzustand / delivery condition:	
Riemenscheibendurchmesser Maschine/ machine pulley diameter	dw 80 mm
Motor-Leistung min. / min. motor power	500 W
Keilriemen-Profil / V-belt profile	10 x 6 mm
Zahnriemenscheibe Maschine / toothed belt pulley/machine	Z = 38
Zahnriemenprofil / toothed belt profile	HTD 5M-9
Stichart / stitch type	Einfaden-Kettenstich-Blindstich Typ 103 / single thread chain stitch type 103
Anschluss pneumatisch / pneumatic connection	6 bar
Luftverbrauch, Mittelwert / avarage air consumption	abhängig von der Ausstattung / depending on the equipement
Stellfläche / foot print	0,5 m x 1,1 m
Arbeitsgeräusch / operating noise at 1800 min-1 nach DIN 45635-48-1 KL3	LpAm 70 dB(A)

3 Setup and installation

3.1 Unpacking the machine

Strobel machines are delivered either complete or as a machine head with sewing drive.

Reel stand, rods and other accessories are packed into the packing.

Make sure that all accessories have been unpacked before throwing away any packing material.

3.2 Setting up the machine

C A U T I O N ! Danger of injury!

Entanglement hazard for clothing or hair and **Danger** of finger injuries!

Never operate the machine without the belt guards for the upper part and Sewing drive.

If the machine head is supplied without stand first make the borings into the table top as shown in the drawing. Mount rods and treadles and electric connections according to the connecting diagram.

The upper component must be fastened to the provided rubber plate on the table top.

Mount the lifting and sewing drive operating rods.

Using a compact motor means to assemble the control box and speed controller under the table. Also the operating rod between speed controller and pedal has to be connected.

After assembling the single parts of the reel stand mount it to the right hand side of the tabletop.

Make sure that all screws on the stand are tight and retighten them, if necessary.

A T T E N T I O N !

Before starting the machine, check that the electrical specifications given on the type plate of the Sewing drive, particular grid voltage and frequency, are appropriate for your electric system.

A T T E N T I O N !

The maintenance instructions according to the operating instructions must be followed!

3.3 Direction of rotation on machine

When facing the handwheel (7) Fig. 4, turn it in a clockwise direction.

3.4 Motor drive using tooth belts

3.4.1 Tension of toothed belt (Fig. 1)

C A U T I O N ! Danger of injury!

Switch off the machine at the mains when checking the belt tension. Do not operate the machine without belt guard. Otherwise DANGER of crushing fingers, of injuries to the body or of pulling in of part of clothing.

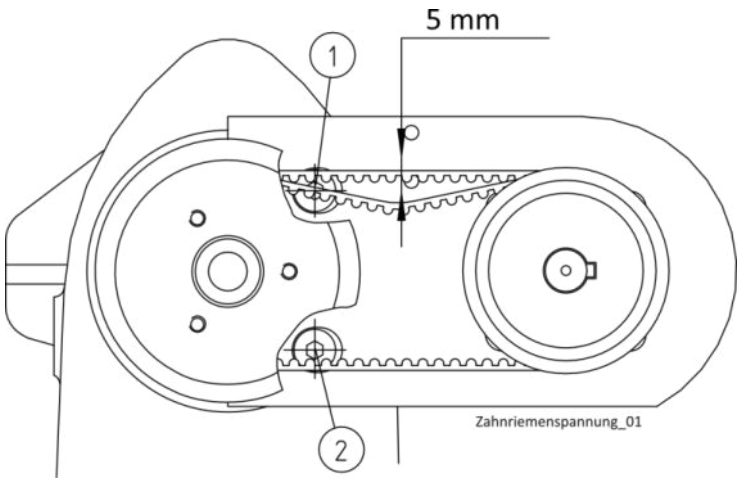
The toothed belt should not be tensioned too much. You should be able to push through it with light thumb pressure by about 5 mm.

Too little or too tight toothed belt tensioning can impair the positioning of the machine and therefore impair the function sequence.

Tensioning the toothed belt (Fig. 1):

- Release the upper and the bottom retaining screw (1), (2) at the upper part of the machine.
- Pull out the Sewing drive slightly and tighten the bottom retaining screw (2) slightly.
- Tension the toothed belt by swivelling the Sewing drive.
- Tighten the upper and the bottom retaining screw (1), (2) again.

Fig. 1



3.4.2 Machine positions

C A U T I O N ! Danger of injury!

Entanglement hazard for clothing or hair and **danger** of finger injuries and needle punctures! When checking the positions while the machine is turned on, keep your fingers and hands away from moving parts.

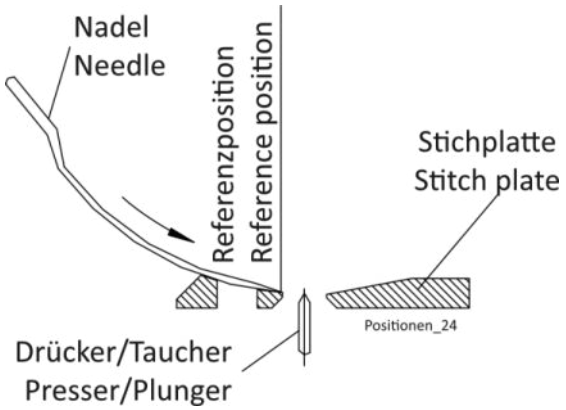
Machine with or without thread trimmer:

The machine needs a needle position and a reference position.

Reference position t 08 10:

The reference position must be set in such a way, that the point of the needle in direction of the insertion stitch closes with the right (inner) edge of the needle slide plate.

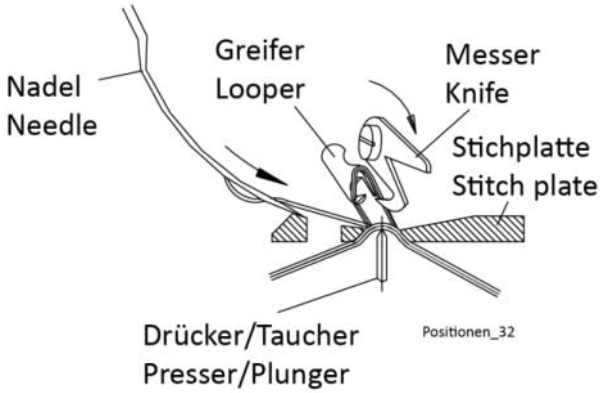
Fig. 2



Cutting position t 08 13 (Fig. 3):

The needle position must be set in such a way, that when the machine is stopped, the hook of the thread knife catches the thread loop lying over the looper securely without touching the looper.

Fig. 3



For the VEB machines we set t 08 12 to the same value as t 08 13/cutting position. This allows us to disregard the needle position after sewing stop key!
For Strobel, the key "needle position after sewing stop" must be switched on as soon as t 08 12 has a different value than t 08 13!

4 Notes on usage

4.1 Needles and threads

The sewing quality can be improved by using the most appropriate needles and threads for the goods to be produced.
Only use approved GROZ-BECKERT needle system 1669 EEO.

The machine is delivered with needles of size 70/10 (VEB100-4) and 80/12 (VEB100-2, -5).

NOTE: An intact needle is very important for ensuring good quality stitches. Bent needle tips, that may only be visible under a magnifying glass, will lead to poorer sewing results. Replace your needles in time!

We recommend using twined polyester tread of thickness 120/2 (VEB100-2, -5) and 200/2 (VEB100-4). Due to their high strength and good sliding behaviour at a small thread size, they are preferable to spun thread.

G u a r a n t e e n o t e !

This machine has been configured and broken in using **original GROZ-BECKERT needles**.

No guarantees can be given when the machine is readjusted for the use of different needles.

4.2 Inserting the needles

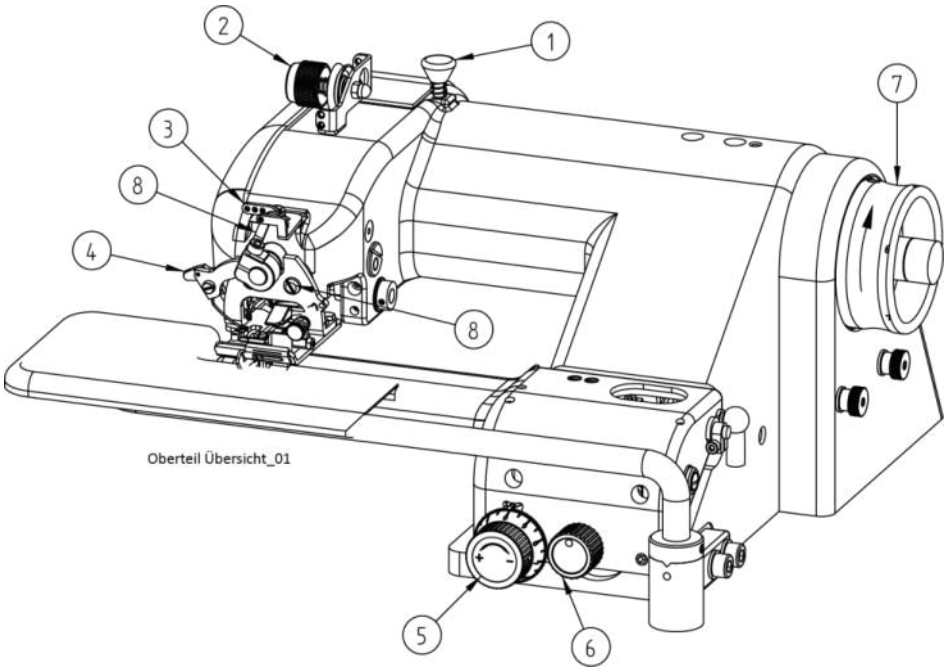
C A U T I O N ! Danger of injury!

Before replacing needles, switch off the machine and push down the Sewing drive switch pedal to ensure that the machine is truly switched off.

Otherwise there is a **danger of injury** from crushing and needle punctures.

The bent shape of the needles determines the position of the needle lever. Only ensure that the needle shank can be pushed into the groove of the needle lever until it stops and the needle clamping plate is tightly fastened using the screw ((for pos 4) Fig. 4).

Fig. 4



1	Adjusting the stitch length
2	Thread tension
3	Thread guide
4	Needle lever
5	Adjusting the stitch depth
6	Adjusting interval
7	Handwheel
8	Thread take-up lever

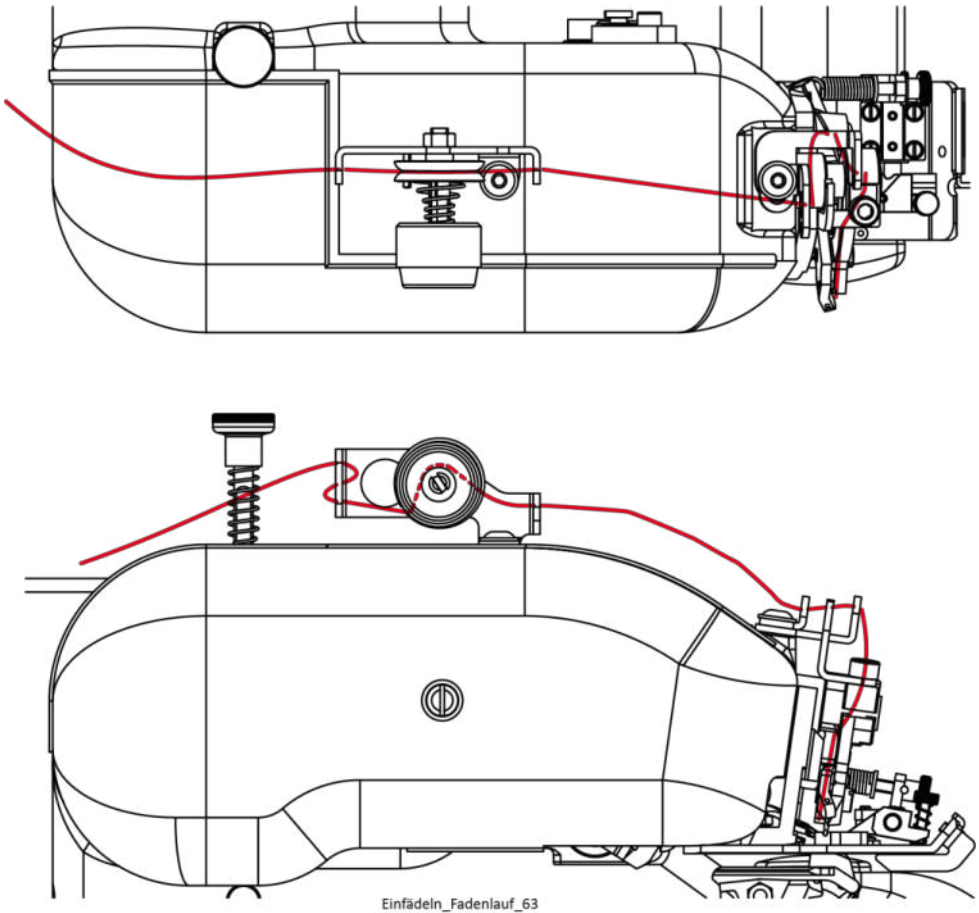
4.3 Threading and thread insertion

C A U T I O N ! Danger of injury!

Before threading, switch off the machine and push down the Sewing drive switch pedal to ensure that the machine is truly switched off.

Fig. 5 indicates the correct threading using the thread take-up device

Fig. 5



4.4 Thread tension

Depending on the quality, configuration and thickness of the thread as well as the sewing material, the thread tension is set using the knurled nut ((2) Fig. 4) until the desired seam shape is created.

4.5 Thread take-up lever

The thread take-up lever (8) shown in Fig. 4 prevents the thread from twisting and the loop from collapsing. It also ensures that the loop is properly caught by the looper and needle.
The seam shape becomes homogeneous and the edge of the hem free of tension.
The behaviour of the thread take-up lever is affected by the thread movement (choice of eye) and thread tension.

4.6 Stitch depth control

The stitch depth controller makes it possible to adjust the distance between the upper edge of the plunger and the needle radius so that the plunger is lifted or lowered, depending on the thickness of the material to be sewed. This determines how deep the needle can penetrate into the layer of material between the plunger and cloth retainer. This value is referred to as the stitch depth.

4.6.1 Adjusting the stitch depth

The stitch depth is set using the control button ((5) Fig. 4) and is located on the front side of the machine.

⇨ Turn the control button to the left (+) to create a deeper stitch.

⇨ Turn the control button to the right (-) to create less stitch depth.

4.7 Cloth retainer (Fig. 6)

C A U T I O N ! Danger of injury!

When making adjustments in the stitch plate area, there is an **danger of injury** for fingers due to accidental actuation of the pedals!

The stitch plate is equipped with a cloth retainer. This retainer holds the sewing material against the plunger to allow needles to insert stitches.

The cloth retainer must be set so that the sewing material cannot move as the needle inserts stitches.

The correct positioning is important for the quality of the stitch! The pressure of the cloth retainer against the layers of material or seam edge can be varied by turning the screw ((1) Fig. 6a). This should be kept as small as possible to prevent the material from developing tension or becoming marked by the pressure between the plunger and cloth retainer. This is particularly important with delicate materials such as velvet.

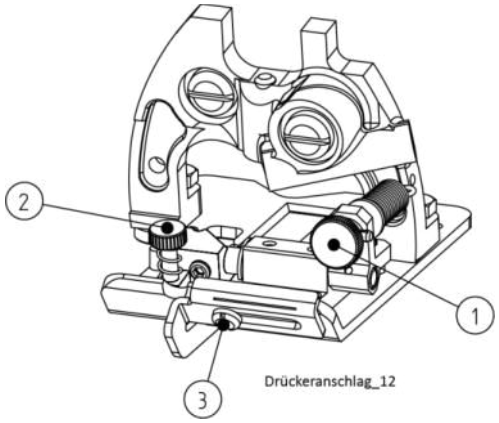
However, the pressure must still be sufficient to ensure that the sewing material cannot move during the needle insertion.

The cloth retainer in machines equipped with a spring-loaded plunger is combined with an adjusting screw which limits the cloth retainer's upwards stroke. This combination is called plunger limit stop. Plunger limit stop and the spring-loaded plunger prevent the needle from stitching through the material over cross seams and other thicker parts and avoid markings.

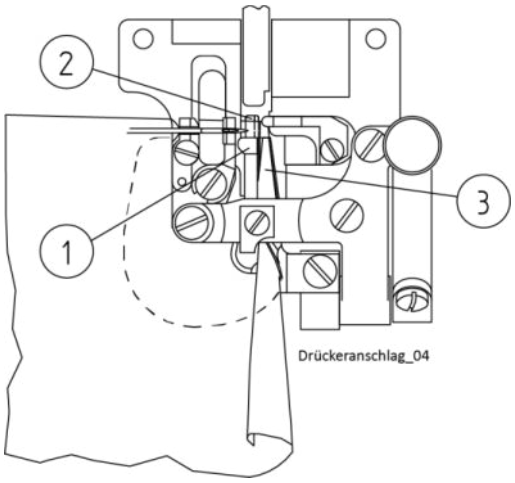
The Cl.VEB100-5 (Fig. 6c) has no real cloth retainer. During the time of needle penetration the material is hold between folder (1) and plunger (2).
The pressure of the folder on the fabric layers should be as low as possible to avoid any twist or marks.
This is of main importance for delicate fabrics such as e.g. velvet.
Adjustment by turning knurled nut (3), depending on the set stitch depth.
The folder should be set in a way that the fabric cannot move during needle penetration.
This setting is of great importance with regard to the sewing quality!
Correct folder setting please see “5.6.2 Sewing with folder“.

Fig. 6

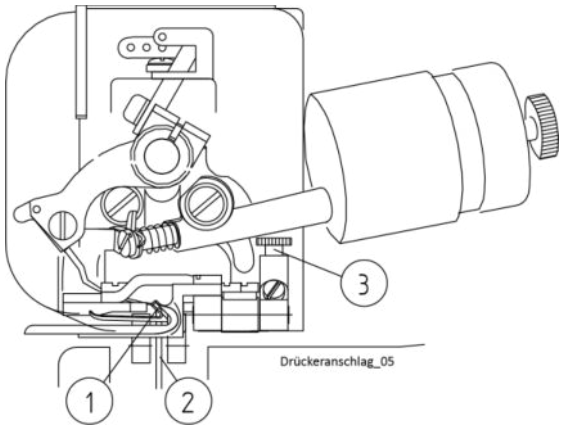
a Cl. VEB100-2



b Cl. VEB100-4



c Cl. VEB100-5



4.7.1 Setting the plunger limit stop for sewing over cross seams

The cloth retainer stroke is set by means of a knurled nut (2) Fig. 6a, which serves as upper limit stop. To set the stroke place the material (a normal fabric layer without cross seam). Close the cloth support arm and turn the hand wheel manually until the needle penetrates the fabric. In this position there should be nearly no space between cloth retainer and fabric layer. If the setting is correct the automatic plunger should be compensating the over cross seams, so that the needle does not penetrate the outer layer.

The pressure of the cloth retainer on the fabric layers or the hem edge can be adjusted through turning the knurled nut (1) Fig. 6a and Fig. 6b. The pressure should be as low as possible to avoid twist or marks resulting from the pressure between plunger and cloth retainer, mainly when sewing delicate fabrics as e.g. velvet. However, the pressure should be high enough to keep the material between plunger and cloth retainer during the time of needle penetration.

The setting of the plunger limit stop has a considerable influence on the stitch quality.

4.7.2 Setting the automatic plunger

The spring pressure of the automatic plunger is set at works and usually needs not to be altered. If the plunger limit stop is set correctly over cross seams the needle should not penetrate the outer fabric layers.
For plunger settings please refer to the mechanic's instructions.

4.7.3 Setting the cloth retainer Cl. VEB100-4

The Cl. VEB100-4 is equipped with an additional cloth retainer made of a spring plate (1), Fig. 6b, that holds the sewing material firm on the one-sided bevelled plunger (2) with the roll seam nozzle (3) for the piercing of the needle (Fig. 6b).

The pressure of the cloth retainer on the sewing material is specified by the shape of the cloth retainer plate.
The cloth retainer is screwed fast to the stitch plate and needs to be set so that the sewing material cannot be shifted while the needle pierces.

The correct setting has a significant influence on the quality of the stitch.

For correct setting of the seamer, refer to point “5.6.2 Sewing with folder".

4.8 Sewing material transport

The machine transports the sewing material using a rigid upper transport. The feed (stitch length) can be set from 3 - 7 mm in 4 steps. Serially, a pyramid-toothed (saw-toothed for Cl. VEB100-4) feed dog is mounted, which can be exchanged for a saw-toothed one (pyramid-toothed) if necessary. (see point „8 Variable sewing tools“).

4.8.1 Adjusting the stitch length

A T T E N T I O N !

Switch off the machine and push down the Sewing drive switch pedal to ensure that the machine is truly switched off

Press the stitch setting knob ((1) Fig. 4) and turn the handwheel until it simply snaps into place. Press down the setting knob and move the handwheel forwards until the desired stitch length noticeably snaps into place.

4.8.2 Adjusting the upper feed dog

The feed dog can be adjusted in its intrusion depth to the stitch plate by loosening the two fastening screws. If the stitch length is adjusted across a greater range e.g., from 7 to 3, then the feed dog should be readjusted.

Adjustments might also be required when changing to sewing materials that are thicker or otherwise different in quality.

Here, observe the instructions given in the mechanic's manual.

4.9 Interval (Cl. VEB100-2, -4)

The machine is equipped with a shiftable interval 1:2.

The interval principle is based on recurrent lowering of the plunger to an exactly configured value (interval stitch depth).

When switched on, the outer layer of material is only stitched every second time. This usually makes it possible to create a marking-free, elastic seam in materials that are difficult to sew.

4.9.1 Activate and adjusting the interval

The interval stroke (= lowering of plunger) defines the stitch depth during the “interval stitch”.

To switch on the interval for a correctly configured stitch depth, screw in the control knob ((6) Fig. 4) until the required interval stroke is achieved.

More stroke means a less stitch depth and vice versa.

4.10 Sewing drive

General:

A DA432 sewing drive is available to drive the sewing machine.

Please note the instructions available online. There you find notes and the instructions for programming the control including the motor speed adjustments.

5 Operating the machine

It is recommended to equip the machine with a pneumatic lifting device to facilitate machine handling (please see “9.4 Pneumatic lifting”).

C A U T I O N ! Danger of injury!

Please observe the sewing area carefully during sewing.

Otherwise there is a **danger of injury** from crushing and needle punctures.

5.1 Switching on

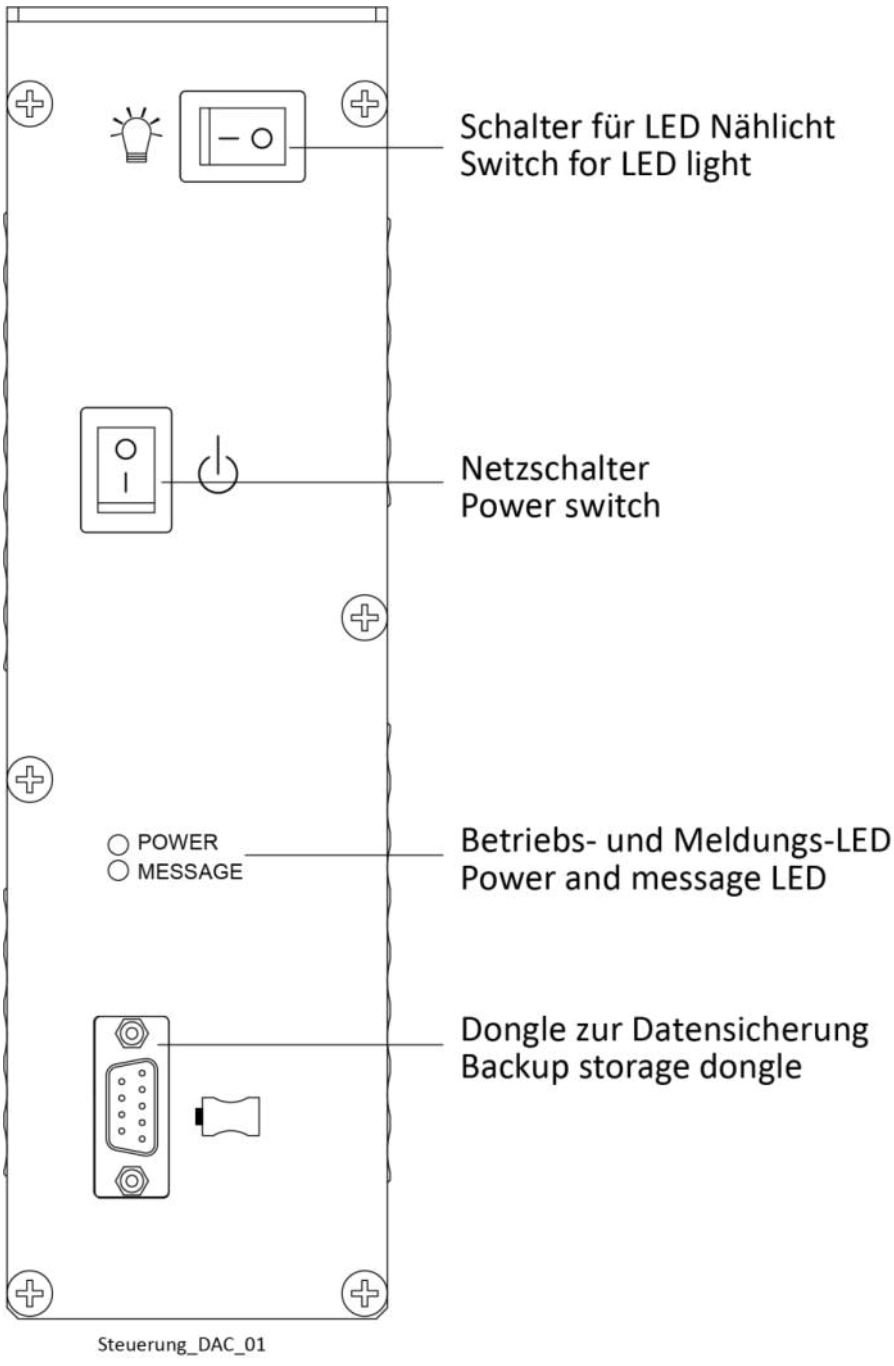
Connect the compressed-air conditioner to the compressed air supplier (max. 10 bar) or to the compressor and set it to 6 bars. Switch on main switch on the right hand side under the table top. Control lamp "POWER" is green.

5.2 Operating and function of the control

5.2.1 General

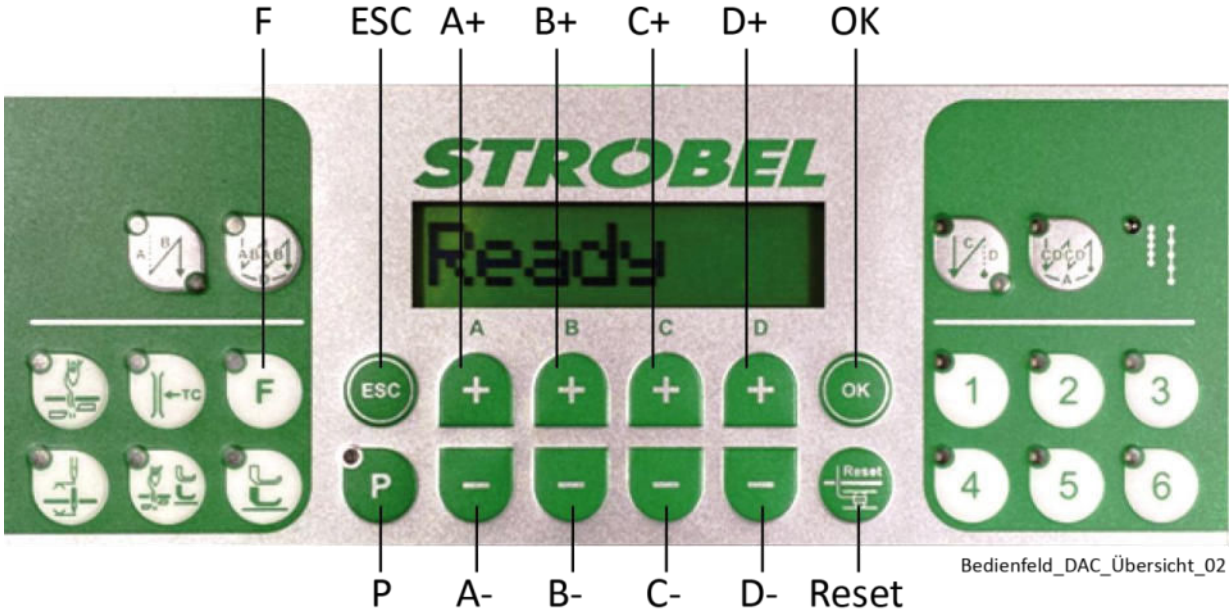
The control is switched on and off by the power switch, which is located on the right side of the machine, below the tabletop (Fig. 7).

Fig. 7



Assignment and display of button functions on operating control V810 (Fig. 8)

Fig. 8



F	Function key Activates or deactivates any stored function
ESC	Exits the setting mode
A+/-	Increase/reduce parameters Switches user level Selects sub-programme
B+/-	Increase/reduce parameters Switches to next higher category Selects sub-programme
C+/-	Increase/reduce parameters Selects sub-programme
D+/-	Increase/reduce parameters Selects sub-programme
OK	Recalls or saves parameters
P	Starts or ends the setting mode Saves the setting values
Reset	To enter the technician level, press the "P" and "Reset" keys simultaneously.

5.3 Placing and removing the fabric - sewing process

- **Knee lever lifting**

  Lift the cloth support arm by pressing the knee lever.
  Place the fabric under the stitch plate and release the pedal.
  Press the pedal to start sewing.
  When the pedal is depressed, the machine runs at the set maximum speed.

- **Pneumatic lifting (optional extra)**

  Fig. 11 shows the treadle's switching functions when the machine is equipped with pneumatic lifting. Place the fabric under the stitch plate while the cloth support arm is lifted and close the arm by slightly pressing the treadle (+1).

  The machine is now ready to sew.

  If the fabric is not placed correctly, the cloth support arm can be lifted again by heeling the treadle back into its initial position. At the end of the sewing process the thread trimmer (optional extra) is operated and the cloth support arm is lifted by heeling the treadle (-1).

5.4 Soft start and Sewing foot lifting

Soft start

Fig. 9

Light at no. 1 is on, soft start is active. Number of softstart stitches can be set with t 05 01.
2 stitches are the basic setting.
Light at no. 1 is off, softstart is deactivated.

Sewing foot lifting

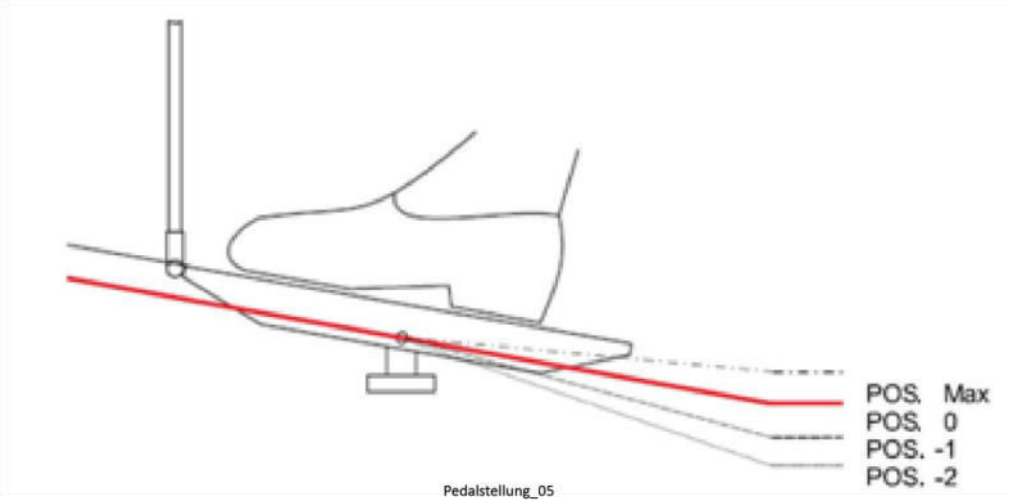
Fig. 10

Light is on, the fabric support arm remains open after the end of sewing and after releasing the pedal position -2.
Light is off, the fabric support arm closes after the end of sewing and as soon as the pedal position -2 is released.

5.5 Calibrate pedal

After mounting the setpoint adjuster, it is necessary to calibrate the pedal. In addition, a speed curve can be determined that influences the acceleration of the machine head. The speed curves refer to the set maximum speed, the minimum speed and the following pedal positions.

Fig. 11



To calibrate the pedal:

1. Call up parameter **t 08 20**.
2. Press the “OK“ button.
   The LED of the "P" button flashes. The display shows “**POS -2?**“
3. Press the pedal to position -2.
4. Confirm with the "OK" button. The display shows “**POS -1?**“
5. Press the pedal to position -1.
6. Confirm with the "OK" button. The display shows “**POS -0?**“
7. Press the pedal to position -0.
8. Confirm with the "OK" button. The display shows “**POS Max?**“
9. Press the pedal all the way forward.
10. Press the “OK“ button.
    The display jumps back to parameter **t 08 20**.

You can navigate to the next parameter to change the pedal levels.

5.5.1 Change pedal steps

You can use pedal steps to specify how quickly the maximum speed is reached. The fewer pedal steps you specify, the faster you reach the maximum speed.

To change the pedal levels:

1. Call up parameter **t 08 21**.
2. Press the “OK“ button.
   The LED of the "P" button flashes. The display shows the currently set number of pedal steps.
3. Press the "D+" or "D-" key repeatedly until the desired number appears on the display.
4. Confirm with the "OK" button.

You can navigate to the next parameter to change the speed curve.

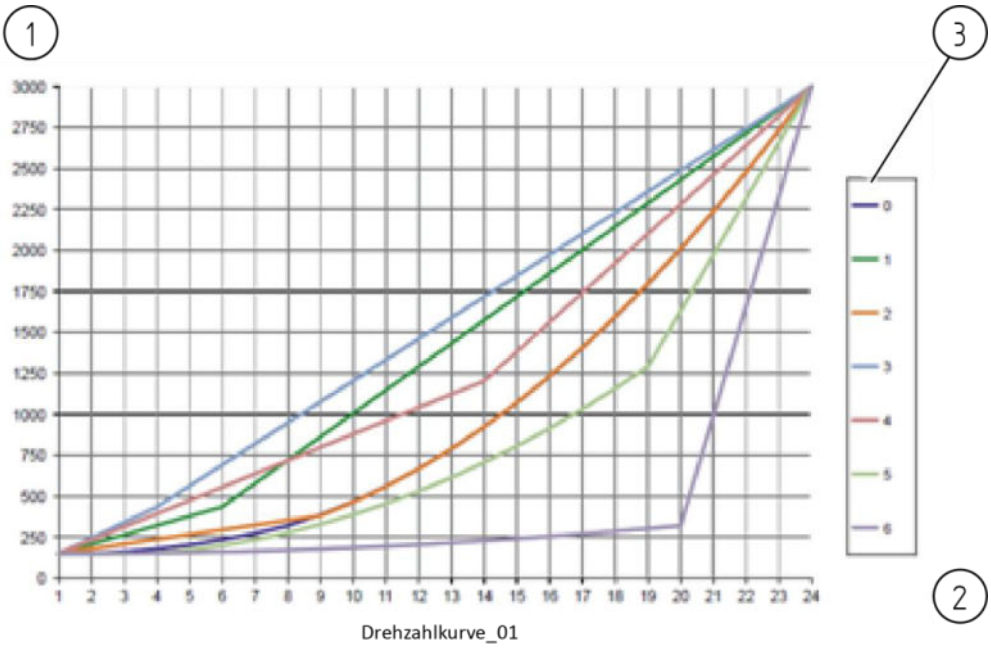
5.5.2 Change speed curve

To change the speed curve:

1. Call up parameter **t 08 22**.
2. Press the “OK“ button.
   The LED of the "P" button flashes. The display shows the value for the currently set speed curve. (Fig. 12)
   If the desired value does not appear:
   Press the "D+" key repeatedly until the desired value appears.
3. Confirm with the "OK" button.

If you do not want to make any further settings, exit the setting mode by pressing "ESC".

Fig. 12



(1) Speed (2) Pedal step (3) Speed curve

5.6 Sewing

The machines of the VEB series are mainly designed for blind stitch hemming. The special applications of the corresponding subclasses are described under “2.3 Range of application and intended use”.

The sewing result should be an elastic seam free of marks. Depending on fabric quality the sewing requires a certain skill. The following instructions will help the operator to obtain this skill.

5.6.1 Seams with blind stitches

In situations where no previous experience has been gathered, use sequence as below:

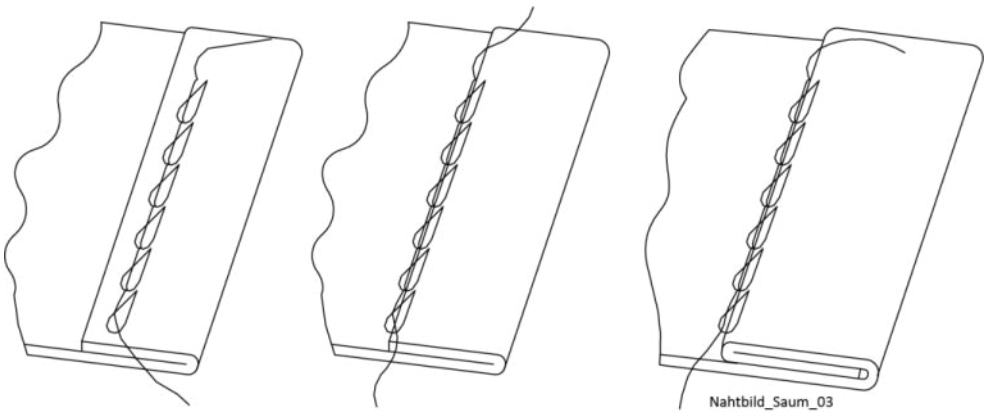
- Set the desired stitch length.
- Set the stitch depth.
- Check the cloth retainer pressure and adjust it if necessary.
- Adjust the plunger stop.
- Adjust the material guide as desired. To do this, loosen the screw (3) Fig. 6 and move the material guide to find the limit for the edge of the seam.
  Sewing can be performed along the edge or directly on the hem. For more, see Fig. 13
- Cl.VEB100-4, -5 check the folder setting and adjust it, if necessary.
- Check the stitch length; if necessary readjust the feed dog.
- Adjust the thread tension. As a rule, the seam should be loosely on the seam.
- If desired, switch on the interval and set the interval stroke according to the required thickness of sewing material.
- To correct the seam shape, thread in at a different spot if necessary.

To place in the sewing material and ensure that the start of the seam can be caught by the feed dog after the first stitch.
Press the pedal briefly. Sew the part and, if required, changes the previous settings until the desired sewing results are achieved. When stitching through the outer material, readjust the stitch depth control.

On extremely thin or hard sewing material, it may not be entirely possible to prevent “markings” caused by the penetration of needles into the outer material (filament displacement).

When sewing, ensure that the edge of the seam always runs along the material guide. Avoid sudden actuation of the pedal since the speed changes can have a negative effect on stitching during the sewing process.

Fig. 13



5.6.2 Sewing with folder

Folder (Cl.VEB100-5)

The machine is equipped with a special combination of stitch plate and folder to provide side and back parts of sack coats with a uniform book seam.
Folders with a width of 6, 8 and 10 mm (finished hem width after pressing) are available.

The standard machine is equipped with folder 286.0364, size 6x1 for thin to medium material.

Roll hemmer (Cl. VEB100-4)

The stitch plate is equipped with a special material guide (roll hemmer) that "rolls in" the sewing material at the edge during the running into the stitch plate.
The roll hemmers No. 0, 1, 2, roll diameter are available for thin medium, thick material and and the Special roll hemmer for sewing curves.

Serially, the standard roll hemmer 286.0428, size 1, has been mounted and set for medium sewing material.

5.6.2.1 Setting the folder

Folder (Cl.VEB100-5)

To re-adjust the folder, the angle of inclination can be adapted to the fabric thickness by means of knurled screw (1) (Fig. 14a and Fig. 15a). The folder should be placed downwards until one fabric layer is nearly jammed between the lower side of the folder and the plunger (Fig. 14).

The folder can be set horizontally after loosening screw (4) (Fig. 15a). This adjustment becomes necessary when a folder is replaced by another one or if the seam appearance has to be modified.
According to the adjustment the seam can either be placed on the hem edge (Fig. 16a) or under the hem edge (Fig. 16b).
Being the thread tension set correctly the overseam should be half as wide as the hem (Fig. 16c).

After re-adjustment of the horizontal folder setting the inclination angle of the folder has also to be re-adjusted as described above.
If a fine adjustment by means of the knurled screw is not possible any more, a coarse setting after loosening screw (2) (Fig. 15a) is necessary. Then the shaft has to be clamped again without any lateral play. If necessary, after releasing three screws (3) (Fig. 15a) the complete bench with folder can be slightly displaced on the stitch plate.

Roll hemmer (Cl. VEB100-4)

Using the knurled screw (1) (Fig. 14b and Fig. 15b), the tilt angle of the roll hemmer towards the plunger can be set.
This influences the seam diagram (zigzag stitch). The needle can pierce the roll more or less deeply.
This setting is the most important control together with the stitch depth regulation during roll seaming.

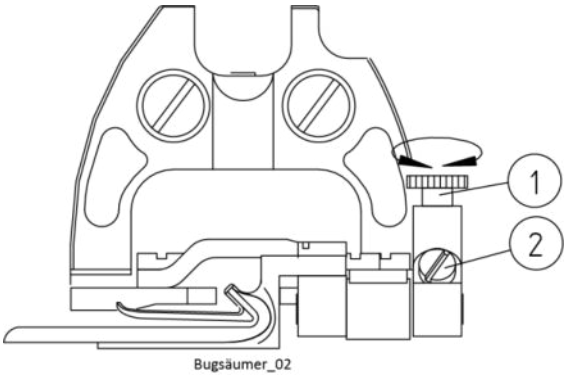
The horizontal setting is done after loosening the screw (4) Fig. 15b. This is necessary when the seamer is exchanged for a different one, or if the seam diagram should be changed.

If the horizontal setting of the seamer was changed, the seamer tilt angle needs to be corrected again afterwards as described above.

If the range for the knurled screw is exhausted, then the rough setting can be redone after loosening the screw (2) (Fig. 14b and Fig. 15b. Afterwards, the axle needs to be clamped again without lateral play. If necessary, the entire bearing block with hemmer can be slightly adjusted on the stitch plate after loosening the 3 screws (3) Fig. 15b.

Fig. 14

a
Cl. VEB100-5



b
Cl. VEB100-4

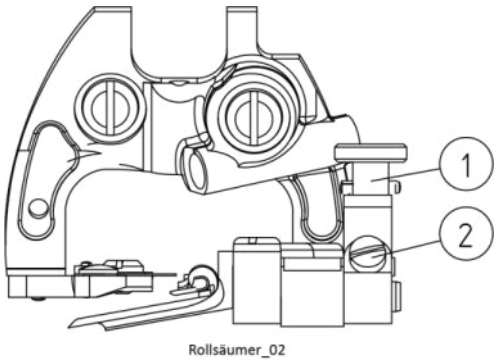


Fig. 15

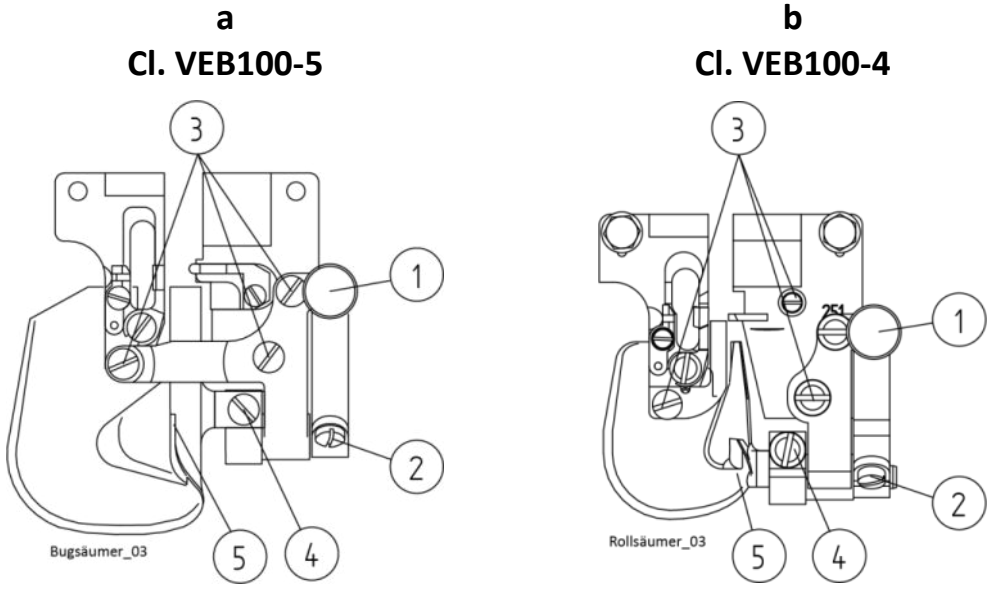
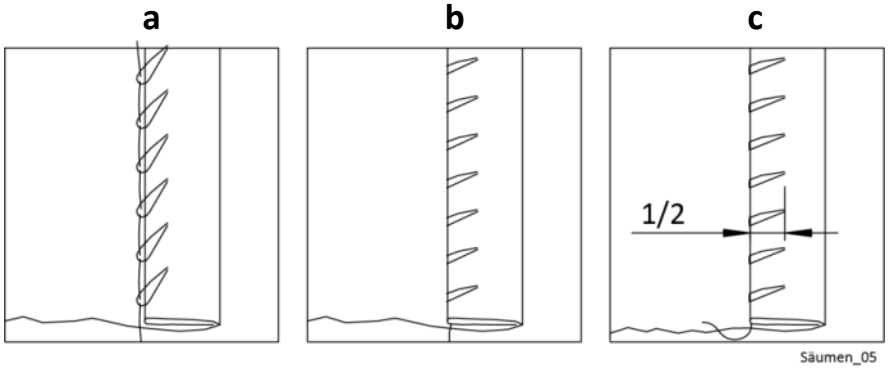


Fig. 16



5.6.2.2 Replacing the folder

Loosen screw (4) (Fig. 15), mount and tighten the new folder.
Realise settings as described in “5.6.2.1 Setting the folder“.

5.6.2.3 Hemming with folder (Cl.VEB100-5)

When the material support arm is lifted place the material from the left side and push the folded corner under the feed dog's front edge. The machine should be switched on and should have positioned at least one time (stop Sewing drive). The seam starts approx. 1 stitch length behind the fabric edge. When using the standard 6 mm folder a stitch length of 7 mm is recommended.
During the hemming operation the hem edge should always run along the upper folder edge. As a guide serves opening (5) in (Fig. 15).

5.6.2.4 Seaming with roll hemmer (Cl. VEB100-4)

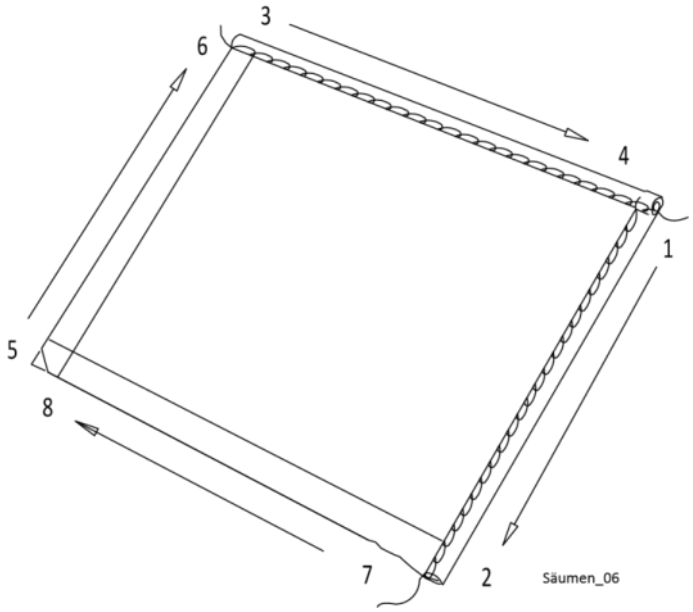
The machine should be switch on and have positioned at least once (stop Sewing drive).

The sewing material is inserted into the roll hemmer from the left side whilst the material support arm is lifted. Pull the material diagonally forwards to under the feed dog. A rolling should be done thereby manually in the roll seam nozzle.
Pull back the sewing material so that the feed dog can catch it. Close the material support arm. The beginning of the stitch is then about 1 stitch length behind the edge of the material.

During the sewing, the seam edge needs to be guided by hand evenly along the seamer infeed (3) Fig. 15b.

Of advantage is to turn the material counter-clockwise (Fig. 17) during the sewing.

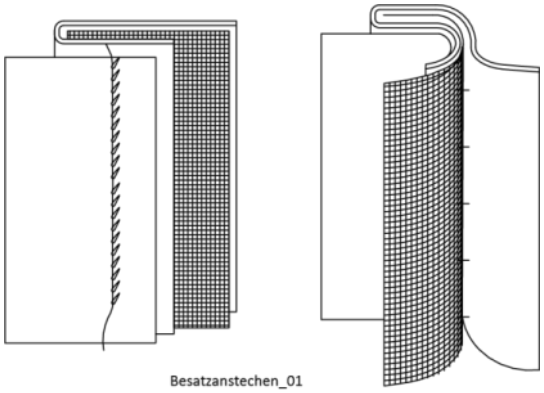
Fig. 17



5.6.3 Attaching facings

This operation is shown in Fig. 18.

Fig. 18



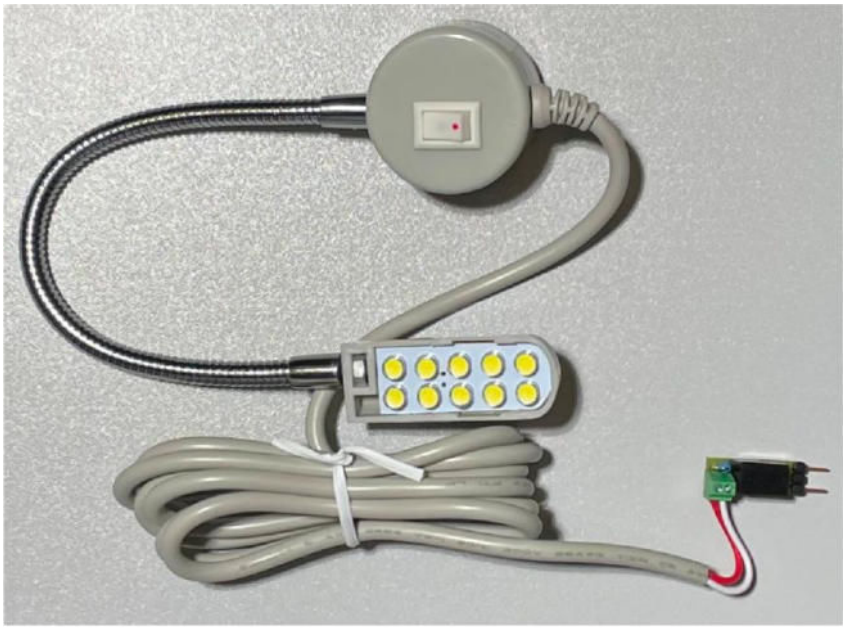
5.7 Sewing lamp

5.7.1 General notes

C A U T I O N !

Switch off the machine electrically!

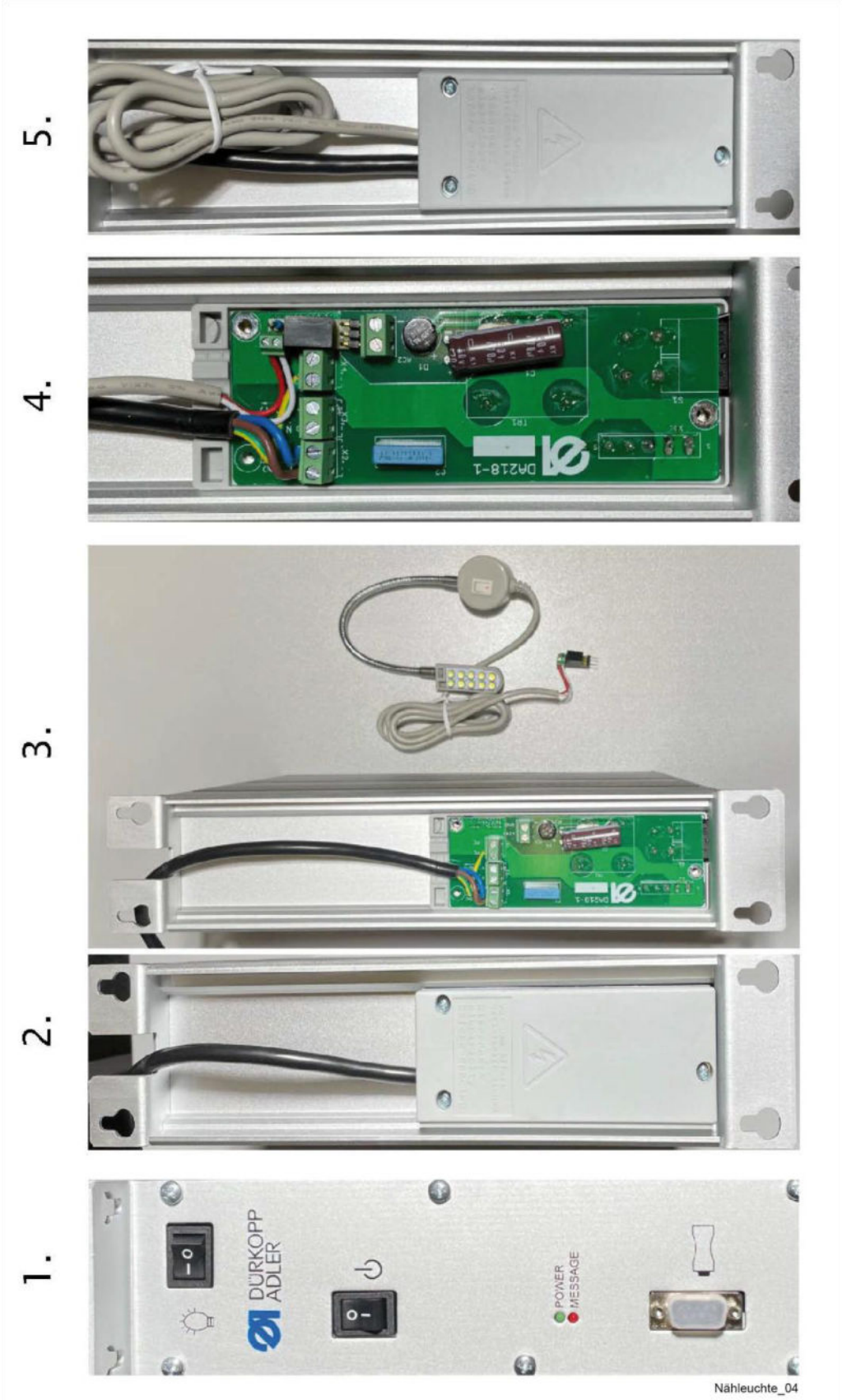
Fig. 19



Nähleuchte_03

For self-assembly with stand see Fig. 20

Fig. 20



6 Sewing problems and troubleshooting

C A U T I O N ! Danger of injury!

Switch off the machine and push down the Sewing drive switch pedal to ensure that the machine is truly switched off.

Otherwise there is hazard of finger injuries and needle puncture!

- **Thread breakage**

  Possible reasons:

  - Sharp edges or grooves in the needle guide, thread take-up lever, looper or needle's eye after the machine has been used for a long time.
  - Looper or loop stroke incorrectly adjusted or has been moved, the thread loops are not always caught.
  - Thread tension is too high
  - Thread thickness does not correspond to the needle thickness (thread too thick)

  Solutions:

  - Replace or repolish the damaged parts
  - Correct the looper setting and/or loop stroke
  - Correct the thread tension, check the thread movement.
  - Choose a suitable thread thickness

  ALWAYS OBSERVE: Thread movement, thread, stitch plate with corresponding plunger and cloth retainer, tested needles and thread tension must correspond to the sewing material being processed!

- **Imprecise blind stitching**

  Possible reasons:

  - Often worn or damaged needle
  - Cloth retainer or setting is incorrect
  - Stitch plate or needle guide is incorrectly set
  - Center needle guard damaged or worn
  - Needle thickness is not suitable (to thin)
  - Damaged or incorrectly adjusted plunger

  Solutions:

  - Replace any damaged needles, use the correct needle thickness
  - Check the settings and correct if necessary
  - Replace the center needle guard

- **Skip a loop**

  Possible reasons:

  - Incorrectly adjusted looper
  - Loop stroke/needle stroke incorrectly adjusted, therefore loop size (too small/too large) may not be suitable
  - Chaining finger damaged or altered
  - Incorrectly set or altered cloth retainer or cloth retainer pressure

  Solutions:

  - Rotate the machine by hand, check the looper movement; usually the cause can be seen.
  - Check the settings, correct if necessary and/or replace any damaged parts.
  - If necessary, change the threading at take-up

- **The machine does not start even though the indicator lamp of the main switch is on.**

  Possible reasons:

  - Thread trimmer not in final position, microswitch is locked
  - Control box error
  - Mechanical damage, machine is blocked

  Solutions:

  - Turn the machine off and back on again. Check the basic position of the blade. Check the programming
  - Eliminate any mechanical faults and, if necessary, call the customer service.

- **Markings or damage to the sewing material**

  Possible reasons:

  - Feed dog gearing is not suitable
  - Plunger shape is not suitable for the sewing material
  - Cloth retainer, pressure is set too strongly
  - Presser foot pressure has been incorrectly adjusted or lift-off is blocked.
  - Damaged sewing parts (lower side of stitch plate!)
  - Needles or thread thickness not suitable

  Solutions:

  - Replace the feed dog or plunger
  - Check the presser foot, sewing parts and their functionality, replace any damaged parts and/or repolish them if necessary.
  - Choose needles and threads that are suitable for the sewing material

- **Difficulties in feeding the sewing material**
  (stitch lengths vary from settings)

  Possible reasons:

  - Feed dog is incorrectly adjusted; need to be set lower or higher
  - Feed dog gearing is not suitable
  - Different presser foot pressure left/right
  - Lift-off of presser foot is blocked
  - Blockage of sewing material in stitch plate, especially for cross-seams
  - The loop remains stuck at the feed dog, for instance.
  - Stitch length accidentally altered
  - Spring-load plunger blocks at the cross-seam area
  - Correct tension on the lower transport belts

  Solutions:

  - Check the height of feed dog and the stitch length and, if necessary, replace the feed dog.
  - Correctly adjust the pressure of the presser foot
  - Check the lower side of the stitch plate and feeding/sewing parts for signs of damage and, if necessary, replace or polish them

7 Servicing the machine

7.1 General

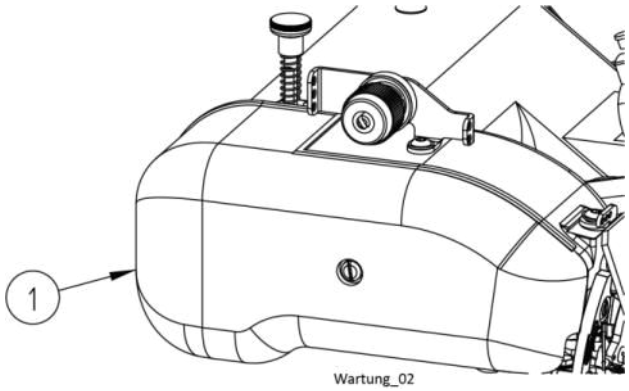
C A U T I O N ! Danger of injury!

Disconnect the machine from the mains and ensure that it is off by pressing the pedal for switching the Sewing drive.

Otherwise there is a **danger of injury** from crushing and needle punctures.

Control:
Check at regular intervals by removing the cover (1) Fig. 21 whether sewing dust, thread remnants etc. have accumulated and remove them.

Fig. 21



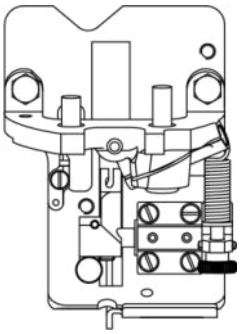
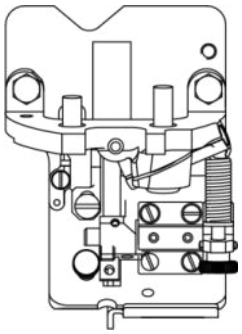
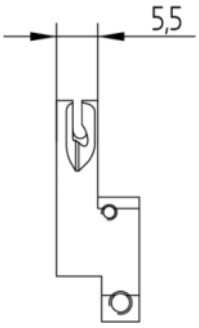
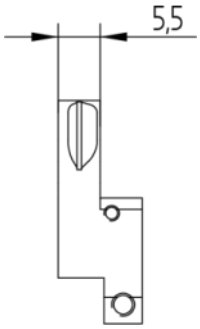
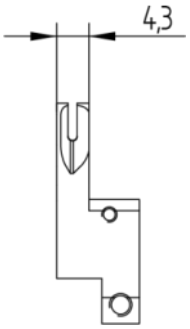
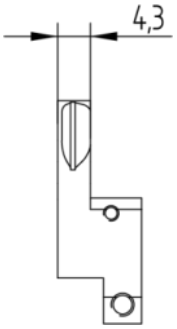
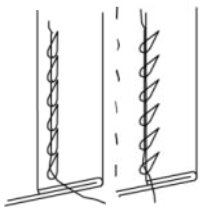
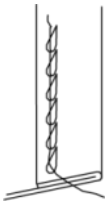
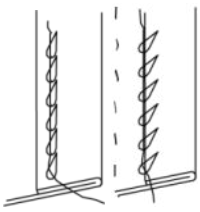
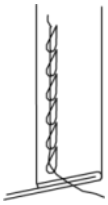
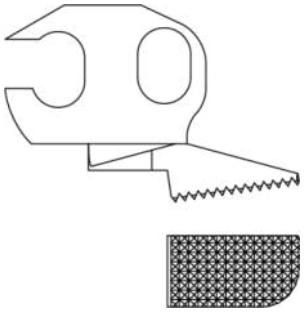
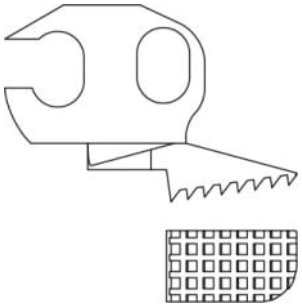
8 Variable sewing tools

C A U T I O N ! Danger of injury!

Disconnect the machine from the mains and ensure that it is off by pressing the pedal for switching the Sewing drive.

Otherwise there is a **danger of injury** from crushing and needle punctures.

The following chart shows all sewing tools available.

<table>
<tr><th colspan="5">Cl. VEB100-2</th></tr>
<tr><td>Stitch plate</td><td colspan="2">Standard
380.0286
 
6,0 mm opening</td><td colspan="2">Optional
380.0287
 
4,5 mm opening</td></tr>
<tr><td>Cloth retainer</td><td>Standard
288.0243
  </td><td>Optional
288.0246
  </td><td>Standard
288.0244
  </td><td>Optional
288.0245
  </td></tr>
<tr><td>Stitch formation</td><td>  </td><td>  </td><td>  </td><td>  </td></tr>
<tr><td>Feed dog</td><td colspan="2">Standard
182.0332
  </td><td colspan="2">Optional
182.0331
  </td></tr>
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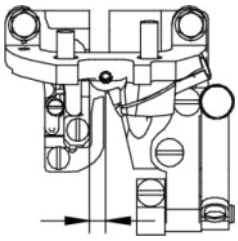
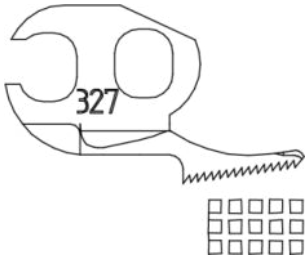
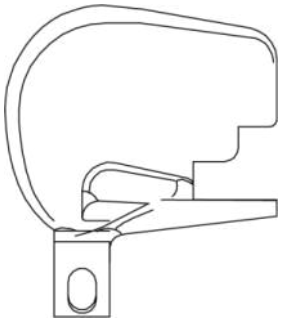
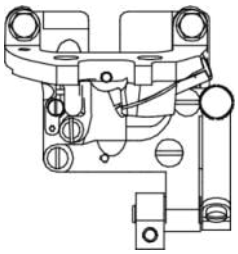
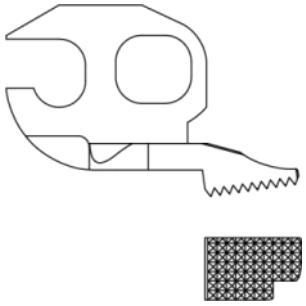
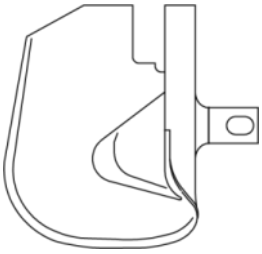
Cl. VEB100-4	
Stitch plate	**Standard** 380.0275  4,5 mm Opening
Feed dog	**Standard** 182.0327 
Roll hemmer 1	**Standard** 386.0428 

Cl. VEB100-5	
Stitch plate	**Standard** 480.0250  7,0 mm Opening
Feed dog	**Standard** 182.0336 
Folder 6 mm	**Standard** 286.0364 1,0 mm opening 

9 Optional extras

The following devices are available as optional extras and can be ordered together with the machine or as separate kits.

9.1 Thread trimmer

(not applicable for cl. VEB100-4)

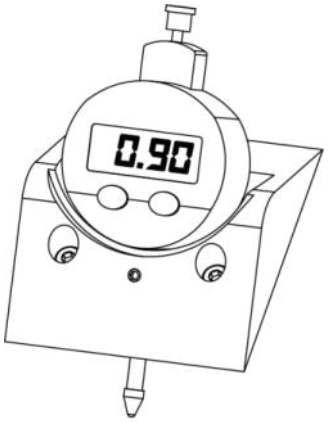
898.0496 electromechanical thread trimmer
Prerequisite here is use of the
DAC Classic with connecting cable

9.2 Hemmer

More hemmer sizes on request.

9.3 Digital display 392.0637

(not applicable for cl. VEB100-4)



Digitalanzeige_02

9.4 Pneumatic lifting

00000.3607 Pneumatic lifting

Und wir können noch mehr für Sie tun!

Unser Lieferprogramm bietet für jede Branche und jegliche Anforderung genau die richtige Problemlösung.

And we can do a lot more for you!

Our range offers the correct problem solution for every branch and for all requirements.

Für die Bekleidungsindustrie:

Ein- und Zweifaden-Hochleistungs-Saummaschinen

Doppelblindstich-Saummaschinen

Zweifaden-Blindstich-Staffiermaschinen

Roll- und Flachpikiermaschinen

Pikier-Automat

und

weitere Spezial-Nähmaschinen

For the clothing industry:

Single and two thread high performance hemming machines

Bluff edge hemming machines

Two thread blind stitch felling machines

Roll and flat padding machines

Automatic lapel padding machine

and other special sewing machines

Für die Schuhverarbeitung:

Einfaden-Überwendlichmaschinen mit und ohne Differentialtransport

For the shoe industry:

Single-thread overseaming machines with and without differential feed

Für Kürschnereien und Pelzkonfektion:

Pelzschnellnäher

For the fur industry:

High-speed fur sewing machines

Für Heimtextilien:

Ein- und Zweifaden-Blindstichmaschinen

For the home textiles industry:

Single and two thread blind stitch machines

Für die Polsterverarbeitung:

Ein- und Zweifaden-Überwendlichmaschinen

Ein- und Zweifaden-Blindstichmaschinen

For the upholstery industry:

Single and two thread overseaming machines

Single and two thread blind stitch machines

Für die Konfektion technischer Textilien:

Ein- und Zweifaden-Überwendlichmaschinen

For the processing of technical textiles:

Single and two thread overseaming machines

Noch Fragen?

Dann rufen Sie uns an, schreiben Sie uns oder kommen Sie einfach bei uns vorbei.
Sie können jederzeit weitere Informationen über unsere Produkte anfodern oder die Strobel-Nähmaschinen in unserem Ausstellungsraum live erleben. Wir freuen uns auf Sie!

Any further questions?

Then phone, write or simply come and see us. You can have further information about our products at any time, or experience the Strobel machines live in our show room. We're looking forward to meeting you!

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