**For the professional user**

# Operating Instructions

***Für den professionellen Anwender***

# *Betriebsanleitung*

**Class:** **710**
***Klasse:***

**Model:** **2**
***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

# Garantiekarte/Warranty Sheet

STROBEL
Boschstraße 16
D-82178 Puchheim
Tel.: 089/80096-0
Fax: 089/80096-190
info@strobel.biz

Maschinenklasse/Machine class: _____

Serien-Nr./Serial No: _____

Auftrags-Nr./Order Confirmation No: _____

Lieferdatum/Delivery Date: _____

Rechnungs-Nr./Invoice No: _____

Rechnungsdatum/Invoice Date: _____

Beanstandung/Complaint: _____

_____

_____

_____

_____

_____ _____

Datum/Date Unterschrift/Signature:

*Bitte nicht vom Kunden ausfüllen/To be filled out by Strobel:*

| | Datum | Bemerkung |
|---|---|---|
| EXA: | | |
| ETA: | | |
| PROD: | | |
| EXA: | | |
| BH: | | |
| | | |

STROBEL

# Operating Instructions
# STROBEL Classes 710

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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

In the operating- and mechanic instructions you will find references to the titles of the video tutorials for the machine class 710.

For further information please contact us by mail:

Mr. Strobl strobl@strobel.biz
Mr. Jäger jaeger@strobel.biz.

Videos: “00Introduce 710 with DAC”
„Information about new machines_part_1.MTS“
„Training Videos_part_1.MTS“

## 2.1 Operating instructions

Any person involved in the installation, operation, maintenance and repair of the machine must have read and understood the operating instructions and mainly the safety instructions before starting 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

Two-thread lockstitch blindstitch sewing machine for felling the lining of jacket/coat hems and for finishing fabric hems on half-lined jackets and coats.

Videos: “Sewing and making a sewing program_1”

“Sewing and making a sewing program_2”

The enclosed parts allows both processing methods.

Variable sewing tools you will find under point 7.

## 2.4 Technical data

| | Technische Daten / Technical data | |
|---|---|---|
| | Empfohlene Nennstichzahl / Recommended rated speed | 1300 min-1 |
| | Stichlänge / stitch length | 3,0 - 6,0 mm<br>(abhängig vom Nähmaterial / depend on fabric)<br>Auslieferzustand / delivery condition 4,5 mm |
| | Programmierbar / Programmable | 6 schnell programmierbare Speicherplätze für individuelle Stichtiefenwerte und Maschinen-drehzahlen die während des Nähvorgangs gewechselt werden können. / 6 fast programmable memory locations for individual stitch depth values and machine speeds that can be changed during the sewing process |
| | Stichtiefeneinstellung über Schrittmotor gesteuerten Taucher /<br>Stitch depth adjustment via step motor controlled plunger | (Einstellgenauigkeit) Taucher mit 0,01 mm Schritte/<br>(setting accuracy) plunger with 0.01 mm steps |
| | Unter-, und differenzierender Seitentransport /<br>bottom and differential lateral feed | verschiedene Transporteure optional /<br>various feed dogs optional |
| | 2 Taucher und zwei gefederte Sperrzähne /<br>2 Plungers and two spring loaded clothretainer | |
| | Stichplattenöffnung / stitch plate opening | 7,0 mm für dünne Stoffe / for thin fabric<br>Optional:<br>8mm für dickere Stoffe inkl. Kit für halbgefütterte Sakkos<br>8mm for thicker fabric inclusive kit for half lined jackets |
| | Nadelpendelung / needle oscillation | |
| | Nadelsystem / needle system<br>Nadelstärke / needle size | GROZ-BECKERT 1828 E<br>80/12 |
| | Fadenspannung / thread tension<br>Faden / thread | Auslieferzustand / delivery condition 50 cN<br>Polyester, endlos gezwirnt /<br>polyester continuous filament 180/2 |

| | | | |
|---|---|---|---|
| | Mehrweite per Fußpedal differenzierbar / fullness by foot pedal differentiable | | |
| | Einfacher Anfangsriegel /<br>Simple initial backtack | | Einfacher Endriegel /<br>Simple end tack |
| | Einmalige Riegelunterdrückung /<br>One-time tack suppression | | Halbstich / Half stitch |
| | Durchgangsraum / arm space<br>420 mm x 150mm | | Flachbettmaschine / Flatbedmachine |
| | LED Leuchte / LED sewing lamp | | Separater Fadenspuler /<br>Separate thread spooler |

| **Technischer Auslieferzustand / delivery condition:** | |
|---|---|
| Motor-Leistung min. –Steuerung / min. motor power – control box | 500 W – DA432 / DAC Classic |
| Zahnriemenscheibe Maschine / toothed belt pulley/machine | Z = 38 |
| Zahnriemenprofil / toothed belt profile | HTD 5M-9 |
| Stichart / stitch type | Zweifaden-Steppstich-Blindstich Typ 313 / two thread lockstitch blind stitch type 313 |
| Anschluss pneumatisch / pneumatic connection | 6 bar |
| Luftverbrauch, Mittelwert / avarage air consumption | 25 l / h |
| Stellfläche / Foot print | 0,5 m x 1,1 m |
| Arbeitsgeräusch / operating noise at 1300 min-1 nach DIN 45635-48-1 KL3 | LpAm 75 dB(A) |

# 3 Set-up and commissioning

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

Due to pulling in of parts of clothing or hair as well as **danger** of crushing of fingers!

## 3.1 Unpacking of the machine

The machine is only delivered completely with stand.

The thread stand and other machine accessories are included in the packaging.

Before disposing of the packaging material, carefully check whether all accessory components have been unpacked.

## 3.2 Setting up the machine (Fig. 1)

**A T T E N T I O N !**

If you release or even loosen positions that are marked in yellow, important factory settings can get lost!!

These screws do not have to be released for maintenance work.

If, however, you do release these screws, please contact the manufacturer.

**A T T E N T I O N !**

Lubricate the hook every day with a drop of oil.

**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 motor, in particular the network voltage and frequency, are appropriate for your electric system and that all other connection values, e.g. for air, comply with the values specified on the machine and in the operating instructions.

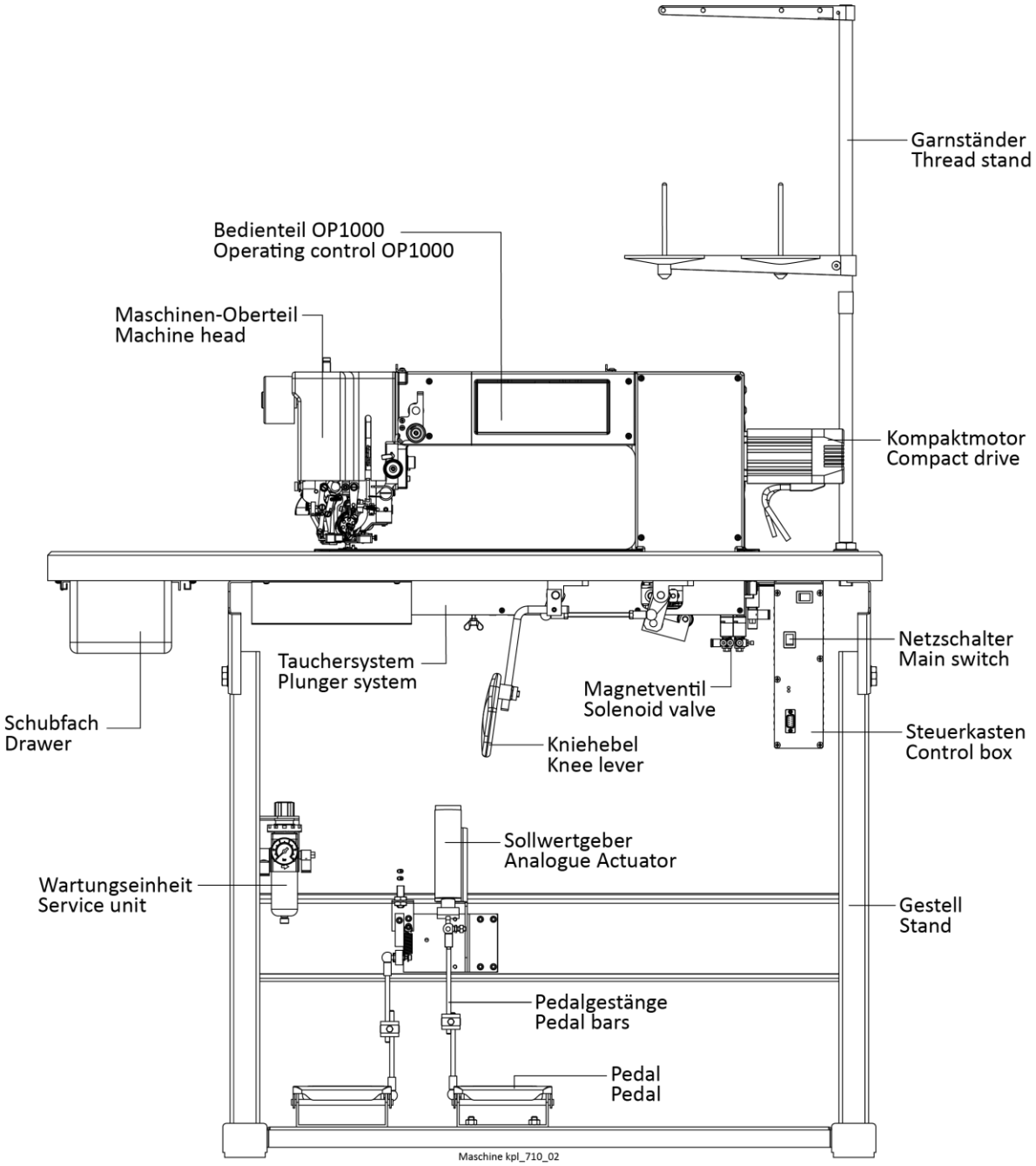
Carry out the electrical connection according to the cable identification or the supplied connection diagram.

Check that all screws on the stand are firmly installed and retighten if necessary.

After the machine lifting and several other activities happen pneumatically, a **compressed air connection of 6 bar** is required (see point "2.4 Technical data"). The air pressure can be regulated with the service unit.

After assembling the individual parts, mount the thread stand on the back right of the table top. (Fig. 1).

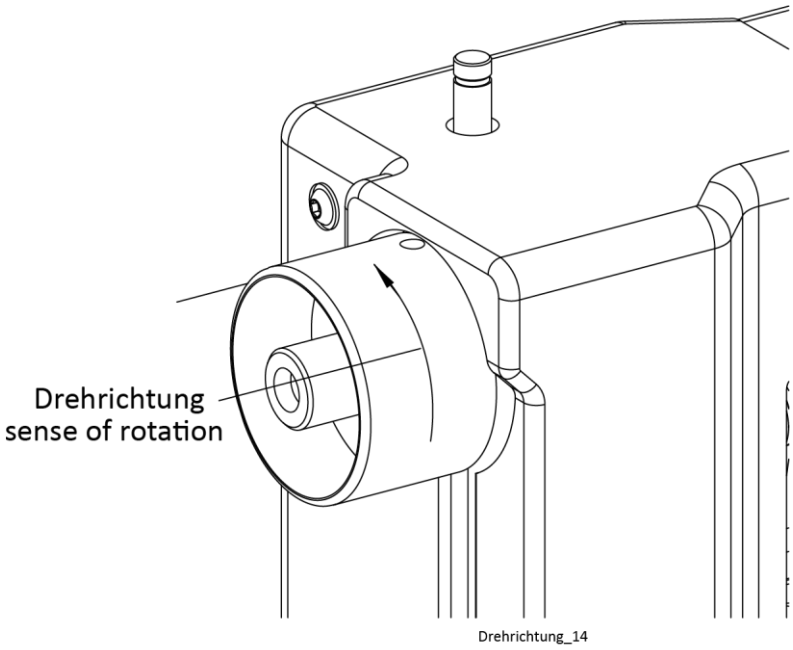
# Fig. 1


Garnständer
Thread stand
Bedienteil OP1000
Operating control OP1000
Maschinen-Oberteil
Machine head
Kompaktmotor
Compact drive
Netzschalter
Main switch
Tauchersystem
Plunger system
Magnetventil
Solenoid valve
Schubfach
Drawer
Kniehebel
Knee lever
Steuerkasten
Control box
Sollwertgeber
Analogue Actuator
Wartungseinheit
Service unit
Gestell
Stand
Pedalgestänge
Pedal bars
Pedal
Pedal
Maschine kpl_710_02

## 3.3 Sense of rotation (Fig. 2)

The sense of rotation of the handwheel is counter-clockwise.

**Fig. 2**




## 3.4 Motor drive via toothed belt

### 3.4.1 Tension of the toothed belt (Fig. 3 and Fig. 4)

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

To check the tension of the toothed belt, switch off the machine electrically, pull the power plug, and depress the motor switch pedal to make sure that the machine is truly switched off.

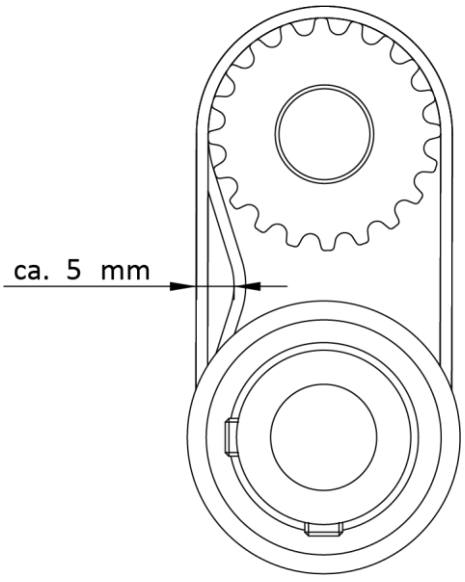
The tension of the toothed belt should not be too great. Slight thumb pressure should be able to push the belt through by approx. 5 mm. (Fig. 3)

A too little or too great toothed belt tension can deteriorate the positioning of the machine and therefore impair the function sequence.

Tensioning the toothed belt (Fig. 4):

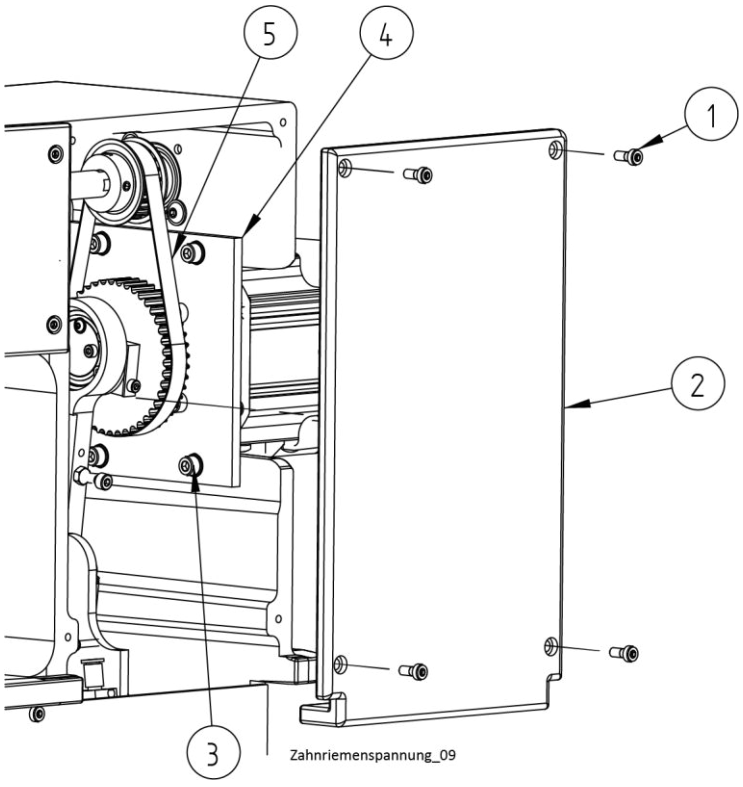
- Loosen the 4 screws (1) from the cover (2).
- Loosen the 4 screws (3) from the motor flange (4) and tighten the belt (5) by pushing down the motor flange (4).
- Retighten the 4 screws (3).
- Refit the cover (2) with the 4 screws (1).

**Fig. 3**




Zahnriemenspannung_07

**Fig. 4**

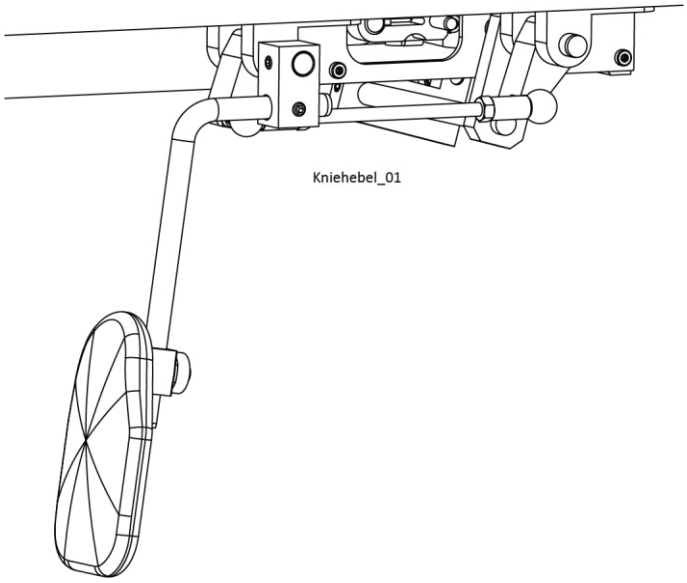



Zahnriemenspannung_09

## 3.5 Intermediate lifting (Fig. 5)

If it is necessary to use the knee lever for intermediate lift when pneumatic lifting is fitted, this can be done with the knee lever already fitted as standard.

## Fig. 5



# 4 Notes on usage

## 4.1 Needle

Only use the approved GROZ-BECKERT needle system 1828 E with thickness 80/12.

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

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

This machine has been set and sewn off with **genuine GROZ-BECKERT needles.**

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

### 4.1.1 Thread

The following sewing threads have been approved by STROBEL Spezialmaschinen GmbH in consultation with the automotive industry for use with the 710 machine:

| | |
|---|---|
| **Thread manufacturer / description** | **AMANN / Serafil** |
| | **GÜTERMANN / Tera** |

Polyester threads endless twisted of thickness 120 or 180.

## 4.2 Inserting the needle (Fig. 6)

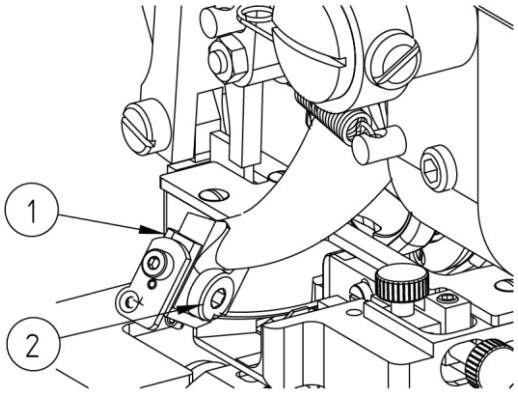
**C A U T I O N ! Danger of injury!**

Switch off machine electrically and confirm that the machine is really in standstill position by operating the treadle for the motor control before changing the needle.

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

The curved needle shape determines its position in the needle lever. Attention should be paid only to ensure that the needle piston is pushed to the stop in the channel of the needle lever and that the screw (2) of the needle clamping plate (1) is tightened well.

## Fig. 6




Nadel_einsetzen_53

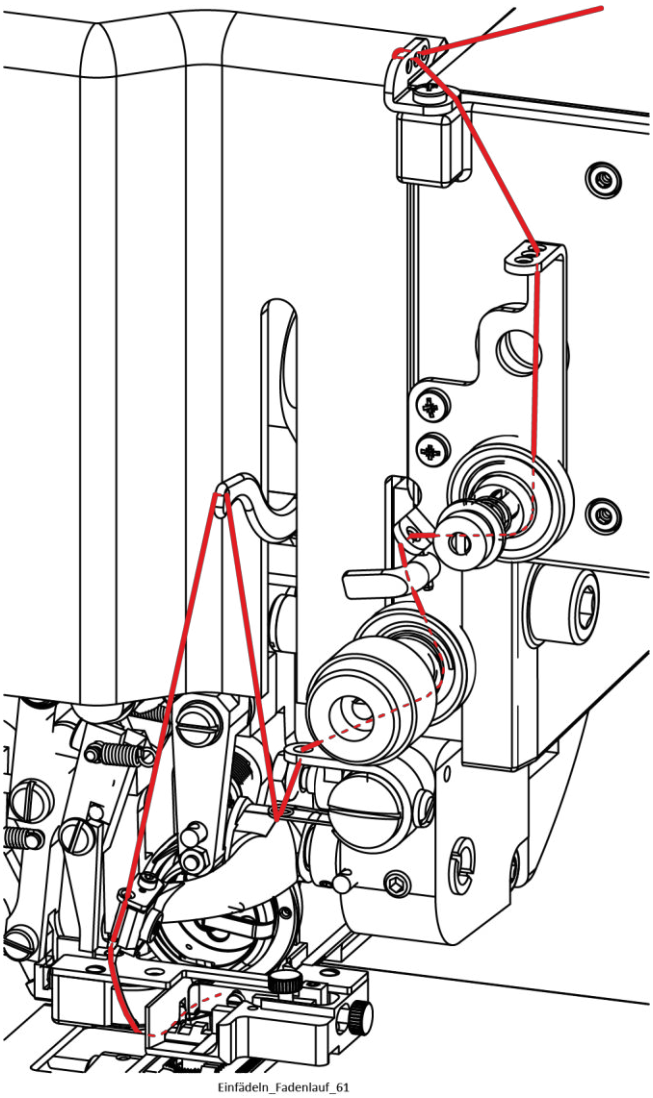
## 4.3 Threading and thread run (Fig. 7)

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

Switch off machine electrically and confirm that the machine is really in standstill position by operating the treadle for the motor control before threading.

Fig. 7 shows the correct threading by using the thread take-up lever.

**Fig. 7**




Videos: „Threading needle thread_part_1.MTS“
„Threading needle thread_part_2.MTS“

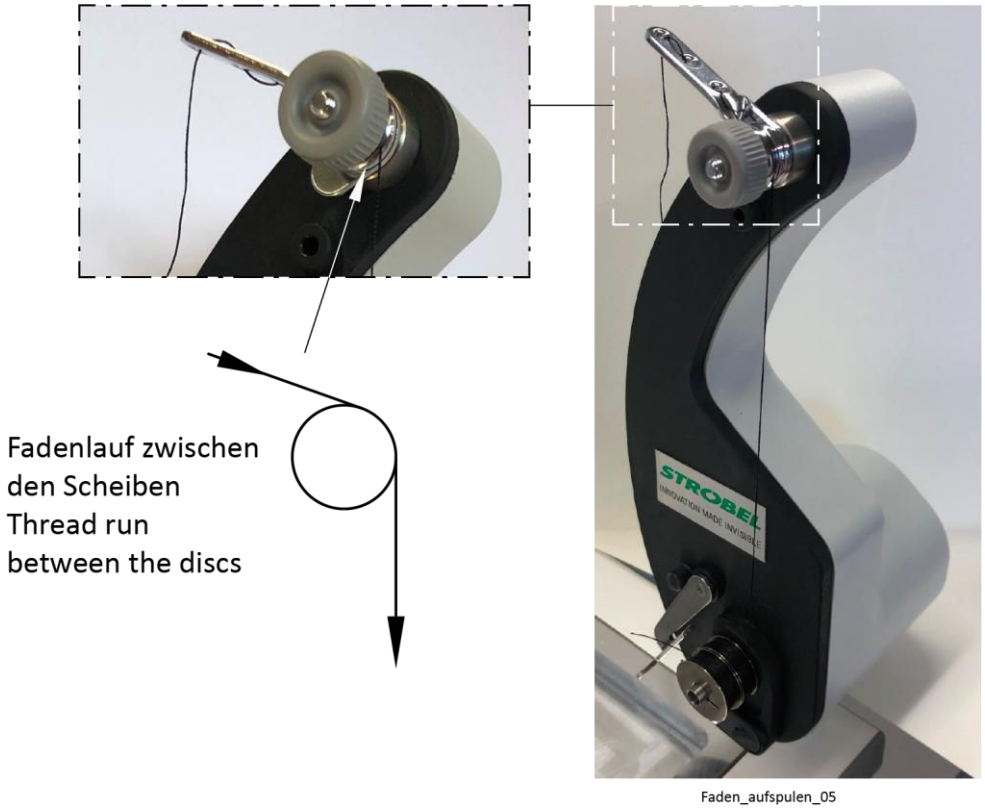
## 4.4 Fill a bobbin (Fig. 8)

Fig. 8 shows the straight grain during winding.

Make sure that not too much thread is spooled onto the bobbin, and that the bobbin walls are not pressed apart. Damaged bobbins should be replaced immediately by new ones. The bobbin should not be filled beyond the edge, rather should be ended approx. 1 mm below the bobbin edge.

Video: „Fill the bobbin_Part_1.MTS“

## Fig. 8




Faden_aufspulen_05

## 4.4.1 Installing the bobbin and threading the bobbin thread (Fig. 9)

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

Before threading, switch off the machine electrically, and depress the motor switch pedal to make sure that the machine is truly switched off.

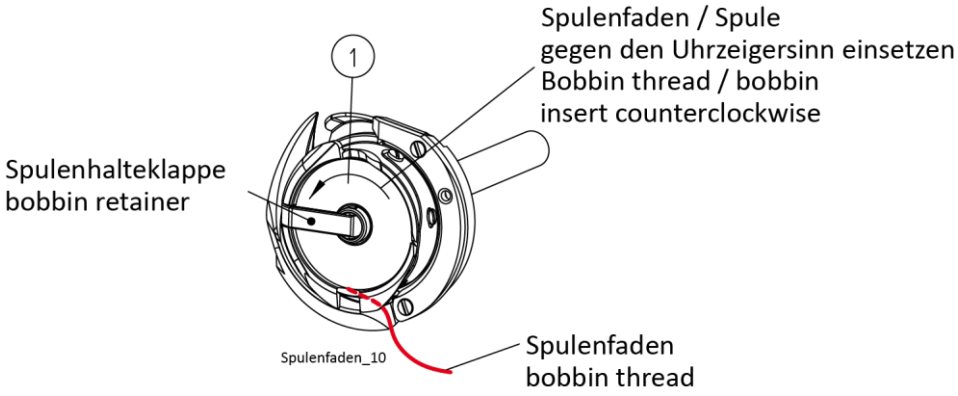
Turn the handwheel to move the needle lever to its highest position to remove and reinsert the bobbin (1). Fold the latch that holds the bobbin away from the bobbin case with a short jerk. The bobbin will then jump out of the bobbin case by spring pressure so that it can be easily removed.

Please make sure that the flat springs remain in the bobbin case.

When inserting the bobbin, observe that the bobbin thread unwinds counter-clockwise from the rear side of the bobbin. Then guide the start of the bobbin thread through the slit on the right side and push this slanting downwards in towards the stitch plate. Guide the bobbin thread out to the right on the stitch plate. Cut off anything that protrudes for approx. 10 cm from the bobbin.

Video: „Insert new Bobbin in 710_part_1.MTS“

## Fig. 9



## 4.5 Thread tensioning

Depending on the thread thickness and the sewing material, the thread tension is set to the desired stitch formation.

### 4.5.1 Lubricate the hook (Fig. 10)

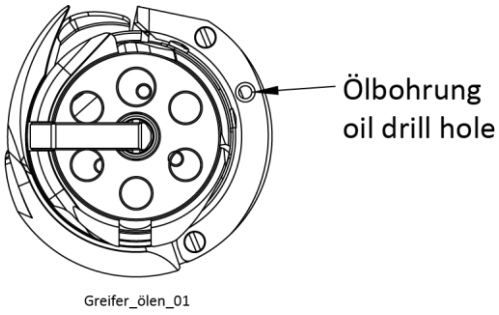
**A T T E N T I O N !**

Lubricate the hook every day with a drop of oil.

Lubricate the hook every day with a drop of oil at the oil drill hole.

Video: „Lubrication of the hook_part_1.MTS“

## Fig. 10




Greifer_ölen_01

## 4.6 Setting the stitch length (Fig. 11)

**C A U T I O N ! Danger of Injury!**

Switch off the machine electrically, and depress the motor switch pedal to make sure that the machine is truly switched off.

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

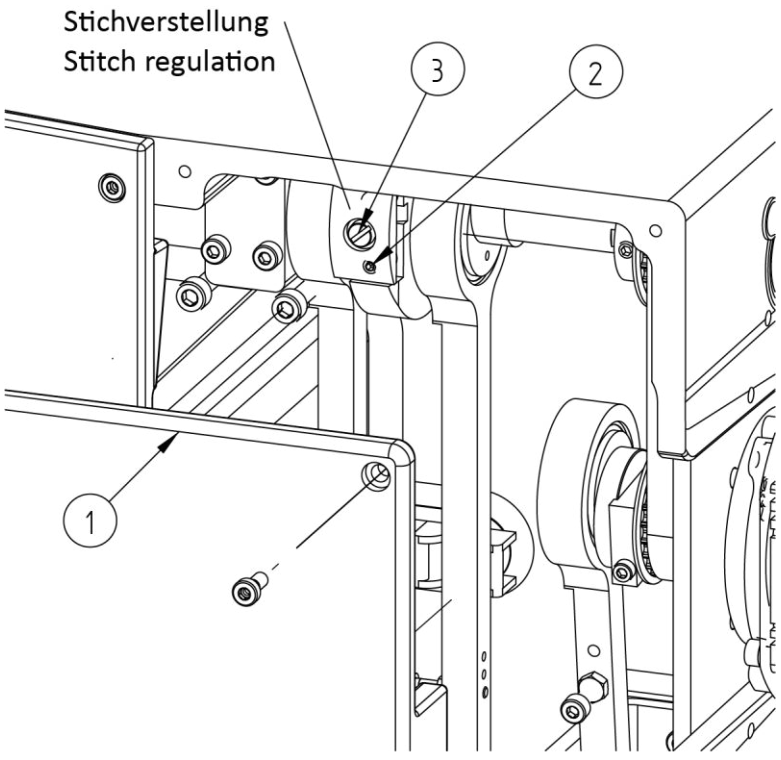
The stitch length can be adjusted after removing the cover (1).

First loosen the threaded pin (2), then turn the oval head screw (3) to the left to increase the stitch length, or to the right to decrease the stitch length.

After setting the desired stitch length, tighten the threaded pin (2) again.

Video: „Set stitchlenght_part_1.MTS“

## Fig. 11



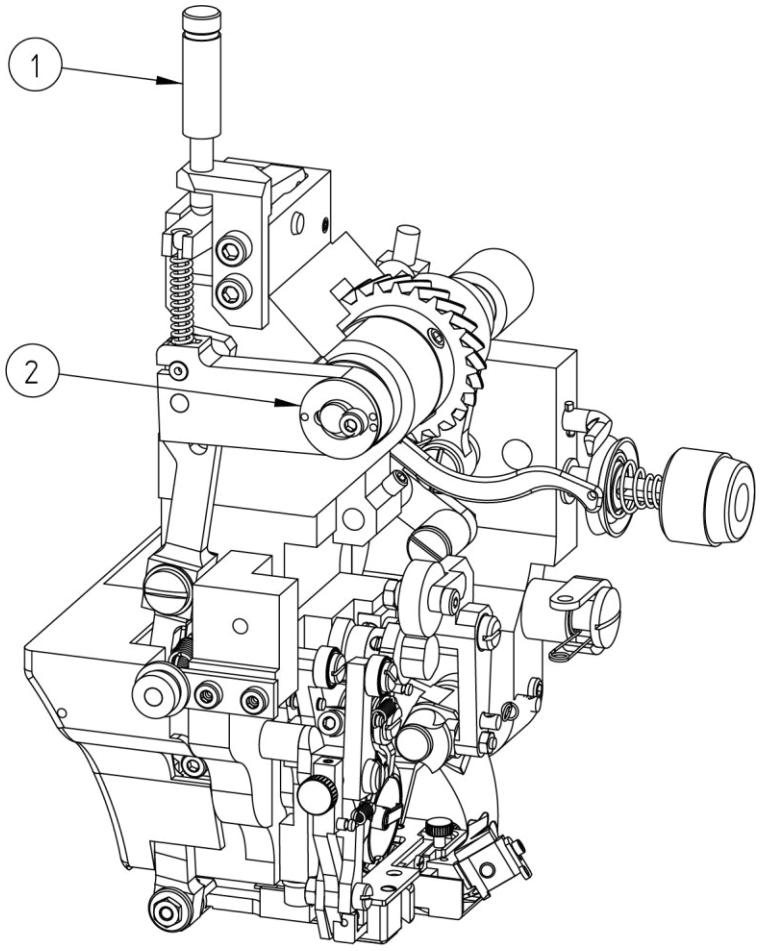

Stichlängeneinstellung_22

### 4.6.1 Adjusting the upper feed path (Fig. 12)

By activating the right pedal the upper feed path is enlarged, that is, multi-width can be worked in.
By turning the knurled screw (1) to the left, multi-width can be worked in continuously.

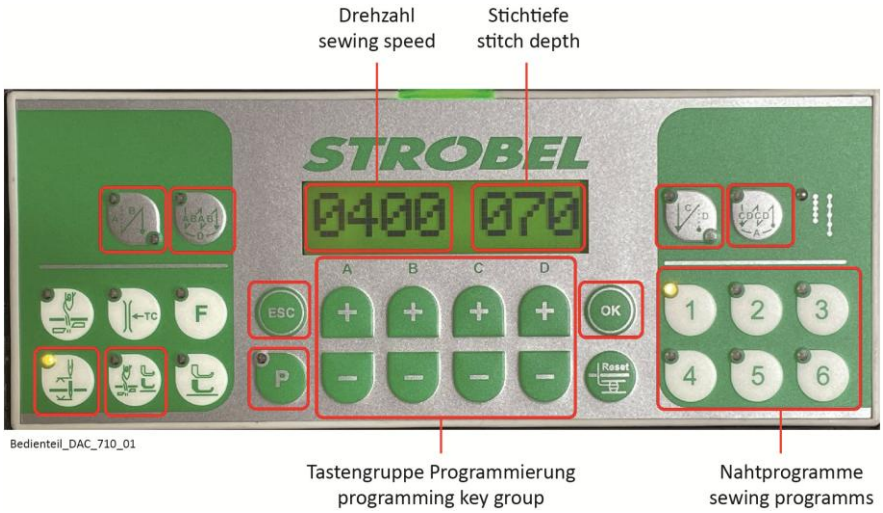
Depending on whether you work with short or long stitch length, the position on eccentric bush (2) • = 2-5 mm stitch length or
•• position = 4 - 7 mm stitch length can be adjusted.

## Fig. 12



## 4.7 Operating control, general

## Fig. 13




| Button | Function |
|---|---|
| | Backtack at seam start |
| | Backtack supression |
| | Backtack at seam end |
| | Half stitch |
| | Confirmation button |
| | Call the teach-in mode/Exit parameter input |
| | Save the programming (teach-in) and exit |
| | Foot lift remains open after pedal position -1 |
| | Needle up- down position |

## 4.7.1 Basic information

**“P" button:**

- Pressing the "P" button takes you to programming mode (teach-in) and the first value starts to flash on the display.
- The values for the plunger height and machine speed can be set using the A to D +/- buttons.
- Sewing can/must also be carried out in teach-in mode, as the corresponding stitch depth must be determined.
- The "P" button is also used to exit the parameter setting.

**OK" button:**

- Pressing the "OK" button confirms the change and takes you to the next input field.
- The values for the plunger height and machine speed can be set using the A to D +/- buttons.

**ESC" button:**

- The "ESC" button is used to exit teach-in mode and the values are saved in the corresponding sewing program.

**Buttons "1-6":**

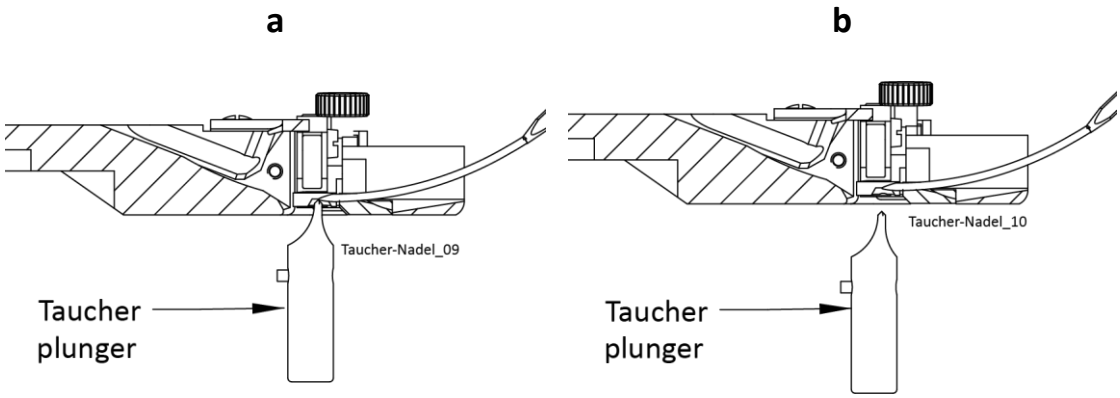
- The Class 710 has 6 sewing programs that can be individually assigned a plunger value and a machine speed.
  During sewing, you only have to stop briefly and you can switch to any sewing program.

**Stitch depth:**

- Stitch depth is the distance between the highest plunger position and the outer radius of the needle. The plunger presses the fabric into the stitch plate opening from below so that the needle penetrates the fabric layers at the desired depth.
- The stitch depth can be set using the "+/-" buttons C and D in the programming button group block.
- in "1" increments (=0.01 mm) Button group D.
- In "10" increments (=0.10 mm) Button group C.
- The setting range of the plunger is from 0 - 254 = 0 - 2.54 mm.
  - "+" = plunger moves down = needle penetrates less deeply
  - "-" = plunger moves up = needle penetrates deeper
  - Basically the following applies: (Fig. 14)

    Small stitch depth - thin material / 0 = needle touches the plunger
    Large stitch depth - thick material / 254 = The plunger has 2.54 mm distance from the needle
- If the stitch depth is too shallow or too deep, skips or punctures may occur.

## Fig. 14




### 4.7.2 General procedure for changing the following values (simultaneously):

- Stitch depth
- - Machine speed
    - Select sewing program (1 to 6)
    - Press the "P" button once and the stitch depth value flashes
    - Change the value using the "+/- " buttons block C and D
    - Press the "OK" button to confirm the value, save it and jump to the next value.

    **INFO:** You can also sew if the value is still flashing and has not yet been confirmed! This is used to find the correct setting.
- When you have finished, press the "ESC" button to exit programming mode.

### 4.7.3 Procedure for changing a certain value (e.g. machine speed):

- Press the "P" button once
- Press the "OK" button once
- Change the machine speed value with the "+/-" button Block A, B and C
- A= step of 100
- B= Step of 10
- C= 1 step
- Press the "ESC" button once to save the change and exit programming mode.

### 4.7.4 Program number (button 1 to 6)

Sewing programs with different values such as machine speed and stitch depth can be selected using the function buttons "1-6". It is also possible to change to a different sewing program while sewing. The sewing process must be stopped briefly, then you can switch to a new sewing program.

### 4.7.5 Backtack at the beginning

You can activate and deactivate the start backtack using the " " button

Simple start backtack

The number of backtack stitches can be changed using the "+/- " buttons Block B.

aktive

inaktive

### 4.7.6 Backtack at the end

The end backtack can be activated and deactivated using the " " button

Simple end backtack

The number of backtack stitches can be changed using the "+/- " buttons block C.

aktive

inaktive

### 4.7.7 One-off backtack suppression

When the " " button is pressed at the beginning or end of the seam, the backtack stitch is not executed once. The next time it is carried out again.

### 4.7.8 Single stitch

Only a half-stitch is performed when the button " " is pressed.

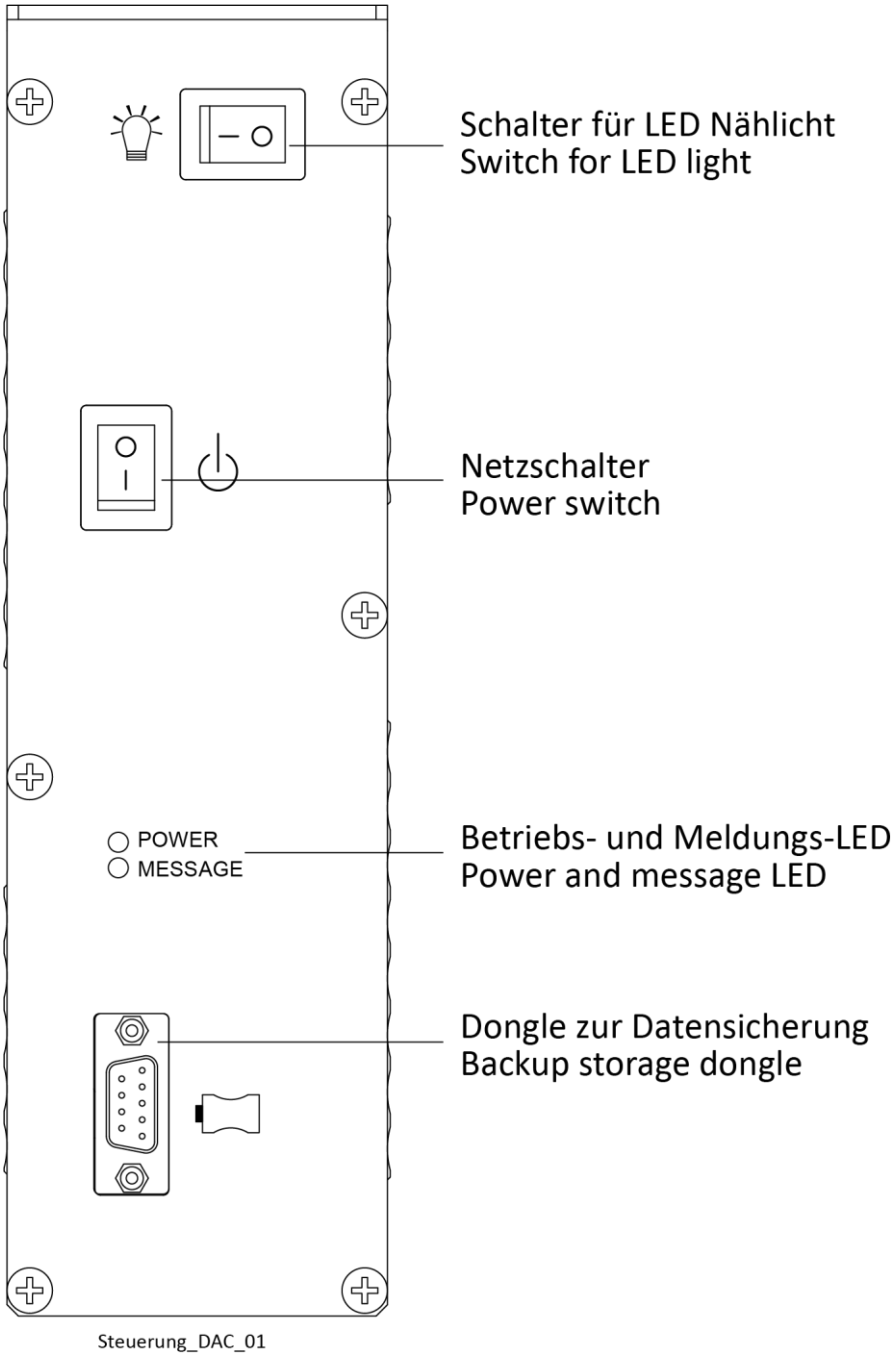
## 4.8 Sewing drive

The machine is equipped with a DA432 sewing drive motor and a DAC Classic sewing drive control unit.

### 4.8.1 Control sockets control box (DAC Classic)

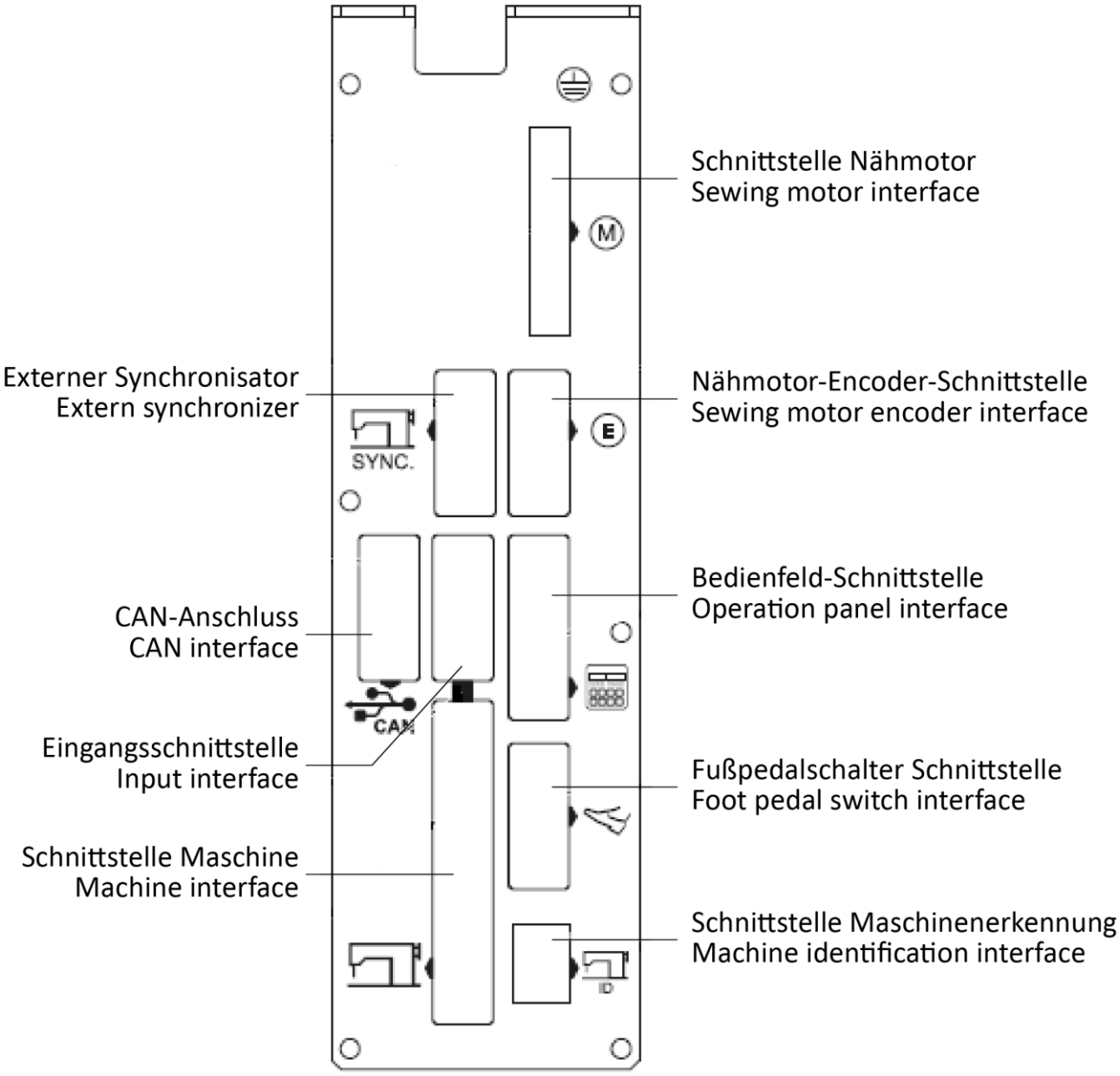
## Fig. 15

**Front side**




Steuerung_DAC_01

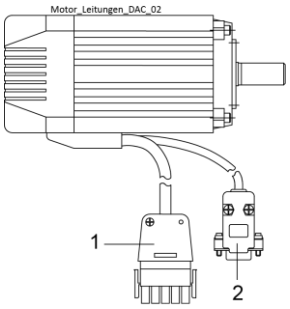
**Back side**




Steuerung_DAC_02

## 4.8.2 Connection cables motor sewing drive

# Fig. 16




**1** Cable 1 for motor supply

**2** Cable 2 for motor sensors

## 4.9 Plunger stop

Frequently it is necessary when stitching over different fabric thicknesses at the same work piece, whereby the penetration depth of the needle, viewed from the upper side of the sewing material, must always remain the same.

The plunger built- into our machines carries out this work automatically in cooperation with an adjustable cloth retainer mounted on the stitch plate.

(This is not true for all machines or stitch plates.)

Video: „Setting the clothretainer and side hammer_part_1.MTS“

### 4.9.1 Adjusting the spring pressure on the plunger (Fig. 17)

**C A U T I O N ! Danger of Injury!**

When adjusting in the area of the stitch plate there is **danger of injury**, especially a danger of crushing fingers due to accidental activation of the pedals!

First set the plunger with the stitch depth regulation so high that the required thickness of the sewing material, in most cases the outside fabric, is stitched blind satisfactory.

Then the plunger stop supported on the stitch plate is adjusted with the knurled screw in such a way, that the sewing material is pressed from above onto the plunger.

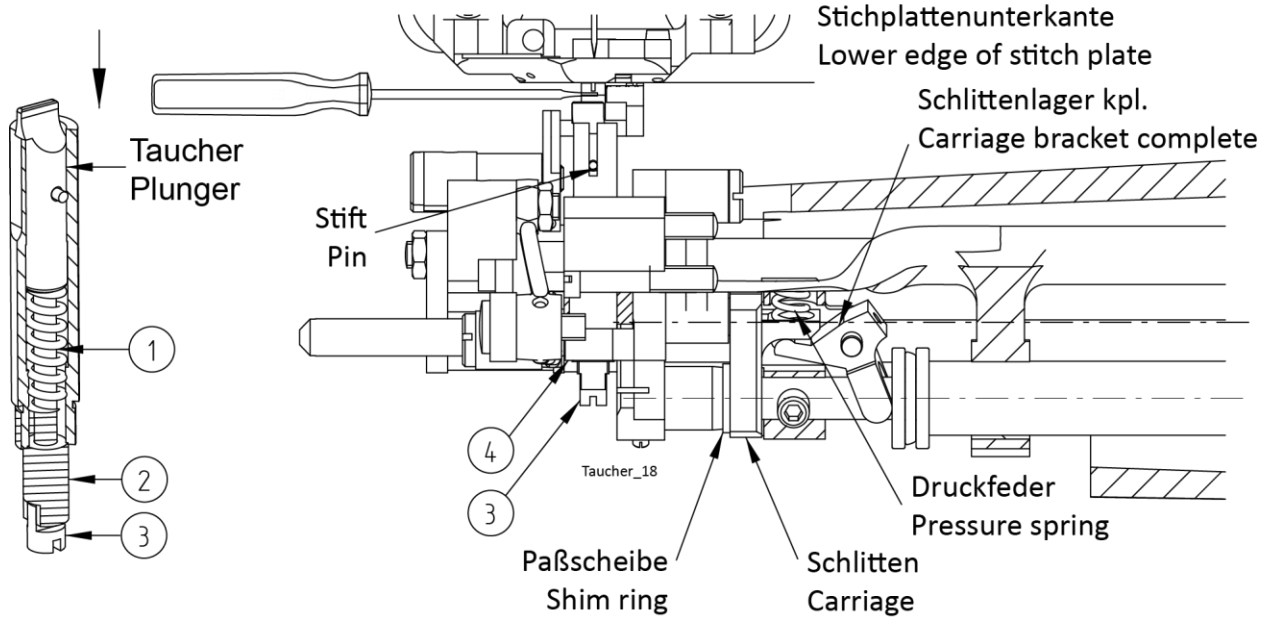
Now the plunger, under pressure from a spring, can rise above several layers of fabric, cross seams, thickenings etc lying above each other only to such a height, that the upper fabric layers and not the outside fabric is stitched.

The above adjustment requires some technical knowledge and experience.

Care must be taken that the pressure spring (1) is only adjusted as much as is necessary for the correct effect of the plunger stop. This keeps the pressure of the plunger onto the plunger stop as low as possible and less stress is put on stitch plate and machine.

With adjustment of the plunger pressure at the works, the screw for the plunger regulation (2) is flush with the plunger guide (4).
By turning the plunger adjusting screw (3), including the screw for the plunger regulation (2), to the right it increases, to the left it decreases.

**Fig. 17**


Stichplattenunterkante
Lower edge of stitch plate
Schlittenlager kpl.
Carriage bracket complete
Taucher
Plunger
Stift
Pin
1
2
3
4
Taucher_18
Druckfeder
Pressure spring
Paßscheibe
Shim ring
Schlitten
Carriage

# 5 Operating the sewing machine

**C A U T I O N !  Danger of Injury!**

Take sufficient **care** during sewing and observe the sewing area!

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

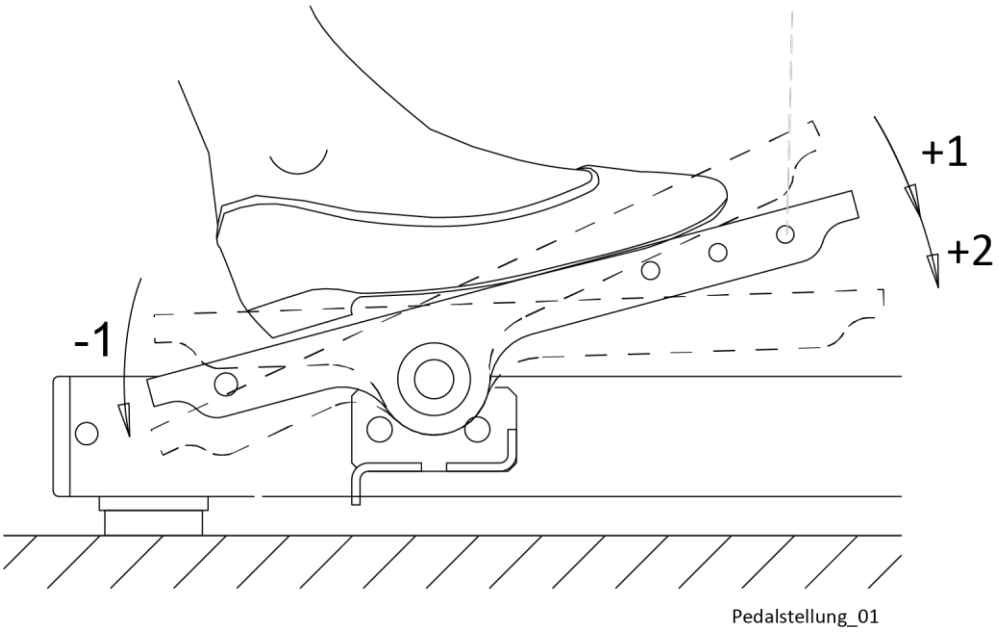
For machines with 2 pedals: push down the left pedal fully increases the top feed length (multi-width take-up). With this configuration, motor control is taken over by the right pedal.

To lift the machine, a pneumatic lifting system can be supplied instead of the knee lever.

When releasing the pedal to switch on the motor, the machine moves to its position and pneumatic lifting takes place.

Pressing the pedal forwards closes the lifting and the machine starts to sew.

## Fig. 18



## 5.1 Switch-on

Switch on the main switch on the right underneath the table plate.

With pneumatic lifting, connect the service unit to the compressed air network (10 bar) or connect the compressor and regulate to 5 – 6 bar.

The lifting is now opened and the sewing machine is ready for operation.

## 5.2 Inserting and removing the sewing material

When during standstill of the machine the needle is approx. 15 mm after its upper dead point in front of the right penetration, the presser plate and the plunger can be moved downwards by activating the knee lever. At the same time the needle thread tension is vented.

For pneumatic lifting also see point “5 Operating the sewing machine”.

Now the sewing material can be inserted into the machine between stitch plate and presser plate.

The sewing material cannot be removed until the last stitch has been completely carried out, the needle thread loop has dropped from the hook, the needle is again in the position mentioned above and the knee lever is activated.

The positioning is done automatically.

**ATTENTION!** Do not let the machine run if there is no fabric between stitch plate and feed dog.

**A T T E N T I O N !**

Do not let a threaded-in machine run without sewing material!

## 5.3 Sewing

The lining will be inserted in the left stitch plate opening standing up.

In both cases it is advantageous to tack or to peg with hairpins.

When hemming the lining the jacket lies to the left.

By exchanging the enclosed accessories the work sequences can be exchanged.

In connection with this please observe point 7 Variable sewing tools.

Video: “Sewing and making a sewing program_1”

“Sewing and making a sewing program_2”

### 5.3.1 General

The sewing cycle begins with the spot tack by pressing the pedal forwards. The sewing speed is independent of the pedal. After completing the spot tack, the machine sews at the speed set by the pedal. When the pedal is released at the end of the stitch, the seam lock becomes active and the machine lifts off automatically after finishing the spot tack. An intermediate lift thus only functions using the knee lever.

During spot tack, feed dog is deactivated and an additional thread tension is active. This thread tension needs to be set separately.

## 5.3.2 Hemming with blind stitch

If there are no experience values available, the best thing to do is to carry out the following settings in sequence:

- Adjust required stitch length
- Adjust stitch depth
- Check plunger stop and if necessary adjust
- Adjust material guide (if available)
- Check presser plate lift. (Mechanic's instructions)
- Check stitch length.
- Adjust thread tension, the seam should lie loose on the hem as a rule.
- Correct the seam diagram.

Insert the sewing material and take care that the start of the hem can be taken up by the feed dog after the first stitch.
Check the sewing result achieved and possibly modify the adjustments carried out above.
With through stitches or omissions at the outside fabric (right hand initial stitch) or the hem edge or the lining (left hand initial stitch), adjust the stitch depth settings.

„Markings“ caused by the penetration of the needle in the outside fabric (shift of fibres) sometimes cannot be avoided with extremely thin und hard sewing material.

When sewing take care that the hem edge always runs along the material guide (if available). Jerky activation of the pedal should be avoided, as changes in speed during the sewing process can under certain circumstances have a negative effect on the initial stitch.

**NOTE:** To avoid having a build-up with thick fabrics it is recommend to cut off the corners at the cross seams prior to hemming.

## 5.4 Problems during sewing and troubleshooting

**C A U T I O N ! Danger of Injury!**

Switch off the machine and ensure it is switched off by pressing the pedal for switching the motor.

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

- **Thread breaking**

  **Possible causes:**

  - sharp edges or grooves in needle guide, take-up lever, hook or needle eye when the machine has been used for a long time.
  - The thread between hook and bobbin case breaks or is pinched off.
  - Too much oil has penetrated the hook path
  - The bobbin is packed too tight or the bobbin sides are forced apart because the thread is too tightly wound.
  - Bobbin case lifting or hook bridge are not correctly adjusted.
  - The hook to needle or needle rise has not been correctly adjusted or has become displaced, meaning that the thread loop is not always taken up.
  - Thread tension is set too slack or too tight.

  **Remedy:**

  - Replace or re-polish the damaged parts
  - Dismantle shuttle, remove bobbin case and polish the feed edges of the bobbin case and hook path.
  - Using an absorbent thread (cotton thread, core spun thread), sew out on a remnant.
  - Insert new bobbin
  - Slowly turn the machine by hand and check whether the loop slides unimpeded through the shuttle. If not, readjust bobbin case lifting or hook bridge.
  - Correct hook position or loop lift.
  - Correct thread tension - check thread line.

  **ATTENTION!** thread course, thread, Stitch plate with plunger and cloth retainer, needle and thread tension should always be set and chosen according to the material to be sewn.

- **Uneven stitching**

  **Possible causes:**

  - frequently worn or damaged needles
  - height of Stitch plate or needle slide plate incorrectly adjusted
  - unsuitable needle thickness (too thin)

  **Remedy:**

  - Replace damaged needle. Check adjustments and correct if necessary. Use correct needle thickness 1828 E 80/12.

- **Missing loops**

  **Possible causes:**

  - incorrectly adjusted or badly adjusted hook
  - Loop stroke too small or too big

  **Remedy:**

  - Turn machine by hand and check hook motion. The cause can usually be seen.
  - If necessary, also correct thread tension or thread tension spring.
  - correct stroke of the loop.

- **Loops become stuck**

  **Possible causes:**

  - thread tension too slack
  - needle not tacking

  **Remedy:**

  - Check thread tension or thread tension spring
  - Check stitch depth (even for skip stitch or plunger lowering)

- **Machine does not start**

  **Possible causes:**

  - Control fault
  - Mechanical damage
  - Plunger module does not react

  **Remedy:**

  - Switch machine off and on again
  - Rectify mechanical faults
  - Check programming. If necessary, call customer service.

- **The sewing result does not come up to your expectations**

  **Possible causes:**

  - Damaged sewing tools or wear caused by improper use or natural wear following long use of machine.
  - The machine has become mechanically misadjusted
  - Unsuitable needle thickness (see “4.1 Needle”)
  - Unsuitable sewing thread (see “4.1 Needle”).

  **Remedy:**

  - Replace damaged parts - customer service
  - Work carried out by engineers: see also mechanic’s instructions and if necessary, call customer service
  - Replace needle; also check needle tip for damage.

- **Marks on or damage to the sewn item**

  **Possible causes:**

  - unsuitable feed gearing
  - Sewing tools incorrectly set
  - Damaged sewing tools
  - Unsuitable needle or thread thickness.

  **Remedy:**

  - check settings
  - check feed (gearing), if necessary, replace feed
  - choose needle and thread to suit sewing material.

- **Difficulties during feeding the sewn material (stitch length)**

  **Possible causes:**

  - Feed incorrectly adjusted
  - Unsuitable feed gearing
  - Incorrect presser plate take-up
  - Bunching of the sewn item on the Stitch plate, particularly when cross-seaming.

  **Remedy:**

  - check settings, if necessary change feed.
  - Check lower side of Stitch plate, feed and sewing tools for damage, if necessary replace or re-polish.
  - The suitable stitch plate must be selected for thick sewn material see “7 Variable sewing tools” and “8 Optional Extras”.

- **Plunger**

  **Possible causes:**

  - The plunger does initialise any longer

  **Solutions:**

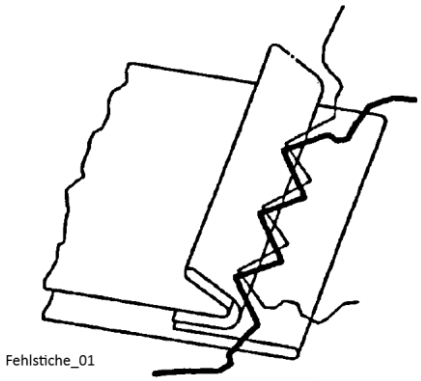
  - Check plug for correct fit on the control box
  - Switch off machine, wait 20 seconds, and then switch on again
  - Contact manufacturer

## 5.5 Incorrect stitches (Fig. 19)

The correct two-thread blind stitch is shown in Fig. 19.

Incorrect stitches can occur if the needle does not take up the sewing material or does not carry out initial stitch or the hook does not take up the thread loop.

## Fig. 19



# 6 Machine maintenance

## 6.1 General

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

Switch off machine electrically and confirm that the machine is really in standstill position by operating thetreadle for the motor control before changing the needle.

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

**A T T E N T I O N !**

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

Material, fibres and dirt which have accumulated on the moving parts of the machine, must be removed as they can cause faults and jeopardise the operating reliability of the machine.

Even the hook path should be lubricated with a drop of oil from time to time. For this purpose there is a hole in the hook cover.

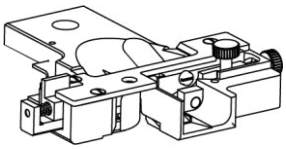
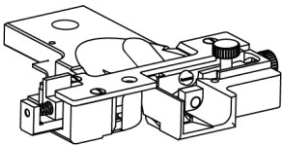
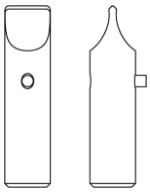
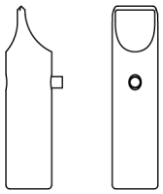
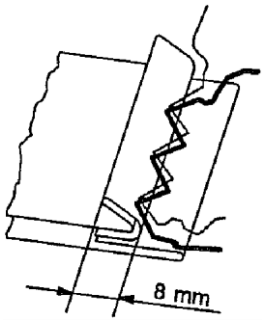
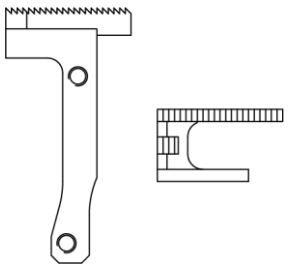
# 7 Variable sewing tools

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

Switch off the machine electrically, and depress the motor switch pedal to make sure that the machine is truly switched off.

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

The following table shows the available sewing tools.

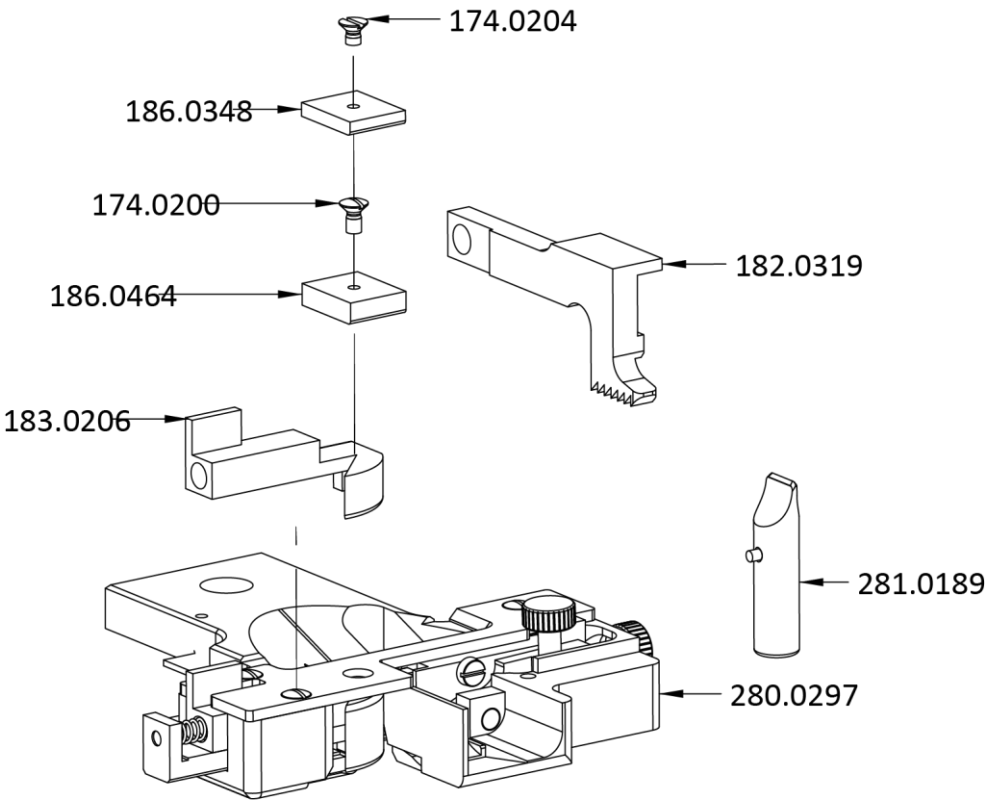
| **Cl. 710** | | |
|---|---|---|
| Stitch plate | Standard<br>  <br>280.0296<br>7,0 mm opening | Optional<br>  <br>280.0297<br>8,0 mm opening |
| Plunger | 281.0125<br>  | 281.0189<br>  |
| Pressure spring | 161.0157<br> | |
| Stitch formation |  | 8 mm<br>(or 6 mm or 4 mm)<br>under the hem<br>edge |
| Feed dog | 182.0347<br>  | |

# 8 Optional Extras

The following equipment is additionally available for the machine and can be ordered from the works with the machine or as attachment:

## 8.1 Stitch plate with Kit for felling fabric hems on half-lined jackets and coats, also for lining felling of thicker material

280.0297 Stitch plate 8,0 mm opening
with Kit for half-lined jackets and coats
Consisting of:



# 9 Parameter list DA432 / DAC Classic

**Relevant parameters:**

| E | K | P | Min | Max | Preset value | Unit | Description |
|---|---|---|---|---|---|---|---|
| t | 08 | 05 | 0 | 1 | 0 | - | Direction of rotation of motor<br>0 = Left<br>1 = Right |
| t | 08 | 10 | - | - | - | - | Reference position |
| t | 08 | 12 | 0 | 359 | 15 | - | Needle in the low position (bottom dead center) (position 1) |
| t | 08 | 13 | 0 | 359 | 355 | - | Thread lever at top dead center (position 2) |

**Error messages:**

| Code | Type | Possible cause | Remedial action |
|---|---|---|---|
| 8406 | Error | Checksum error | - Software update<br>- Replace the control |
| 8501 | Error | Software protection | - The DA tool must always be used for software updates |
| 9400 | Error | Wrong machine ID | - Check whether machine is connected<br>- Switch machine ID |
| 9401 | Error | Plunger PCB did not start properly. No response of PCB after the programmed time (t 40 00) | - Check/switch Plunger System |

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

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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:

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*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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