

# PFAFF

## 3371-10/01

### Instruction Manual

This instruction manual applies to machines from the following serial numbers onwards:

# 6 001 000 →



This Instruction Manual is valid for all models and subclasses listed in the chapter " **Specifications** ".



The adjustment manual for the machines can be downloaded free of charge from the internet address

[www.pfaff-industrial.com/de/service/download/index.php3](http://www.pfaff-industrial.com/de/service/download/index.php3).

As an alternative to the internet download the adjustment manual can also be ordered in book form under part no. **296-12-18 584/002**.

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## **PFAFF Industrie Maschinen AG**

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## 1 Safety

### 1.01 Directives

This machine is constructed in accordance with the European regulations contained in the conformity and manufacturer's declarations.

In addition to this Instruction Manual, also observe all generally accepted, statutory and other regulations and legal requirements and all valid environmental protection regulations!

The regionally valid regulations of the social insurance society for occupational accidents or other supervisory organizations are to be strictly adhered to!

### 1.02 General notes on safety

- This machine may only be operated by adequately trained operators and only after having completely read and understood the Instruction Manual!
- All Notes on Safety and Instruction Manuals of the motor manufacturer are to be read before operating the machine!
- The danger and safety instructions on the machine itself are to be followed!
- This machine may only be used for the purpose for which it is intended and may not be operated without its safety devices. All safety regulations relevant to its operation are to be adhered to.
- When exchanging sewing tools (e.g. needle, roller presser, needle plate and bobbin), when threading the machine, when leaving the machine unattended and during maintenance work, the machine is to be separated from the power supply by switching off the On/Off switch or by removing the plug from the mains!
- Everyday maintenance work is only to be carried out by appropriately trained personnel!
- Repairs and special maintenance work may only be carried out by qualified service staff or appropriately trained personnel!
- Work on electrical equipment may only be carried out by appropriately trained personnel!
- Work is not permitted on parts and equipment which are connected to the power supply! The only exceptions to this rule are found in the regulations EN 50110.
- Modifications and alterations to the machine may only be carried out under observance of all the relevant safety regulations!
- Only spare parts which have been approved by us are to be used for repairs! We expressly point out that any replacement parts or accessories which are not supplied by us have not been tested and approved by us. The installation and/or use of any such products can lead to negative changes in the structural characteristics of the machine. We are not liable for any damage which may be caused by non-original parts.

## 1.03

### Safety symbols



Danger!  
Points to be observed.



Danger of injury for operating and specialist personnel!



### Caution

Do not operate without finger deflector and safety devices.

Before threading, changing bobbin and needle, cleaning etc. switch off main switch.

## 1.04

### Important points for the user

- This Instruction Manual is an integral part of the machine and must be available to the operating personnel at all times.
- The Instruction Manual must be read before operating the machine for the first time.
- The operating and specialist personnel is to be instructed as to the safety equipment of the machine and regarding safe work methods.
- It is the duty of the user to only operate the machine in perfect running order.
- It is the obligation of the user to ensure that none of the safety mechanisms are removed or deactivated.
- It is the obligation of the user to ensure that only authorized persons operate and work on the machine.

Further information can be obtained from your PFAFF agent.

## 1.05 Operating and specialist personnel

### 1.05.01 Operating personnel

Operating personnel are persons responsible for the equipping, operating and cleaning of the machine as well as for taking care of problems arising in the sewing area.

The operating personnel is required to observe the following points and must:

- always observe the Notes on Safety in the Instruction Manual!
- never use any working methods which could adversely affect the safety of the machine!
- not wear loose-fitting clothing or jewelery such as chains or rings!
- also ensure that only authorized persons have access to the potentially dangerous area around the machine!
- always immediately report to the person responsible any changes in the machine which may limit its safety!

### 1.05.02 Specialist personnel

Specialist personnel are persons with a specialist education in the fields of electrics, electronics and mechanics. They are responsible for the lubrication, maintenance, repair and adjustment of the machine.

The specialist personnel is obliged to observe the following points and must:

- always observe the Notes on Safety in the Instruction Manual!
- switch off the On/Off switch before carrying out adjustments or repairs, and ensure that it cannot be switched on again unintentionally!
- wait until the luminous diode on the control box is no longer blinking or on before beginning adjustment or repair work.
- never work on parts which are still connected to the power supply! Exceptions are explained in the regulations EN 50110.
- replace the protective coverings and close the electrical control box after all repairs or maintenance work!

1.06

## Danger



A working area of 1 meter is to be kept free both in front of and behind the machine while it is in operation so that it is always easily accessible.



Never reach into the sewing area while sewing! Danger of injury by the needle!



Never leave objects on the table while adjusting the machine settings!  
Objects can become trapped or be slung away! Danger of injury!

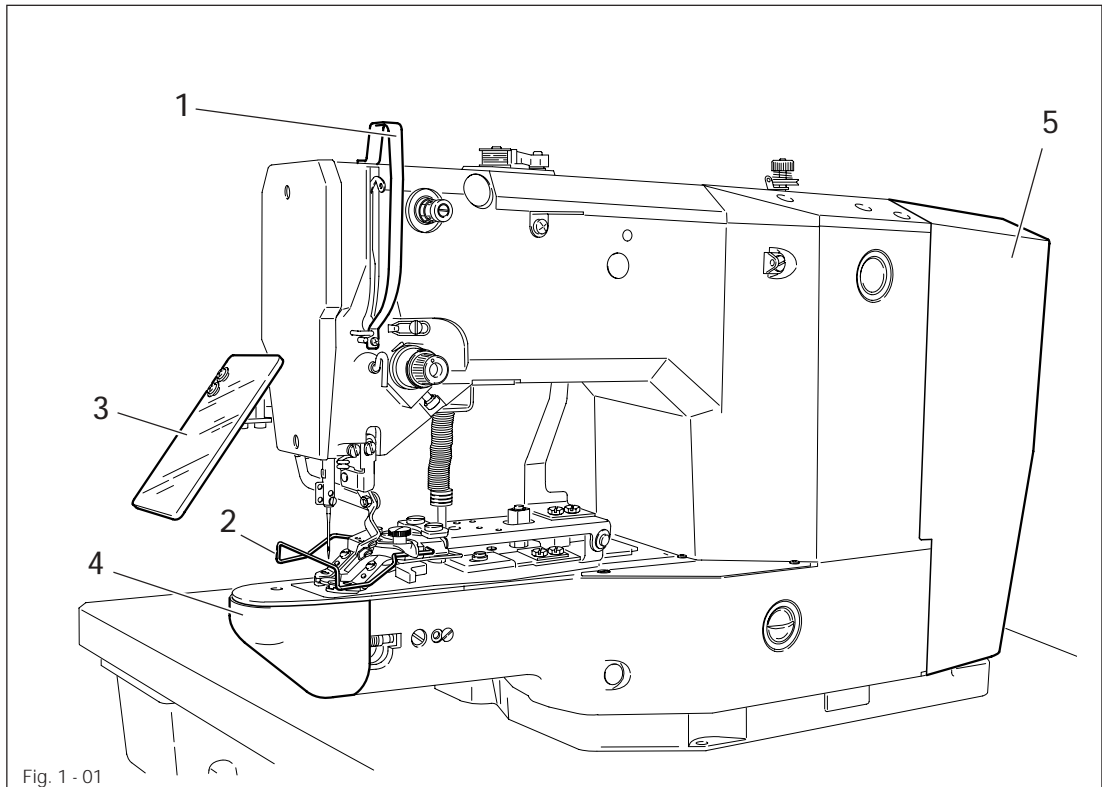


Fig. 1 - 01



Do not operate the machine without its take-up-lever guard 1!  
Danger of injury due to the motion of the take-up lever!



Do not operate the machine without finger deflector 2!  
Danger of injury by the needle!



Do not operate the machine without eye shield 3!  
Danger of injury from flying needle or button fragments!



Only operate the machine with cover 4 closed!  
Danger of injury from rotating hook!



Do not operate the machine without cover 5!  
Danger of injury from moving parts!



2 Proper use

The Pfaff 3371-10/01 is used for attaching buttons to articles of clothing automatically.



Any and all uses of this machine which have not been approved of by the manufacturer are considered to be inappropriate! The manufacturer cannot be held liable for any damage caused by the inappropriate use of the machine! The appropriate use of the machine includes the observance of all operational, adjustment, maintenance and repair measures required by the manufacturer!

## Specifications ▲

Max. sewing speed: ..... 2500 spm  
Feed type: ..... intermittent  
Stitch length: ..... 0.1 – 10.0 mm  
Stitch type: ..... 301 (lockstitch)

Needle sizes in 1/100 mm:

for fine materials: ..... 70 - 100

for medium-weight materials: ..... 100 - 120

Needle system: ..... DPx17

Needle bar stroke: ..... 41 mm

Fabric clearance: ..... max. 13 mm

Max. size of sewing area: ..... 6,5 x 6,5 mm

Power supply: ..... 220 V ± 10%, 50/60 Hz, single phase

Power consumption: ..... 0.55 kVA

Electrical power rating: ..... 1,2 kVA

Fuse protection: ..... 1x 16 A, inert

Noise data:

Noise emission level at workplace

with a sewing cycle of 4 sec. on and 2 sec. off: .....  $L_{pa} = 74 \text{ dB(A)} \blacksquare$

(Noise measurement in accordance with DIN 45 635-48-B-1, ISO 11204, ISO 3744, ISO 4871)

Sewing head dimensions:

Length: ..... approx. 770 mm

Width: ..... approx. 220 mm

Height: ..... approx. 380 mm

Dimensions of standard base:

Length: ..... approx. 1060 mm

Width: ..... approx. 600 mm

Height: ..... approx. 820 mm

Weights

Sewing head: ..... approx. 42 kilos

Base incl. control box: ..... approx. 45 kilos

▲ Subject to alterations

■  $K_{pA} = 2,5 \text{ dB}$

### 4 Disposal of machine

- The proper disposal of the machine is the responsibility of the customer.
- The materials used in the machines are steel, aluminium, brass and various plastics. The electrical equipment consists of plastics and copper.
- The machine is to be disposed of in accordance with the locally valid environmental protection regulations. If necessary, a specialist is to be commissioned.



Special care is to be taken that parts soiled with lubricants are separately disposed of in accordance with the locally valid pollution control regulations!

### 5 Transport, packaging and storage

#### 5.01 Transport to the customer's premises

The machines are delivered completely packed.

#### 5.02 Transport within the customer's premises

The manufacturer bears no liability for transport within the customer's premises or to the individual locations of use. Make sure that the machines are always transported upright.

#### 5.03 Disposal of the packaging

The packaging of these machines consists of paper, cardboard and VCE fiber. The proper disposal of the packaging is the responsibility of the customer.

#### 5.04 Storage

The machine can be stored for up to 6 months if not in use. During this time it should be protected from dust and moisture.

For longer storage the individual parts of the machine, especially the moving parts, must be protected from corrosion, e.g. by a film of oil.

### 6 Explanation of the symbols

In the following section of this Instruction Manual, certain tasks or important pieces of information are accentuated by symbols.

The symbols used have the following meanings:



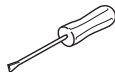
Note, information



Cleaning, care



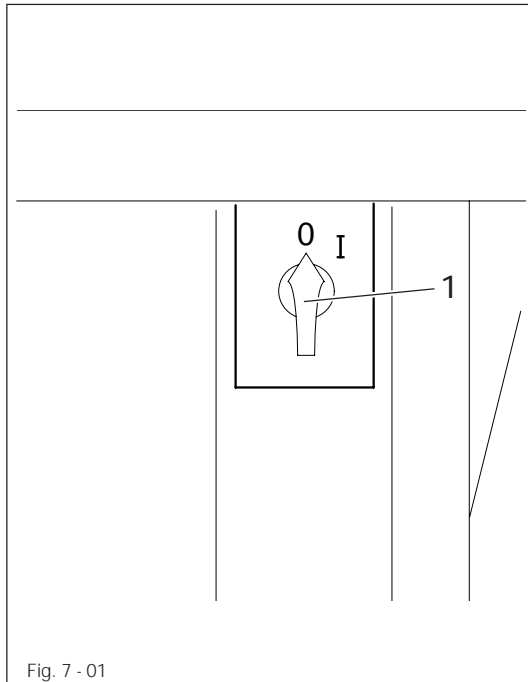
Lubrication, greasing



Servicing, repairing, adjustment, maintenance  
(only to be carried out by specialist personnel)

## 7 Control elements

### 7.01 Main switch

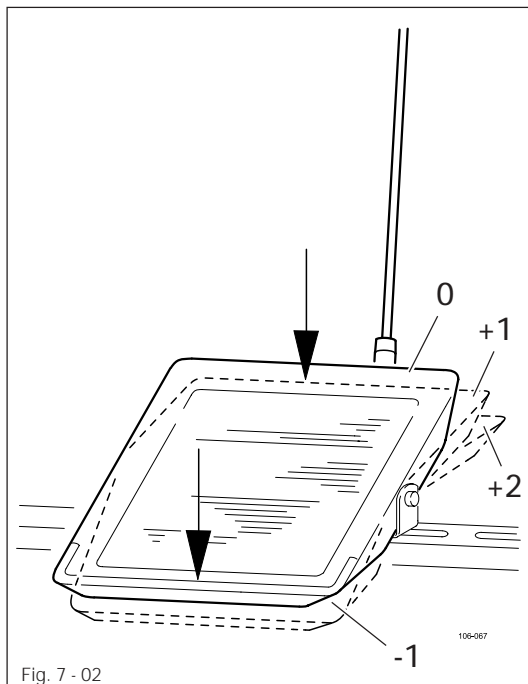


- Switch the machine on or off by turning main switch 1.



After switching the machine on, first press the „TE“ key to bring the machine into its neutral position.

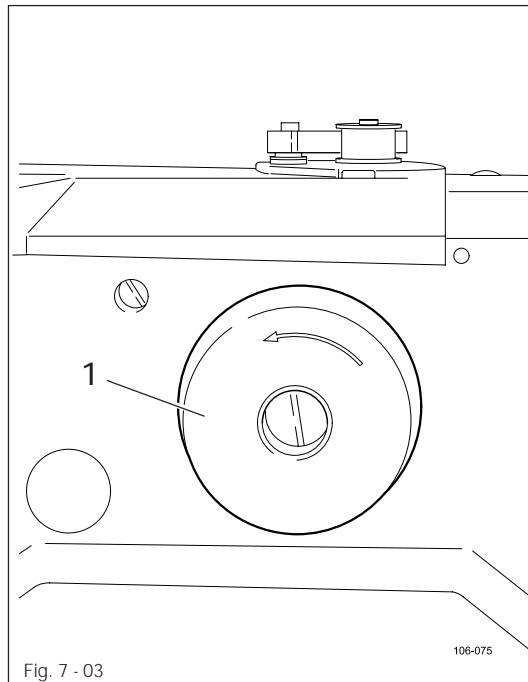
### 7.02 Pedal



The pedal is used to lower and raise the button clamp, and to start the sewing program.

- 1 = sewing interruption
- 0 = neutral position
- +1 = lower button clamp
- +2 = sewing

7.03 Balance wheel

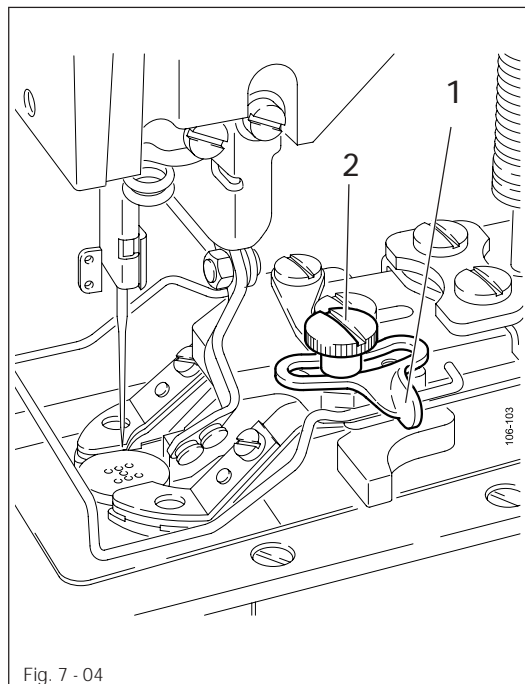


- By pressing and holding down balance wheel 1, it is possible to adjust the needle bar manually.



Release the balance wheel 1 before operating the **basic position** or **tacting backwards/forwards** keys on the control panel.

7.04 Lever for adjusting the button clamp size



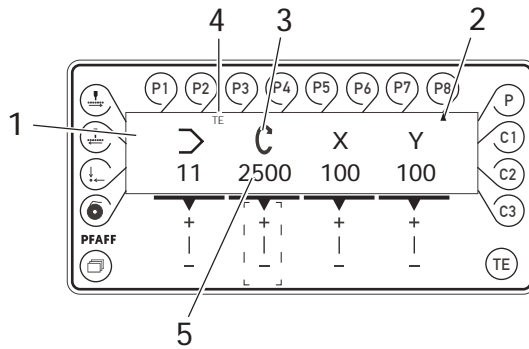
- Adjust lever 1 to set the size of the button clamp. To do so, loosen screw 2.



After screw 2 has been loosened, the clamp jaws close automatically! Danger of crushing in the button clamp zone!

## 7.05 Control panel

The control panel is used to select seam programs, change parameter values, control the different operating modes, as well as for reading error signals and service settings.



The control panel consists of screen 1 with the appropriate displays and a row of function keys.

### 7.05.01 Screen displays

Depending on the operating mode, on the screen 1 information is shown about the machine status, program selection, sequence program progress, input parameters, as well as error signals.

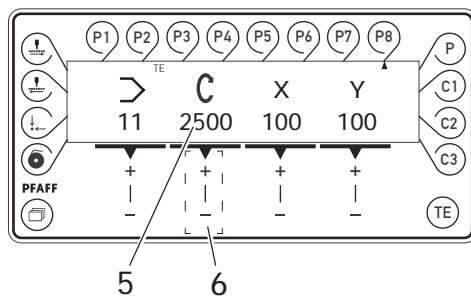
- Activated functions are displayed with the triangular marking 2 beneath and next to the respective function key.
- Depending on the operating mode, relevant data is displayed in combination with the appropriate symbol or text, and can be altered directly (e.g. speed 3 with the value 5).
- When the parameters are entered, the number of the parameter selected is shown with the corresponding parameter value, see **Chapter 11.03 Parameter input**.
- After the input mode has been selected, the text 4 („TE“) appears at the top edge of the display, the input mode is activated, see **Chapter 11 Input**.
- If faults occur in the sewing operation, a corresponding error signal appears in the display, see **Adjustment manual Chapter 14.34 Error messages on the display**.



7.05.02 Display symbols

- **Program number**  
The current seam program number appears under this symbol.
- Ⓒ **Speed**  
The current speed appears under this symbol.
- X **Size factor X (crosswise)**  
The size factor in X-direction in % appears under this symbol.
- Y **Size factor Y (lengthwise to arm)**  
The size factor in Y-direction in % appears under this symbol.
- ▢▢▢ **Bobbin thread counter/piece counter**  
The current value for counting the piece or bobbin thread appears under this symbol.
- ↵ **Enter**  
If the key under this symbol is pressed, the input is concluded.

7.05.03 Function keys



With the function keys functions are switched on or off, parameters and operating modes are selected and relevant values changed.

Each time a key is pressed, an acoustic signal is given (factory setting). If function keys are pressed which are not permitted in accordance with the machine status, or if the top or bottom limit of the input value is reached, a double signal tone can be heard.



A value is changed with the corresponding +/--key. In this way, e.g. by pressing and holding +/- on key 6, the speed value 5 can be changed.



### Menu

This function is used to scroll within various different screen displays.



### Wind

The bobbin thread winding function is called up, see Chapter 9.03 **Winding the bobbin thread**.



### Basic position

The button clamp and needle are positioned in the basic position and, if necessary, the thread cutting function activated.



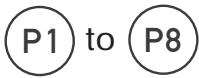
### Tacting backwards

Each time the key is pressed, the selected seam program is sewn stitch by stitch in reverse, and the coordinates for each stitch are shown on the control panel.



### Tacting forwards

Each time the key is pressed, the selected seam program is sewn forwards stitch by stitch, and the coordinates for each stitch are shown on the control panel.



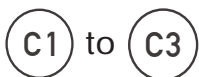
### Program stations

The function keys P1 to P8 are used to enter and select seam programs, see Chapter 9.06.02 **Selecting the program station**.



### Direct program selection

This function is used to select a seam pattern. After selection, speed and size can be altered, see Chapter 9.06.01 **Selecting and altering the seam pattern**.



### Sequences

The function keys C1 to C3 are used to enter and select sequences, see Chapter 9.06.03 **Selecting a sequence**.



### TE

In the production mode, this key is used to change into the input mode. In the input mode this key is used to acknowledge the input of program stations and sequences, to change into the basic status of the input mode and to change into the sewing mode.

## 8 Installation and commissioning



The machine must only be installed and commissioned by qualified personnel!  
All relevant safety regulations must be strictly adhered to!  
If the machine is delivered without a table, be sure to use a stand and table top that can hold the weight of the machine with its motor.  
It is very important to ensure that the stand of the machine is firm and steady, also during sewing.

### 8.01 Installation

The site where the machine is installed must be provided with suitable connections for electric current.

It must be ensured that the standing surface of the machine site is firm and horizontal, and that sufficient lighting is provided for.

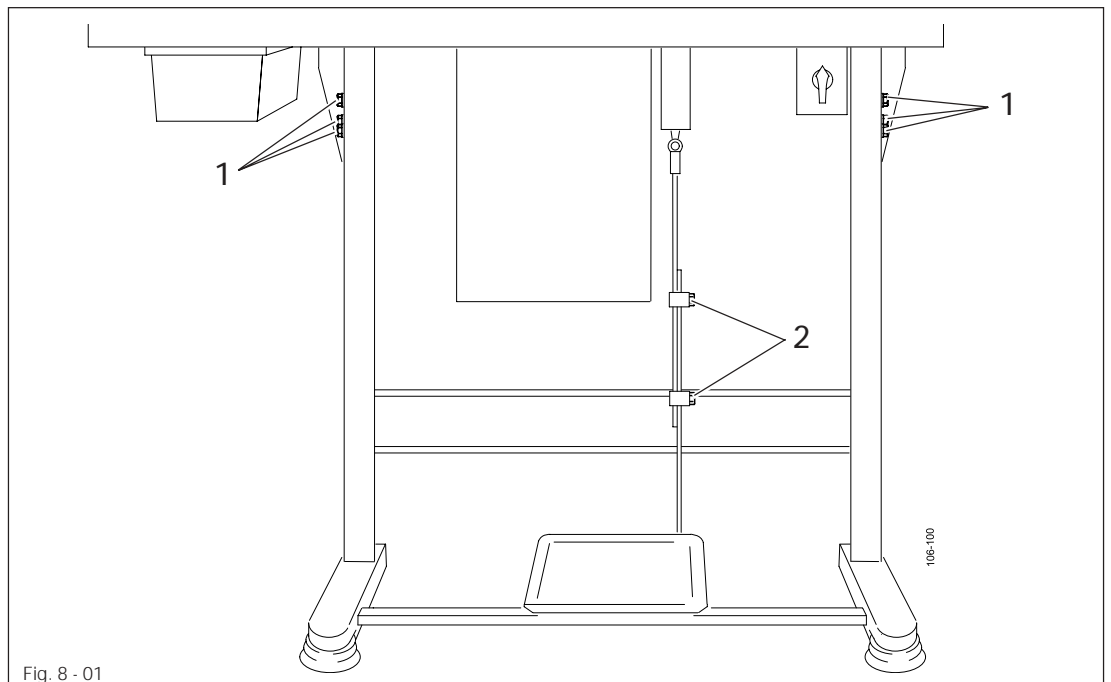


For packing and transportation reasons the table top is in the lowered position. The table height is adjusted as described below.



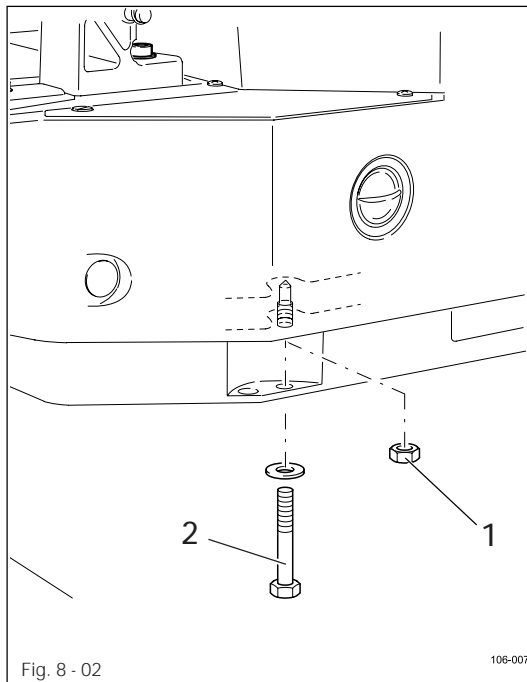
If the machine is delivered with stand, the transit lock must be removed before commissioning, see Chapter 8.01.02 Removing the transit lock.

#### 8.01.01 Adjusting the table height



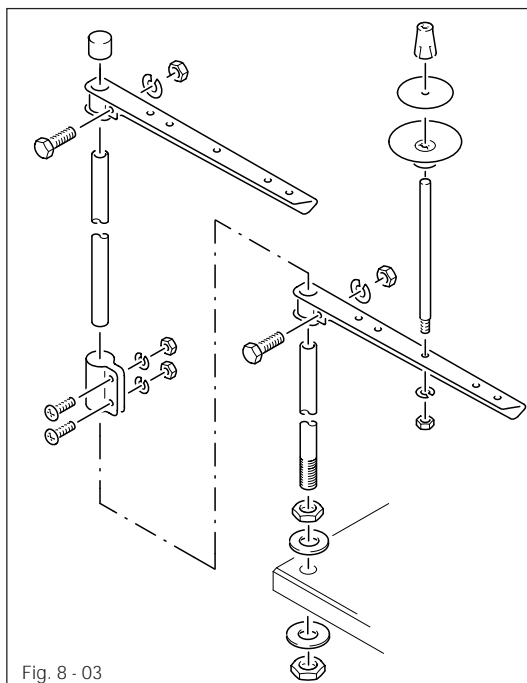
- Loosen screws 1 and 2 and set the table height as required.
- Firmly tighten screw 1.
- Set the required pedal position and tighten screw 2.

## 8.01.02 Removing the transit lock



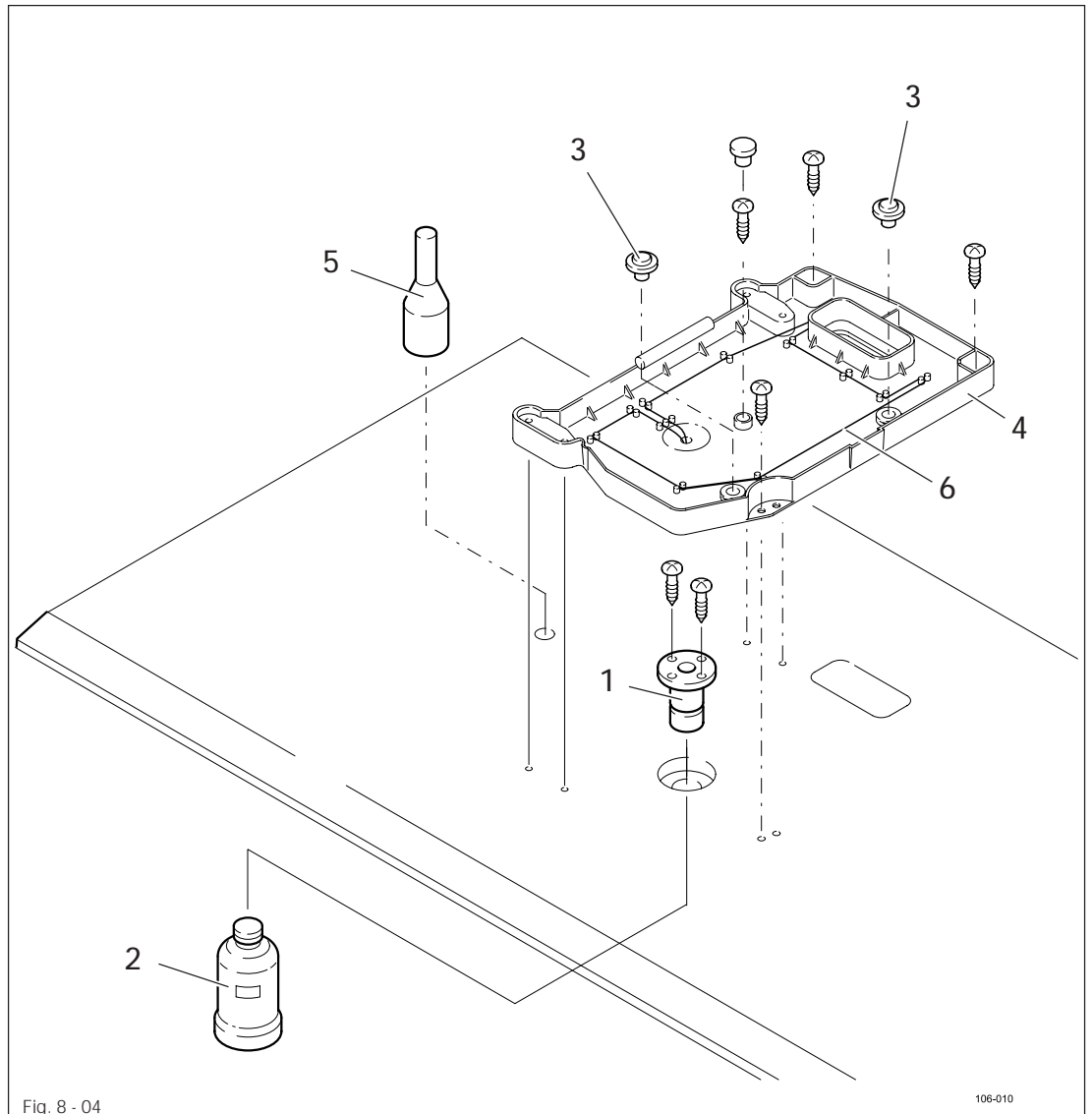
- Loosen nut 1.
- Remove screw 2.

## 8.01.03 Fitting the reel stand



- Fit the reel stand as shown in Fig. 8 - 03.
- Afterwards insert the stand in the hole in the table top and secure it with nuts provided.

## 8.01.04 Mounting the table top (for deliveries without stand)

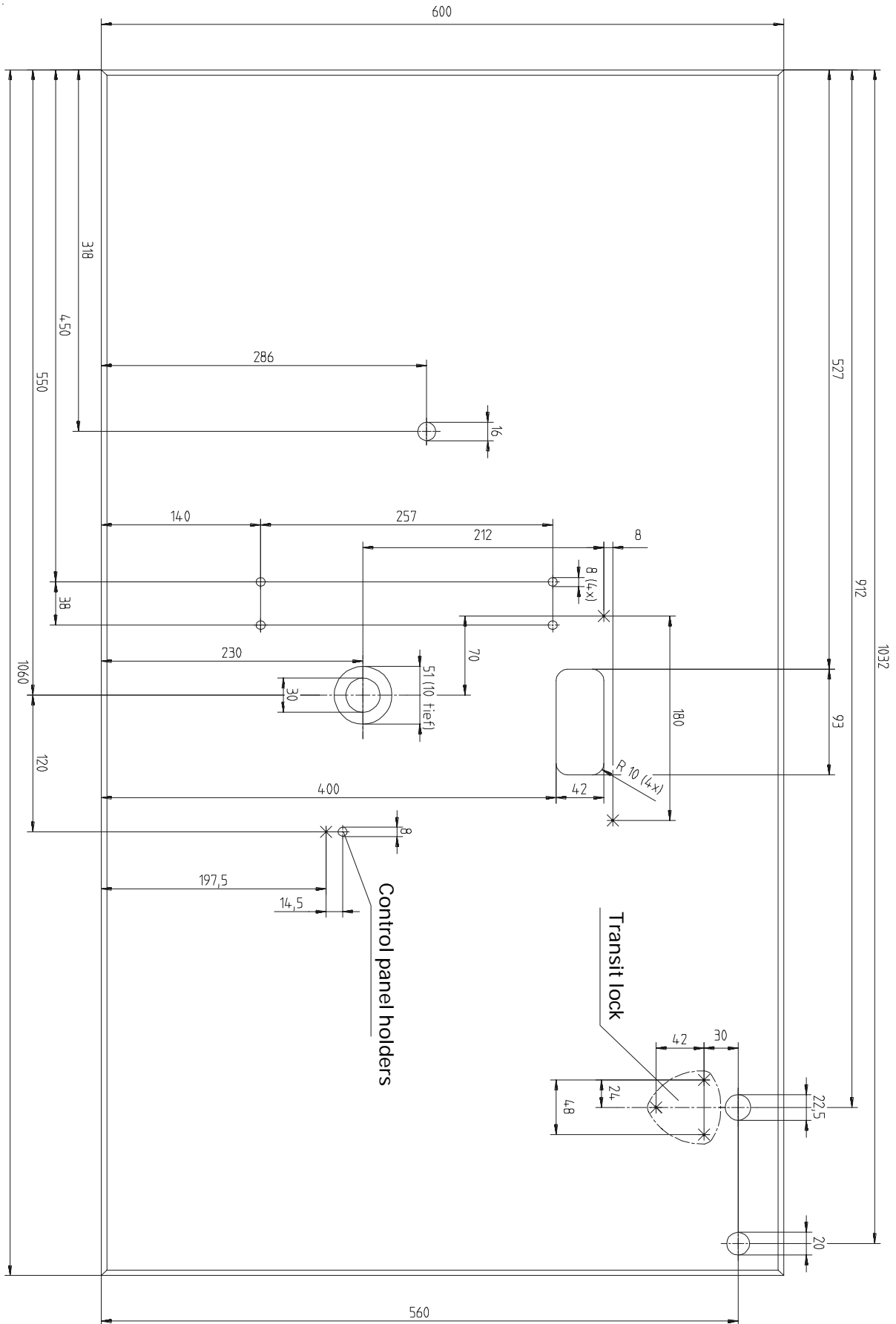


- Drill holes in the table top as shown in the drawing, see Chapter 8.01.05 Table top drill hole plans.
- Screw on the oil outlet 1.
- Screw the oil tank 2 to oil outlet 1.
- Set the rubber pads 3 in the fastening holes of the oil pan 4 and screw oil pan 4 to the table top.
- Set support 5 in the appropriate hole.
- Place wick 6 in the holders of oil pan 4.

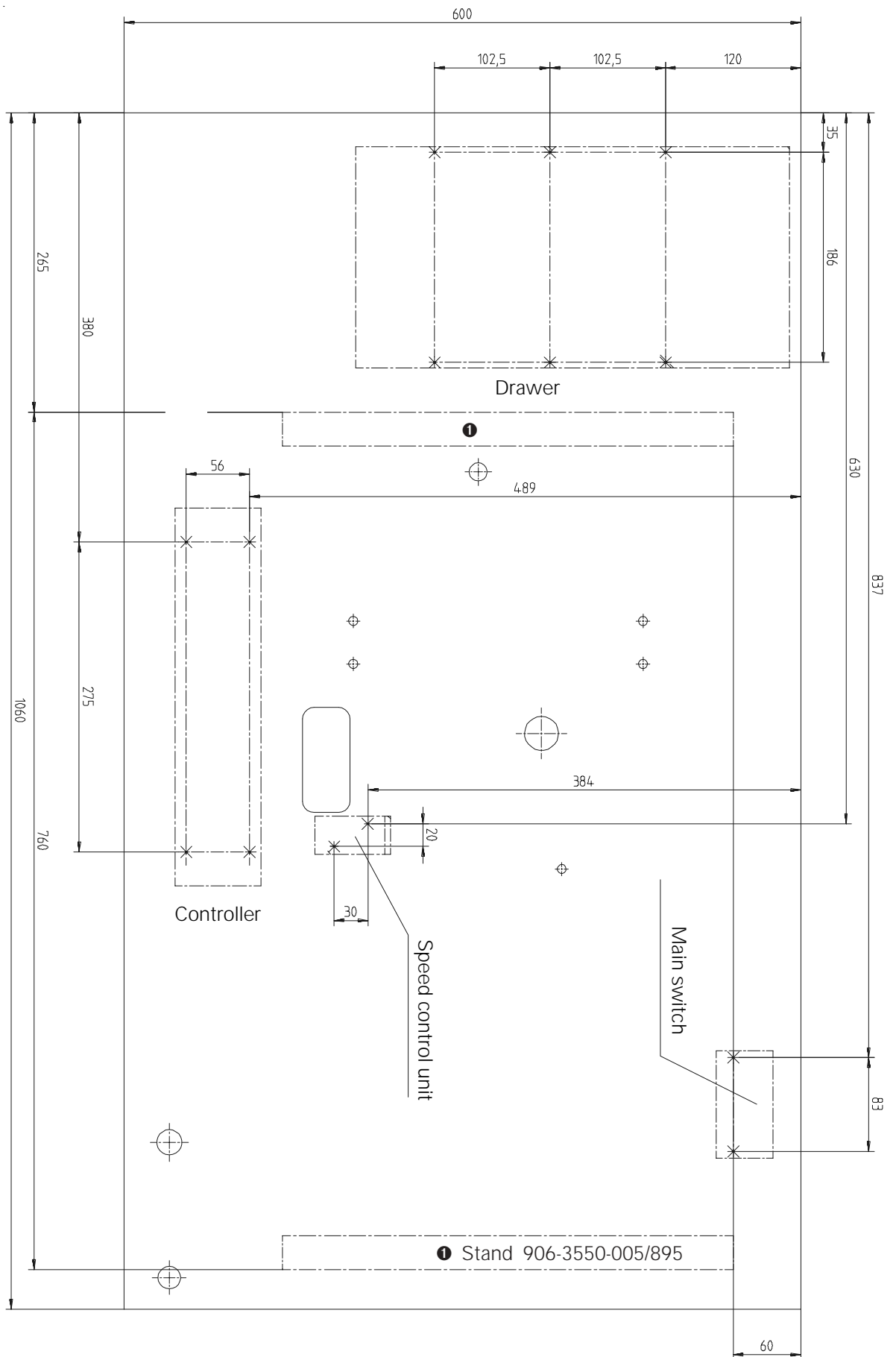
# Installation and commissioning

## 8.01.05 Table top drill hole plans

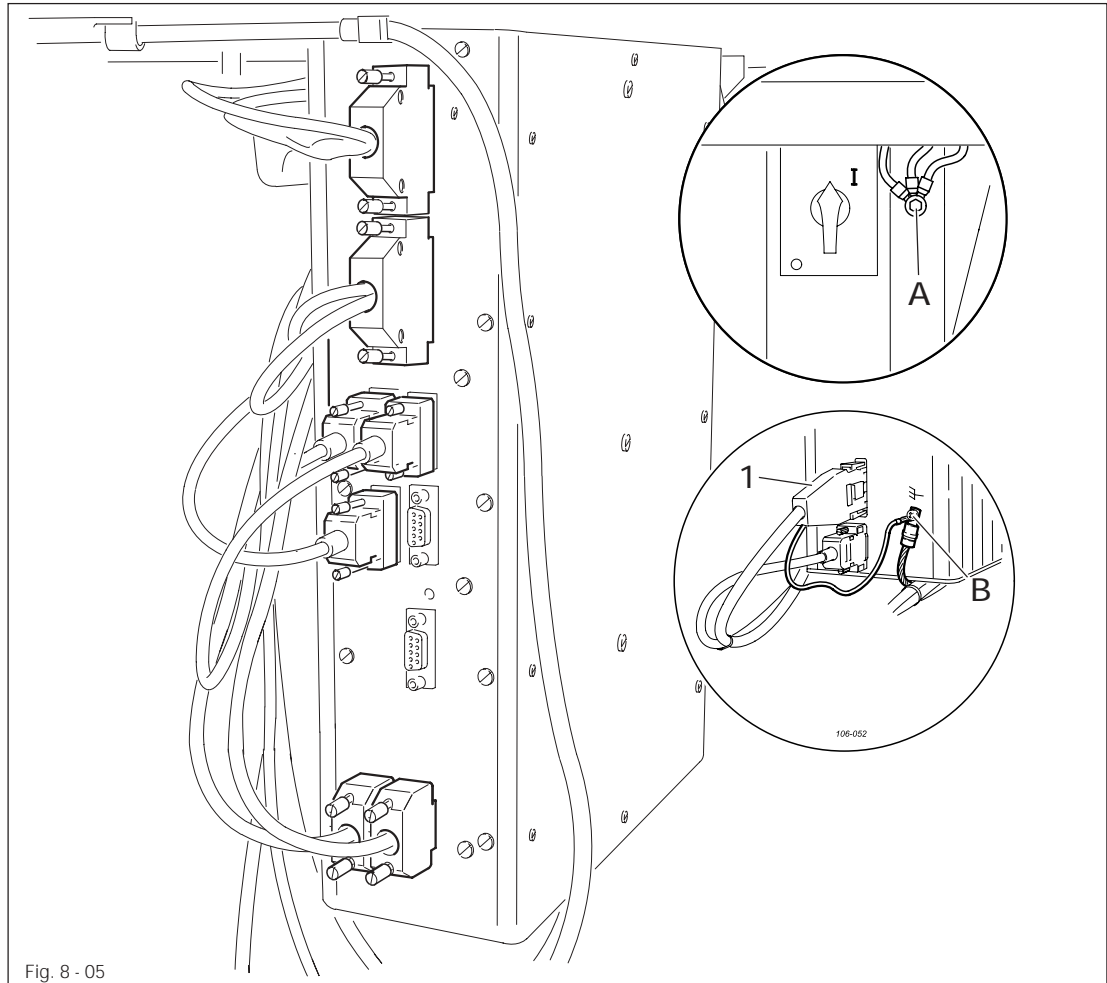
Top view



Bottom view



## 8.01.06 Connecting the plug-in connections and earth cable



- Connect all plugs as labelled in the control box.
- Screw the earth cable from the machine and the main switch to earth point **A**.
- Connect earth point **A** and earth point **B** with an earth cable.
- Screw the earth cable of plug **1** to earth point **B**.

## 8.02 Commissioning the machine

- Clean the machine thoroughly.
- Check the oil level, see **Chapter 12 Care and Maintenance**.
- Check the machine, especially the electric wires, for any damage.
- Have specialists check, whether the machine's motor can be used with the existing mains voltage.

## 8.03 Switching the machine on/off

- Switching the machine on/off, see **Chapter 7.01 Main switch**.



9

Setting up



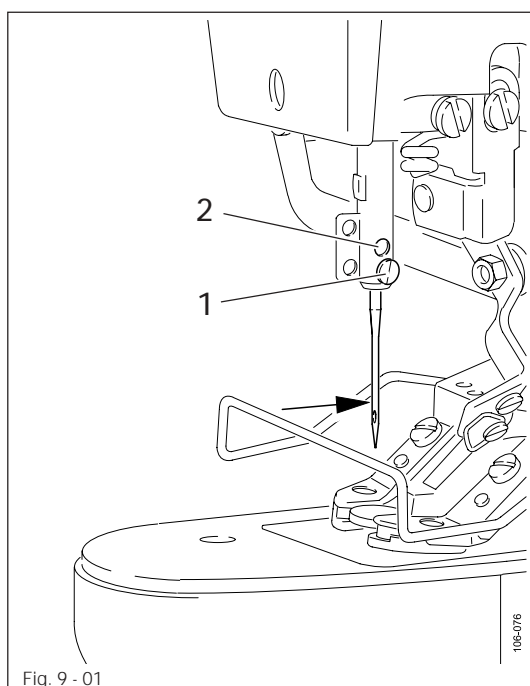
All instructions and regulations in this instruction manual must be observed. Special attention must be given to all safety regulations!



All setting-up work must only be done by personnel with the necessary training. For all setting-up work the machine must be isolated from its power supply by turning off the on/off switch or removing the machine plug from the electric power socket!

9.01

Inserting the needle



Switch off the machine!  
Danger of injury if the machine is started accidentally!



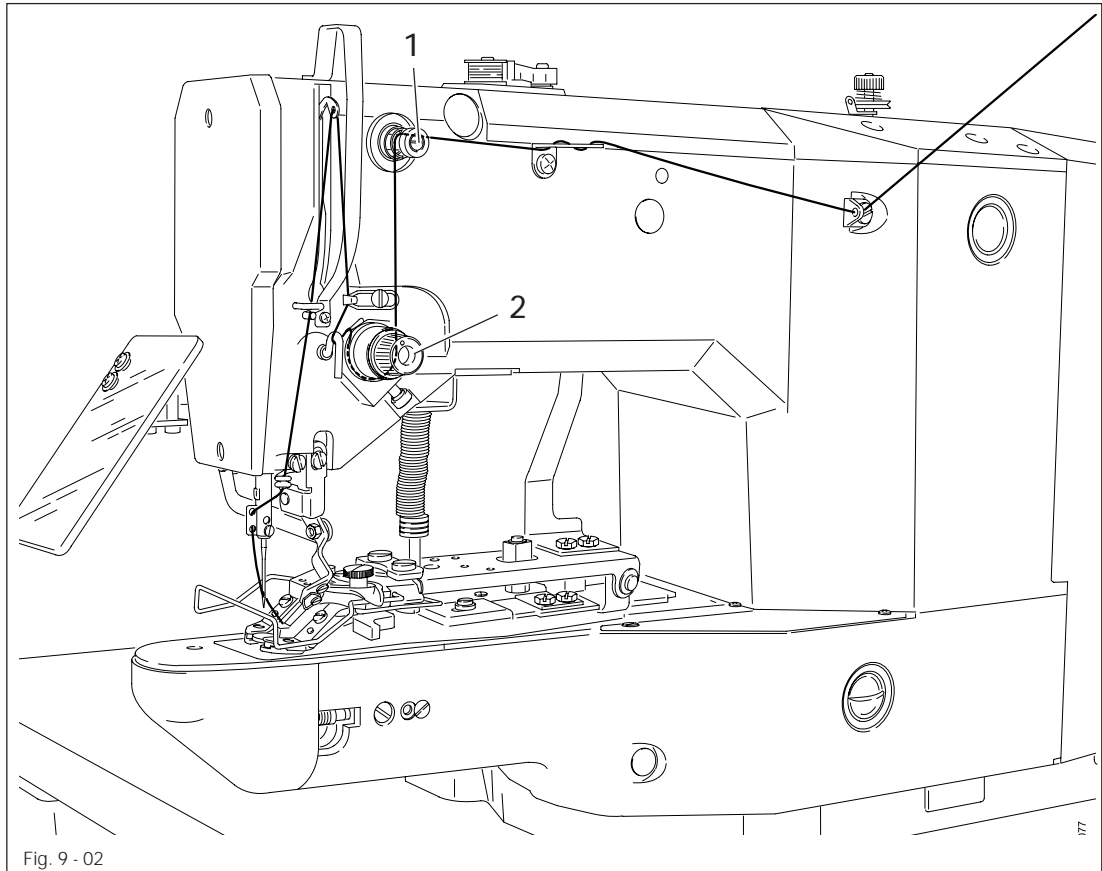
Only use needles from the system intended for the machine, see Chapter 3 Specifications.

- Loosen screw 1.
- Insert the needle as far as possible. The long needle groove (see arrow) must be facing forwards.
- Tighten screw 1.



Through hole 2 it is possible to check whether the needle has been inserting as far as possible.

Broken needles can be removed by inserted suitable tools in hole 2.

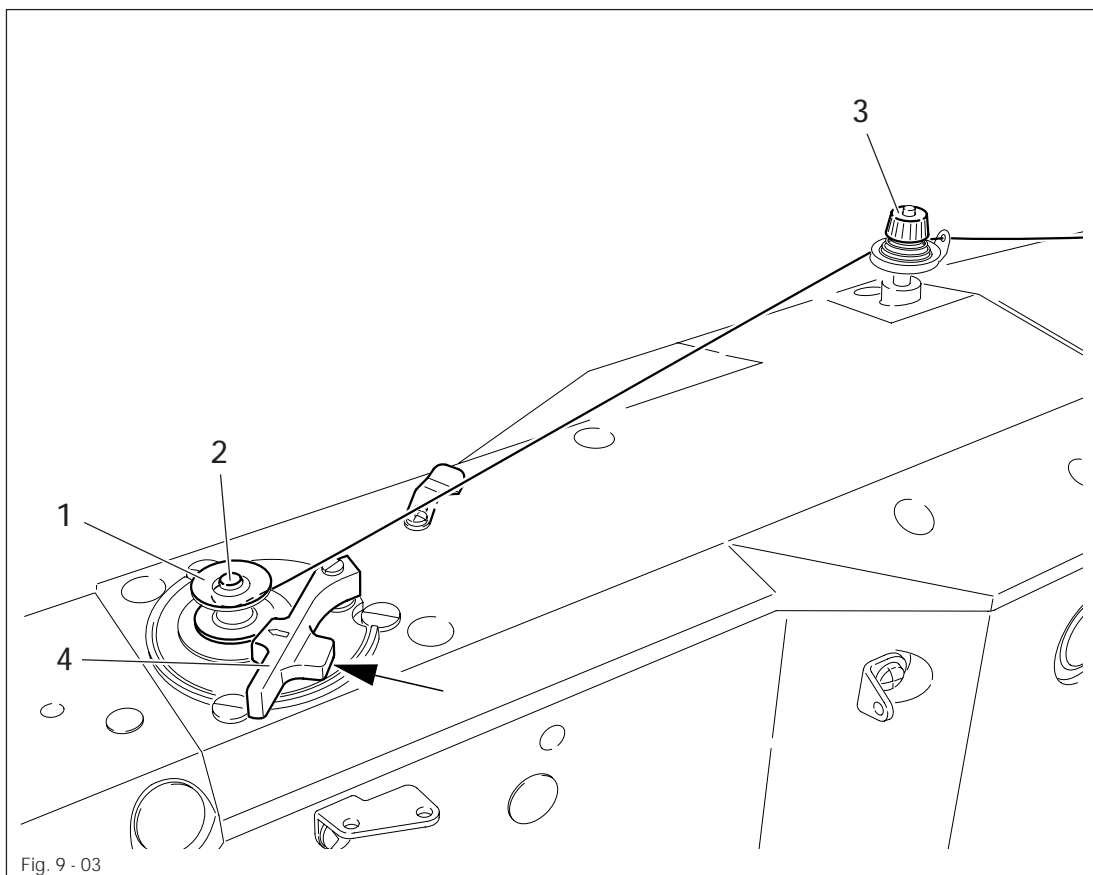


Switch off the machine!

Danger of injury if the machine is started accidentally!

- Thread the needle thread as shown in Fig. 9-02.
- Adjust the needle thread tension by turning milled nuts 1 and 2.

9.03 Winding the bobbin thread



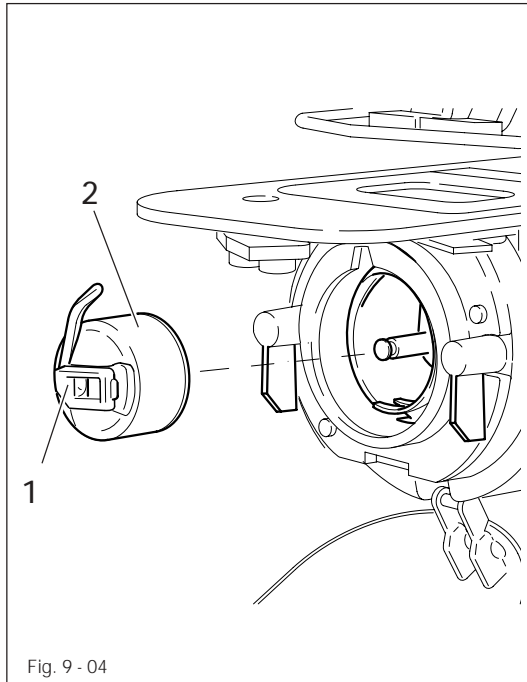
- Place the empty bobbin 1 on the bobbin winder spindle 2.
- Thread the thread as shown in Fig. 9-03 and wind it round bobbin 1 a few times in clockwise direction.
- Set the preliminary thread tension by turning milled screw 3.
- Press lever 4 in the direction of the arrow until it clicks into place.



The bobbin is filled during sewing.

- Winding is also possible as follows:
- Switch on the machine and press the key for **winding**.
- Remove the thread from the needle and take-up lever.
- Operate the pedal to carry out winding, the bobbin winder stops automatically as soon as the bobbin is adequately full.
- Press the key for **winding**, the machine stops.
- Thread the machine again.

## 9.04 Removing / replacing the bobbin case



Switch off the machine.  
Danger of injury if the machine starts accidentally!

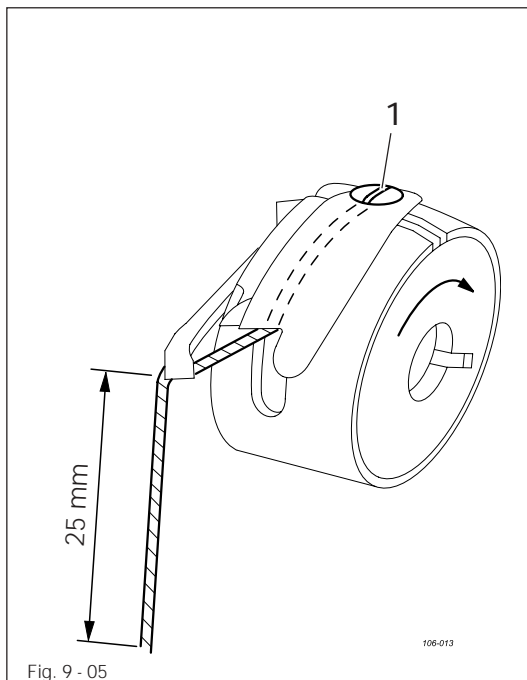
### Removing the bobbin case

- Open the hook cover
- Pull out latch 1
- Remove bobbin case 2

### Replacing the bobbin case

- Push bobbin case 2 into the bobbin case base until you feel it click into place
- Close the hook cover.

## 9.05 Threading the bobbin thread / adjusting the bobbin thread tension



- Place the bobbin into the bobbin case, so that this turns in the direction shown by the arrow when the thread is pulled.
- Insert the thread as shown in Fig. 9-05.
- Set the thread tension by turning screw 1.

## 9.06 Selecting a seam program

**TE**

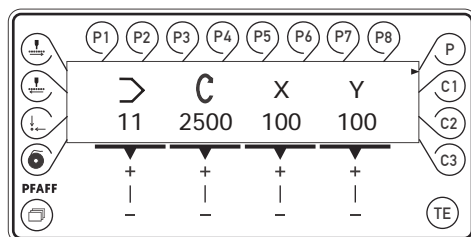
To avoid the machine starting accidentally, to begin with the **TE** key must be pressed, after the machine has been switched on. The machine is then in its basic position and offers a number of possibilities for selecting seam programs.

- Direct selection of the seam pattern and its individual adaptation by changing the speed and size factors.
- Selection of the seam program via a program station. For this purpose a seam pattern with its respective speed and corresponding size factors must have been stored previously.
- With the selection of a sequence several seam programs are sewn after each other. For this purpose a sequence must have been compiled beforehand from individual seam programs (program stations).

### 9.06.01 Selecting and changing the seam pattern.

**P**

- With the machine in the basic position, select the direct seam pattern.



**➤ 11**

- With the corresponding **plus/minus key** select the desired seam pattern, e.g. 11. The seam patterns are stored in the machine under program numbers, see **Chapter 11.06 Summary of the seam patterns**.

**C 2500**

- Select the desired speed with the corresponding **plus/minus key**.

**X 100**

- Enter the desired size factor (in %) (X-direction) with the corresponding **plus/minus key**.

**Y 100**

- Enter the desired size factor (in %) (Y-direction) with the corresponding **plus/minus key**.

**TE**

- Conclude the input by pressing the **TE** key. (The machine changes to the sewing mode).



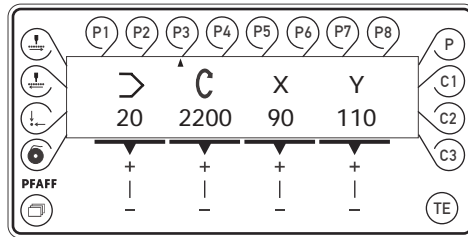
The enlargement of the seam pattern is limited by the size of the machine's sewing area.



The altered speed and size factors entered are not stored when the machine changes to another seam program. If you wish to store these values, a station key must be reserved with the corresponding seam program, see **Chapter 11.01 Reserving program stations**.

## 9.06.02 Selecting a program station.

- P3** ● With the machine in its basic position, select the desired program station, e.g. P3.



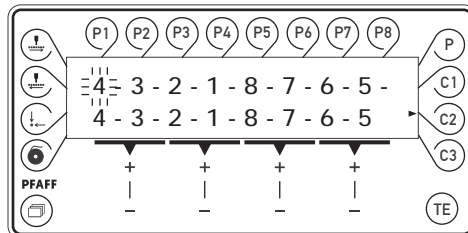
Only those program stations can be selected, which have been reserved previously with a seam pattern with its respective speed and size factors, see **Chapter 11.01 Reserving program stations.**



Speed and size factors cannot be changed directly in a seam program selected via a program station.

## 9.06.03 Selecting a sequence

- C2** ● With the machine in its basic position, select the desired sequence, e.g. C2.



The next seam program waiting to be sewn is depicted by the relevant flashing station number.



- By selecting the **menu** function, the parameters of the current program station, such as number of seam pattern, speed and size factors are shown.

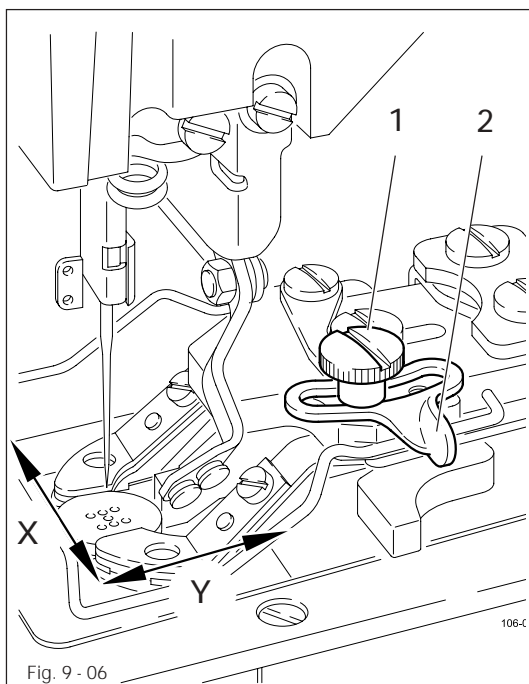


- With any desired **plus/minus key** the automatic sequence cycle is interrupted and the machine moves to the previous or subsequent program station within the sequence.



- Conclude the input by pressing the **TE** key. (The machine changes to the sewing mode).

9.07 Adjusting the size of the button clamp and sewing area



A comparison between the sewing area size entered and the actual sewing area size of the button clamp ensures that seam programs, which extend outside the sewing area size, cannot be sewn.



If the actual and the entered sewing area size do not concur with each other, severe damage can be caused to the machine!

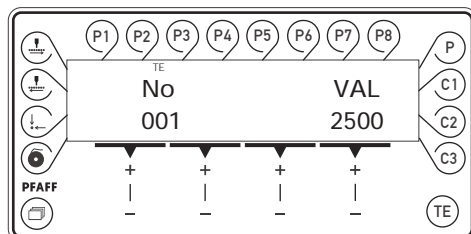
- Loosen screw 1 and with lever 2 adjust the button clamp size to match the button being sewn.
- Measure the sewing area size.



Take care that the feed dog cut-out and the needle plate insert do not collide.



- With the machine in its basic position, select the input mode.



- With the corresponding plus/minus key select parameter „023“.

- If required, enter the access code, see Chapter 11.05.01 Entering the access code.



- With the corresponding plus/minus key enter the measured value (in 1/10 mm) for the X-axis.



- With the corresponding plus/minus key select parameter „024“.



- With the corresponding plus/minus key enter the measured value (in 1/10 mm) for the Y-axis.



- Conclude the input by pressing the TE key. (Machine changes to the sewing mode).

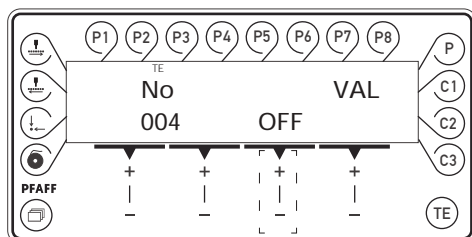
## 9.08 Setting up the bobbin thread counter



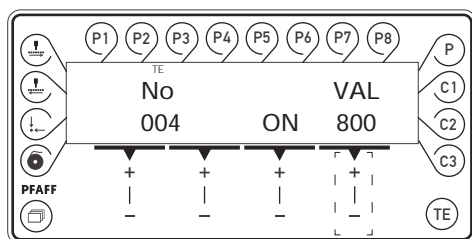
- With the machine in its basic position, select the input mode.



- With the corresponding plus/minus key select parameter „004“.
- If required, enter the access code, see Chapter 11.05.01 Entering the access code.



- ON ● With the corresponding plus/minus key switch on the bobbin thread counter.



VAL  
800

- With the corresponding plus/minus key enter the number of workpieces to be sewn.

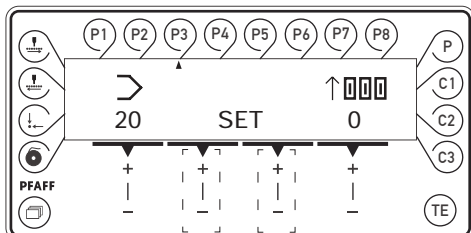


- Conclude the input by pressing the TE key. (Machine changes to the sewing mode).

## 9.09 Resetting the piece counter



In the sewing mode (basic position of the machine) the piece counter or the bobbin thread counter can be displayed by pressing the menu key. (When the bobbin thread counter is switched off, the piece counter is displayed).





The piece counter counts from 0 onwards and differs from the bobbin thread counter in the display through the upwards pointing arrow.

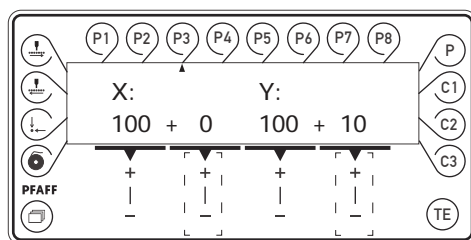
- SET ● Reset the piece counter with the corresponding plus/minus keys.



## 9.10 Shifting the seam pattern

To adapt the seam patterns to formed workpiece holders, selected seam patterns can be shifted.

- 
  - From the basic position of the machine select the desired program station, e.g. P3.
- 
  - Tact through the seam pattern, e.g. forwards.  
The actual coordinates are shown together with the shift values for each stitch.



- The shift values are changed with the corresponding plus/minus key.



- Conclude the seam pattern shifting operation.



The seam pattern shift is allocated to the respective actual program station and is deleted when the program number is changed.



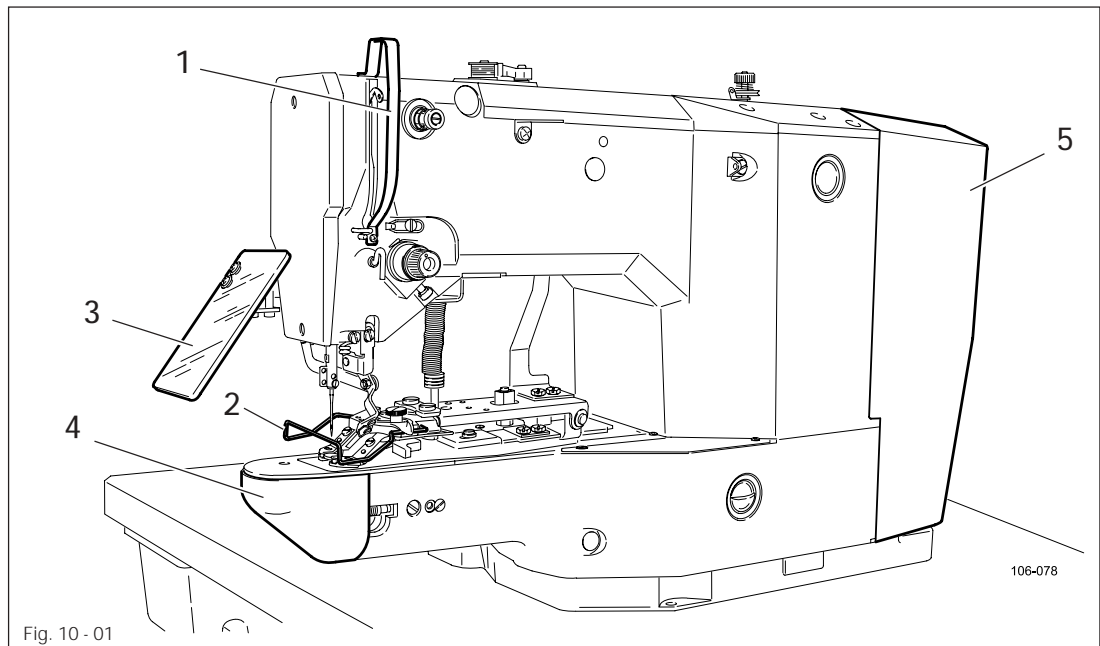
If a shift value is changed, no matter at whatever point in the seam pattern, the entire seam pattern is shifted.



The machine must be installed, connected and set up as described in **Chapter 8 Installation and Commissioning**.



The machine must not be operated without the safety devices 1 to 5, see **Chapter 1.06 Danger warnings! Danger of injury!**



## 10.01

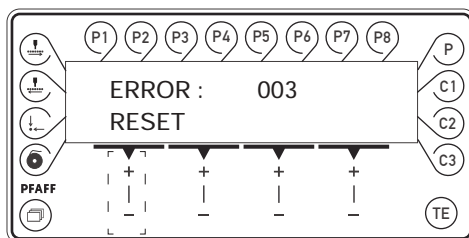
### Operating cycle

- Carry out all steps in accordance with **Chapter 9 Setting up**.
- Place the button in the button clamp.
- Place the material accordingly under the button clamp.
- Lower the button clamp and start the sewing sequence, see **Chapter 7.02 Pedal**.

## 10.02

### Error messages

When an error occurs, the text „ERROR“ appears on the display together with an error code and short instructions. An explanation of the error codes can be found in the Adjustment Manual **Chapter 14.34 Error messages on the display**.



- Correct the error.

- RESET** ● Acknowledge the correction of the error by pressing the corresponding plus/minus key or by switching the machine off and on.

11 Input

After the machine has been switched on, it is in the input mode. The letter combination „TE“ appears on the control panel display. The input mode is used to reserve program stations, to enter sequences and to change machine parameters. In addition information and input possibilities for the service area are available in this mode.

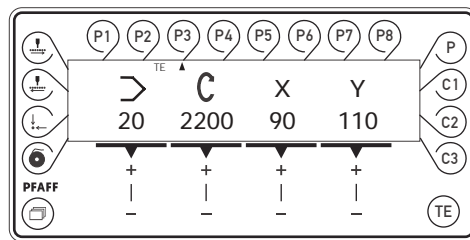
11.01 Reserving program stations

P1 to P8

The station keys P1 to P8 are used to enter and select seam programs. A complete seam program is configured from the following parameter:

- seam pattern
- speed
- size factor in X-direction
- size factor in Y-direction

- In the input mode, select the desired program station, e.g. P3.



- With the corresponding **plus/minus key** select the desired seam pattern, e.g. 20. The seam patterns are stored in the machine under program numbers, see **Chapter 11.06 Summary of the seam patterns**.

- Select the desired speed with the corresponding **plus/minus key**.

- Enter the desired size factor (in %) (X-direction) with the corresponding **plus/minus key**.

- Enter the desired size factor (in %) (Y-direction) with the corresponding **plus/minus key**.



The enlargement of the seam pattern is limited by the size of the machine's sewing area.

- Conclude the input by pressing the TE key. (The machine changes to the sewing mode).

## 11.02 Entering sequences

**C1** to **C3** The sequence program keys **C1** to **C3** are used to enter and select sequence programs. The sequence programs are put together from seam programs, which have been deposited under the station keys P1 to P8.

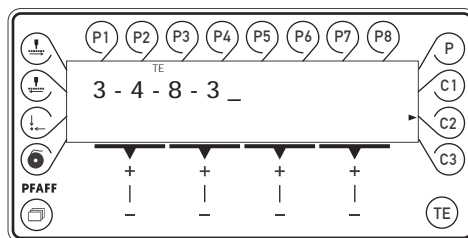
**C2** ● In the input mode, select the desired sequence program key, e.g. **C2**.

**P3** ● Enter the desired seam programs in any order by using the station keys, e.g. **P3**.

**P4** P4,

**P8** P8

**P3** and **P3**.



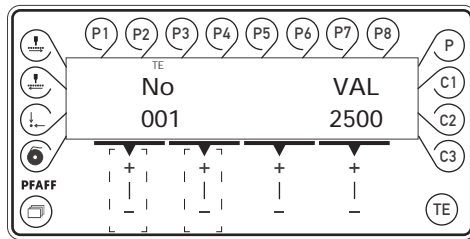
Up to 16 entries are possible. The station keys for selection must have been reserved beforehand, see **Chapter 11.01 Reserving program stations**.

● By pressing the **tacting in reverse** key, the current entry is deleted.

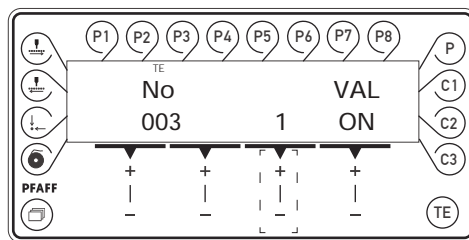
**TE** ● Conclude the input by pressing the **TE** key. (The machine changes to the sewing mode).

### 11.03 Parameter input

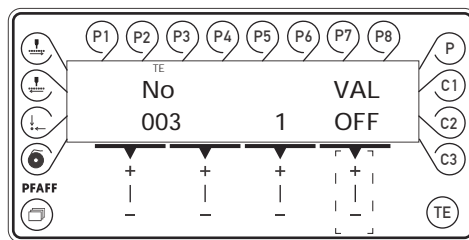
After the machine has been switched on, it is in the input mode.



- With the corresponding **plus/minus key** select the desired parameter, e.g. 003 lock seam patterns.



- With the corresponding **plus/minus key** select the desired seam pattern.



- With the corresponding **plus/minus key** lock the desired seam pattern.

- Conclude the input by pressing the **TE** key. (The machine changes to the sewing mode).



There is a list explaining all the parameters in **Chapter 14.33 List of parameters** in the Adjustment Manual.

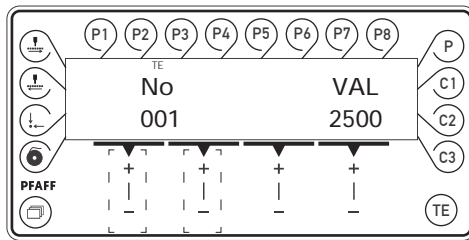
## 11.04 Free input of the seam pattern (Teach in)

In addition to the selection of firmly stored seam patterns (see **Chapter 11.06 Summary of the seam patterns**), there is also a possibility of setting seam patterns (button type) as desired using the corresponding parameter input.

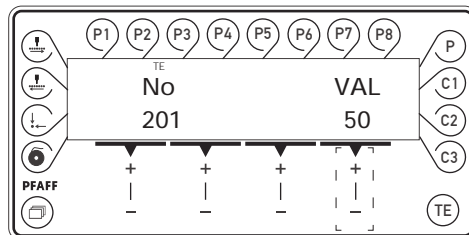


The program numbers P50 to P99 are reserved for the free input of seam patterns.

- Switch on the machine.  
After the machine has been switched on, it is in the input mode.



- No 201 ● With the corresponding **plus/minus** keys, select the parameter 201 to enter the program number.


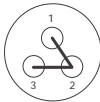



- 50 ● With the corresponding **plus/minus** keys, select the desired program number.

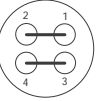
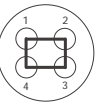
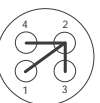
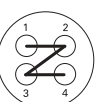
- No 202 ● With the corresponding **plus/minus** keys, select the parameter 202 to enter the button type.

- With the corresponding **plus/minus** keys, select the desired button type.  
(2 = two-hole button, 3 = three-hole button, 4 = four-hole button)
- With the corresponding **plus/minus** keys, select the parameters 203 – 208 in turn to enter the coordinates of the buttonholes 1 – 6, and enter the relevant values for the X- and Y-direction.
- If necessary, with the corresponding **plus/minus** keys, select the parameter 209 to enter the number of stitch positions and enter the desired value.
- If necessary, with the corresponding **plus/minus** keys, select the parameter 210 to choose the stitch formation.  
The stitch formation can only be chosen for three- and four-hole buttons and depends on the previously selected button type.

Stitch formations for the three-hole button

	<p>Seam cycle Value for parameter 210 = 0</p>
	<p>Point Value for parameter 210 = 1</p>
	<p>Stitching Value for parameter 210 = 2</p>

Stitch formations for the four-hole button

	<p>Normal Value for parameter 210 = 0</p>
	<p>Seam cycle Value for parameter 210 = 1</p>
	<p>Arrow Value for parameter 210 = 2</p>
	<p>Z Value for parameter 210 = 3</p>

- Select the desired stitch formation with the corresponding plus/minus key.
- If necessary, select parameter 211 with the corresponding plus/minus keys and activate the intermediate trimming function.  
The intermediate trimming function can only be activated for four-hole buttons. When the function is activated, the thread is trimmed between the second and third hole of the button.



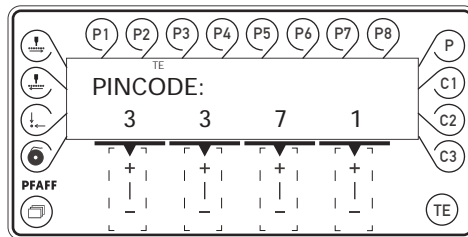
A summary with explanations of all the parameters can be found in **Chapter 14.33 List of parameters** of the Adjustment Manual.

## 11.05 Access codes

The selection of seam patterns, the reservation of the program stations, the input of sequences and the selection of individual parameter levels can be locked with a 4-figure access code. The access code can be changed as desired. The factory set access code is „3371“.

### 11.05.01 Entering the access code

If, in the input mode, a function is selected, which has an access code, the demand for entering the access code appears on the display.



- Enter the access code with the corresponding **plus/minus** keys.



- Conclude the input.



Once the access code has been entered, all functions with access protection are freely accessible, until the machine is switched off.

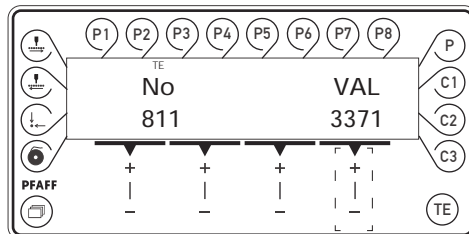
### 11.05.02 Changing the access code



- In the input mode, select parameter „811“



- Enter the access code, see **Chapter 11.05.01 Entering the access code**.



- Change the access code with the corresponding **plus/minus** keys.



- Conclude the input.



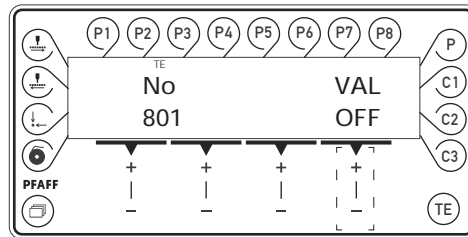
11.05.03 Granting access rights



- In the input mode select the corresponding parameter („801“ to „806“), see Chapter 14.33 List of parameters in the Adjustment Manual.



- If required, enter the access code, see Chapter 11.05.01 Entering access codes.

























- With the corresponding plus/minus key approve (on) or lock (OFF) access.














- Conclude the input.

11.06 Summary of the seam patterns

No.	Seam pattern	Size of sewing area [mm]	Penetrations/ button row	Total number of stitches
P1		3,4 x 3,4	6	18
P2		3,4 x 3,4	8	22
P3		3,4 x 3,4	10	26
P4		3,4 x 3,4	12	22
P5		3,4 x 3,4	6	22
P6		3,4 x 3,4	8	26
P7		3,4 x 3,4	8	26
P8		3,4 x 3,4	12	3
P9		3,4 x 3,4	6	18
P10		3,4 x 3,4	8	22
P11		3,4 x 3,4	10	26

No.	Seam pattern	Size of sewing area [mm]]	Penetrations/ button row	Total number of stitches
P12		3,4 x 3,4	6	18
P13		3,4 x 3,4	8	22
P14		3,4 x 3,4	10	26
P15		3,4 x 3,4	6	22
P16		3,4 x 3,4	8	26
P17		3,4 x 3,4	10	30
P18		3,4 x 0,0	6	11
P19		3,4 x 0,0	8	13
P20		3,4 x 0,0	10	15
P21		3,4 x 0,0	12	17
P22		3,4 x 0,0	16	21

No.	Seam pattern	Size of sewing area [mm]]	Penetrations/ button row	Total number of stitches
P23		0,0 x 3,4	6	11
P24		0,0 x 3,4	10	15
P25		0,0 x 3,4	12	17
P26		3,4 x 3,4	6	18
P27		3,4 x 3,4	10	26
P28		3,4 x 3,4	6	22
P29		3,4 x 3,4	10	30
P30		3,0 x 2,6	5	20
P31		3,0 x 2,6	8	29
P32		3,0 x 2,6	5	20
P33		3,0 x 2,6	8	29

12 Care and maintenance

12.01 Maintenance intervals

Clean the entire machine .....	once a week
Clean the hook compartment .....	once a day, more often when in continuous operation
Oiling the needle head parts .....	as required
Oiling the hook .....	as required
Oiling the bearing points in the arm .....	once a month



During all cleaning work the machine must be disconnected from the power supply by switching off the main switch or pulling out the plug!  
Danger of injury if the machine is started accidentally!

12.02 Cleaning the machine

The cleaning cycle required for the machine depends on following factors:

- Single or several shift operation
- Amount of dust resulting from the workpiece

It is therefore only possible to stipulate the best possible cleaning instructions for each individual case.



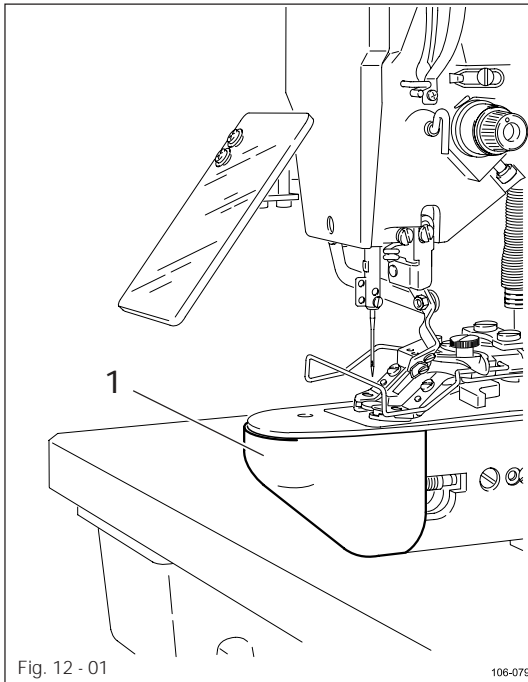
For all cleaning work the machine must be disconnected from the mains by switching off the on/off switch or by removing the mains plug!  
Danger of injury if the machine suddenly starts up .



To avoid breakdowns, the following cleaning work is recommended for single shift operation:

- Clean hook compartment and needle area of sewing head several times daily.
- Clean the entire machine at least once a week.

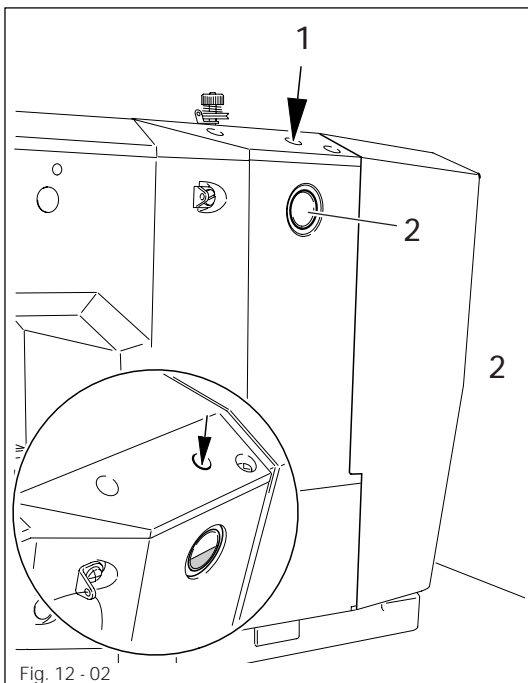
## 12.03 Cleaning the hook compartment



Switch off the machine!  
Danger of injury if the machine is started accidentally!

- Open the hook compartment cover 1.
- Clean the hook and the hook compartment daily, more often if in continuous operation.

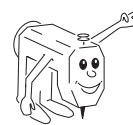
## 12.04 Oiling the needle head parts



- When required, pour oil through hole 1 up to the upper marking in inspection glass 2.



Only use oil with a mean viscosity of 10.0 mm<sup>2</sup>/s at 40°C and a density of 0.847 g/cm<sup>3</sup> at 15°C.



We recommend PFAFF sewing machine oil, part no. 280-1-120 105.

12.05 Oiling the hook

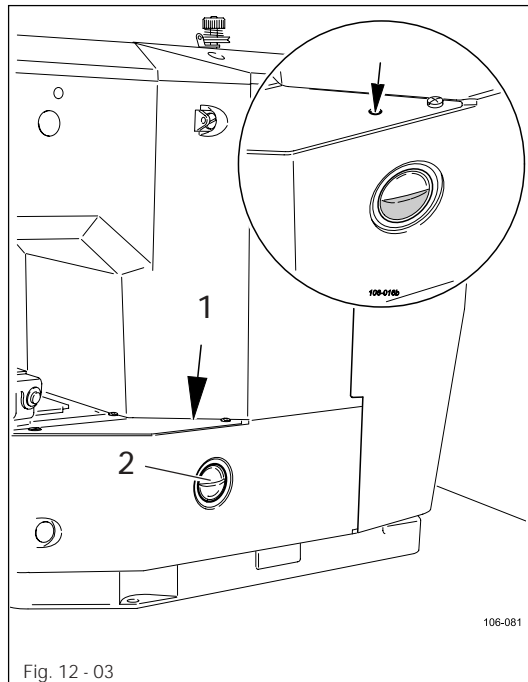


Fig. 12 - 03

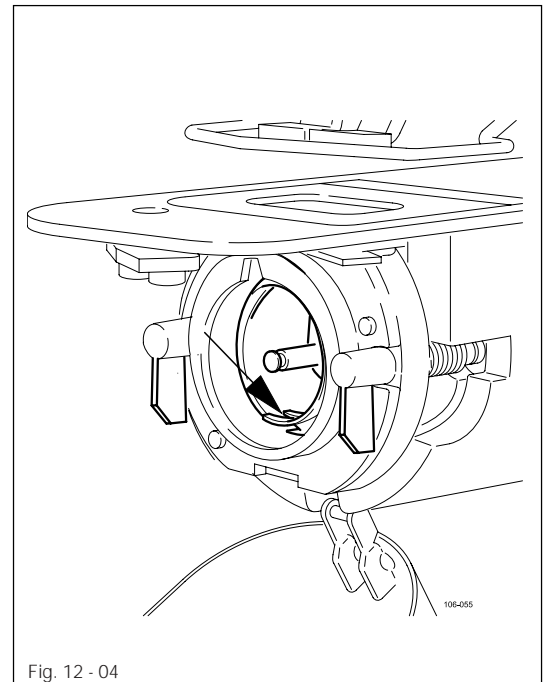


Fig. 12 - 04

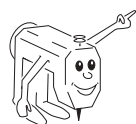


Switch off the machine!  
Danger of injury if the machine is started accidentally!

- When required, pour oil through hole 1 up to the upper marking in inspection glass 2.
- Before commissioning the machine, and after long downtimes, also add a few drops of oil to the hook race, see arrow in Fig. 12-04.

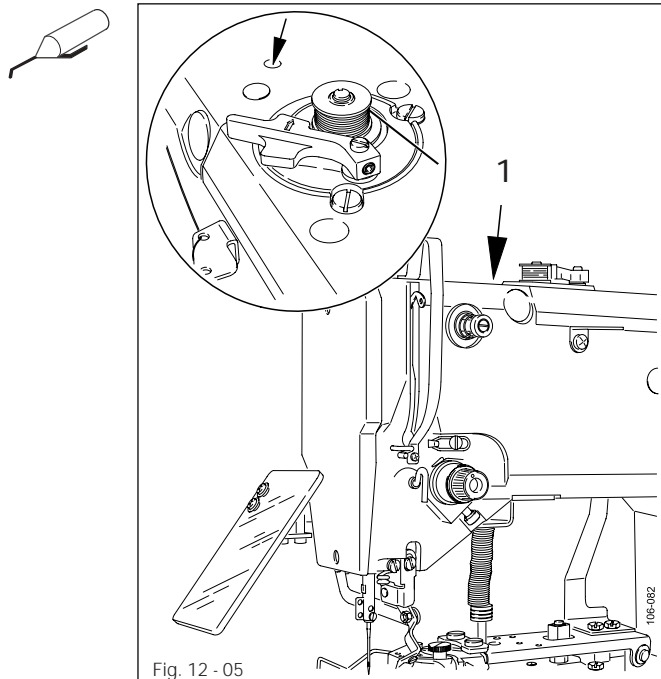


Only use oil with a mean viscosity of 10.0 mm<sup>2</sup>/s at 40°C and a density of 0.847 g/cm<sup>3</sup> at 15°C.



We recommend PFAFF sewing machine oil, part no. 280-1-120 105.

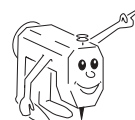
### 12.06 Oiling the bearing points in the arm



- Once a month pour a few drops of oil into hole 1.

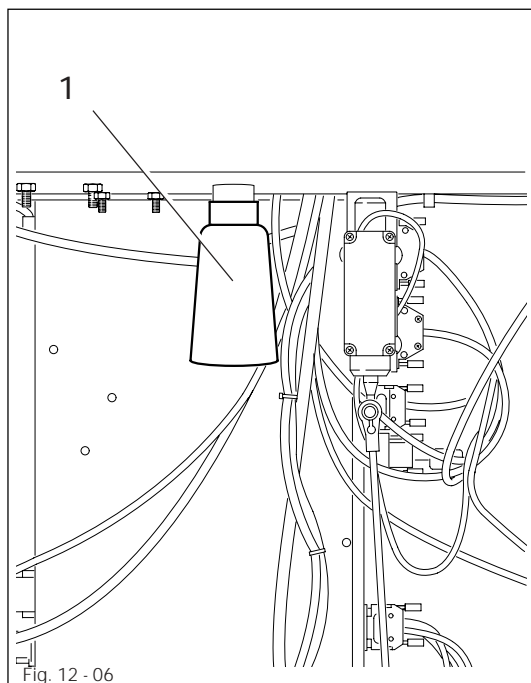


Only use oil with a mean viscosity of 10.0 mm<sup>2</sup>/s at 40°C and a density of 0.847 g/cm<sup>3</sup> at 15°C.



We recommend PFAFF sewing machine oil, part no. 280-1-120 105.

### 12.07 Oil disposal



- When required, unscrew oil collector 1 and dispose of the oil in accordance with the valid local environmental regulations.



The oil must not get into the sewer system! Danger of damage to the environment!



Wearing parts

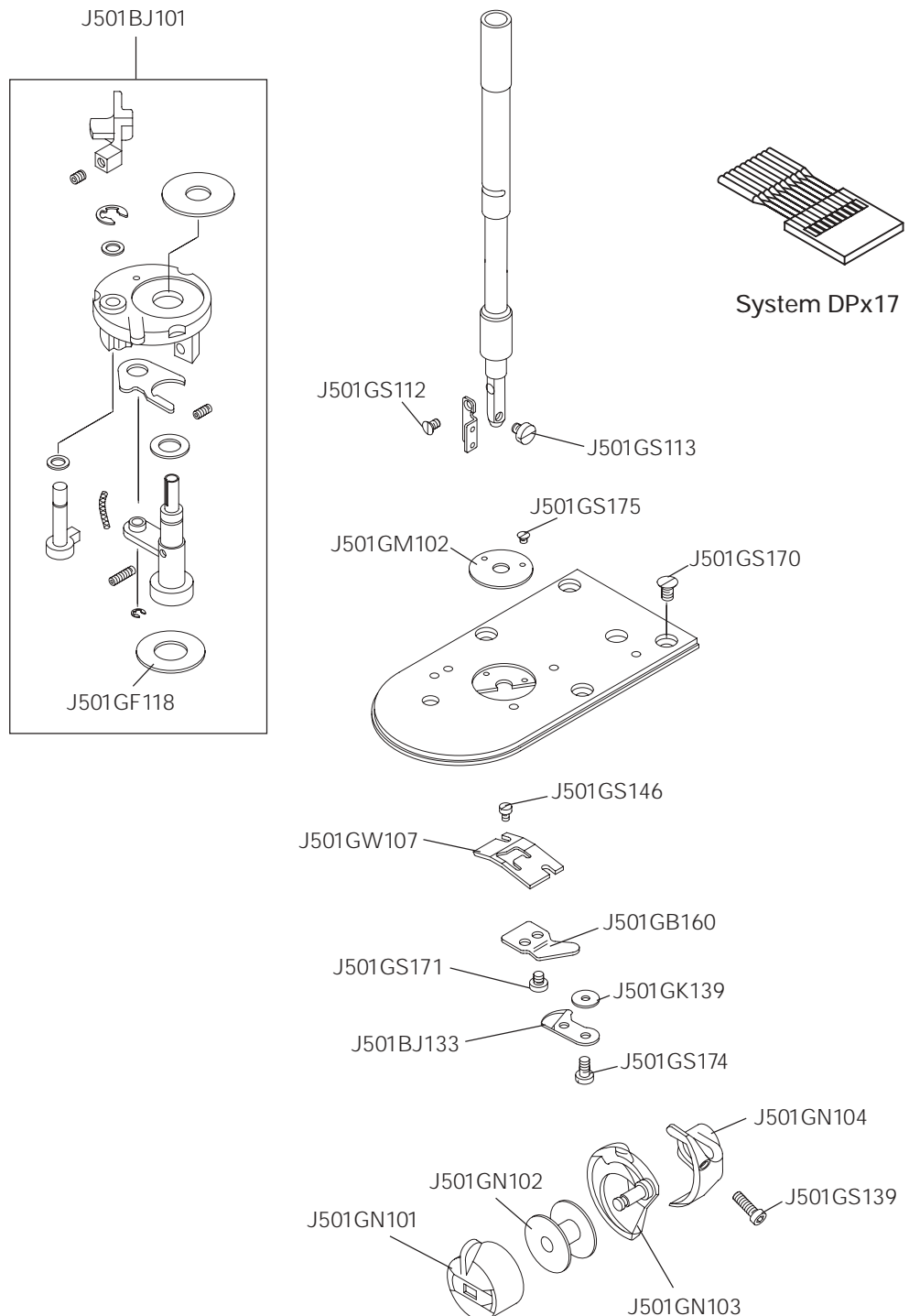
This is a list of the most important wearing parts.

A detailed parts list for the complete machine is included with the accessories.

In case of loss the parts list can be downloaded from the internet address

[WWW.pfaff-industrial.com/de/service/download/index.php3](http://WWW.pfaff-industrial.com/de/service/download/index.php3). As an alternative to the internet download the parts lists can also be ordered in book form

under part no. 296-12-18 604.



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