

***POWER*Line**

**2545**

**2546**

INSTRUCTION MANUAL

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

# 2 798 767 →



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/pfaff/de/service/downloads](http://www.pfaff-industrial.com/pfaff/de/service/downloads)**.

As an alternative to the internet download the adjustment manual can also be ordered in book form under part no. **296-12-19 220/002**.

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**PFAFF Industriesysteme  
und Maschinen AG**

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## 1 Safety

### 1.01 Directives

The machine has been constructed in accordance with the requirements listed in the EC Declaration of Conformity and the Declaration of Incorporation.

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 guard 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 warnings



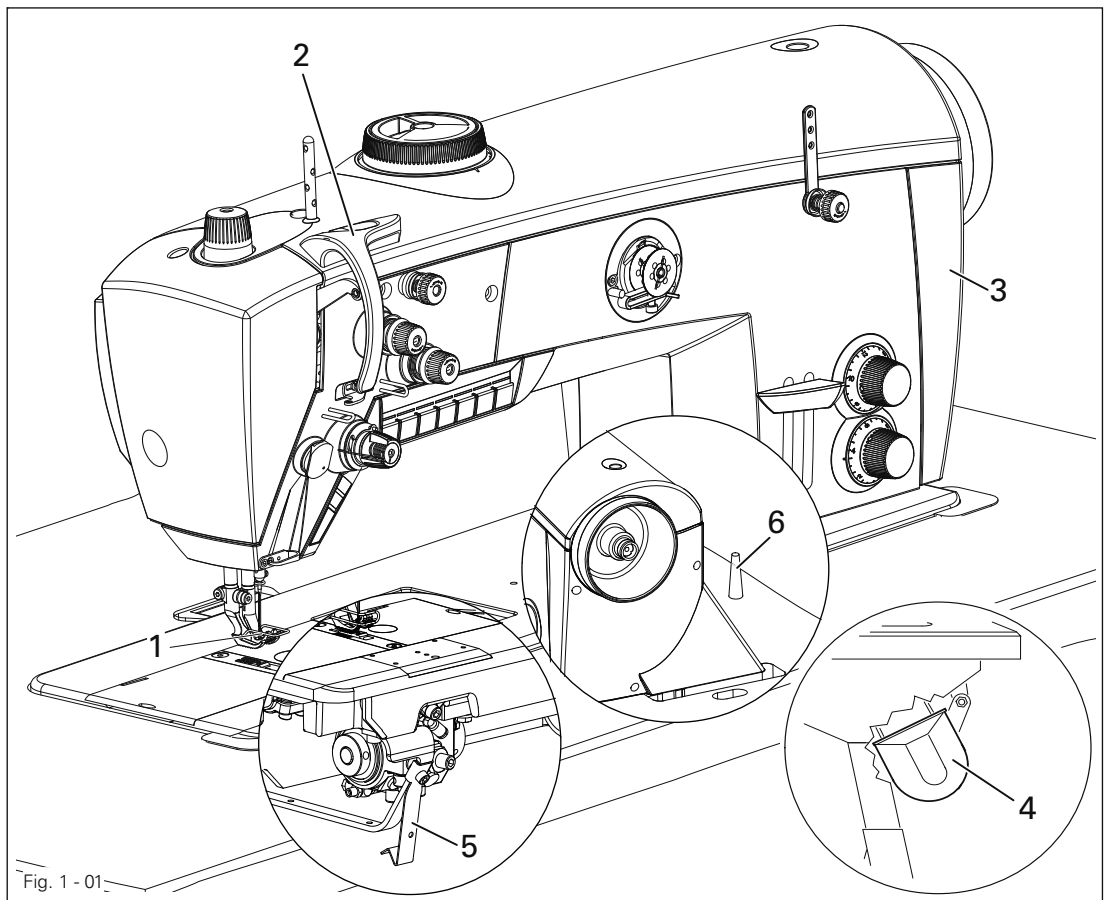
A working area of 1 m must be kept free both in front of and behind the machine, so that easy access is possible at all times.



Never put your hands or fingers in the sewing area during sewing!  
Danger of injury by the needle!



While setting or adjusting the machine do not leave any objects on the table nor in the needle plate area! Objects may be trapped or flung out of the machine!



Do not run the machine without finger guard 1!  
Danger of injury by up and down movement of needle!



Do not run the machine without take-up lever guard 2!  
Danger of injury by moving take-up lever!



Do not run the machine without belt guards 3 and 4!  
Danger of injury by rotating v-belt!



Do not operate the machine without tilt lock 5!  
Danger of crushing between sewing head and table!



Do not operate the machine without support 6! Danger due to top-heavy sewing head! Machine can tip over backwards when tilted!



2

**Proper use**

The PFAFF 2545 **BASIC**, **CLASSIC** and **PLUS** are special high-speed, single needle lock-stitch sewing machines with unison feed and a large, respectively extra large hook.

The PFAFF 2546 **BASIC**, **CLASSIC** and **PLUS** are special high-speed, two needle lockstitch sewing machines with unison feed and a large, respectively extra large hook.

The machines are used for sewing lockstitch seams in the textile industry.



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!

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# Specifications

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## 3 Specifications

### 3.01 PFAFF 2545 / 2546 (BASIC, CLASSIC and PLUS) \*

Stitch type: .....301 (lockstitch)

Needle system: ..... 134-35

Version CN; CN9; CN12: ..... for processing medium-heavy materials

Version DN; DN12: ..... for processing heavy materials

Needle size in 1/100 mm:

Version CN9: ..... 110 – 140

Version DN12: ..... 150 – 200

Max. stitch length:

Version CN; DN: .....6 mm

Version CN9: .....9 mm

Version CN12; DN12: ..... 12 mm

Max.thread size (synthetic):

Version CN.. : ..... 15/3▲

Version DN.. : ..... 8/3▲

Presser foot clearance: .....20 mm

Clearance width 2545/46: .....350 mm

Clearance width 2545/46-798/01: .....700 mm

Clearance width 2545/46-798/02: ..... 1000 mm

Clearance height: ..... 120 mm

Bed plate dimensions 2545/46: .....640 x 200 mm

Bed plate dimensions 2545/46-798/01: .....990 x 200 mm

Bed plate dimensions 2545/46-798/02: ..... 1290 x 200 mm

Noise data:

Noise emission level at workplace with a sewing speed of 2400 spm: .....  $L_{pA} < 80$  dB(A)■

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

Motor data: ..... See instruction manual for the motor

Leakage current .....  $\leq 5$  mA\*

Air consumption per switch cycle: .....0.146 NI

Net weight of sewing head 2545/46: ..... approx. 72 kg

Net weight of sewing head 2545/46-798/01: ..... approx. 112 kg

Net weight of sewing head 2545/46-798/02: ..... approx. 132 kg

Gross weight of sewing head 2545/46: .....approx. 82 kg  
 Gross weight of sewing head 2545/46-798/01: .....approx. 150 kg  
 Gross weight of sewing head 2545/46-798/02: .....approx. 180 kg

\* Subject to alterations

♦ Due to the use of network filters there is a nominal leakage current of  $\leq 5$  mA.

▲ synthetic, or other sizes of comparable thread types

■  $K_{pA} = 2,5$  dB

## 3.02 Maximum speed

Top feed lift	Stitch length range	Max. speed / spm on version C and with large hook	Max. speed / spm on version C and with extra-large hook	Max. speed / spm on version D and with large hook	Max. speed / spm on version D and with extra-large hook
1 - 2 mm	up to 9 mm	3800♦	3400♦	3000♦	2700♦
2,5 - 4 mm	up to 9 mm	3200♦	2800♦	2800♦	2700♦
4,5 - 5 mm	up to 9 mm	2600♦	2200♦	2400♦	2200♦
5,5 - 7 mm	up to 9 mm	2000	1800	1800	1800
7,5 - 9 mm	up to 9 mm	1800	1800	1600	1600
1 - 2 mm	9,5 - 12 mm	2200♦	2200♦	2200♦	2200♦
2,5 - 4 mm	9,5 - 12 mm	2200♦	2200♦	2200♦	2200♦
4,5 - 5 mm	9,5 - 12 mm	2200♦	2200♦	2200♦	2200♦
5,5 - 7 mm	9,5 - 12 mm	2000	1800	2000	1800
7,5 - 9 mm	9,5 - 12 mm	1800	1800	1800	1800

♦ The max. speed on the PFAFF 2546 with needle gauge larger than 20 mm is 2000 spm.

# Specifications

## 3.03 Machine equipment and options

PFAFF 2545 / 2546	BASIC	CLASSIC	PLUS
Vetical hook, large	●	●	●
Vetical hook, extra large	○	○	○
Thread trimmer (-900/81), < 13 mm rest thread	-	●	●
Thread trimmer (-900/82), < 5 mm rest thread	-	○	○
Thread puller (-909/12), controlled	-	○	○
Presser foot lift, manual via knee lever	●	-	-
Presser foot lift (-910/04), electropneumatic	-	●	●
Manual backtacking with mech. hand switch	●	●	●
Automatic backtacking (-911/35), electropneumatic	-	●	●
1 preselectable stitch length	●	●	-
2 preselectable stitch lengths, can be switched alternately	-	-	●
2 preselectable thread tensions, one can be switched on manually	●	-	-
2 preselectable thread tensions, one can be switched on electropneumatically by hand switch	-	●	●
1 presser foot stroke, manually adjustable, top feed stroke up to max. 9 mm	●	●	-
2 presser foot strokes, manually adjustable, preselectable quick stroke adjustment with hand switch (electropneumatically controlled)	-	-	●
Drop feed, adjustable	●	●	●
Oil level control through inspection glass	●	●	●
Oil level on display, with warning light on machine head	-	●	●
Presser foot pressure, manually adjustable	●	●	●
Clutch motor	●	-	-
DC-motor functionality PicoDrive P45 PD-L	○	-	-
DC-motor functionality P74 ED-L, PF 321	-	●	●
Control panel - PicoTop	-	●	●
Remaining bobbin thread recognition function by stitch counting with LED display	-	●	●
Bobbin thread monitor with remaining thread recognition by sensor (sub-class -926/06)	-	-	○
Integrated multiple switch on machine head + programmed multi switch	-	●	●
Integrated LED sewing lamp on sewing head, dimmable	○	●	●
Bobbin thread winding device	●	●	●
Attachment slider	●	●	●
Skip stitch detector SSD	-	○	○
Bobbin thread monitoring with thread detection	-	○	○
Safety coupling	●	●	●

● = standard, ○ = optional

### 4 Disposal of Machine

- Proper disposal of the machine is the responsibility of the customer.
- The materials used for the machine are steel, aluminium, brass and various plastic materials. The electrical equipment comprises plastic materials and copper.
- The machine is to be disposed of according to the locally valid pollution control regulations; if necessary, a specialist is to be commissioned.



Care must be taken that parts soiled with lubricants are disposed of separately according to the locally valid pollution control regulations!

**5            Transportation, packing and storage**

**5.01        Transportation to customer's premises**

The machines are delivered completely packed.

**5.02        Transportation inside the customer's premises**

The manufacturer cannot be made liable for transportation inside the customer's premises nor to other operating locations. It must be ensured that the machines are only transported in an upright position.

**5.03        Disposal of packing materials**

The packing materials of this machine comprise paper, cardboard and VCE fibre. Proper disposal of the packing material is the responsibility of the customer.

**5.04        Storage**

If the machine is not in use, it can be stored as it is for a period of up to six months, but it should be protected against dust and moisture.

If the machine is stored for longer periods, the individual parts, especially the surfaces of moving parts, must be protected against corrosion, e.g. by a film of oil.

### 6 Explanation of symbols

In this instruction manual, work to be carried out or important information is accentuated by symbols. These symbols have the following meanings:



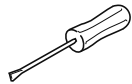
Note, information



Cleaning, care



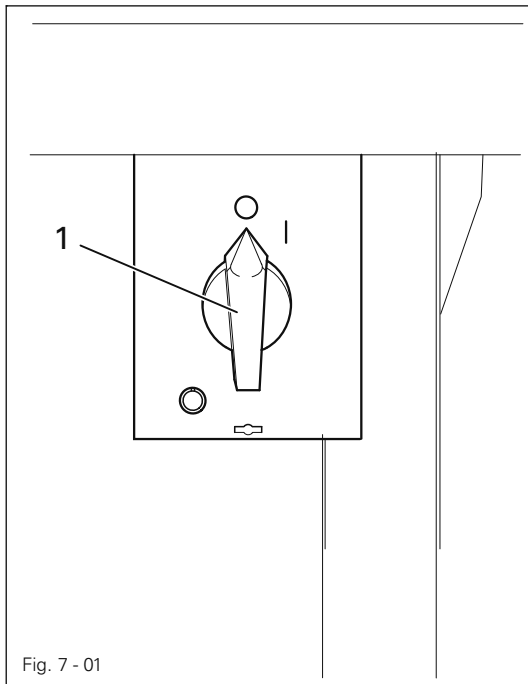
Lubrication



Maintenance, repairs, adjustment, service work  
(only to be carried out by technical staff)

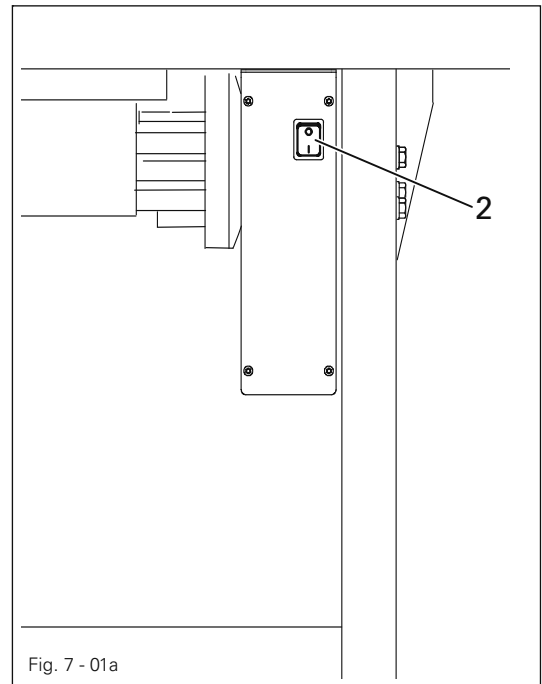
## 7 Controls

### 7.01 On/off switch



#### Machines with motor P45 PD2-L + P74 ED-L

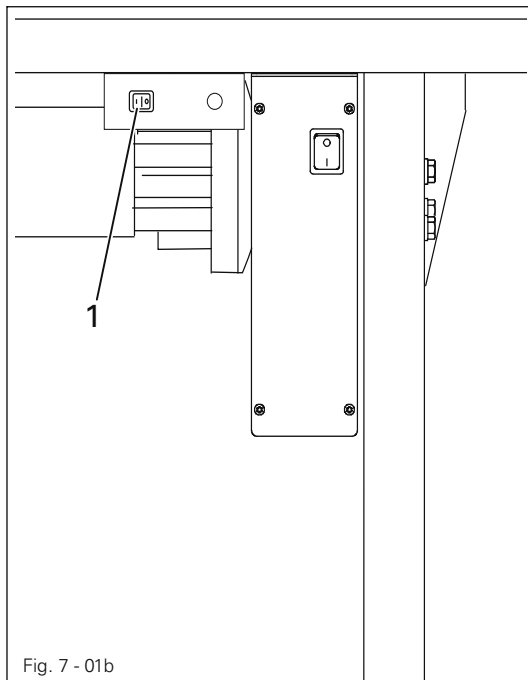
- The power supply to the machine is switched on or off by turning switch 1.



#### Machines with motor PF 321

- Operate main switch 2 to switch the machine on or off.

### 7.02 Sewing lamp switch (only on the PFAFF 2545 / 2546 CLASSIC and PLUS)



- Switch the sewing lamp, which is integrated in the machine head, on or off by operating switch 1.



7.03 Pedal

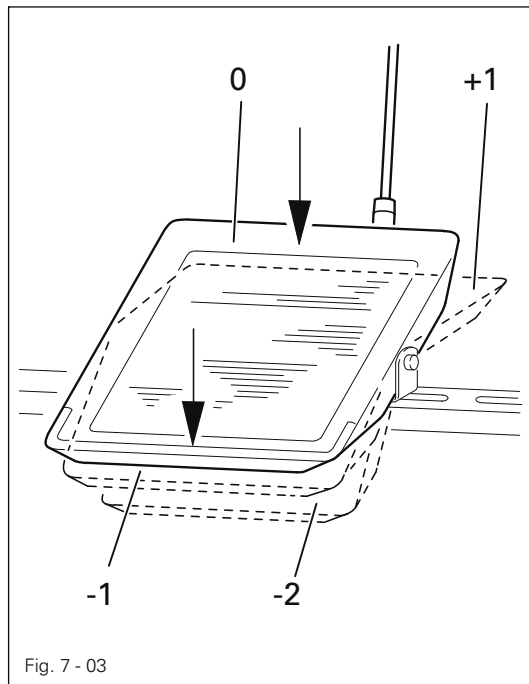
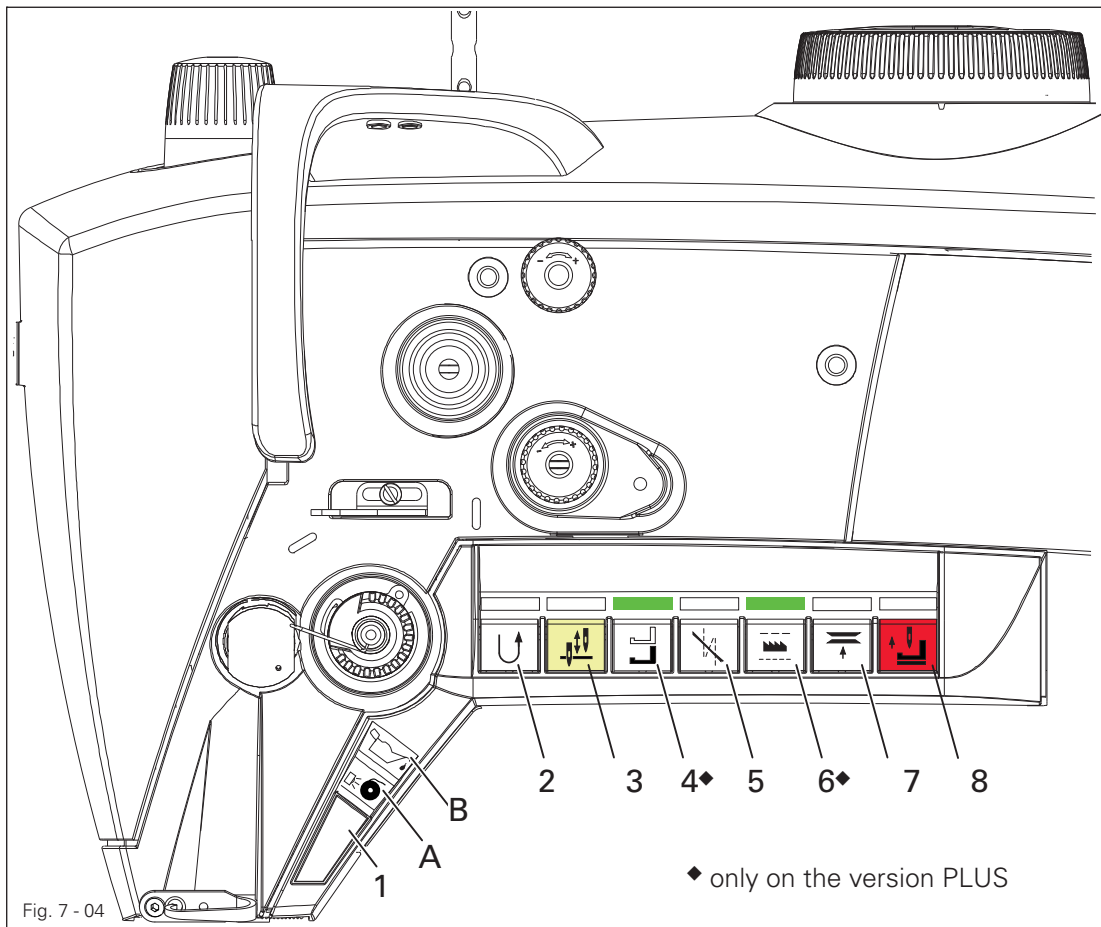


Fig. 7 - 03

- With the on/off switch on
- 0 = Machine stop
- +1 = Sew
- 1 = Raise presserfoot
- 2 = Trim thread (on machines with thread trimmer)



- The machine has a keyboard with 8 keys to activate different functions.
- In the keys 2 – 7 there are yellow LEDs. These shine when the respective function has been allocated to key 1.
- Green LEDs are located above the keys 2 - 7. These shine when the function has been activated.
- Above key 1 there are two symbol lamps.  
Lamp A indicates the status of the bobbin thread control.  
Lamp B shines when the minimum level of the oil supply has been reached.
- When the keys 1 – 8 are operated, the functions listed below are carried out.

**Key 1:** The functions of the keys 2 - 7 can be allocated to this key.  
To program key 1, simultaneously press one of the keys 2 - 7 and key 1 for approx. **3 seconds**. The function of the selected key is taken over and the yellow LED in this key lights up  
(For drive system P74 ED-L = standard)  
For drive system PF 321, the value **94** is set under parameter **840** (= standard).



**Key 2:** **Reverse sewing or intermediate backtacks during the seam.**  
(On drive system P74 ED-L under Parameter **634** other functions can be assigned to this key: ON = Feed adjustment when machine has stopped and when machine is running (standard)  
OFF = Feed adjustment only when machine is running  
For drive system PF 321, the value **16** is set under parameter **841** (= standard).



**Key 3: Needle position change**

This button can have the **following functions** assigned depending on the drive system implemented and by way of changes to the parameter values:

P74 ED-L		PF 321	
Parameter	Function	Parameter	Function
695	0 = Off 1 = needle raised without trimming 2 = needle position change (standard) 3 = single stitch 4 = single stitch in reverse 5 = moving forwards to needle position step by step 6 = programmable tack on / off	842	0 = Function off 01 = Needle up without trimming 02 = Change needle position (standard) 03 = Single stitch 20 = Step-by-step approach to a needle position forward 95 = Offset multi-backtack 96 = Backtack suppression (all autom. backtack deactivated) 97 = Single stitch reverse 98 = Not used



**Key 4: Calling up the pre-selected top feed lift.**

(Diode on = high lift, diode off = low lift)..

This button can have the **following functions** assigned depending on the drive system implemented and by way of changes to the parameter values:

P74 ED-L		PF 321	
Parameter	Function	Parameter	Function
401	0 = Off 1 = when key pressed constant second stroke (standard) 2 = second stroke only as long as key pressed If this key is operated, the second voltage is switched on This function can be switched off under Parameter 764	843	0 = Off 01 = With button pressed constantly, 2nd lift (standard) 02 = 2nd lift only while button is pressed 14 = Stroke adjustment (Flip Flop 1) with speed limit N10 (Parameter 137 must be set to "On")



**Key 5: Bartack suppression for one bartack.**

This button can have the **following functions** assigned depending on the drive system implemented and by way of changes to the parameter values:

P74 ED-L		PF 321	
Parameter	Function	Parameter	Function
780	0 = Off 1 = tack inversion once (standard) 2 = tack suppression (all tacks switched off) 3 = reverse move to needle position step by step 4 = edge trimmer on / off 5 = programmable tack on / off	844	17 = Backtack inversion, single (standard) 21 = Step-by-step approach to a needle position reverse 95 = Offset multi-backtack 96 = Backtack suppression (all autom. backtack deactivated) 97 = Single stitch reverse 98 = Not used



**Key 6: Calling up the pre-set stitch length**

Diode on = large stitch length, diode off = small stitch length.

This button can have the **following functions** assigned depending on the drive system implemented and by way of changes to the parameter values:

P74 ED-L		PF 321	
Parameter	Funktion	Parameter	Funktion
786	Function = Standard This function can be switched off under Parameter 786.	845	22 = Speed limitation n11 , Flip Flop 2 (Parameter 186 must be set to "On".



**Key 7:** If this key is operated, the second thread tension is switched on.

If this key is pressed for longer than about **2** seconds, the machine moves to the threading position - the needle is raised and the motor start inhibitor is activated (sewing threads are not trimmed).

If the key is operated again, the motor start inhibitor is deactivated again

*(For drive system P74 ED-L = standard)*

*For drive system PF 321, the value 93 is set under parameter 846 (= standard).*



**Key 8: EMERGENCY KEY**

Needle is raised without trimming, the thread clamp is opened, the thread tension is released, the presser foot raised and the motor start inhibitor activated.

**Deactivation the motor safety lock**



*For drive system P74 ED-L - click the button 'Scroll'.*

*For drive system PF 321 - click the button 'E' (under parameter 847, the value 24 is set = standard)*



The method for setting parameters is described in the settings manual, and may only be carried out by certified professionals!

7.05 Knee switch (option)

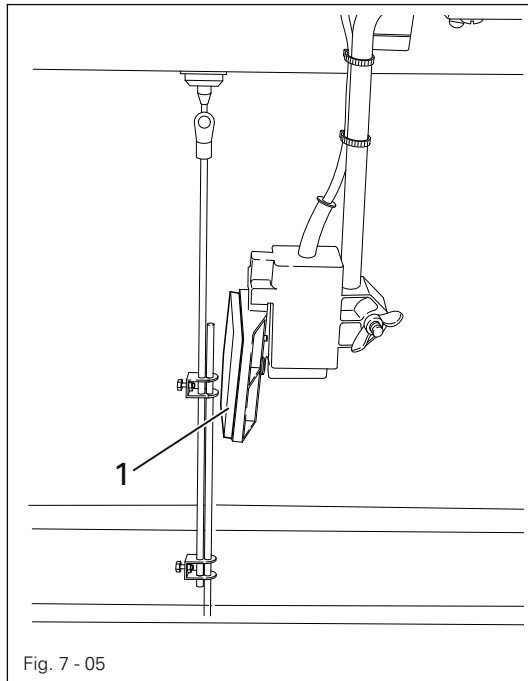


Fig. 7 - 05

● Depending on how the machine is equipped, the following functions can be called up with the knee switch:

1. On machines with centre guide (sub-class -63/24) this can be engaged or disengaged by operating the knee switch.
2. By operating knee switch 1 it is possible to alternate between two pre-selected feed stroke settings.



For the high stroke setting the speed is reduced.

The knee switch function can be altered, see the instruction manual for the control panel.

7.06 Knee lever (only on the PFAFF 2545 / 2546 BASIC)

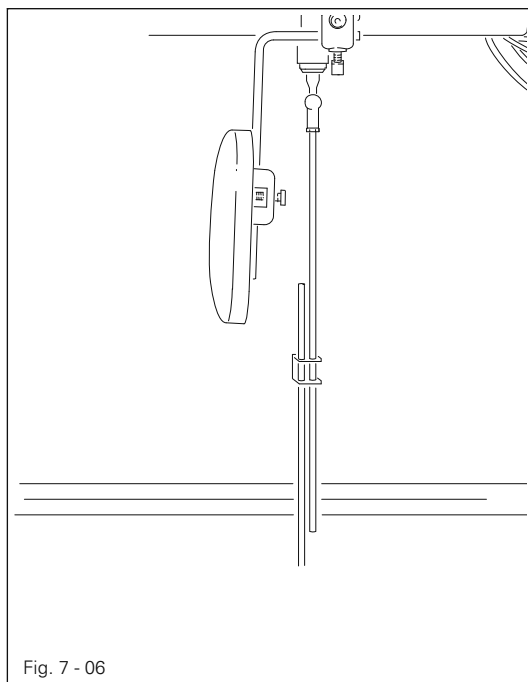
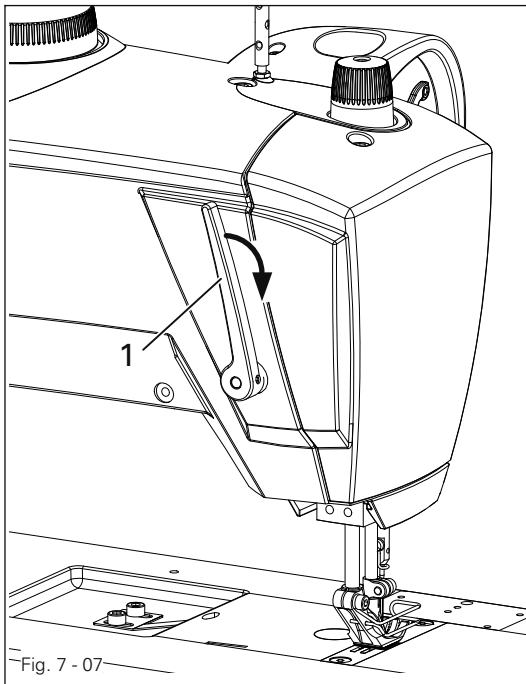


Fig. 7 - 06

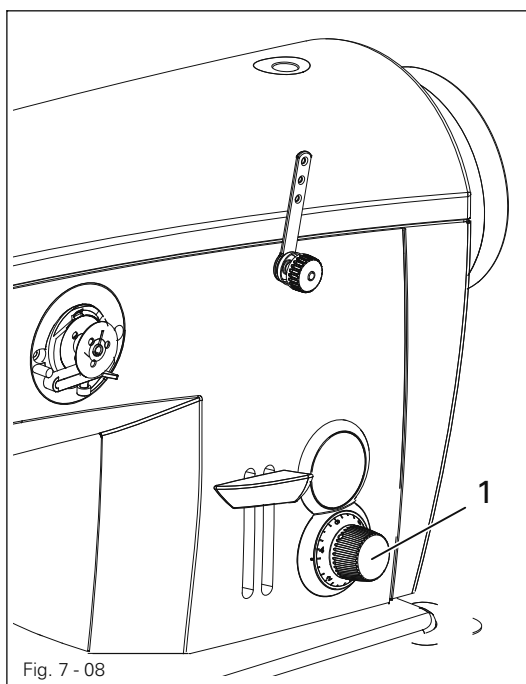
● By pressing the knee lever 1 in the direction of the arrow, the presser foot is raised.

## 7.07 Lever for lifting the presser foot



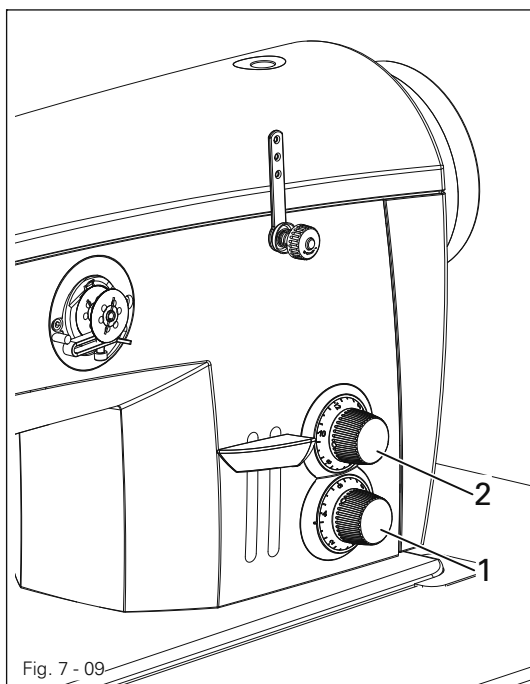
- The sewing foot can be lifted by raising lever 1.

## 7.08 Adjusting the stitch length (on the PFAFF 2545 / 2546 BASIC and CLASSIC)



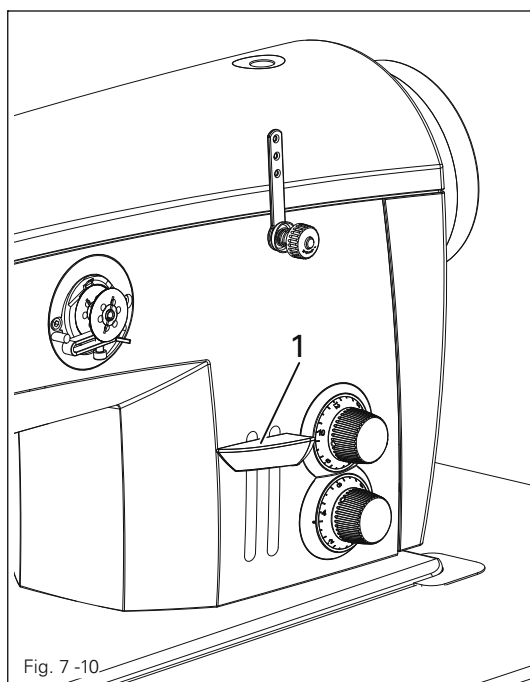
- Adjustment wheel 1 is used to pre-select the stitch length

7.09 Adjusting the stitch length (on the PFAFF 2545 / 2546 PLUS)



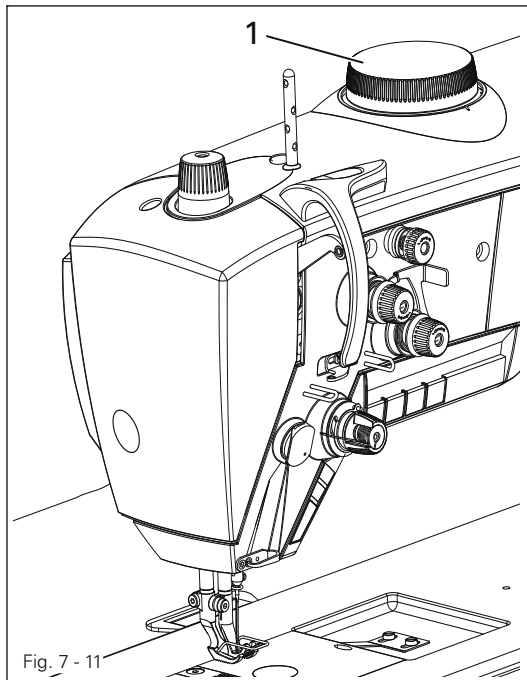
- Two different stitch lengths can be pre-selected on the thumb wheels 1 and 2.
- The adjustment can be made by turning the thumb wheels.
- The larger stitch length is set on thumb wheel 1, and the smaller stitch length on thumb wheel 2.
- Use key 6 to call up the pre-selected stitch lengths, see Chapter 7.04 Keyboard on machine head.

7.10 Reverse feed lever



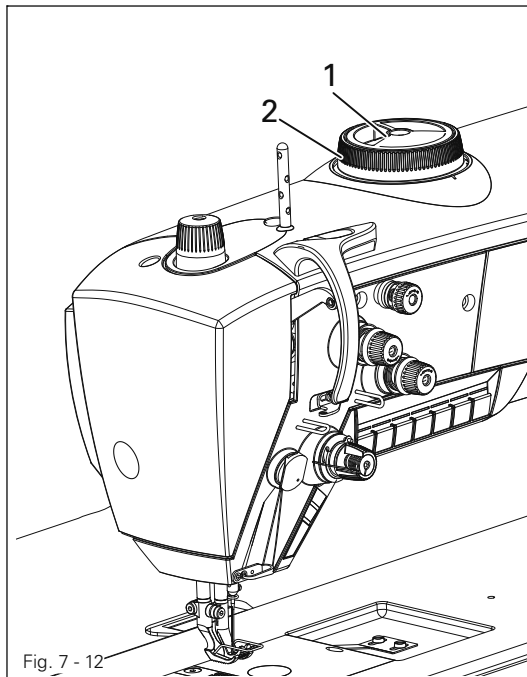
- As long as the reverse feed lever 1 is pressed during the sewing operation, the machine sews in reverse.

## 7.11 Adjusting the top feed stroke (on the PFAFF 2545 / 2546 BASIC and CLASSIC)



- The top feed stroke can be adjusted by turning knob 1.

## 7.12 Adjusting the top feed stroke (on the PFAFF 2545 / 2546 PLUS)

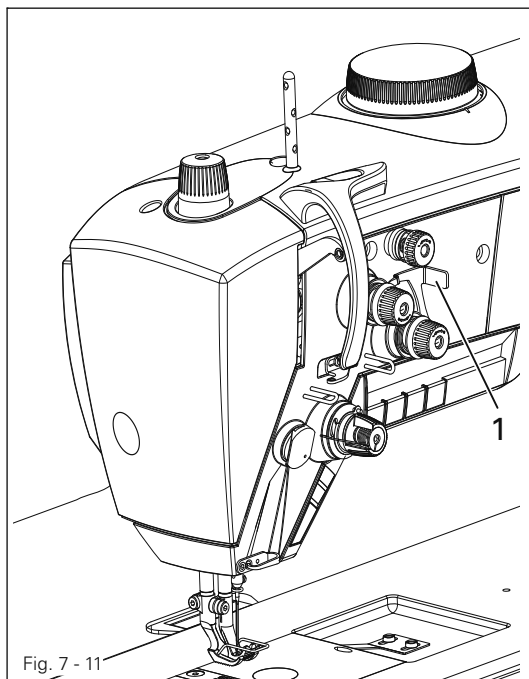


- The large top feed lift can be set by turning thumb wheel 1, and the small top feed lift by turning thumb wheel 2.
- Use key 4 to change between the two top feed lift settings (see Chap. 7.04 Keyboard on machine head).



### 7.13 Switchable needle thread tension

(only on the PFAFF 2545 / 2546 BASIC )

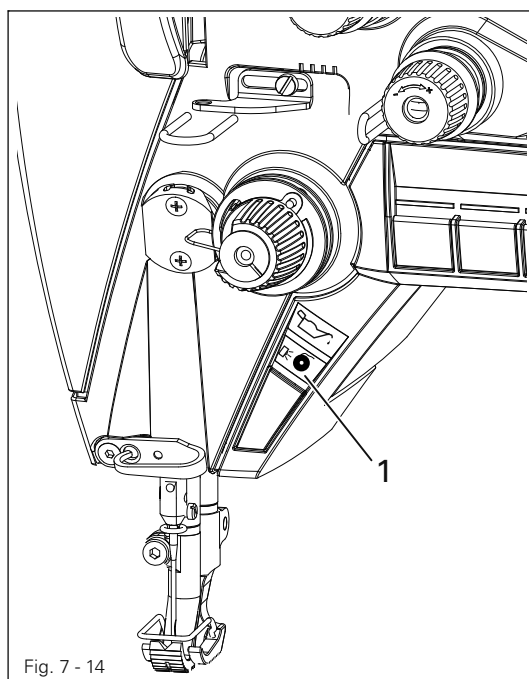


- The needle thread tension can be increased by turning lever 1 to the right.

### 7.14 Bobbin thread monitor with remaining thread recognition by sensor

(sub-class -926/06)

Bobbin thread control by reverse stitch counting (with P74 ED-L + PF 321)



- When the remaining thread amount is reached, the symbol lamp A flashes and the machine stops.
- After the pedal has been released and the forwards sewing function operated again, the seam can be completed.
- After the thread trimming operation and replacing the bobbin, press button F1 (for P74) or key 8 (for AB and PF 321) must be pressed. Symbol light 1 turns off.
- When sewing begins the monitoring or counting function begins again.



For settings see chapters 8.04 and 8.05.

## 7.15 Bobbin thread control by stitch-counting *(with PicoDrive)*

- When the pre-set number for stitches have been sewn, the machine stops and the signal "Bobbin" appears on the display.
- After the pedal has been released and the forwards sewing function has been operated twice, the seam can be completed.
- The display goes off and the LED in the F1 key flashes as a reminder.



After the thread trimming operation and the bobbin change, the F1 key on the control panel must be pressed. When sewing begins, the new pre-set counting process begins.



Pre-setting the number of stitches, see Chapter 8.04 **Setting the bobbin thread control**.

## 7.16 Control panel

The description can be found in the separate instruction manual for the drive.

## 8 Preparation



All regulations and instructions in this Instruction Manual are to be observed!  
Special attention is to be paid to the safety regulations!



All preparation work is only to be carried out by appropriately trained personnel.  
Before all preparation work, the machine is to be separated from the electricity supply by removing the plug from the mains or switching off the On/Off switch!

### 8.01 Inserting the needle

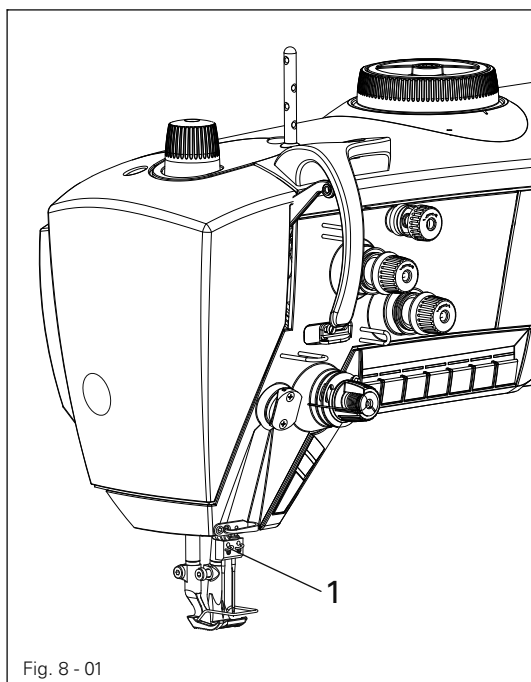


Fig. 8 - 01

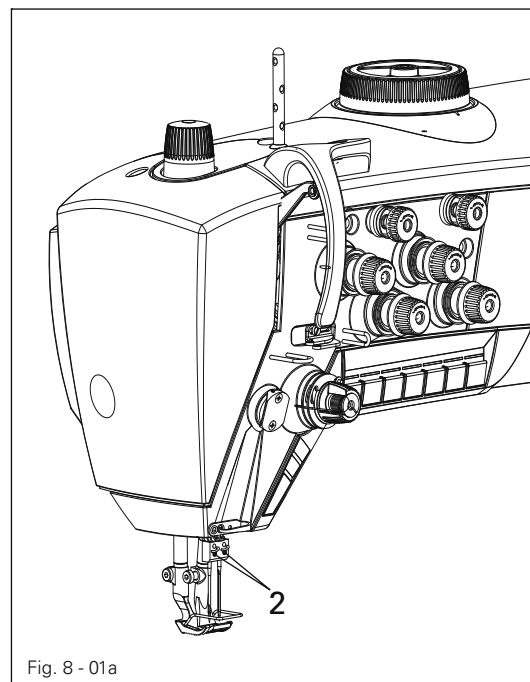


Fig. 8 - 01a



Switch off the machine!  
Danger of injury due to unintentional starting of the machine!



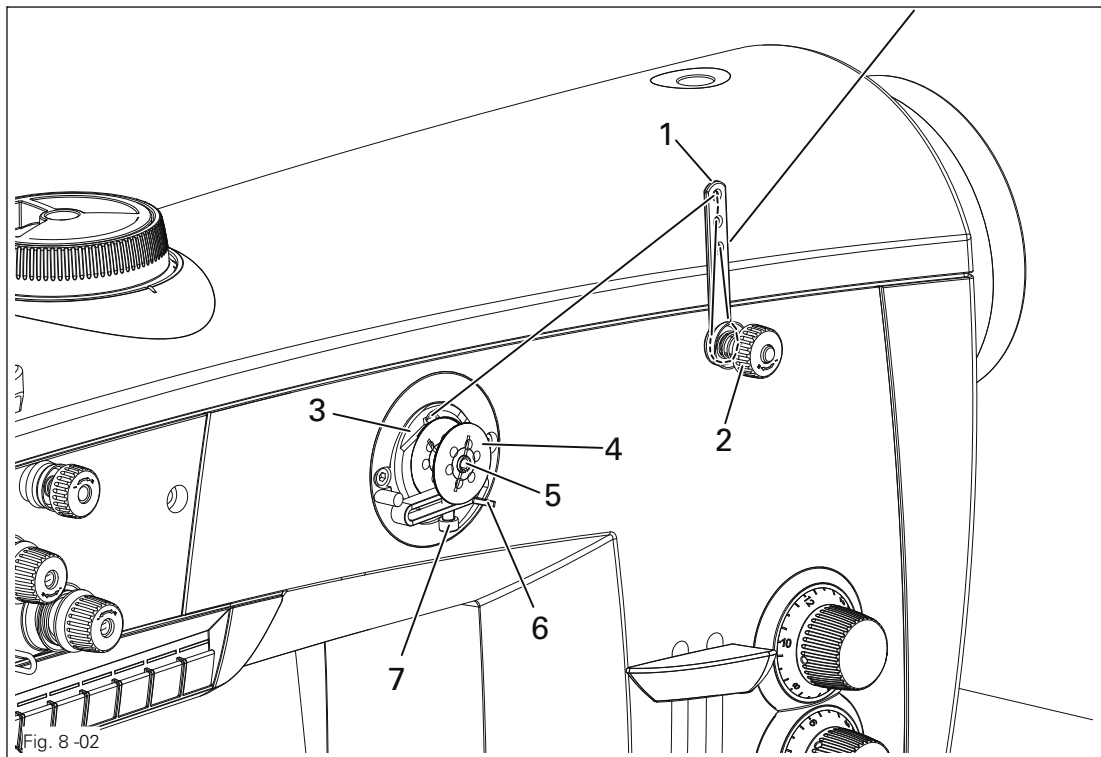
Only use needles from the system intended for the machine, see Chapter 3 Specifications.

#### PFAFF 2545

- Set needle bar at top position and loosen screw 1.
- Push the needle fully in (the long needle groove must face to the left)
- Tighten screw 1

#### PFAFF 2546

- Set needle bar at top position and loosen screw 2.
- Push the needle fully in (the long groove of the left needle must face to the right and that of the right needle to the left).
- Tighten screw 2 again.



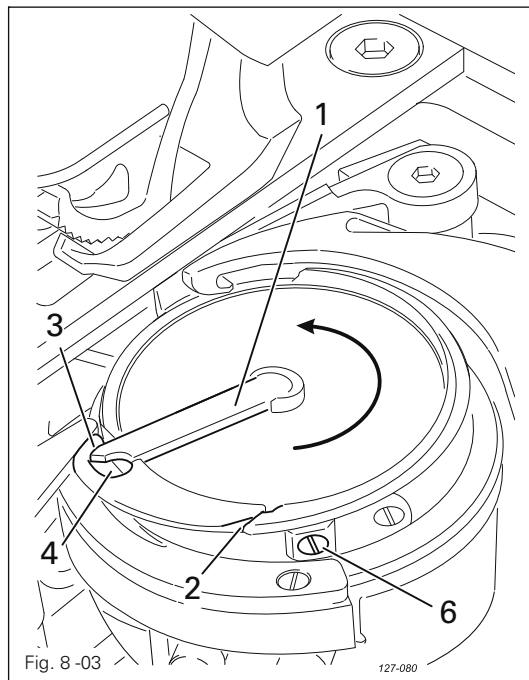
- Draw the thread from the reel stand through guide hole 1 into the bobbin winder tension unit 2 and then behind the thread clamp 3.
- Cut off the thread in thread clamp 3. The thread is retained.
- Place empty bobbin 4 on the bobbin winder spindle.
- To switch on the bobbin winder, push up lever 6.



The bobbin is wound during sewing.

- The bobbin winder stops automatically, when the bobbin 4 is filled sufficiently.
- Remove full bobbin 4 and cut off the thread in thread clamp 3.
- The tension of the thread on bobbin 4 can be adjusted on the bobbin winder tension unit 2.
- The volume of thread on bobbin 4 can be adjusted with screw 7.

## 8.03 Bobbin-changing/threading, and regulating the bobbin thread tension



Switch off the machine!  
 Danger of injury due to unintentional starting of the machine!

- Set take-up lever at its top position.
- Open bed slide, lift latch 1 and take out the bobbin. Place the filled bobbin into the hook so that the bobbin turns as shown by the arrow when the thread is pulled.
- Close latch 1 again.
- Pull the thread through slot 2, around stop 3 and into hole 4. Close the bed slide again.
- Regulate the bobbin-thread tension by turning screw 5.



Do not run the machine with the bed slide open.  
 Danger of injury by moving parts.

## 8.04 Setting the bobbin thread control function by reverse stitch counting

### 8.04 .01 Machines with P45 PD2-L and P74 ED-L

- Switch on the machine.
- Call up the parameter input function by pressing the **Scroll** key.
- Press the **TE** key to switch the function keys to the input function (LED in the **TE** key is on).
- Select parameter "660" by pressing the appropriate +/- keys, and set the value at 2.
- Press the **scroll** key to select the "TM" function.
- Set the number of stitches, which can sewn with a filled bobbin, by pressing the appropriate +/- key.
- Change to the "RM" function by pressing the "TE" key (diode is off).
- Take over the set value by pressing the "F1" key.

### 8.04 .02 Machines with PF 321

- The description can be found in the separate instruction manual for the drive.

### 8.05 Setting the bobbin thread monitor with remaining thread recognition by sensor (sub-class -926/06)

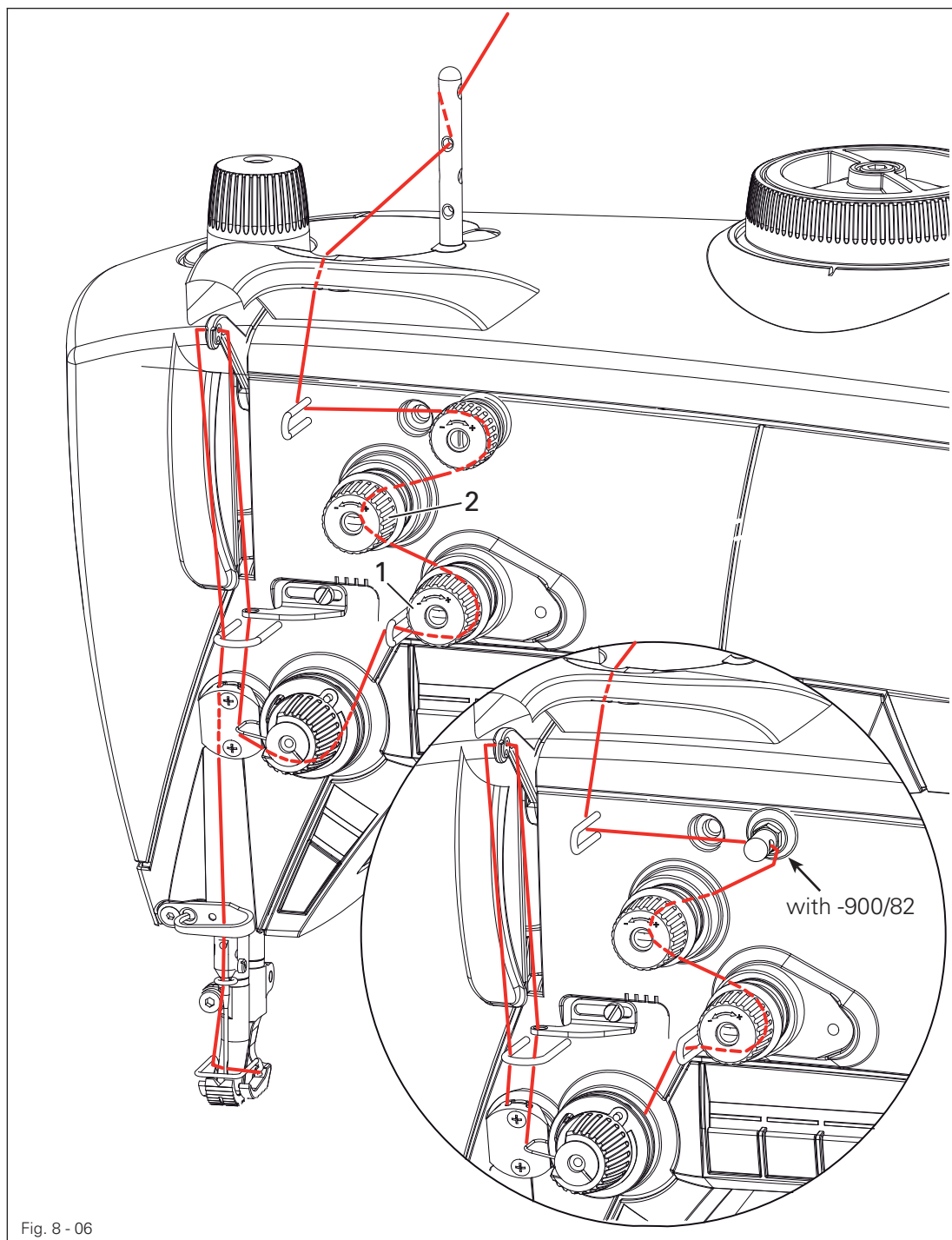
#### 8.05 .01 Machines with P74 ED-L

- Switch on the machine.
- Call up the parameter input function by pressing the **Scroll key**.
- Press the **TE key** to switch the function keys to the input function (LED in the **TE key** is on).
- Select parameter "**660**" by pressing the appropriate +/- **keys**, and set the value at **1** (on machines with one sensor ) or **3** (on machines with two sensors).
- Select parameter "**760**" by pressing the appropriate +/- **keys**
- Set the number of remaining stitches, which can still be sewn after recognition through the bobbin thread monitoring function, by pressing the relevant plus-minus key. The selected value is multiplied by 10, in this way showing the number of stitches.
- Conclude the input function by pressing the **Scroll key**.
- The set values are applied.

#### 8.05 .02 Machines with PF 321

- The description can be found in the separate instruction manual for the drive (see parameter **835** and **836**).

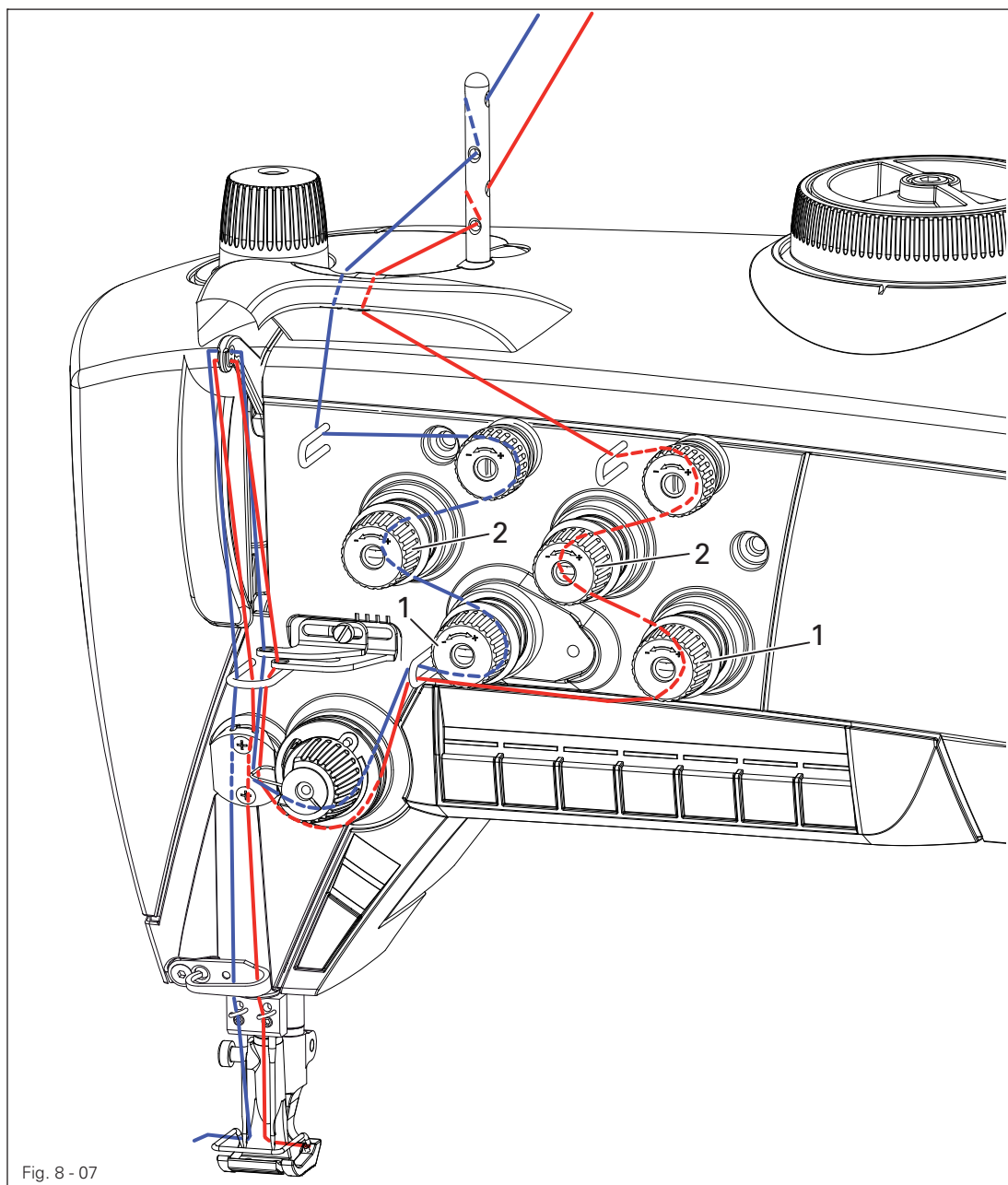
8.06 Threading needle thread and regulating its tension on the 2545



Switch off the machine!  
 Danger of injury due to unintentional starting of the machine!

- Thread the needle thread as shown in Fig. 8 - 06.
- Regulate the needle-thread tension by turning milled screw 1 or 2.

## 8.07 Threading needle thread and regulating its tension on the 2546



Switch off the machine!  
Danger of injury due to unintentional starting of the machine!

- Thread the needle thread as shown in Fig. 8 - 07.
- Regulate the needle-thread tension by turning milled screw 1 or 2.



9 Care and maintenance

9.01 Servicing and maintenance intervals

Clean the hook compartment .....	Daily, several times if in continuous use
Check the oil level .....	Daily, before starting the machine
Check/adjust the air pressure .....	Daily, before starting the machine
Clean the filter of the air filter/lubricator .....	As required



These maintenance intervals are calculated for the average running time of a single shift operation. If the machine is operated more than this, shorter intervals are recommended.

9.02 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 .

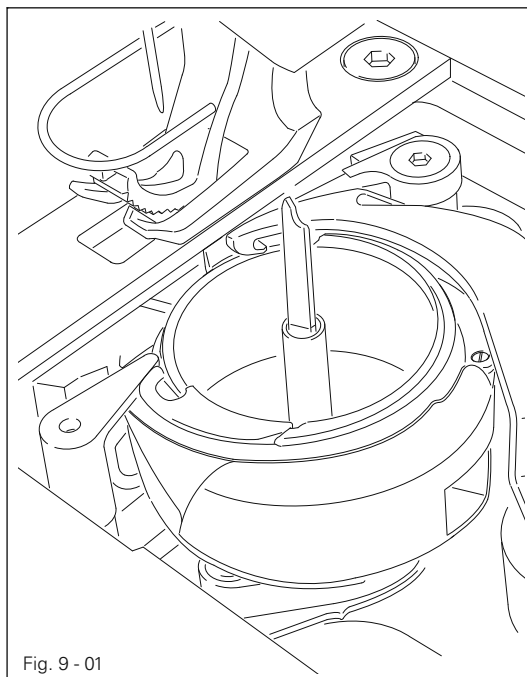
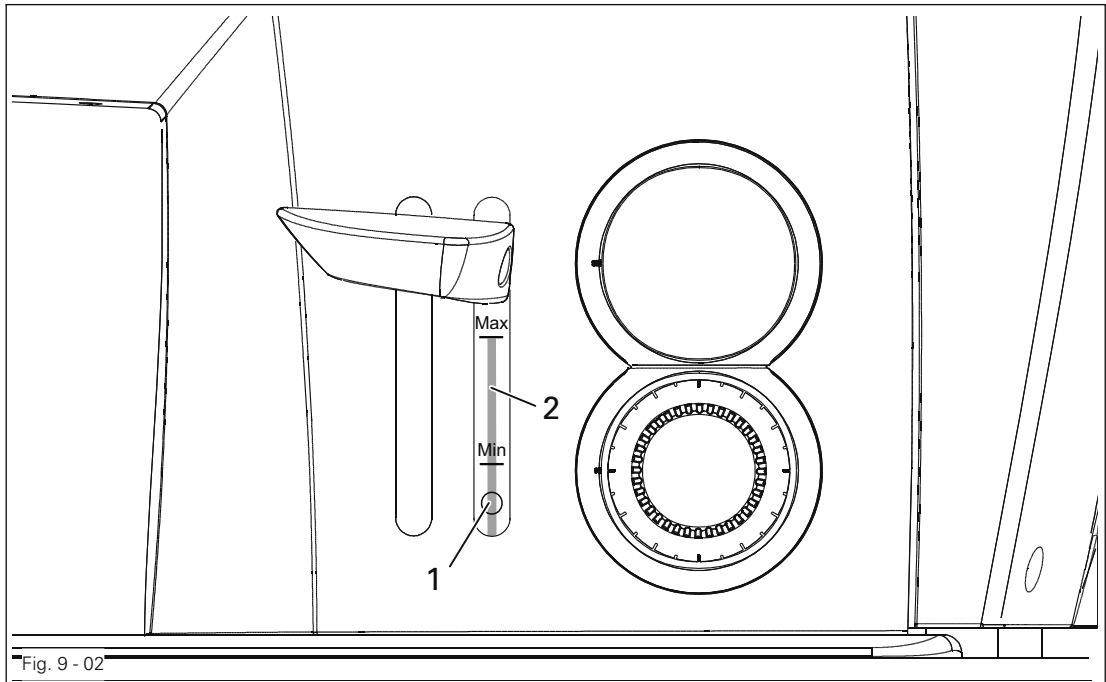


Fig. 9 - 01

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

- Open the bed slide and remove the bobbin.
- Clean the hook and hook compartment daily, several times if in continuous use.
- Set the bobbin in position and close the bed slide.

## 9.03 Lubricating



Before commissioning the machine, fill in oil through hole 1 until the oil level indicator 2 is at the "MAX" marking.

### PFAFF 2545 / 2546 BASIC



Check the oil level daily before starting the machine!

The level of the oil in indicator 2 must not sink below the "MIN" marking and not exceed the "MAX" marking.

If required, fill oil into the tank through hole 1.

### PFAFF 2545 / 2546 CLASSIC and PLUS



The oil level is controlled by sensor.

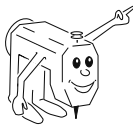
When the minimum oil level is reached, key B on the machine head shines red (see Chapter 7.03 Keys on the machine head).

If required, fill oil into the tank through hole 1.

Oil level indicator 2 must not exceed the "MAX" marking.



Only use oil with a medium viscosity of 22.0 mm<sup>2</sup>/s at 40° C and a density of 0.865 g/cm<sup>3</sup> at 15°C!



We recommend PFAFF sewing-machine oil, part No. 280-1-120 144.

## 9.04 Checking/regulating the air pressure

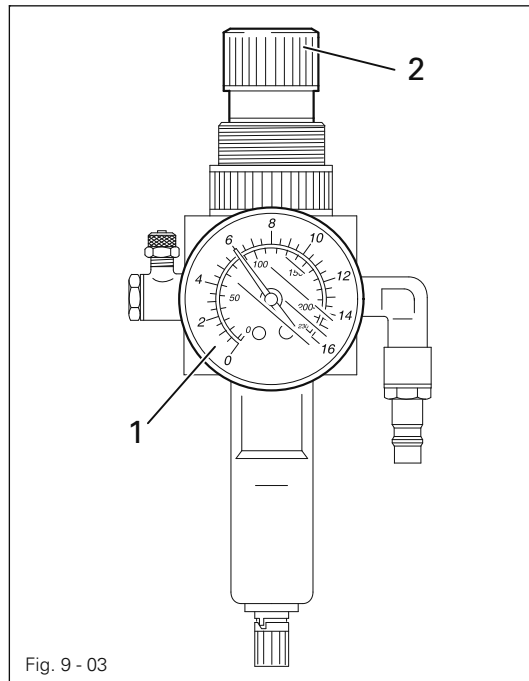


Fig. 9 - 03

- Check the air pressure on gauge 1 every time before operation.
- Gauge 1 must show a pressure of 6 bar.
- Regulate this pressure if required.
- To do so, pull knob 2 up and turn it accordingly.

## 9.05 Emptying/cleaning the water bowl of the air filter/regulator

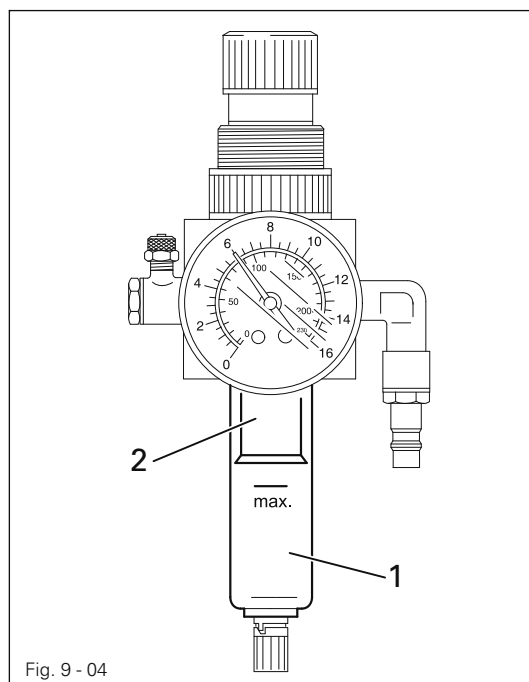


Fig. 9 - 04



Switch off the machine.  
Disconnect the air hose at the air filter/regulating unit.

### Emptying the water bowl

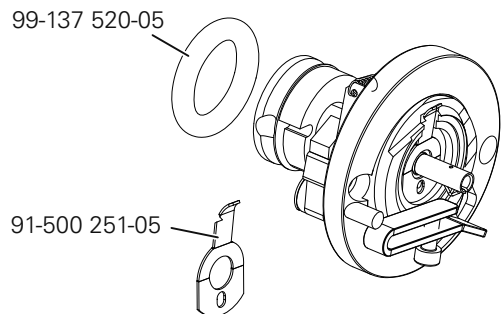
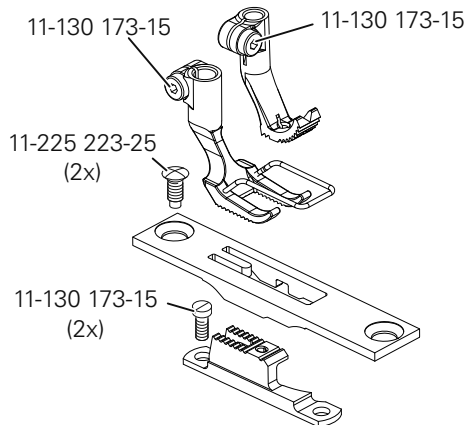
- Water bowl 1 empties itself automatically when the air hose is disconnected from the air filter/regulator.

### Cleaning the filter

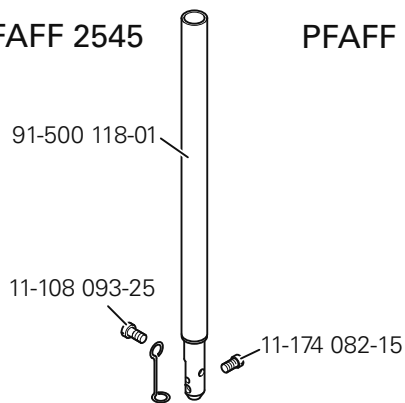
- Unscrew water bowl 1 and take out filter 2.
- Clean the filter with compressed air or with isopropyl-alcohol, part number 95-665735-91.
- Screw in filter 2 and screw on water bowl 1.

This is a list of the most important wearing parts.

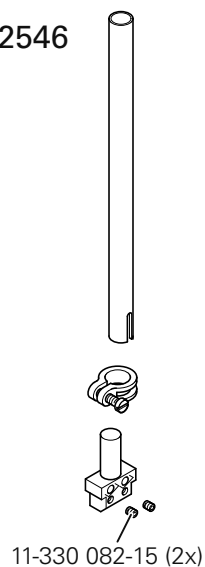
A detailed parts list for the complete machine is included with the accessories. In case of loss, the parts list can be downloaded from the internet address [www.pfaff-industrial.com/pfaff/de/service/downloads](http://www.pfaff-industrial.com/pfaff/de/service/downloads) As an alternative to the internet download the parts lists can also be ordered in book form under part no. 296-12-19 003.



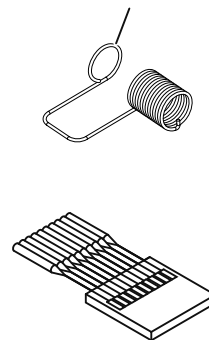
PFAFF 2545



PFAFF 2546

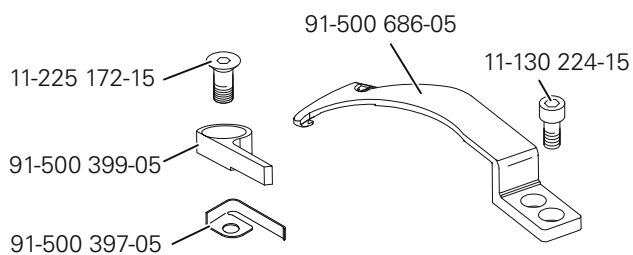


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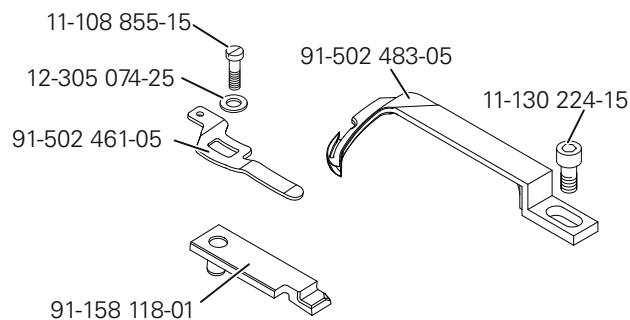


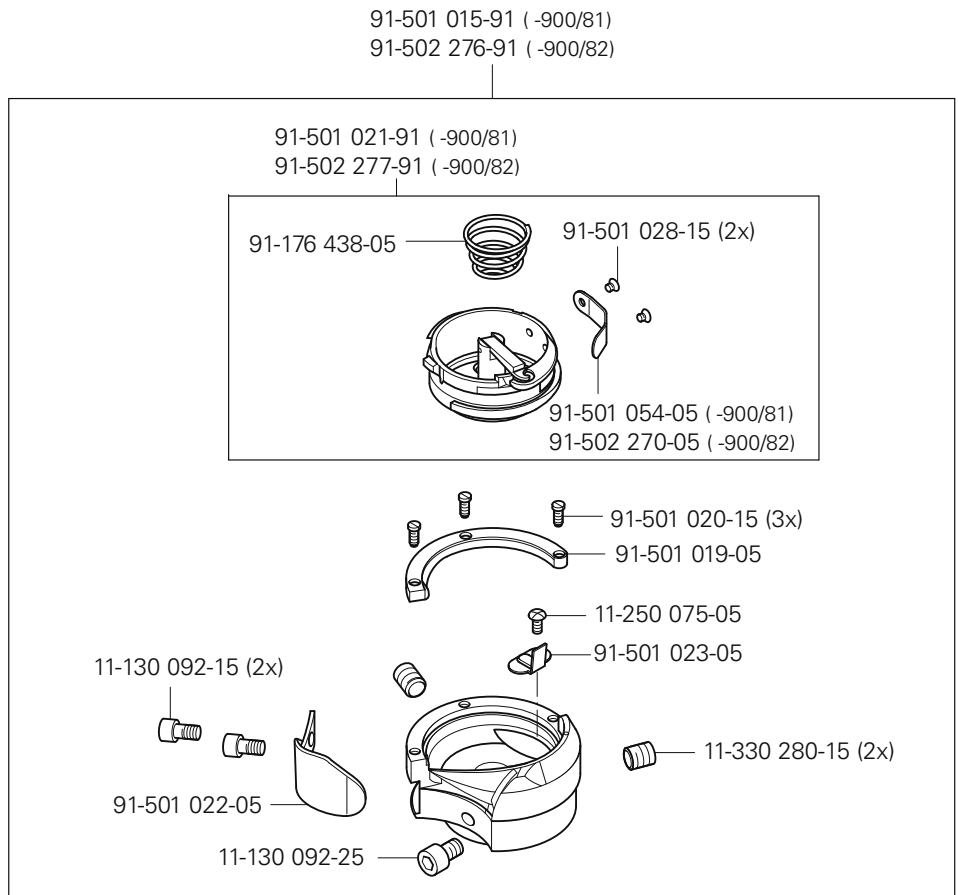
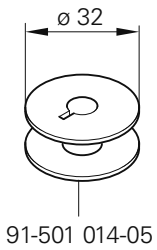
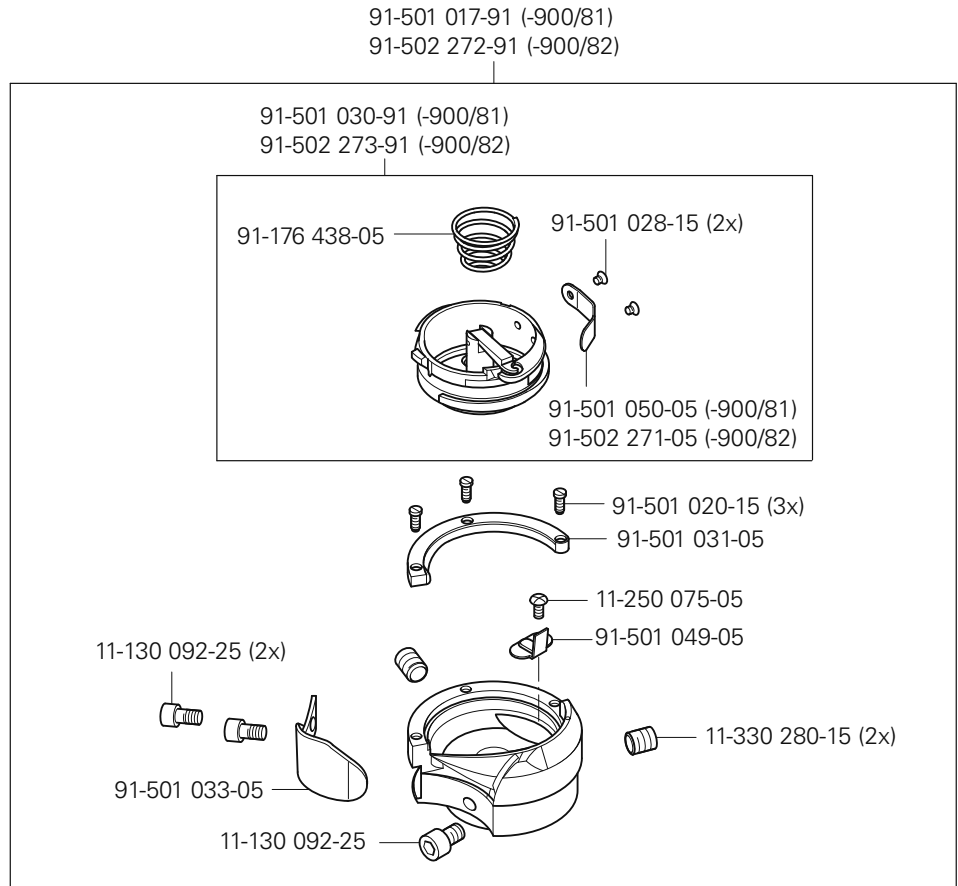
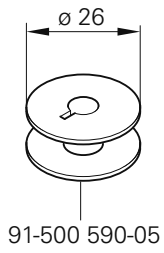
System 134 - 35

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