

# PFAFF

## 3801<sub>-1/07; -1/071; -10/071</sub>

### Instruction Manual

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

# 1494769 →



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

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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, presser foot and needle plate), 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! Exceptions to this are only to be 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 shall not be 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 a component 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 at 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 taking care of faults arising in the sewing area.

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

- always observe the Notes on Safety in the Instruction Manual!
- never use any working methods which could limit the level of safety in using 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!
- never work on parts which are still connected to the power supply! Exceptions are explained in the regulations EN 50110.
- replace the protective coverings 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!

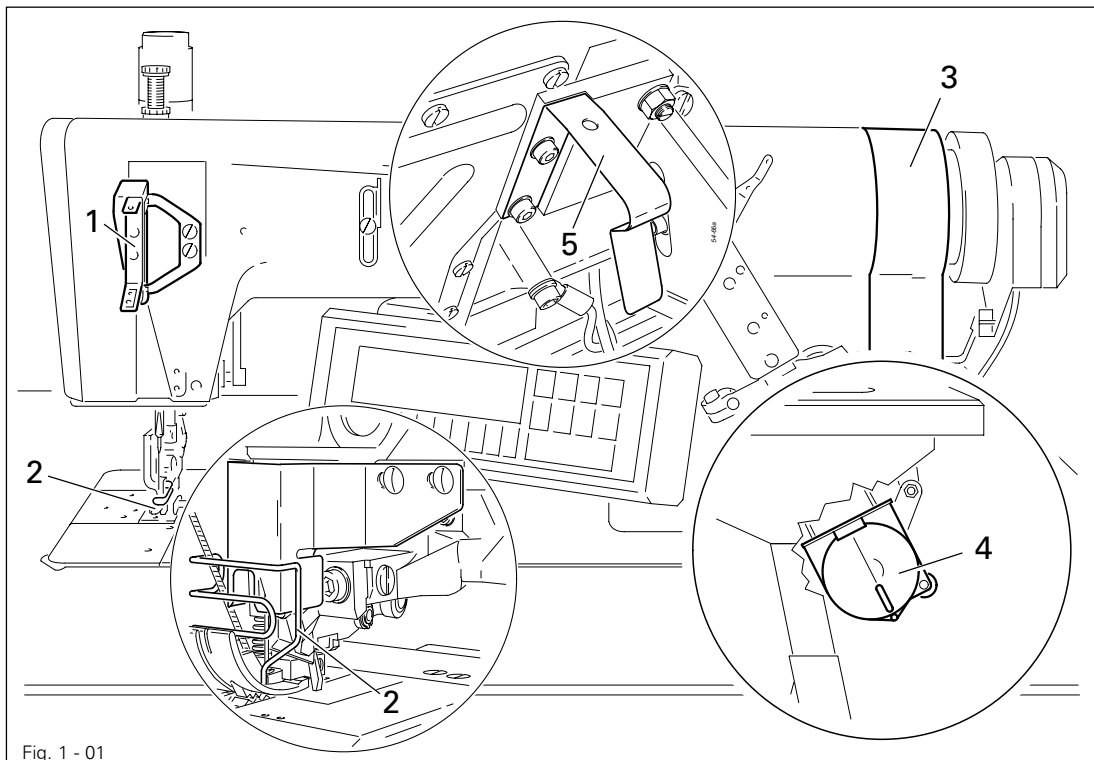


Fig. 1 - 01



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



Do not operate the machine without the needle guard **2!**  
Danger of injury by the needle!



Do not operate the machine without the belt guards **3 and 4!**  
Danger of injury due to the rotating V-belt!



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



Do not operate machines with a tape feeding device when this is disengaged.  
Danger of injury from the knife and needle!

2      **Proper use**

The PFAFF 3801-1/07, the PFAFF 3801-1/071 and the PFAFF 3801-10/071 are integrated workplaces for the clothing industry for the application of fullness in one material ply.

Machinemodel	Equipment
3801-1/07	
3801-1/071	with thread-trimming unit
3801-10/071	with thread-trimming unit and tape feeding device



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!

## 3 Specifications <sup>▲</sup>

Machine sewing head:

3801-1/07: ..... 5487/5489-814/01

3801-1/071: ..... 5487/5489-814/01-900/71

3801-10/071: ..... 5487/5489-814/01-900/71

Stitch type: ..... 401 (two-thread chainstitch)

Max. speed: ..... 3200 s.p.m. <sup>♦</sup>

Max. stitch length: ..... 2.5 mm

Differential stitch length: ..... 6 mm

Needle system: ..... 4463-35

Needle size in 1/100 mm: ..... 80 – 100 depending on the material

Sewing thread: ..... 120

Tape width (on the PFAFF 3801-10/071): ..... 2; 2.5; 3 or 4 mm

Eff. Balance wheel dia.: ..... 65 mm

Presser foot clearance:

3801-1/07: ..... 7 mm

3801-1/071: ..... 7 mm

3801-10/071: ..... 5 mm

Sewing motor: ..... See Motor Service Manual

Power requirement: ..... 0.8 kW

Connection voltage: ..... E 230 V, 50 – 60 Hz

Working air pressure: ..... 6 bar

Air consumption (on the Pfaff 3801-1/07 and the PFAFF 3801-10/071): ..... 0.3 – 0.5 l/work cycle

Noise data:

Emission sound level at the workplace at a speed of 2600 spm: ..... 79 dB(A) <sup>■</sup>

(Noise measurement in acc. with DIN 45 635-48-A-1, ISO 11204, ISO 3744, ISO 4871)

Machine dimensions:

Length: ..... approx. 1250 mm

Width: ..... approx. 800 mm

Height(with reel stand): ..... approx. 1700 mm

Net weight:approx. .... 140 kg

<sup>▲</sup> Subject to technical alterations

<sup>♦</sup> Depending on the material, work operation and stitch length

<sup>■</sup>  $K_{pA} = 2,5$  dB

### 4 Disposal of machines

- The proper disposal of the machines 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!

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## *Transport, packaging and storage*

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### 5 Transport, packaging and storage

#### 5.01 Transportation to customer's premises

All 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.

Always ensure that the machine is only 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, should be protected against corrosion, e.g. by a film of oil.

### 6 Explanation of the symbols

In this Instruction Manual, tasks to be carried out and important information are drawn to your attention by symbols. The symbols have the following meanings:



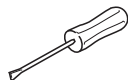
Note, information



Cleaning, care



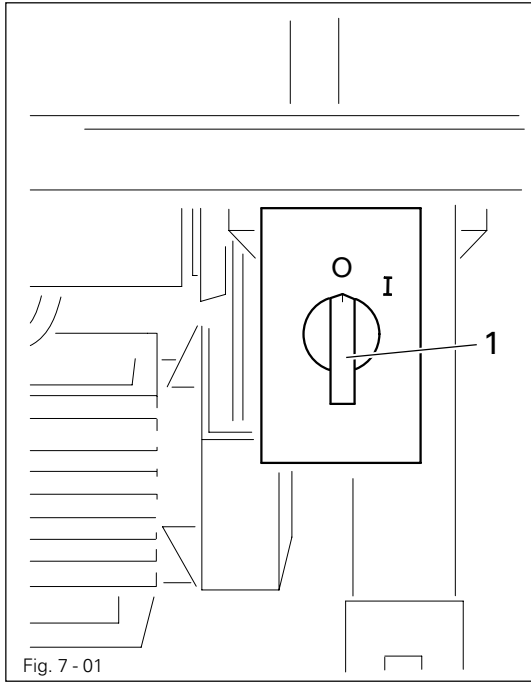
Lubrication



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

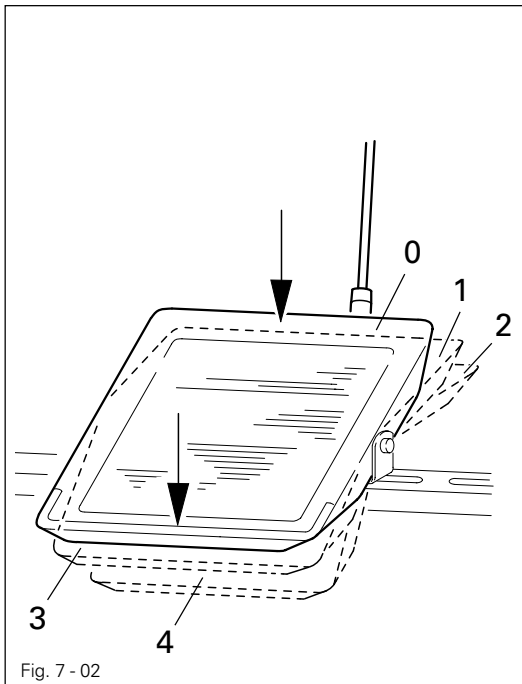
## 7 Controls

### 7.01 Main switch



- The machine is switched on or off by turning main switch 1.

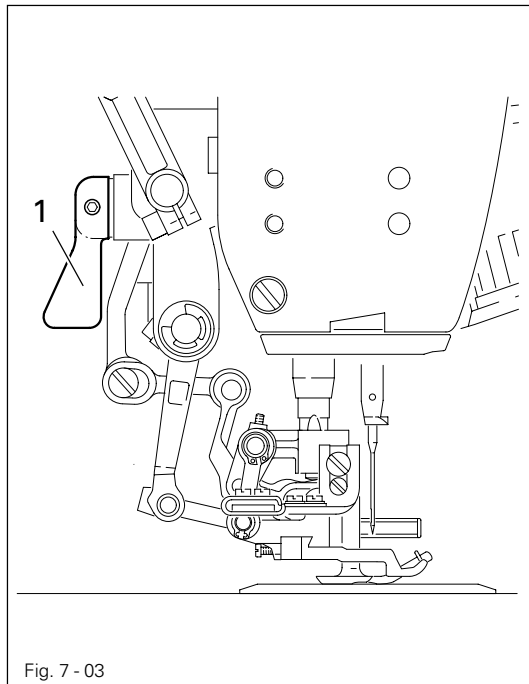
### 7.02 Pedal



- 0 = Machine stop
- 1 = Presser foot down
- 2 = Sew
- 3 = Presser foot up
- 4 = Cut thread

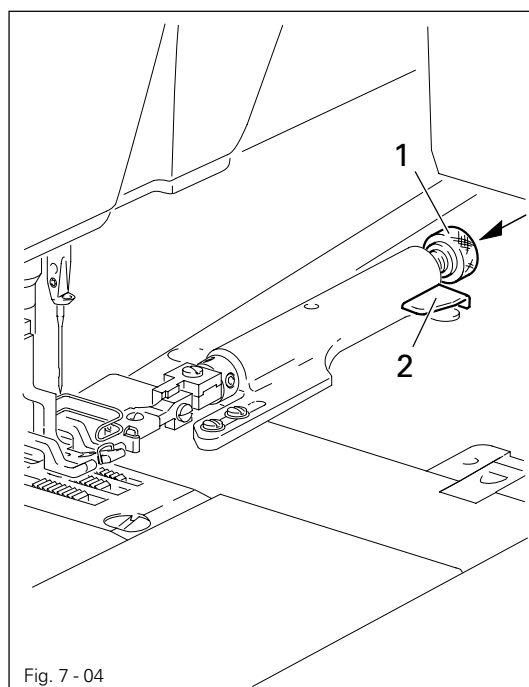


7.03 Lever for lifting the presser foot



- The presser foot is raised by turning lever 1.

7.04 Edge guide



- The edge guide is brought into operating position by pushing up lever 1.
- By pressing switch-key 2, the edge guide can be raised.

## 7.05 Control panel

The control panel consists of the display and two key panels.

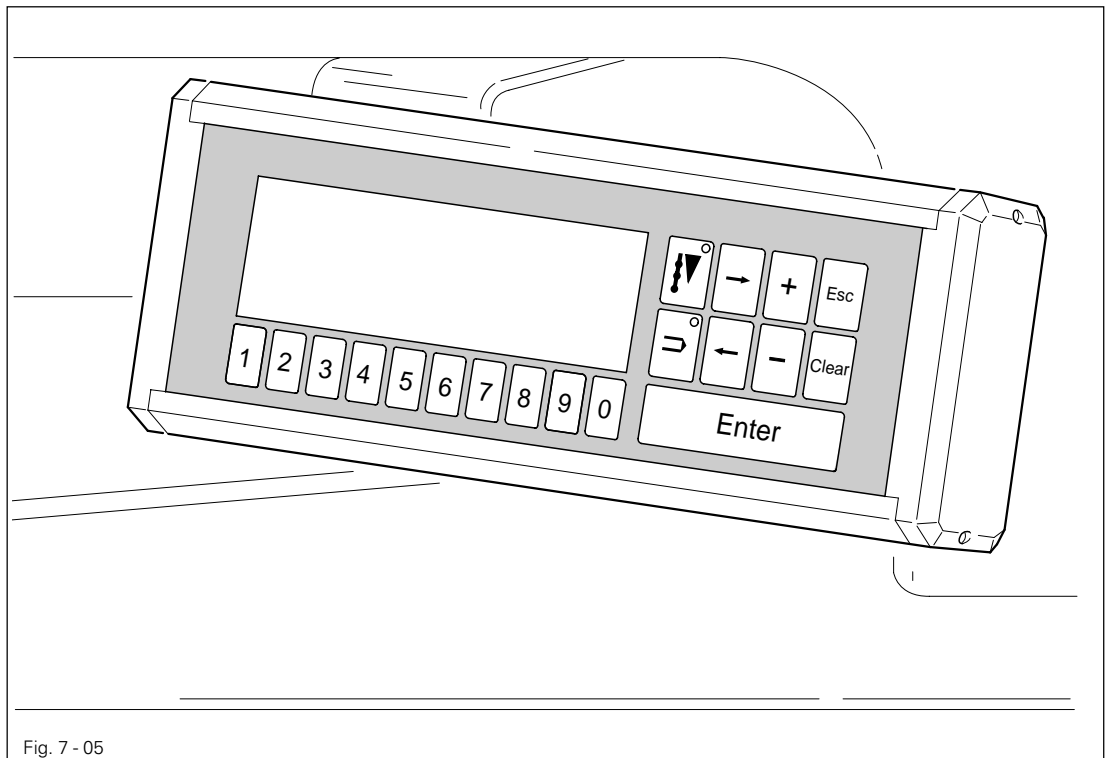


Fig. 7 - 05

### 7.05.01 Display

In the basic screen the messages in the display are divided into three sections:

#### Status bar

The status bar is in the upper section of the display. Here, up to 5 symbols with the corresponding values can be displayed (e.g. program number, number of seam sections, etc.).

#### Text field

The text field is in the middle section of the screen, in which messages are displayed in 2 lines. Stylized seam segments can also be shown here with information about start and end bartacks, sewing direction and seam section end.

#### Symbol bar

The symbol bar is found at the bottom of the display. Here, symbols are displayed and their corresponding function can be called up via the **number keys**. Active functions are shown by a symbol displayed on a dark background.



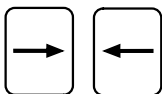
Normal symbol (function not active)



Symbol on dark background (function active)

**7.05.02 Operation-mode keys**

There are two operation modes. The selected mode can be seen by the light emitting diode in the respective key.

**SEWING mode****INPUT mode****7.05.03 Function keys****Arrow keys (right/left)**

- For positioning the cursor when entering several values in one line
- Selecting function

**Plus/Minus keys**

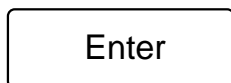
- For raising and lowering input values

**Esc key**

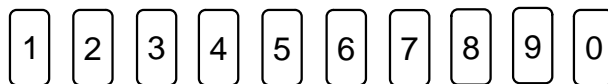
- For interrupting functions without taking on the value entered
- For returning to superordinate menu functions
- For error acknowledgement after an error message

**Clear key**

- For returning the input value to 0
- For error acknowledgement after an error message

**Enter key**

- For confirming an input value
- For error acknowledgement after an error message

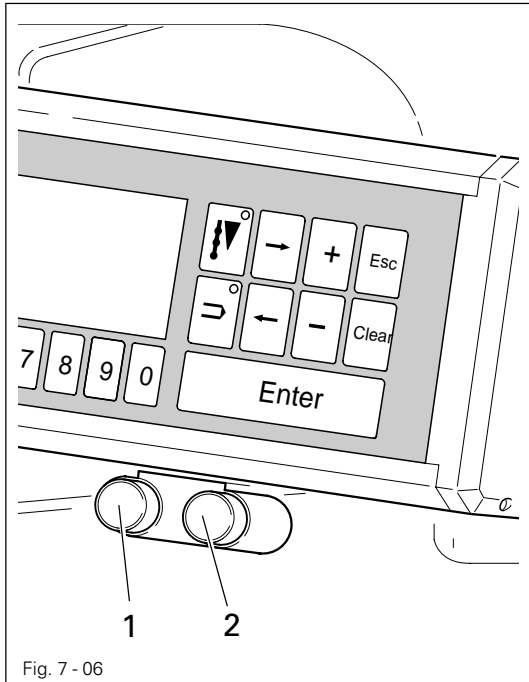
**7.05.04 Number keys**

Below the display there is a row of number keys.

Depending on the current operating mode, these keys have the following functions:

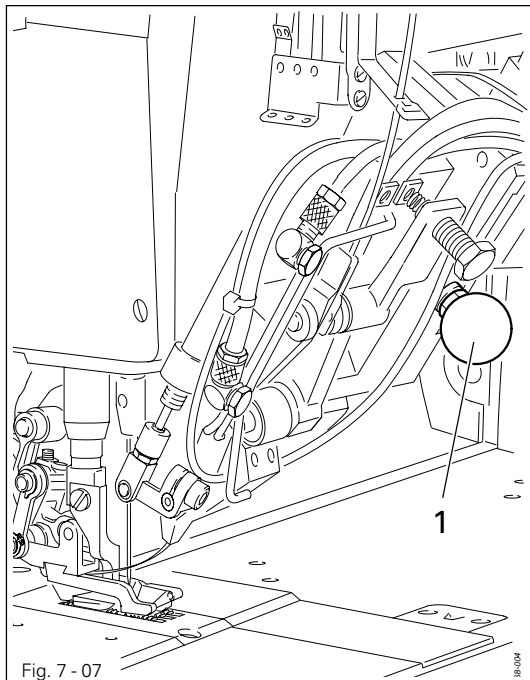
- carrying out the function shown by the symbol displayed above the number key
- entering a numerical value
- selecting functions or the next level of the menu

## 7.05.05 Control panel keys



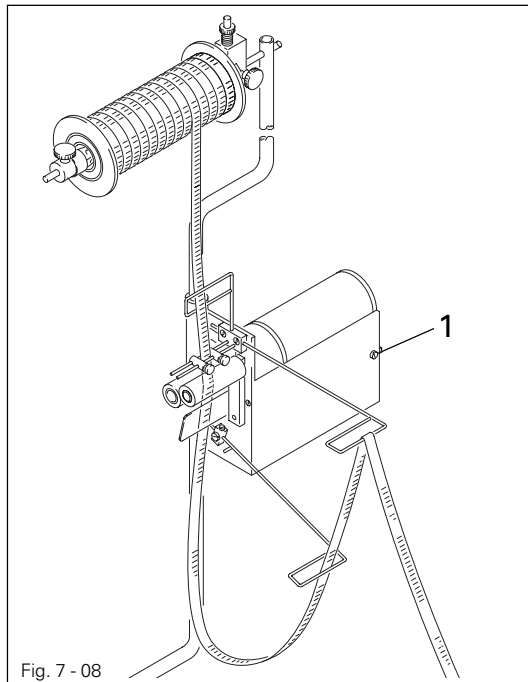
- Key 1 is used for re-setting after malfunctions of the tape-feeding unit.
- Key 2 is used for threading the bridle tape, see Chapter 9.04 Threading the bridle tape.

## 7.06 Lever for retracting the tape-feeding unit (only on the PFAFF 3801-10/071)



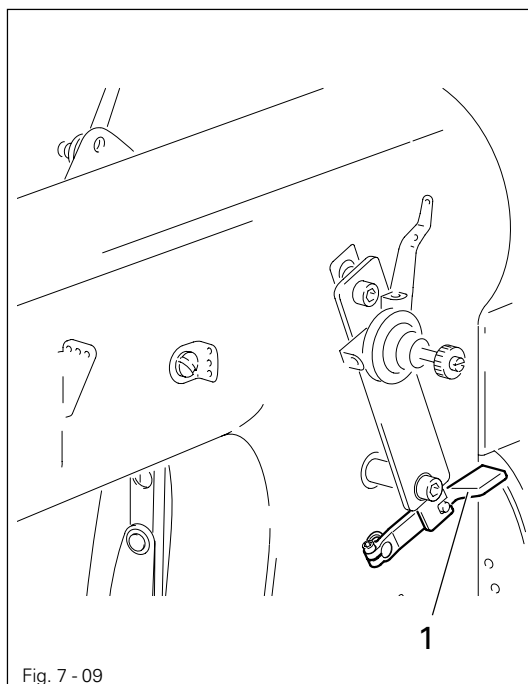
- The tape-feeding unit can be retracted with lever 1.

7.07 Tape feeding device (not on the PFAFF 3801-10/071)



- To apply the fusing tape, switch on the unit with switch 1.

7.08 Reverse-feed control lever



- To sew condensed stitches, press lever 1 down.

# Mounting and commissioning the machine

## 8 Mounting and commissioning the machine

The machine must only be mounted and commissioned by qualified personnel!  
All relevant safety regulations are to be observed!



If the machine is delivered without a table, you must make sure that the frame and the table top which you intend to use can hold the weight of the machine and the motor. It must be ensured that the supporting structure is sufficiently sturdy, including during all sewing operations.

### 8.01 Mounting

The necessary electricity supply must be available at the machine's location (see **chapter 3 Specifications**).

There must be a stable and horizontal surface and adequate lighting at the machine's location.



The method of packaging used requires that the table top be lowered for transport. The following is a description of how to adjust the height of the table top.

#### 8.01.01 Adjusting the table-top height

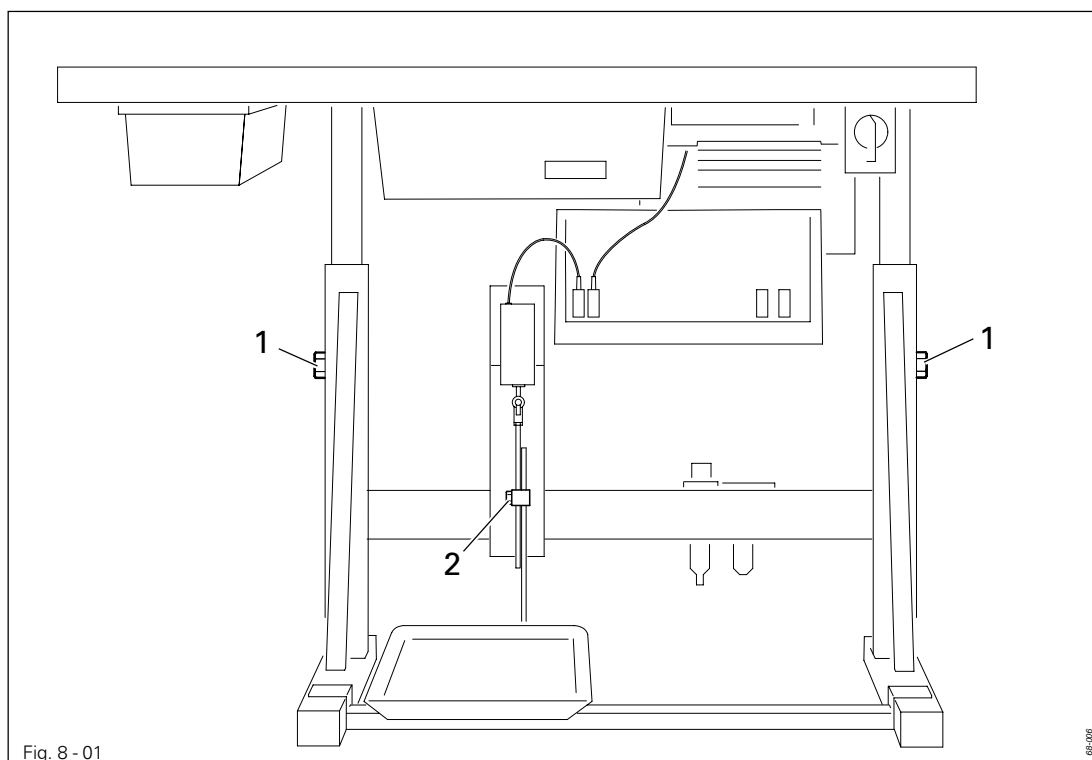
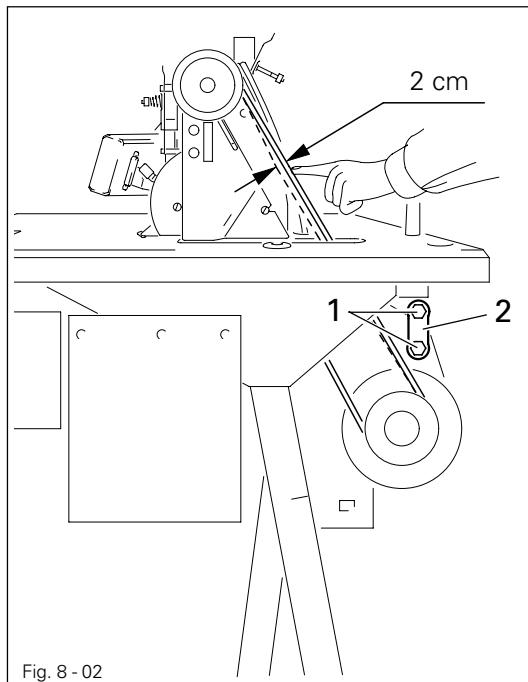


Fig. 8 - 01

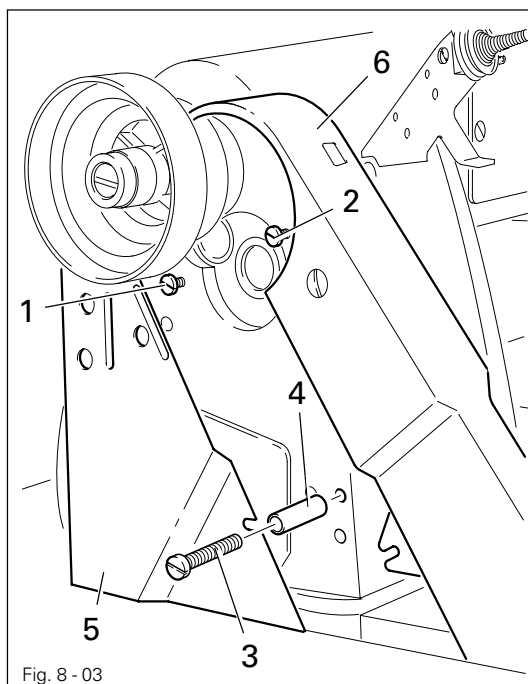
- Loosen screws 1 and 2 and set the desired table-top height.
- Tighten screws 1 well.
- Adjust the position of the pedal so that you can operate it comfortably and tighten screw 2.

## 8.01.02 Adjusting the V-belt tension



- Loosen nuts 1.
- Tighten the V-belt with belt take-up hanger 2.
- Tighten nuts 1.

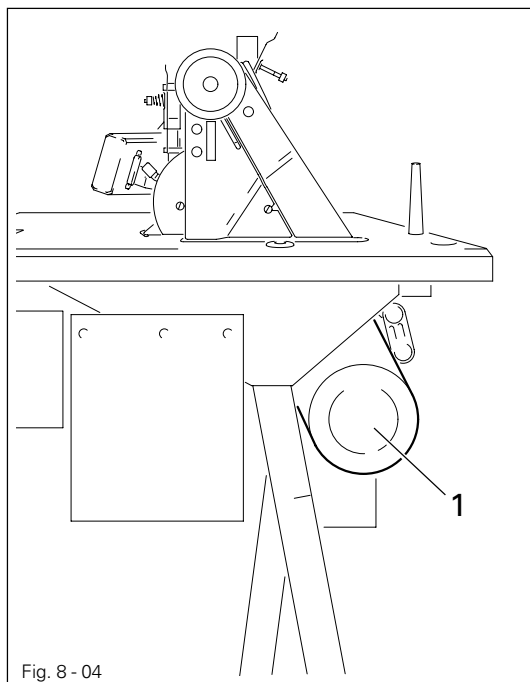
## 8.01.03 Fitting the upper belt guard



- Insert screws 1 and 2.
- Insert screw 3 with spacing sleeve 4.
- Slide belt guard section 5 so that the slots are behind the heads of screws 1 and 3.
- Slightly tighten screw 1.
- Making sure that the lug of belt guard section 6 is located between belt guard section 5 and the spacing sleeve 4, align the complete belt guard and tighten screws 1, 2 and 3.

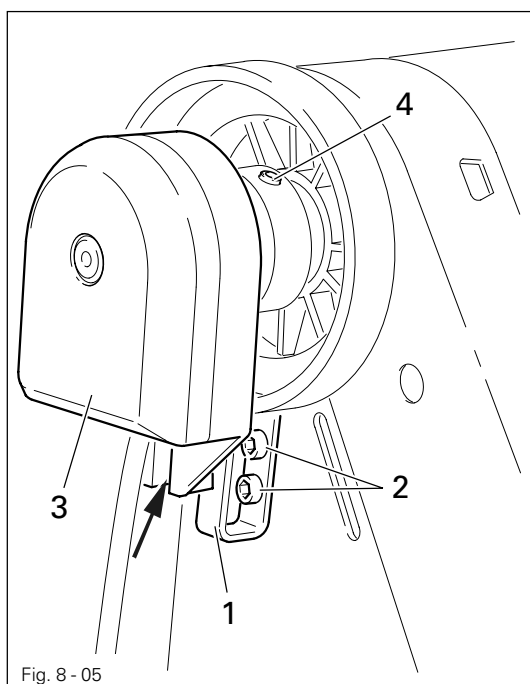
## Mounting and commissioning the machine

### 8.01.04 Fitting the lower belt guard



- Position belt guard 1 so that motor pulley and v-belt can run freely.

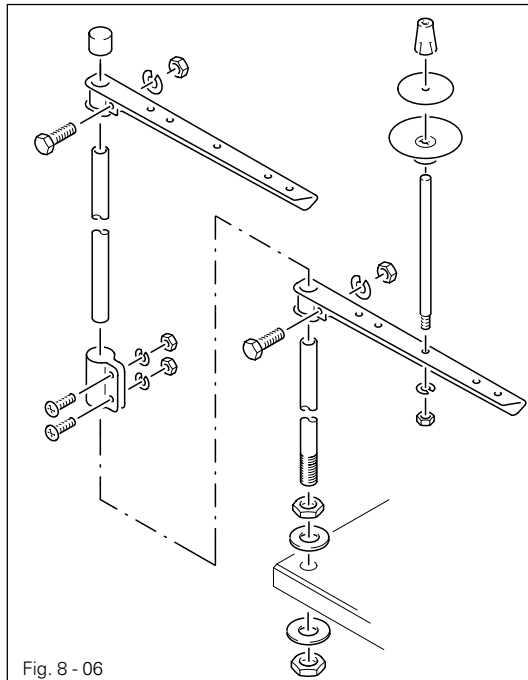
### 8.01.05 Fitting the synchronizer



- Screw on stop 1 with screws 2.
- Place synchronizer 3 on the shaft so that stop 1 is in the slot of synchronizer 3, see arrow.
- Tighten screws 4 just a little.
- Insert the plug for the synchronizer in the socket on the control box.
- Adjust synchronizer 3 (see **Chapter 13.05.01, Adjusting the synchronizer**).

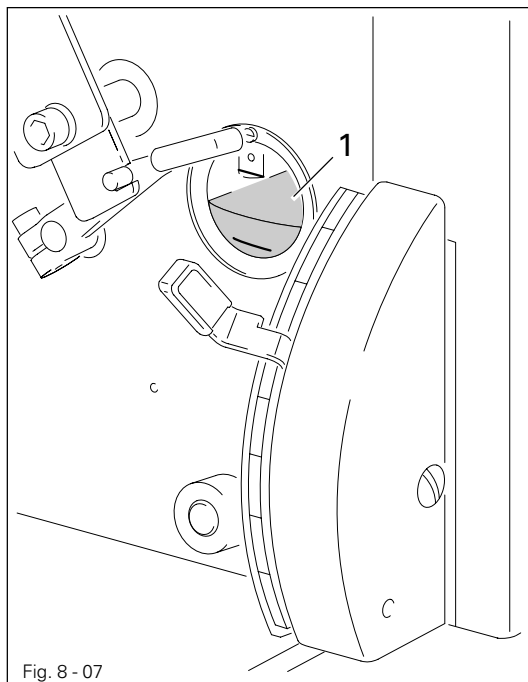


## 8.01.06 Assembling and fitting the reel stand



- Assemble the reel stand as shown in Fig. 8-06.
- Fit the reel stand in the holes in the table top and secure it with the nuts provided.

## 8.02 Commissioning



Before setting up, remove the protective foil from oil glass 1!

- Clean the machine thoroughly and afterwards check the oil level (see **Chapter 12, Care and Maintenance**).
- Check the machine for any damage, especially the electrical leads.
- Have a qualified person check whether the motor can be driven with the existing power voltage and that it is correctly connected in the junction box.



If there are any differences, the machine must definitely not be operated!



The machine must only be connected to a suitably earthed socket!

- When the machine is running, the balance wheel must turn towards the operator; if it does not, have a qualified person change the motor connection.
- Machines with pneumatic equipment have to be connected to the compressed air supply. The pressure gauge must show a pressure of **6 bar**. If necessary have this reading adjusted (see **Chapter 12.04, Checking/adjusting the air pressure**).

### 8.03 Switching the machine on/off

- Switch the machine on or off, see Chapter 7.01 Main switch.
- Carry out a test run.

9 Preparation

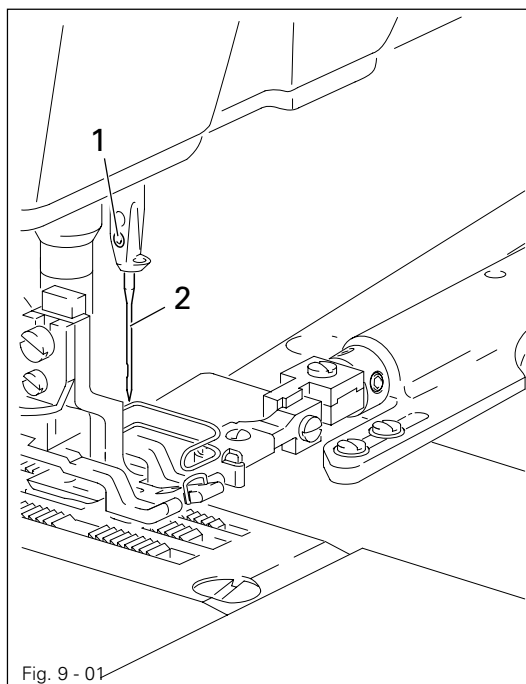


All regulations and instructions in this Instruction Manual are to be observed!  
Special attention is to be paid to the safety regulations!



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!

9.01 Inserting the needle

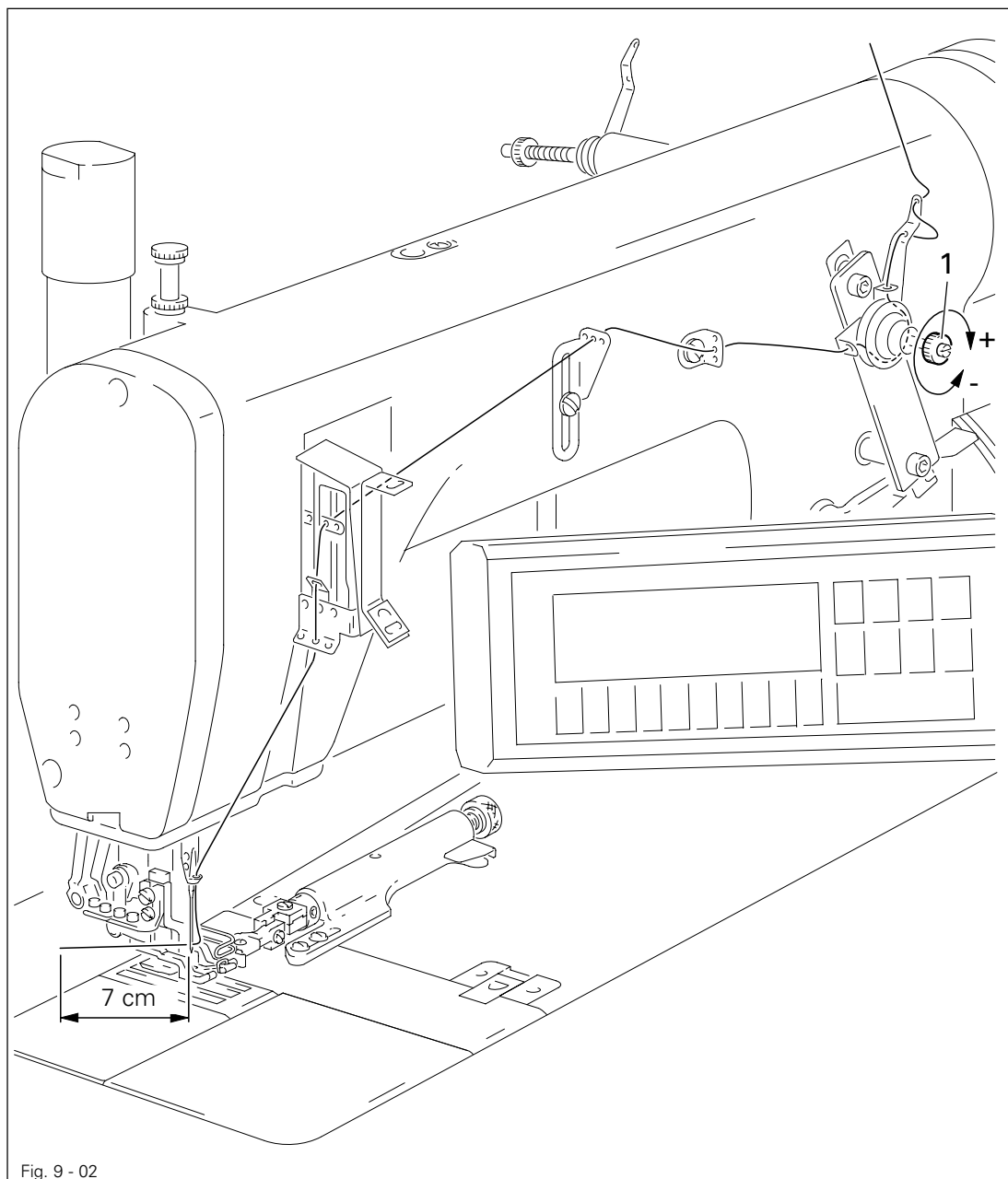


Switch off the machine!  
Danger of injury by unintentional starting of the machine!

- Set the needle bar at its highest point.
- Loosen screw 1.
- Push needle 2 fully into the needle bar (the long needle groove must face to the front).
- Tighten screw 1.



Only use needles from system 4463-35.

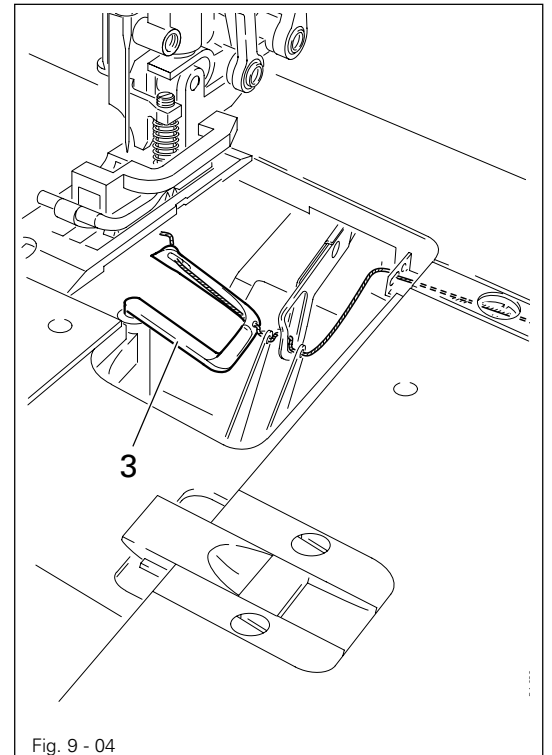
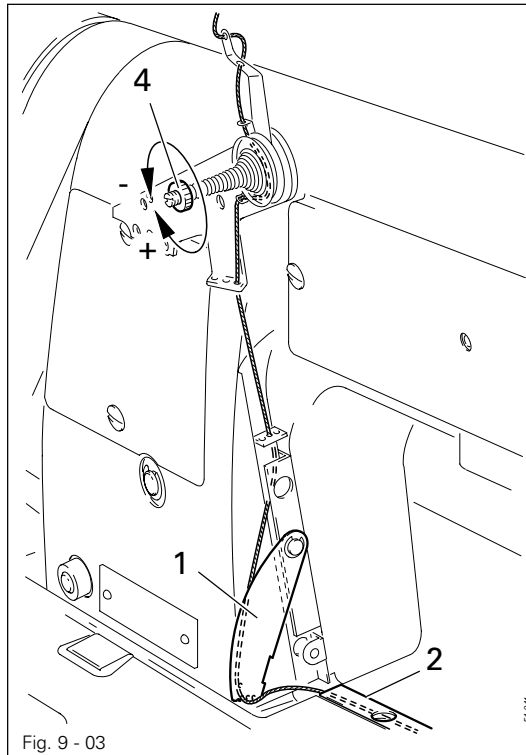


Switch off the machine!

Danger of injury by unintentional starting of the machine!

- Thread the needle thread as shown in **Fig. 9-02**.
- Regulate the needle thread by turning knurled screw **1**.

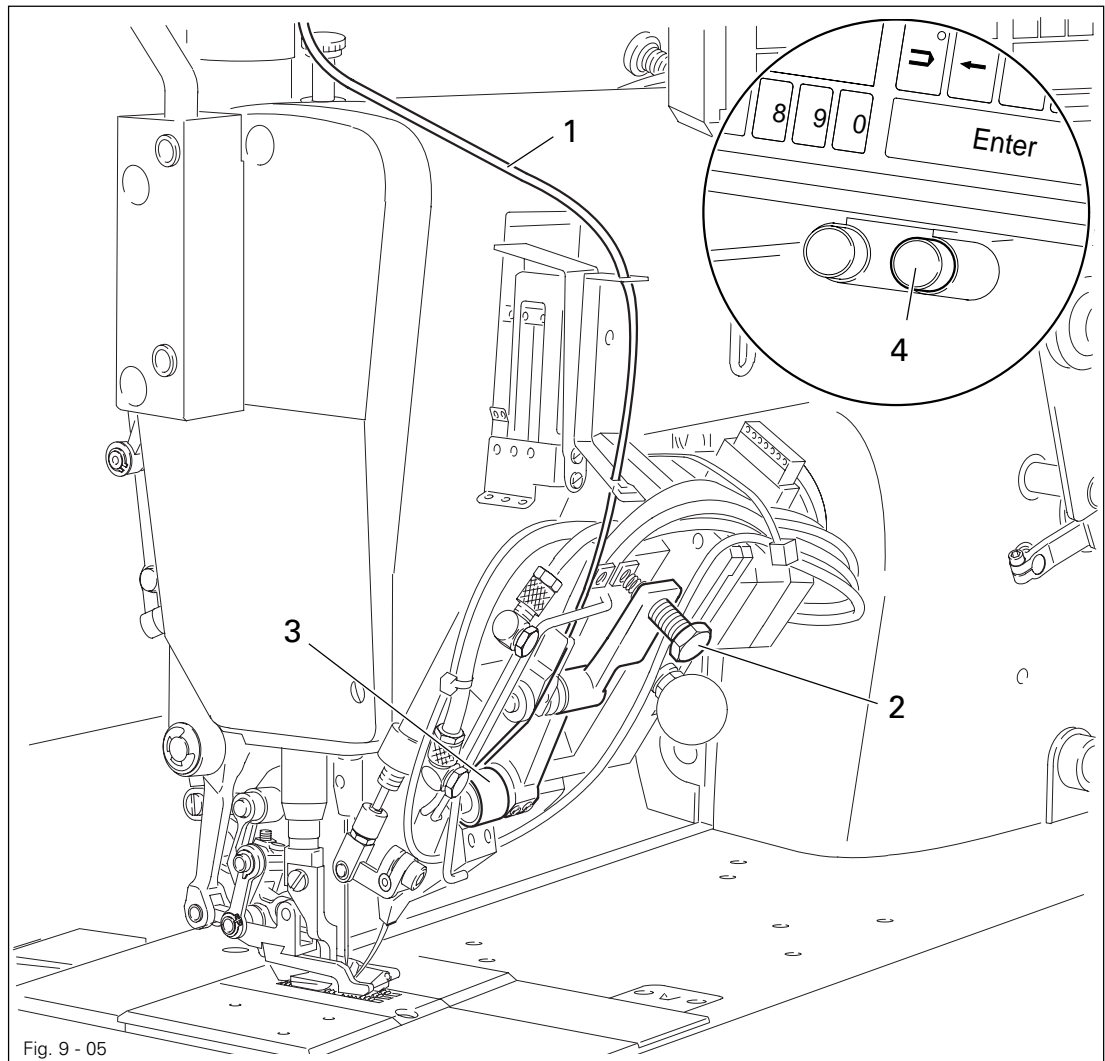
## 9.03 Threading the looper thread and regulating its tension



Switch off the machine!

Danger of injury by unintentional starting of the machine!

- Open the looper cover and swing out thread guide plate 1.
- Thread the looper thread as shown in Figs. 9-03 and 9-04 and pull it under guide plate 2.
- Thread looper 3 using tweezers.
- Regulate the looper thread by turning knurled screw 4.

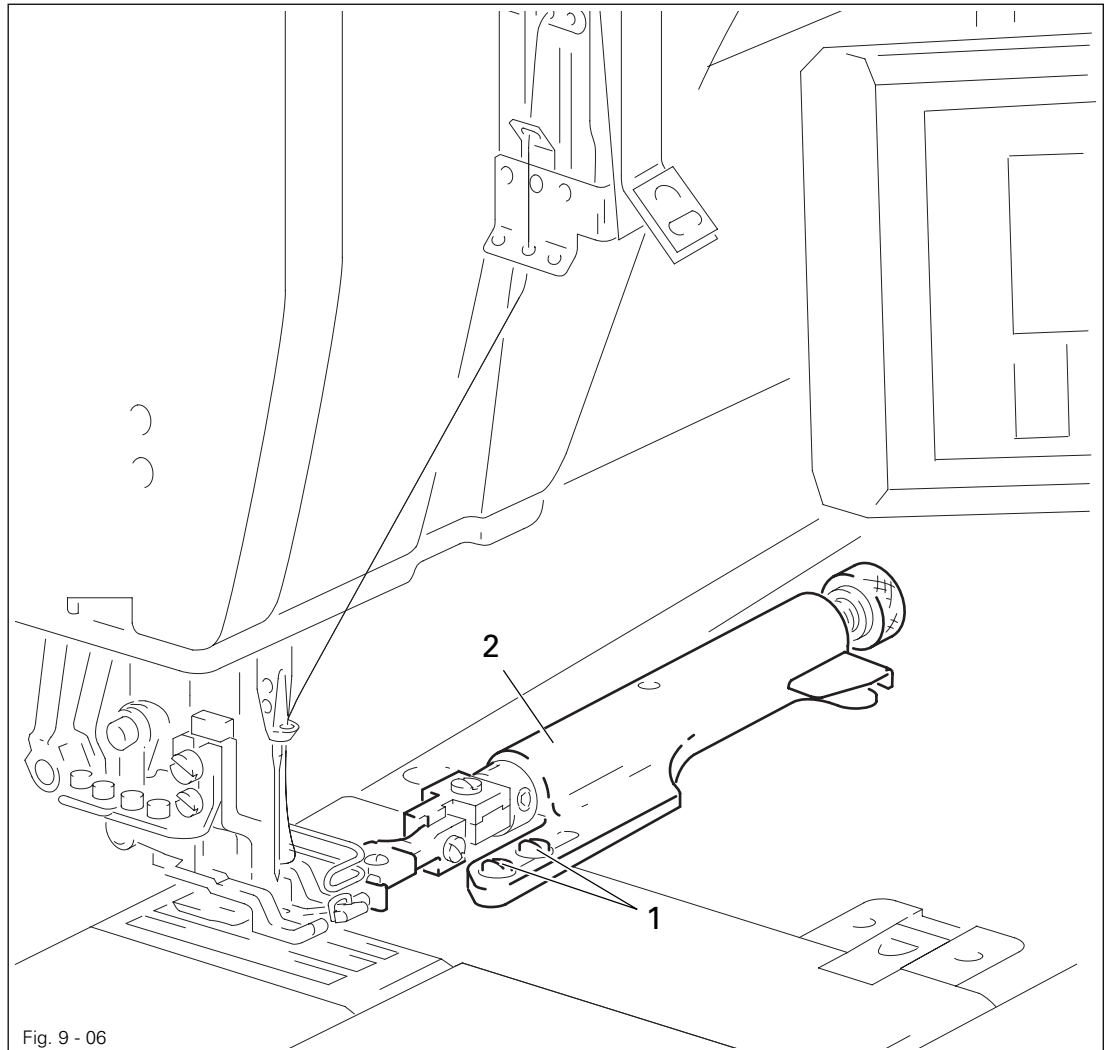


Switch off the machine!

Danger of injury if the machine is started accidentally!

- Thread the bridle tape 1 as shown in the above illustration.
- Operate lever 2 and guide the bridle tape 1 between the feed rollers 3.
- Switch on the machine and press button 4.

## 9.05 Setting the seam depth



Switch off the machine!

Danger of injury if the machine is started accidentally!

- Switch on the edge guide, see **Chapter 7.04 Edge guide**.
- Loosen screws **1**.
- Adjust edge guide **2** according to the seam depth required and tighten screws **1**.

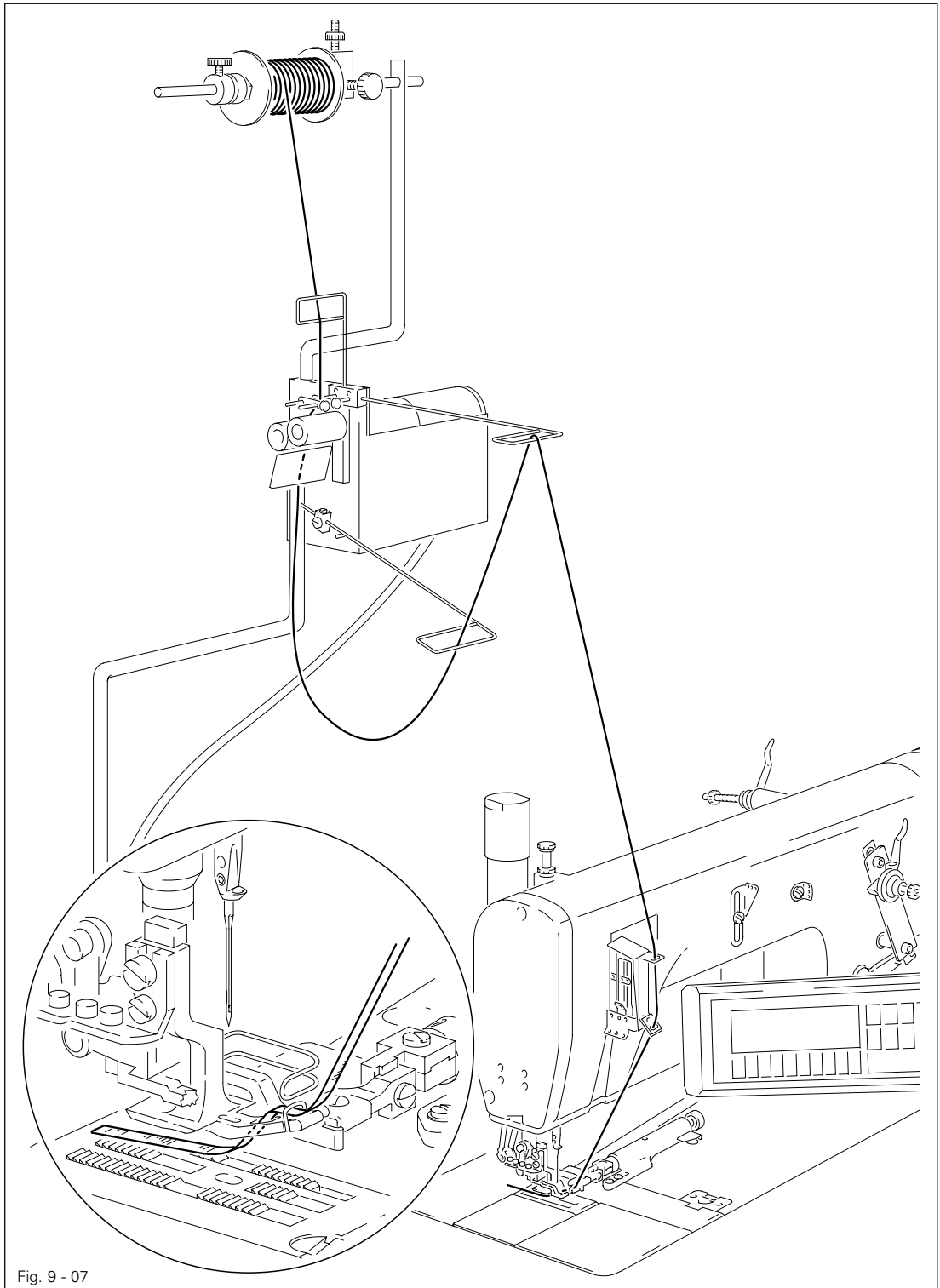


Fig. 9 - 07



Switch off the machine!

Danger of injury if the machine is started accidentally!

- Thread the fusing tape as shown in Fig. 9-07.



### 9.07 Inputting fullness

- Turn the machine on.



- Select **SEWING** mode.



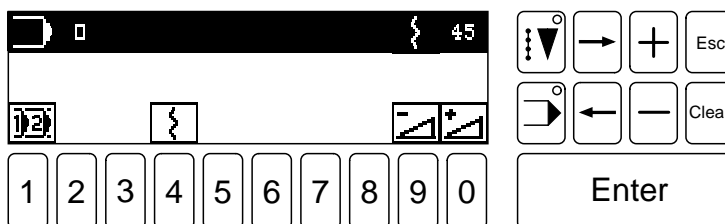
- Select the function **select program** (number key 1).



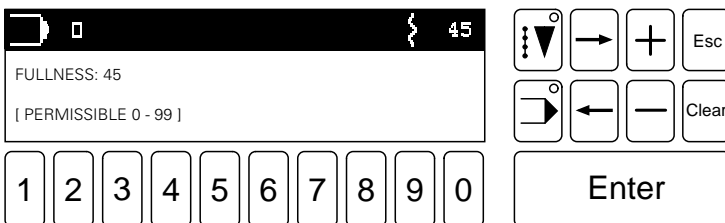
- Enter program number **0**.

Enter

- Confirm with the **enter** key.



- Select the function **fullness** (number key 4).



- Input the desired value using the **number keys**.



The current value can also be increased or decreased by using the **plus/minus keys**.



You can exit the input menu any time using the **Esc key**. The values entered will not be taken over; the previous values remain stored.

Enter

- The values you have entered or changed are taken over by pressing the **Enter key**.

## 9.08 Selecting a language

- Turn the machine on.



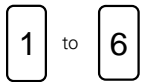
- Select INPUT mode



- Select the function input menu with number key 0.



- Select the function LANGUAGES with number key 1.



- Select the desired language with the number keys:

1 = (D)

2 = (GB)

3 = (F)

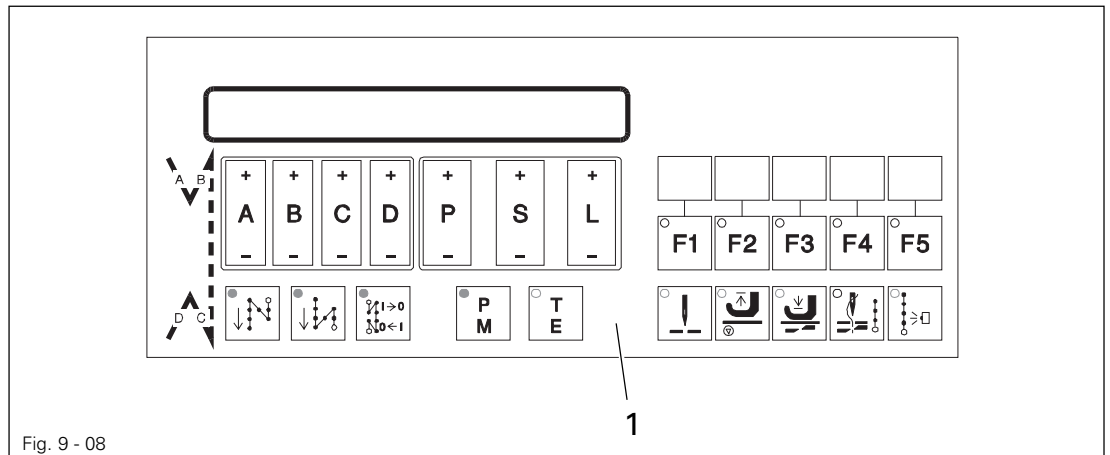
4 = (I)

5 = (E)

6 = (P)

- The language selected is assumed immediately once the corresponding number has been entered.

9.09 Entering the seam parameters

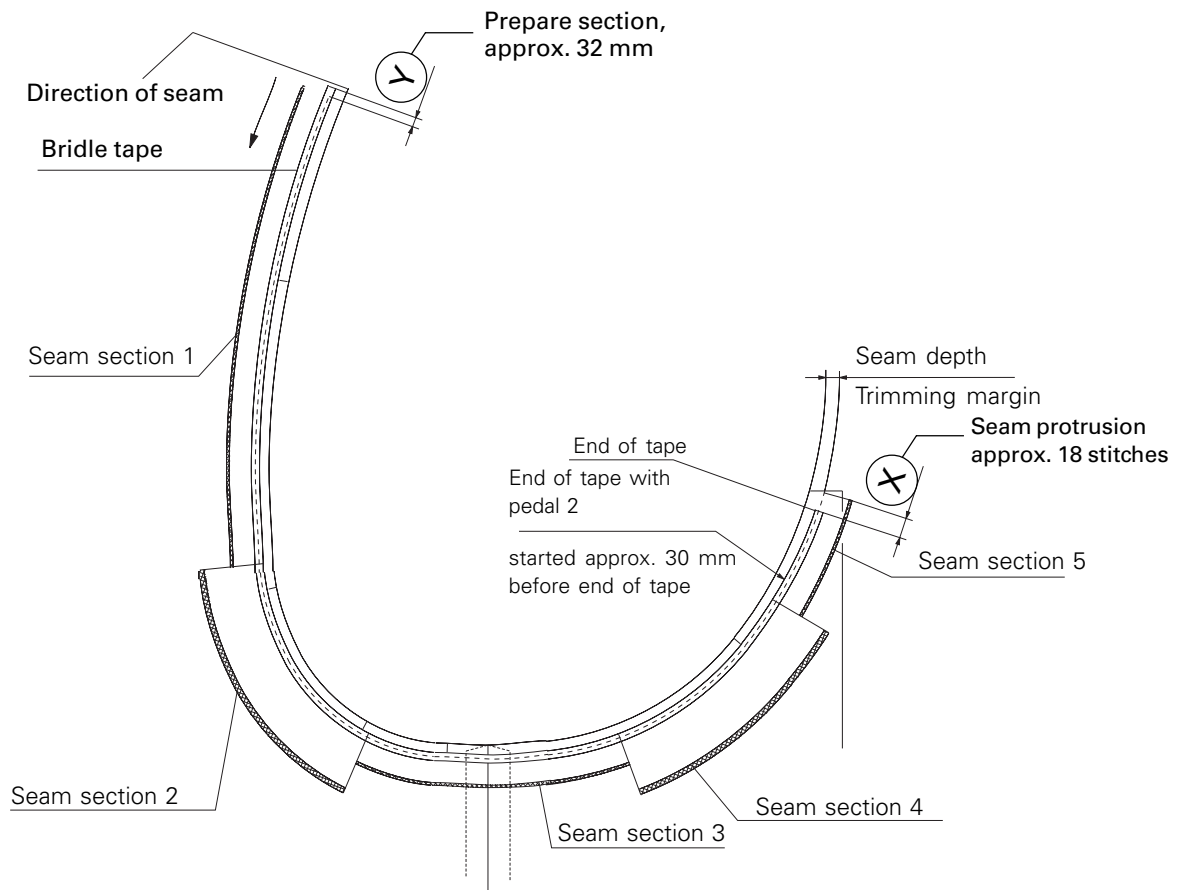


Section "X" (compensating stitches photoelectric barrier)

- Connect Quick control panel 1 and switch on the machine.  
(The control panel is not included with the machine.)
- Set the required value by pressing key "C".

Section "Y" (Preparing the tape section)

- Connect the graphics CONTROL panel to the tape-feeding unit, see Chapter 11.08 Summary of the functions of the tape-feeding unit.
- Enter the required value on the graphics control panel, see Chapter 11.08.01 Explanation of the functions of the tape-feeding unit.

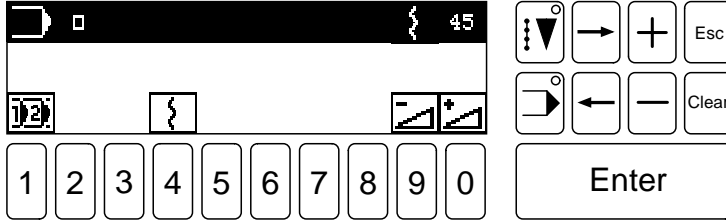


## 10 Sewing

### 10.01 Manual sewing (Program number 0)



- Select operating mode **SEWING**.



If the display shown in **Fig. 10-01** does not appear:



- Select the **Program selection** function (number key 1).



- Enter program number 0.

Enter

- Confirm input with **Enter**.

- After these inputs, sewing can begin.

Explanation of the display symbols:



#### Program selection

This function opens a direct menu for selecting the desired seam program.



#### Fullness

This function opens a direct menu for entering the desired fullness (see **Chapter 9.07 Entering the fullness**).



#### Minus correction value

When this function is activated, the correction value is subtracted from the current amount of fullness.



#### Plus correction value

When this function is activated, the correction value is added to the current amount of fullness.



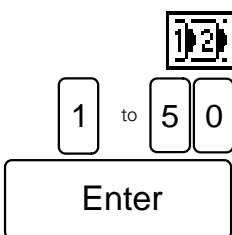
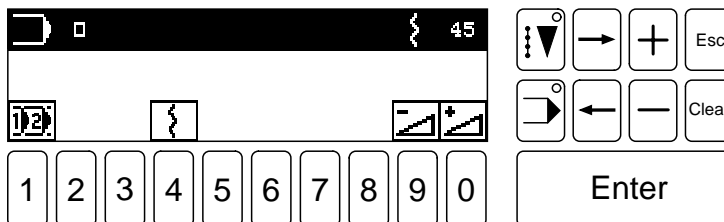
The **Plus/Minus correction value** functions are used to compensate varying feed properties after an alteration of the parameters.  
The amount of the correction value can be altered in the input menu.

## 10.02 Programmed sewing

Previously programmed seams can be selected with the program numbers 1 – 50.



- Select operating mode **SEWING**.



- Select the **Program selection** function.
- Enter the desired program number from 1 – 50.
- Confirm input with **Enter**.



Explanation of the symbols:



#### Program selection

This function opens a direct menu for selecting the desired seam program.



#### Size selection

This function opens a direct menu for selecting the desired size (see **Chapter 11.10 Selecting the size**).



#### Program interruption

This function interrupts the seam program cycle (see **Chapter 10.03 Program interruption**).



#### Automatic seam change

When this function is activated, at the end of the seam a switch is made to the right or left seam.



#### Left seam

When this function is activated, a left seam is sewn.



#### Right seam

When this function is activated, a right seam is sewn.



#### Minus correction value

When this function is activated, a certain value is subtracted from the current amount of fullness.



## Plus correction value

When this function is activated, a certain value is added to the current amount of fullness.



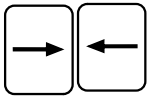
The **Plus/Minus correction value** functions are used to compensate varying feed properties after an alteration of the parameters. The amount of the correction value can be altered in the input menu.

## 10.03 Program interruption

If a seam program cycle is interrupted (e.g. due to a broken thread), the **Program interruption** function must be selected.



- After the key is pressed for the first time, a switch is made to **manual SEWING**.
- It is possible to continue sewing manually.
- With the **arrow keys** the seam section can be selected, where the seam program is to be continued.
- After the key is pressed for the second time, the selected seam section is entered, **programmed SEWING** continues.

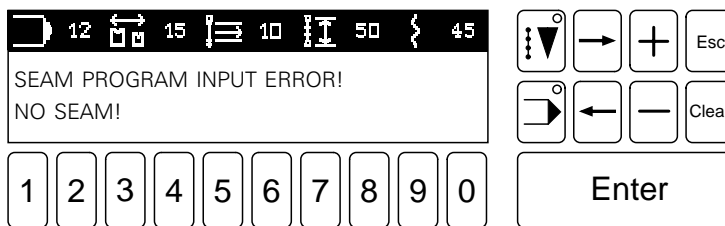


After thread trimming with the use of the pedal (pedal position 4 in **Chapter 7.02 Pedal**) the interrupted seam program is started from the beginning.



## 10.04 Error signals

When an error signal occurs, the text and symbol bar in the display are overwritten. An error signal is caused by incorrect settings, faulty elements or seam programs or due to overload conditions.



- Before the operation of the machine can continue, the error must be eliminated.

For error elimination:

- By pressing **Enter key**, the program springs back to an incorrect input.
- Enter the correct input.

Enter

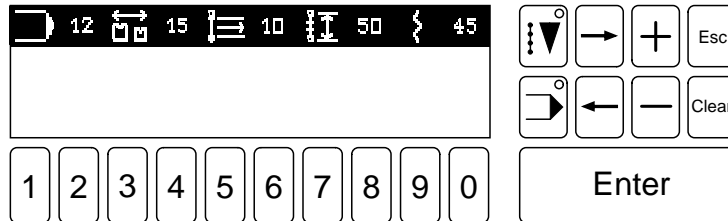


For error elimination which can only be carried out by authorised personnel, a separate error elimination list can be requested.

11 Input

11.01 Symbols in the status bar

Information on the current seam section is displayed in the upper area of the display. For this purpose symbols are displayed together with the corresponding values.



**Program number**

The number of the selected seam program appears to the right of this symbol.



**Garment size**

The current size is displayed to the right of this symbol.



**Number of seam sections**

The total number of seam sections contained in the current seam program is displayed to the right of this symbol.



**Number of stitches**

The number of stitches of the current seam section is displayed to the right of this symbol.



**Fullness**

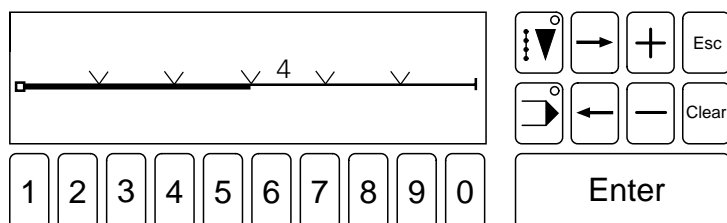
The fullness value for the current seam section is displayed to the right of this symbol.

## 11.02 Symbols in the text and graphic fields

Depending on the operating mode, a stylised seam program or stylised seam section is shown in the centre of the display.

### 11.02.01 Text and graphics field in the operating mode SEWING

In **programmed SEWING** a stylised seam program is presented.



In the above example, a seam program with 6 seam sections is presented. The first three seam sections have already been sewn. The fourth seam section is in process (current seam section).

— Seam

∨ Notch

□— Beginning of seam

∨—∨ Seam section

∨<sup>4</sup>∨ Current seam section (with seam section number)

—→ End of seam

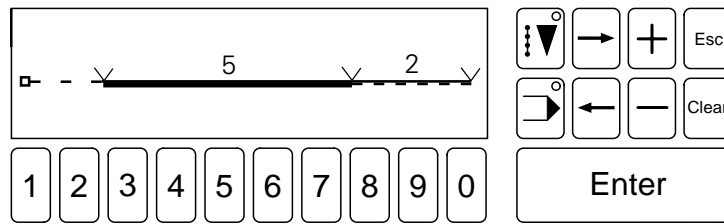


The display presentation is not to scale.



11.02.02 Text and graphics field in the operating mode input

In the operating mode **INPUT**, a stylised seam section is shown.



▣ - - Beginning of seam

∨ 5 ∨ Current seam section (with seam section number)

∨ 2 ∨ Graduation section (with graduation value)



The display presentation is not to scale.

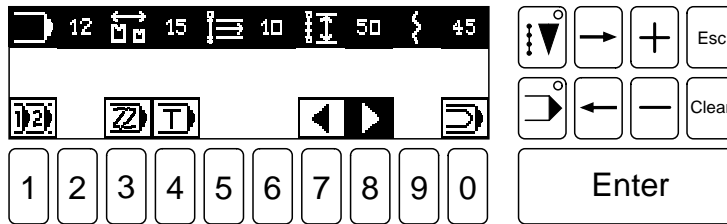
## 11.03 Symbols in the symbol bar

In this operation concept, the selection of the functions is made exclusively with the use of the **number keys**.

In the symbol bar of the display the available functions are depicted as a symbol.

By operating the **number key** under the respective symbol, the function allocated to the symbol is selected.

Initial state operating mode **INPUT**



Explanation of the symbols in the display:



### Program selection

This function opens a direct menu for the selection of the desired seam program.



### Programming

This function opens a direct menu for entering or altering seam programs. Here the seam program is entered with the use of the control panel.



### Teach In

This function opens a direct menu for programming seams, whereby the system "learns" the desired seam.



### Left seam

When this function is activated, the left seam is processed.



### Right seam

When this function is activated, the right seam is processed.



### Input menu

This function opens a menu with special functions, setting the language, setting parameters and service functions.

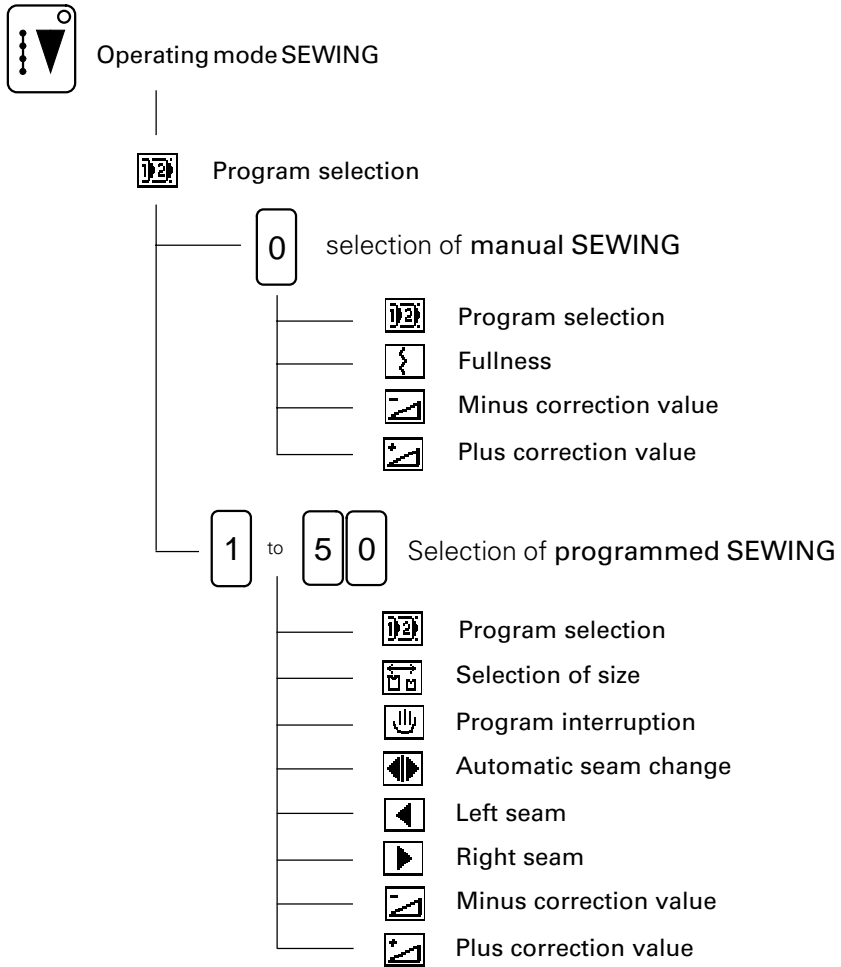
11.04 Summary of the functions in the operating mode SEWING

The functions shown on the display, after the machine is switched on, depend on the program number shown in the status bar:



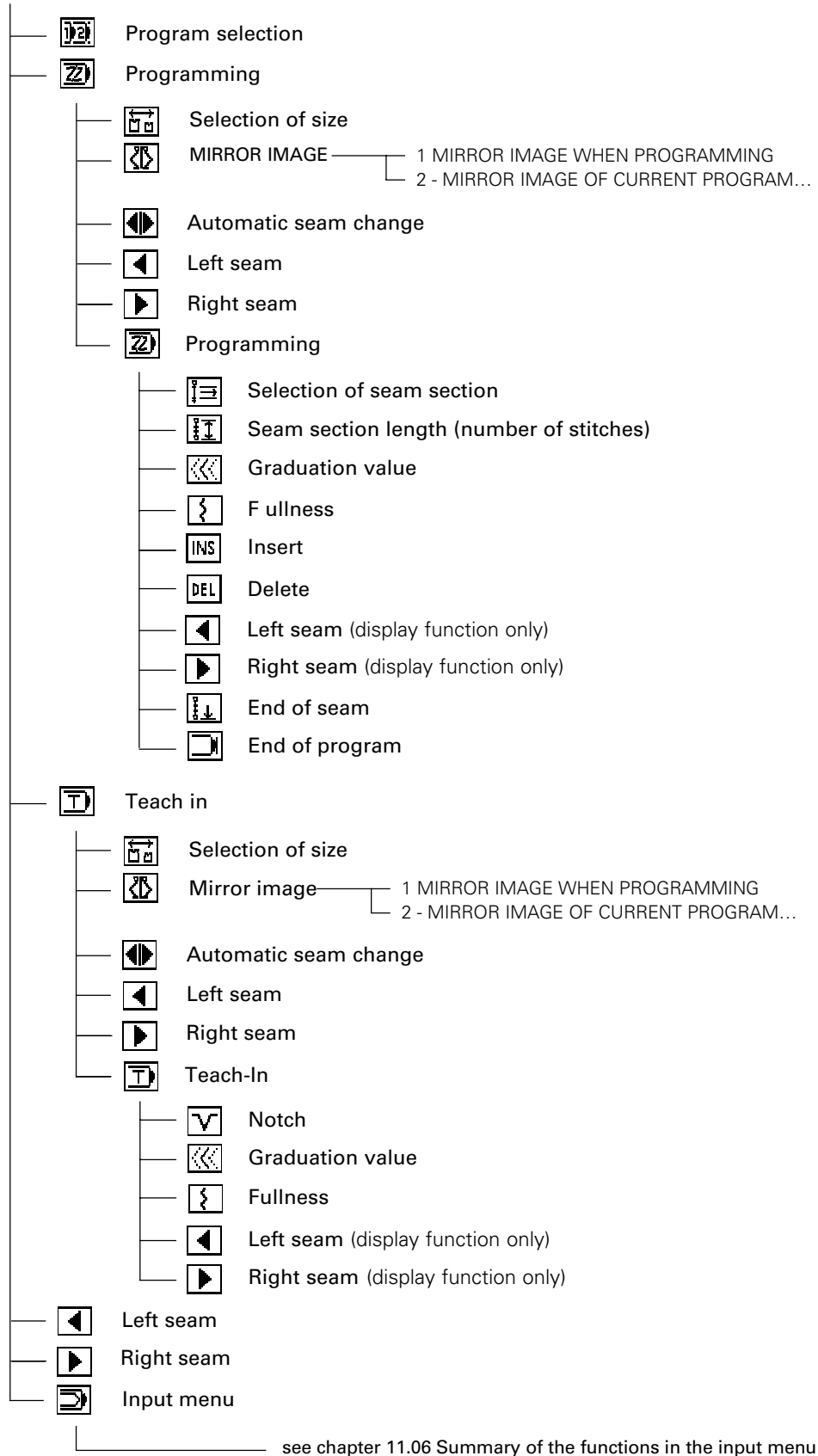
Program number 0 : manual SEWING  
 Program number 1 - 50 : programmed SEWING

By selecting the program selection function, either **manual** or **programmed SEWING** can be chosen.

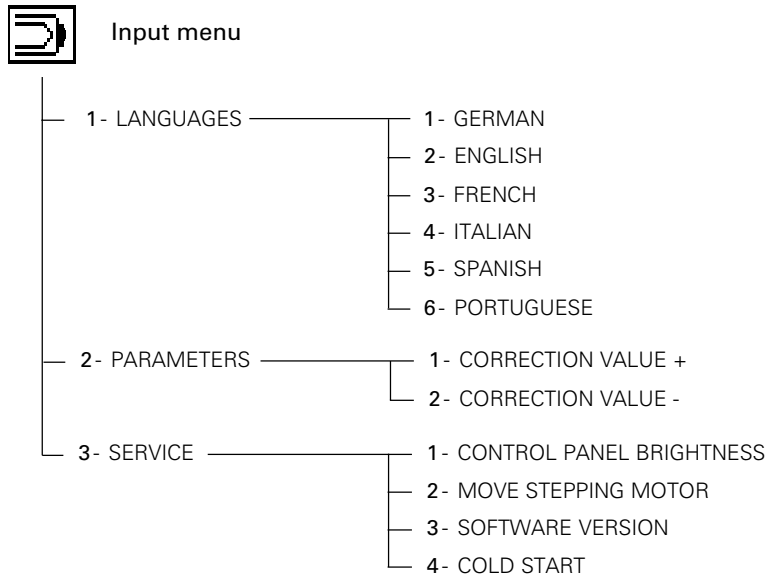




### INPUT mode



11.06 Summary of the functions in the input menu

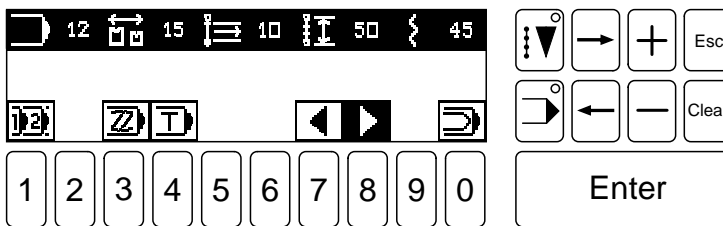


11.07 Selection of the functions from the input menu

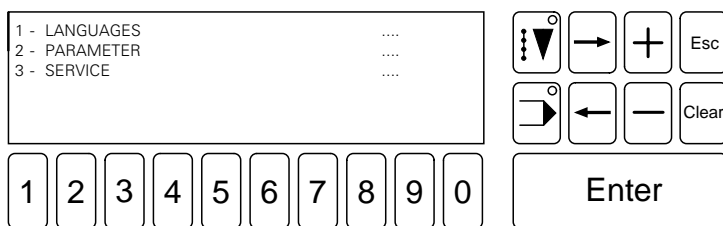
For example, the contrast setting of the display can be adjusted as follows:



- Select operating mode **INPUT**.

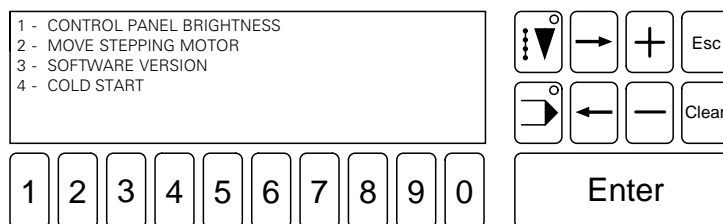


- Select the **Input menu** function (number key 0).







3

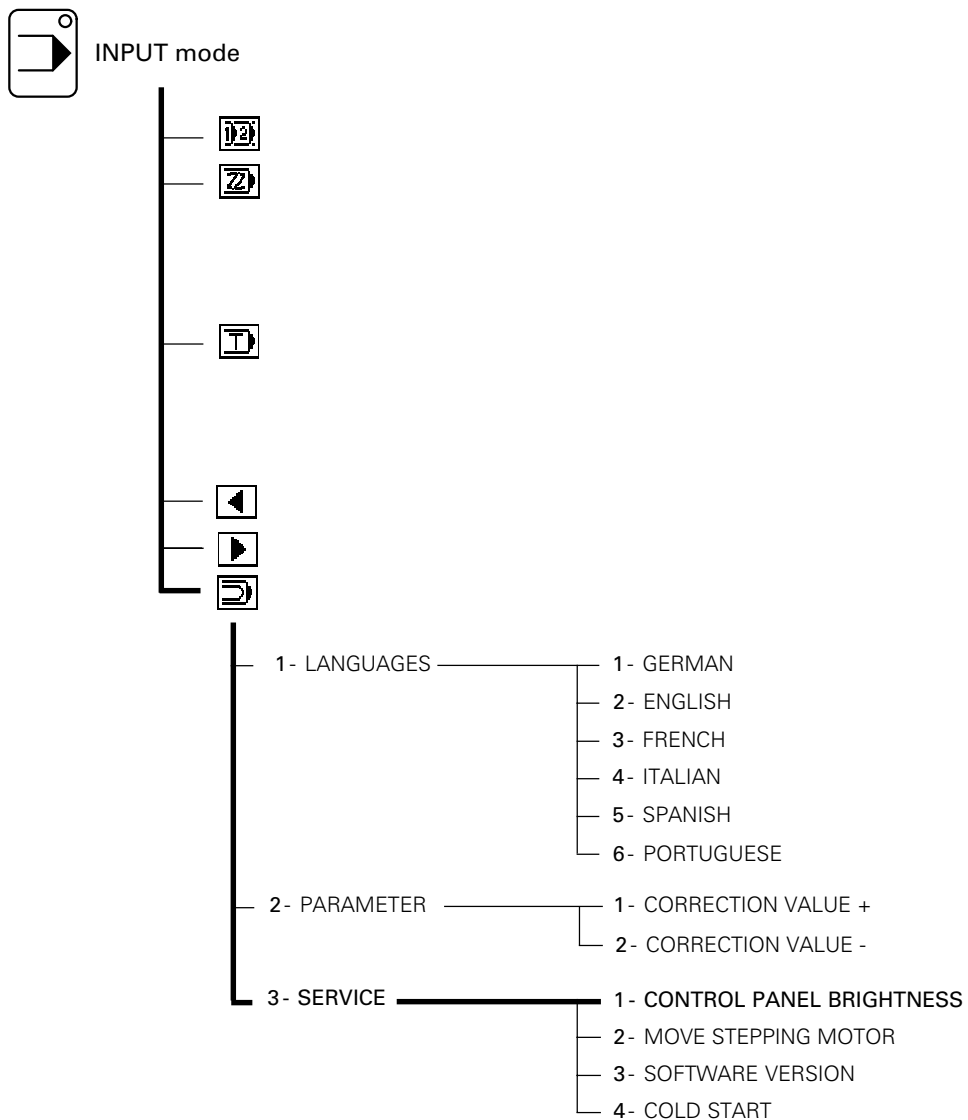
- Select the **SERVICE** function. The following display appears:



# Input

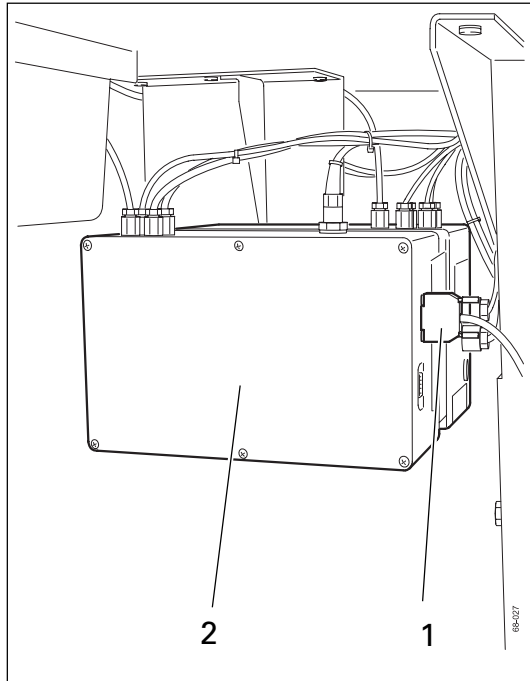
-  ● Select the CONTROL PANEL BRIGHTNESS function.
-   ● The desired brightness can be set with the **Plus/Minus** keys.
-  ● Confirm by pressing **Enter**.

Summary of the input steps:



11.08 Summary of the functions of the tape feeding device (only on the 3811-10/071)

The control panel of the machine can be used to install the tape feeding device.



To select the functions of the tape feeding device on the control panel, the control panel plug 1 must be connected to the appropriate socket on the control box 2 of the tape feeding device.

Summary of the steps:



INPUT mode

- 1- LOAD TAPE ROUTE
- 2- PREPARE TAPE ROUTE
- 3- TAPE SPEEDS
  - 1- LOAD TAPE SPEED
  - 2- PREPARE TAPE SPEED
  - 3- THREAD TAPE SPEED
  - 4- TAPE SPEED IN KNIFE
- 4- LANGUAGE
  - 1- GERMAN
  - 2- ENGLISH
  - 3- FRENCH
  - 4- SPANISH
- 5- SERVICE
  - 1- SOFTWARE-VERSION
  - 2- MOVE STEPPING MOTOR
  - 3- CONTRAST SETTING OF DISPLAY
  - 4- SWITCH OUTPUTS
  - 5- DISPLAY INPUTS/OUTPUTS
  - 6- COLD START

## 11.08.01 Explanation of the functions of the tape feeding device



After the operating mode **INPUT** has been selected, following functions are available:

1 - LOAD TAPE ROUTE :	0 mm	
2 - PREPARE TAPE ROUTE :	29 mm	
3 - TAPE SPEEDS	.....	
4 - LANGUAGE	.....	
5 - SERVICE	.....	

1 2 3 4 5 6 7 8 9 0 Enter

- 1 **LOAD TAPE ROUTE**  
After selecting this function, the route of the bridle tape after sewing starts is established.
- 2 **PREPARE THE TAPE ROUTE**  
After selecting this function, the lead length of the bridle tape after trimming can be defined.
- 3 **TAPE SPEEDS**  
When this function is selected, a menu for entering the different tape speeds is opened. All speeds can be changed in steps from 0 to 9 or 0.9.

1 - LOAD TAPE SPEED :	9	
2 - PREPARE TAPE SPEED :	5	
3 - THREAD TAPE SPEED :	0	
4 - TAPE SPEED IN KNIFE :	0.5	

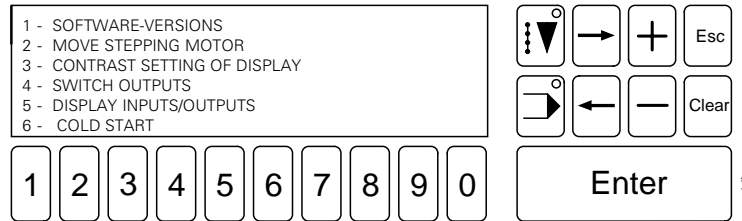
1 2 3 4 5 6 7 8 9 0 Enter

- 1 **LOAD TAPE SPEED**  
After selecting this function, the corresponding tape speed can be changed.
- 2 **PREPARE TAPE SPEED**  
After selecting this function, the corresponding tape speed can be changed.
- 3 **THREAD TAPE SPEED**  
After selecting this function, the corresponding tape speed can be changed.
- 4 **TAPE SPEED IN KNIFE**  
After selecting this function, the corresponding tape speed can be changed while the knife is being moved back.



**4** LANGUAGE  
 This function opens a menu for selecting the language displayed  
 (see **Chapter 9.08 Selecting the language**)

**5** SERVICE  
 This function opens a menu for selecting service functions.



**1** SOFTWARE VERSIONS  
 After this function is selected, the current software versions of the controller and the control panel are displayed.

**2** MOVE STEPPING MOTOR  
 The stepping motor can be moved with the use of this function.

- 1** Clockwise rotation direction
- 2** Anti-clockwise rotation direction

**3** CONTRAST SETTING OF DISPLAY



The display must never be adjusted to the extent that it is impossible to read the display.

This function can be used to change the contrast setting of the display

**4** SWITCH OUTPUTS  
 The outputs can be set or reset with this function, see **Chapter 13.11 Table of inputs and outputs...**

- 1** Output on
- 2** Output off

**5** DISPLAY INPUTS/OUTPUTS  
 After this function has been selected, the status of the inputs and outputs is displayed: 1 = input activated/output switched  
 0 = input not activated/output not switched

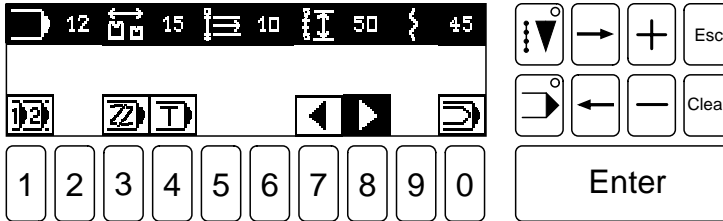
**6** COLD START  
 This function is used to reset all inputs.

## 11.09 Creating seam programs

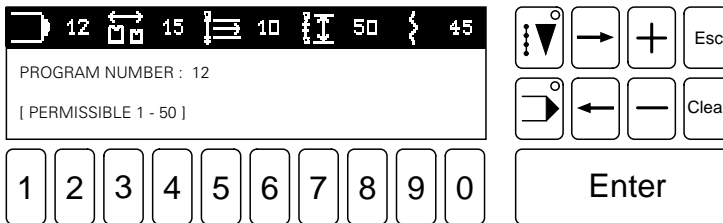
### 11.09.01 Input



- Select operating mode INPUT.



- Select the Program selection function.



1 to 50

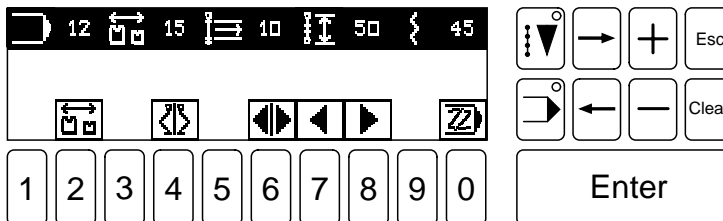
- Enter a program number from 1 and 50.

Enter

- Confirm input with Enter.



- Select Programming function.



Explanation of the display symbols:



#### Selection of size

This function opens a direct menu for selecting the basic size.  
(See chapter 11.10 Selecting the size.)



#### Mirror image

This function opens a menu for mirroring seams.  
(see Chapter 11.11 Mirroring seams)



#### Automatic seam change

When this function is activated, after the right seam is finished, the system switches automatically to the left seam and vice versa.



**Left seam**

When this function is activated, the left seam is processed.



**Right seam**

When this function is activated, the right seam is processed.



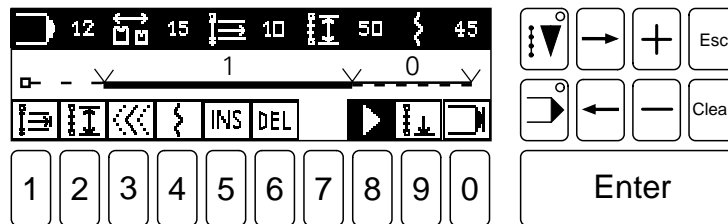
**Programming**

This function opens a direct menu for programming seams.  
The program is entered on the control panel.

Entering or altering seam programs:



- Select **Programming** function.



Explanation of the display symbols:



**Selection of seam section**

This function opens a direct menu for selecting a desired seam section within the seam program.



The desired seam section can also be selected by operating the **arrow keys**.



**Length of seam section (number of stitches)**

This function opens a direct menu for entering the number of stitches in the current seam section.



**Graduation value**

This function opens a direct menu for entering the graduation value in the current seam section (graduation value = seam section extension in stitches).



**Fullness**

This function opens a direct menu for entering the fullness in the current seam section.



**Insert**

This function inserts a seam section in front of or behind the current seam section in the current seam program. The following seam sections are moved back one space.



**Delete**

This function deletes the current seam section.



**End of seam**

This function ends the current seam and changes to the input of the second seam.



The **End of seam** function is only displayed, if the function **Automatic seam change** was selected previously when entering the basic data and the first seam is still being entered.



## End of program

This function is used to close the seam program. The program data entered is checked.

- With the above-mentioned functions only individual seam programs can be created or modified.
- The system does not accept incorrect combinations.



In Chapter 11.12.01 Example of how to enter seam programs programming is described step by step with the use of an example.

## 11.09.02 Teach In

In this function the machine can "learn" a seam program during sewing.



- Select operating mode INPUT.



- Select the Program selection function.



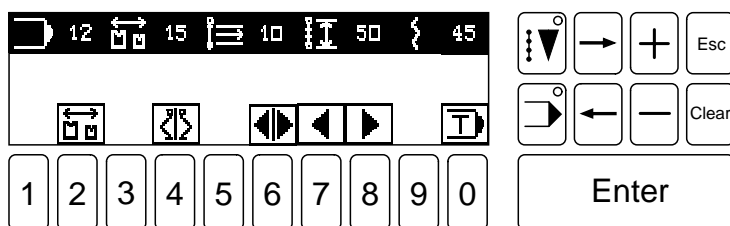
- Enter a program number from 1 – 50.



- Confirm with Enter.



- Select the Teach In function.



Explanation of the display symbols:



### Basic size

This functions opens a direct menu for the selection of the basic size.  
(see Chapter 11.10 Selecting the size)



### Mirror Image

This function opens a menu for mirroring seams (see Chapter 11.11 Mirroring seams)



**Automatic seam change**

When this function is activated, after the right seam is finished, the system switches automatically to the left seam and vice versa.



**Left seam**

When this function is activated, the left seam is processed.



**Right seam**

When this function is activated, the right seam is processed.



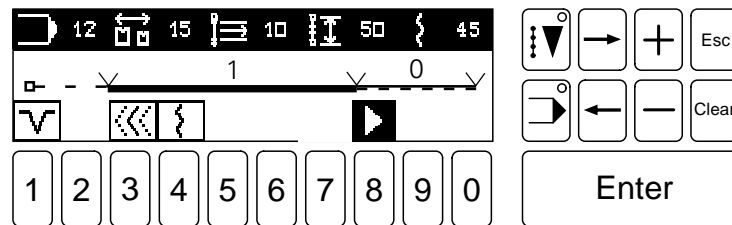
**Teach In**

This function opens a direct menu for programming seams, whereby the systems "learns" the desired seam

Entering seam programs with Teach In:



- Select the **Teach In** function:



Explanation of the display symbols:



**Notch**

This function closes the actual seam section and changes to the next.



**Graduation value**

This function opens a direct menu for entering the graduation value in the current seam section (graduation value = seam section extension in stitches).



**Fullness**

This function opens a direct menu for entering the fullness in the current seam section.



**Left seam**

When this function is activated, the left seam is processed.



**Right seam**

When this function is activated, the right seam is processed.



Only the symbol for the activated seam (left or right) is visible.

- Insert desired values.
- Operate the pedal.  
The seam is sewn with the inserted values.

## 11.10 Selecting the size



Depending on the operational mode, under the function **Selecting the size** the basic size or the garment size can be selected. Following sizes are available:

- Men's sizes (German)

Basic size: **50**

Sizes: 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 88, 90, 92, 94, 96, 98, 100, 102, 104, 106, 108, 110, 112, 116, 120, 124, 128, 132, 136, 140, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 23, 24, 25, 26, 27, 28, 29, 30

- Men's sizes (American)

Basic size: **40**

Sizes: 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

- Ladies' sizes (German)

Basic size: **38**

Sizes: 34, 36, 38, 40, 42, 44, 46, 48, 50, 52

- Ladies' sizes (Large American)

Basic size: **20**

Sizes: 18, 19, 20, 21, 22, 23, 24, 25, 26

- Ladies' sizes (American)

Basic size: **6**

Sizes: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20

### 11.10.01 Selecting the basic size in the operating mode INPUT



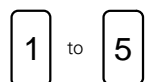
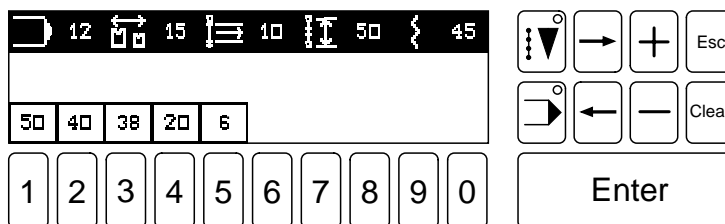
In the operating mode **INPUT** only basic sizes can be altered. The basic size determines the size system to be worked in, which is permanently allocated to the future program.



- In the operating mode **INPUT** select the **Programming** or **Teach In** function.



- Select the **size selection** function.



- Select the desired basic size.

11.10.02 Selecting the garment size in the operating mode SEWING



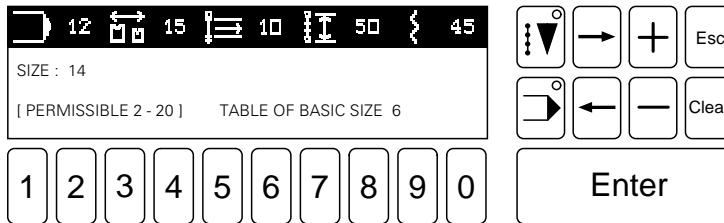
In **programmed SEWING** the garment sizes can be chosen from the respective size system. The size system is determined by the program selected, to which it was allocated during programming.



- In the operating mode **SEWING** select the **Program selection** function.
- Select a previously programmed seam program ( **number keys** ).



- Select the **Size selection** function.



- Enter the desired garment size with the **number keys**.



- Confirm with **Enter**.

11.11 Mirroring seams



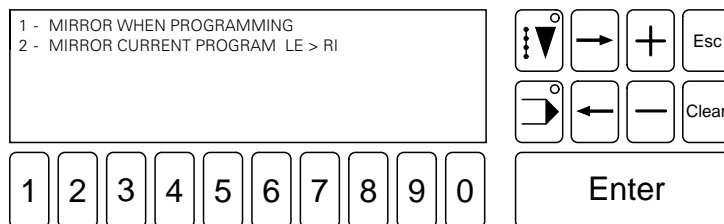
- Select operating mode **INPUT**.



- Select the **Programming** or **Teach In** function.



- Select the **Mirroring** function.



- With the **number keys** the desired type of mirroring can be chosen.



After the **MIRROR IMAGE WHEN PROGRAMMING** function has been entered, the first (e.g. right) seam is mirrored automatically.  
 With **MIRROR CURRENT PROGRAMM...** an existing right seam can be mirrored left, or a left seam right.

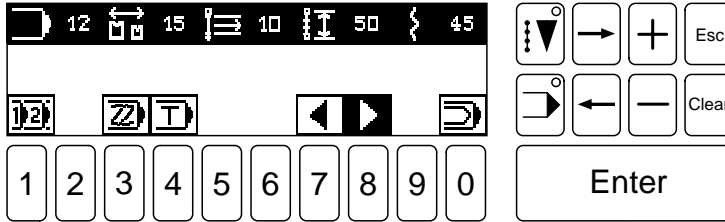
## 11.12 Input examples

### 11.12.01 Example of how to enter seam programs

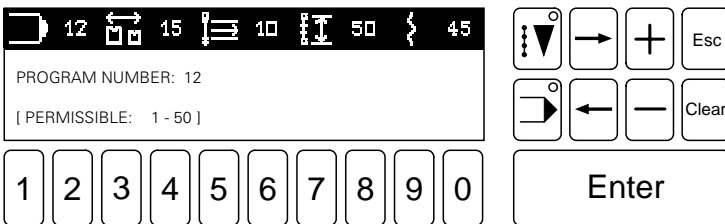
The seam to be programmed consists of **2 seam sections** and is stored under **program number 4** with the basic size allocation **50** (German men's size). To begin with the seam will only be sewn as a right seam.



- Select operating mode INPUT.



- Select the Program selection function (number key 1)



- Enter the program number.

Enter

- Confirm with Enter.

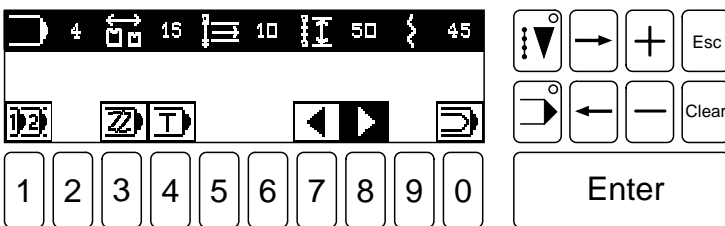
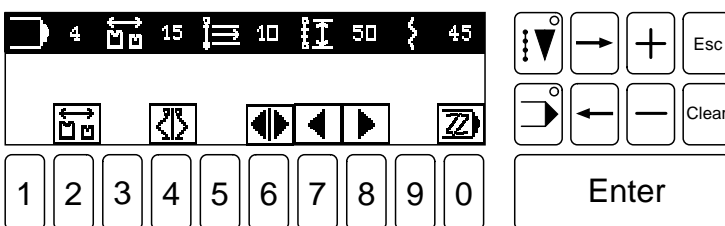


Fig. 11 - 20



- Select the Programming function (number key 3).



- Select the Size selection function (number key 2).



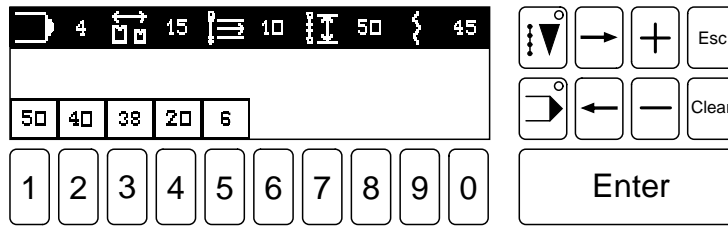
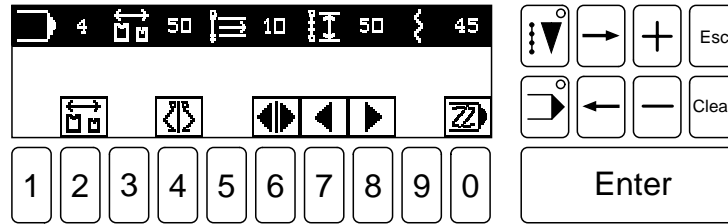
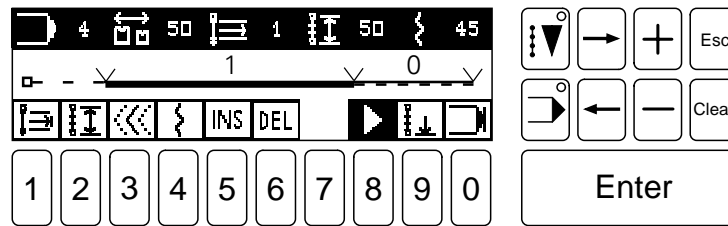


Fig. 11 - 22

- Select basic size 50 (number key 1).



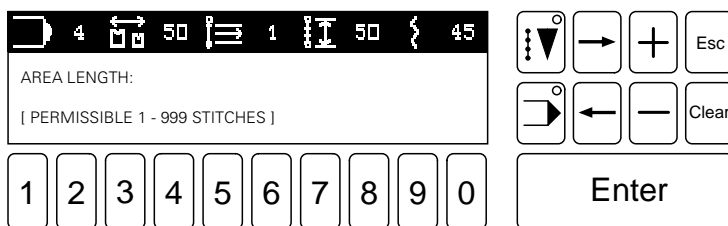
- Select the Programming function (number key 0).



Entering the first seam section:

In this seam section the **seam section length** should be 20 stitches. The seam will be sewn with a **graduation value** of 2, without fullness.

- Select the Seam section length function (number key 2).



- Enter the number of stitches.

- Confirm with Enter.



- Select the **Graduation value** function (number key 3).

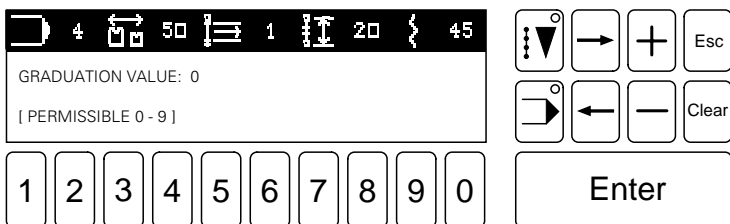


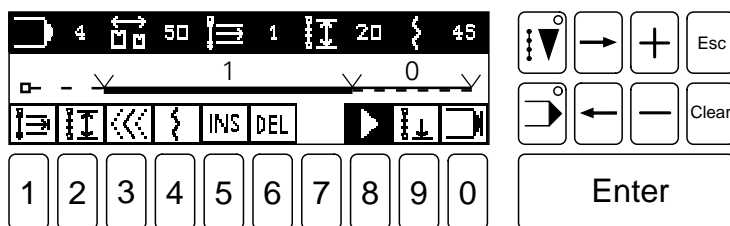
Fig. 11 - 27

2

- Enter the graduation value.

Enter

- Confirm with **Enter**.



- Select the **Fullness** function (number key 4).

0

- Enter the fullness value.

Enter

- Confirm with **Enter**.



- Press the **arrow key** to move to the input of the second seam section.

In the second seam section **10 stitches** will be sewn, the other values remain unaltered.



- Select the **Seam length** function (number key 2).

1 0

- Enter the number of stitches.

Enter

- Confirm with **Enter**.



- Save the seam with the **End of program** function and leave the programming mode.



- After selecting the operating mode **SEWING**, the seam program can be sewn.

### 11.12.02 Example of Teach In input

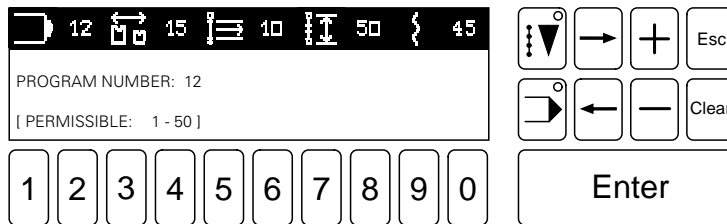
The seam to be programmed consists of **2 seam sections** and is stored under **program number 4** with the basic size allocation 6 (American ladies' size). The seam is to be mirrored immediately after the input.



- Select operating mode **INPUT**.



- Select the **Program selection** function (number key 1)



- Enter the program number.



- Confirm with **Enter**.



- Select the **Teach In** function (number key 4).





- Select the Size selection function (number key 2).



- Select basic size 6 (number key 5).



- Select the Mirroring function (number key 4).



- Select the MIRROR IMAGE WHEN PROGRAMMING function.



- Select the Teach In function (number key 0).

Entering the first seam section:

The seam will be sewn **without fullness** and with a **graduation** value of 3.



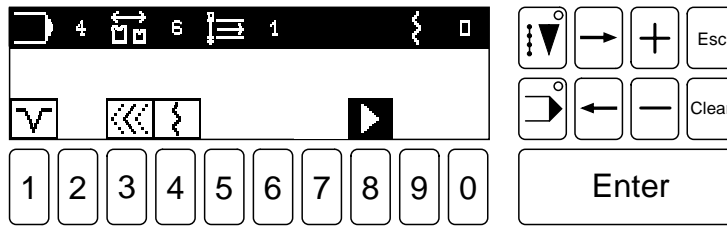
- Select the Fullness function (number key 4).



- Enter the fullness value.

Enter

- Confirm with **Enter**.



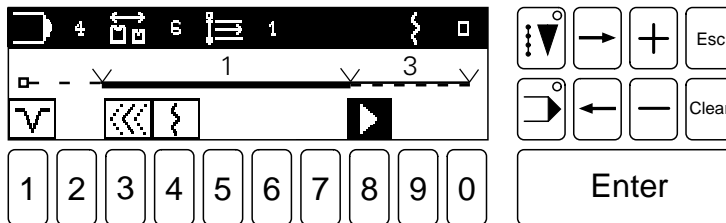
- Select the **Graduation value** function (number key 3).

3

- Enter the graduation value.

Enter

- Confirm with **Enter**.



- After operating the pedal, sew the first seam section.



- With the **Notch** function the first seam section is concluded and the system switches to the second seam section.

In the second seam section, a **fullness amount** of **3 mm** is to be applied, the **graduation value** is taken over from the first seam section **unaltered**.



- Select the **Fullness** function (number key 4).

3

- Enter the fullness value.

Enter

- Confirm with **Enter**.

- Sew the second seam section.



- End the seam section with the **Notch** function.

- The seam program is concluded and saved by thread trimming with the pedal (Position 4 in **Chapter 7.02 Pedal**).



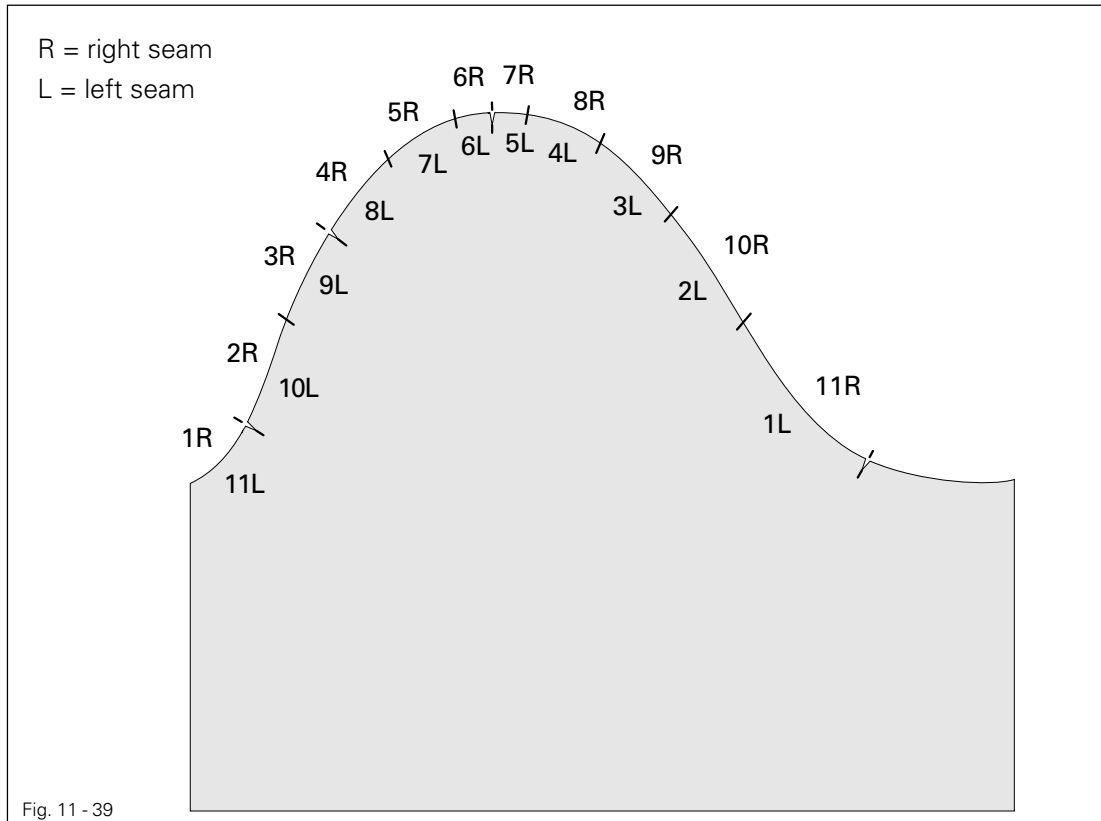
- After selecting the operating mode **SEWING**, the seam program can be sewn.

## 11.12.03 Input example for a sleeve seam



Fig. 11-01 shows a sleeve seam size 50.

The values for the individual seam sections are listed in the table, whereby the left sleeve was mirrored.



Right sleeve				Left sleeve			
Seam section	Stitches	Fullness	Graduation value	Seam section	Stitches	Fullness	Graduation value
1	7	0		1	8	0	
2	14	10		2	42	10	
3	24	25		3	27	20	3
4	25	40		4	22	10	
5	20	50	2	5	39	45	2
6	14	10		6	14	10	
7	39	45	2	7	20	50	2
8	22	10		8	25	40	
9	27	20	3	9	24	25	
10	42	10		10	14	10	
11	8	0		11	7	0	







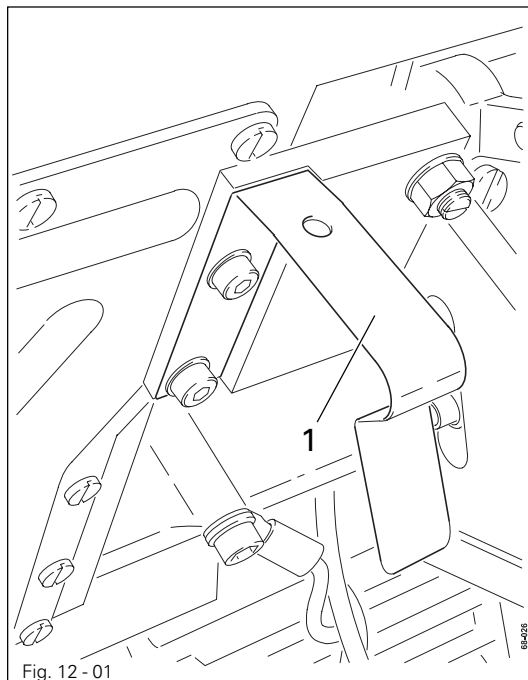
12 Care and Maintenance

Clean looper compartment .....	daily, several times if in continuous use
Clean the entire machine .....	once a week
Check the oil level .....	daily, before use
Lubricate the articulated joints of the top feed .....	once a week
Check/adjust the air pressure .....	daily, before use
Clean air filter of air filter/regulator .....	as required



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

12.01 Cleaning



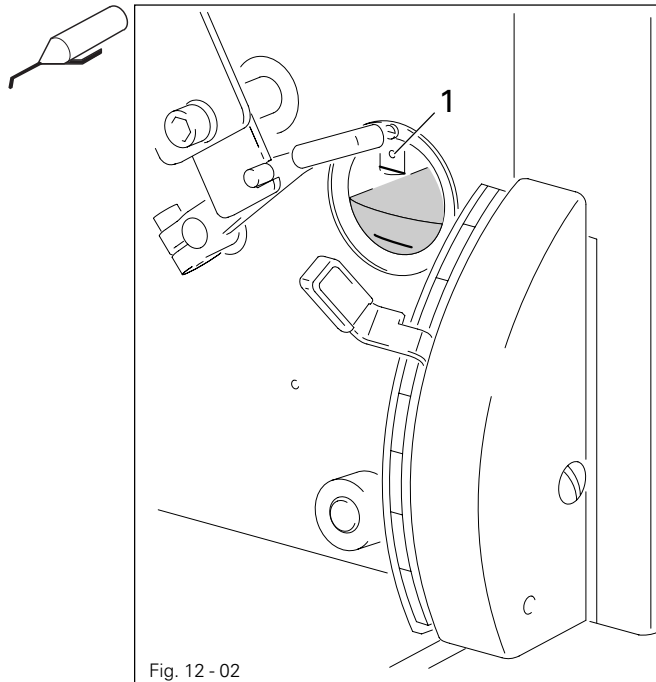
Switch the machine off!  
Danger of injury if the machine is started accidentally!

- Tilt sewing head back.
- Clean looper and looper compartment daily, several times if in continuous operation.
- When returning the machine to an upright position, make sure that tilt lock 1 is pressed.



Use both hands to set the sewing head upright!  
Danger of crushing between the sewing head and the table top!

## 12.02 Machine oil level



Check oil level before each use.

- The oil level must be between the markings in the inspection glass.
- If required refill oil through hole 1.

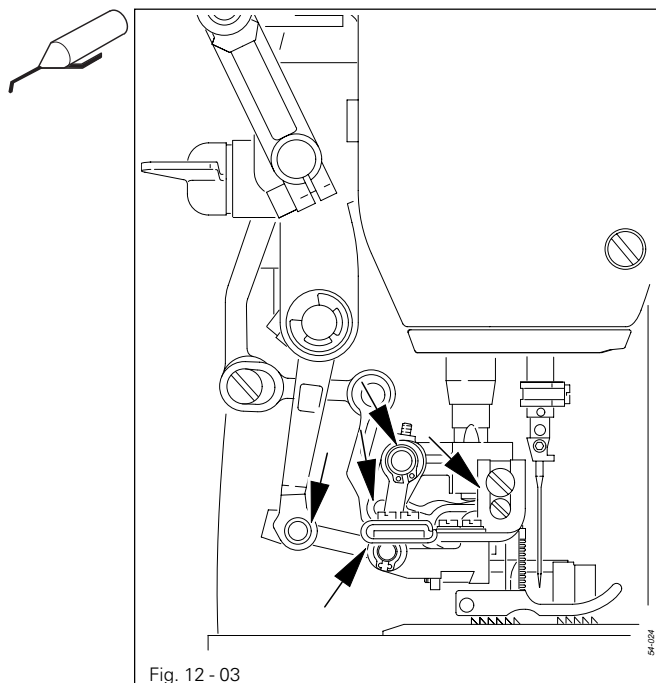


Only use oil with a mean viscosity of 22.0 mm<sup>2</sup>/s at 40° C and a density of 0.865 g/cm<sup>3</sup> at 15° C!



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

## 12.03 Lubricating the top feed joints



- Lubricate the points marked in the illustration with a drop of oil once a week or after the machine has stood still for longer periods.

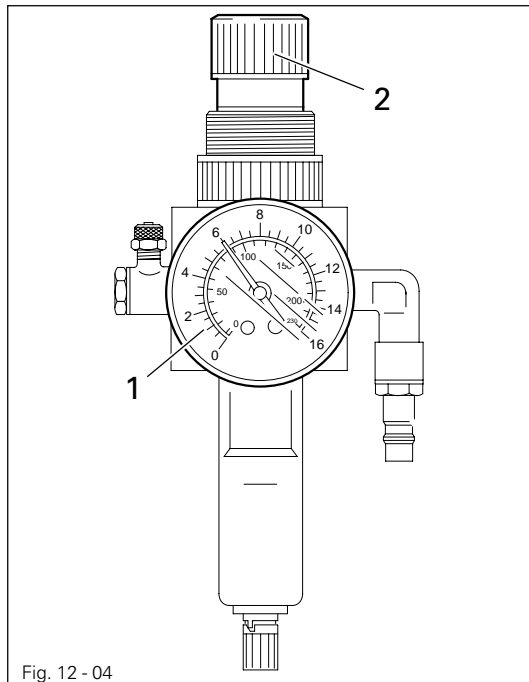


Only use oil with a medium viscosity of 10.00 mm<sup>2</sup>/s at 40°C and a density of 0.847 g/cm<sup>3</sup> at 15°C.



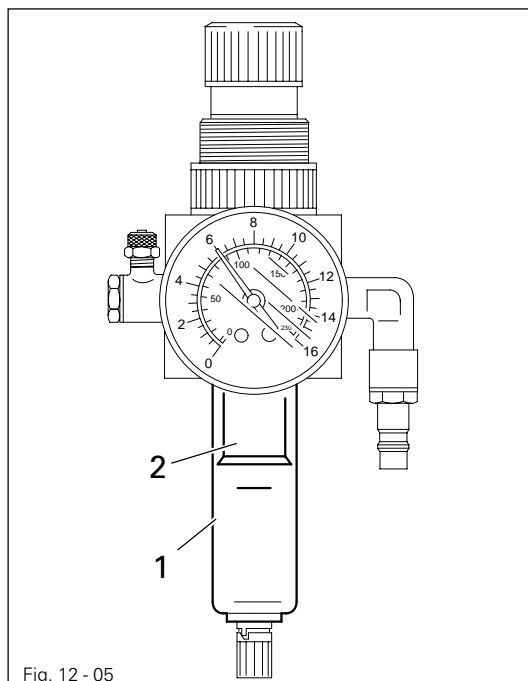
We recommend PFAFF sewing machine oil, part no. 280-1-120 105.

### 12.04 Checking/adjusting the air pressure



- Before operating the machine, always check the air pressure on gauge 1.
- Gauge 1 must show a pressure of 6 bar.
- If necessary adjust to this reading.
- To do so, pull knob 2 upwards and turn it so that the gauge shows a pressure of 6 bar.

### 12.05 Cleaning the air filter of the air-filter/lubricator



Switch the machine off!  
Disconnect the air hose at the air-filter/lubricator.

To drain water bowl 1:

- Water bowl 1 drains itself automatically when the compressed-air hose is disconnected from the air-filter/lubricator.

Cleaning filter 2:

- Unscrew water bowl 1.
- Take out filter 2.
- Clean filter 2 with compressed air or iso-propyl alcohol (part No. 95-665 735-91).
- Screw in filter 2 and screw on water bowl 1.

## 13 Adjustment

### 13.01 Notes on adjusting

All adjustments in this instruction manual refer to a completely installed machine and must only be carried out by appropriately trained specialists.

Covers on the machine which have to be removed and replaced for checks and adjustment work are not mentioned here.

The screws and nuts in brackets ( ) are attachments of machine parts which are to be loosened before making the adjustment and tightened again when the adjustment is complete.

### 13.02 Tools, gauges and other accessories for adjusting

- 1 set of screwdrivers with blade widths from 2 to 10 mm
- 1 set of fork wrenches with jaw widths from 6 to 22 mm
- 1 set of Allan keys from 1.5 to 6 mm
- 1 hammer, 250 g
- 1 brass drift,  $\varnothing$  6 - 8 mm
- 1 original Seeger pliers
- 1 pair of pincers, 90° offset
- 1 adjustable clamp, (Part No. 08-880 137-00)
- 1 metal rule, (Part No. 08-880 218-00)
- 1 adjustment pin,  $\varnothing$  5 mm (Part No. 13-030 341-05)
- 1 adjustment gauge (Part No. 61-111 642-19)
- 1 adjustment gauge (Part No. 91-186 311-15)
- 1 adjustment gauge (Part No. 91-084 387-11)
- 1 looper adjustment gauge (Part No. 61-111 643-06)
- Needles, system 4463-35
- Sewing thread and test material
- Spacing rings: 0.3/0.5/0.8 and 1.2 mm

### 13.03 Abbreviations

TDC = top dead center

BDC = bottom dead center

## 13.04 Checking and adjusting aids



By inserting the adjustment pin ( $\varnothing$  5 mm) into holes 1, 3 and 4 the needle bar can be fixed precisely in the desired position.

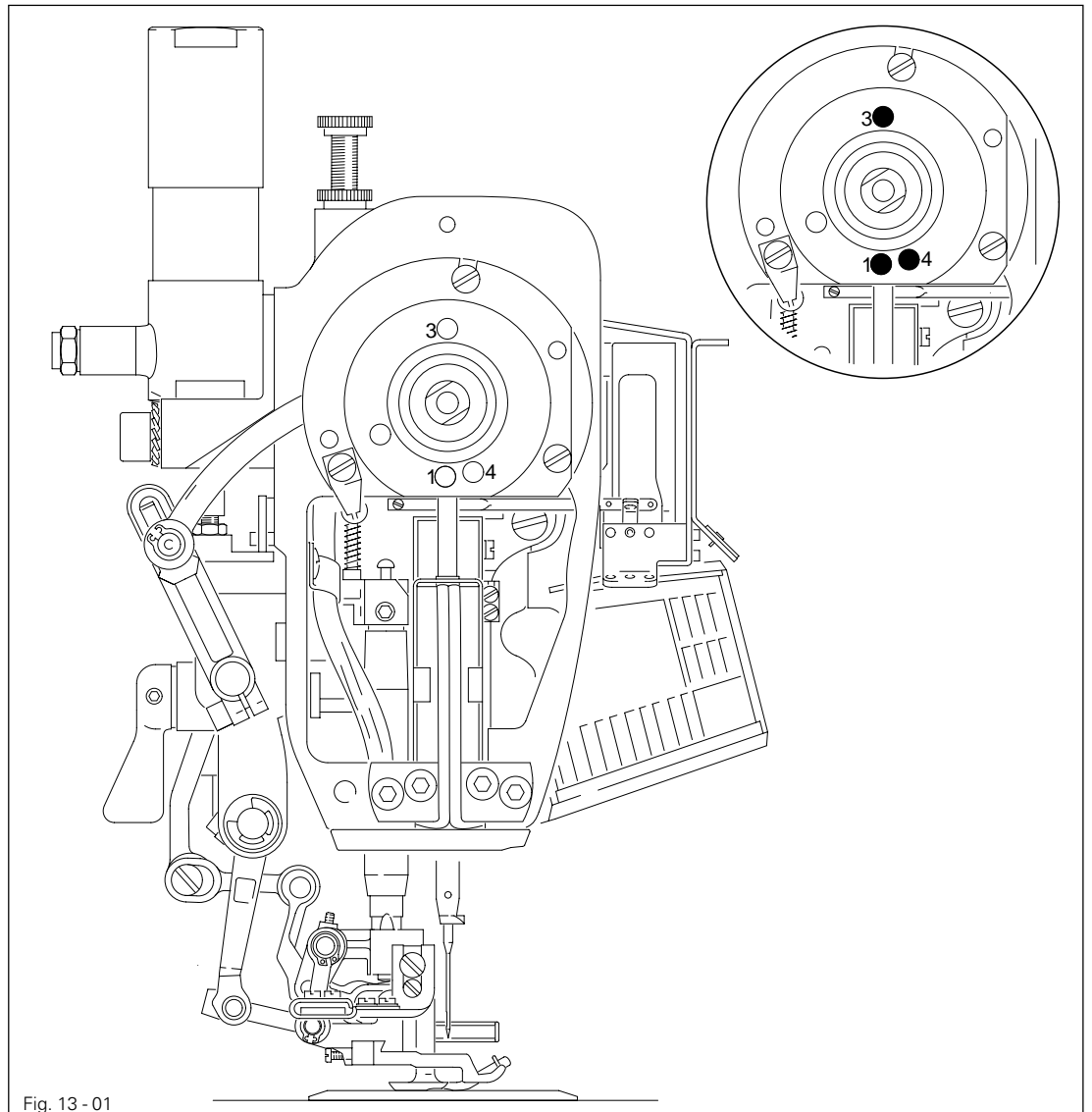
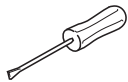


Fig. 13 - 01



- Turn the handwheel until the needle bar is approximately in the desired position.
- Insert the adjustment pin into the respective hole and apply pressure.
- Turn the handwheel slightly forwards and backwards until the adjustment pin engages in the rear crank recess and thus blocks the machine.

**Hole 1** = top dead center of the needle bar (TDC)  
**Hole 3** = bottom dead center of the needle bar (BDC)  
**Hole 4** = 0.8 mm below the top dead center of the needle bar (0.8 below TDC)

## 13.05 Adjusting the basic machine

### 13.05.01 Adjust the synchronizer

#### Requirement

After the thread has been trimmed, the machine should be positioned 0.3 - 0.4 mm after TDC.

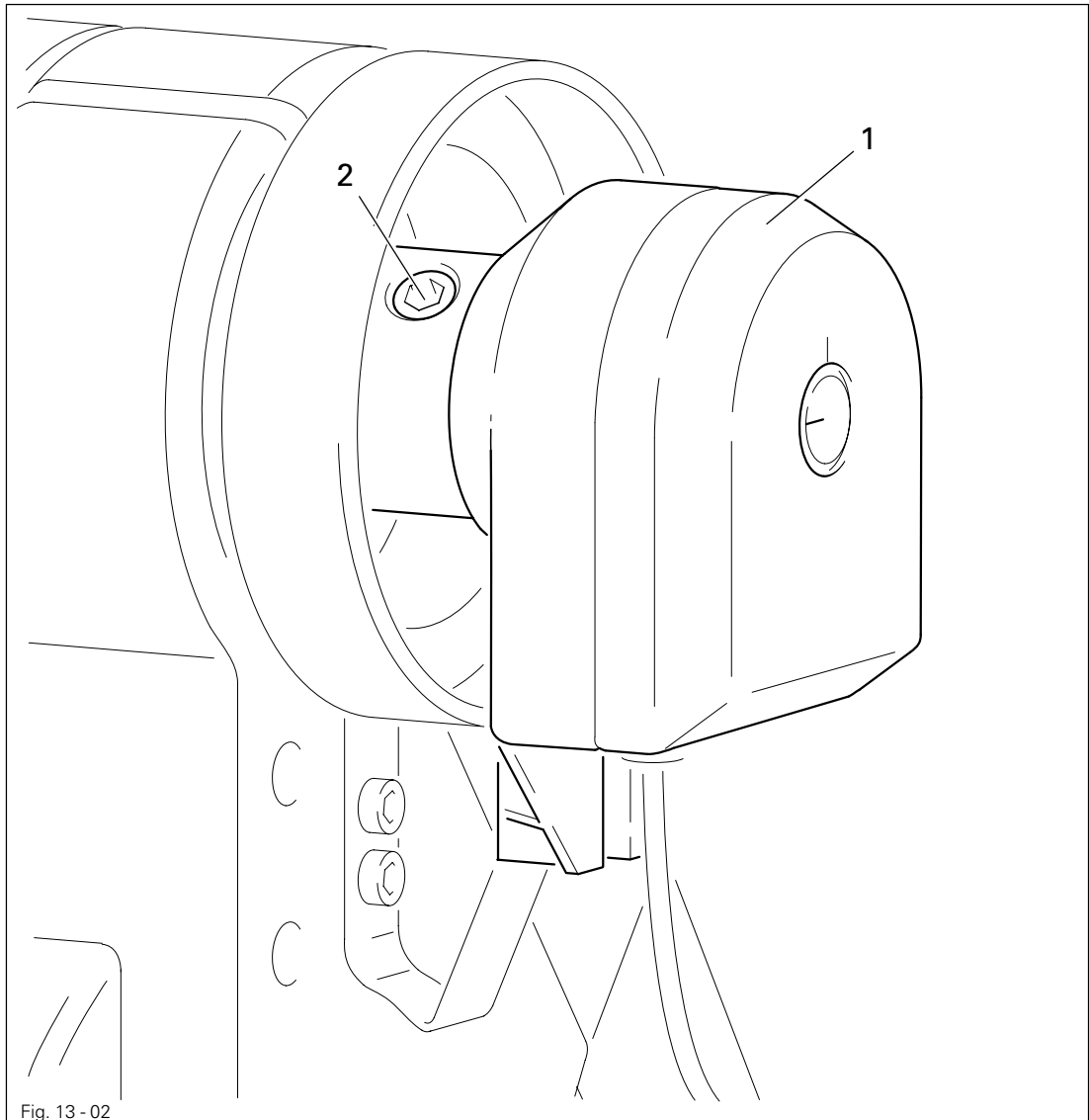
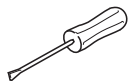


Fig. 13 - 02

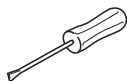
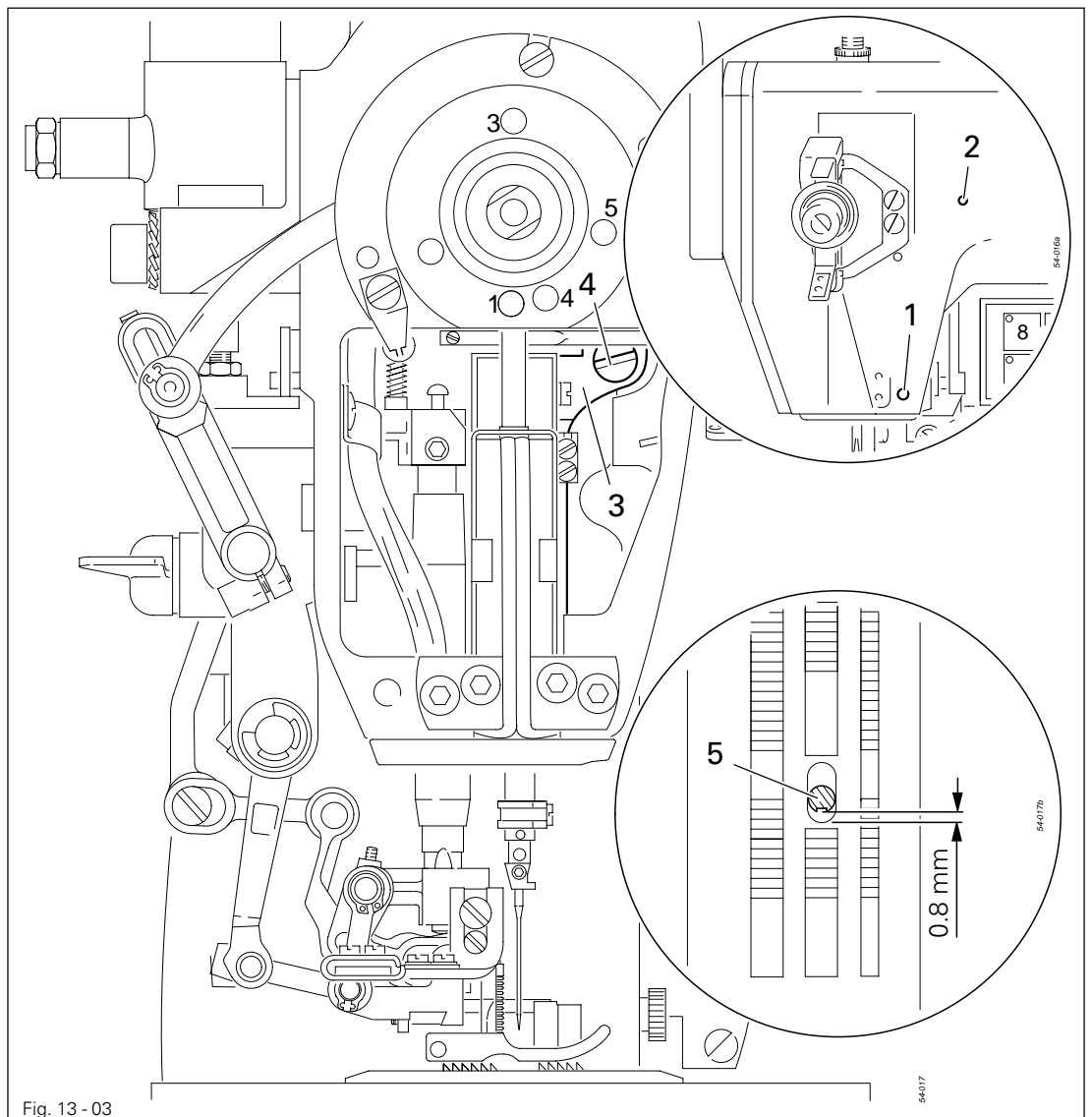


- Adjust synchronizer 1 (screw 2) according to the operating instructions for the motor. Also see **Chapter 13.09 Parameter settings**.

## 13.05.02 Position of needle to needle hole

**Requirement**

1. As seen crosswise to the direction of sewing, needle **5** should enter the needle hole in the centre.
2. The distance between needle **5** and the front edge of the needle hole should be approx. **0.8 mm**.



- Loosen screws **1** and **2**.
- Adjust needle bar frame **3** according to **requirement 1** and tighten screw **1**.
- Loosen screw **4** and turn needle bar frame **3** according to **requirement 2**.
- Tighten screws **2** and **4**.

# Adjustment

## 13.05.03 Pre-adjusting the needle height

### Requirement

At the top dead center of the needle bar (hole 1), the clearance between the needle plate and the point of the needle must be **11 mm**.

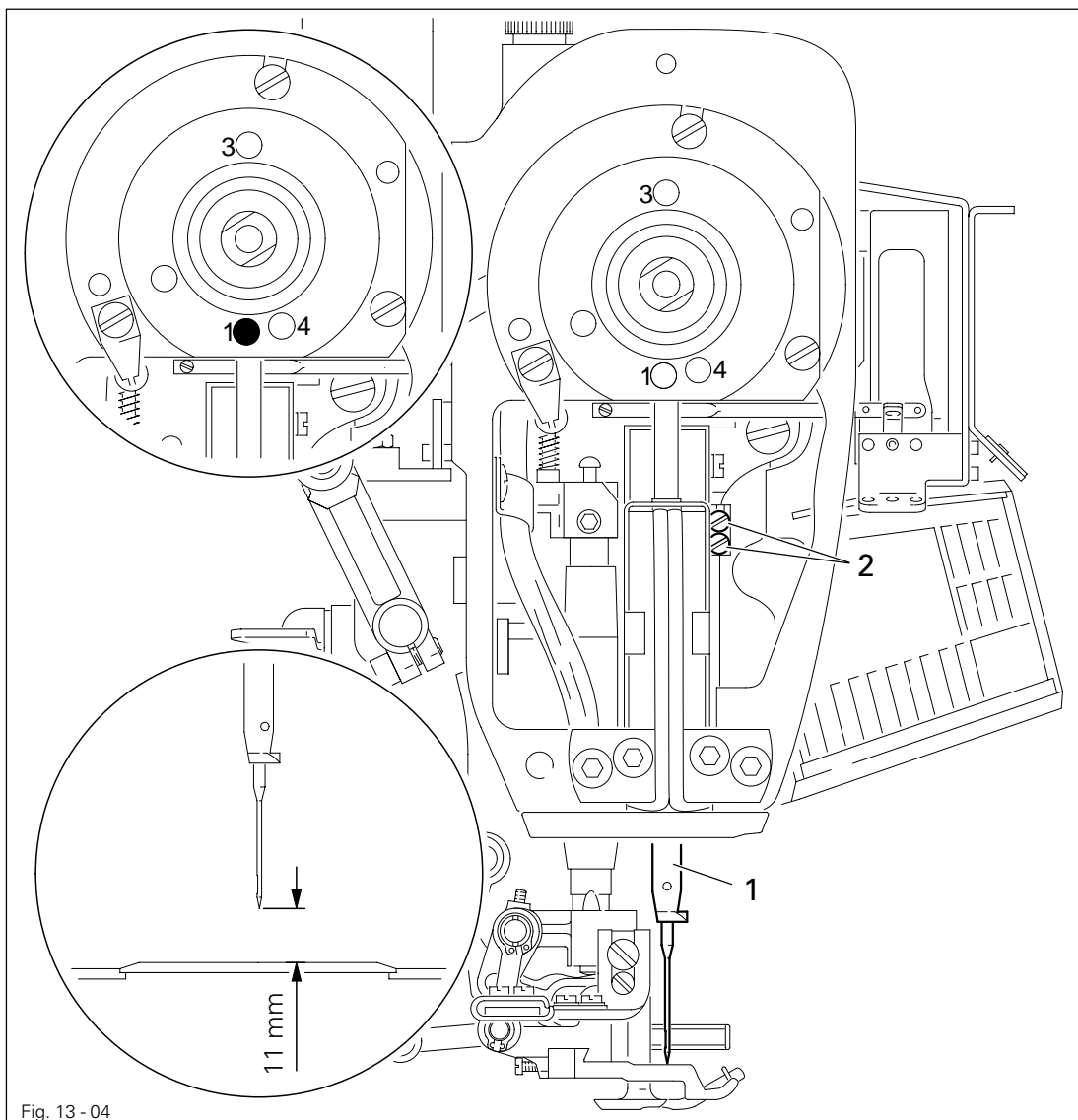
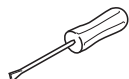


Fig. 13 - 04



- Bring the needle bar 1 to its TDC.
- Move the needle bar 1 in accordance with the **requirement**.



## 13.05.04 Neutral position of the main feed dog

**Requirement**

When the stitch length is set at "0", there should be no feeding motion of the main feed dog 7.

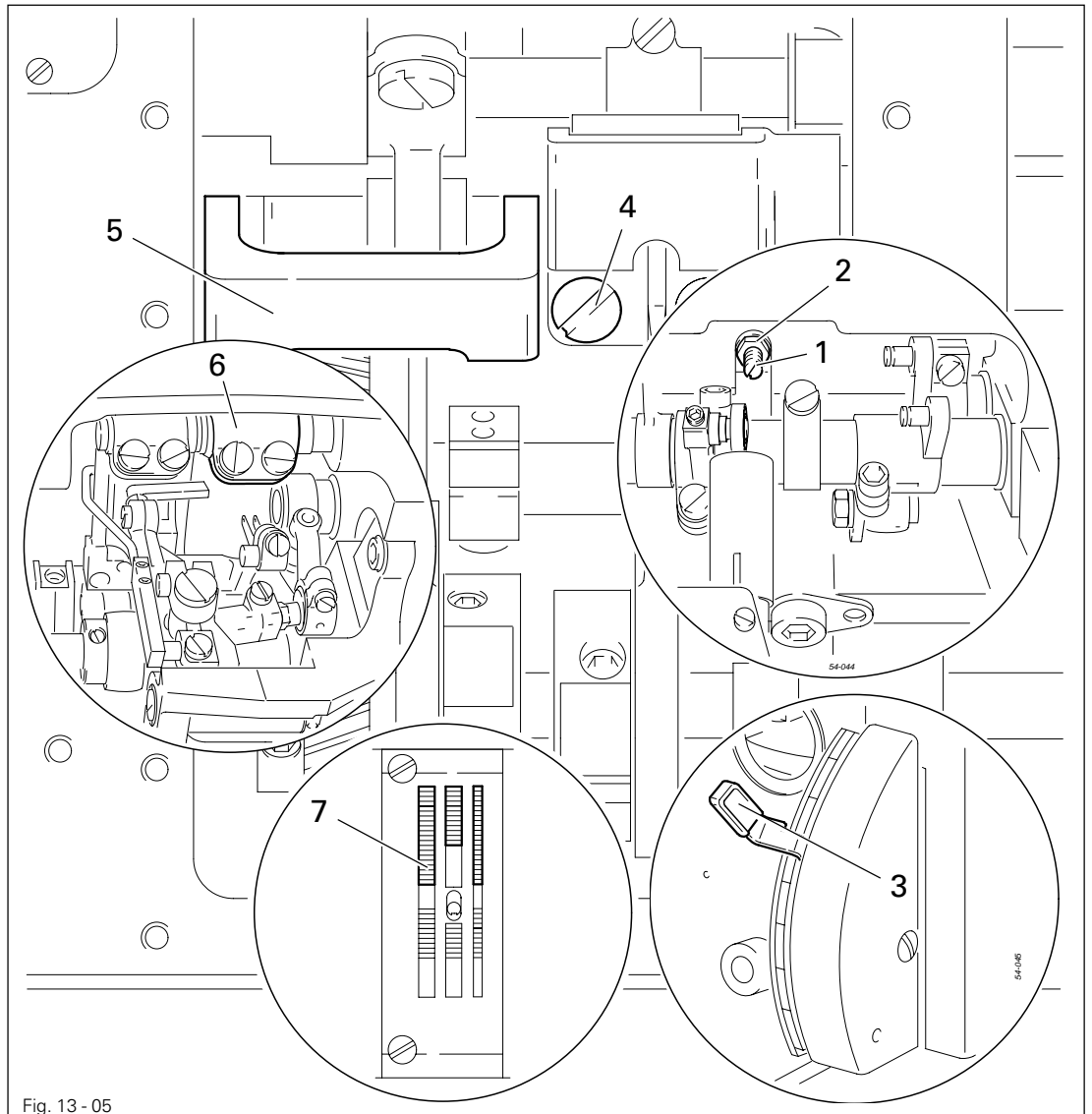
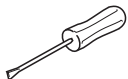


Fig. 13 - 05



- Unscrew screw 1 (nut 2) (stitch length limitation deactivated).
- With adjustment lever 3 set stitch length to "0".
- Loosen screw 4 to such an extent that crank 5 can be moved on the shaft with difficulty.
- While turning the balance wheel continuously, adjust crank 5, so that crank 6 does not move.
- Tighten screw 4.



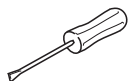
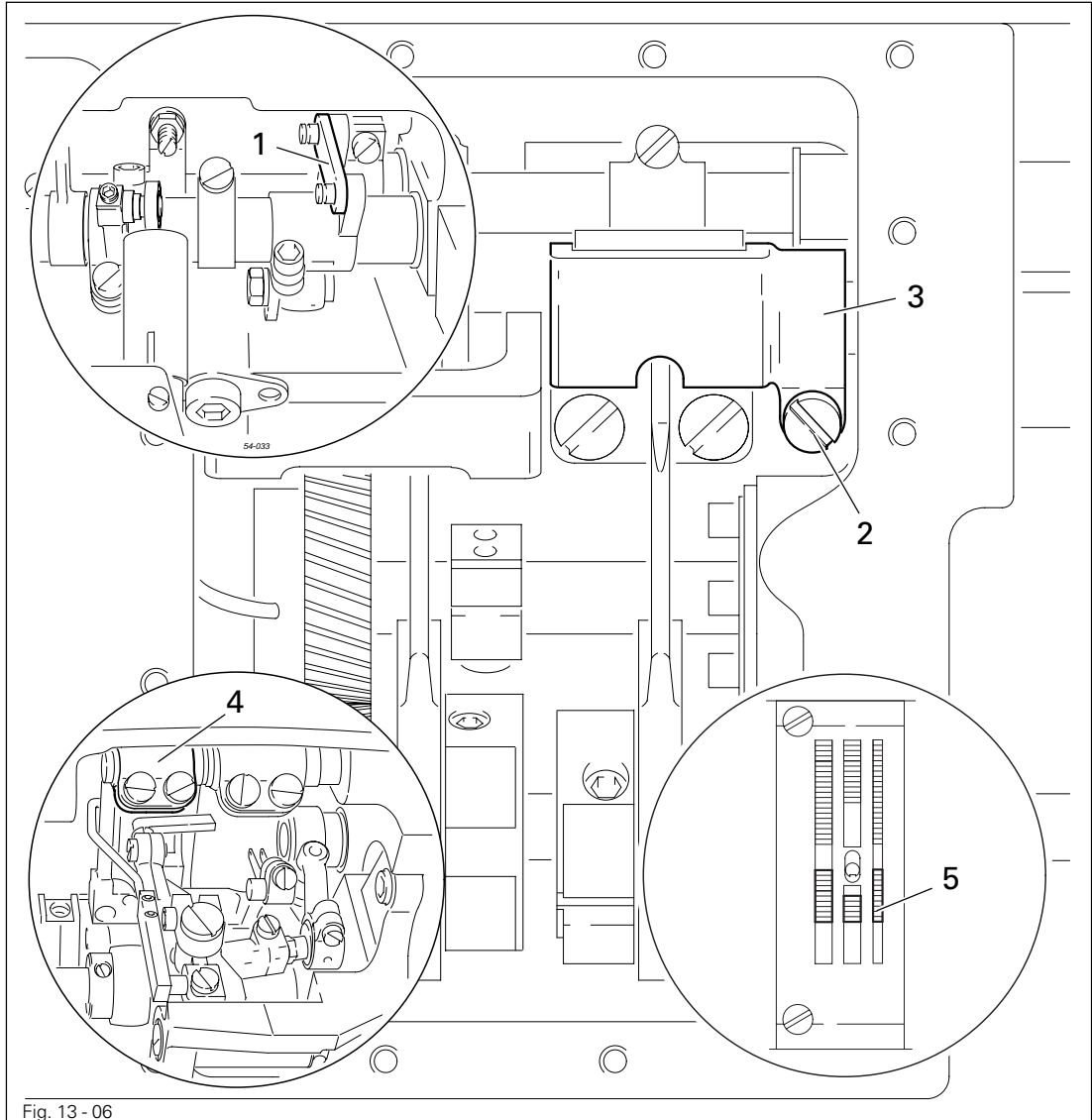
Screw 1 (nut 2) remains loosened for further adjustments.  
(Stitch length limitation is still deactivated).

# Adjustment

## 13.05.05 Zero position of the differential feed dog

### Requirement

At stitch length setting " 0 " and with adjustment gauge 1 fitted, differential feed dog 5 must not make any movement.



- Set stitch length at " 0 " .
- Fit adjustment gauge 1.
- Undo screw 2 just enough to allow crank 3 to be turned on the shaft.
- Turn the balance wheel continuously and turn crank 3 to the position in which crank 4 no longer moves.
- Tighten screw 2.



Leave adjustment gauge 1 in place for further adjustments.

## 13.05.06 Feeding motion of main- and differential feed dogs

**Requirement**

With the longest stitch length set, the needle bar in position 0.8 before t.d.c. (hole 4) and adjustment gauge 8 fitted, the main- and differential feed dogs must not move when lever 5 is operated.

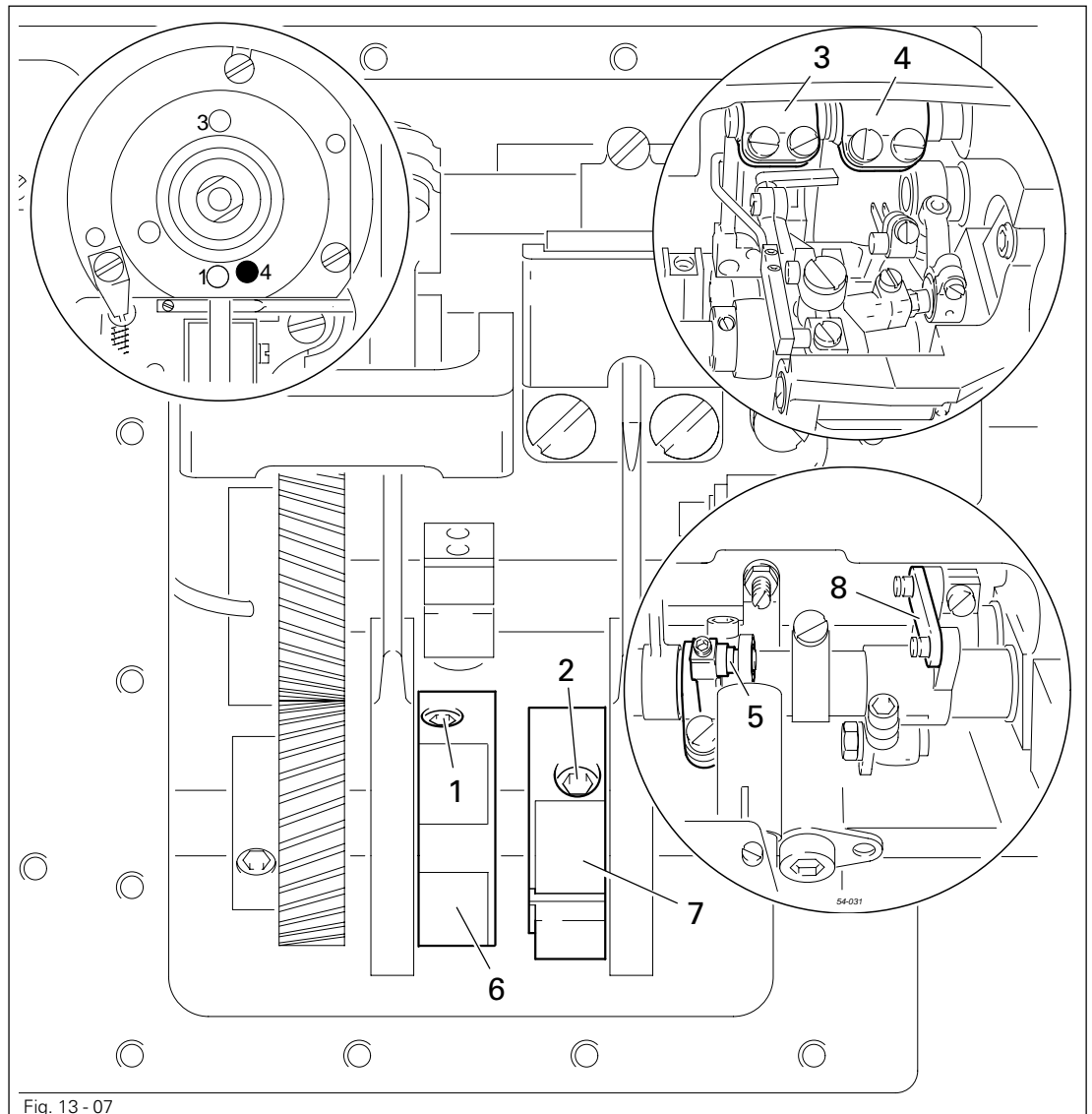
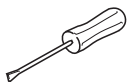


Fig. 13 - 07



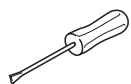
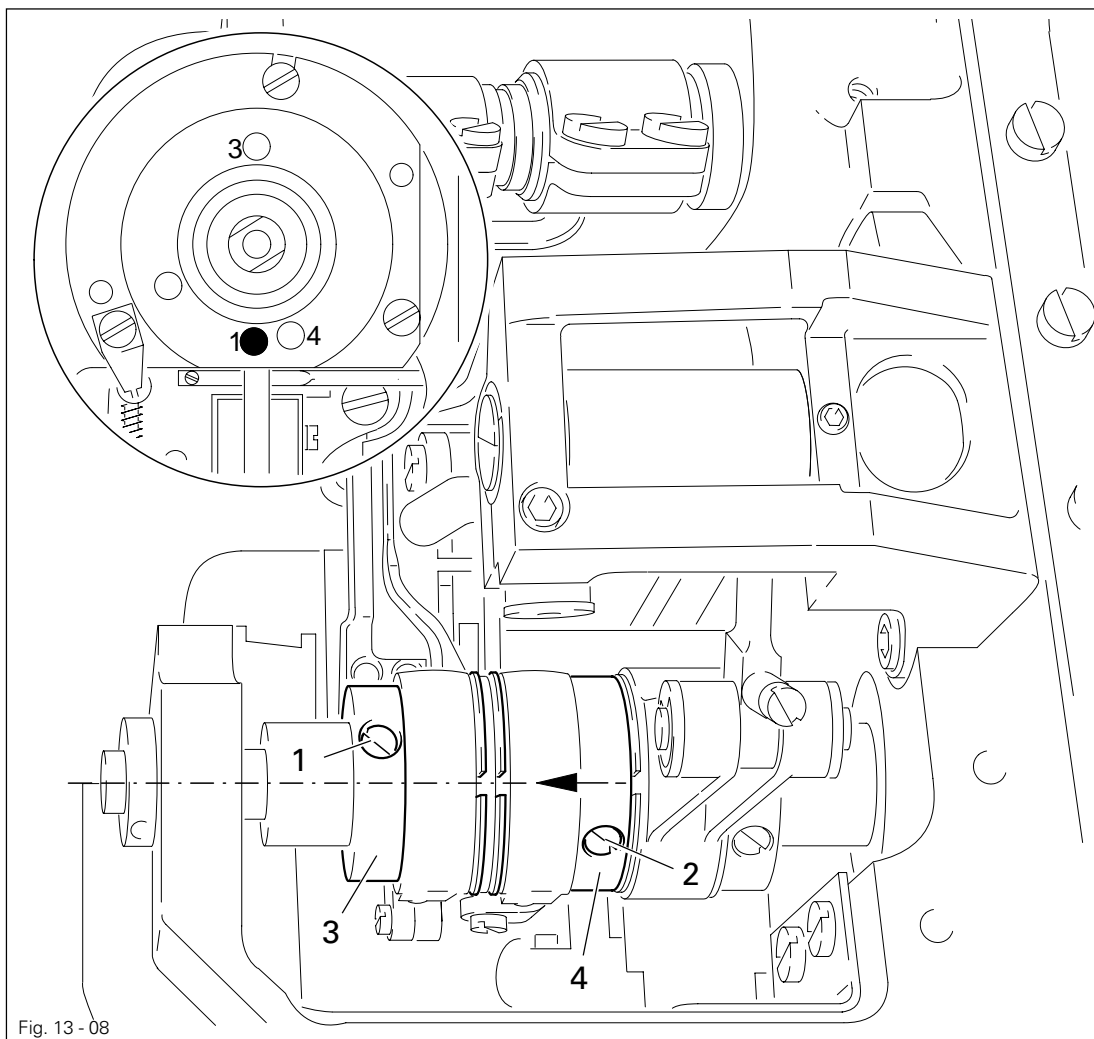
- Loosen screws 1 and 2 (four screws) just a little.
- Set needle bar at 0.8 before t.d.c. and set the longest stitch.
- Continuously move lever 5 up and down and turn eccentrics 6 and 7 so that the coutout is visible and cranks 3 and 4 do not move.
- Fully tighten screws 1 and 2.

## Adjustment

### 13.05.07 Lifting motion of main- and differential feed dogs

#### Requirement

With the needle bar at t.d.c. (hole 1) the cutouts of eccentrics 3 and 4 must face vertically downwards.



- Loosen screws 1 and 2 (four screws).
- Set needle bar at t.d.c.
- Turn eccentrics 3 and 4 according to **Requirement** and fully tighten the accessible screws 1 and 2.
- Turn balance wheel to make the remaining screws 1 and 2 accessible and fully tighten them.

## 13.05.08 Position of main- and differential feed dogs

**Requirement**

When the needle bar is at t.d.c (hole 1) and the longest stitch length is set the main- and differential feed dogs must:

1. rest their full length on adjustment gauge 5,
2. be centred in the feed slots of the needle plate, and
3. clear each other by 4 mm.

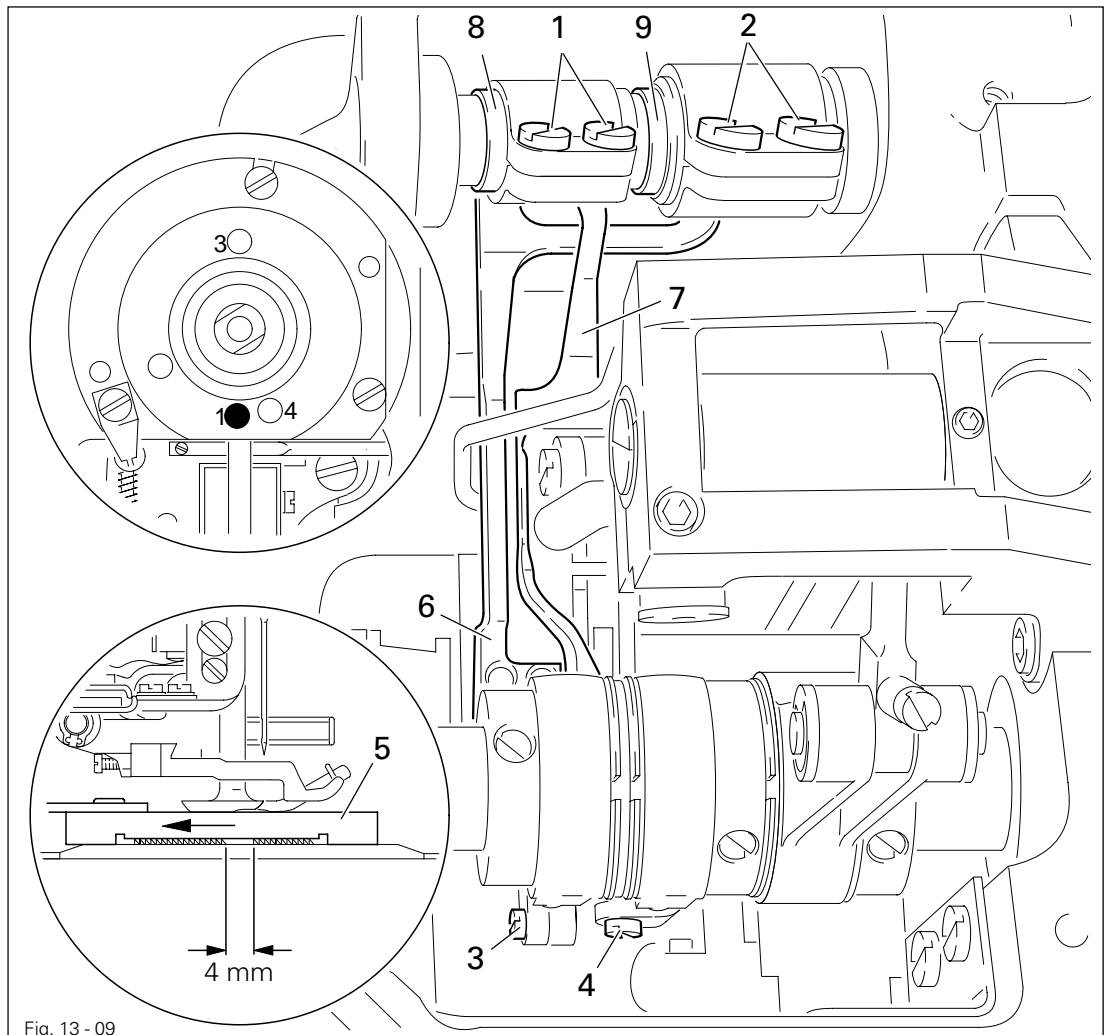
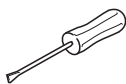


Fig. 13 - 09

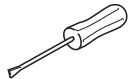
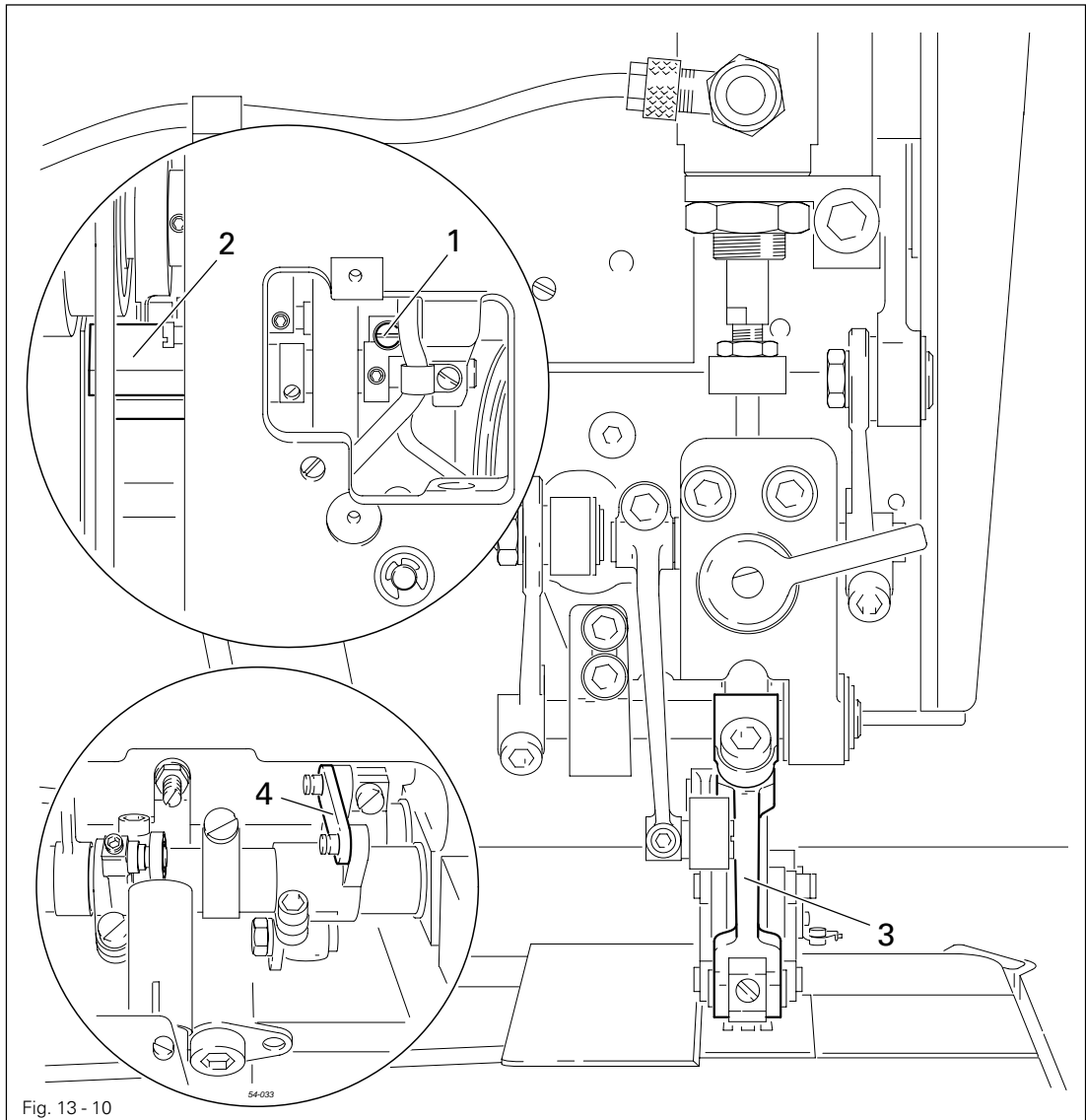


- Set needle bar at t.d.c. and set longest stitch length.
- Loosen screws 1, 2, 3 and 4.
- Raise lifting presser and place adjustment gauge 5 (part No. 61-111 642-19) under the lifting presser with its cutout facing downwards so that the arrow on gauge 5 faces in feed direction.
- Push two feed bars 6 and 7 upwards to press the two feed dogs against the gauge.
- Tighten screws 1 and 2 just a little.
- Turn eccentric bushes 8 and 9 according to **Requirements 2** and **3**.
- In this position fully tighten screws 3 and 4.
- Making sure that **Requirement 1** is fulfilled, fully tighten screws 1 and 2.

## 13.05.09 Zero position of feeding presser

### Requirement

With the stitch length set at " 0 " and adjustment gauge 4 in place the feeding presser must not make any movement.



- Set feed regulator at " 0 ".
- Undo screw 1 just enough to allow crank 2 to be turned.
- Turn the balance wheel continuously and turn crank 2 to the position in which lever 3 no longer moves.
- Fully tighten screw 1.

## 13.05.10 Front driving link of feeding-presser drive

**Requirement**

With the needle bar at 0.8 mm before t.d.c. (hole 4) there must be a distance of 16.5 mm between the eye of link 2 and machine housing 3.

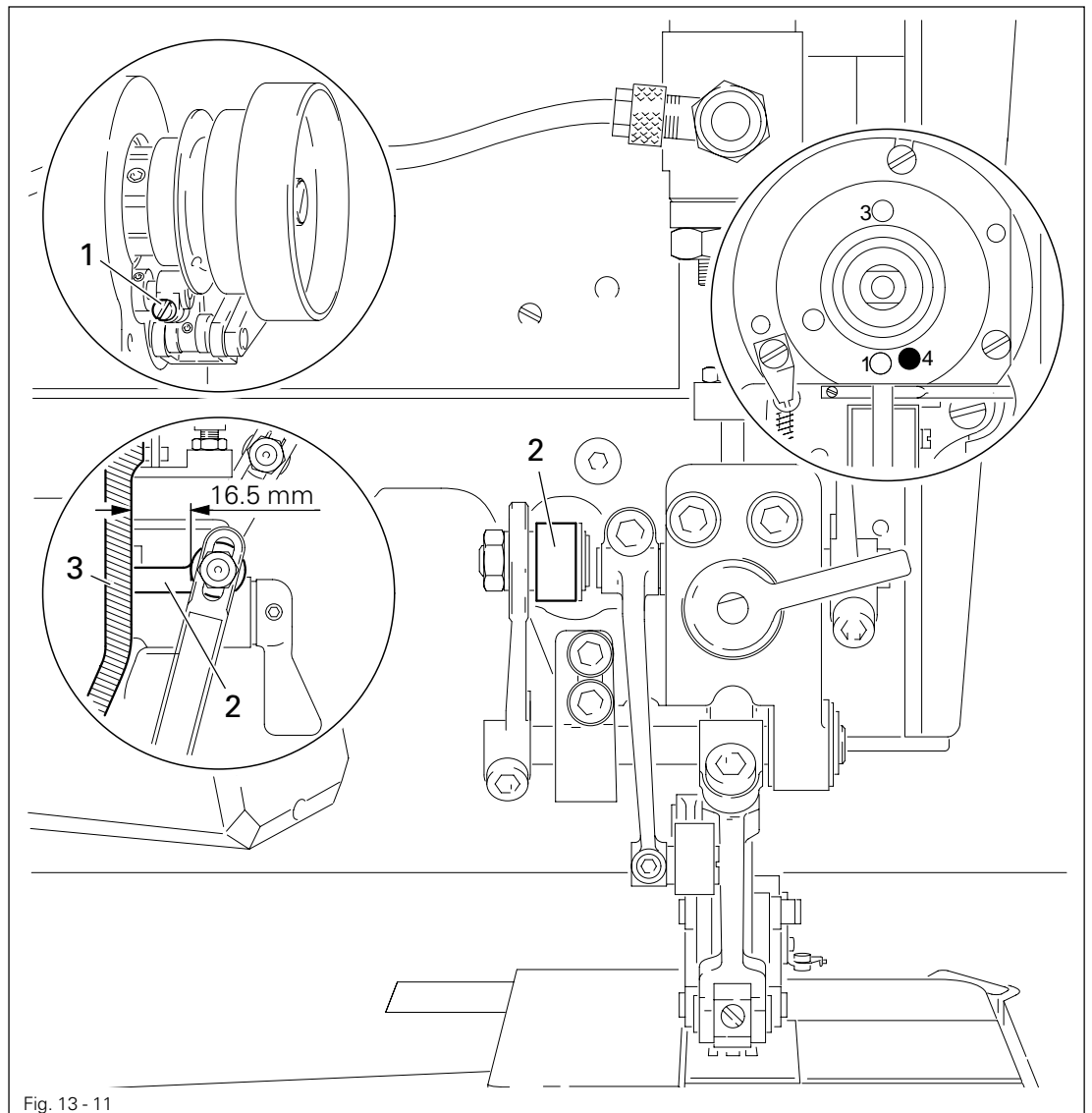
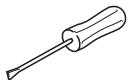


Fig. 13 - 11



- Set needle bar at 0.8 mm before t.d.c.
- Loosen screw 1.
- Adjust link 2 according to **Requirement**.
- Tighten screw 1.
- Check adjustment.

## 13.05.11 Positioning the lifting presser

### Requirement

1. With presser bar lifter 1 raised there must be a clearance of 5 mm between lifting presser 13 and the needle plate.
2. The needle must enter the centre of the needle hole in lifting presser 13.
3. The edge of the lifting presser must be parallel with the bottom feed dog.

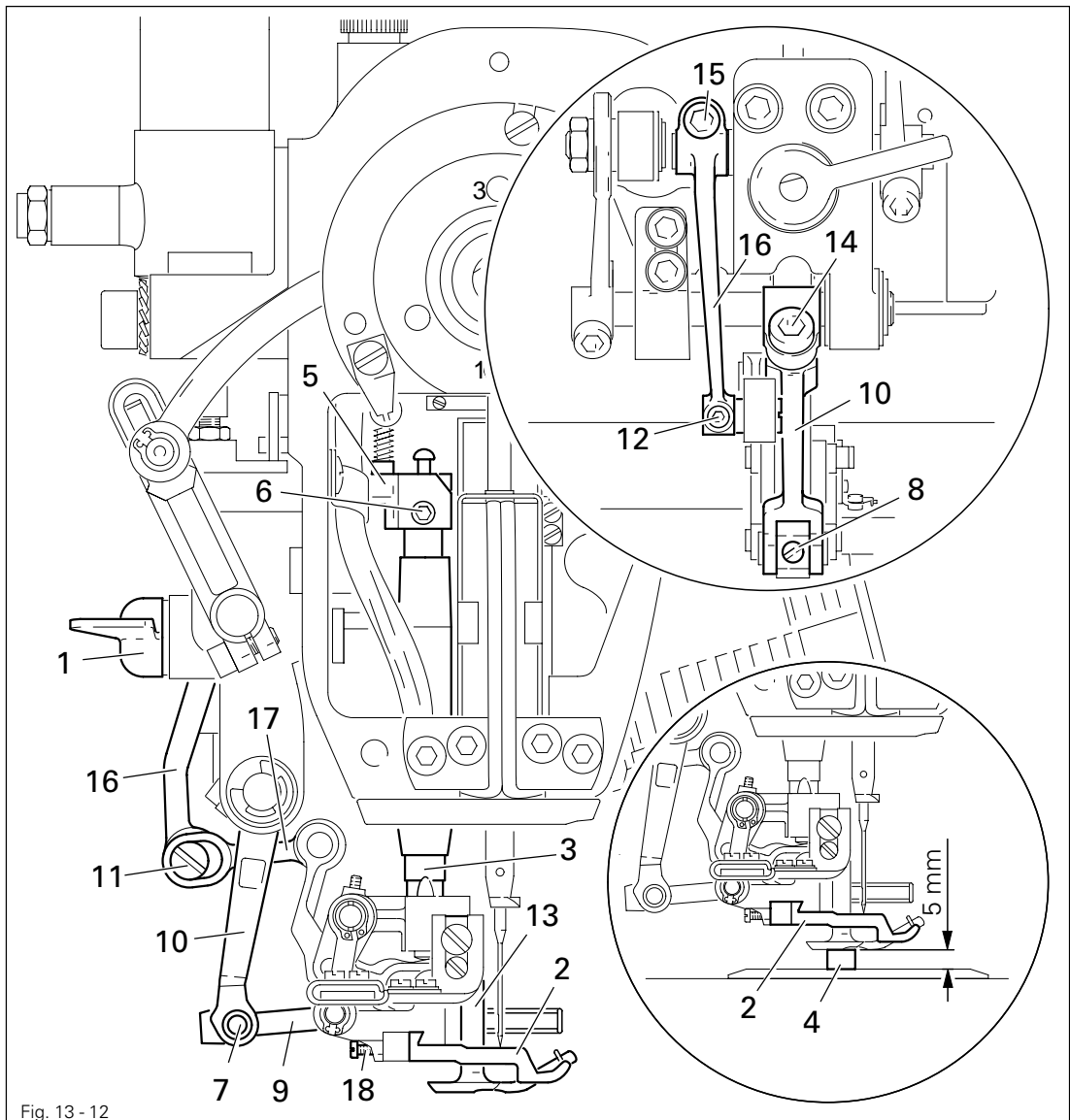
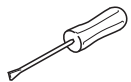


Fig. 13 - 12



- Raise presser bar lifter 1.
- Turn the balance wheel to set feeding presser 2 at its highest point.
- Raise presser bar 3 and push the 5 mm thick part of adjustment gauge 4 (part No. 61-111642-19) under the lifting presser from behind.
- Move lifting piece 5 (screw 6) down as far as it will go.
- Take out pin 7 (screw 8).
- Swing lever 9 out of the fork of lever 10.
- Take out eccentric pin 11 (screw 12).
- Position lifting presser 13 according to the Requirements.



- Tighten screw **6**.
- Remove gauge **4** and lower lifting presser **13** onto the needle plate.
- Loosen screw **14**.
- Swing lever **9** into the fork of lever **10**.
- Insert pin **7** (screw **8**), making sure it can move freely.
- If necessary, bend lever **10** accordingly.
- Set needle bar at 0.8 mm before t.d.c.
- Set feeding presser **2** at middle of lifting presser cutout and tighten screw **14**.
- Loosen screw **15**.
- Connect lever **16** with link **17** using eccentric pin **11** (screw **12**) and turn eccentric pin **11** with highest eccentric part facing downwards.
- Move lever **16** up against eccentric pin **11** and tighten screw **15**.
- Position feeding presser **2** (screw **18**) so that it does not touch lifting presser **13** to the side.



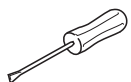
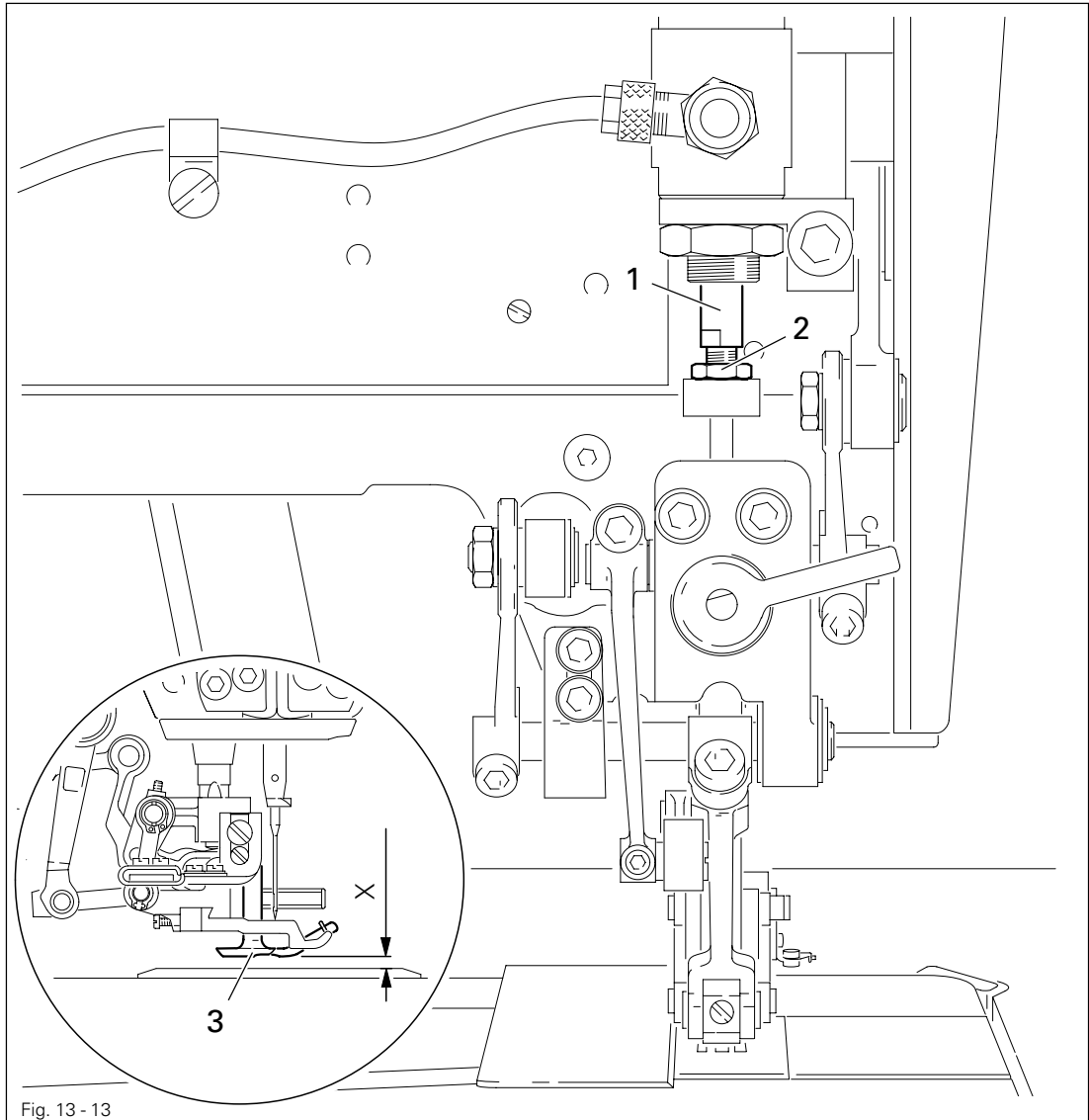
All moving parts of the top feed drive must run smoothly and without any backlash.

Lubricate the joints at regular intervals, see **Chapter 12.03 Lubricating the top feed joints**.

# Adjustment

## 13.05.12 Lift height of the automatic presser foot lift

Regel	
3801 -1/07	When plunger 1 is retracted the distance between the presser foot 3 and the needle plate should be 7 mm.
3811-10/071	When plunger 1 is retracted the distance between the presser foot 3 and the needle plate should be 5 mm.



- Adjust plunger 1 (nut 2) in accordance with the requirement.

## 13.05.13 Feeding motion of the top feed dog

### Requirement

When the maximum stitch length is set, and the needle bar is positioned 0.8 mm before t.d.c. (hole 4), lever 4 should not move when lever 2 is operated.

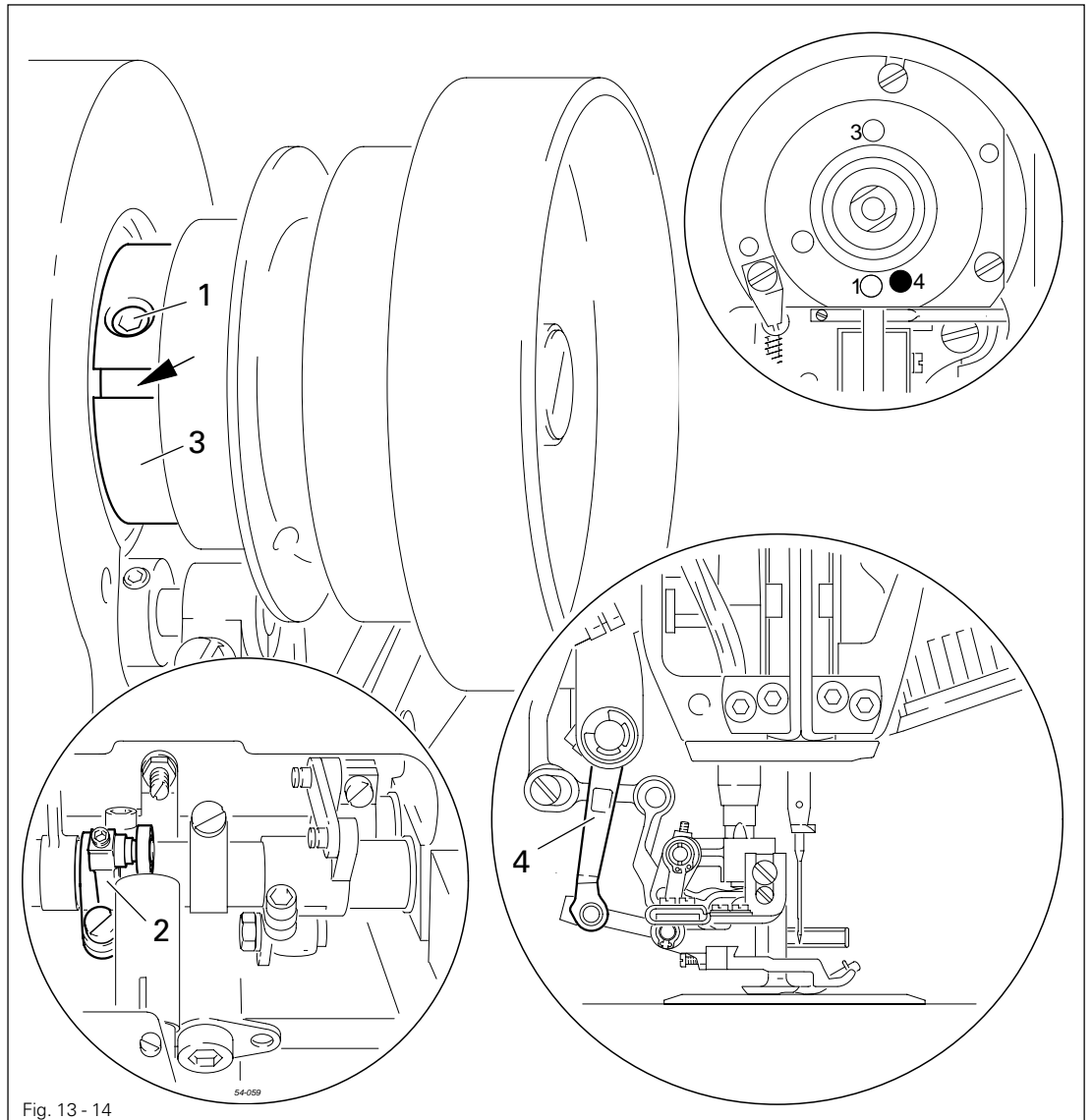
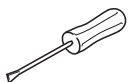


Fig. 13 - 14

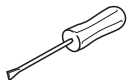
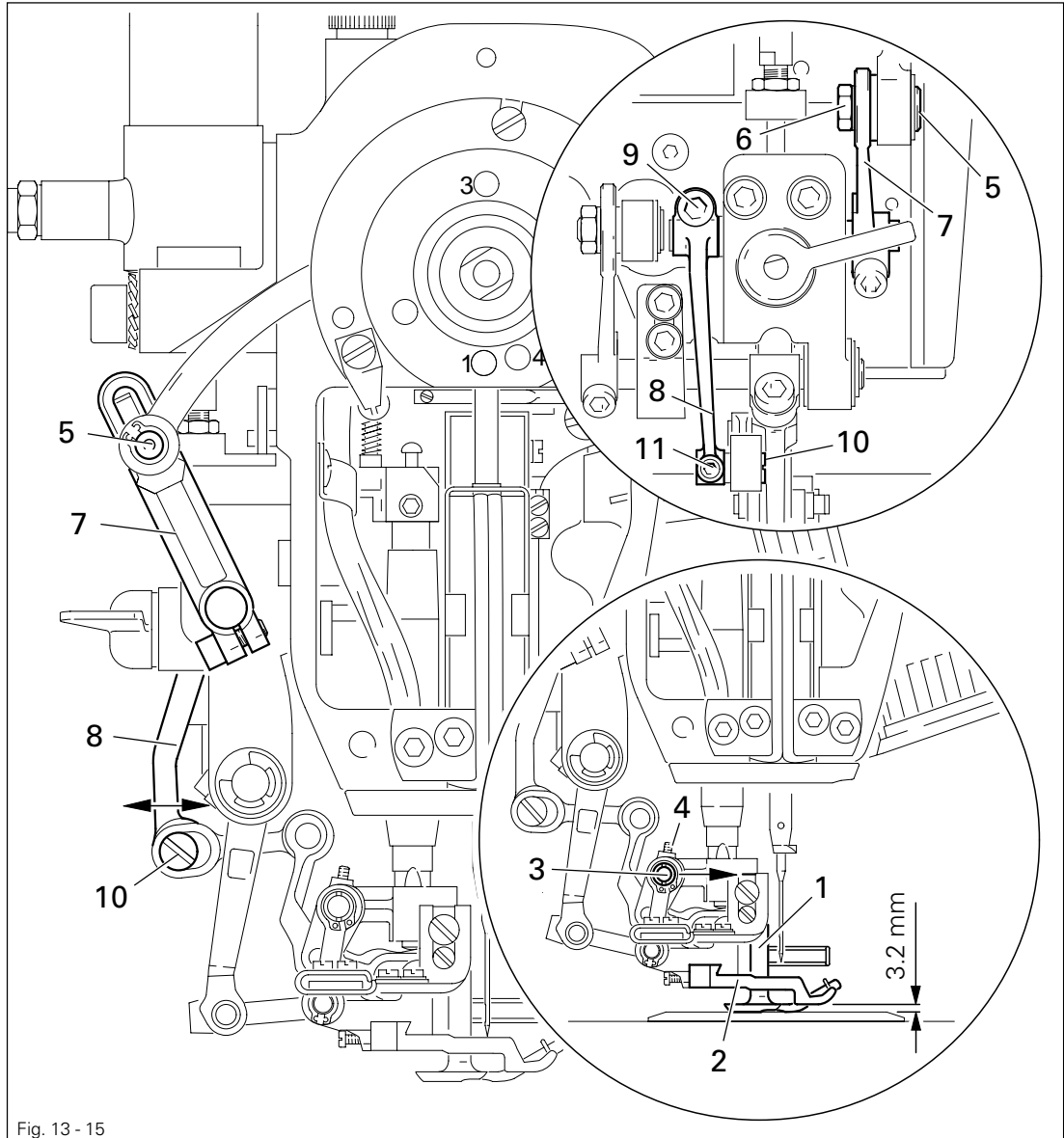


- Loosen both screws 1.
- While continuously moving lever 2 up and down, adjust eccentric 3, so that the slot is pointing towards the operator and lever 4 does not move.
- Tighten screws 1.

## 13.05.14 Lift of feeding presser

### Requirement

With the stitch length set at " 2.5 " and the adjustment gauge in place, the feeding presser 2 must clear the needle plate by 3.2 mm when at the top of its stroke.



- Lower lifting presser 1 onto needle plate.
- Set stitch length at " 2.5 " and turn balance wheel to set lifting presser 2 at the top of its stroke.
- Turn eccentric pin 3 (screw 4) so that its eccentric side faces the needle (see arrow).
- Move pin 5 (nut 6) fully down in elongated hole of lever 7.
- For preliminary adjustment of clearance between feeding presser 2 and needle plate position lever 8 (screw 9).
- Turn eccentric pin 10 (screw 11) according to Requirement.

## 13.05.15 Lifting stroke of feeding presser

**Requirement**

With the stitch length set at " 2.5 " and adjustment gauge 4 in place, the feeding presser must contact the bottom feed dog when the latter has risen to the top surface of the needle plate.

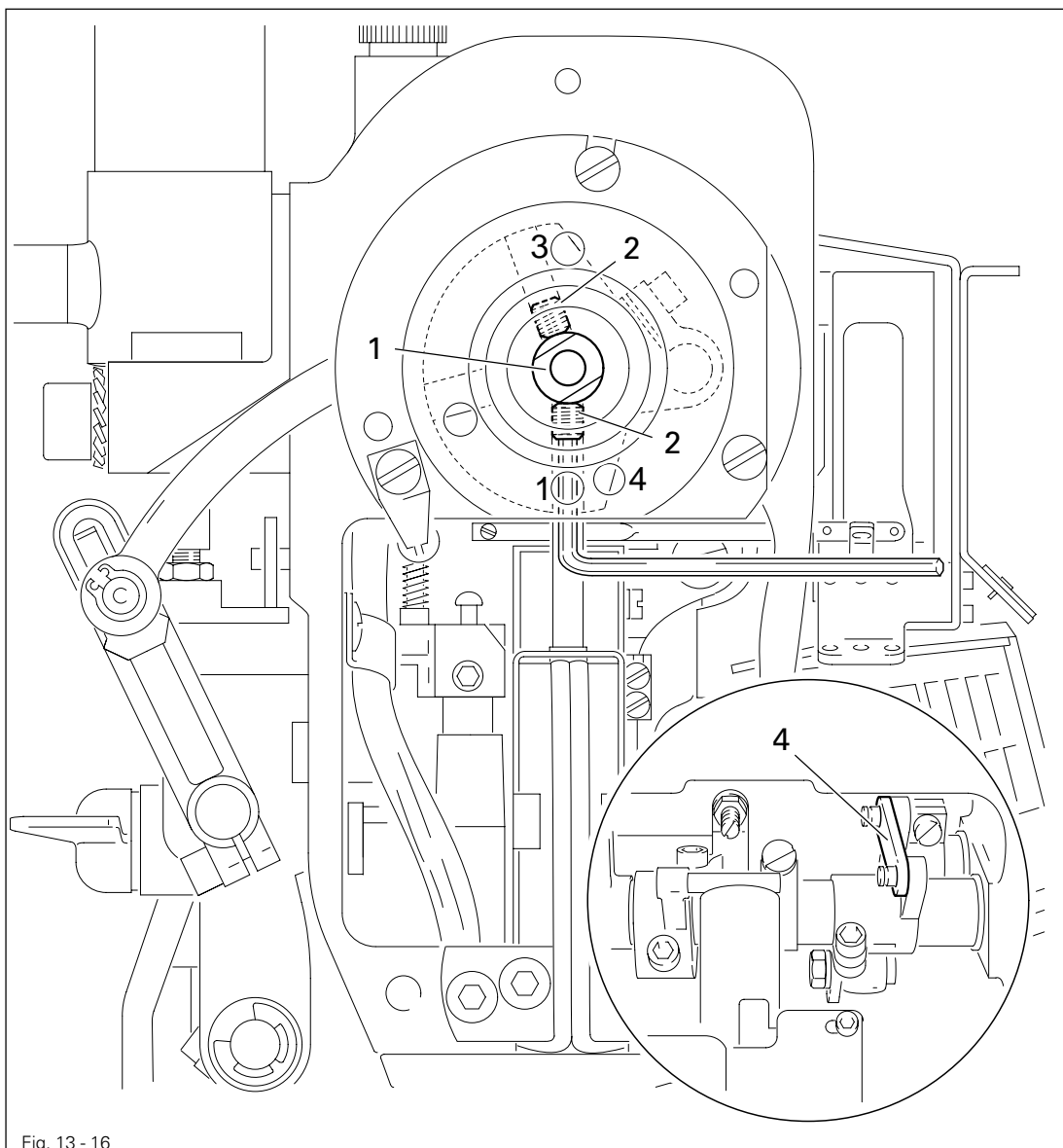
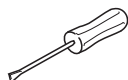


Fig. 13 - 16



- Set the stitch length at " 2.5 ".
- Turn eccentric 1 (screw 2) according to **Requirement**.

## 13.05.16 Stitch length limitation

### Requirement

1. The bottom stroke of rocking bar 6 should be set so that the stitch length is 2.5 mm ( $x = 25$  mm with 11 penetration points).
2. With the same stitch length screw 4 should slightly touch the casting. (It must no longer be possible to move rocking bar 6.)

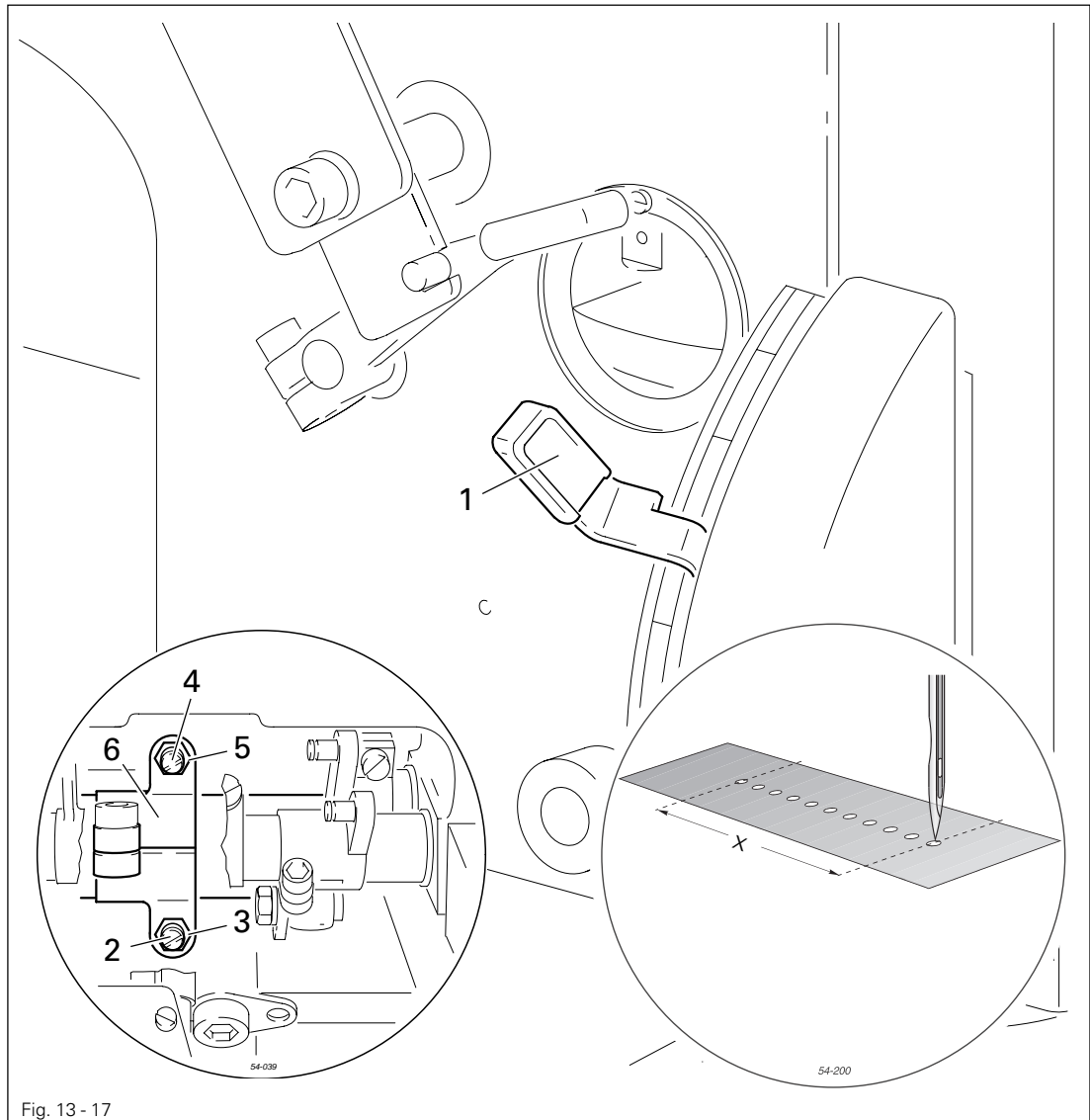
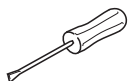


Fig. 13 - 17

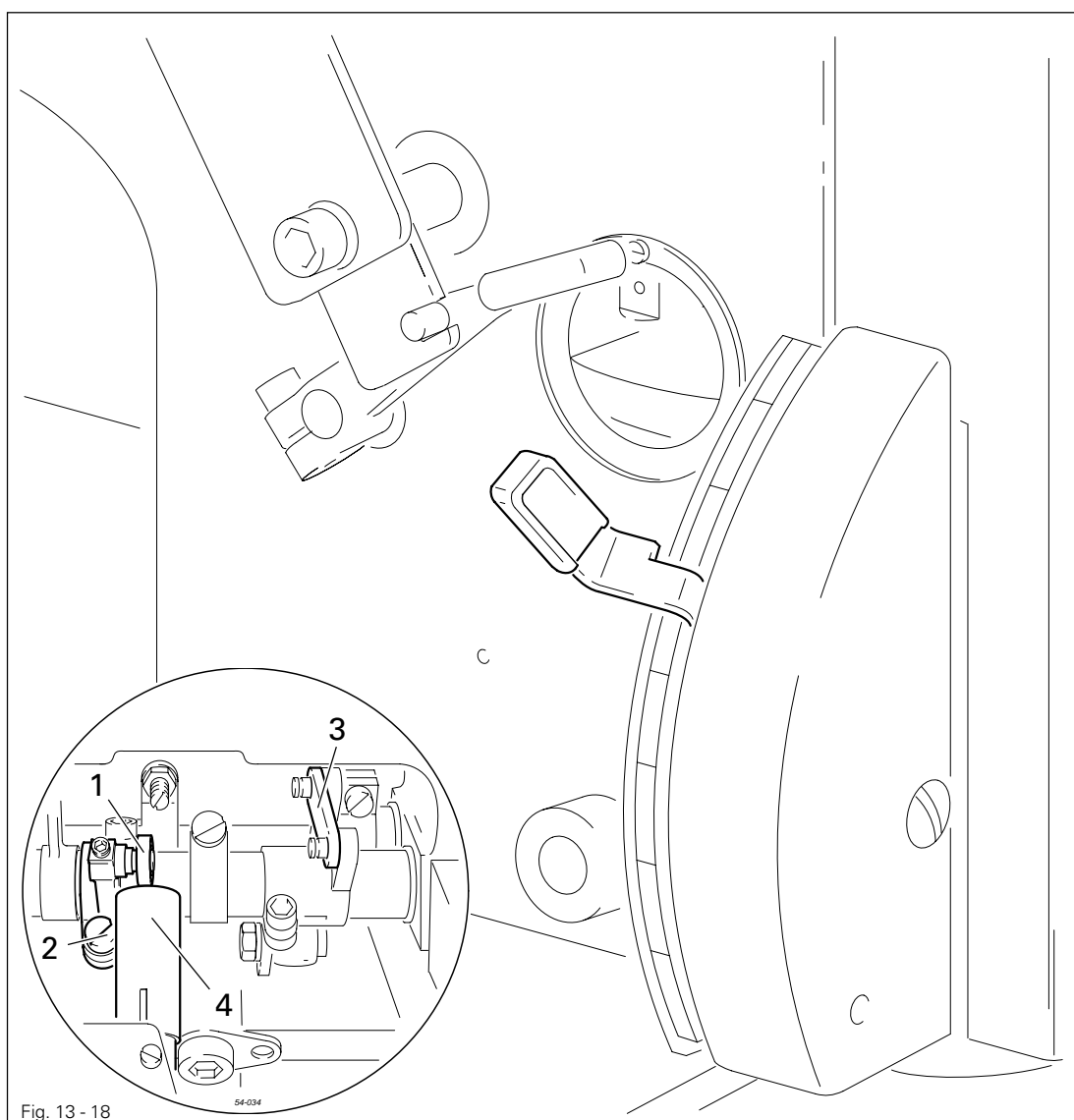


- Set the stitch length on lever 1 in accordance with **requirement 1**.
- Adjust screw 2 (nut 3) in accordance with **requirement 1**.
- Adjust screw 4 (nut 5) in accordance with **requirement 2**.

## 13.05.17 Basic setting of the differential adjustment device

### Requirement

With the fullness set at "0", the stitch length at "2.5" and the adjustment gauge 3 fitted, the roller 1 should be touching pressure sleeve 4.



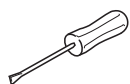
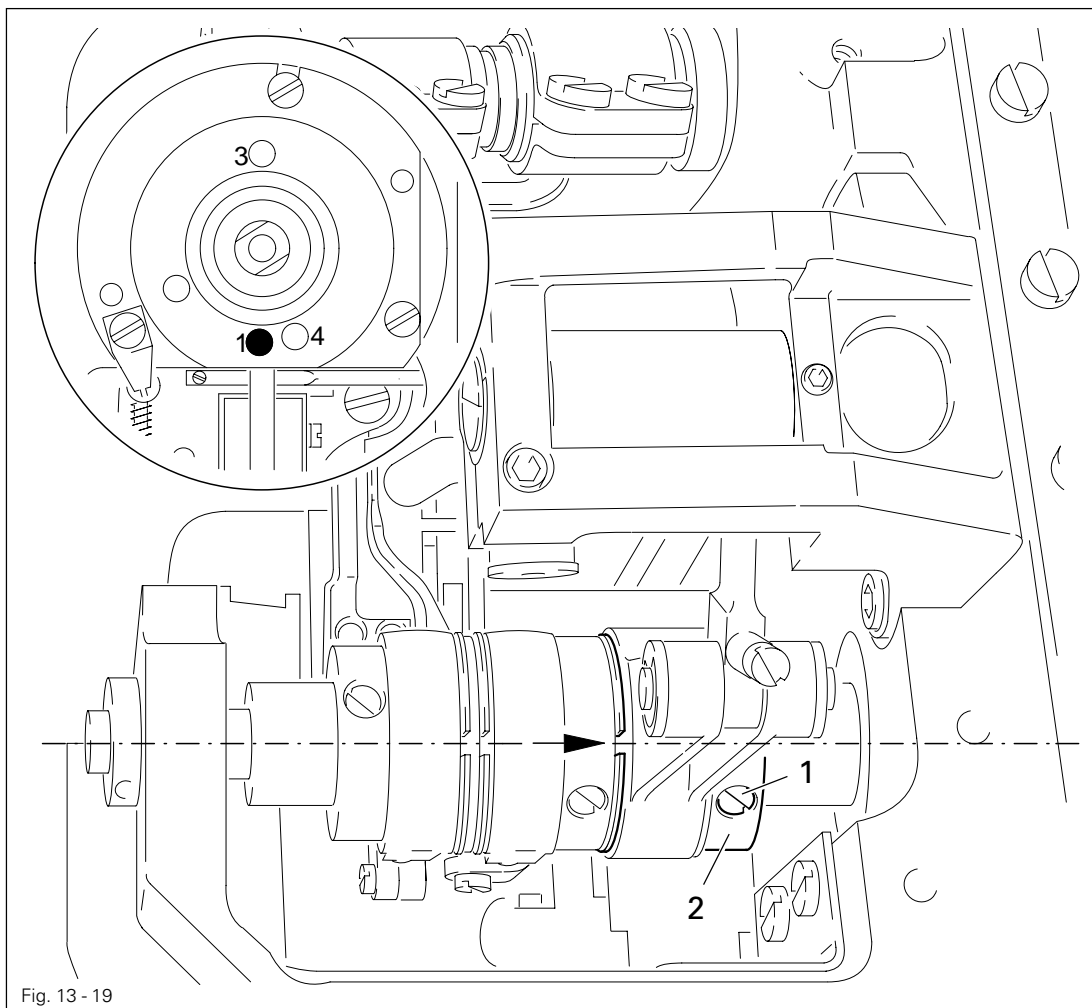
- Switch on the machine.
- Set the fullness at "0".
- Adjust roller 1 (screw 2) in accordance with the **requirement**.

## Adjustment

### 13.05.18 Looper avoiding motion

#### Requirement

With the needle bar at t.d.c. (hole 1) the cutout in eccentric 2 must be positioned vertically below the shaft centre line.



- Loosen screw 1.
- Set needle bar at t.d.c.
- Turn eccentric 2 according to Requirement.
- Tighten screws 1.



## 13.05.19 Looper height and looper angle (for the 3801-1/07)

**Requirements**

When the looper carrier 2 is vertical

1. there must be a clearance of **0.7 mm** between the highest point of the back of the looper and the needle plate support surface, and
2. looper 7 must touch adjustment gauge 9.

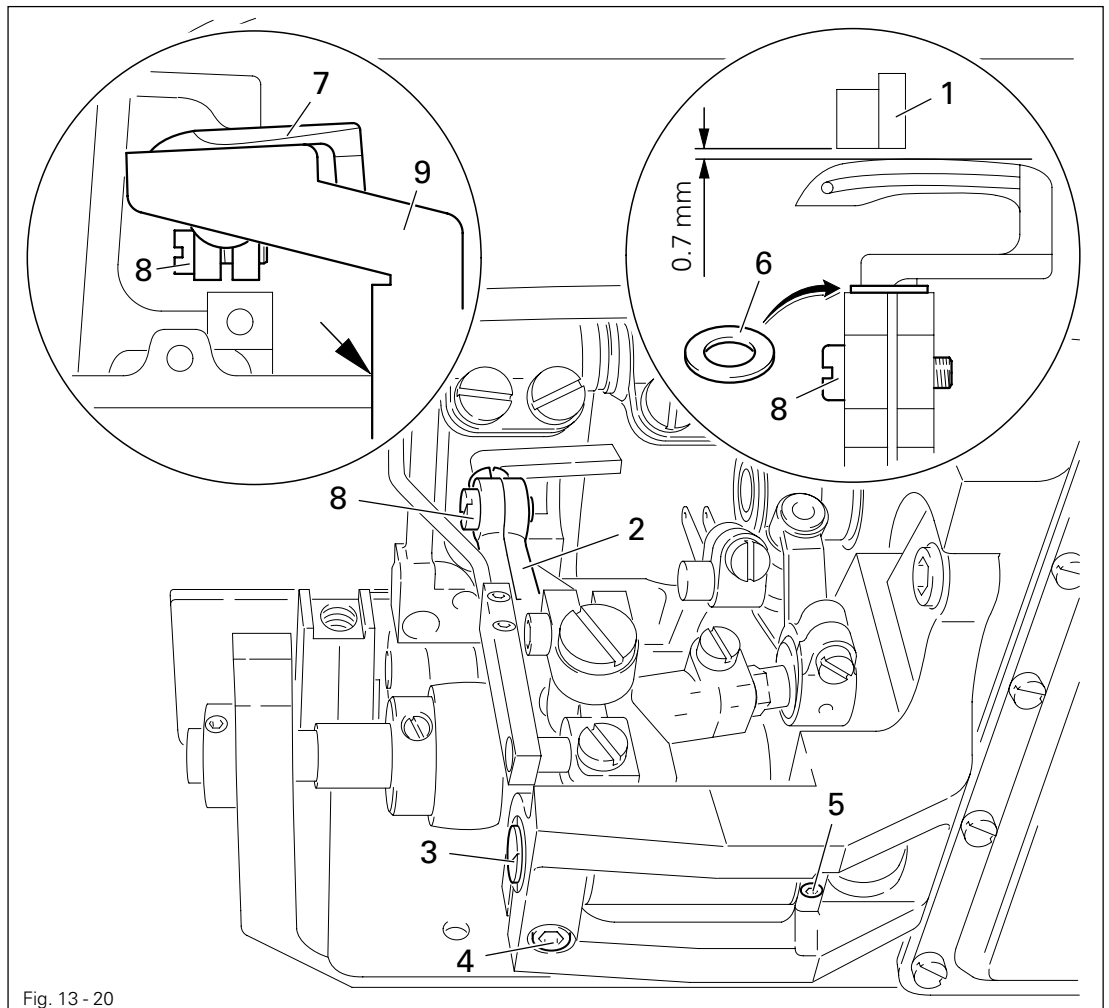
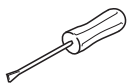


Fig. 13 - 20



- Remove needle plate and bottom feed dog.
- Lay the adjustment gauge (Part No. 61-111 642-19) onto the needle plate support.
- Position the looper carrier 2 vertically.
- Turn eccentric bearing pin 3 (screws 4 and 5) according to requirement 1.
- Check adjustment.
- If the required clearance is not achieved, replace the spacer 6. To do this, looper 7 (screw 8) must be dismantled.
- Lay looper adjustment gauge 9 (Part No. 61-111 643-06) on the left edge of the cover plate groove (see arrow) and slide against looper 7.
- Position looper 7 (screw 8) so that it touches looper adjustment gauge 9 (requirement 2).

Spacer	Part No.	Spacer	Part No.
0,3 mm	91-170 693-05	0,8 mm	91-169 615-05
0,5 mm	91-169 614-05	1,2 mm	91-170 694-05

## 13.05.20 Looper height and looper angle (for the 3801-1/071 and -10/071)

### Requirements

When the looper carrier 1 is vertical

1. there must be a clearance of **0.3 mm** between the highest point of the back of the looper and the bottom of the thread trapper 9, and
2. looper 6 must touch looper adjustment gauge 8.

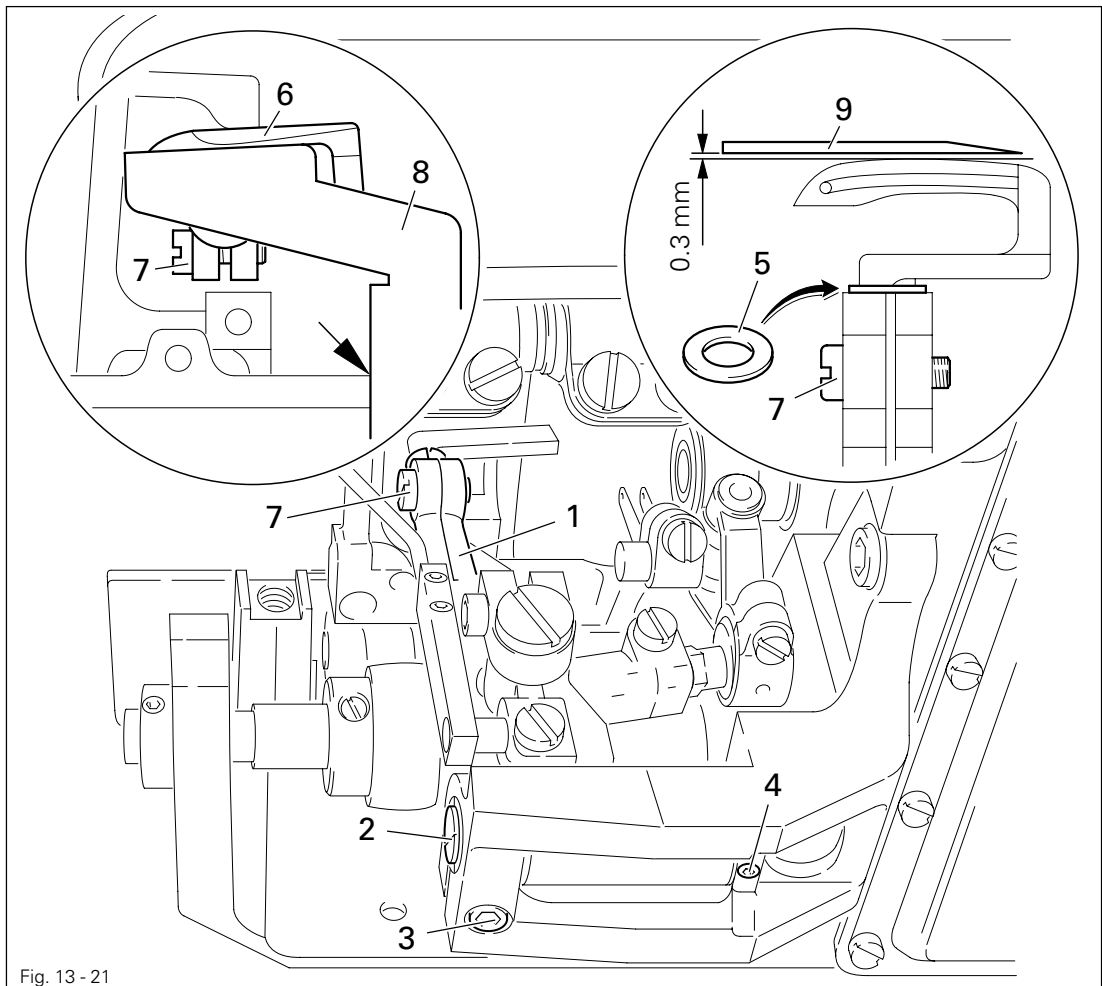
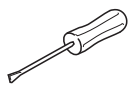


Fig. 13 - 21



- Position looper carrier 1 so that it is vertical.
- Disassemble needle plate and bottom feed dog.
- Turn eccentric bearing pin 2 (screws 3 and 4) according to **requirement 1**.
- Check adjustment.
- If the required clearance is not achieved, replace the spacer 5. To do this, looper 6 (screw 7) must be dismantled.
- Lay looper adjustment gauge 8 (Part No. 61-111 643-06) on the left edge of the cover plate groove (see arrow) and slide against looper 6.
- Position looper 6 (screw 7) so that it touches looper adjustment gauge 8 (**requirement 2**).

Spacer	Part No.	Spacer	Part No.
0,3 mm	91-170 693-05	0,8 mm	91-169 615-05
0,5 mm	91-169 614-05	1,2 mm	91-170 694-05

## 13.05.21 Distance of the looper from the needle (in sewing direction)

### Requirement

In the sewing direction the distance of the looper point from the needle should be approx. **0.1 mm**.

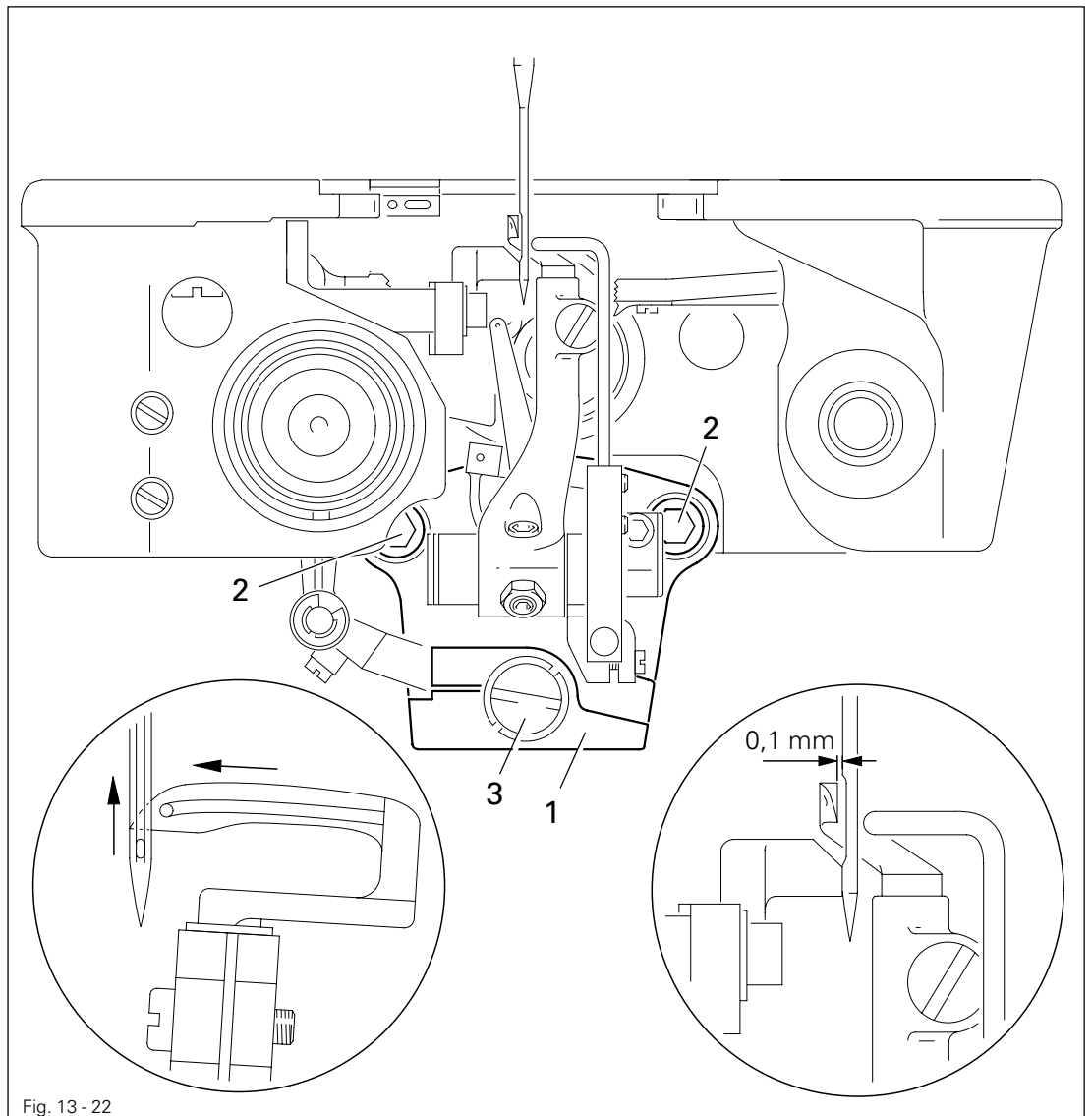
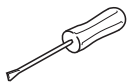


Fig. 13 - 22



- Turn the balance wheel until the looper point coming from the right has reached the left side of the needle.
- Align looper unit 1 (screws 2) in accordance with the requirement.



If it is not possible to achieve the distance of **0.1 mm**, a correction can be made on the eccentric bearing pin 3.

After this adjustment the looper height and looper angle must be checked, see Chapter 13.05.19 and 13.05.20 Looper height and Looper angle.

## Adjustment

### 13.05.22 Looper-to-needle clearance (crosswise to sewing direction)

#### Requirement

When the looper 1 is at its right point of reversal, there must be a clearance between the looper point crosswise to the sewing direction and the needle center of 3.6 mm.

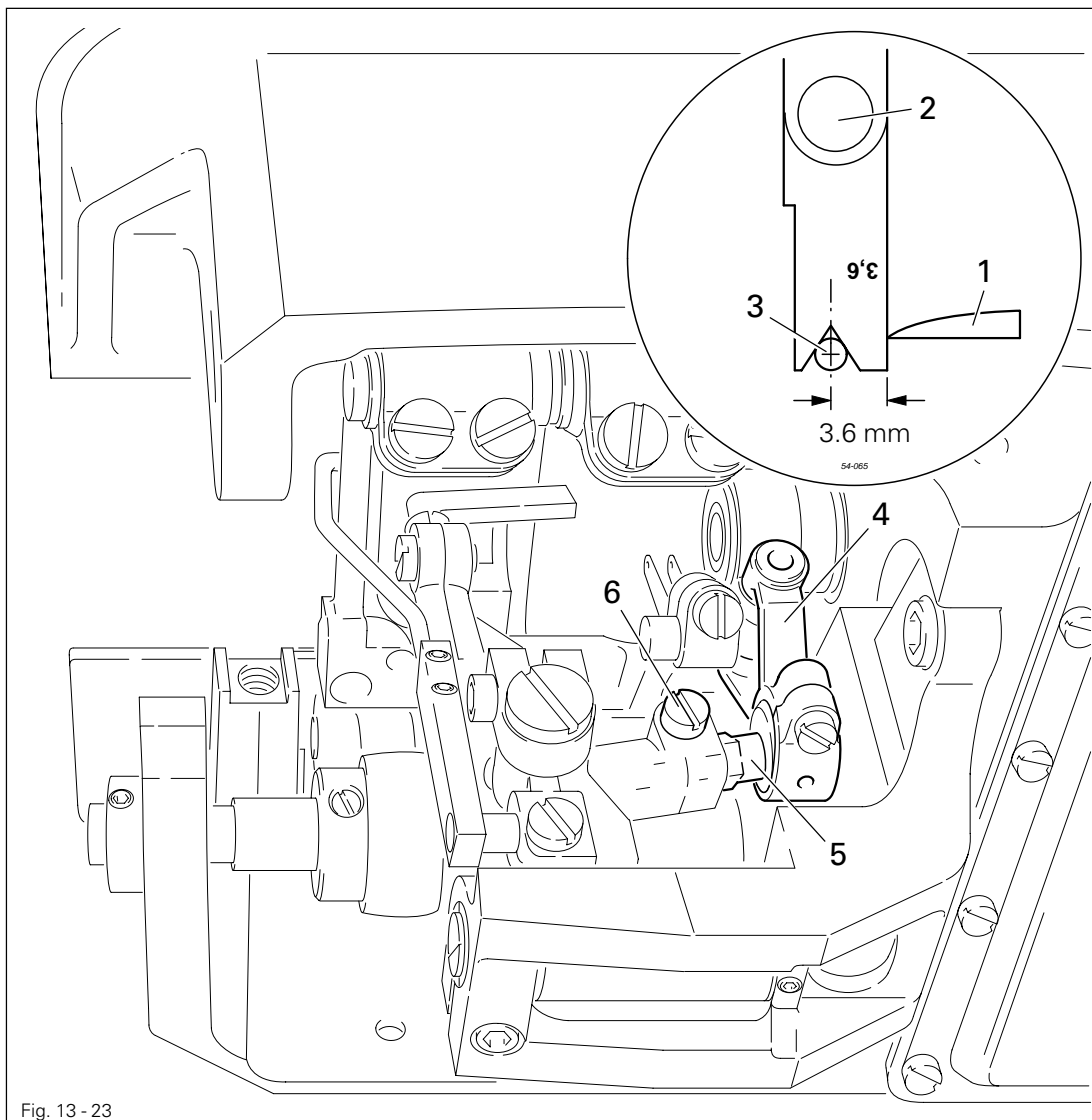
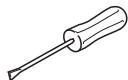


Fig. 13 - 23



- By turning the balance wheel bring the looper 1 to its right point of reversal.
- Place the "3.6" blade of looper gauge 2 (Order No. 61-111 643-06) against the needle 3 with its notch facing the direction of feed.
- Make sure that the driving link 4 is vertical and turn the ball pin 5 (screw 6) with the aid of an open-ended spanner (size 6), until the looper point 1 contacts the blade.

## 13.05.23 Looper motion

**Requirement**

The needle bar position must be the same:

- when the point of the looper, coming from the right hand side, is positioned to the left hand side of the needle and,
- when, after the handwheel has been turned back, the looper point is positioned a) to the right hand side of the needle.

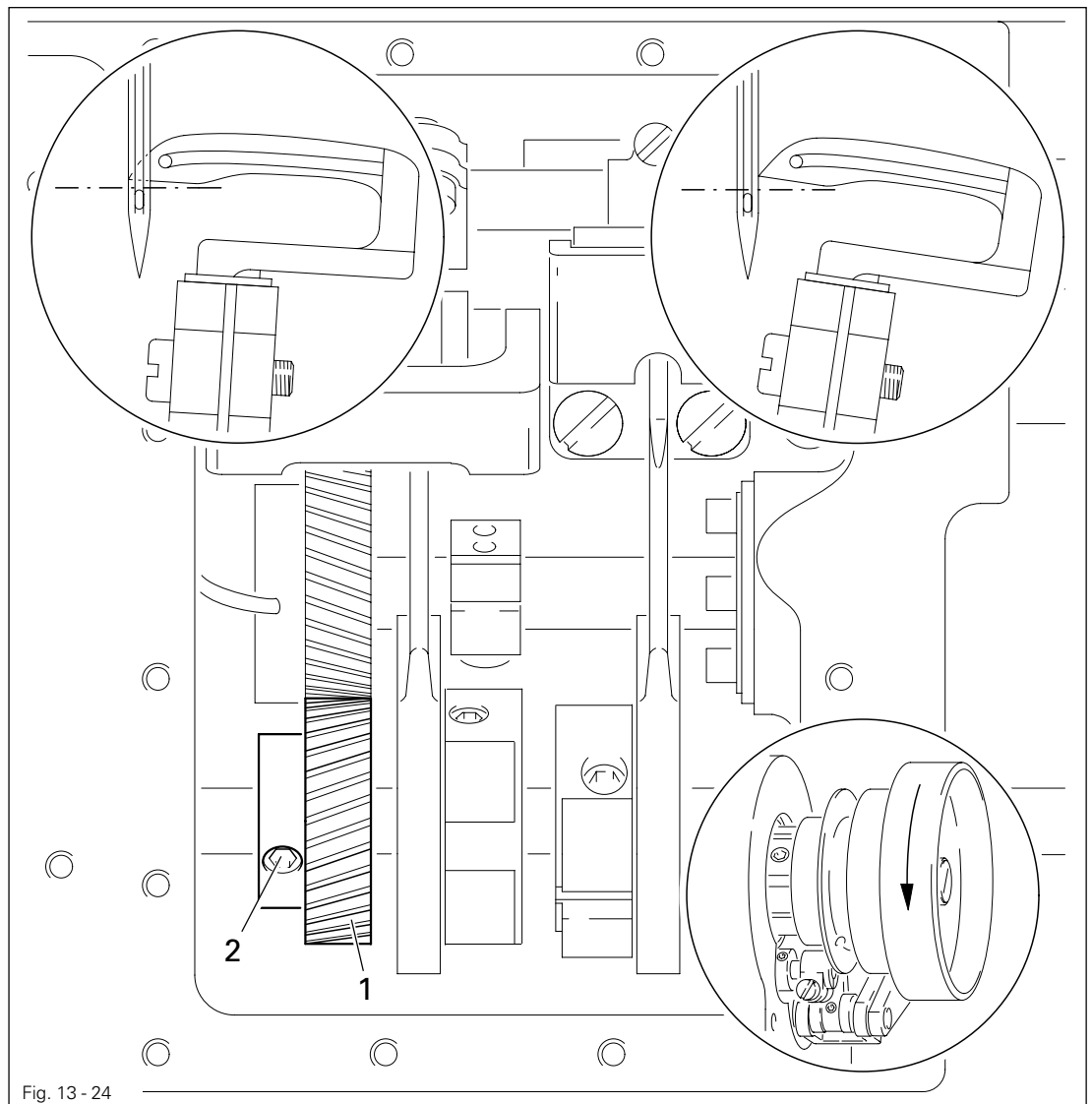
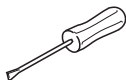


Fig. 13 - 24



- Insert a new 80 Nm needle.
- Turn the handwheel until the point of the looper, coming from the right hand side, is on the left hand side of the needle.
- In this position, fasten the screw clamp (Part No. 08-880 137-00) onto the needle bar so that the upwards movement of the needle bar is blocked.
- Turn the needle bar back until the screw clamp is once again touching it.
- Check **requirement**.
- If necessary, remove the screw clamp and turn the cog 1 (screws 2) according to the **requirement**.

## 13.05.24 Final adjustment of the needle height

### Requirement

When the point of the looper advancing from the right reaches the left side of the needle, the top edge of the needle eye must be 1.0 - 1.2 mm below the bottom edge of the looper.

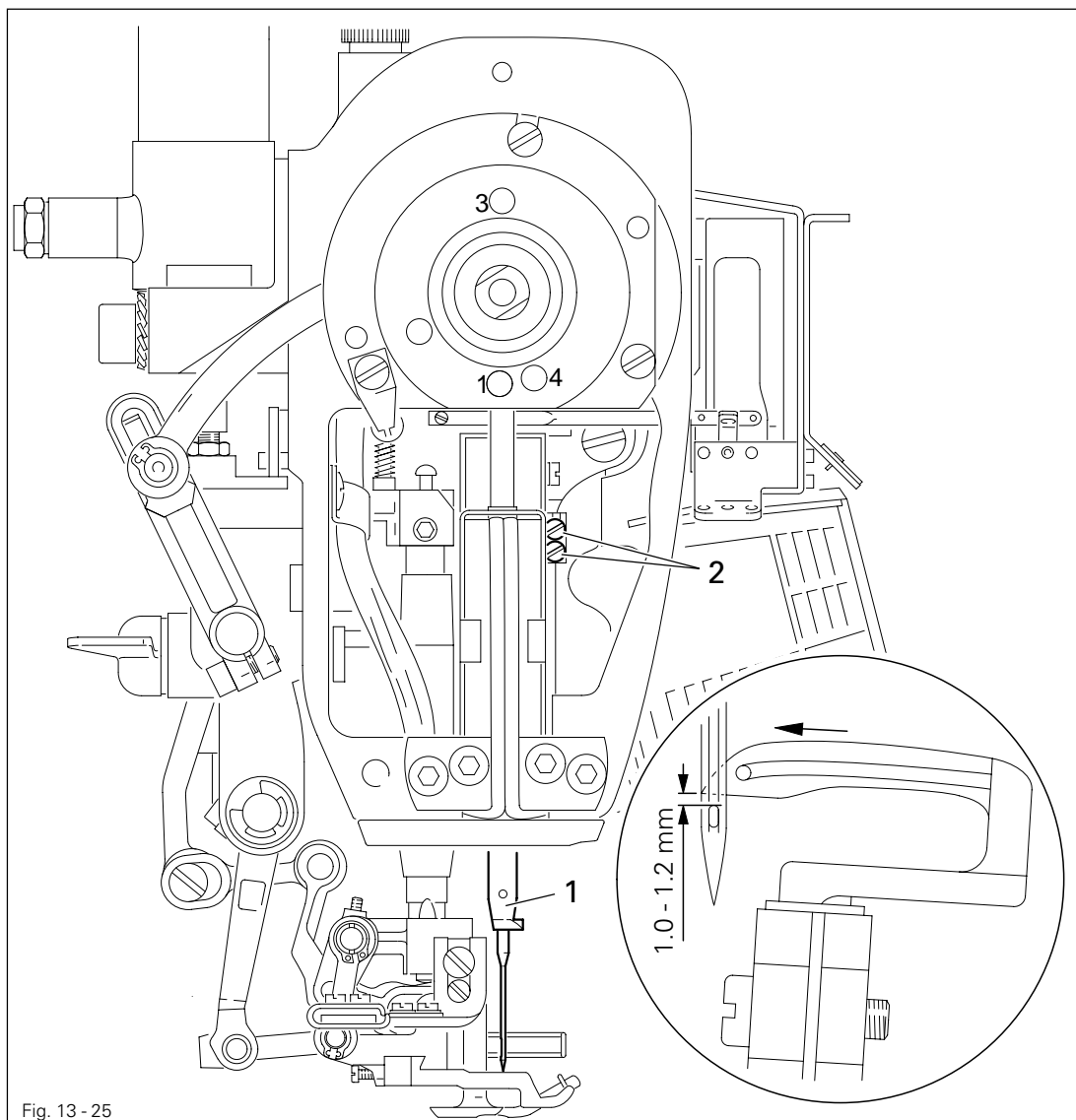
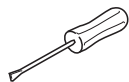


Fig. 13 - 25



- Turn the handwheel until the point of the looper, coming from the right hand side, reaches the left hand side of the needle.
- Move the needle bar 1 (screws 2) without turning it according to the **requirement**.
- Check the distance of the looper from the needle in the direction of sewing in accordance with **Chapter 13.05.21 Distance of the looper from the needle in sewing direction**, and adjust if necessary.

## 13.05.25 Height of rear needle guard

**Requirement**

When the needle bar is at bottom dead center (pin in hole 3), the vertical surface of the needle guard 1 must cover about  $\frac{2}{3}$  of the needle eye.

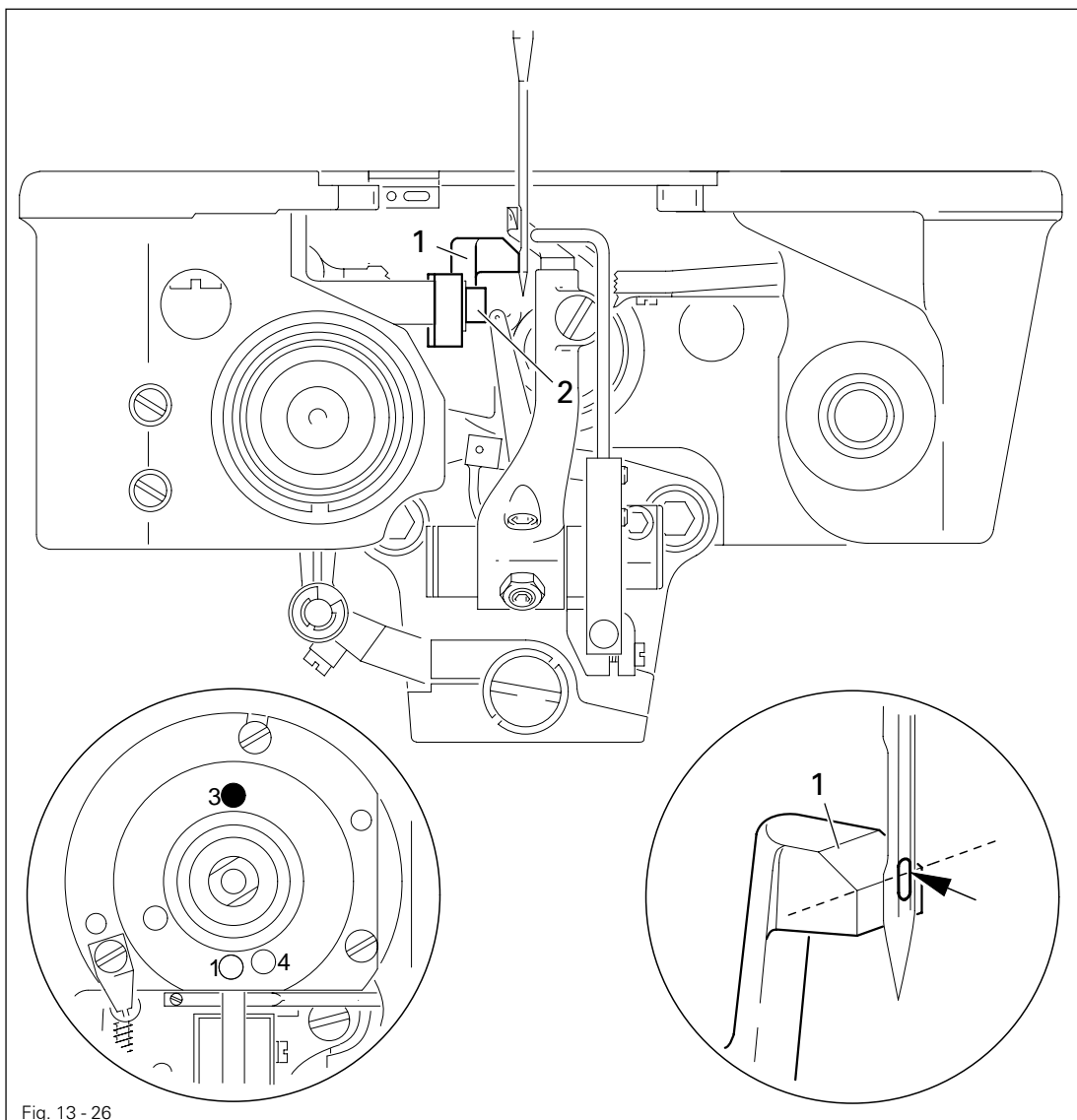
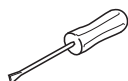


Fig. 13 - 26



- Bring the needle bar to BDC.
- Adjust needle guard 1 (screw 2) according to the requirement.

## 13.05.26 Clearance between the rear needle guard and the needle

### Requirement

When the point of the looper, coming from the right hand side, has reached the right hand side of the needle, the needle guard **3** must still be slightly touching the needle.

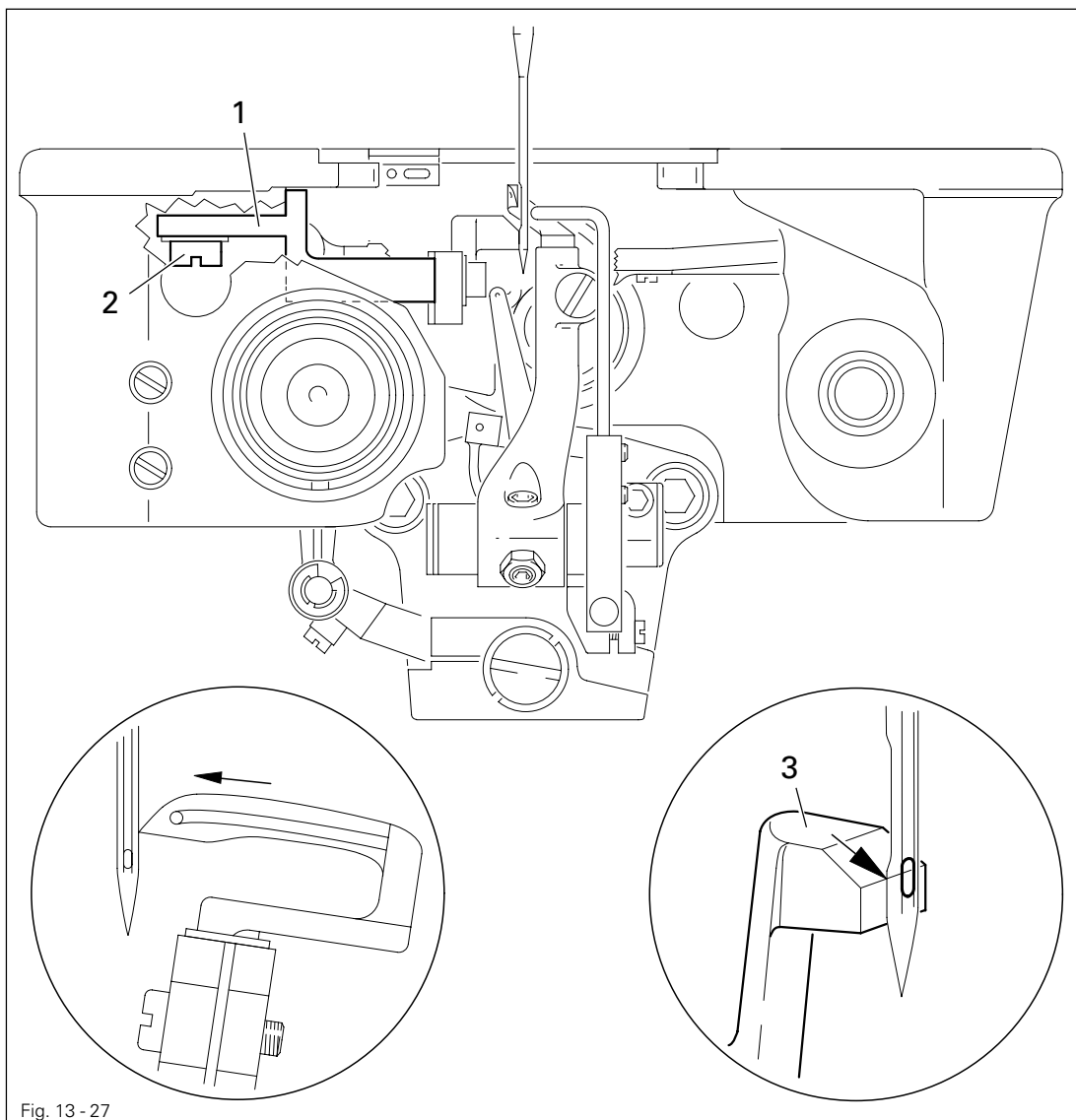
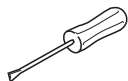


Fig. 13 - 27



- Turn the handwheel until the point of the looper has reached the right hand side of the needle.
- Move the carrier **1** (screw **2**) according to the **requirement**.



The needle guard **3** must not press against the needle!



## 13.05.27 The looper-eccentric guard

### Requirement

The eccentric must not at any stage of its motion touch the guard 1.

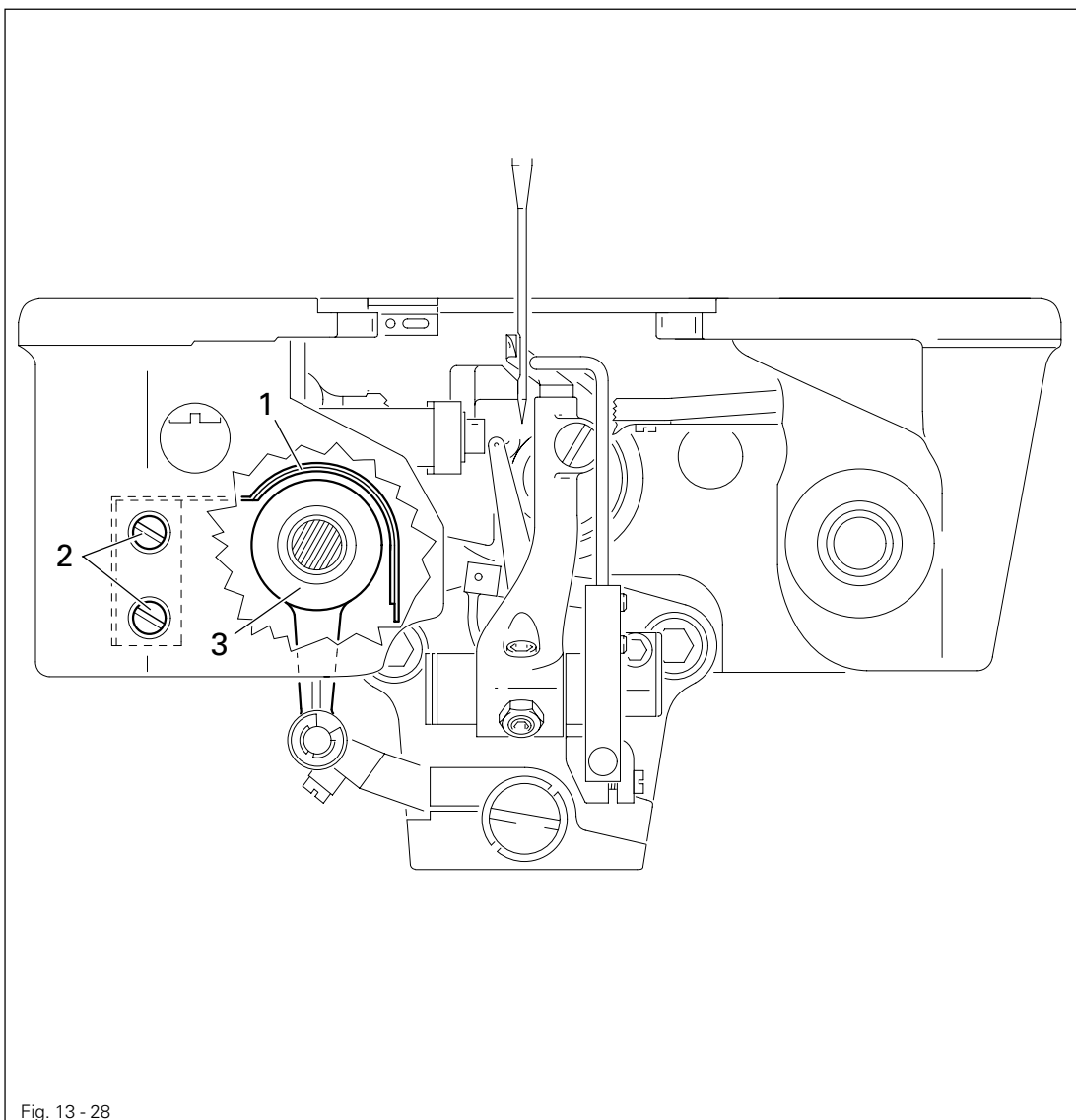


Fig. 13 - 28



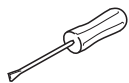
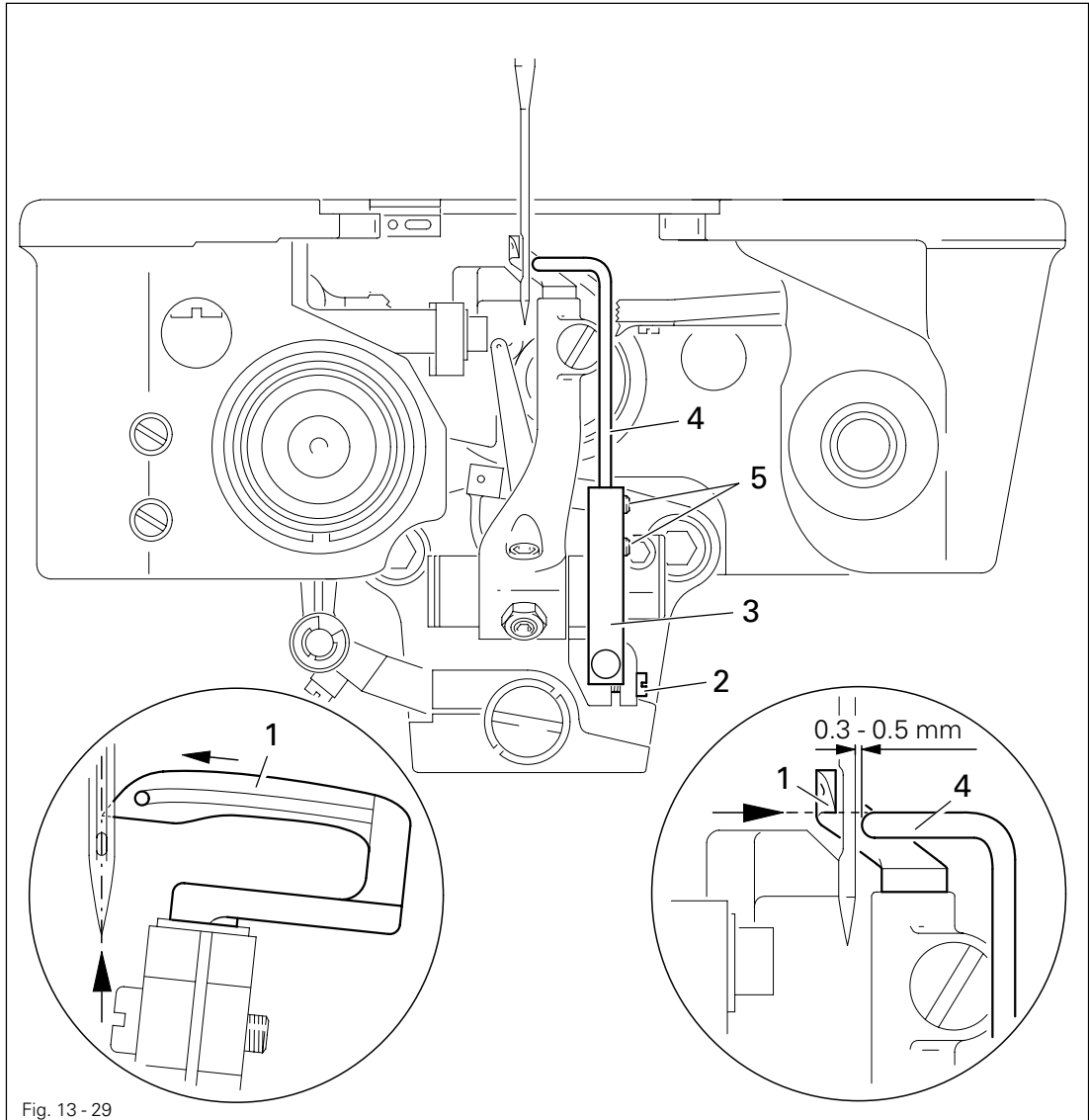
- Align the guard 1 (screws 2 which can be reached through the holes) in accordance with the requirement.

## 13.05.28 Position of the front needle guard

### Requirement

When the point of the looper 1, coming from the right hand side, is positioned at the middle of the needle, the needle guard finger 4

1. must have a lateral clearance of **0.3 - 0.5 mm** to the needle,
2. must be parallel to the looper blade and
3. must have its upper edge positioned at the same height as the point of the looper 1.

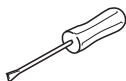
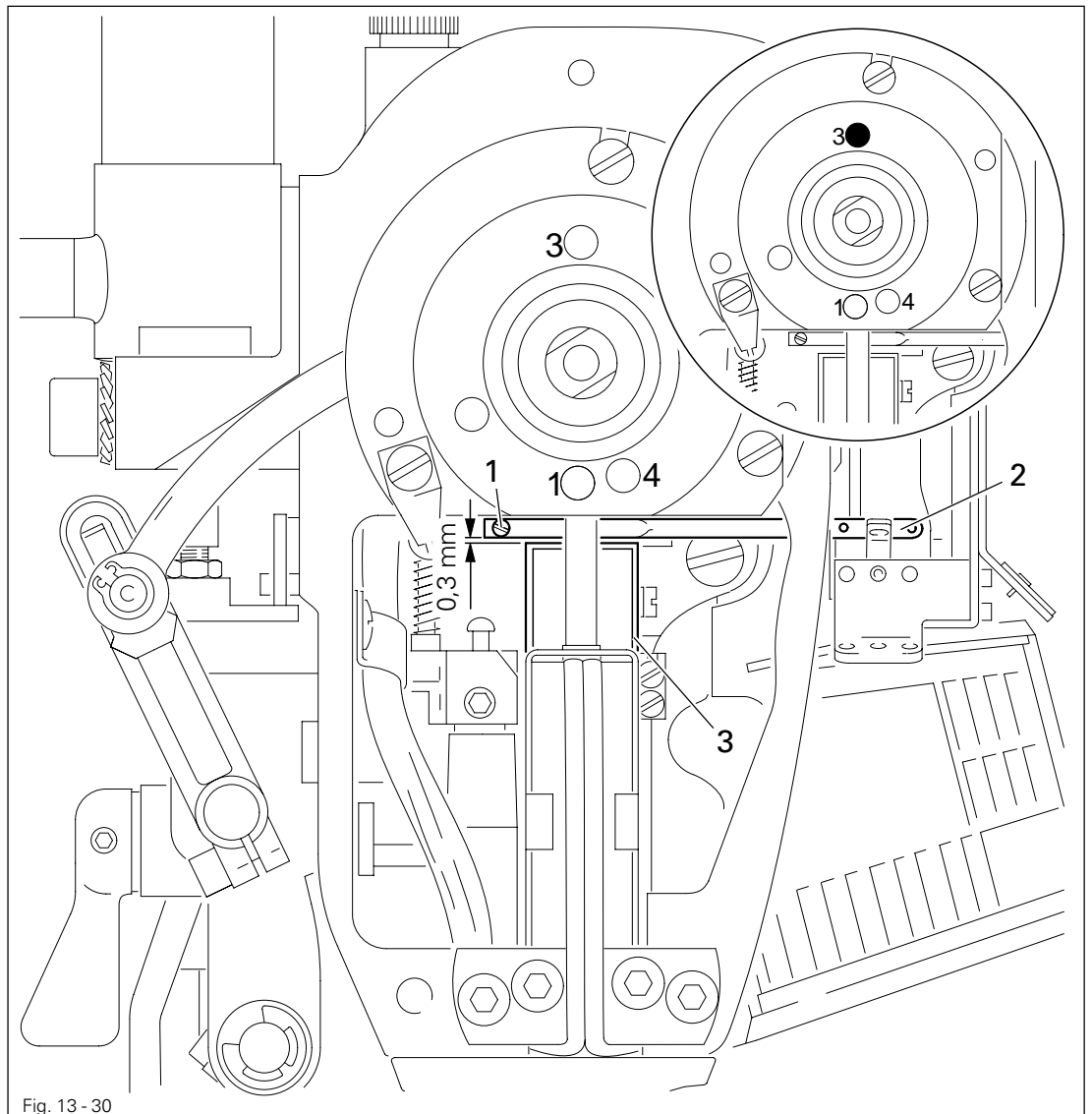


- Turn the handwheel until looper 1 is at its left reversal point.
- Loosen screws 2.
- Move needle guard carrier 3 so that in this position the needle guard finger 4 does not press against looper 1.
- Turn screws 2 slightly.
- Turn the handwheel until the point of the looper 1, coming from the right hand side, has reached the middle of the needle.
- Turn needle guard carrier 3 according to **requirement 1**.
- Align needle guard finger 4 (screws 5) according to **requirement 2 and 3**.

## 13.05.29 Needle thread puller

**Requirement**

1. When the needle bar is at its BDC (hole 3), the clearance between the needle thread puller **2** and needle bar frame **3** must be approx. **0.3 mm**.
2. The needle thread puller **2** must be able to move freely in the middle of the face slot and not strike against anything at its top and bottom reversal points.



- Turn handwheel until screw **1** is easily accessible and loosen screw slightly.
- Move the needle bar to its BDC.
- Move needle thread puller **2** according to **requirement 1**.
- Tighten screw **1** according to **requirement 2**.

## 13.05.30 Basic setting of the needle thread regulator and the thread guide

### Requirement

1. With the needle bar at its BDC (hole 3), the eye of the needle thread regulator 1 must be at the same height as the hole in the needle thread puller 4.
2. The thread guide 2 must be vertical and fastened in the middle of the elongated hole.

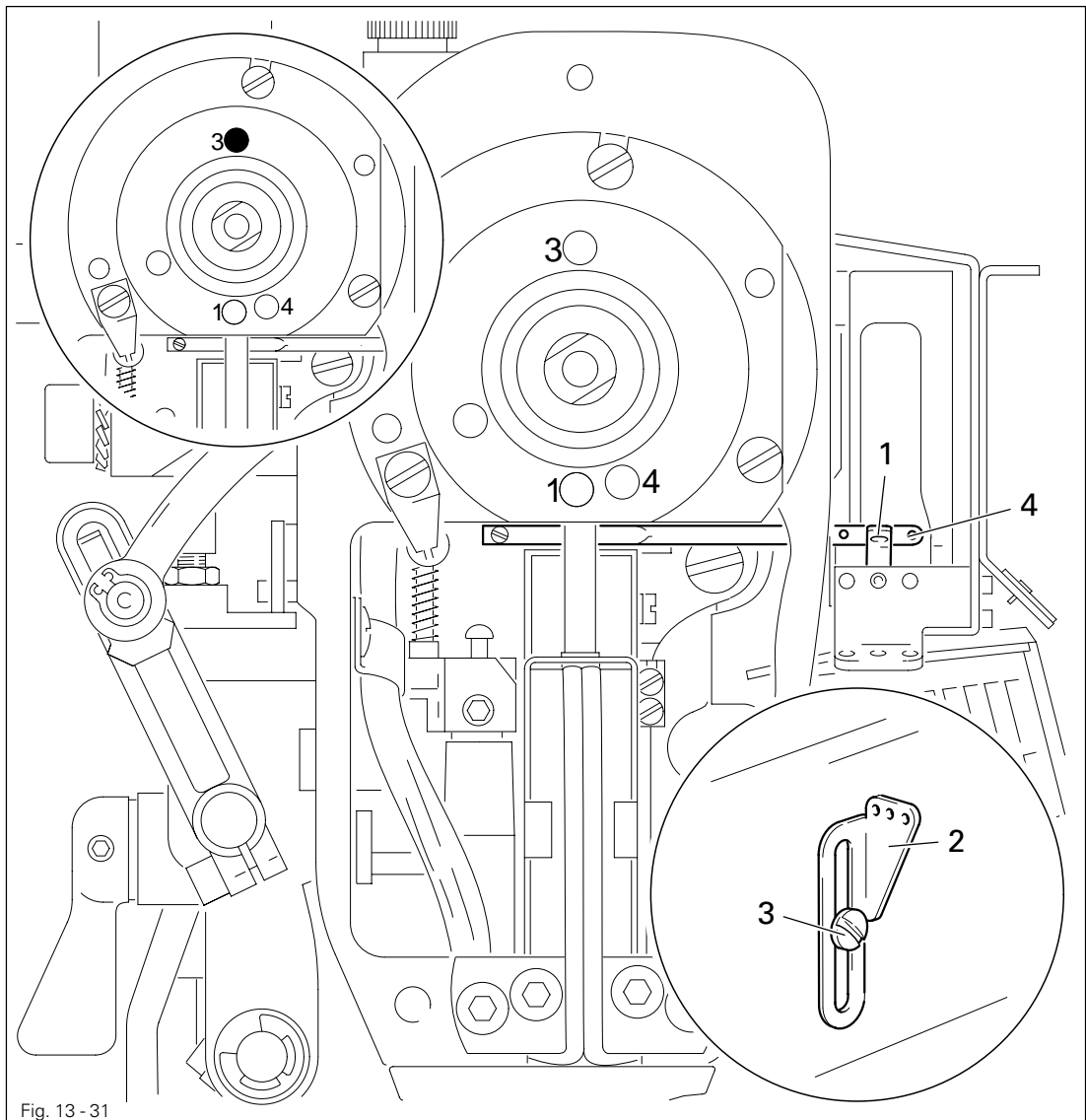
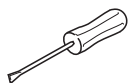


Fig. 13 - 31



- Bring the needle bar to its BDC.
- After you have loosened the screw, move the needle thread regulator 1 according to **requirement 1**.
- Tighten the screw of the needle thread regulator.
- Align the thread guide 2 (screw 3) according to **requirement 2**.



Depending on the workpiece and the type of thread, it may be necessary to deviate from the basic setting.

## 13.05.31 Looper thread regulators

**Requirement**

1. The front edge of the thread regulator **1** must be at a distance of **29 mm** to the needle plate cutout, and be centered with respect to the fork of the looper thread puller **5**.
2. The front edges of thread regulators **3** and **1** must be at a distance of **8 mm** to each other.

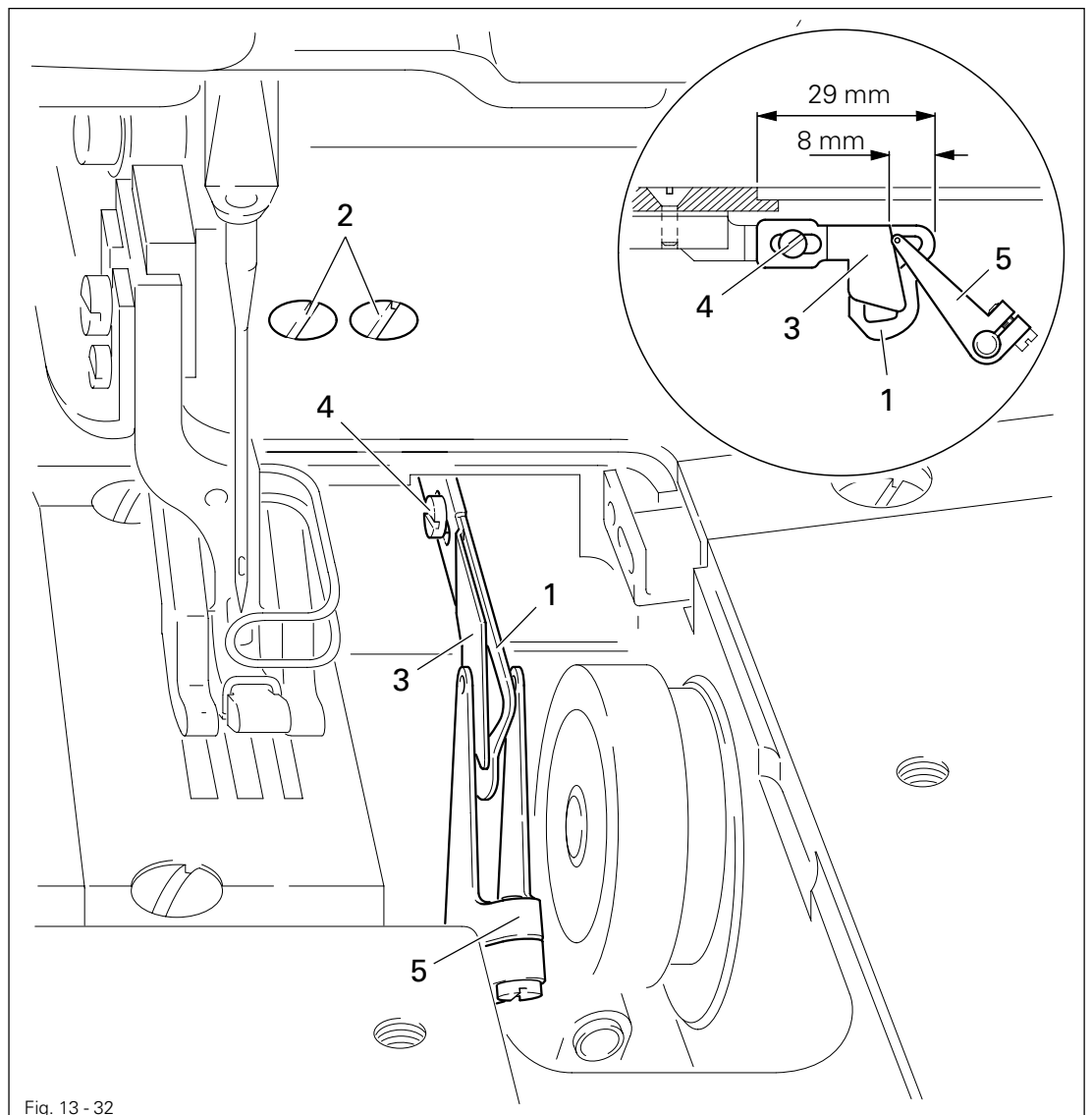
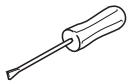


Fig. 13 - 32



- Move thread regulator **1** (screws **2**) according to **requirement 1**.
- Move thread regulator **3** (screw **4**) according to **requirement 2**.



Depending on the workpiece and the type of thread, it may be necessary to deviate from the basic setting.

## 13.05.32 Looper thread puller

### Requirement

With the needle bar at its TDC (hole 1), both eyes of the looper thread puller 1 must be positioned at the front edge of the thread regulator 4.

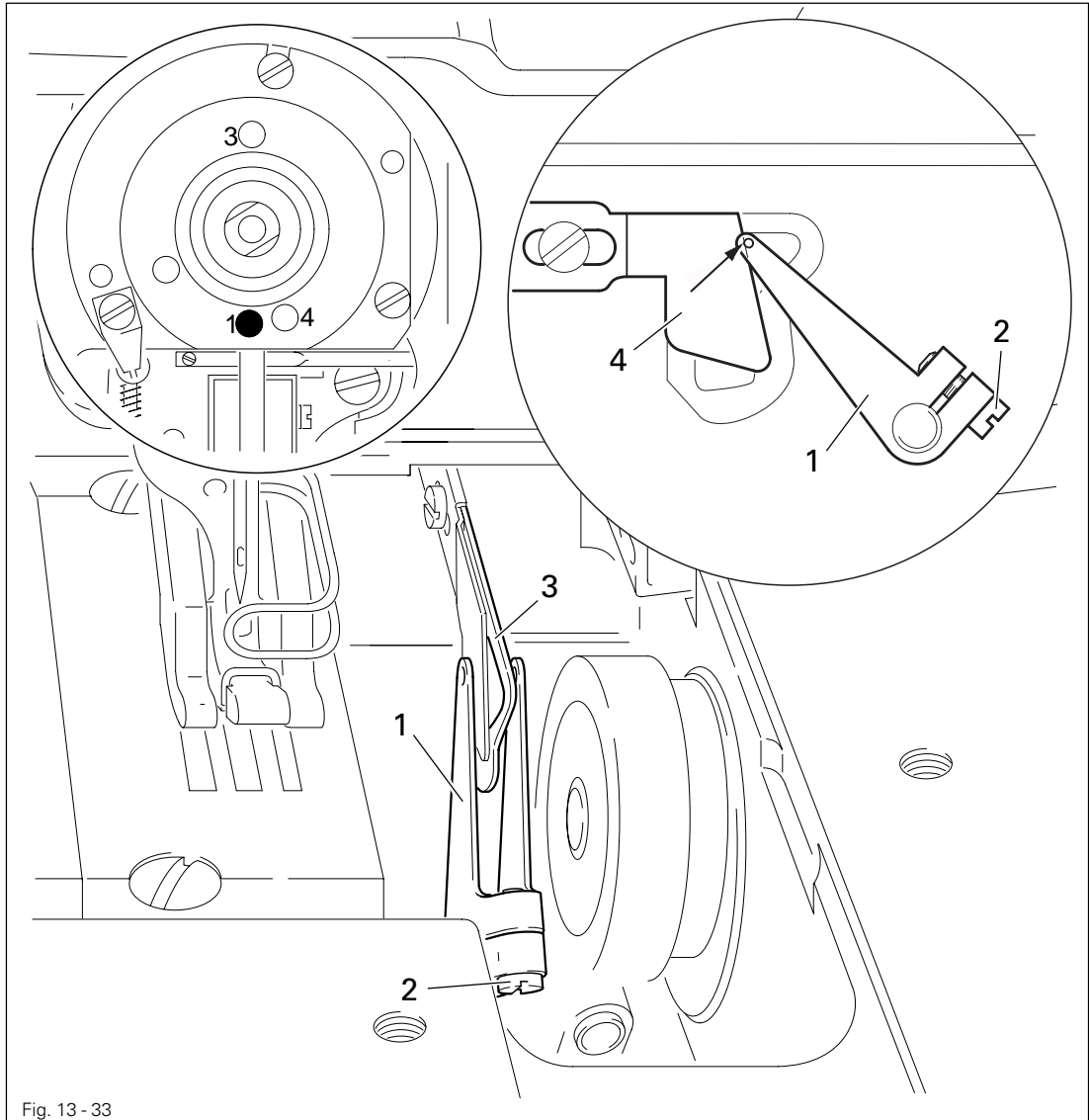
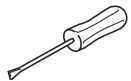


Fig. 13 - 33



- Bring the needle bar to its TDC.
- Turn looper thread puller 1 (screw 2) according to the **requirement**. In doing so, make sure that the fork of the looper thread puller 1 is centered with respect to the thread regulator 3.



Depending on the workpiece and the type of thread, it may be necessary to deviate from the basic setting.

## 13.05.33 Top feed and presser foot pressure

### Requirement

The pressure exerted by the top feed and the presser foot must be adjusted so that the workpiece is transported optimally at any sewing speed.

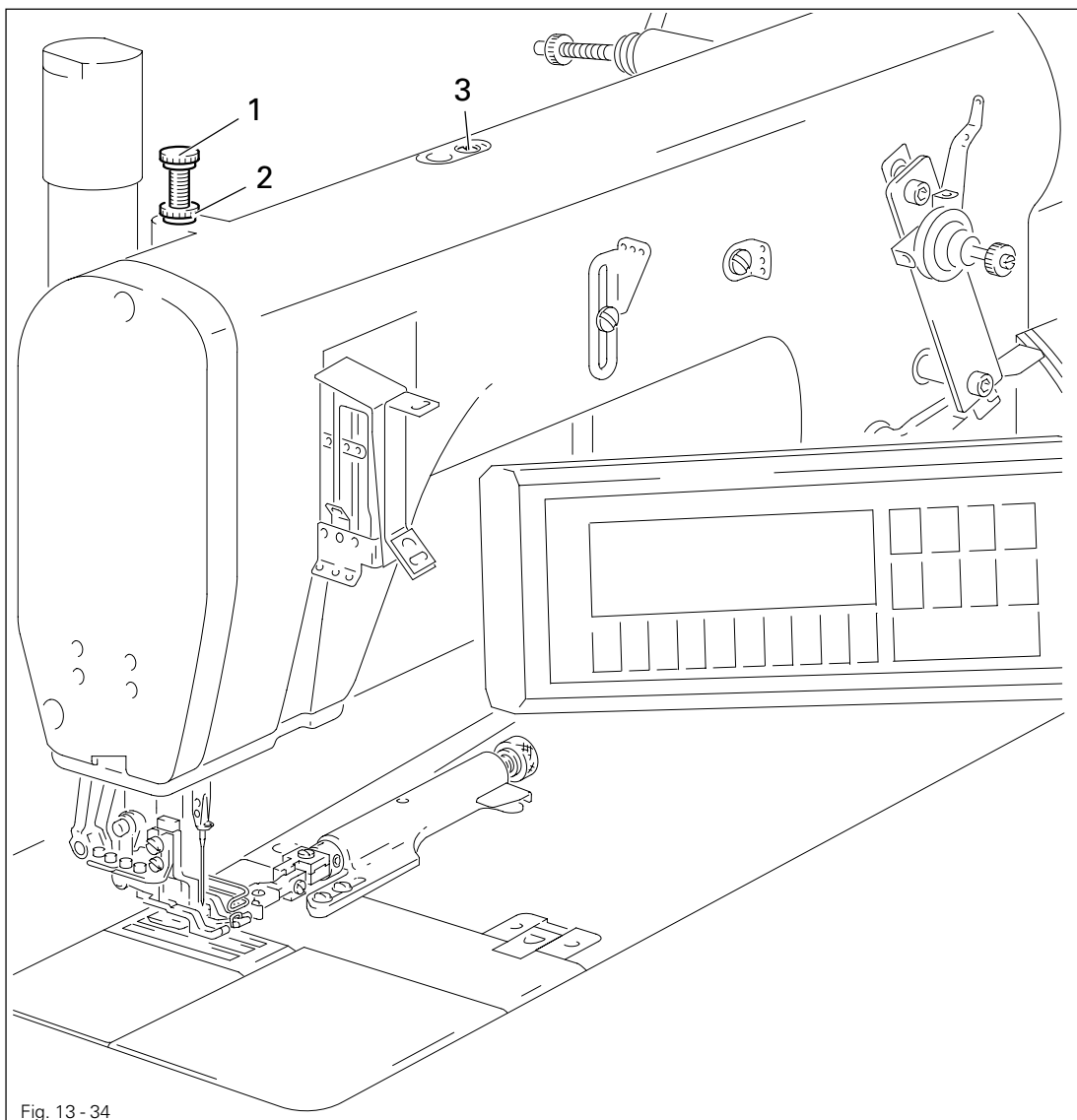
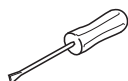


Fig. 13 - 34



- Adjust presser foot pressure according to the **requirement** with screw 1 (nut 2).
- Adjust top feed pressure according to **requirement** with screw 3.

# Adjustment

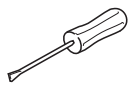
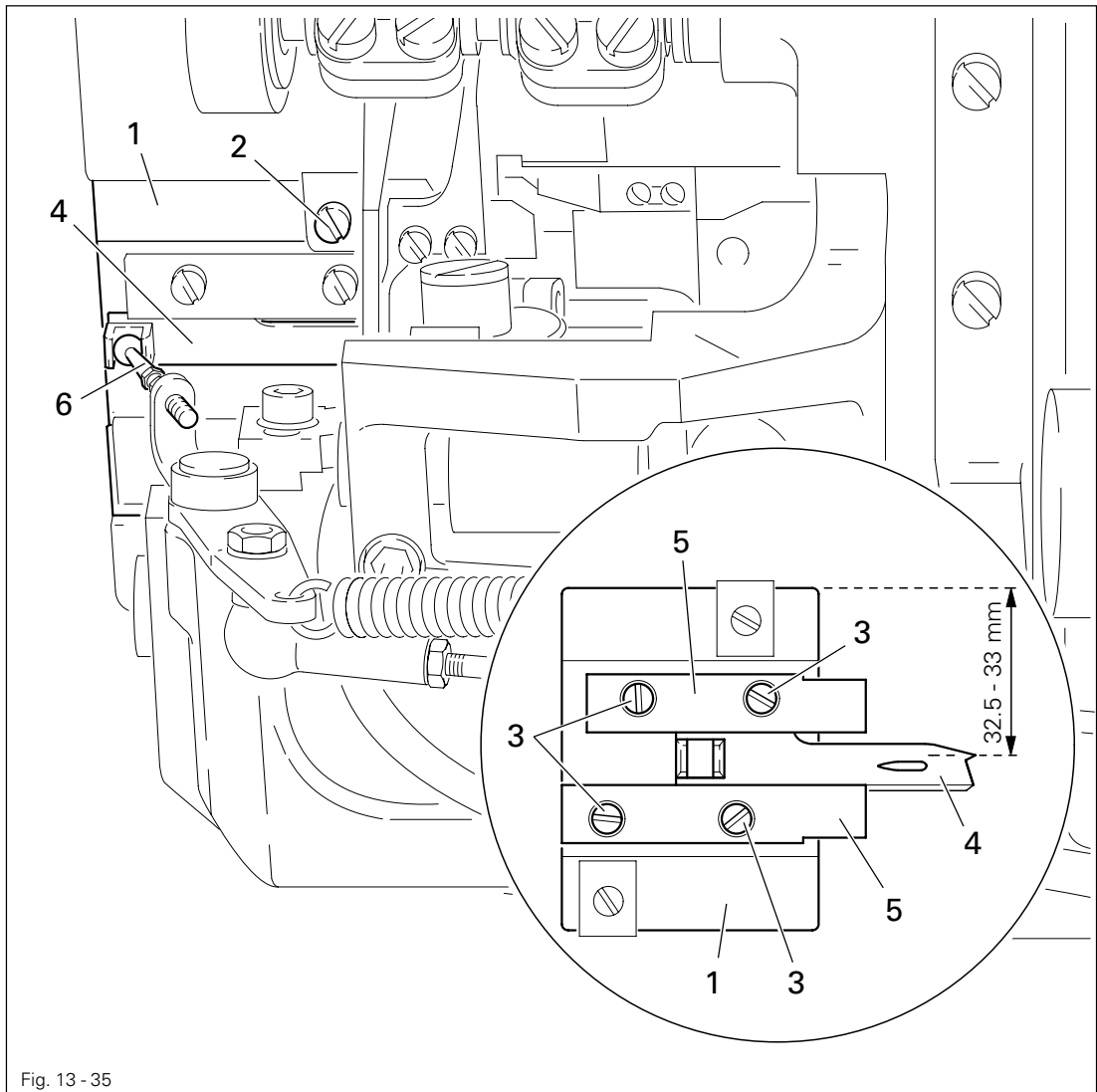
## 13.06 Adjusting the thread trimmer

Only on the PFAFF 3801-1/071 and -10/071.

### 13.06.01 Preadjusting the thread catcher

#### Requirement

1. The point of the thread catcher **4** must be at a distance of **32.5 - 33 mm** to the front edge of the mounting plate **1**.
2. The guides **5** must be parallel to the mounting plate **1**.
3. The thread catcher **4** must move freely and with minimal play.



- Remove mounting plate **1** (screws **2**).
- Loosen screws **3**.
- Move thread catcher **4** according to **requirement 1**.
- Align guides **5** according to **requirements 2** and **3**, and tighten screws **3**.
- Screw on mounting plate **1**, ensuring that the ball pin **6** engages in the drive dog of the thread catcher **4**.

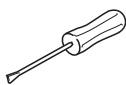
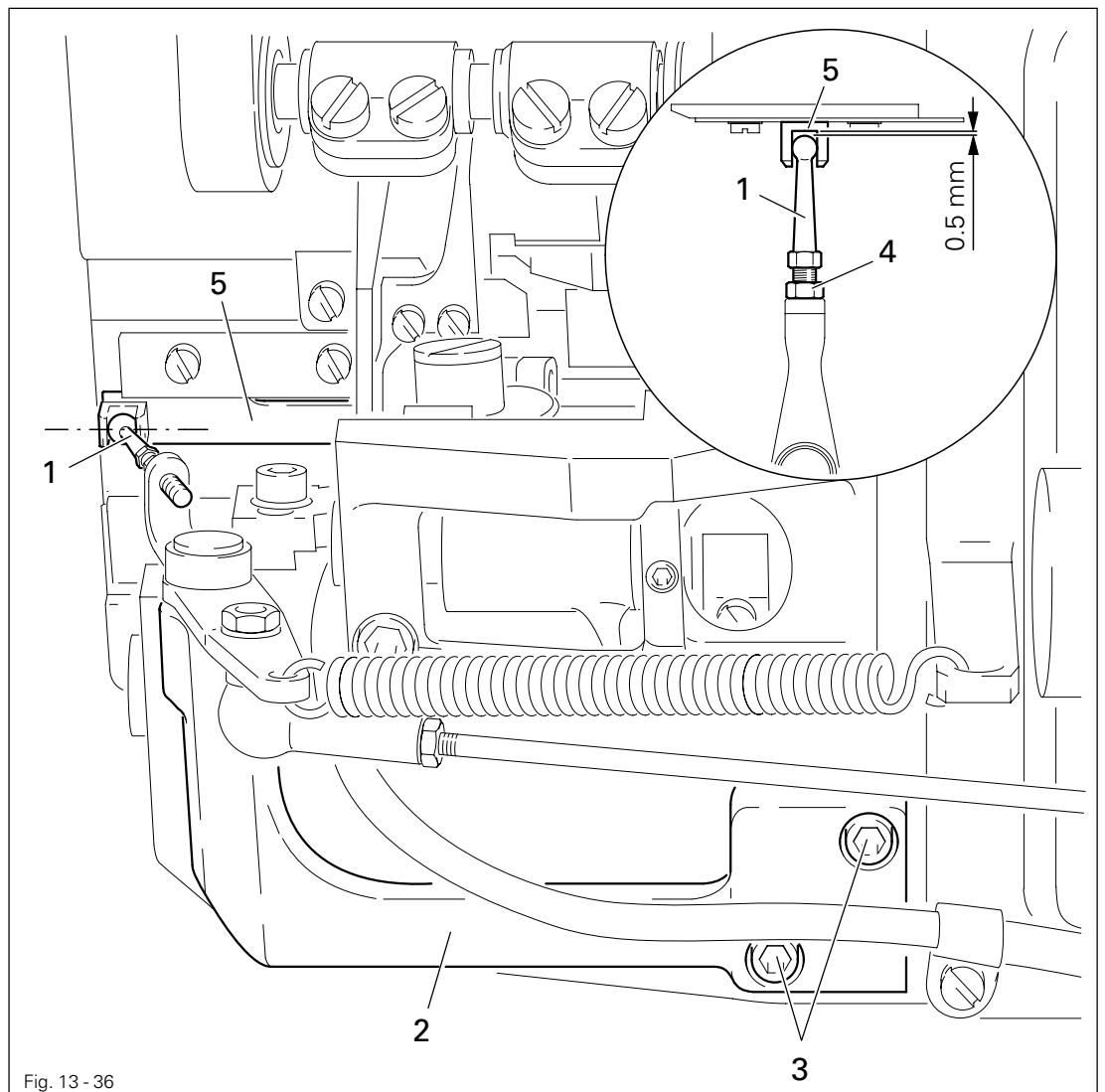


## 13.06.02 Ball pin position

**Requirement**

When it is positioned vertically, the ball pin 1 must

1. be centered with respect to the drive dog 5, and
2. have a distance of **0.5 mm** to the bottom of the drive dog 5.



- Position the ball pin 1 vertically.
- Move carrier 2 (screws 3) according to requirement 1.
- Turn ball pin 1 (nut 4) according to requirement 2.

## 13.06.03 Thread catcher position with respect to needle

### Requirement

With the thread trimmer in its resting position, the point of the thread catcher **4** must be at a distance of **7 mm** to the center of the needle.

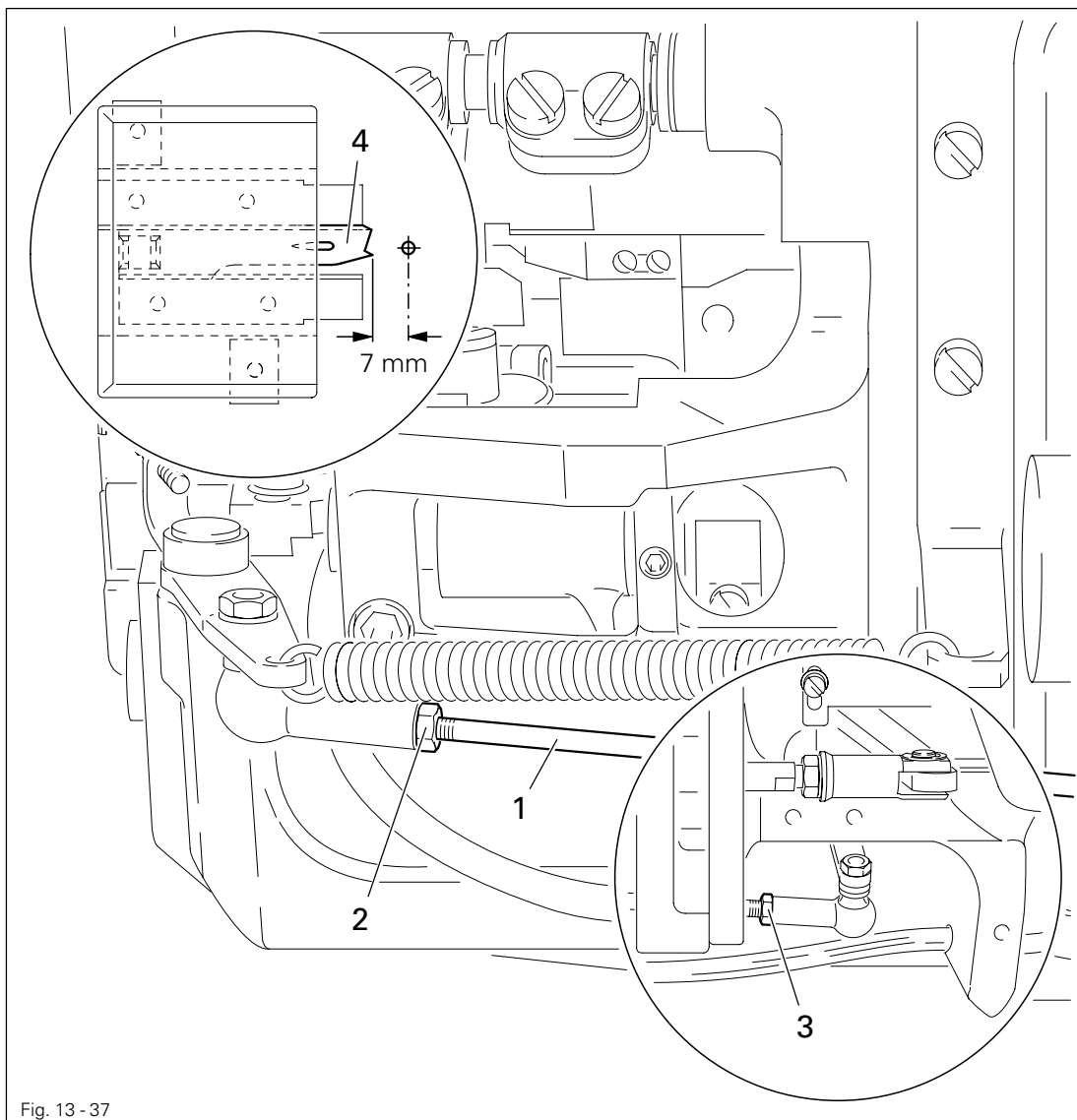
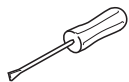


Fig. 13-37

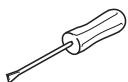
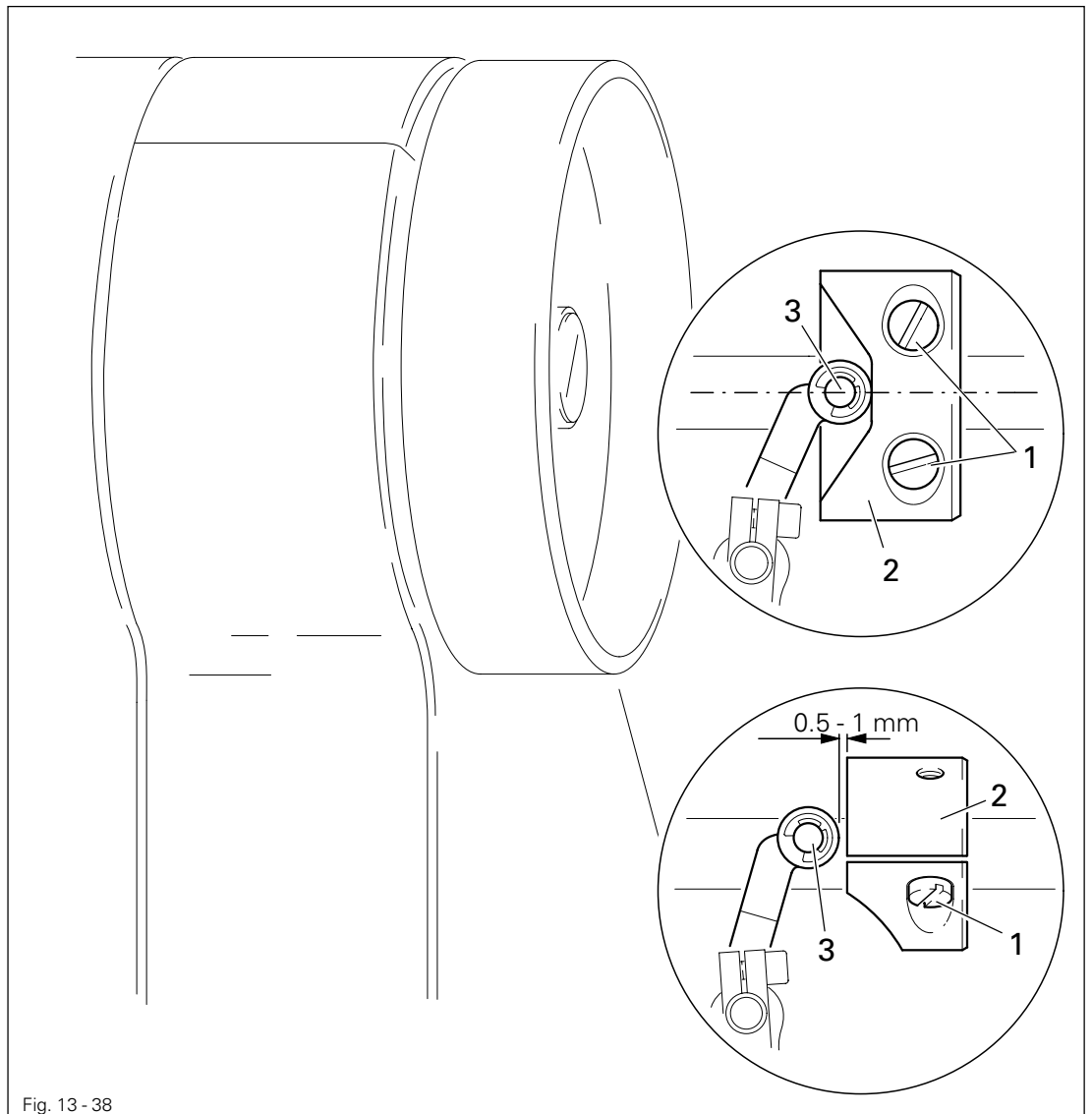


- Bring the thread trimmer into its resting position.
- Turn connecting rod **1** (nut **2**, nut **3** with left-hand thread) according to the **requirement**.

## 13.06.04 Thread catcher guard

**Requirement**

1. When the thread trimmer is in the basic position, there must be a distance of **0.5 - 1 mm** between the guard cam **2** and the guide roller **3**.
2. When the thread trimmer is in the cutting position, the guide roller **3** must be centered in the recess of the guard cam **2**.



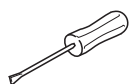
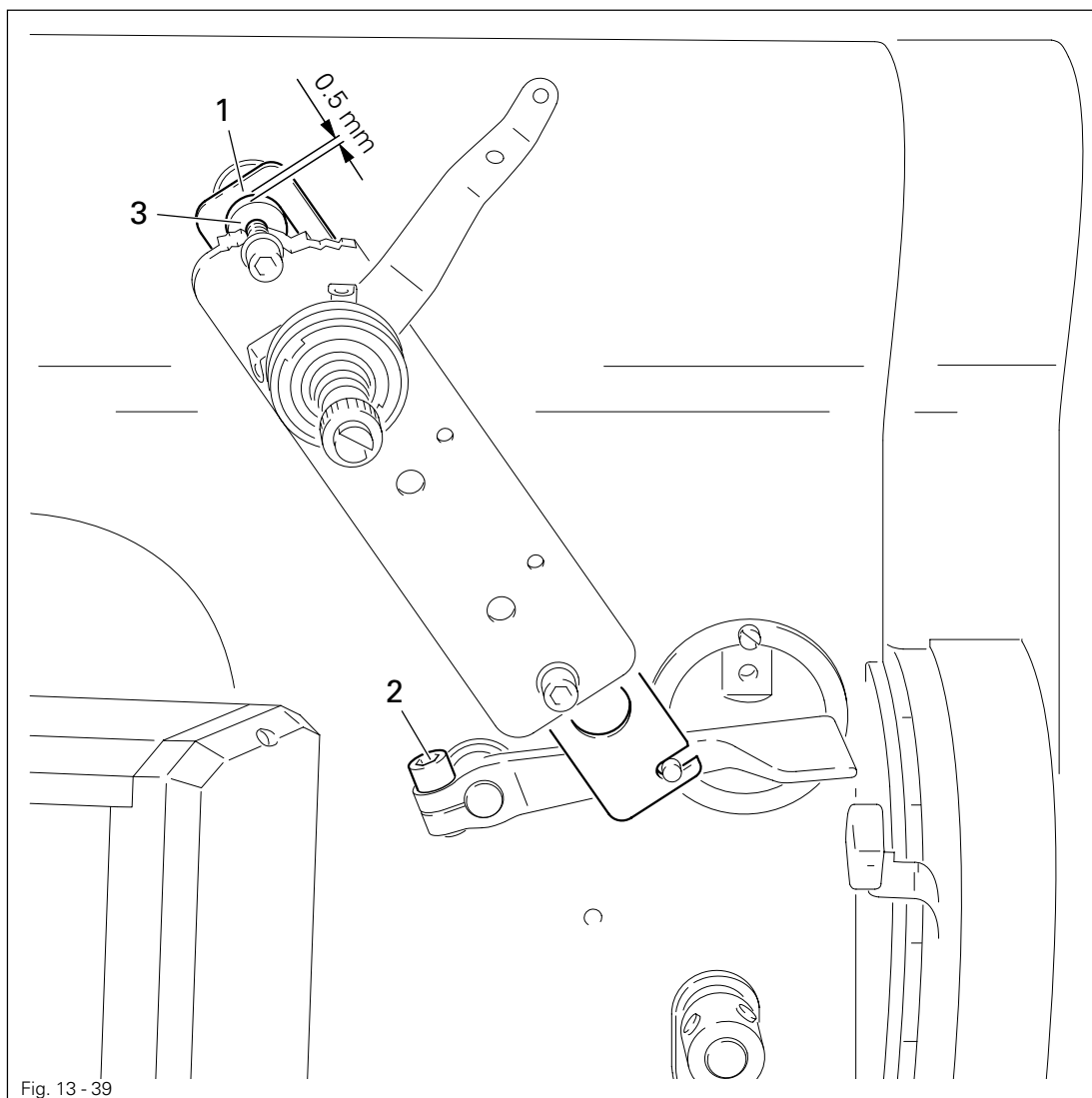
- Loosen screws **1** so that the interlocking cam can be turned on its shaft with resistance.
- Bring the needle bar to TDC.
- In this position turn the interlocking cam **2** according to **requirement 1**.
- Bring the thread-trimming device to its neutral position and the needle bar to BDC.
- Adjust interlocking cam **2** according to **requirement 2** and tighten screws **1**.

## Adjustment

### 13.06.05 Tension release

#### Requirement

When the cylinder is fully actuated, there must be a distance of approx. **0.5 mm** between the upper edge of the elongated hole in plate 1 and the guide studs 3.

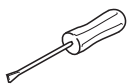
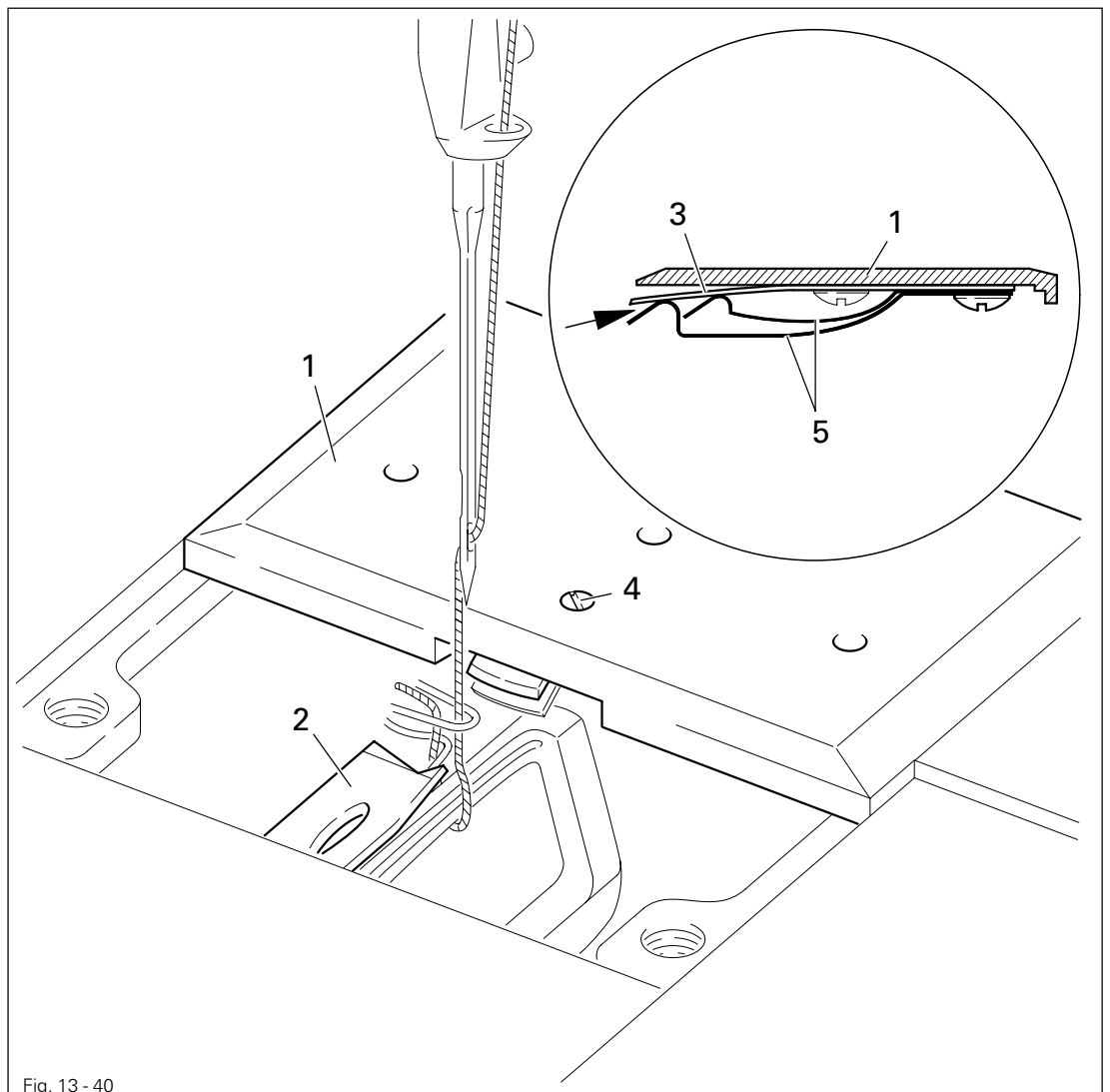


- Fully extend thread trimmer cylinder.
- Move plate 1 (screw 2) according to the requirement.

## 13.06.06 Trimmer test

**Requirement**

1. The point of the thread catcher 2 must securely take hold of the looper thread and the back part of the needle thread loop.
2. The threads must not be damaged when the cover plate 1 is removed.
3. When the cover plate 1 is mounted, the thread catcher 2 must enter between the knife 3 and the thread clamp spring 5; in the process, the threads must be perfectly cut and trapped.



- Lay material under presser foot and sew a few stitches.
- Remove cover plate 1.
- Set needle position according to **chapter 13.06.04 Thread catcher guard**.
- Operate cutting cylinder manually to check **requirements 1 and 2**.
- If necessary, adjust thread catcher 2 accordingly.
- Screw on cover plate 1.
- Operate cutting cylinder again and check **requirement 3**.
- If necessary, turn screw 4 carefully according to **requirement 3**.

## 13.07 Adjusting the tape feeder (Option / not on the PFAFF 3801-10/071)

### Requirement

When the switch wire 6 is raised by approx. 3 cm, the motor must start to operate.

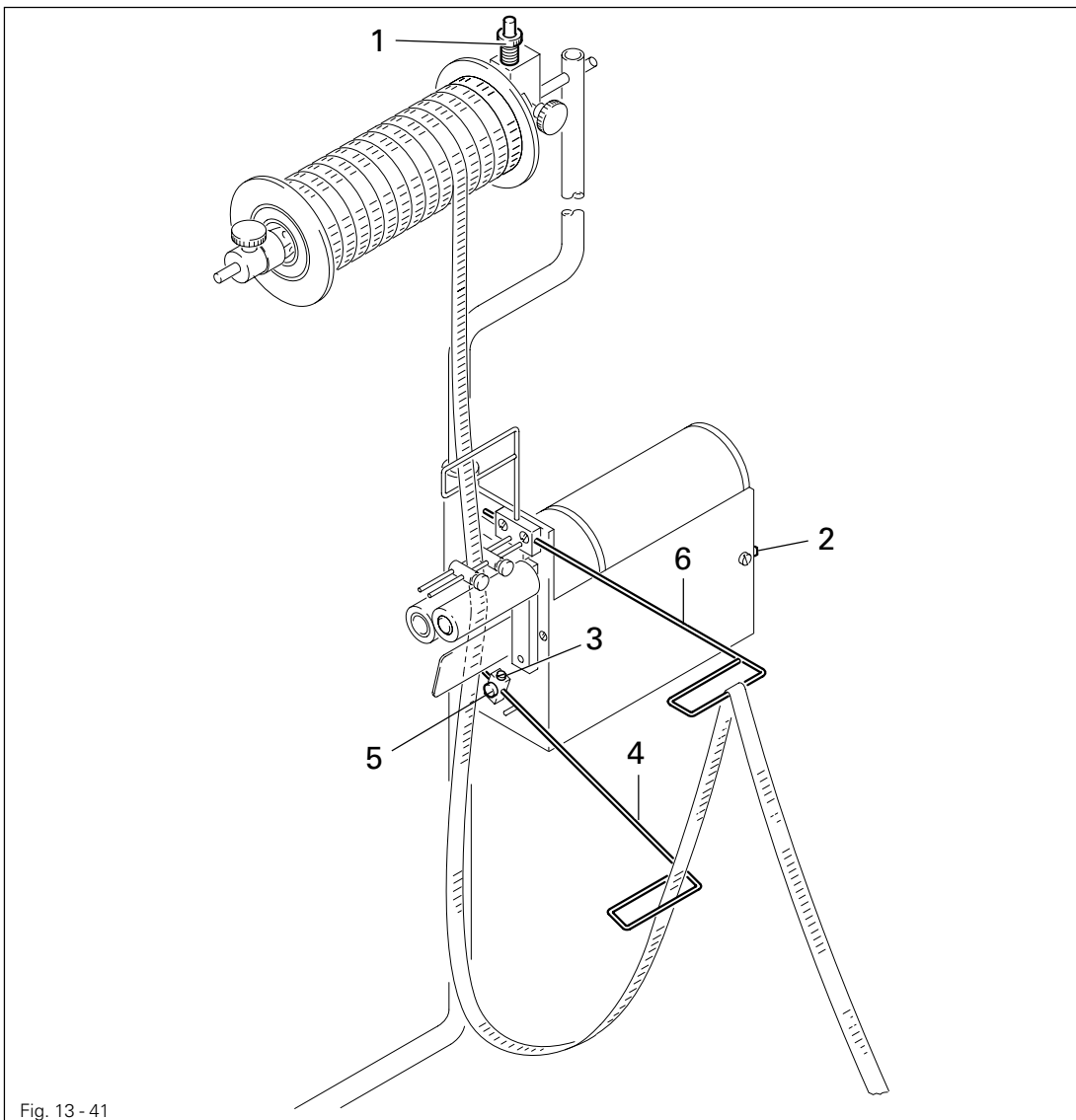
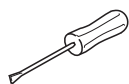


Fig. 13 - 41



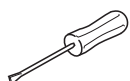
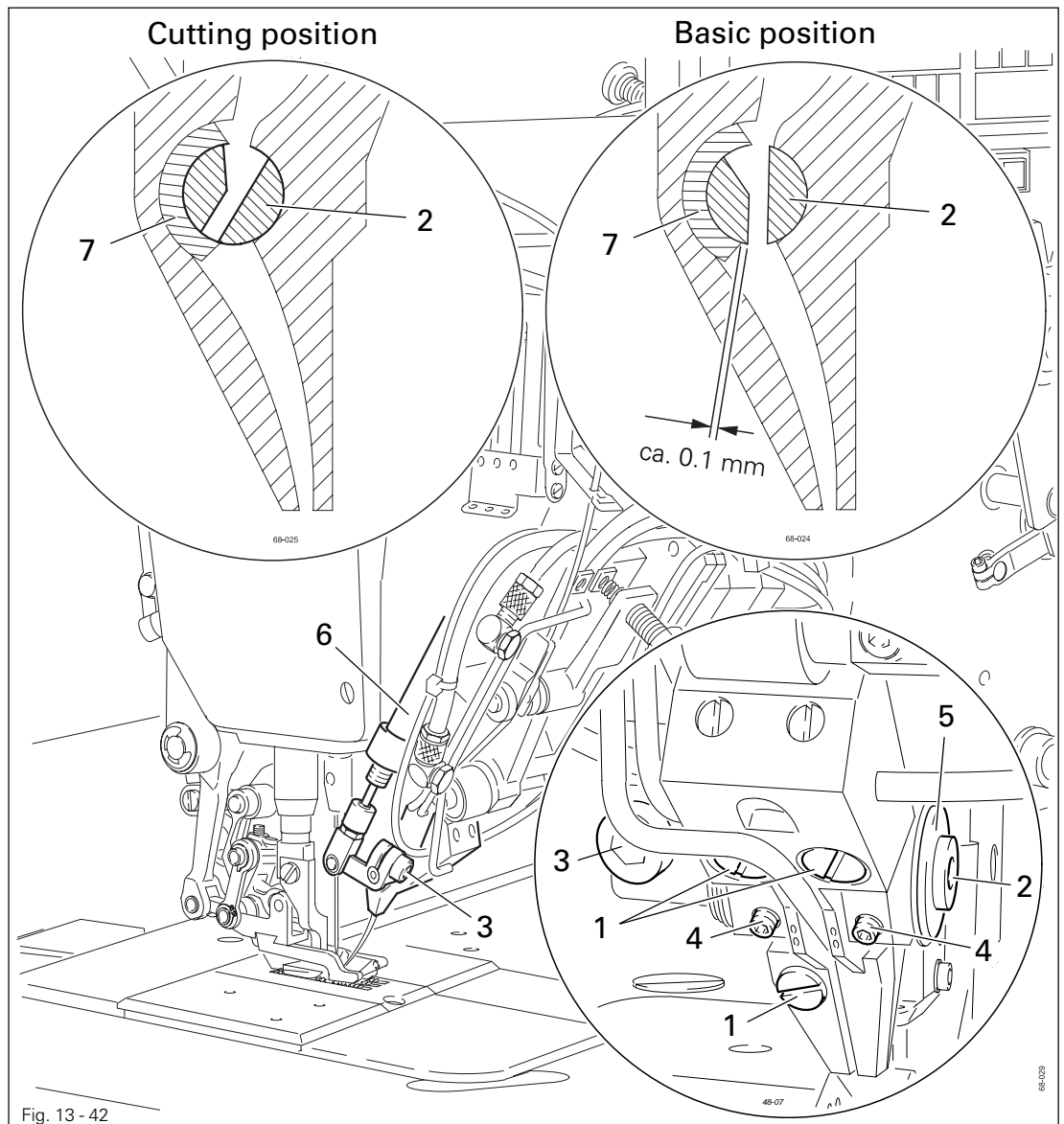
- Mount reel with stabilizing tape and thread tape through loop.
- Adjust brake 1 so that the stabilizing tape can be quickly fed.
- Switch on tape feeder (switch 2).
- Loosen screw 3.
- Press down guide wire 4 until it stops.
- Turn selector shaft 5 to the right until it stops and tighten screw 3.

## 13.08 Adjusting the tape feeding device

## 13.08.01 Adjusting the knife

**Requirement**

With cylinder 6 extended, the edge of the inside blade 2 should be approx. 0.1 mm above the edge of the outside blade 7.



- Remove cover (screw 1).
- Adjust inside blade 2 (screw 3) in accordance with the requirement.

Changing the knife:

- Loosen screw 4.
- Remove retaining ring 5 and pull out the complete knife towards the left.
- Assembly in the reverse order.

## 13.08.02 Setting the evaluation function of the photoelectric beam

### Requirement

1. If the bridle tape 2 is in the detection range of the photoelectric beam 3 (regulate air jet on, valve Y2 activated), none of the LEDs 4 should be on.
2. If the bridle tape 2 is outside the detection range of the photoelectric beam 3, both LEDs 4 should be on.

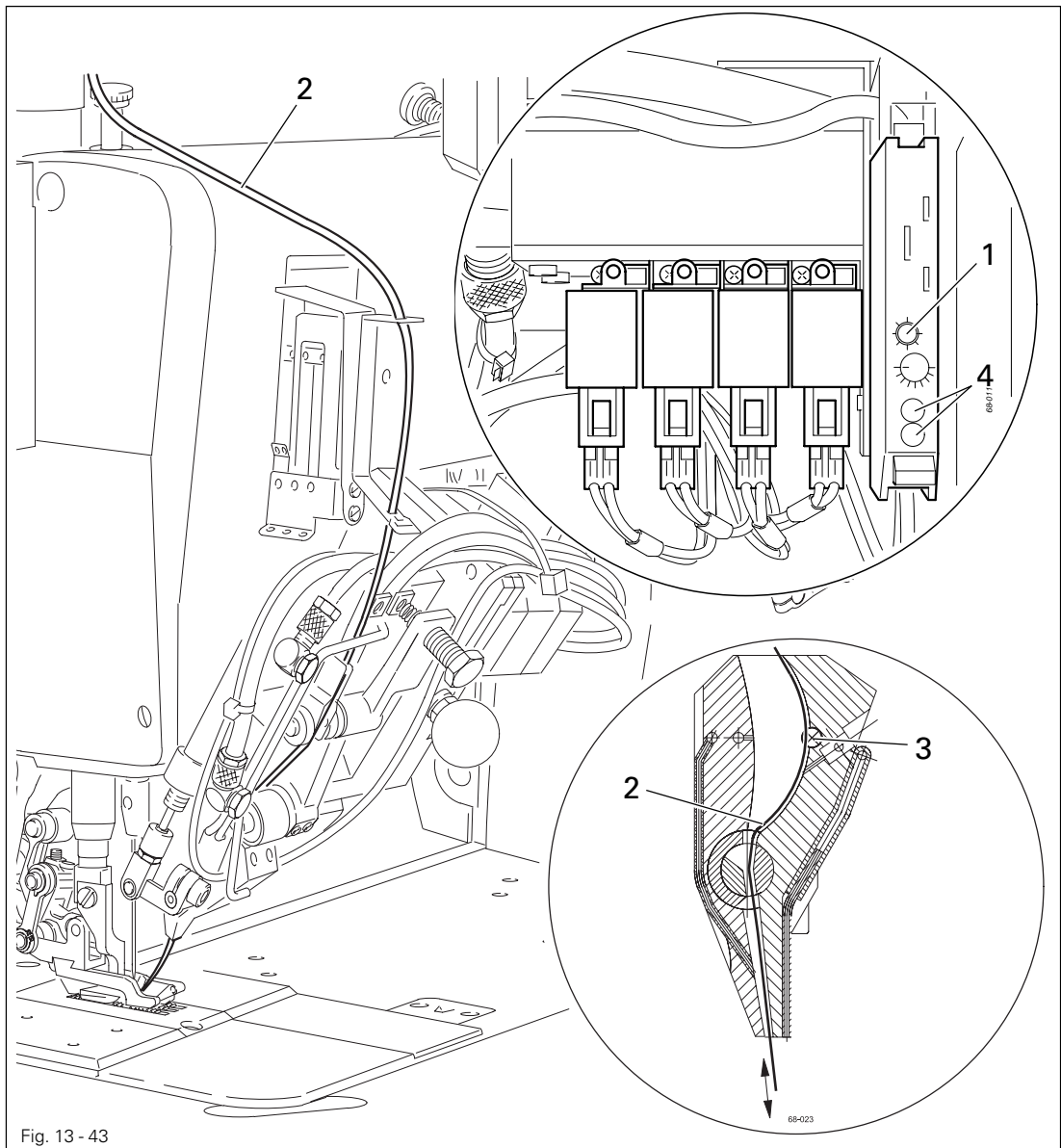
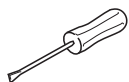


Fig. 13 - 43



- Adjust the trimmer 1 in accordance with the requirements.



To check the setting tighten and release bridle tape 2.

For further information see **Data sheet for the evaluation of the photoelectric beam.**



## 13.08.03 Adjusting the air jets

**Requirement**

1. Open throttle 1 far enough to press bridle tape 5 over air jet 6 into the range of the photoelectric beam 7, so that the switch status of the photoelectric beam is displayed (LEDs 8 are **not** on).
2. Open throttle 2 (jet 10) far enough to ensure a reliable sewing start.
3. Open throttle 3 (jet 11) far enough to ensure that the tape is dispensed reliably after trimming.
4. During the feed motion throttle 4 should only be opened far enough to press bridle tape 5 over air jet 9 out of the detection range of the photoelectric beam 7.

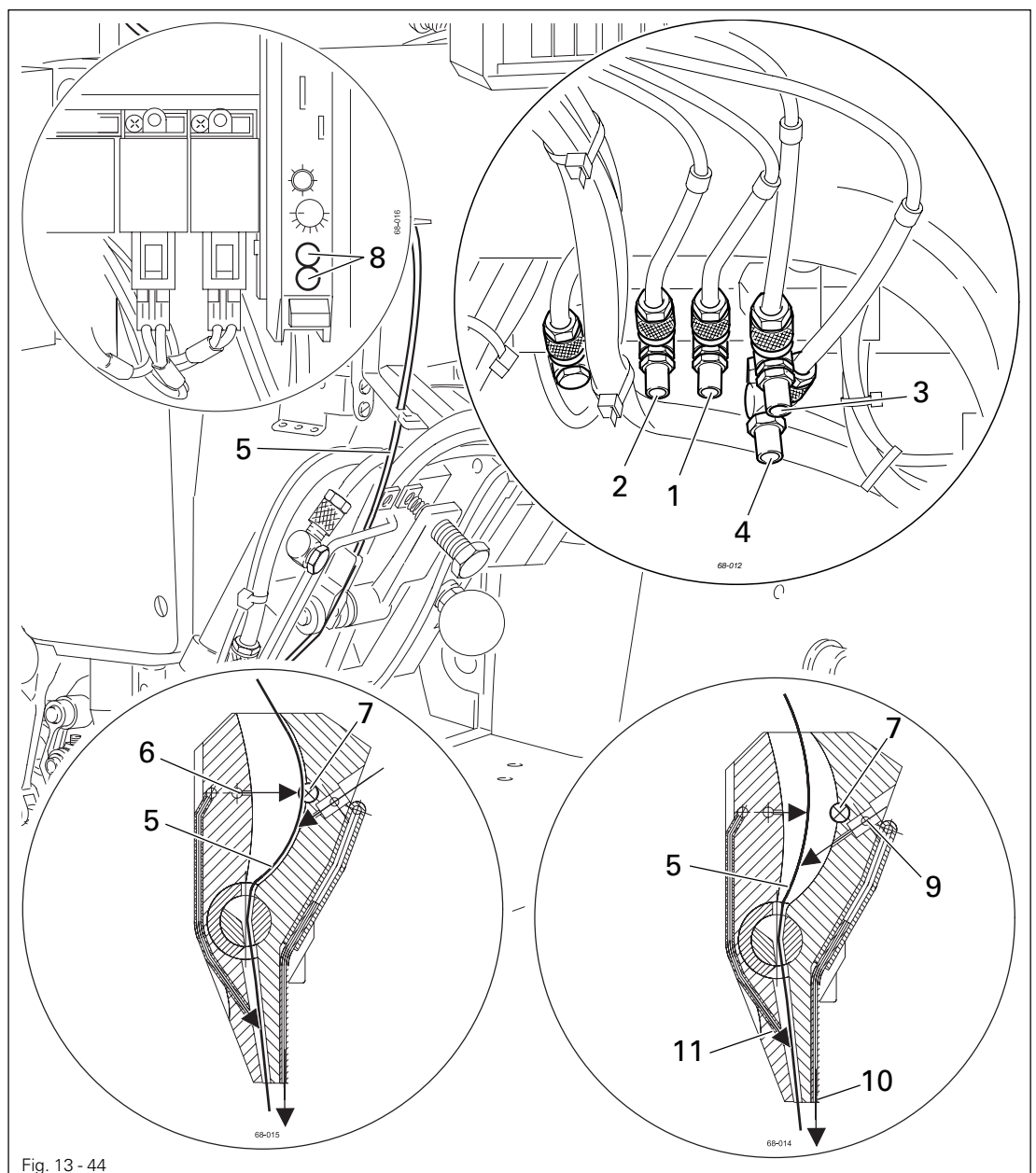
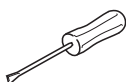


Fig. 13 - 44



- Adjust throttles 1 to 4 in accordance with requirements 1 to 4.

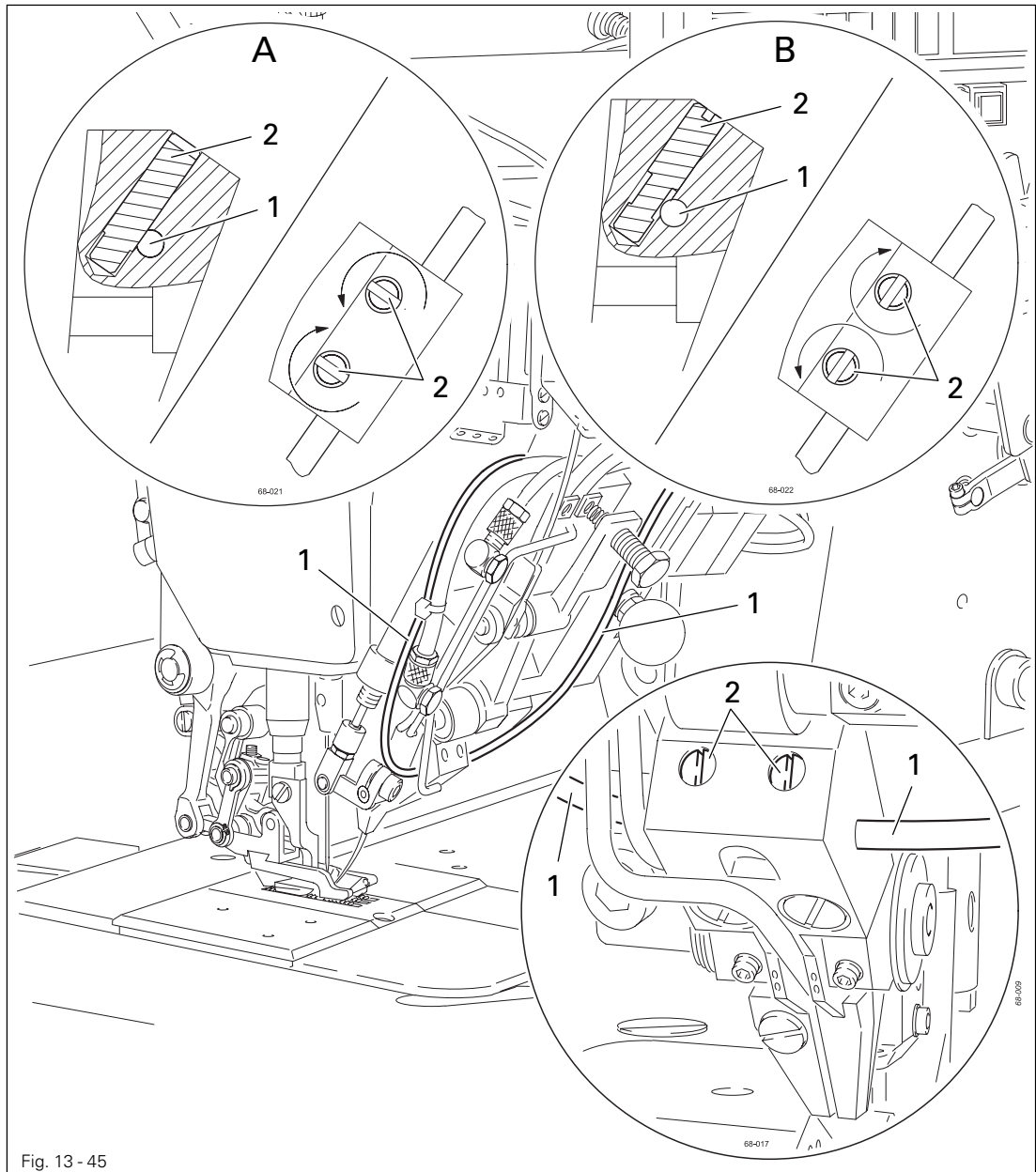
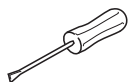


Fig. 13 - 45



The light guides 1 are led into the corresponding holes on the Tape feeding device and clamped with bolts 2, see magnified illustration A.

To release the clamping, the bolts 2 must be turned by 90°, see magnified illustration B.



For cutting or shortening the light guides 1, we recommend the use of a suitable knife (part no. 99-137 071-91).

## 13.09 Parameter settings



The following parameter settings can only be made with a Quick-Control Panel (optional).

Group	Parameter	Description	Setting	Standard value
1	110 <sup>▲</sup>	Speed for end stitch condensation		2.000
2	208	Pedal as set value transmitter variable Pedal as key (fixed speed)		II I
	222	Automatic speed		1.500
5	585	Speed limiter N1	300 - 6.400	2.000
	586	Speed limiter N2	300 - 6.400	1.000
	587	Speed limiter N3	300 - 6.400	300
	591	Speed limiter via key I = yes II = no	I / II	I
6	607	Max. speed	100 – 10000	3200
	609	Trimming speed	30 – 500	180
	651 <sup>▲</sup>	Presser foot lowers automatically when machines stops I = yes II = no	I/II	II
	665	Start inhibitor / stop I = contact to "plus" II = contact to "zero"		I
7	799	Machine configuration		5
9	904 <sup>▲</sup>	Output (Ax) Motor operation activated I = by running motor II = by standing motor	I/II	II

<sup>▲</sup> Values for the PFAFF 3801-10/071



For more information see the motor instruction manual.

## 13.10 Table of inputs and outputs for the fullness control

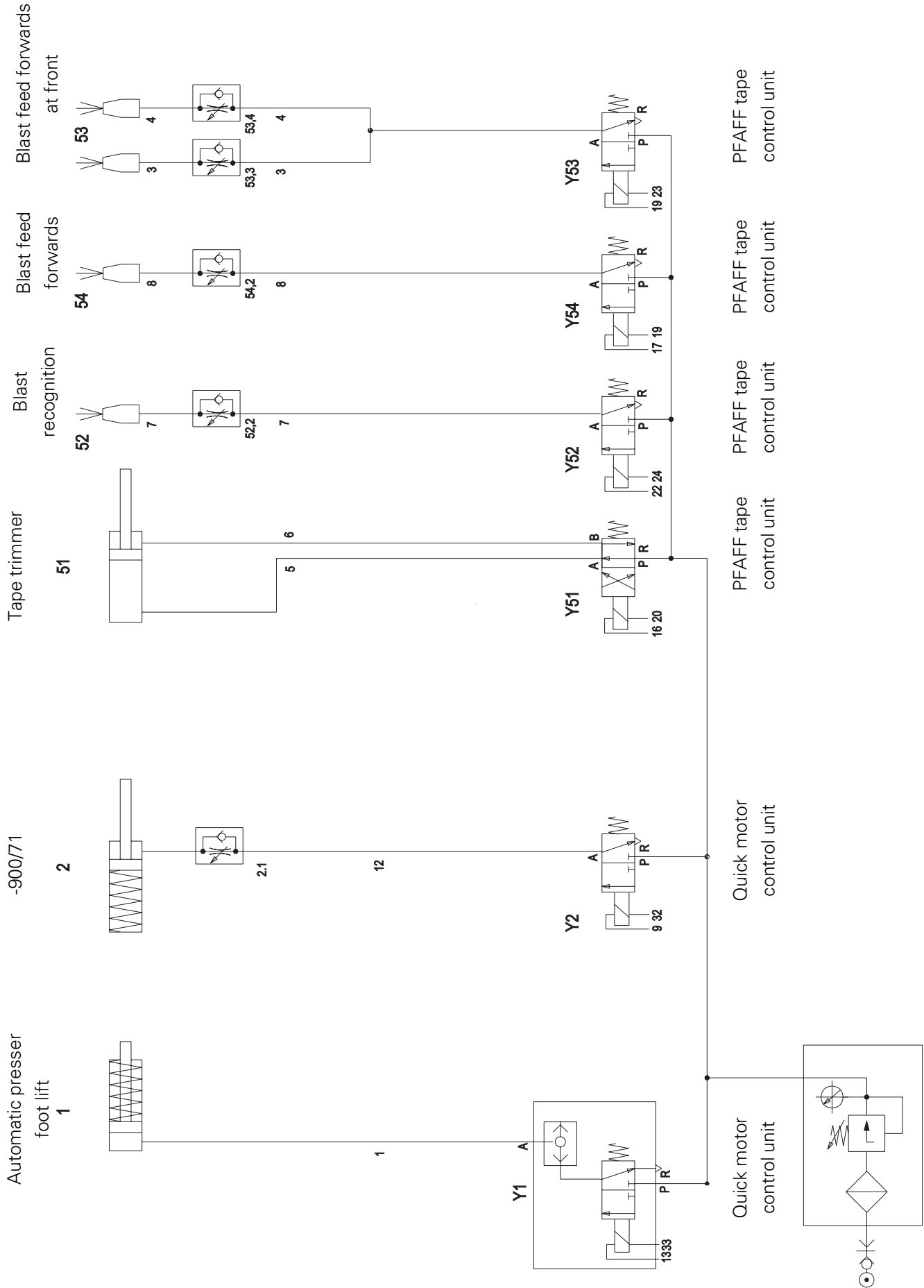
Inputs				
Input	Signal	Terminal M-DX-6	Connection	Terminal
E1	Counting signal	1	Quick-motor A16	X1/21
E2	Switch to next section	2	Knee switch S102	
GND	Switch to next section	3	Knee switch S102	
E3	Thread wiper	4	Quick-Motor A3	X1/7
E4	GST-stepping motor	5	Initiator B200	X20/2
GND		6	Initiator B200	
E5	Motor running	7	Quick-Motor A8	X1/4
E6	Tape control	8	Tape control A4	18
GND		9	Tape control GND	3
GND			without tape control bridge from terminal 8 to terminal 9	
E7	Error tape control	10	Tape control A6	21
E8	Stitch condensation	11	Quick motor A5	X1/11
GND		12	Quick-Motor 0V	X1/24

Outputs					
Output	Code number	Signal	Terminal MD-DX-6	Connection	Terminal
+ 24 V			13	Initiator B200	X20/1
A1	1	Start inhibitor	14	Quick-Motor E6	X1/6
A2	2	Speed limiter	15	Quick-Motor E13	X1/20
+ 24 V			16	Valve/Stitch length	
A3	3	Speed limiter	17	Quick-Motor E1	X1/3
A4	4		18		
+ 24 V			19	Valve Y17	
A5	5	Stitch length 3 mm	20	Valve Y11	
A6	6	Cut tape	21	Tape control E2	2
+ 24 V			22	Valve Y13	
A7	7	Tape brake or regulate tape	23	Valve Y17 Tape control E1	1
A8	8	Edge trimmer	24	Valve Y13	

## 13.11 Table of inputs and outputs for the Tape feeding device

Inputs				
Input	Signal	Terminal PFAFF	Connection	Terminal
BAR	Adjust on	1		
BAS	Trimming on Prepare off	2		
GND		3		
E3	Feed tape on/off	4		
E4		5		
GND		6		
E5	Code input 1	7		
E6	Code input 2	8		
GND		9		
E7	ERROR – Reset threading	10		
E8	Photoelectric barrier B50	11	Photoelectric barrier (out)	black
GND		12	Photoelectric barrier 0 V	blue

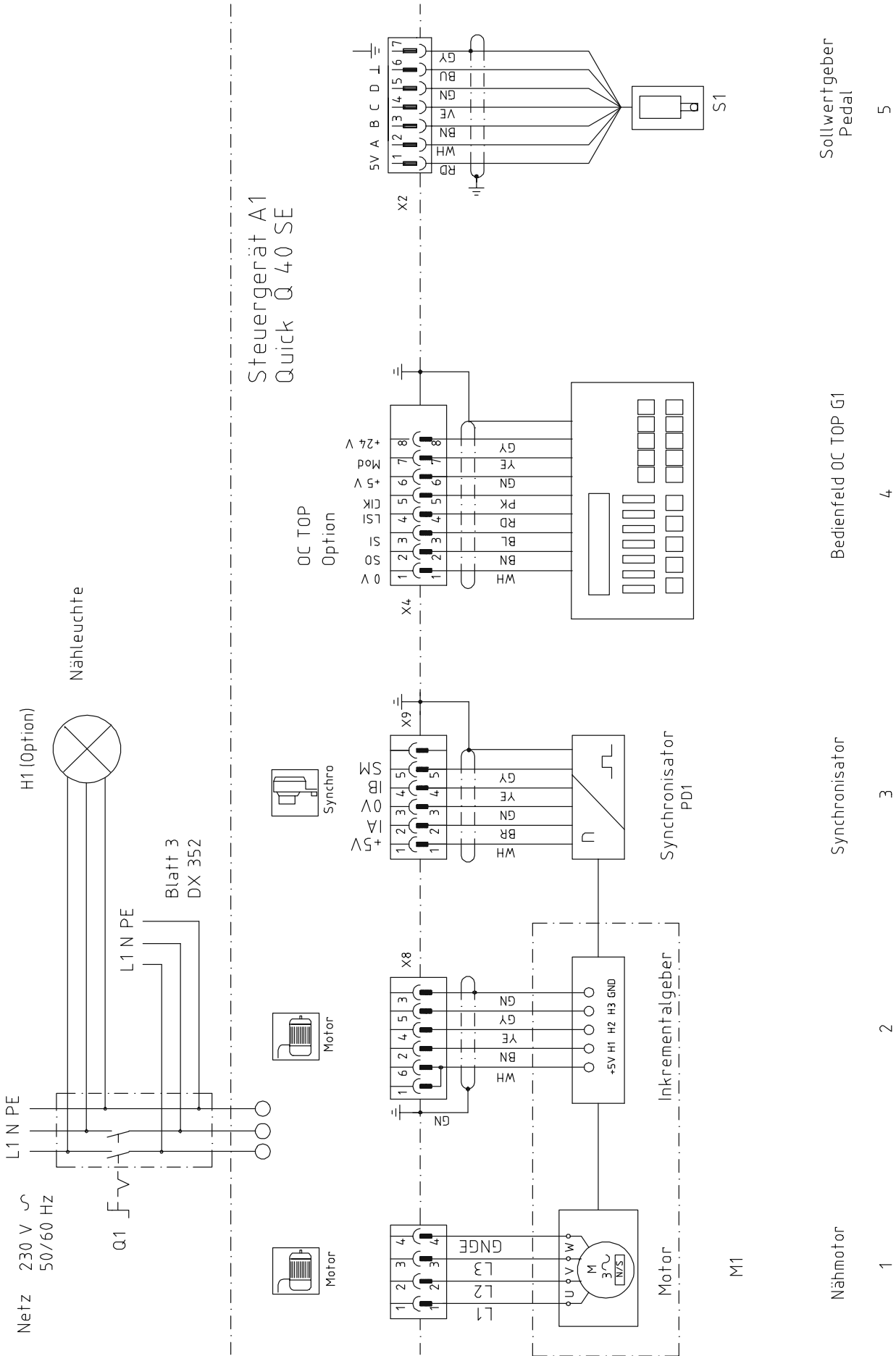
Outputs					
Output	Code number	Signal	Terminal PFAFF	Connection	Terminal
+ 24V			13	Photoelectric barrier ) 12 – 24 V)	brown
A1	1		14		
A2	2	Lamp on	15	Key	
+24V			16	Y51	
Y54	3	Blast air/feed	17	Y54	
TAPE	4		18		
+24 V			19	Y54	
Y51	5	Tape/Knife	20	Y51	
BAF	6	Tape/Error	21	Key/Quick	
+24 V			22	Y52/Y53	
Y53	7	Tape feed	23	Y53	
Y52	8	Adjust tape feed	24	Y52	



Reference list for the circuit diagrams

		3801-1/07	3801-1/071	3801-10/071
A1	Controller Quick Q 40 SE	●	●	●
A20	Fullness control unit	●	●	●
A50	Tape control unit			●
B20	Sensor – stepping motor	●	●	●
B50	Photoelectric barrier			●
D1	Diode 1N4007			●
F1	Fuse 1 AT	●	●	●
F2	Fuse 2 AT	●	●	●
G1	Quick control panel (OC-TOP)	▲	▲	▲
G20	Graphics control panel	●	●	●
G50	Graphics control panel (optional)	▲	▲	▲
H1	Sewing lamp	▲	▲	▲
M1	Sewing motor	●	●	●
M20	Stepping motor fullness	●	●	●
M50	Stepping motor tape feed			●
Q1	Main switch	●	●	●
S1	Command transmitter pedal	●	●	●
S51	Tape feed on / off			●
S52	Error /Reset, thread			●
T1	Transformer	●	●	●
Y1	Presser foot	●	●	●
Y2	Thread trimmer		●	●
Y51	Trim tape			●
Y52	Adjust blast air			●
Y53	Blast air feed			●
Y54	Blast air feed at front			●

▲ can be connected (optional)



Nähmotor

1

Inkrementalgeber

2

Synchronisator

3

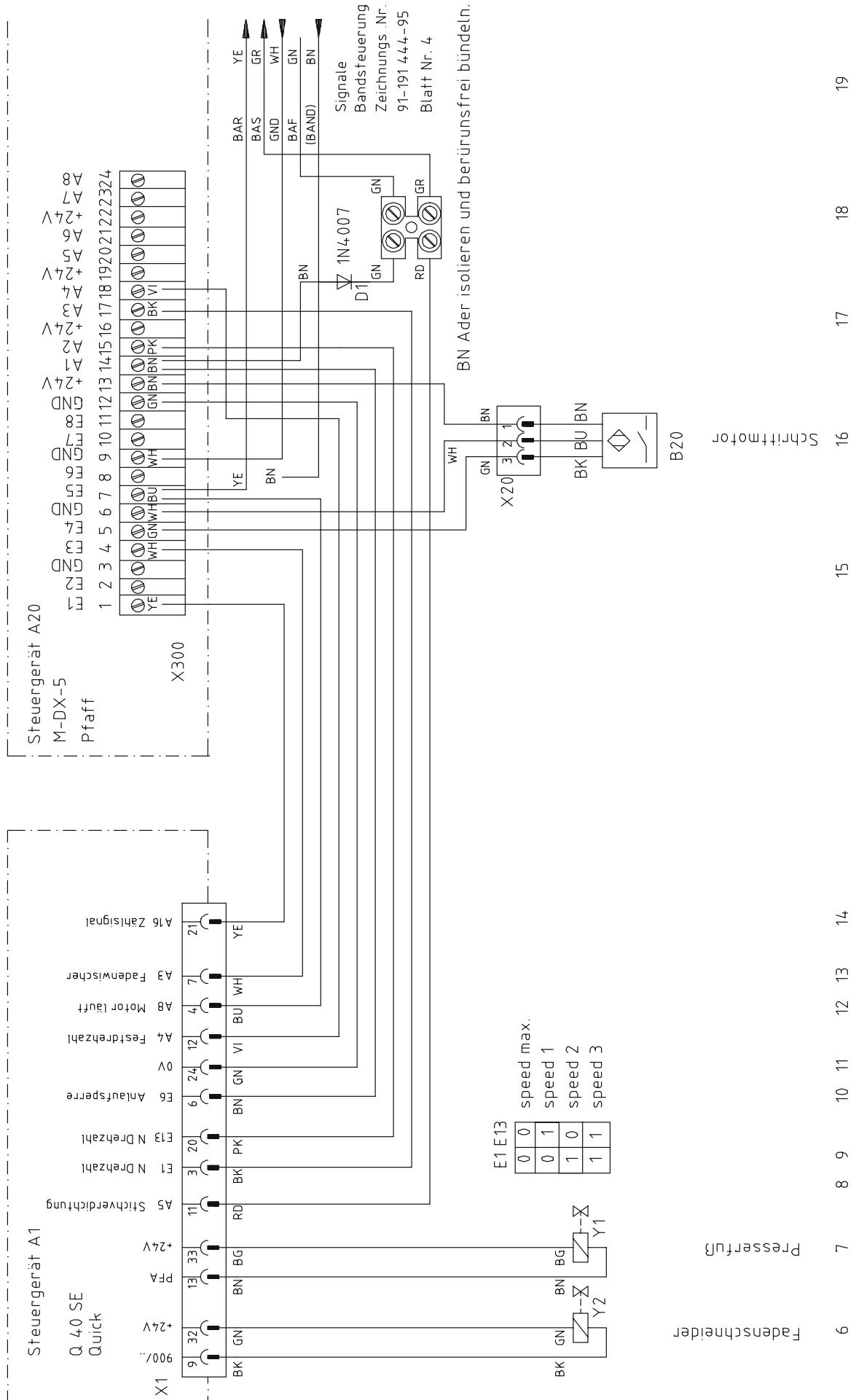
Bedienfeld OC TOP G1

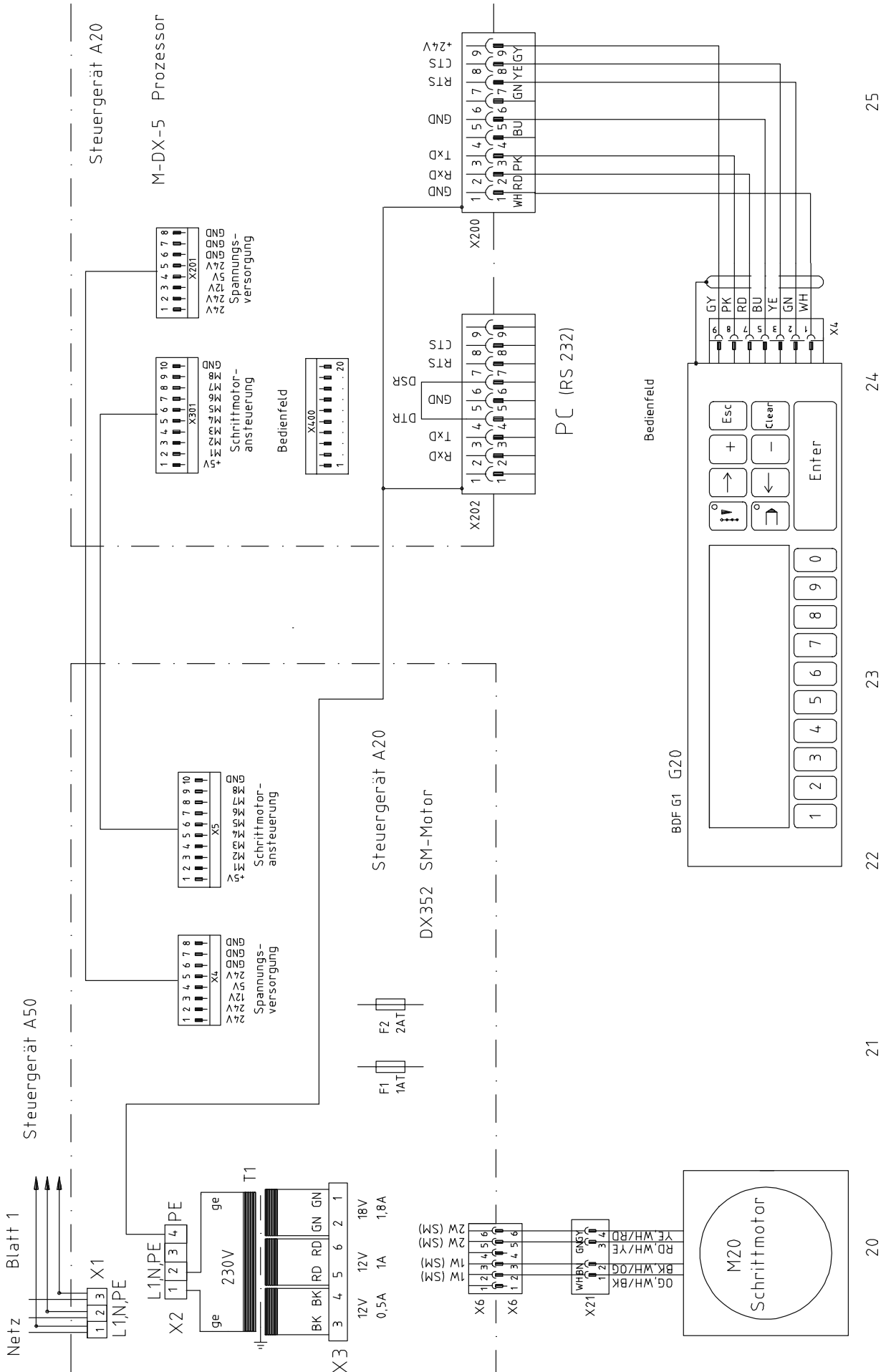
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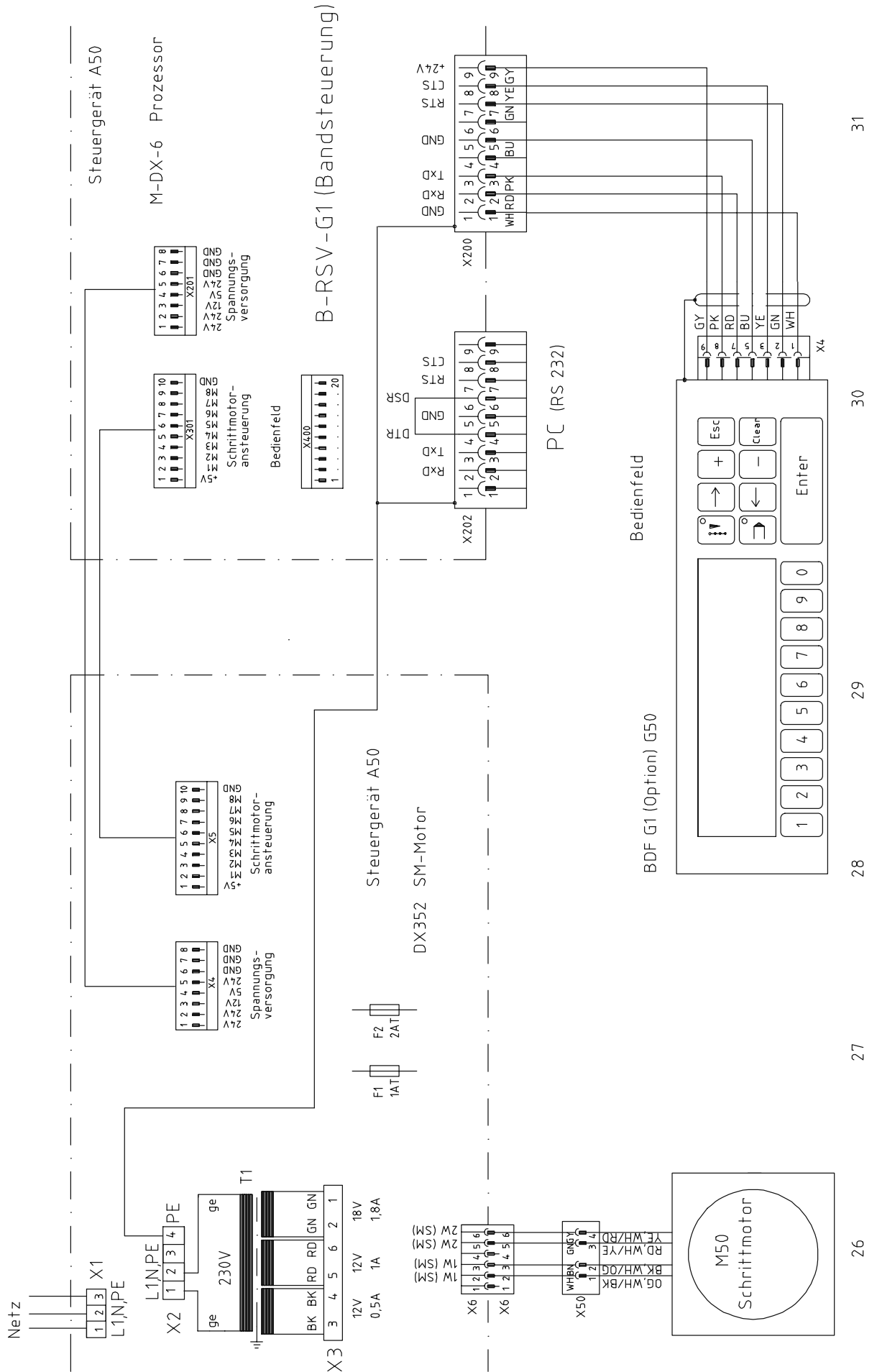
Sollwertgeber Pedal

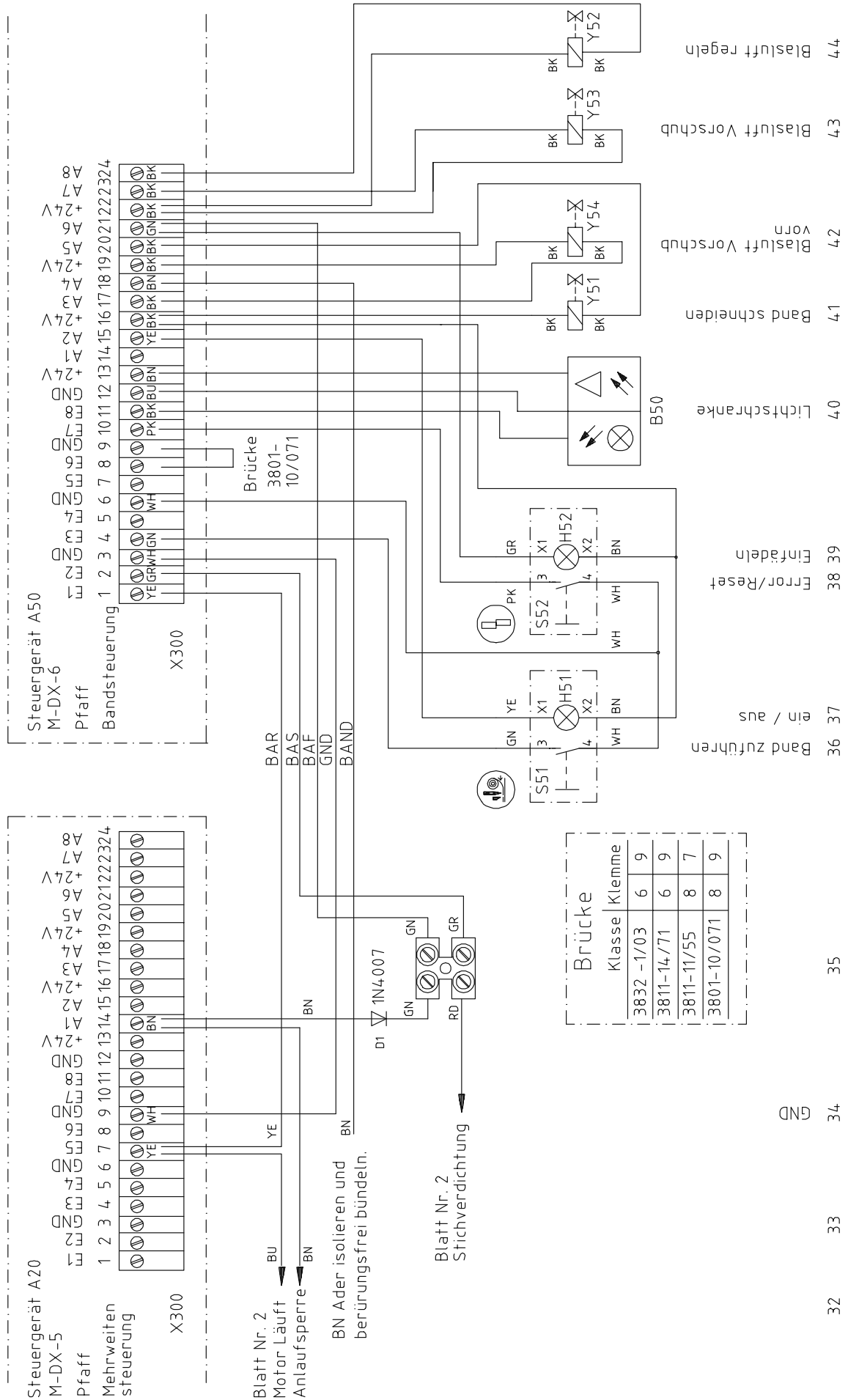
5













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