

PFAFF

3822-1/32; -1/34

Instruction Manual

3822-1/42; -1/44

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

2207516 →



This instruction manual applies to all versions and subclasses listed under "Specifications".

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1 Safety

1.01 Regulations

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

In addition to this instruction manual, please also observe all generally accepted, statutory and other legal requirements, including those of the user's country, and the applicable pollution control regulations!

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

1.02 General notes on safety

- The machine must only be operated by adequately trained operators and only when the instruction manual has been fully read and understood!
- All notices on safety and the instruction manual of the motor manufacturer are to be read before the machine is put into operation!
- All notes on the machine concerning danger and safety must be observed!
- The machine must be used for the purpose for which it is intended and must not be operated without its safety devices; all regulations relevant to safety must be adhered to.
- When part sets are changed (e.g. needle, presser foot, needle plate, feed dog or bobbin), during threading, when the workplace is left unattended and during maintenance work, the machine must be disconnected from the power supply by turning off the on/off switch or removing the plug from the mains!
- Daily maintenance work must only be carried out by appropriately trained persons!
- Repairs and special maintenance work must only be carried out by qualified technical staff or persons with appropriate training!
- During maintenance or repairs on the pneumatic system the machine must be disconnected from the compressed air supply! The only exception to this is when adjustments or function checks are carried out by appropriately trained technical staff!
- Work on the electrical equipment must only be carried out by technical staff who are qualified to do so!
- Work on parts or equipment connected to the power supply is not permitted! The only exceptions to this are specified in regulations EN 50110.
- Conversion or modification of the machine must only be carried out under observation of all relevant safety regulations!

- Only spare parts which have been approved by us are to be used for repairs! We draw special attention to the fact that spare parts and accessories not supplied by us have not been subjected to testing nor approval by us. Fitting and/or use of any such parts may cause negative changes to the design characteristics of the machine. We shall not accept any liability for damage caused by the use of non-original parts.

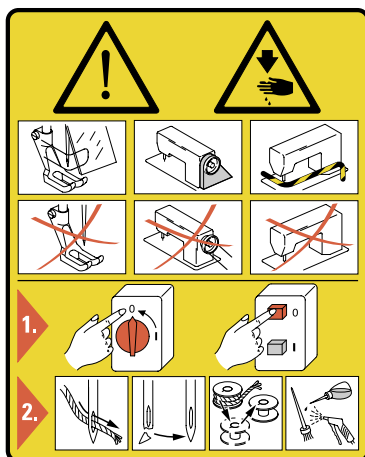
1.03 Safety symbols



Danger!
Special points to observe.



Danger of injury to operating or technical staff!



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 notes for the user

- This instruction manual belongs to the equipment of the machine and must be available to the operating staff at all times.
This instruction manual must be read before the machine is operated for the first time.
- Both operating and technical staff must be instructed on the safety devices of the machine and on safe working methods.
- It is the duty of the user to operate the machine in perfect running order only.
- The user must ensure that none of the safety devices are removed nor put out of working order.
- The user must ensure that only authorized persons operate and work on the machine.

For further information please refer to your PFAFF agency.

1.05 Notes for operating and technical staff

1.05.01 Operating staff

Operating staff are the persons responsible for setting up, operating and cleaning the machine and for removing any disturbances in the sewing area.

The operating staff are obliged to observe the following points, and must:

- always observe the notes on safety in this instruction manual!
- avoid using any working methods which adversely effect the safety of the machine!
- avoid wearing loose-fitting clothing or jewelry such as necklaces or rings!
- also ensure that only authorized persons are allowed near the danger area of the machine!
- immediately report to the user any changes to the machine that may affect its safety!

1.05.02 Technical staff

Technical staff are persons who have been trained in electrical engineering, electronics, pneumatics and mechanical engineering. They are responsible for lubricating, servicing, repairing and adjusting the machine.

The technical staff are obliged to observe the following points, and must:

- always observe the notes on safety in this instruction manual!
- switch off the on/off switch before carrying out adjustment and repair work and ensure it cannot be switched on again unintentionally!
- never work on parts or equipment still connected to the power supply! Exceptions to this are only permissible according to regulations EN 50110;
- disconnected the machine from the compressed air supply when carrying out maintenance or repair work on pneumatic equipment!
Exceptions to this are only permissible for function checks;
- replace all safety covers after carrying out maintenance or repair work!

1.06

Danger warnings



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



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



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

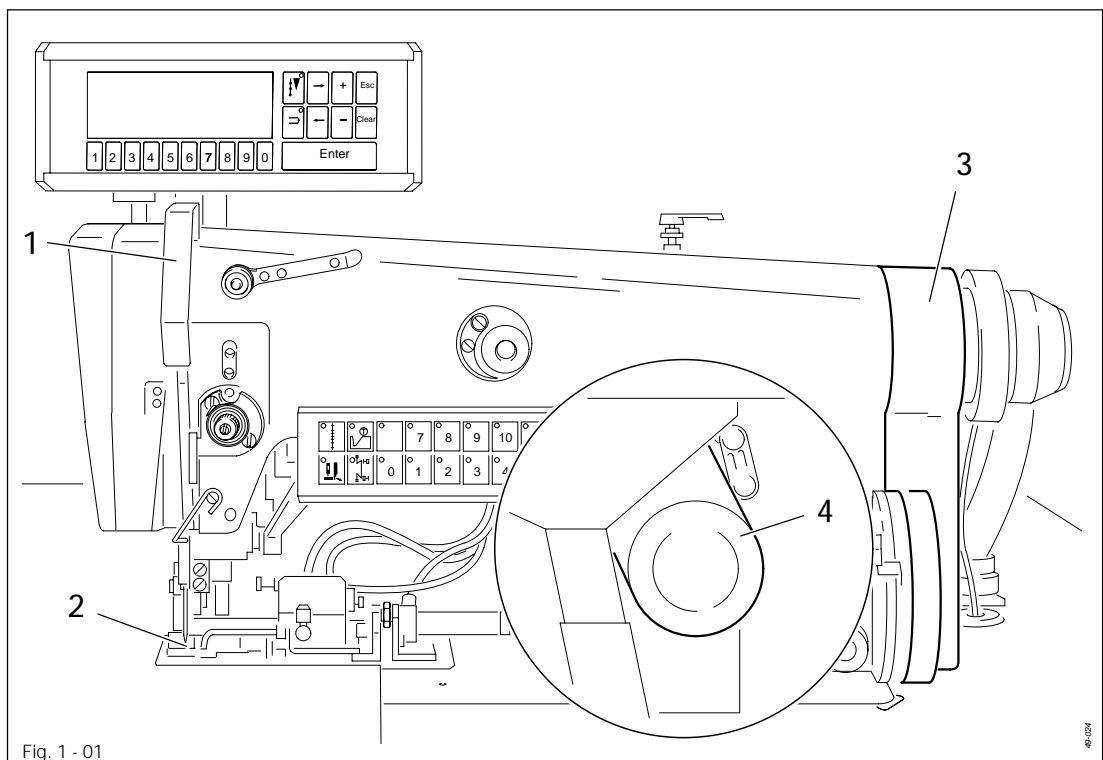


Fig. 1 - 01



Do not operate the machine without take-up lever guard 1!
Danger of injury by movement of take-up lever!



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



Do not operate the machine without belt guards 3 and 4!
Danger of injury by rotating drive belt!



Do not place hands in the cutting area between needle plate and knife!
Danger of injury from the cutting motion of the knife!

2 Proper use

The PFAFF 3822-1/32, -1/34, -1/42 and -1/44 are integrated workplaces for run-stitching and trimming the edges of jackets, coats and costumes.

Machinemodel	Equipment
PFAFF 3822-1/32	Edge trimming device
PFAFF 3822-1/42	Edge trimming device and graphics control panel
PFAFF 3822-1/34	Edge trimming device for feathered trimming
PFAFF 3822-1/44	Edge trimming device for feathered trimming and graphics control panel



Any use of these machines which is not approved by the manufacturer shall be considered as improper use! The manufacturer shall not be liable for any damage arising out of improper use! Proper use shall also be considered to include compliance with the operation, adjustment, service and repair measures specified by the manufacturer!

3

Specifications[▲]

Sewing head

3822-1/32; -1/42 487

3822-1/34; -1/44 487

Stitch type: 301

Max. speed

3822-1/32; -1/42 4000 s.p.m.^{1♦}

3822-1/34; -1/44 3200 s.p.m.^{1♦}

Trimming margin

3822-1/32; -1/42 5, 6 or 7 mm

3822-1/34; -1/44 6.5 x 3.5 mm

Stitch length

With fullness setting "0": 2.7 mm

With stitch condensation: 1.6 mm

Needle system: 134 KK

Needle size (Nm) in 1/100 mm: 80

Sewing thread: 150

Presser foot clearance: 7 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: 40 l/cycle

Working noise level:

Emission level at workplace at a speed of 2400 s.p.m.: 75 dB(A)

(Noise measurement in accordance with DIN 45 635-48-A-1)

Machine dimensions:

Length: approx. 1365 mm

Width: approx. 950 mm

Height(with reel stand): approx. 1700 mm

Net weight: approx. 140 kg

[▲]Subject to alteration

[♦]Dependent on material, operation and stitch length

4 Disposal of Machine

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



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

Transportation, packing and storage

5 Transportation, packing and storage

5.01 Transportation to customer's premises

All machines are delivered completely packed.

5.02 Transportation inside the customer's premises

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

5.03 Disposal of packing materials

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

5.04 Storage

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

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

6 Explanation of symbols

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



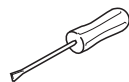
Note, information



Cleaning, care



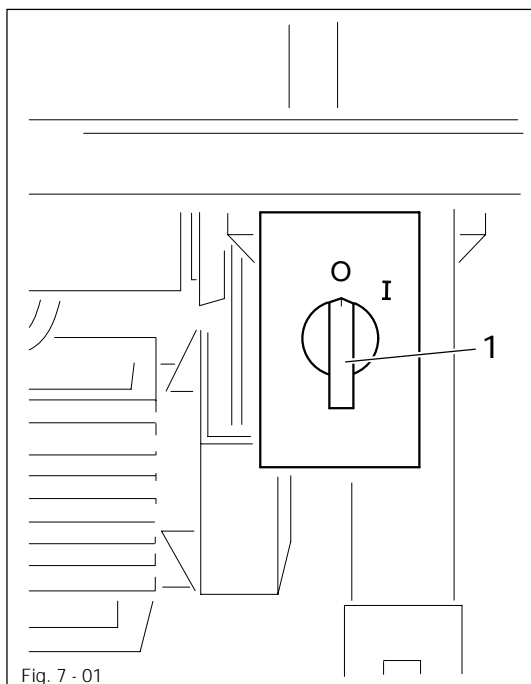
Lubrication



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

7 Controls

7.01 Main switch

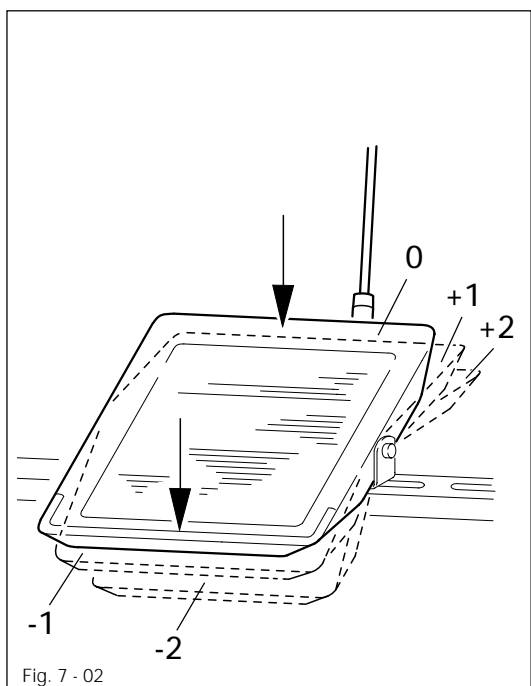


- The machine is switched on or off by turning main switch 1.



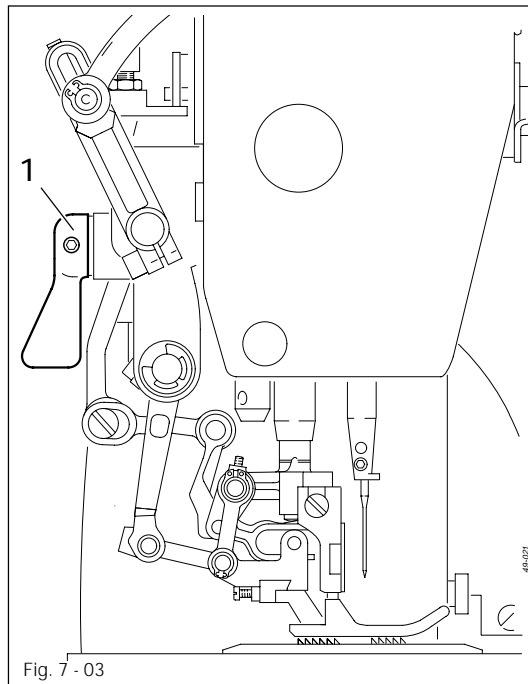
The illustrated main switch is fitted to machines with Quick motors. If other motors are used, different switches may be fitted.

7.02 Pedal



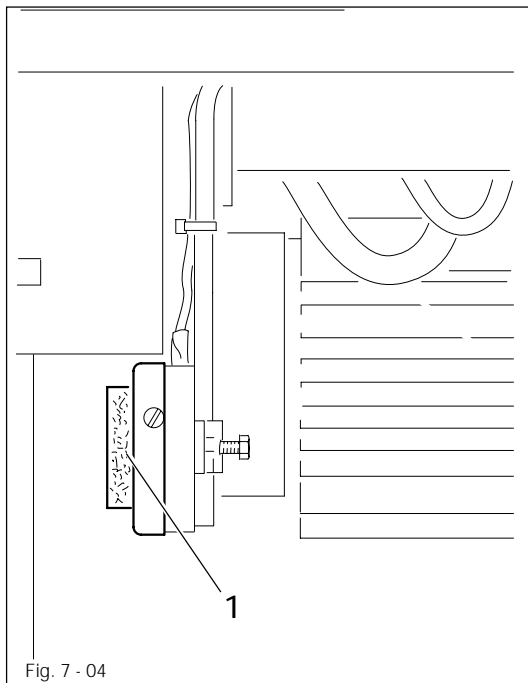
- 0 = Neutral position
- +1 = Lower presser foot
- +2 = Sewing
- 1 = Raise presser foot
- 2 = Trim threads

7.03 Presser bar lifter



- The presser foot is raised by turning lever 1.

7.04 Knee Switch



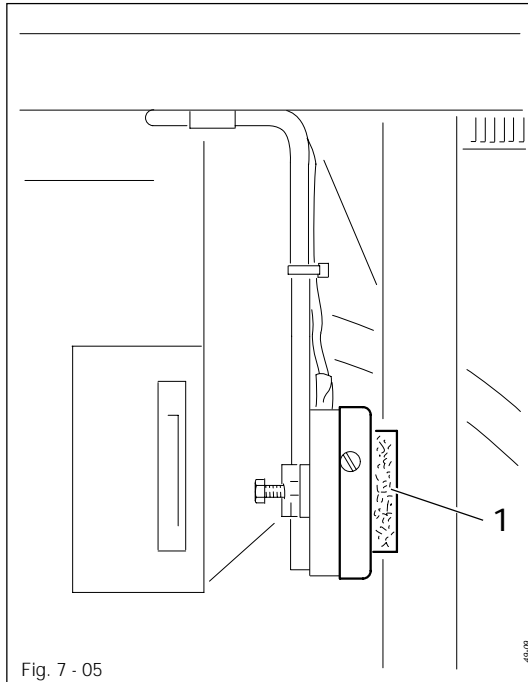
Manual sewing:

- By operating knee switch 1 it is possible to alternate between two pre-set amounts of fullness.

Programmed sewing:

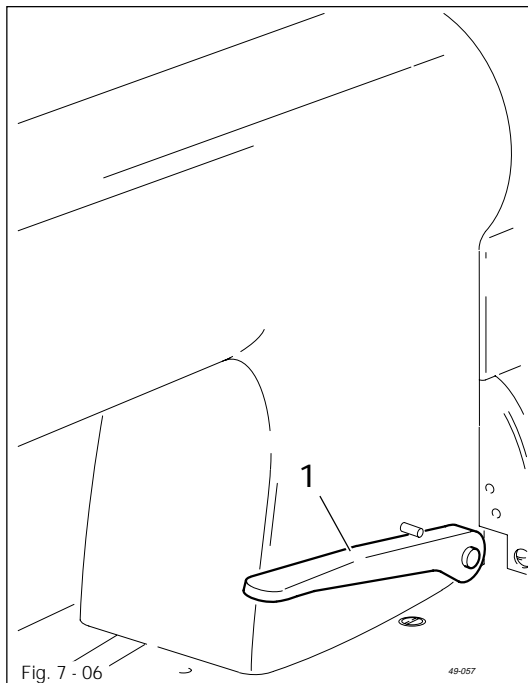
- By operating knee switch 1 the amounts of fullness are changed according to the program selected.

7.05 Left knee switch



- By operating knee switch **1**, the knife for feathered trimming can be switched on or off.

7.06 Reverse-feed key



- The machine sews in reverse as long as the reverse-feed key **1** is pressed.

7.07 Keyboard

The keyboard **1** is used for the quick operation of the machine during sewing and when selecting the fullness. With the corresponding LED of the 20 keys, active key functions are displayed (Function active = LED lit).

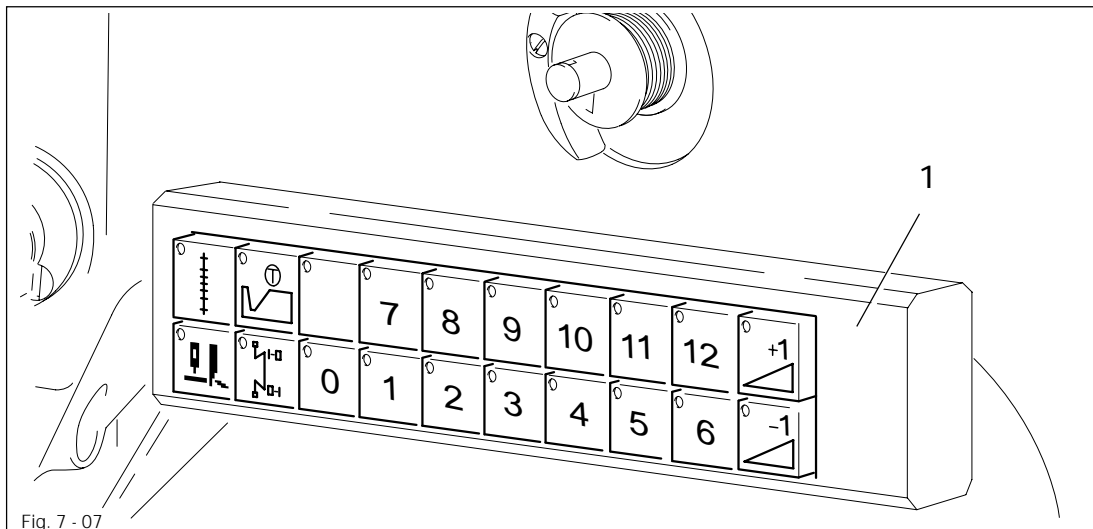


Fig. 7 - 07



Stitch condensation

- The stitch condensation is switched on and off by pressing a key.



Edge trimming device

- The edge trimming device is switched on and off by pressing a key.



Hook knife

- The device for feathered trimming is switched on and off by pressing a key (same function as left knee switch).



Bartack inversion

- Programmed bartacks can be suppressed by pressing a key.

Number keys (0 – 12)

- For selecting the fullness to be applied to the top or bottom material ply.

Key 0: No fullness will be applied

Key 6: Selects the max. fullness for the bottom material ply.

Key 12: Selects the max. fullness for the top material ply.

Key 0 + 1: Selects the min. fullness for the bottom material ply.

Key 0 + 7: Selects the min. fullness for the top material ply.

- When two neighbouring number keys are pressed simultaneously, the corresponding average value is selected.



On machines with graphics control panel, the steps 0 – 12 can be defined freely; on machines without graphics control panel, these steps are pre-set.



Correction value + / correction value -

- By pressing a key, the value for the selected fullness is increased or reduced in 2 steps.

7.08 Graphics operating panel

The graphics operating panels consists of the display screen and 2 key zones.

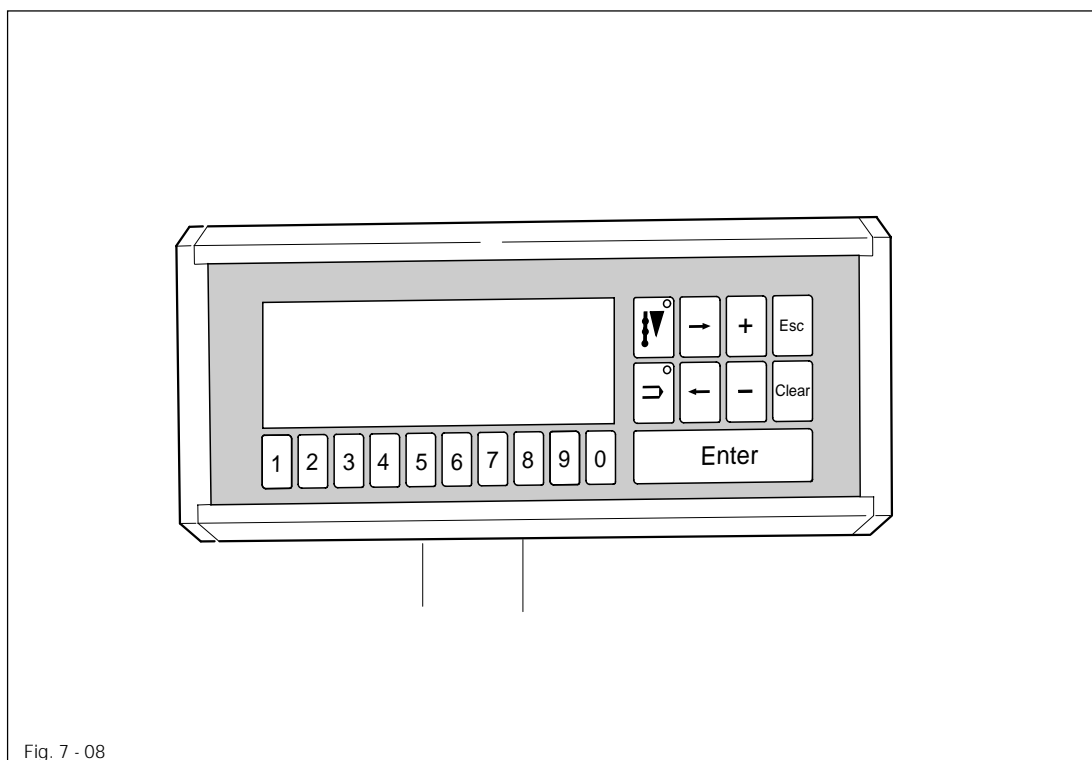


Fig. 7 - 08

7.08.01 Display

In its basic condition the displays on the screen are divided into 2 part sections:

Status line

In the top section of the display screen there is a status line, where up to 5 pictographs with their corresponding values can be displayed (e.g. program number, number of seam sections etc.).

Pictograph strip

In the bottom section there is the pictograph line. The functions of the symbols, which appear here, can be called up using the **number keys**. Activated functions are displayed by an inverse symbol.



Normal symbol (function not activated)



Inverse symbol (function activated)

7.08.02 Operational mode keys

There are two different modes of operation. The selected mode is shown by the diode of the respective key.

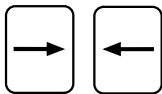


- Operational mode **SEWING** has been selected



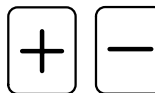
- Operational mode **ENTER** has been selected
 - If the operational mode **ENTER** has already been selected, the standard condition is selected.

7.08.03 Function keys



Arrow keys (right/left)

- Positioning of cursor if several values are entered in one line
- Turning over menu pages
- Changing zones during programming and seam interruption



Plus/Minus keys

- Increasing or reducing input values
- Selection of sign for sign-dependent inputs
- Selection of program number



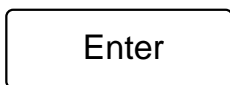
Esc-key

- Interruption of functions without taking over the input value
- Return to superior menu functions



Clear key

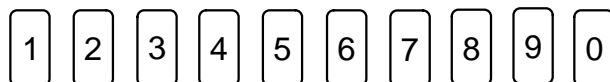
- Setting input values at 0



Enter key

- Confirmation of an input value / finishing an input
- Switching to another zone when programming or interrupting a seam
- Confirmation of error correction after error alarm

7.08.04 Number keys



Beneath the display there is a strip with number keys.

Depending on the operating condition, the keys have the following functions:

- Executing a function illustrated by the symbol of the corresponding key
- Input of a numerical value (if no symbol is entered with a number key)
- Selection of functions or of the next menu level

8 Installation and commissioning



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

If the machine is delivered without a table, be sure to use a stand and table top that can bear the weight of the machine and the motor reliably.

It is very important to ensure that support of the machine on its stand is firm and steady, also during sewing.

8.01 Installation

The site where the machine is installed must be provided with power connections (see **Chapter 3, Specifications**).

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



For packing and transportation reasons the table top is in the lowered position.

The table height is adjusted as described below.

8.01.01 Adjusting the table height

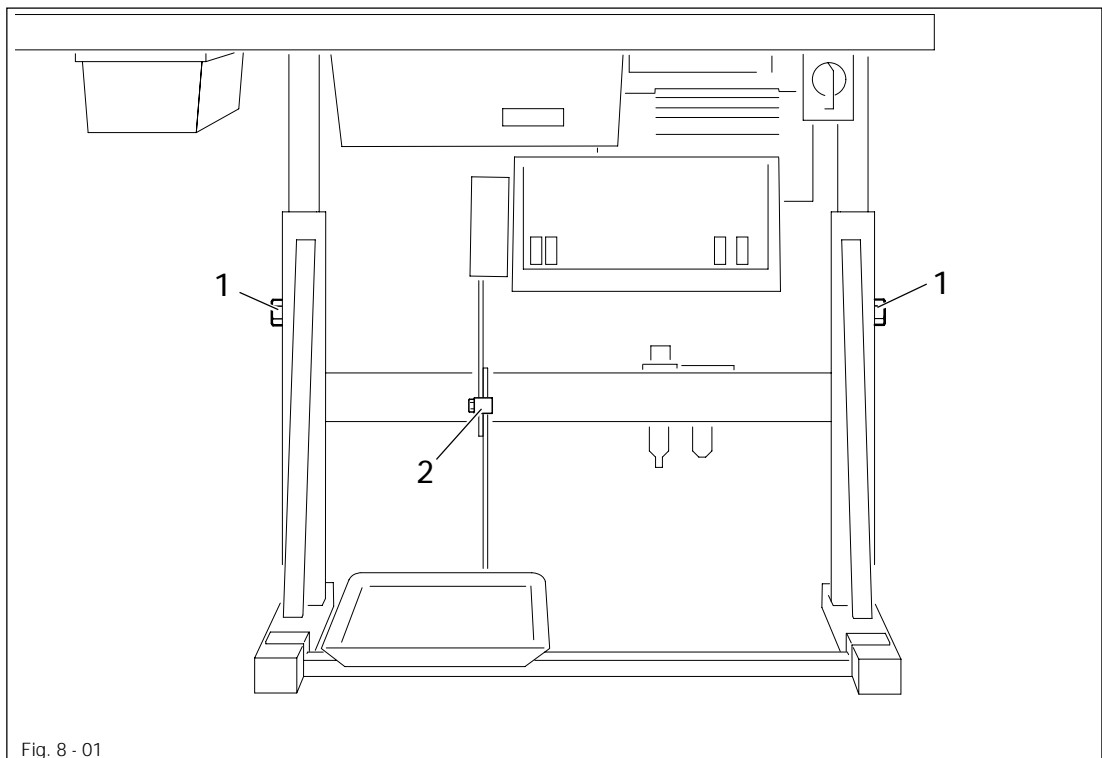
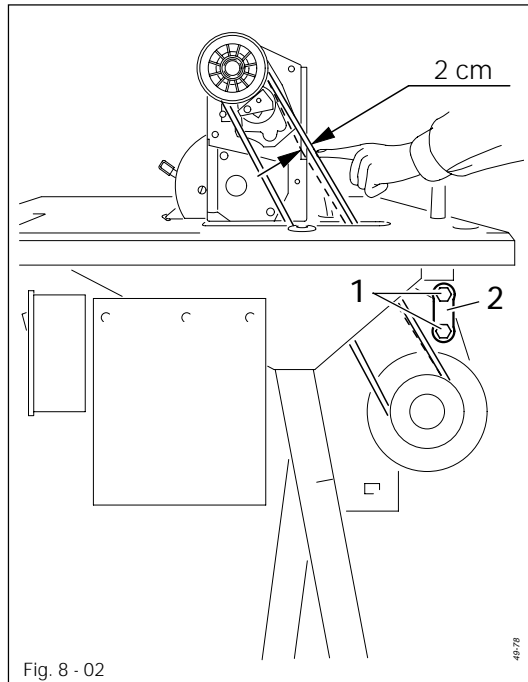


Fig. 8 - 01

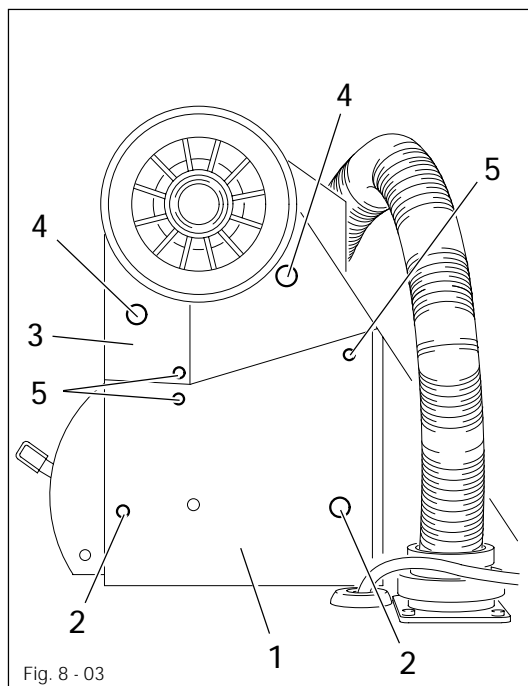
- Loosen screws 1 and 2 and set the table height as required.
- Firmly tighten screws 1.
- Set the required pedal position and tighten screw 2.

8.01.02 Tensioning the v-belt



- Loosen nuts 1.
- Tension the v-belt with motor bracket 2.
- Tighten nuts 1 firmly.

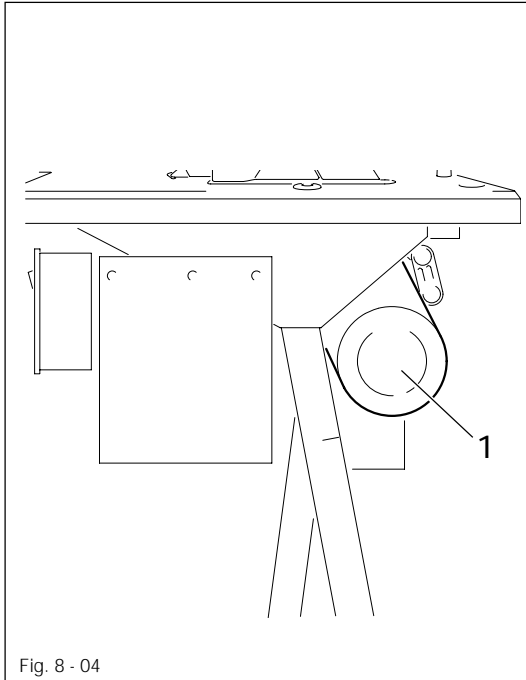
8.01.03 Fitting the top V-belt guard



- Fasten bottom section of V-belt guard 1 with screws 2.
- Fasten top section of V-belt guard 3 with screws 4.
- Attach belt guard sections 1 and 3 with screws 5.

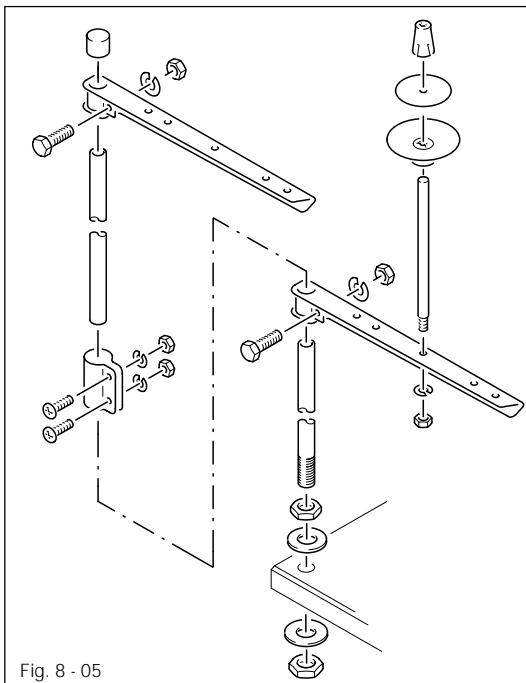
Installation and commissioning

8.01.04 Fitting the lower belt guard



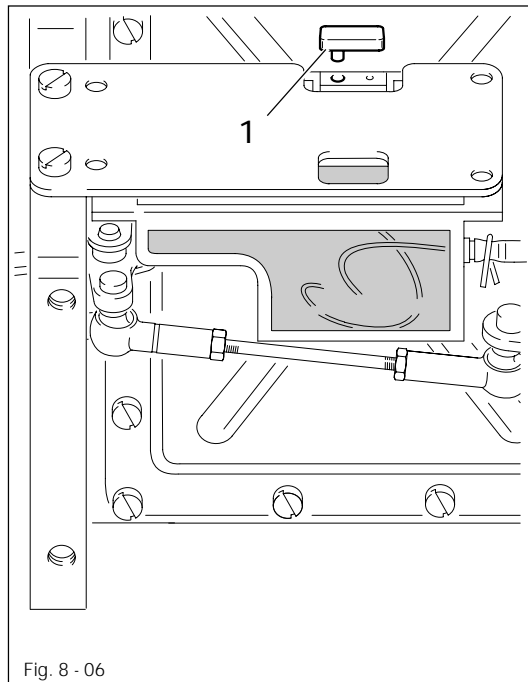
- Position belt guard 1 so that motor pulley and v-belt can run freely.

8.01.05 Assembling and fitting the reel stand



- Assemble the reel stand as shown in Fig. 8-05.
- Fit the reel stand in the holes in the table top and secure it with the nuts provided.

8.02 Commissioning



Before the machine is commissioned, stopper 1 must be removed!

- Clean the machine thoroughly and then check the oil level (see **Chapter 12 Care and Maintenance**).
- Check the machine, in particular the electrical leads, for any damage.
- Have specialists check, whether the machine can be operated with the available mains connection.



If there are any irregularities, do not operate the machine under any circumstances!



The machine may only be connected to a grounded socket.

- When the machine is running, the balance wheel must turn towards the operator. If this is not the case, have the machine converted by specialist personnel, see **Motor Service Manual**.
- Connect the machine to the compressed air system. The manometer must display a pressure of **6 bar**. If necessary, set to the correct value (see **Chapter 12.04 Checking/regulating air pressure**).

8.03 Switching the machine on/off

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

Setting up



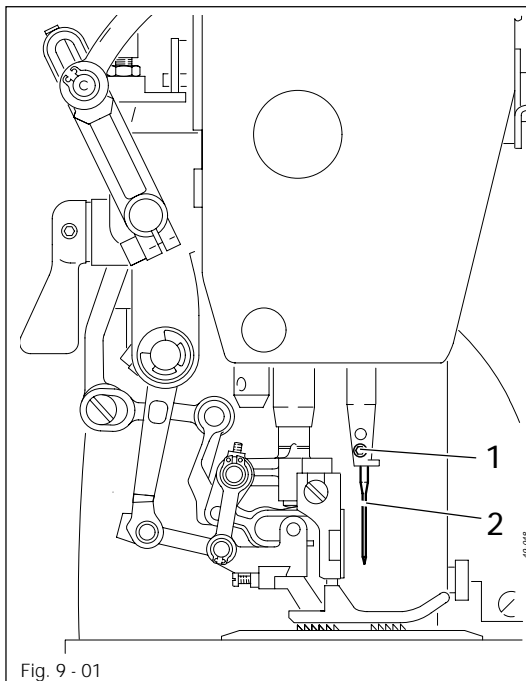
All instructions and regulations in this instruction manual must be observed. Special attention must be given to all safety regulations!



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

9.01

Inserting the needle



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

- Raise the needle bar to its highest position.
- Loosen screw 1.
- Insert the needle 2 in the needle bar as far as it will go.
(The long needle groove must be pointing left – as seen in the direction of sewing.)
- Tighten screw 1.



Only use 134 KK system needles.

9.02 Winding the bobbin thread, adjusting the thread tension

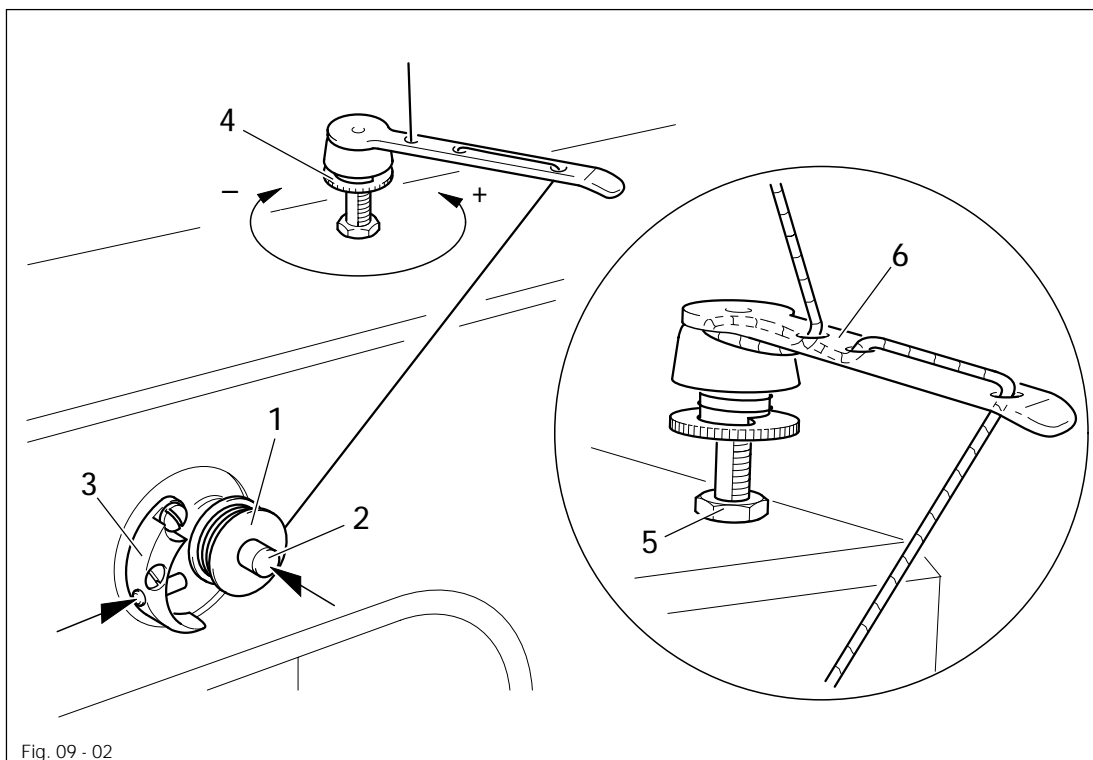


Fig. 09 - 02

- Place the empty bobbin 1 onto the bobbin winder spindle 2.
- Thread the thread in accordance with Fig. 09-02 and wind it a few times around bobbin 1 in a clockwise direction.
- Switch the bobbin winder on by pushing the bobbin winder spindle 2 and lever 3 simultaneously.



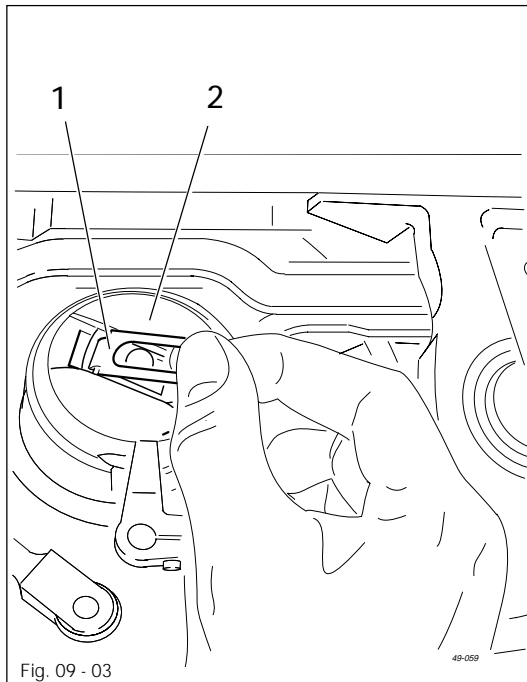
The bobbin is wound during sewing.

- The tension of the thread on bobbin 1 can be adjusted using milled screw 4.
- The bobbin winder stops automatically when bobbin 1 is full.

If the thread is wound irregularly:

- Loosen nut 5.
- Turn thread guide 6 accordingly.
- Tighten nut 5.

9.03 Removing/inserting the bobbin case



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

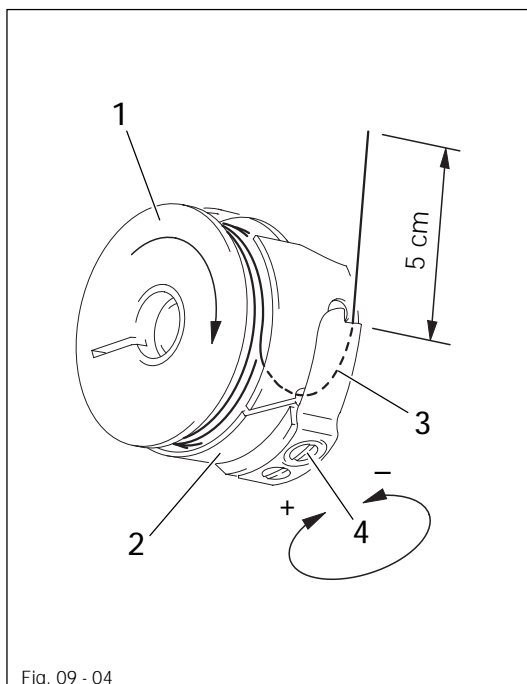
Removing the bobbin case.

- Lift clip 1 and remove bobbin case 2.

Inserting the bobbin case:

- Insert bobbin case 1 until you feel it click into place.

9.04 Threading the bobbin case, adjusting the thread tension

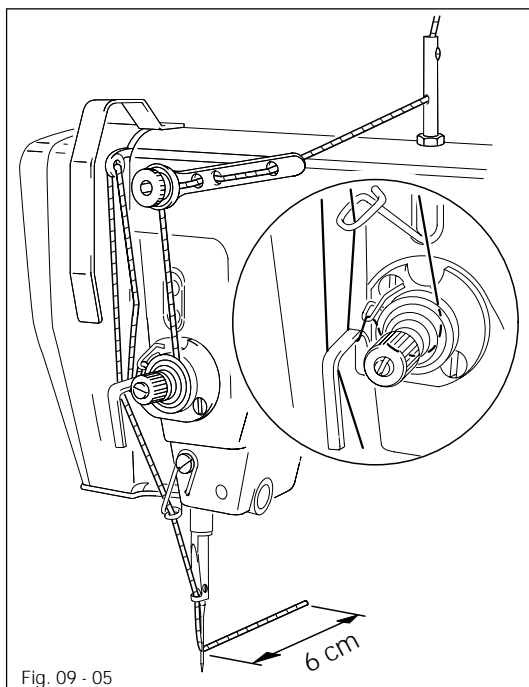


- Insert bobbin 1 into bobbin case 2.
- Guide the thread through the slot under spring 3.
- Adjust the thread tension by turning screw 4.



When the thread is pulled the bobbin 1 must rotate in the direction of the arrow.

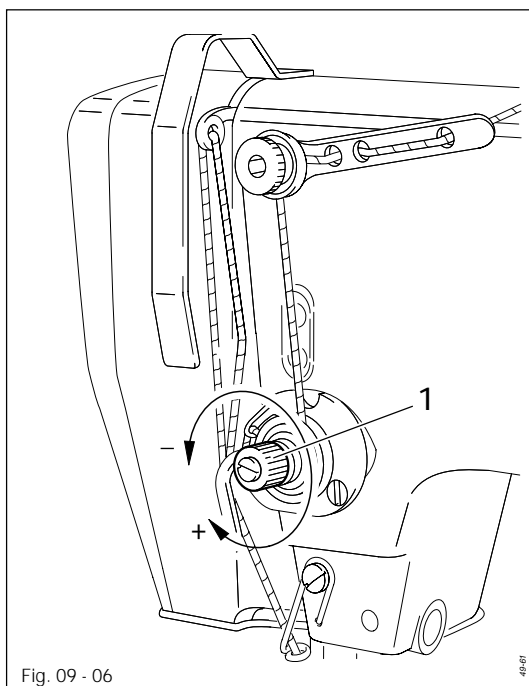
9.05 Threading the needle thread



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

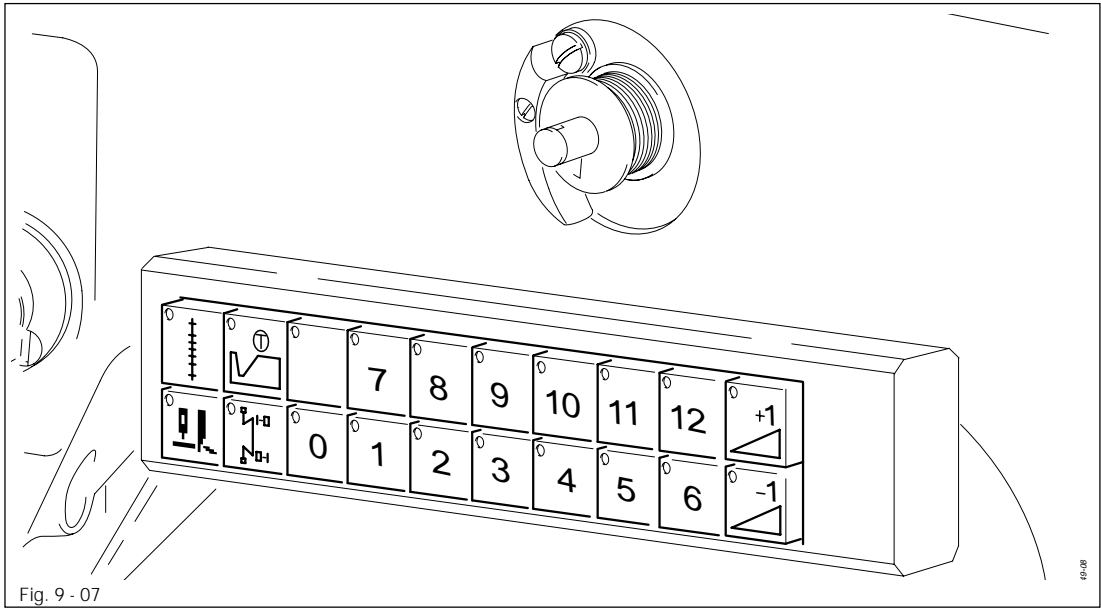
- Thread the needle thread in accordance with Fig. 09-05.

9.06 Adjusting the needle-thread tension



- Adjust the needle-thread tension by turning milled screw 1.

9.07 Fullness input



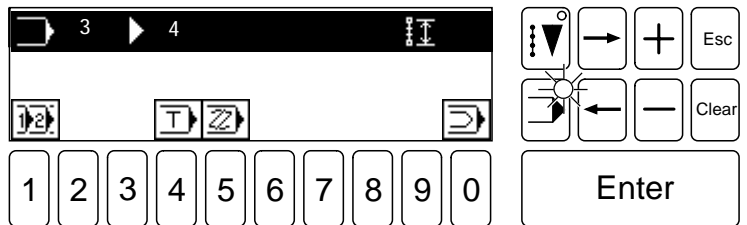
- Switch on the machine.
- Select the desired fullness using keys 0 – 12.

9.08 Selecting the language (only on machines with graphics operating panel)

- Switch on the machine.



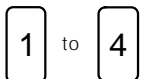
- Select mode INPUT.



- With number key 0 call up the function input menu.



- With number key 1 call up the function LANGUAGES.



- Select the desired language with the number keys:

- 1 = (D)
- 2 = (GB)
- 3 = (F)
- 4 = (E)

- After the corresponding number has been entered, the language is taken over immediately.

10 Sewing

Following steps must be carried out before work begins, irrespective of how the machine is equipped.

- Check the oil level of the machine, see **Chapter 12.02 Oil level of the machine.**
- Check the air pressure, see **Chapter 12.04 Checking/adjusting the air pressure**
- Switching on the machine, see **Chapter 7.01 On/off switch.**

10.01 Machines without graphics control panel (Manual Sewing)

On machines without a graphics control panel 2 values are set for the fullness. After the machine has been switched on, following functions are available:

- By operating the knee switch it is possible to change from one amount of fullness to the other, see **Chapter 7.04 Right knee switch.**
- Using the keyboard, the value for the selected fullness can be changed in part steps, see **Chapter 7.07 Keyboard.**

10.02 Machines with graphics control panel

10.02.01 Manual sewing with one amount of fullness (program number 0)



- Select **SEWING** mode.



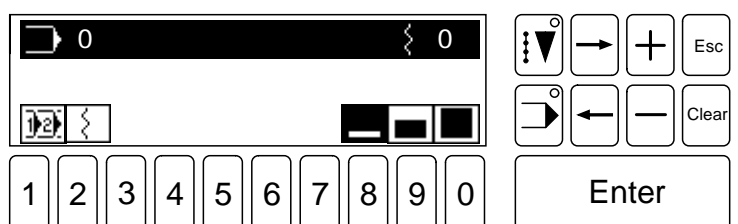
- Select **program selection function** (number key 1).



- Enter program number 0.

Enter

- Confirm input with **Enter**.



- Using the keyboard, the value for the fullness can be changed in part steps, see **Chapter 7.07 Keyboard.**

Displays in the status bar:



Program number

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

"Manual sewing with one amount of fullness" is selected with program number 0.



Fullness

The current fullness value is shown next to this symbol.

Functions in the pictogram bar:



Program selection

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



Fullness

This function opens a direct menu for the input/alteration of the desired fullness. The value for the fullness from + 50 to - 50 can be entered with the number keys.

Type of material

To achieve the same results (amounts of fullness) when working with different types of materials, with this function 3 types of material can be selected directly.



Light material



Medium weight material



Heavy material

The pictogram of the type of material currently selected is displayed on a dark background.

10.02.02 Manual sewing of 2 amounts of fullness alternately (program number 1)



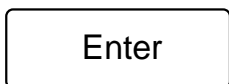
- Select **SEWING** mode.



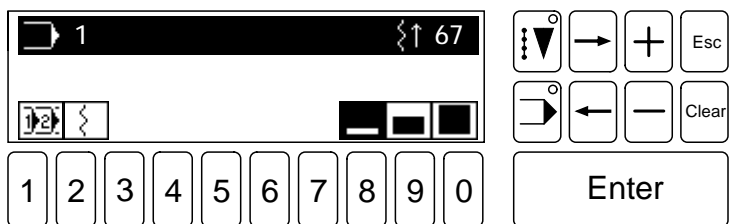
- Select **program selection** function (number key 1).



- Enter program number 1.



- Confirm input with **Enter**.



- Using the keyboard, the value for the fullness can be changed in part steps, see **Chapter 7.07 Keyboard**.
- Using the knee switch, it is possible to change from one amount of fullness to the other.

Displays in the status bar:



Program number

The number of the selected seam program appears next to this symbol.
 "Manual sewing of 2 amounts of fullness" is selected with program number "1".



Top fullness/bottom fullness

The current value for the top or bottom fullness is shown next to these symbols. The bottom fullness is marked with "-".

Functions in the pictogram bar:



Program selection

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



Fullness

This function opens a direct menu for the input/alteration of the desired fullness. The value for the fullness from + 50 to - 50 can be entered with the number keys.



Type of material

To achieve the same results (amounts of fullness) when working with different types of materials, with this function 3 types of material can be selected directly, see **Explanations in Chapter 10.02.01 Manual sewing with one amount of fullness**.

10.02.03 Programmed sewing (program numbers 2 – 200)

Using the program numbers 2 – 200, seam programs programmed **beforehand** can be selected.

- Select **SEWING** mode.
- Select **program selection** function.
- Enter desired program number from **2 - 200**.
- Confirm input with **Enter**.

The diagram also shows a control panel with a display showing '2 4 | 5', navigation buttons, and a numeric keypad (1-0) with an 'Enter' key.

- The programmed amounts of fullness (seam areas) are processed consecutively dependent on the programmed number of stitches.
In seam areas, which were programmed without details of the number of stitches (number of stitches = 0), switch to the next area using the right knee switch.

Displays in the status bar:



Program number

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



Seam areas left/right

The number of the seam areas for left and right parts is shown next to this symbol.



Number of stitches

The number of stitches for the present seam area is shown next to this symbol.


If no value is shown next to symbol, switch to the next seam area using the knee switch.

Text displays:

 **Beginning of seam**

 **Seam area sewn**

 **Current seam area** (with seam area number)

 **End of seam**



Display presentation is not true to scale.

Functions in the pictogram bar:



Program selection

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



Program interruption

This function interrupts the seam program cycle (see **Chapter 10.02.04 Program interruption**).



Stitch counter on/off

With this function the stitch counter can be switched on or off.



Alternate sewing

When this function is activated, the left and right parts are processed alternately. The function is activated, when the symbol is displayed on a dark background. If only one part is programmed, this symbol is not displayed.



Left part/right part

The symbol illustrated on a dark background shows which part is being worked on currently. By selecting the corresponding function, it is possible to switch over to the desired part. The symbols are only displayed, if both parts are programmed.



Type of material

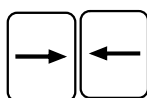
To achieve the same results (amounts of fullness) when working with different types of materials, with these functions 3 types of material can be selected directly, see **Explanations in Chapter 10.02.01 Manual sewing with one amount of fullness**.

10.02.04 Program interruption



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

- Switch over to **manual SEWING** after the key is pressed the first time.
- It is possible to continue sewing manually.
- Using the **arrow keys** it is possible to select the seam area, in which the seam program should be continued.
- After pressing the key the second time, the selected seam area is entered, **programmed SEWING** is continued.



In the last seam area, after the thread has been cut using the pedal (pedal position 4 in **Chapter 7.02 Pedal**) the interrupted seam program is started from the beginning.

10.02.05 Error messages

In case of an error message, the text and pictogram bars in the display are written over. An error message is caused by false settings, defective elements or seam programs as well as by overload conditions.

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

Enter

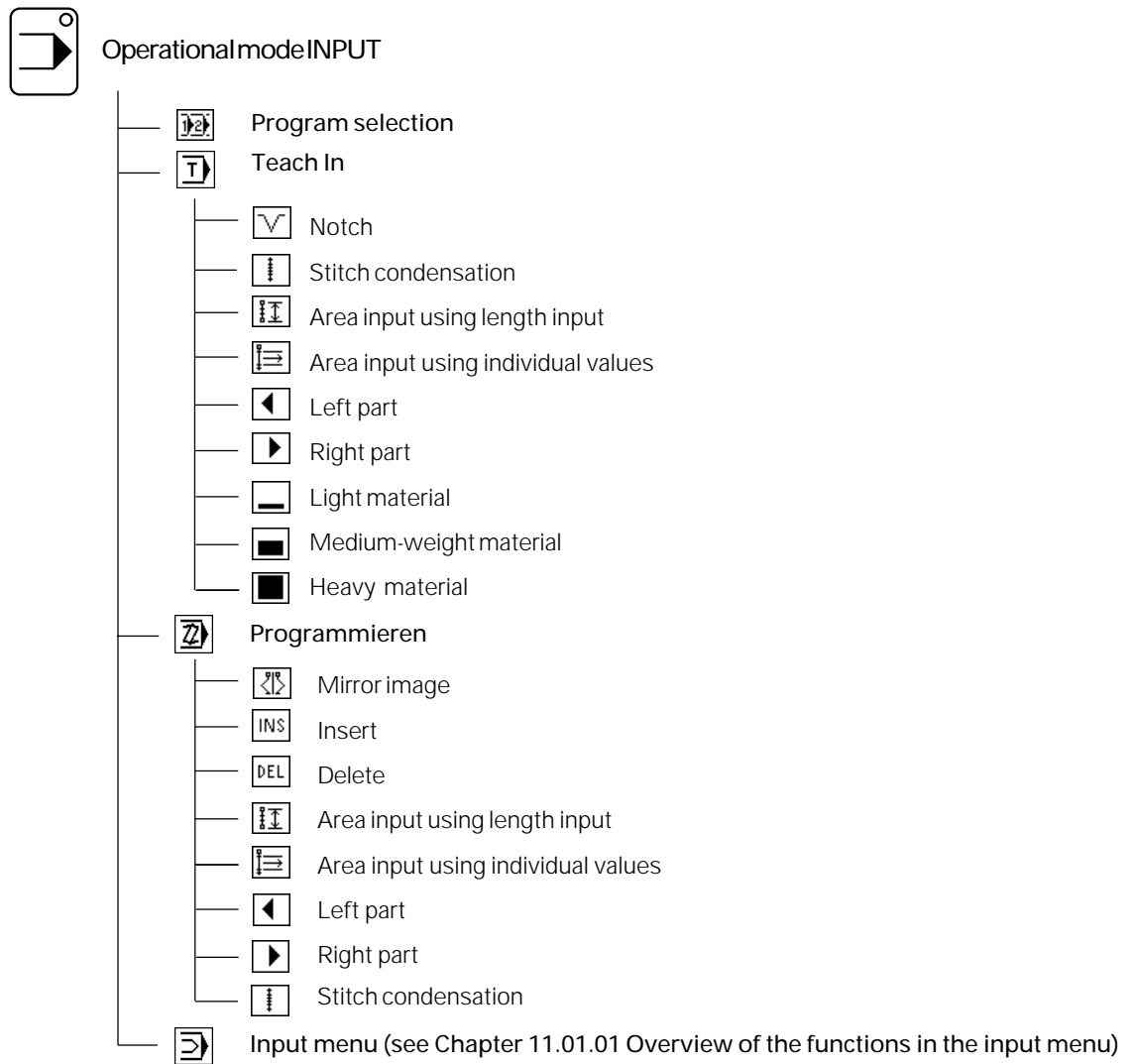
How to correct the error:

- A move back to an incorrect input is effected by pressing **Enter**.
- Correct the input.

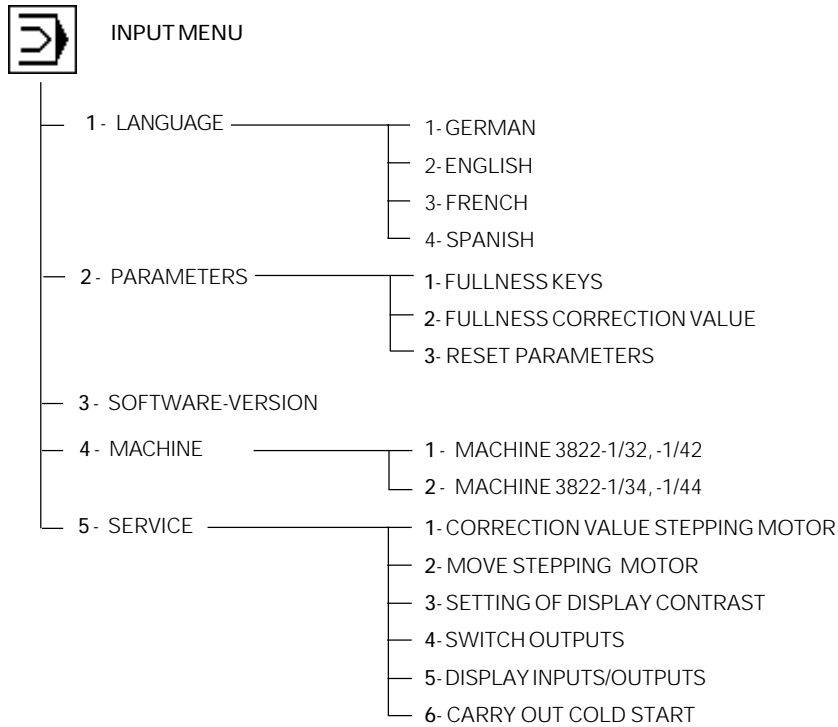
11 Input (only on machines with graphics operating panel)

The operational mode Input is used to enter parameters and programs.
 In the function **Service** help for error search is offered. Functions for direct selection and functions for selection using a menu are available.

11.01 Overview of the functions in the operational mode INPUT



11.01.01 Overview of the functions in the input menu



11.01.02 Selection of functions from the input menu

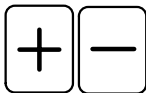
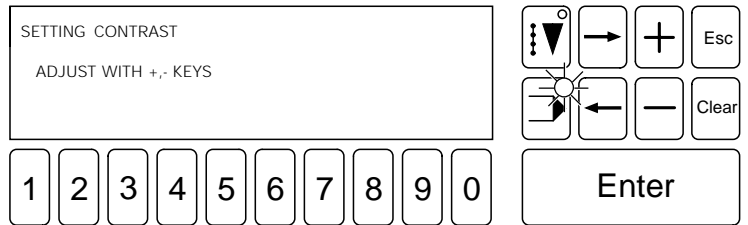
For example, the display contrast can be adjusted as follows:

- Select operational mode **INPUT**
- Select function **Input menu (number key 0)**.
- Select function **SERVICE**:

- 3 ● Select DISPLAY CONTRAST function



On no account may the display be changed to such an extent, that it is impossible to read it!



- The desired contrast can be set using the Plus/Minus keys.

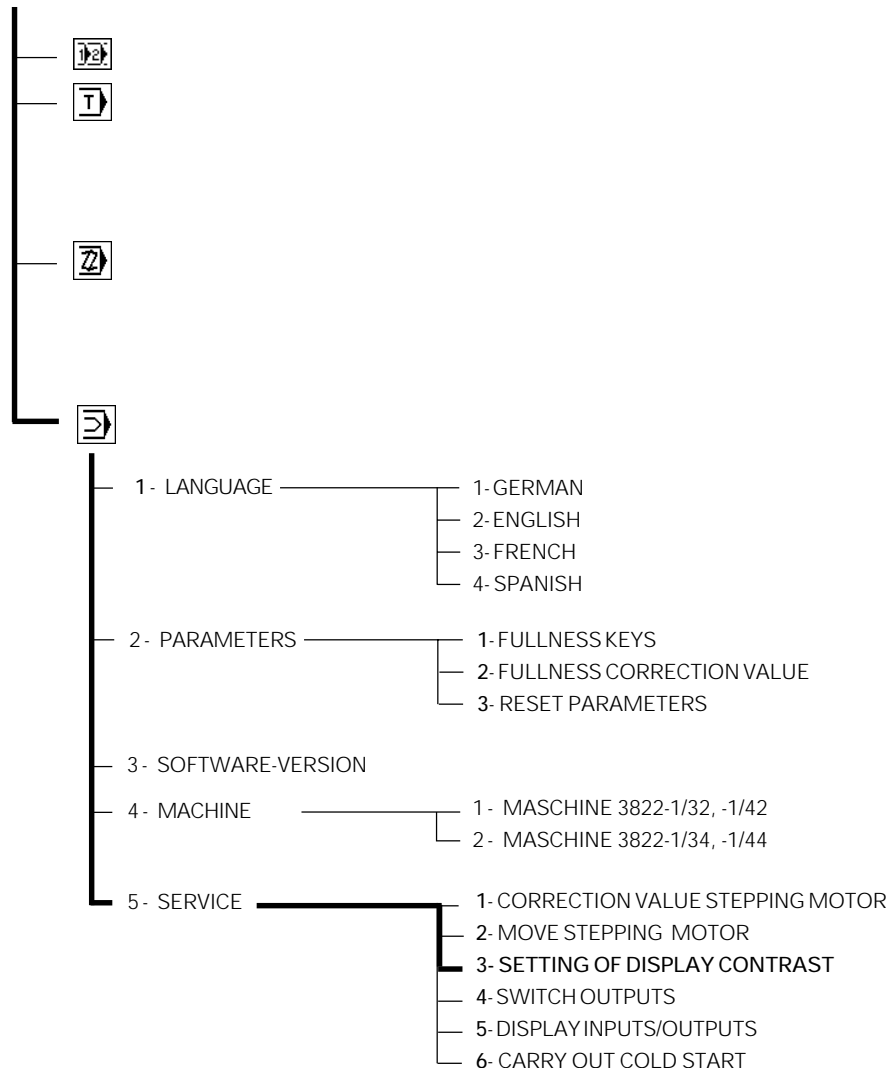


- The input is accepted by pressing Enter.

Overview of the input steps



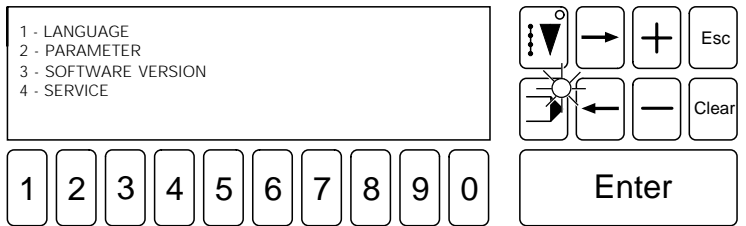
Operational mode INPUT



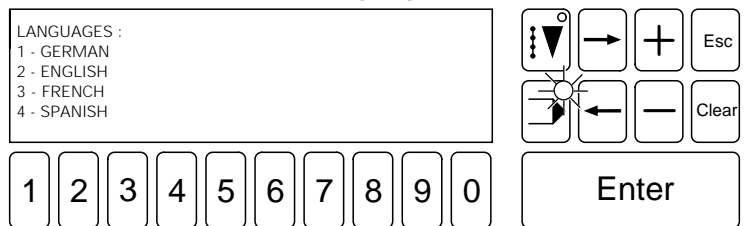
11.01.03 Explanation of the functions in input menu



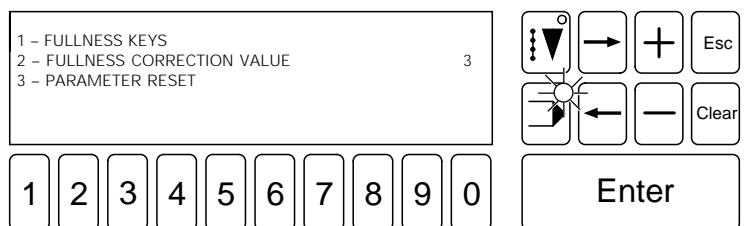
After calling up the function **Input menu**, following additional functions are available:



- 1 LANGUAGE
This function opens a menu on the display for the selection of the language (see **Chapter 9.08 Select language**):



- 2 PARAMETER
This function calls up parameters, which can be altered.

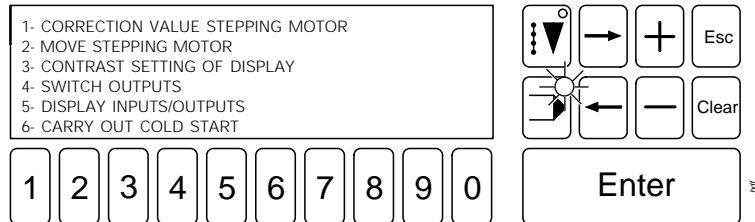


- 1 FULLNESS KEYS
With this function a fullness amount can be allocated to each of the keys on the keyboard.
- 2 FULLNESS CORRECTION VALUE
With this function the value for the fullness correction can be set for the correction keys on the keyboard. The value is always valid for one use of the corresponding key, see **Chapter 7.07 Keyboard**.
- 3 RESET PARAMETERS
After this function has been called up, the values for FULLNESS KEYS, FULLNESS CORRECTION VALUE and type of material can be reset.

- 3 SOFTWARE VERSION
After this function has been called up, the current software versions for control and the operating panel are displayed.


4 MACHINE
The machine type can be selected using this function. Depending on which machine is selected, the corresponding control parameters are loaded.

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



1 CORRECTION VALUE STEPPING MOTOR
This function is used to correct the zero position of the stepping motor for adjusting the fullness.

2 MOVE STEPPING MOTOR
With this function the stepping motor can be moved.

 Clockwise direction

 Anti-clockwise direction


3 CONTRAST SETTING OF DISPLAY



On no account may the display be changed to such an extent, that it is impossible to read it!

This function alters the contrast setting of the display.

4 SWITCH OUTPUTS
With this function the outputs can be set or reset,
See **Chapter 13.10 Table of inputs and outputs**

 Output on

 Output off

5 DISPLAY INPUTS/OUTPUTS
After this function has been selected, the conditions of the inputs and outputs are displayed: 1 = input operated / output switched on
0 = input not operated / output not switched on

6 CARRY OUT COLD START
This function resets all inputs and parameters and deletes the programs.

11.02 Input and alteration of seam programs

11.02.01 Teach in

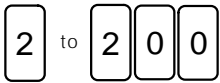
With the function **Teach in** the seam program can be entered during sewing.
The desired fullness can be selected and then, when the seam is sewn, the number of stitches to the end of this seam area is stored.



- Select mode **INPUT**.



- Call up function **program selection**.



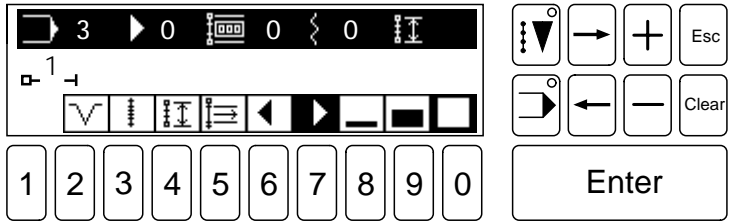
- Enter desired program number from **2 – 200**.



- Confirm input with **Enter key**.



- Call up function **Teach in**.



Display in the status line:



Program number

The number of the selected seam program appears after this symbol.



Right seam areas

The number of seam areas for right parts is displayed after this symbol.



Number of stitches

The number of stitches in the current seam area is shown after this symbol.



Fullness

The amount of fullness in the current area is shown after this symbol.



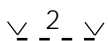
Required seam length

The required seam length of the current area is shown after this symbol.

Displays in text description field:



Beginning of seam



Seam area being inserted at present



End of seam

Explanation of the functions in the pictogram bar:



Notch

This function defines the end of the seam area. The number of stitches is saved and the required seam length calculated.

The same function is executed by pressing **Enter**.



By operating the knee switch, the stitch number = 0 is set, i.e. later, during the execution of the program, the move to the next seam area is carried out by operating the knee switch.



Stitch condensation

By selecting this function, the stitch condensation is activated and the stitch counter switched off for this area (number of stitches = 0).



Seam area input using length input

By entering the start length and the given length, with this function the required seam area values for number of stitches, fullness and given length are calculated and saved.



Area input using individual values

After selecting this function, each individual parameter can be entered and changed. If number of stitches = 0, the seam area is sewn without counting the stitches, and the required seam length is deleted.

If the number of stitches is 1 – 999, the number of stitches specified are sewn.



Left part/Right part

These functions are used for selecting the part to be programmed or altered. The selection is shown by a symbol on a dark background.

Type of material

To achieve the same results (amounts of fullness) when working with different types of materials, with these functions 3 types of material can be selected directly.



Light material



Medium weight material



Heavy material

The pictogram of the selected type of material is shown on a dark background.



By operating a mode key (SEWING or INPUT) the values entered are taken over and the teach in is completed.

11.02.02 Programming / Alterations

With the function programming, seam programs, which have already been compiled, can be altered. However, new seam programs can also be compiled.



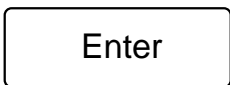
- Select mode **INPUT**.



- Call up function **program selection**.



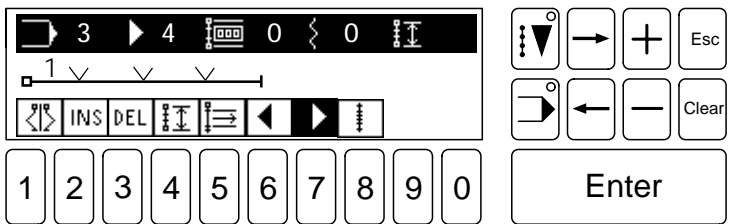
- Enter desired program number from 2 – 200.



- Confirm input with **Enter** key.



- Call up function **Programming**.



Display in the status line:



Program number

The number of the selected seam program appears after this symbol.



Right seam areas

The number of seam areas for right parts is displayed after this symbol.



Number of stitches

The number of stitches in the current seam area is shown after this symbol.



Fullness

The amount of fullness in the current area is shown after this symbol.



Required seam length

The required seam length of the current area is shown after this symbol.

Displays in text description field:

□ — Beginning of seam

∨ 1 ∨ Current seam area

∨ 2 ∨ Seam area being inserted at present

— → End of seam

Explanation of the functions in the pictogram bar:

**Mirror image**

With this function it is possible to see the currently entered seam program as a mirror image. After selecting this function, programming ends.

**Insert**

This function inserts a seam area at the current position. The contents of the current seam area are first taken over into the inserted seam area and can be changed if required. The following seam areas are moved one step back.

**Delete**

This function deletes the current seam area. Following seam areas are moved forward. If all seam areas are deleted, the program is quitted.

**Area input using length input**

By entering the start length and the given length, with this function the seam area values for number of stitches, fullness and given length are calculated and saved.

**Area input using individual values**

After selecting this function, each individual parameter can be entered and changed. If number of stitches = 0, the seam area is sewn without counting the stitches, and the required seam length is deleted.

If the number of stitches is 1 – 999, the number of stitches specified are sewn.

**Left part/Right part**

These functions are used for selecting the part to be programmed or altered. The selection is shown by a symbol displayed on a dark background.

**Stitch condensation**

By selecting this function, the stitch condensation is activated and the stitch counter switched off for this area (number of stitches = 0).



By operating a mode key (SEWING or INPUT) the values entered are taken over and the teach in is completed.

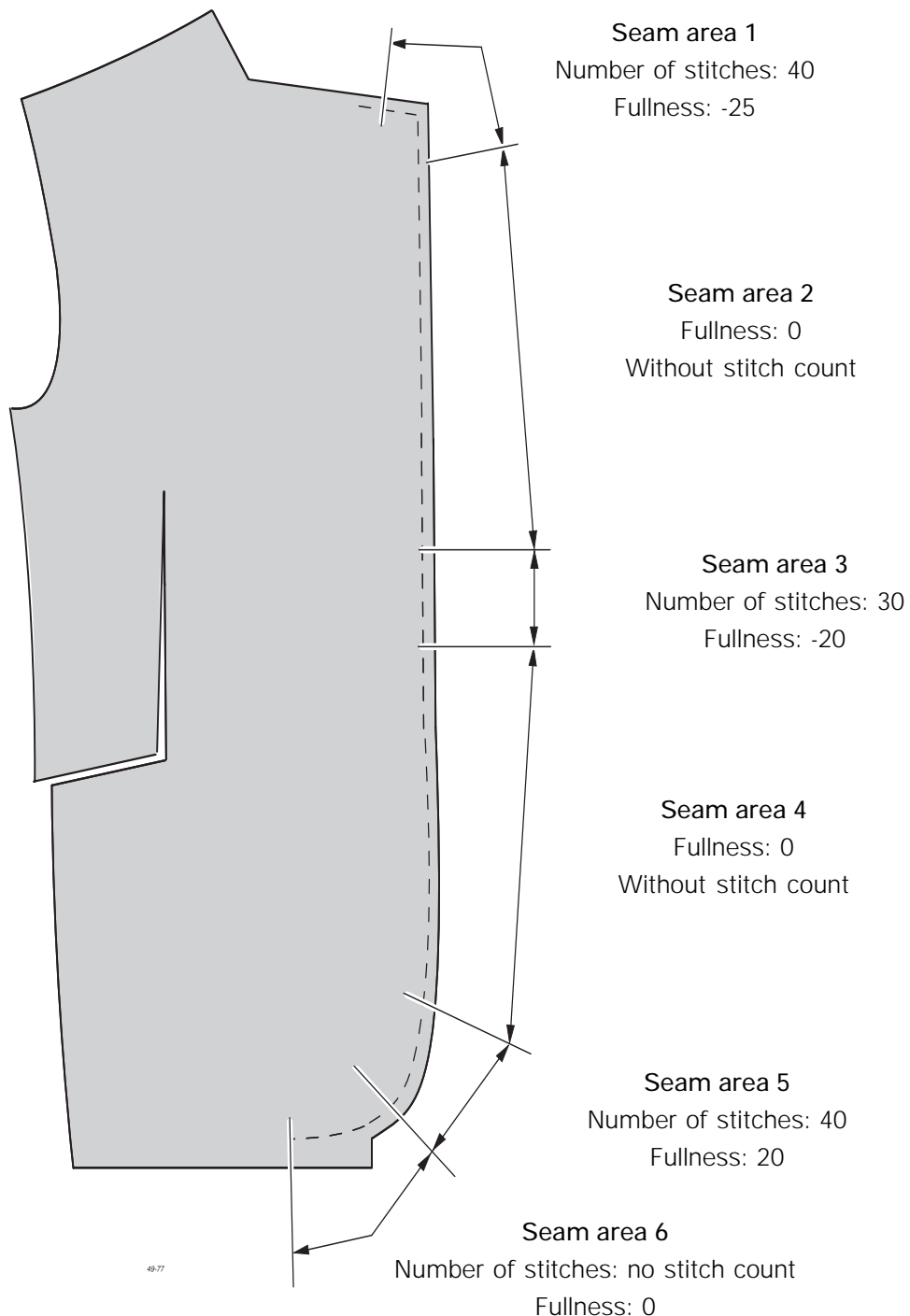
11.03 Examples for programming a seam

The required values can be entered as follows:

1. By direct input of the number of stitches and value for the fullness,
2. By entering the given length-start length value
3. By using the Teach-in method (see Chapter 11.03.01 – 11.03.03)

11.03.01 Programming by direct input of number of stitches and fullness

The seam to be programmed for the front part of a jacket consists of 5 seam areas and is saved under program number 3.





- Select **INPUT** mode.



- Select **program selection** function.



- Enter program number **3**.



- Confirm input with **Enter**.



- Select **programming** function.

Seam area 1



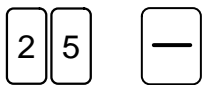
- Select **area input using individual values** function.



- Enter number of stitches.



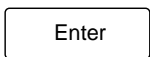
- Confirm with **Enter**.



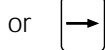
- Enter fullness.



- Confirm with **Enter**.



- Switch to the next seam area by pressing the **Enter** or **arrow** key.



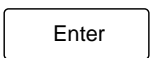
Seam area 2



- Select **area input using individual values** function.



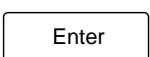
- Enter number of stitches.
(If "0" is entered, the end of the seam area is selected by operating the right knee switch.)



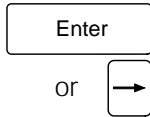
- Confirm with **Enter**.



- Enter fullness.



- Confirm with **Enter**.

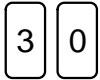


- Switch to the next seam area by pressing the **Enter** or **arrow** key.

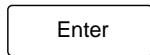
Seam area 3



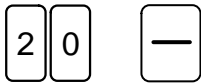
- Select area input using individual values function.



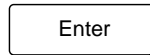
- Enter number of stitches.



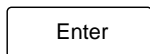
- Confirm with **Enter**.



- Enter fullness.



- Confirm with **Enter**.



or

- Switch to the next seam area by pressing the **Enter** or **arrow** key.

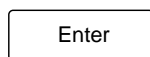
Seam area 4



- Select area input using individual values function.



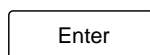
- Enter number of stitches.
(If "0" is entered, the end of the seam area is selected by operating the right knee switch.)



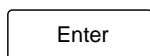
- Confirm with **Enter**.



- Enter fullness.



- Confirm with **Enter**.



or

- Switch to the next seam area by pressing the **Enter** or **arrow** key.

Seam area 5



- Select **area input using individual values** function.



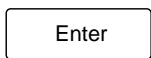
- Enter number of stitches.
(If "0" is entered, the end of the seam area is selected by operating the right knee switch.)



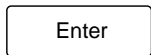
- Confirm with **Enter**.



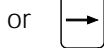
- Enter fullness.



- Confirm by pressing **Enter** twice.



- Switch to the next seam area by pressing the **Enter** or **arrow** key.



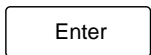
Seam area 6



- Select **area input using individual values** function.



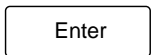
- Enter number of stitches.
(If "0" is entered, the end of the seam area is selected by operating the right knee switch.)



- Confirm with **Enter**.



- Enter fullness.



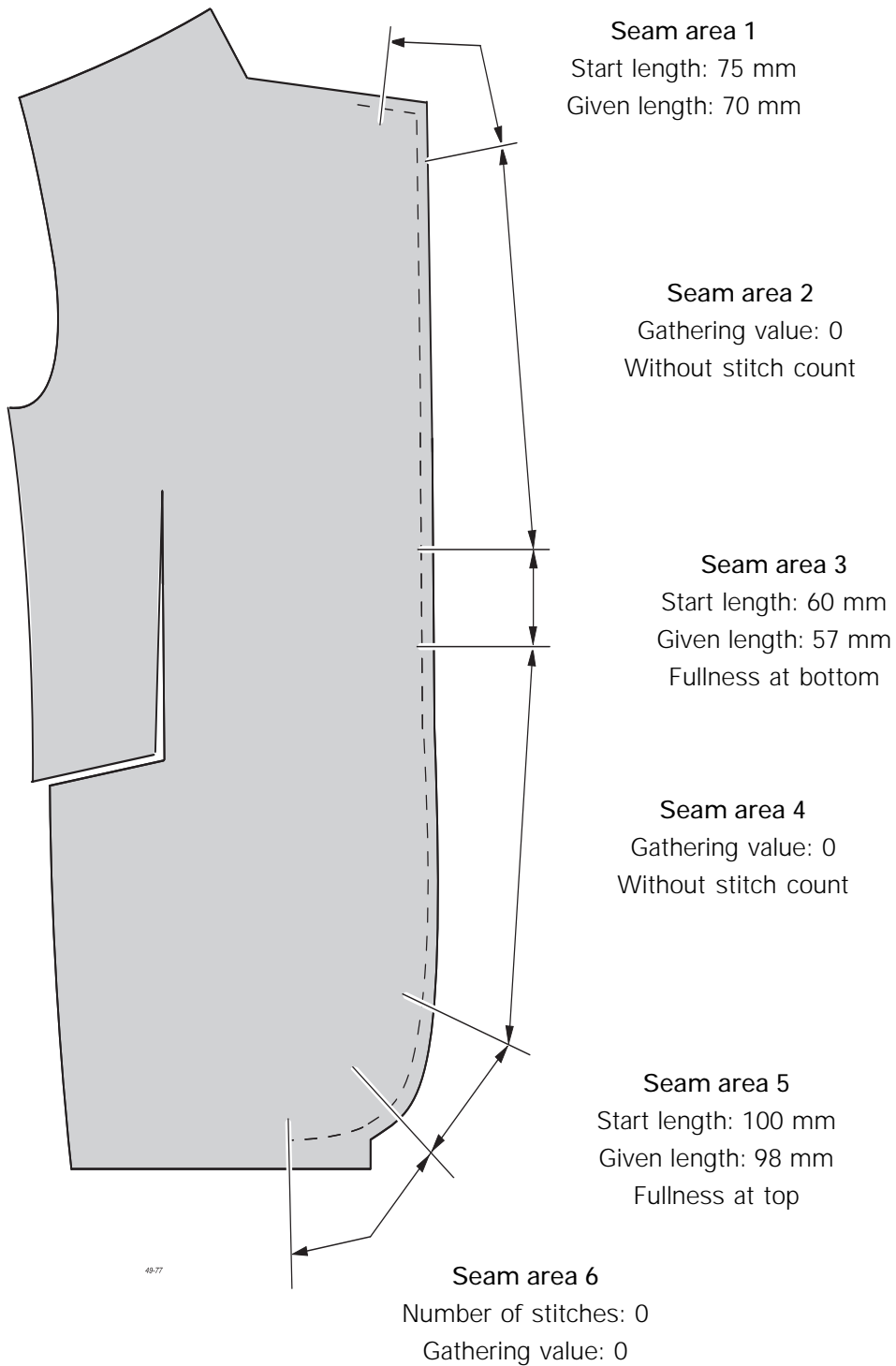
- Confirm by pressing **Enter** twice.



- Press **operational mode key**.
The programming has been completed and the program is saved.

11.03.02 Programming by entering the given-start value

The seam to be programmed for the front part of a jacket consists of 5 seam areas and is saved under program number 5.





- Select **INPUT** mode.



- Select **program selection** function.



- Enter program number 5.



- Confirm input with **Enter**.



- Select **programming** function.

Seam area 1



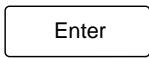
- Select **given-start** input.



- Select **fullness at bottom**.



- Enter start length.



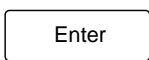
- Confirm with **Enter**.



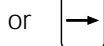
- Enter given length.



- Confirm with **Enter**.



- Switch to the next seam area by pressing the **Enter** or **arrow** key.



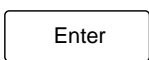
Seam area 2



- Select **area input using individual values** function.



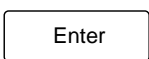
- Enter number of stitches.
(If "0" is entered, the end of the seam area is selected by operating the right knee switch.)



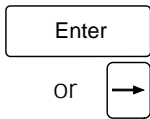
- Confirm with **Enter**.



- Enter fullness.



- Confirm with **Enter**.



- Switch to the next seam area by pressing the **Enter** or **arrow** key.

Seam area 3



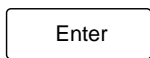
- Select given-start input.



- Select fullness at bottom.



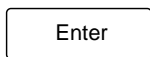
- Enter start length.



- Confirm with **Enter**.



- Enter given length.



- Confirm with **Enter**.



- Switch to the next seam area by pressing the **Enter** or **arrow** key.



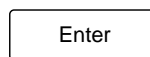
Seam area 4



- Select area input using individual values function.



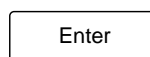
- Enter number of stitches.
(If "0" is entered, the end of the seam area is selected by operating the right knee switch.)



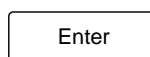
- Confirm with **Enter**.



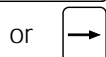
- Enter fullness.





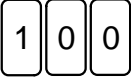




- Confirm with **Enter**.




- Switch to the next seam area by pressing the **Enter** or **arrow** key.





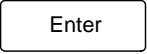



Seam area 5

- 
 - Select given-start input.
- 
 - Select fullness at top.
- 
 - Enter start length.
- 
 - Confirm with **Enter**.
- 
 - Enter given length.
- 
 - Confirm with **Enter**.
- 
 - Switch to the next seam area by pressing the **Enter** or **arrow** key.
- or

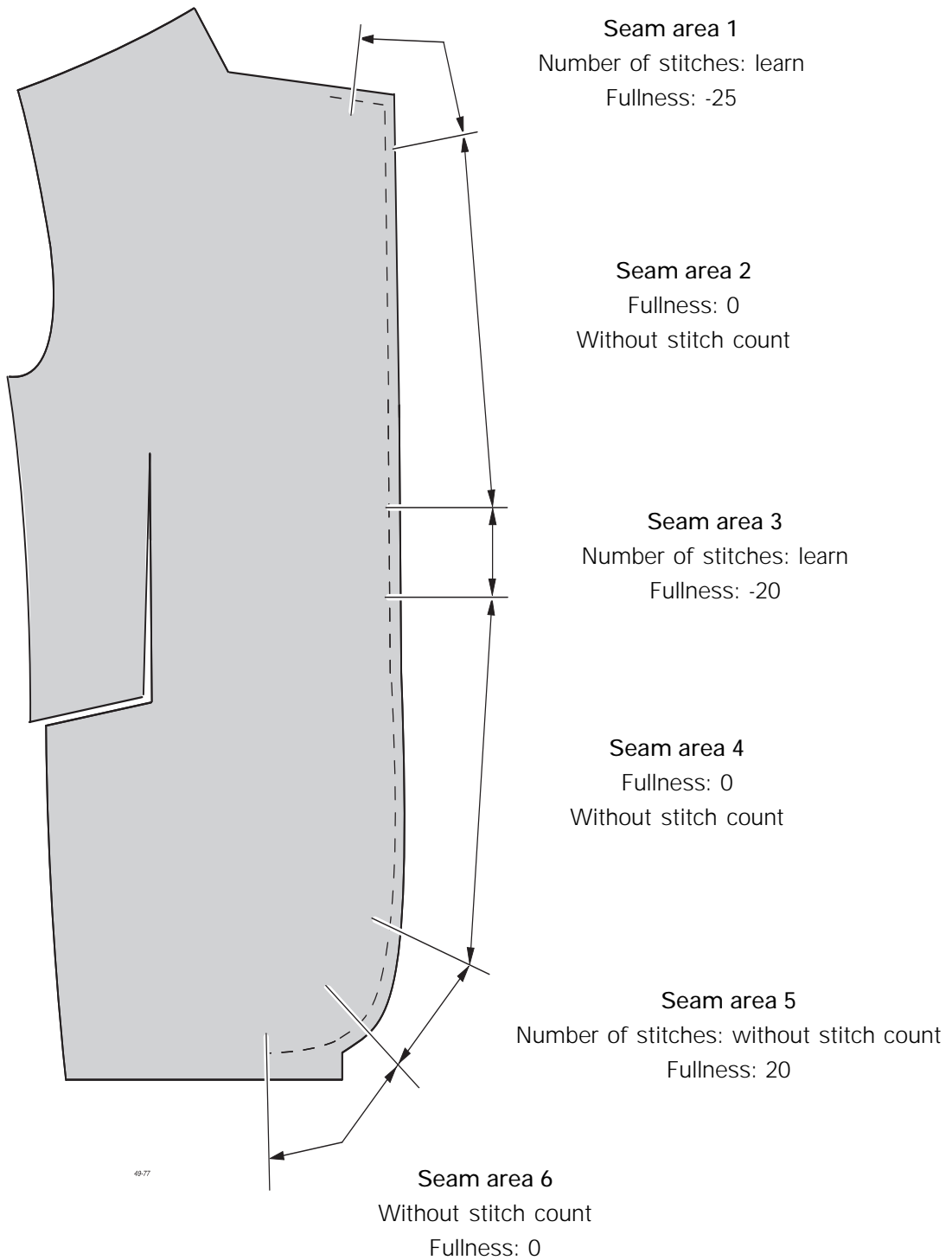


Seam area 6

- 
 - Select area input using individual values function.
- 
 - Enter number of stitches.
(If "0" is entered, the end of the seam area is selected by operating the right knee switch.)
- 
 - Confirm with **Enter**.
- 
 - Enter fullness.
- 
 - Confirm by pressing **Enter** twice.
- 
 - Press **operational mode** key.
The programming has been completed and the program is saved.

11.03.03 Programming using the teach-in method

The seam to be programmed for the front part of a jacket consists of 5 seam areas and is saved under program number 4.





- Select **INPUT** mode.



- Select **program selection** function.



- Enter program number 4.



- Confirm input with **Enter**.



- Select **teach-in** function.

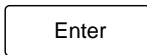
Seam area 1



- Select **area input using individual values** function.



- Enter fullness.



- Confirm by pressing **Enter** twice.

- Sew seam area 1.



- By pressing the **notch** key, the number of stitches sewn is taken over and a switch is made to the next seam area.

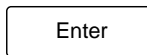
Seam area 2



- Select **area input using individual values** function.



- Enter fullness.



- Confirm by pressing **Enter** twice.

- Sew seam area 2.

- Switch to the next seam area by pressing the knee switch (the stitches learned are not taken over).

Seam area 3



- Select area input using individual values function.



- Enter fullness at bottom.



- Confirm by pressing **Enter** twice.

- Sew seam area 3.



- By pressing the **notch key**, the number of stitches sewn is taken over and a switch is made to the next seam area.

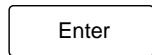
Seam area 4



- Select area input using individual values function.



- Enter fullness.



- Confirm by pressing **Enter** twice.

- Switch to the next seam area by pressing the knee switch (the stitches learned are not taken over).

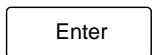
Seam area 5



- Select area input using individual values function.



- Enter fullness at top.



- Confirm by pressing **Enter** twice.

- Sew seam area 5.



- Switch to the next seam area by pressing the **notch key**.

Seam area 6



- Select area input using individual values function.



- Enter fullness.



- Confirm by pressing **Enter** twice.

- Sew seam area 6.

- By pressing the knee switch, the programming operation is ended.



- Press **operational mode key**.
The programming has been completed and the program is saved.



In the **Sewing** mode the seam areas 3 and 5 have to be started with the knee switch.

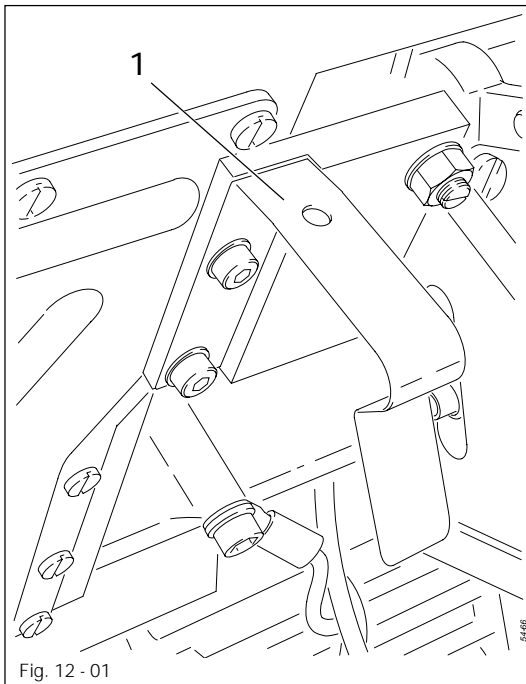
12 Care and Maintenance

Clean hook compartment	daily, several times if in continuous use
Clean the entire machine	once a week
Check the oil level	once a month
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 longer periods, shorter maintenance intervals are recommended.

12.01 Cleaning the machine



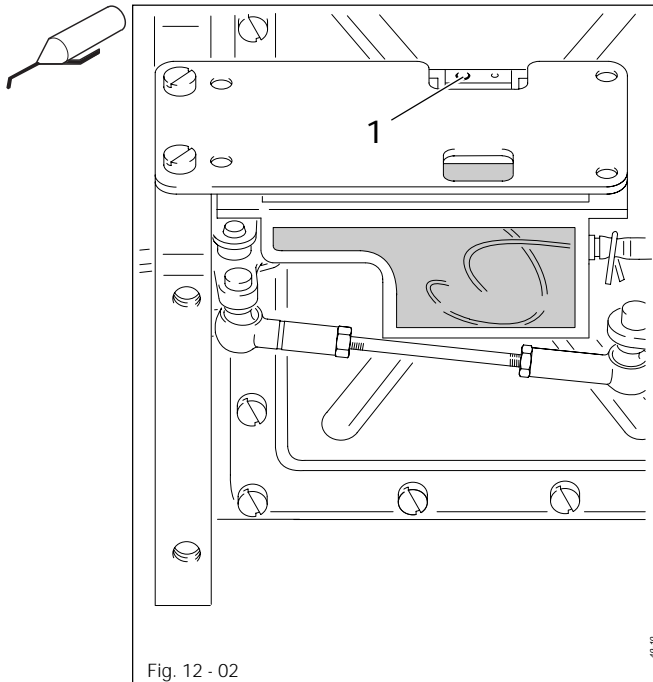
Switch off the machine!
Danger of injury if the machine is started accidentally!

- Tilt sewing head backwards.
- Clean the entire hook and hook compartment daily, more often if the machine is in continuous use.
- When returning the machine to an upright position, make sure that tilt lock 1 is pressed.



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

12.02 Oil level of the machine



Check the oil level once a month!

- If necessary fill oil into hole 1 up to the marking.

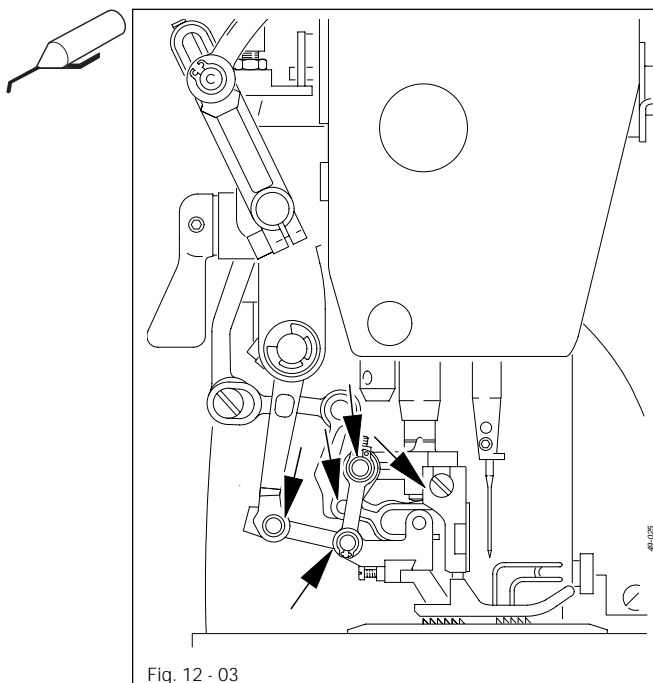


Only use oil with a medium viscosity of 10.00 mm²/s at 40°C and a density of 0.847 g/cm³ at 15°C.



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

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 mm²/s at 40°C and a density of 0.847 g/cm³ at 15°C.



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

12.04 Checking the air pressure

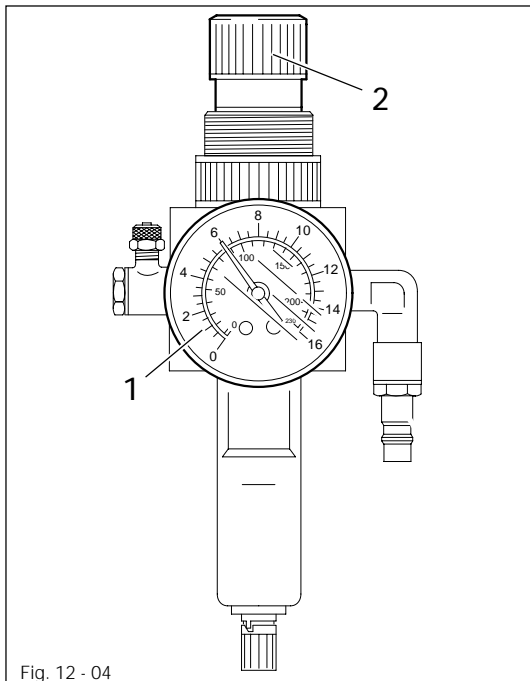


Fig. 12 - 04

- Check the air pressure on the gauge 1 before every use of the machine.
- The gauge 1 must show a pressure of approx. 6 bar.
- Adjust to this value if necessary.
- To do so lift button 2 and turn it until the gauge shows approx. 6 bar.

12.05 Emptying/cleaning the water container of the air filter/regulator

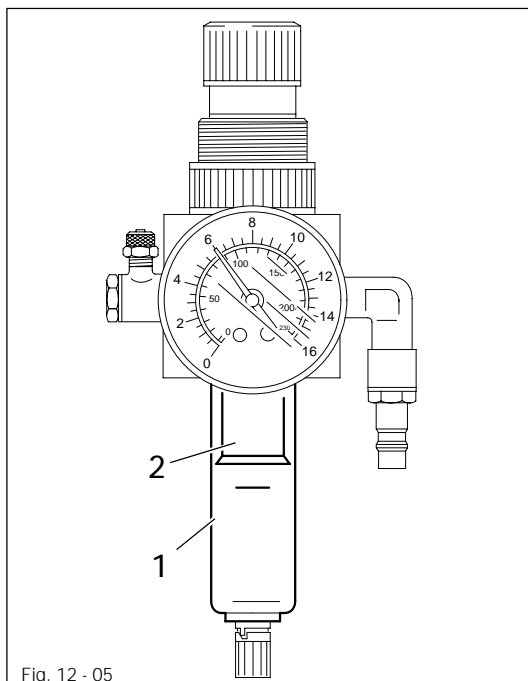


Fig. 12 - 05



Turn the machine off!
Disconnect the compressed air hose from the air filter/regulator.

Emptying water container 1

- Water container 1 empties itself automatically when the compressed air hose is removed from the air filter/regulator.
- Unscrew water container 1.
- Screw out filter 2.
- Clean filter 2 with compressed air or isopropyl alcohol (Part No. 95-665 735-91)
- Screw filter 2 back in and screw on water trap 1.

13 Adjustment

13.01 Notes on adjustment

All following adjustments are based on a fully assembled machine and may only be carried out by expert staff trained for this purpose.

Machine covers, which have to be removed and replaced to carry out checks and adjustments, are not mentioned in the text.

The order of the following chapters corresponds to the most logical work sequence for machines which have to be completely adjusted. If only specific individual work steps are carried out, both the preceding and following chapters must be observed.

Screws, nuts indicated in brackets () are fastenings for machine parts, which must be loosened before adjustment and tightened again afterwards.



On the **PFAFF 3822** no c-clamps may be attached to the needle bar as this would damage the special coating on the needle bar.

13.02 Tools, gauges and other accessories

- 1 set of screwdrivers with blade widths from 2 to 10 mm
- 1 set of 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 mandrel, Ø 6 - 8 mm
- 1 original Seeger pliers
- 1 pair of tweezers, 90° offset
- 1 metal ruler (part no. 08-880 218-00)
- 1 adjustment pin ø 5 mm (part no. 13-030 341-05)
- 1 adjustment coupler (part no. 91-069 375-15)
- 1 adjustment stand (part no. 61-111 639-20)
- 1 feed dog height gauge (part no. 61-111 639-49)
- Needles, 134 KK system
- Sewing thread and test materials

13.03 Abbreviations

t.d.c. = top dead centre

b.d.c. = bottom dead centre



By marking the holes 1 and 3 - 6 with the adjustment pin (\varnothing 5 mm), the desired needle bar positions can be fixed exactly.

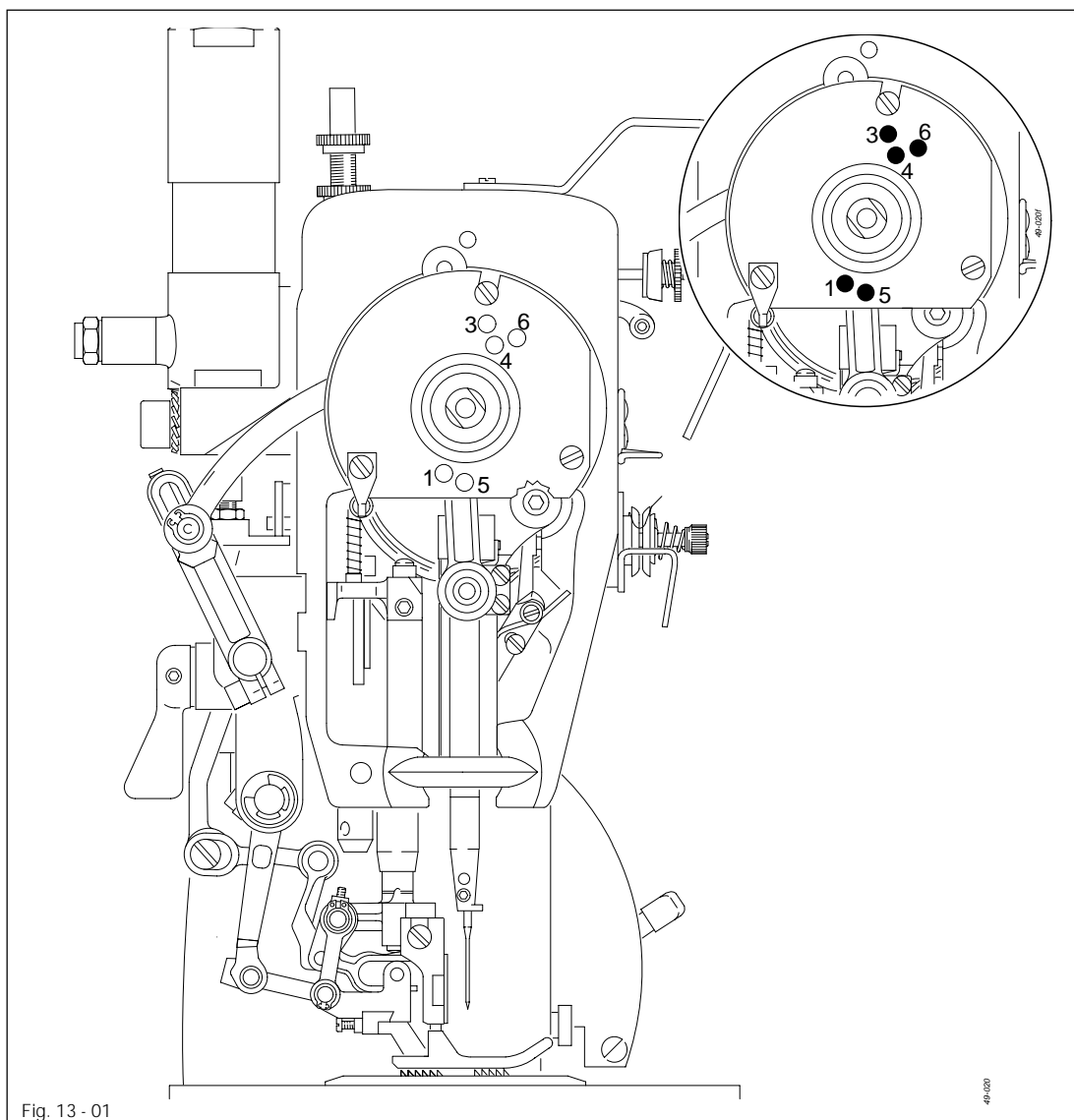
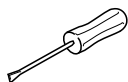


Fig. 13 - 01



- Turn the balance wheel until the needle bar is approximately in the desired position.
- Insert the adjustment pin into the appropriate hole and apply pressure.
- Turn the balance wheel slightly backwards and forwards, until the pin locks into the rear crank recess, in this way blocking the machine.

Adjustment hole 1 = 0.6 mm past top dead centre of the needle bar (0.6 past t.d.c.)

Adjustment hole 3 = 0.6 mm past bottom dead centre of the needle bar (0.6 past b.d.c.)

Adjustment hole 4 = 1.8 mm past bottom dead centre of the needle bar (1.8 past b.d.c.)

Adjustment hole 5 = top dead centre of the needle bar (t.d.c.)

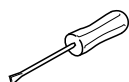
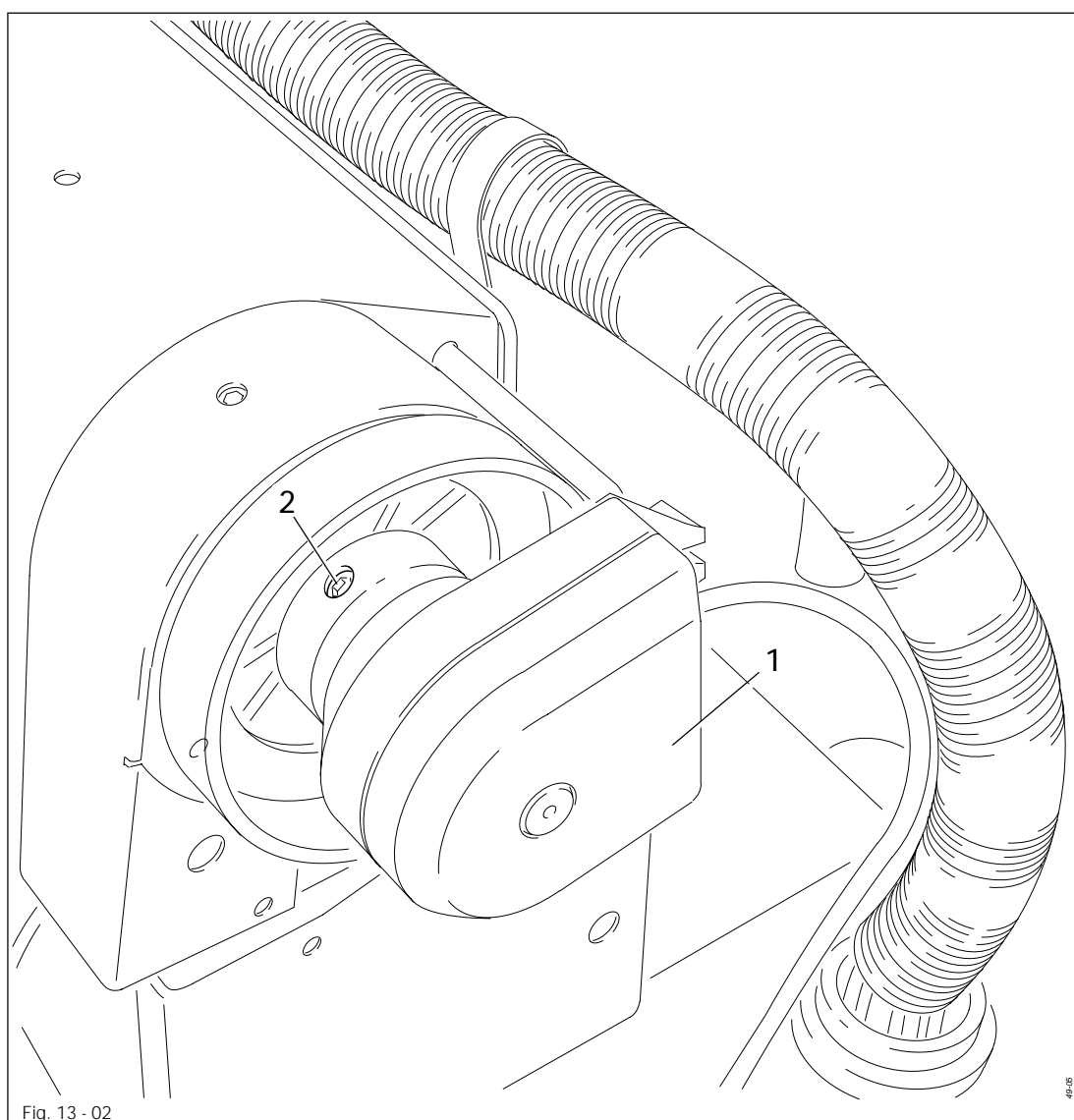
Adjustment hole 6 = 4.0 mm past bottom dead centre of the needle bar (4.0 past b.d.c.)

13.05 Adjusting the basic machine

13.05.01 Adjusting the synchronizer

Requirement

After thread trimming the machine should be in the t.d.c. take-up lever position.



- Adjust the synchronizer 1 (screws 2) in accordance with the Motor Service Manual, also see Chapter 13.09 Parameter settings.

Adjustment

13.05.02 Preliminary adjustment of the needle height

Requirement

With the needle bar at b.d.c. the distance between bottom edge of the needle bar and the needle plate must be 16.5 mm.

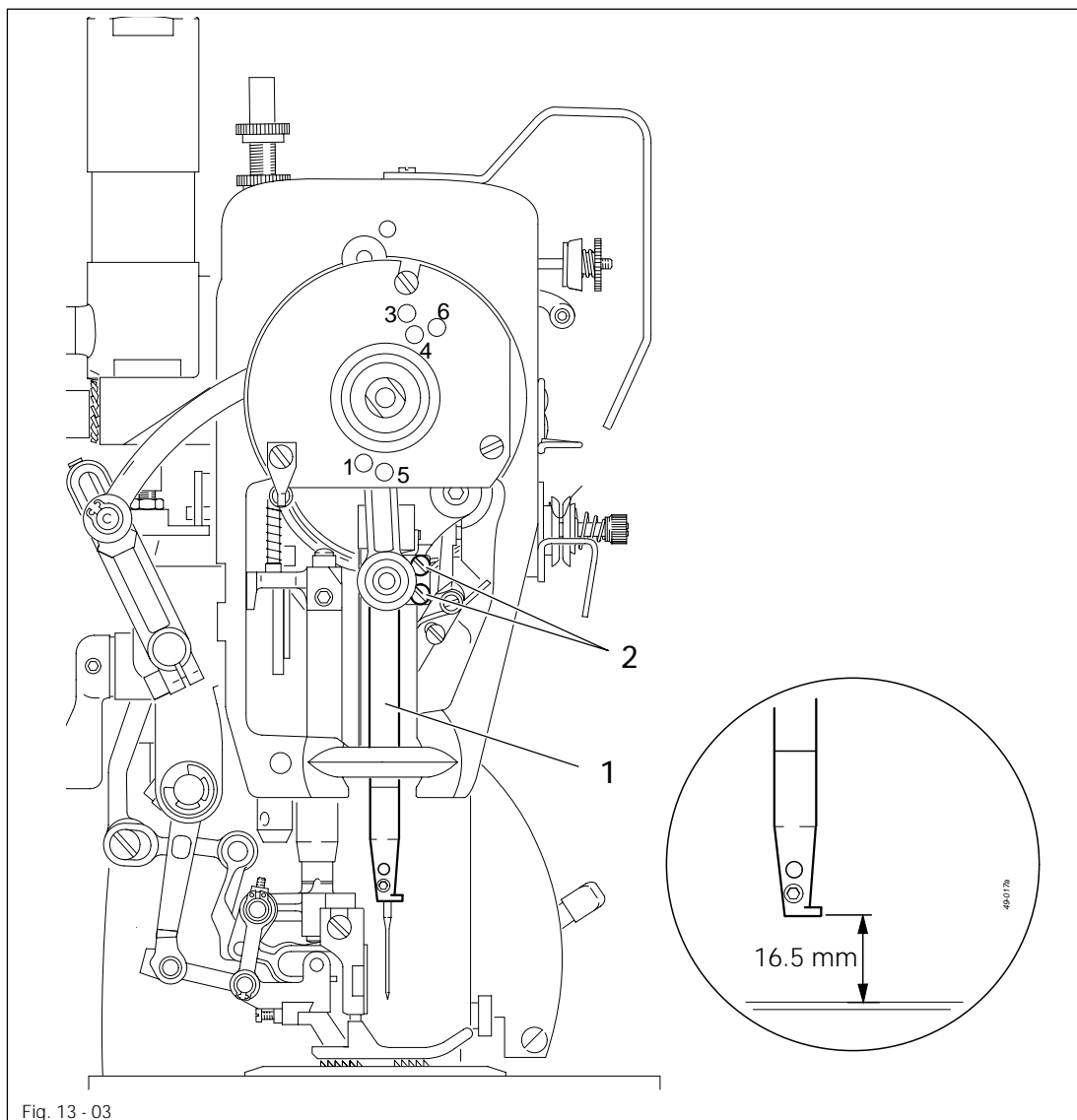
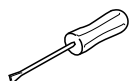


Fig. 13 - 03



- Adjust needle bar 1 (screws 2) according to the requirement.

13.05.03 Needle in needle-hole centre

Requirement

The needle should enter the needle hole exactly in the centre.

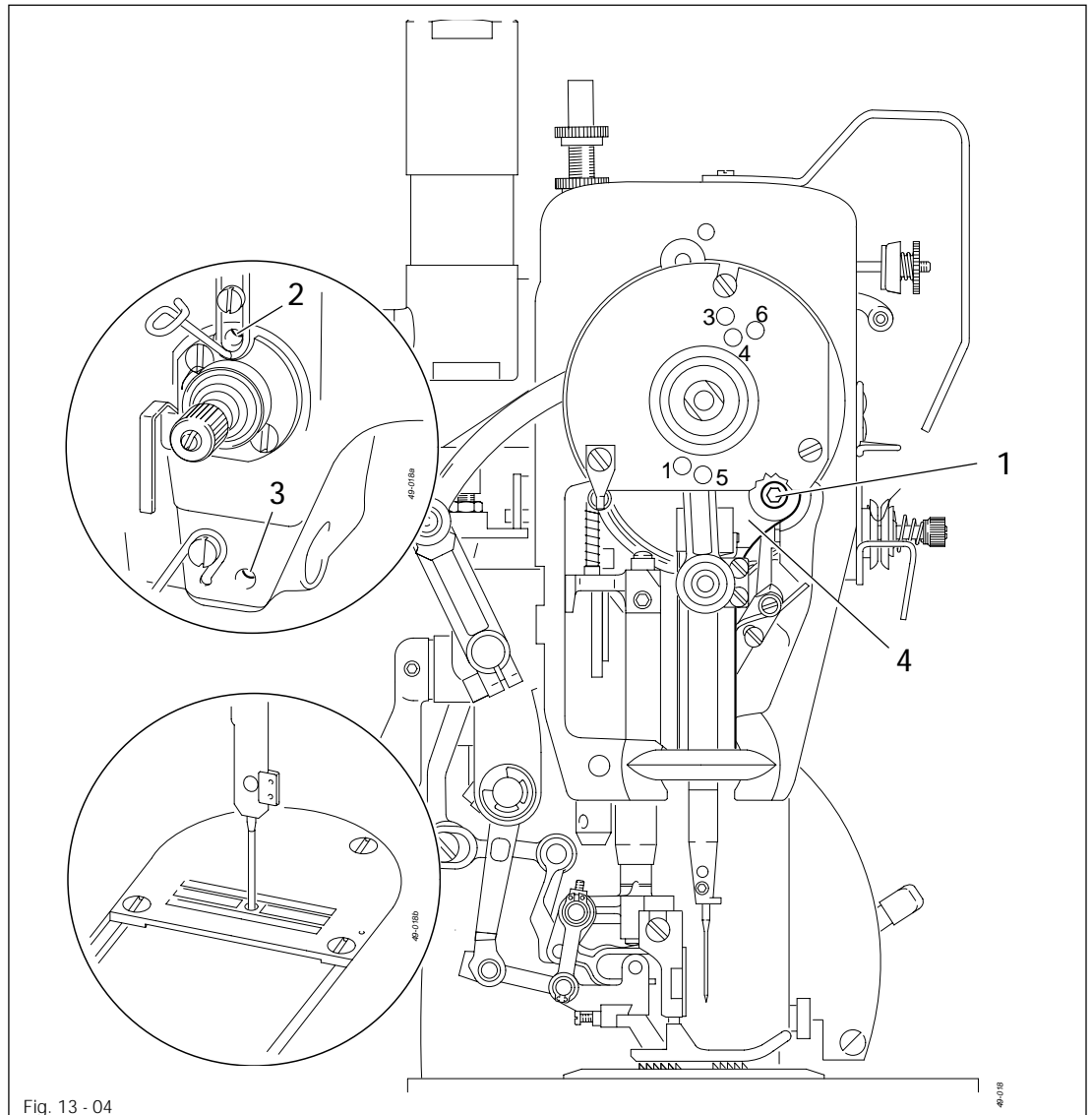
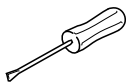


Fig. 13 - 04

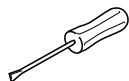
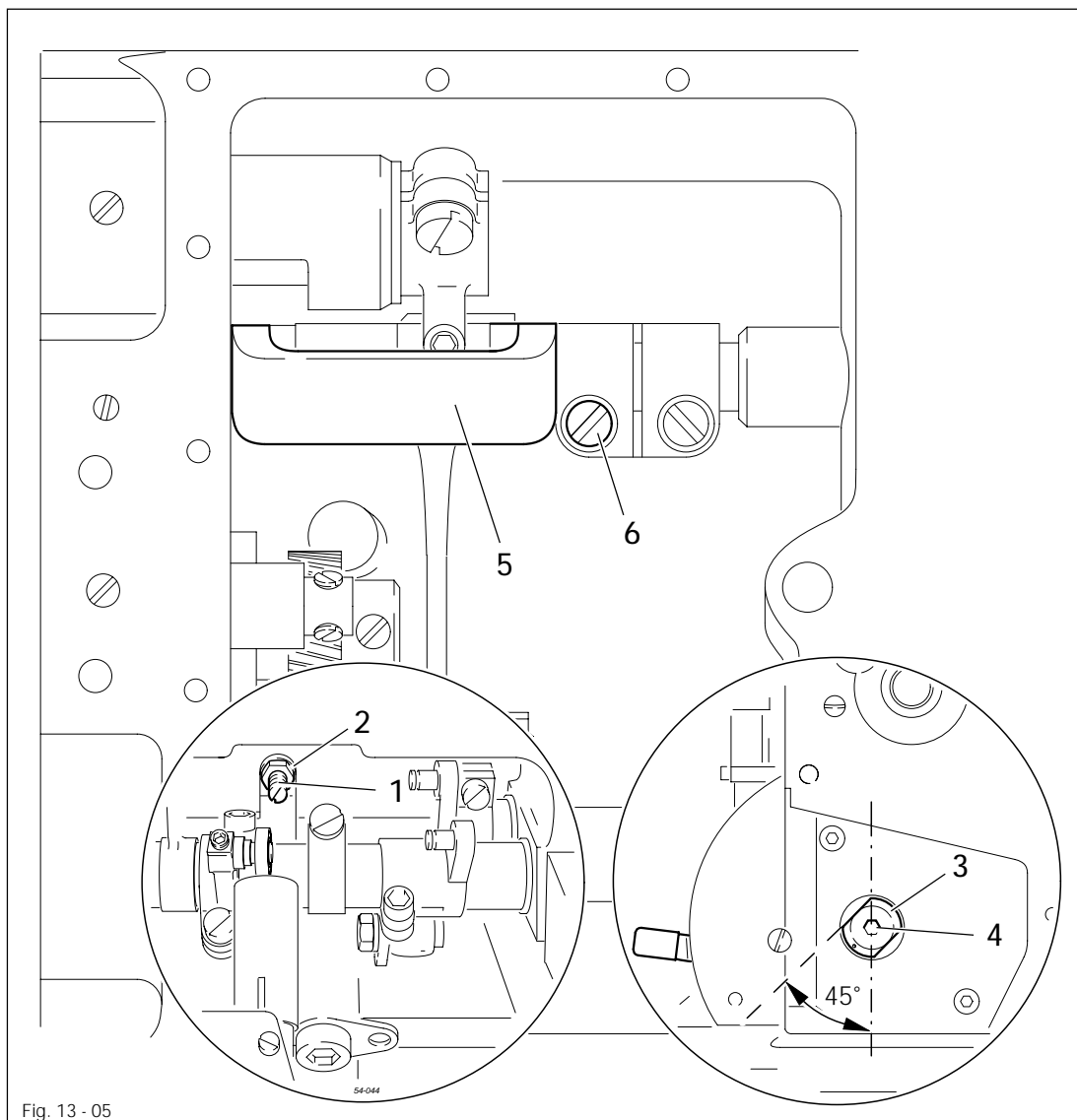


- Position the needle directly over the needle hole.
- Loosen screws 1, 2 and 3.
- Adjust the needle bar frame 4 both crosswise and in the direction of sewing according to the **requirement** and tighten screw 2 slightly and screw 3.
- With screw 1 draw the guide stud located behind it towards the eye of the needle bar frame and tighten it.
- Turn the balance wheel round a few times to avoid any distortion of the needle bar frame and tighten screw 2.

13.05.04 Neutral position of the bottom feed dog

Requirement

With the stitch length set at "0" there should be no feeding motion of the bottom feed dog when the balance wheel is turned.



- Loosen screw 1 (nut 2).
- Set stitch length at "0".
- Turn eccentric bush 3 (screw 4) so that the marking is pointing downwards and the surface of eccentric bush 3 is at an angle of 45° to the front edge of the machine.
- While turning the balance wheel continuously, adjust crank 5 (screw 6) according to the requirement.

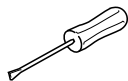
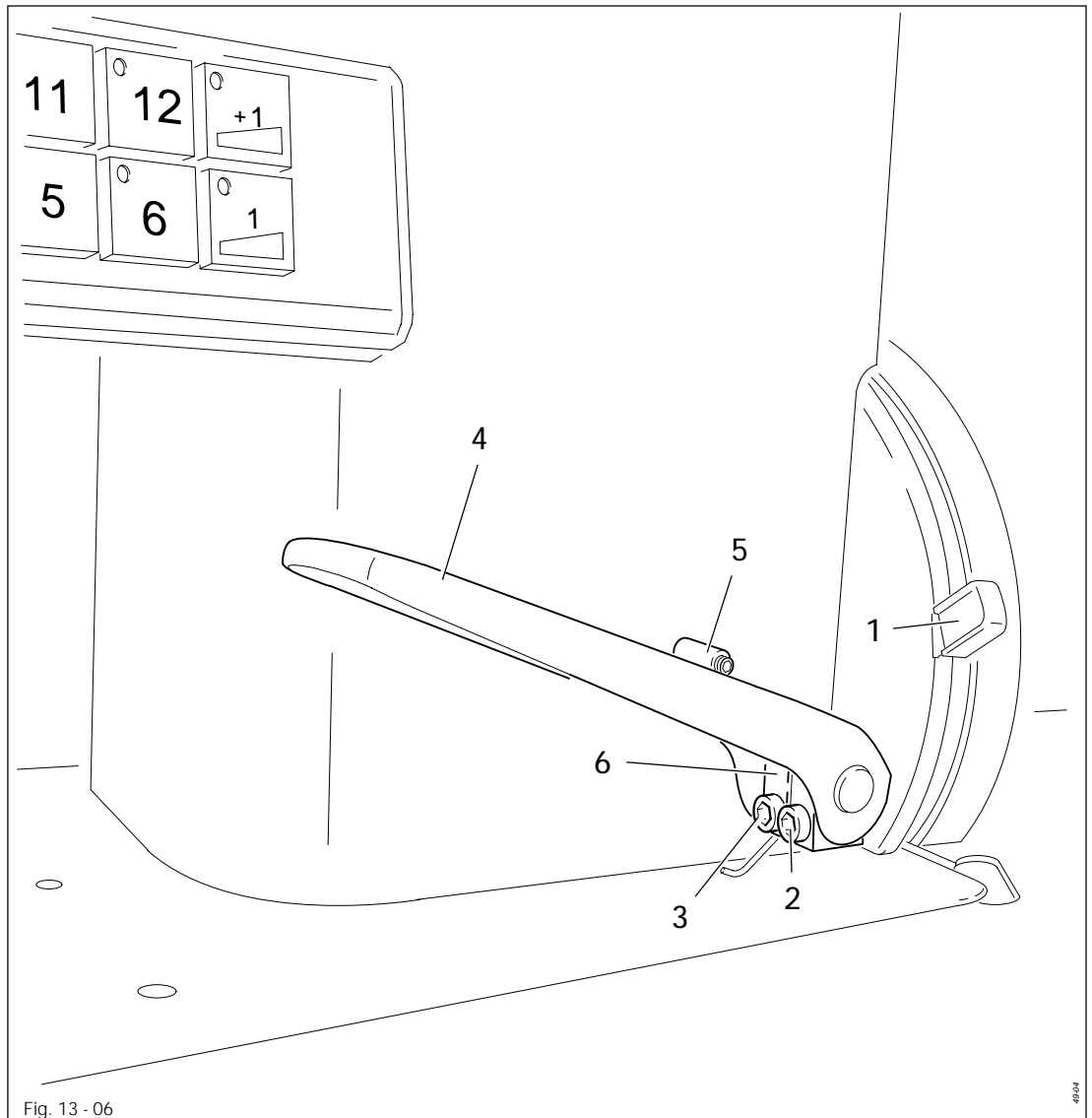


Screw 1 remains loosened for further adjustments.

13.05.05 Play of the feed reverse key

Requirement

With the maximum stitch length set, the feed reverse key 4 should have **approx. 0.3 mm** play.



- Set the maximum stitch length (lever 1).
- Loosen screws 2 and 3.
- Press feed reverse key 4 against stop 5 and bring actuator lever 6 into contact with the feed reverse key.
- Tighten screw 2.



Screw 3 remains loosened for further adjustments.

Adjustment

13.05.06 Feeding motion of the bottom feed dog

Requirement

With the maximum stitch length set and the needle bar positioned 0.6 mm past t.d.c. (adjustment hole 1), the bottom feed dog should not move when the reverse feed key is operated.

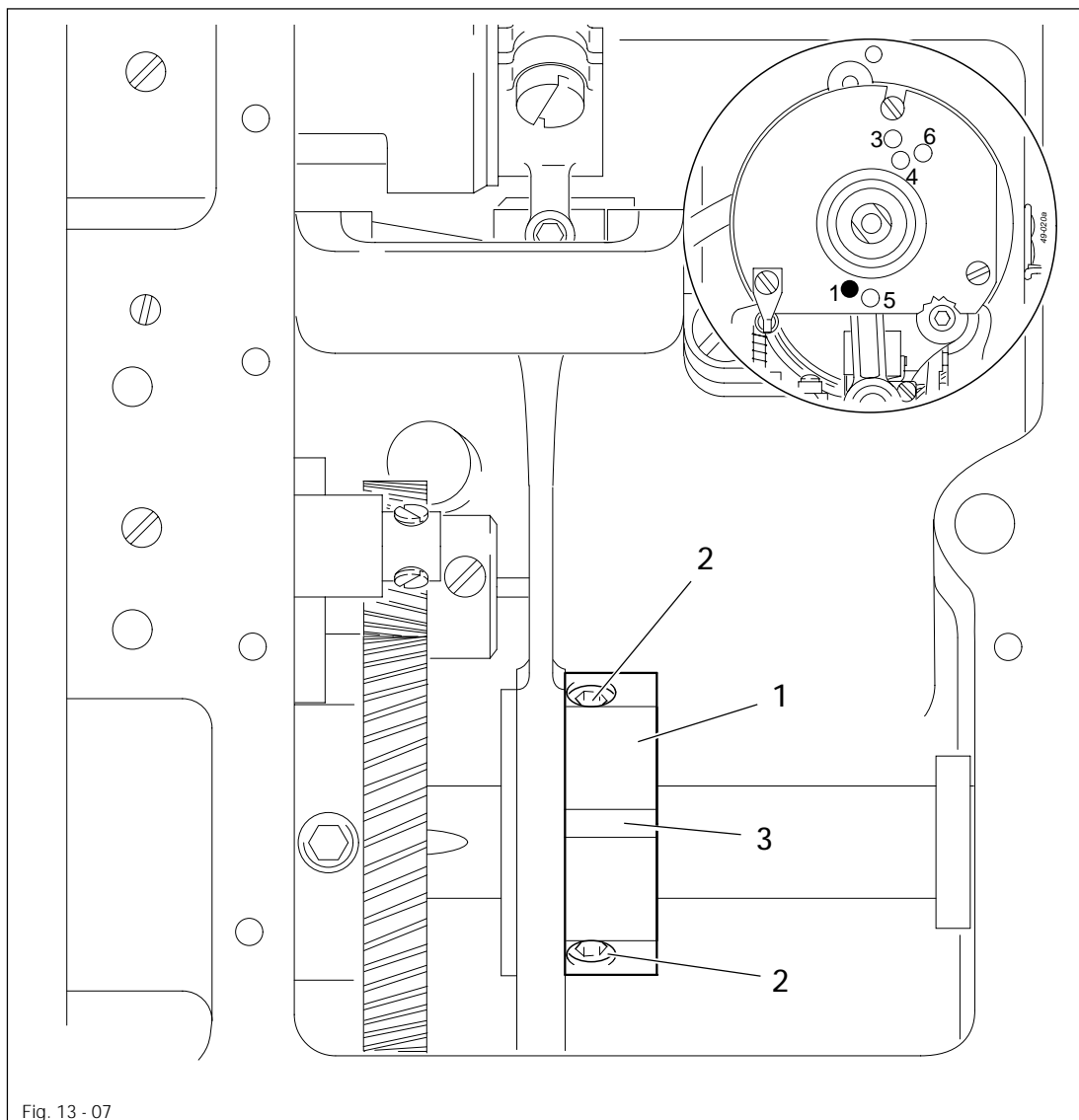
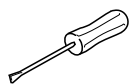


Fig. 13 - 07

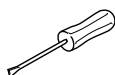
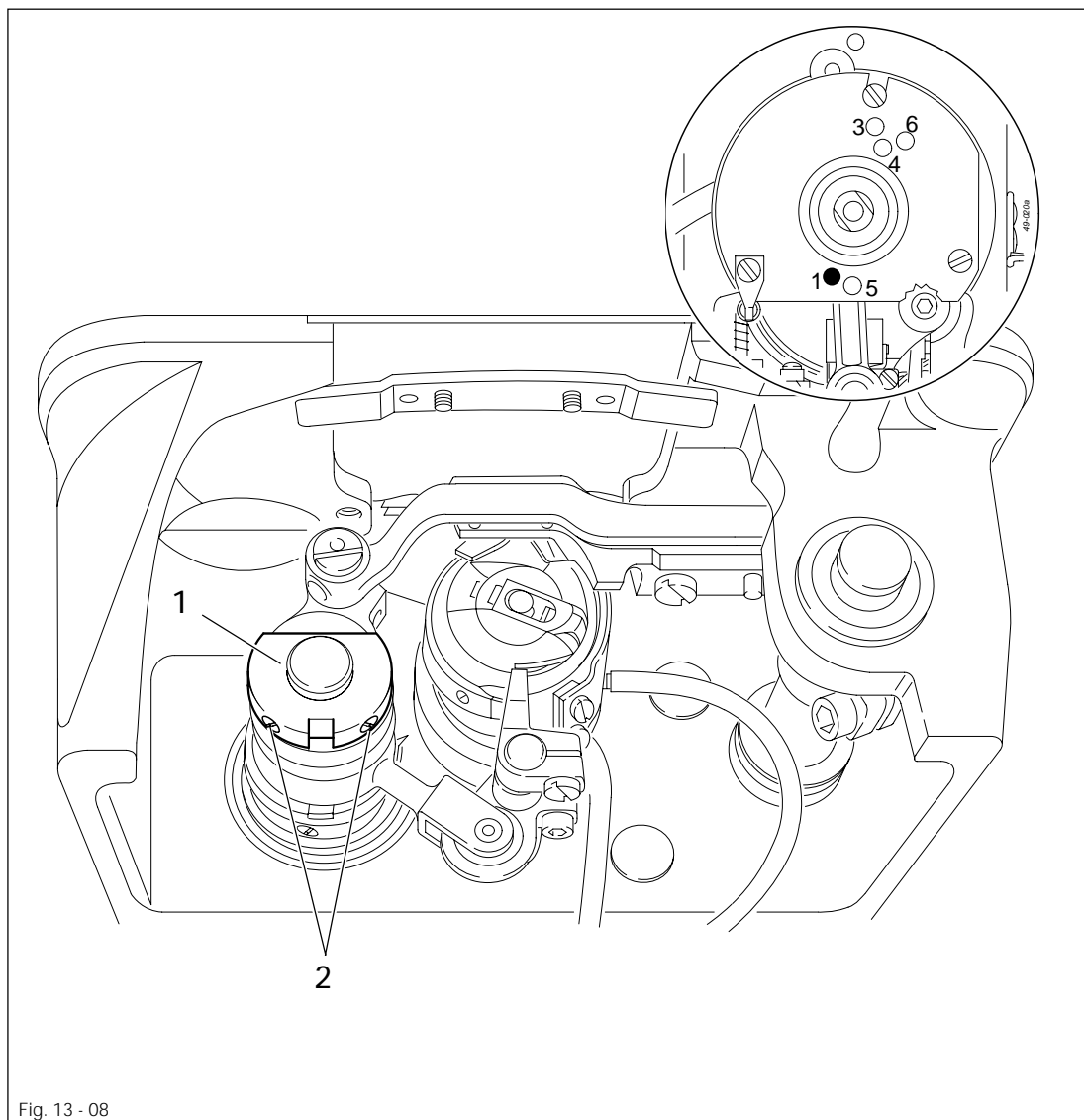


- Bring needle bar to 0.6 past t.d.c.
- Adjust eccentric 1 (screw 2) according to the requirement, making sure that the cutout 3 is visible.

13.05.07 Lifting motion of the bottom feed dog

Requirement

1. With the needle bar set 0.6 past t.d.c. (adjustment hole 1) and the stitch length set at "0", the bottom feed dog should be at the top of its stroke.
2. The cutout of eccentric 1 should be more or less directly under the axis centre.



- Adjust eccentric 1 (screws 2) according to the requirement.

13.05.08 Height of the bottom feed dog

Requirement

When the needle bar is at 0.6 past t.d.c. (adjustment hole 1) and the stitch length is set at "0",

1. The bottom feed dog should be in the centre of the needle plate cutout, as seen from the side and in the direction of feed.
2. The bottom feed dog should be at the top of its stroke and its entire length should be positioned against the adjustment gauge.

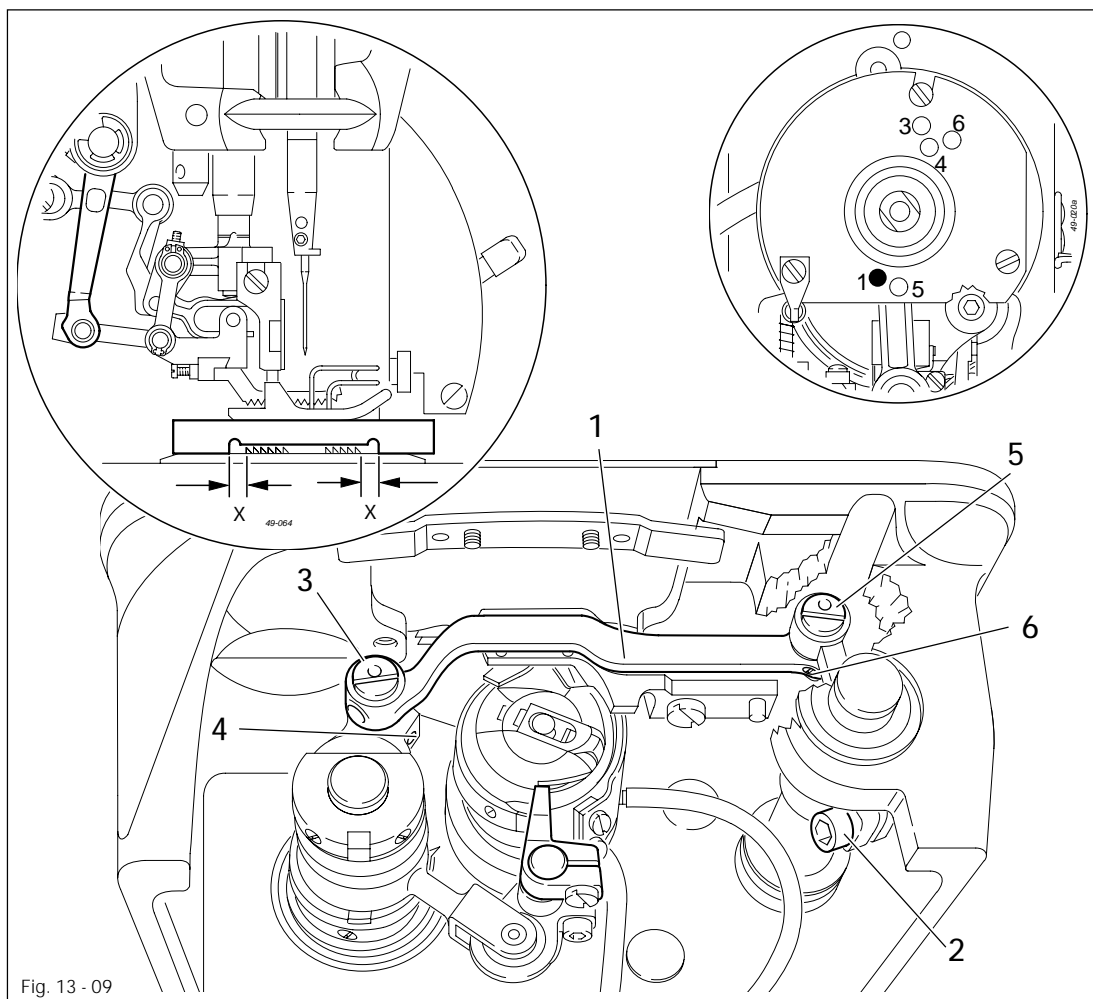
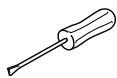


Fig. 13 - 09

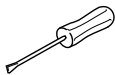
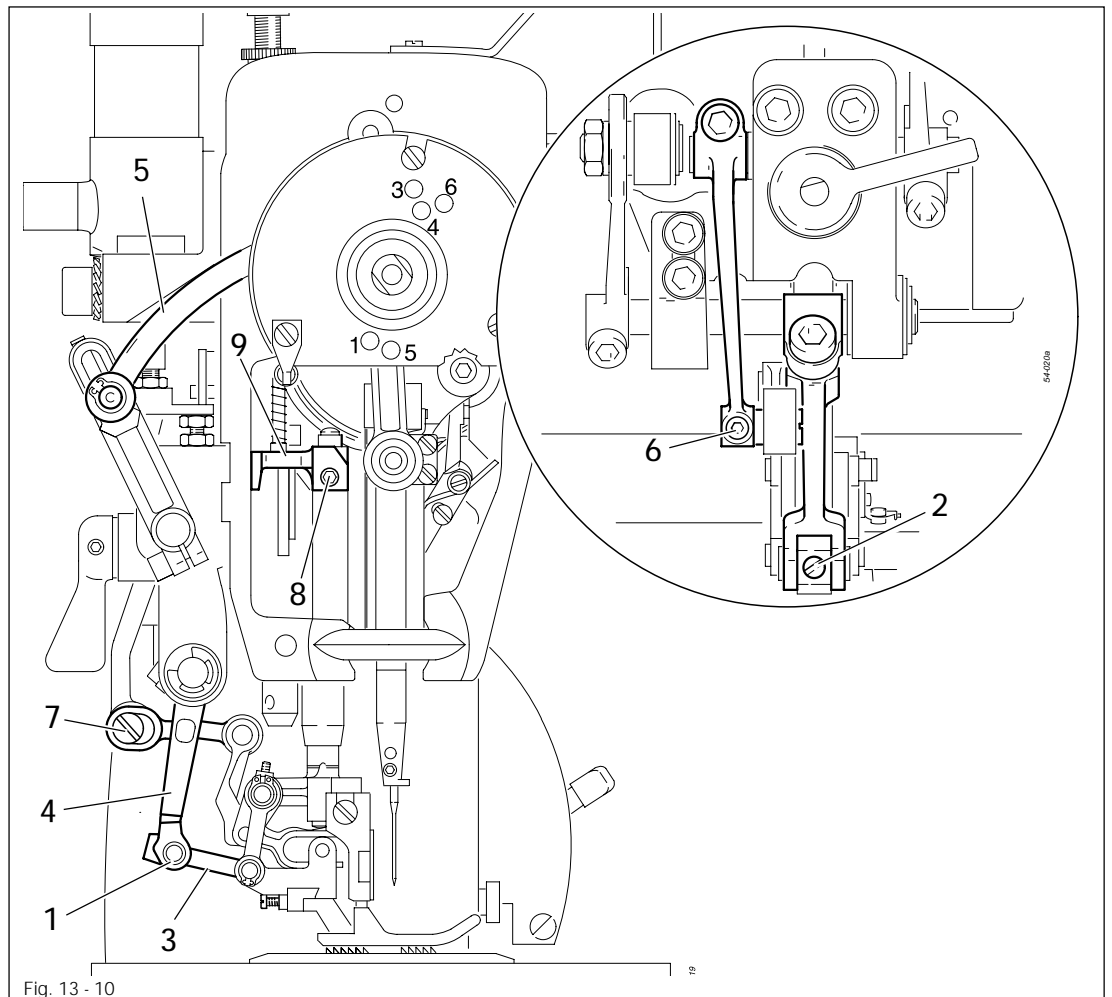


- Adjust feed dog bracket 1 (screw 2) according to requirement 1.
- Lower the presser foot onto the gauge (part no.61-111 639-49).
- Turn eccentric 3 (screw 4) and eccentric 5 (screw 6) according to requirement 2.

13.05.09 Clearance between presser foot and needle plate

Requirement

When hand lever 1 is raised there should be a clearance of 5 mm between the presser foot and the needle plate.



- With the hand lever lower the presser foot onto the needle plate.
- Loosen the adjustment screw for the presser foot presser (reduce pressure)
- Push out bolt 1 (screw 2) and remove connection element 3 from the yoke of lever 4.
- By turning the balance wheel bring lever 5 to its furthest point of reversal.
- Place feed dog adjustment gauge under the presser foot with the recess facing down.
- Loosen screw 6 and push out bolt 7.
- Adjust presser foot (screw 8) at the side so that the edge of the presser foot is parallel to the bottom feed dog.
- Lower lifting piece 9 as far as possible and tighten screw 8.

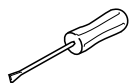
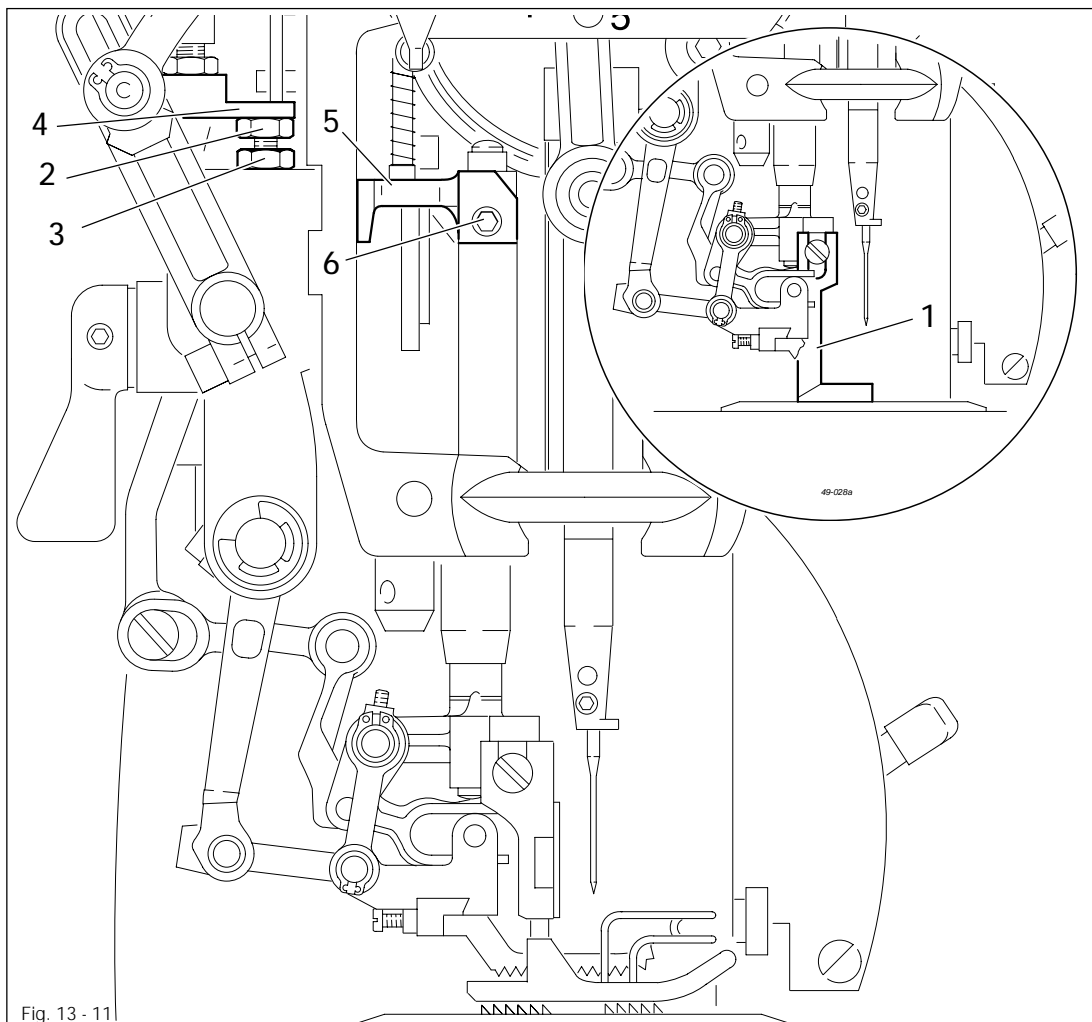


Screws 2 and 6 remain loosened for further adjustments.

13.05.10 Stop in relation to the presser foot

Requirement

When adjustment foot 1 (part no. 61-111 639-20) is resting on the needle plate, stop 4 should be touching screw 2



- Remove presser foot.
- Attach adjustment foot 1 (part no. 61-111 639-20) and lower it onto the needle plate.
- Adjust screw 2 (nut 3) according to the **requirement**.
- Remove adjustment foot 1 and replace presser foot.

13.05.11 Top feed driving and connecting lever

Requirement

1. All moving parts of the top feed should move freely without play.
2. The top feed must not touch the presser foot.

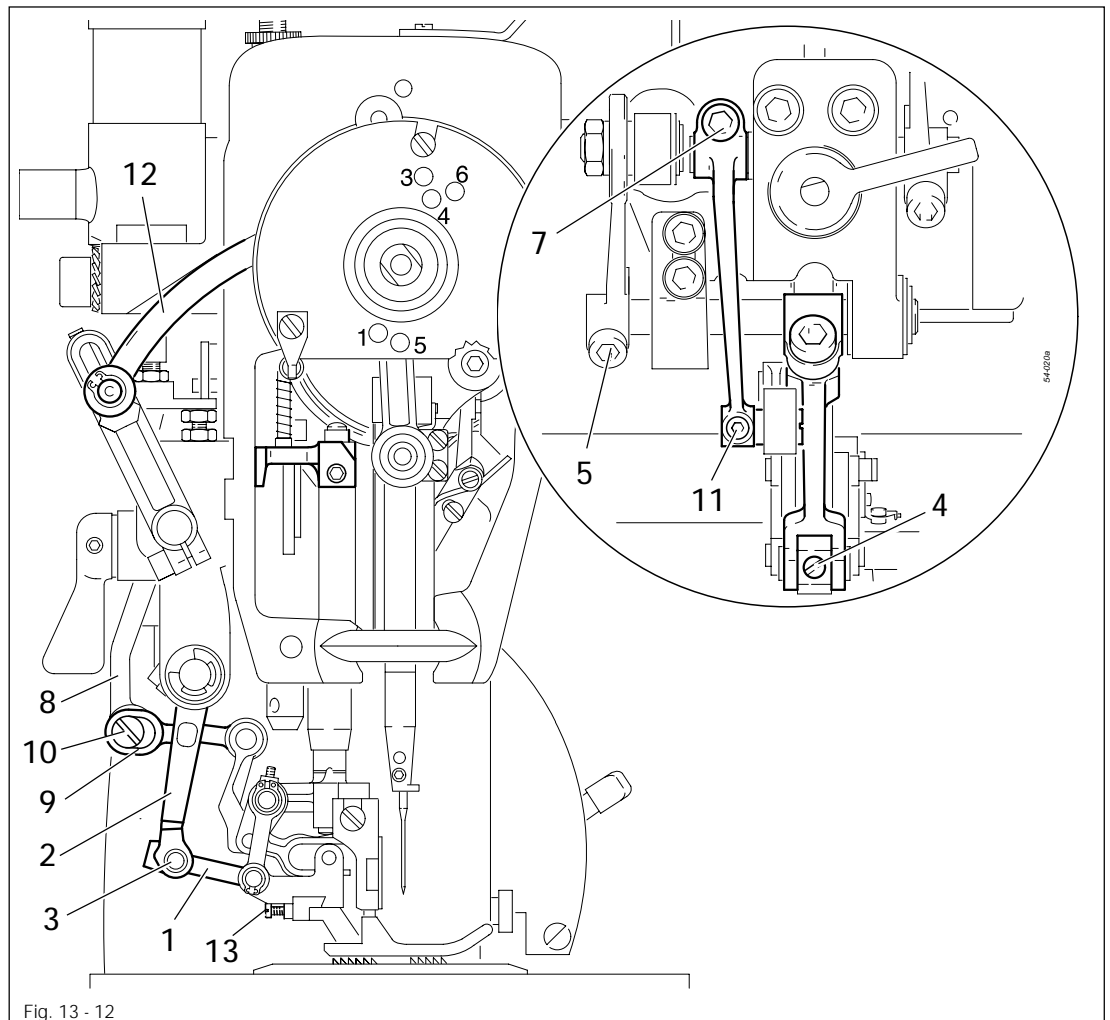
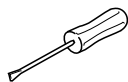


Fig. 13 - 12



- Lower the presser foot with the hand lever.
- Swing connection element 1 into the yoke of lever 2, insert bolt 3 and tighten screw 4 (make sure that the parts move freely, if necessary adjust lever 2).
- Align top feed dog in the centre of the presser foot cutout in the direction of sewing (screw 5).
- Loosen screw 7.
- Align the hole of lever 8 with the elongated hole of lever 9 without any lateral play, if necessary adjust or align lever 8.
- With its greatest eccentricity pointing downwards, place bolt 10 into the holes of lever 9 and 8 and tighten screw 11.
- Bring lever 12 to its furthest point of reversal.
- Press lever 8 in feed direction until a stop can be felt and tighten screw 7.
- Align the side of the top feed foot so that it is not touching the presser foot (screw 13).

13.05.12 Neutral position of the top feed dog

Requirement

When the stitch length is set at "0" and with the adjustment gauge 4 fitted, there should be no feeding motion of the top feed dog.

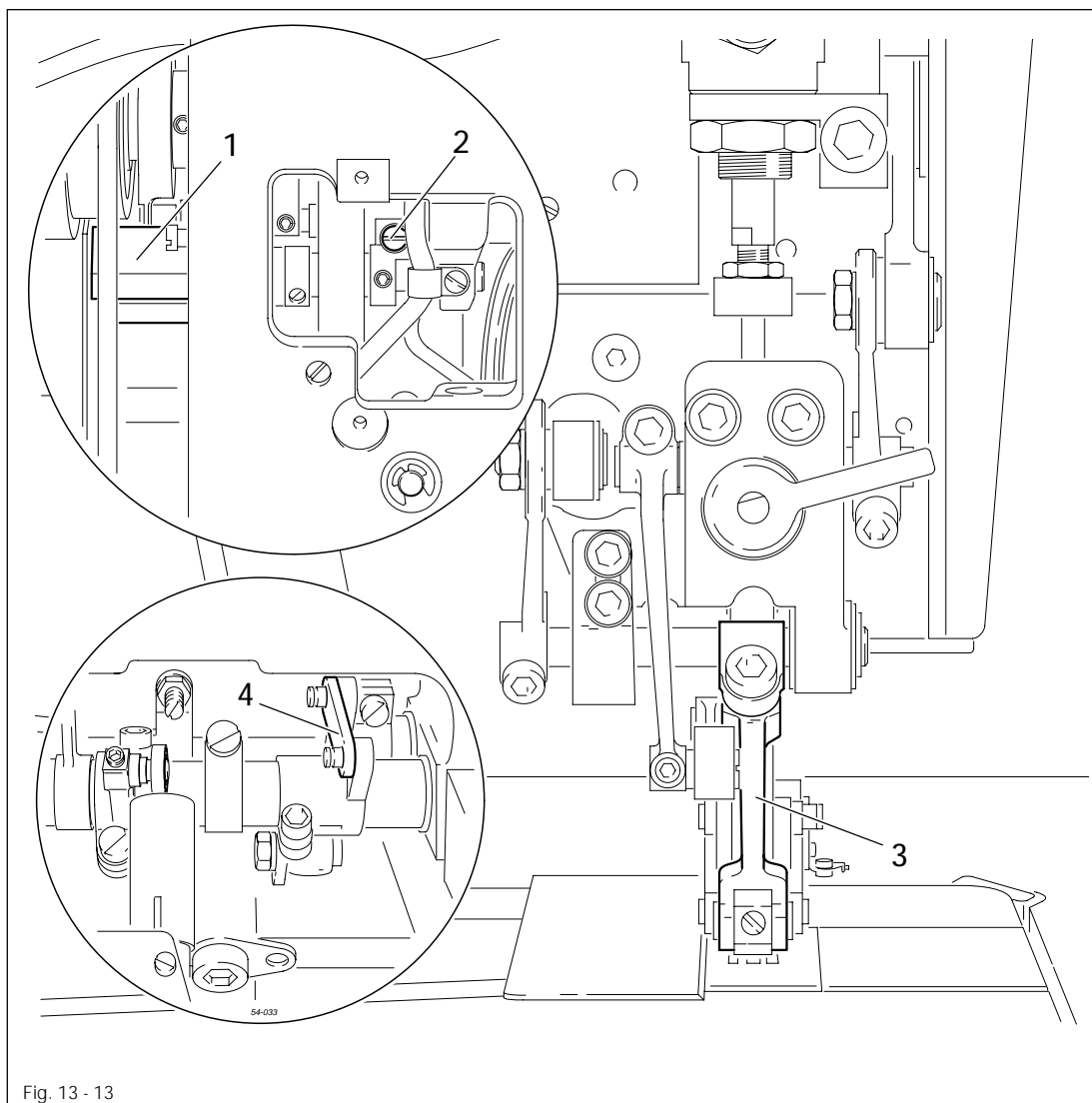
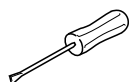


Fig. 13 - 13



The stitch length limitation (screw 1 in Chapter 13.05.04 Neutral position of the bottom feed dog) must be deactivated.

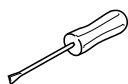
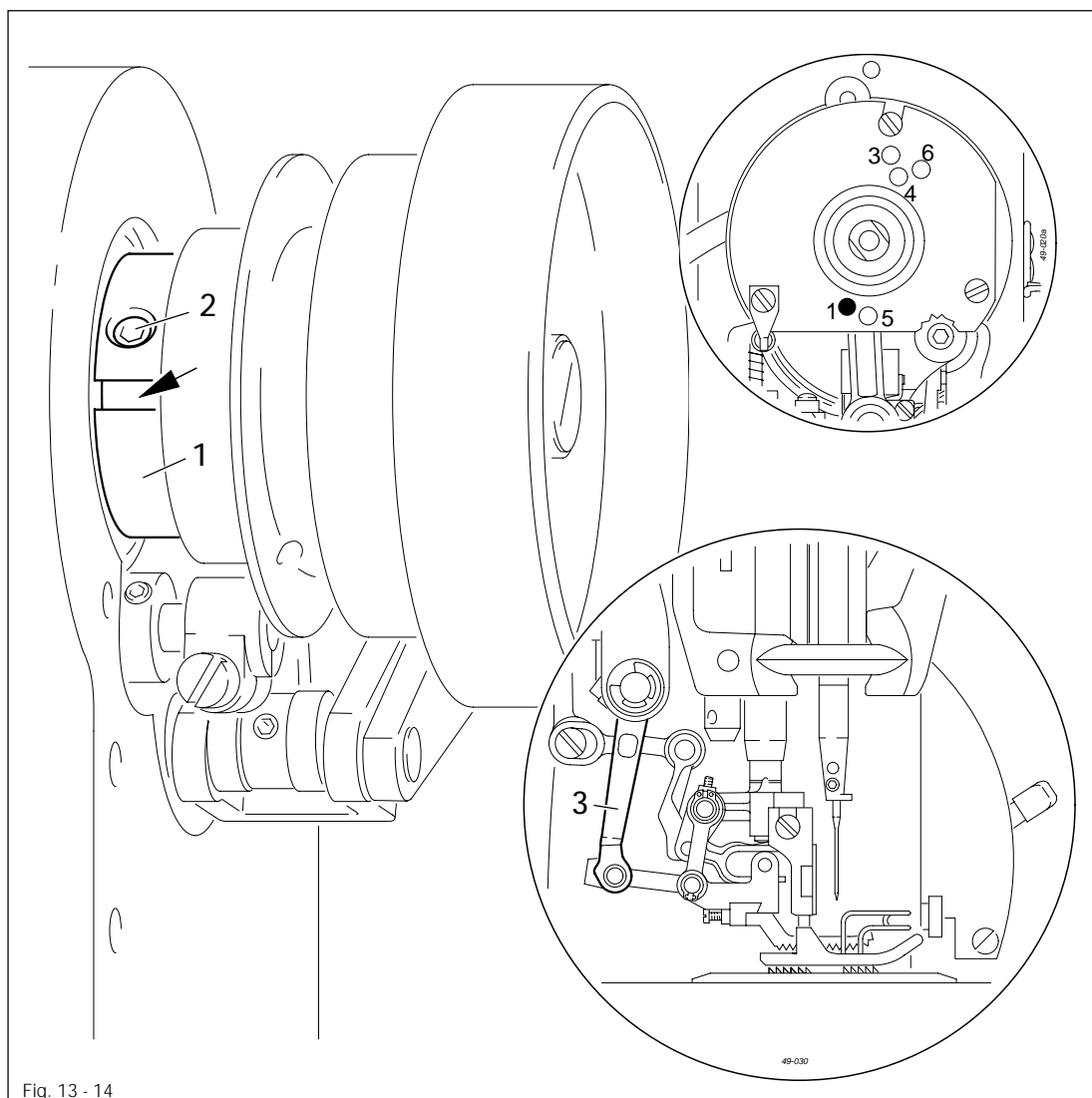


- Set stitch length at "0".
- While continuously turning the balance wheel, turn crank 1 (screw 2) so that lever 3 does not move.

13.05.13 Feeding motion of the top feed dog

Requirement

When the needle bar is positioned 0.6 mm past t.d.c (adjustment hole 1) and the maximum stitch length is set, lever 3 should not move when the feed reverse key is operated.

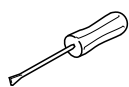
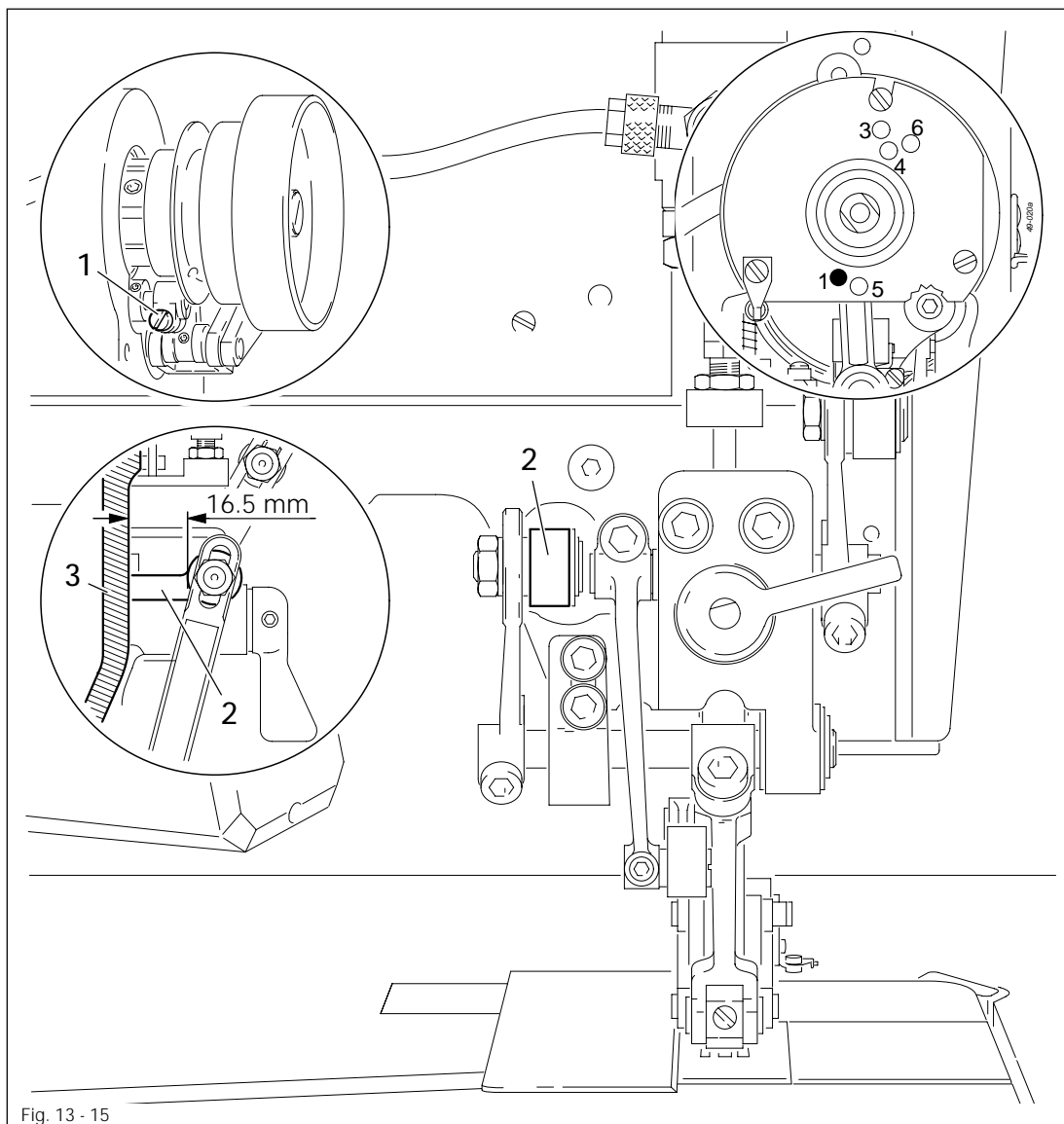


- While continuously operating the feed reverse key, adjust eccentric 1 (screws 2) so that the slot is pointing towards the operator and lever 3 does not move.

13.05.14 Front linkage rod to top feed drive

Requirement

With the needle bar positioned 0.6 past t.d.c. (adjustment hole 1), there must be a distance of approx. 16.5 mm between the eye of the linkage rod 2 and machine case 3.



- Bring needle bar to 0.6 past t.d.c..
- Loosen screw 1.
- Adjust linkage rod 2 according to the requirement.
- Tighten screw 1.
- Check the setting.

13.05.15 Top feed stroke

Requirement

With the stitch length set at "3" and the adjustment gauge 12 fitted, at its t.d.c. the top feed dog 2 should be 2 mm from the needle plate.

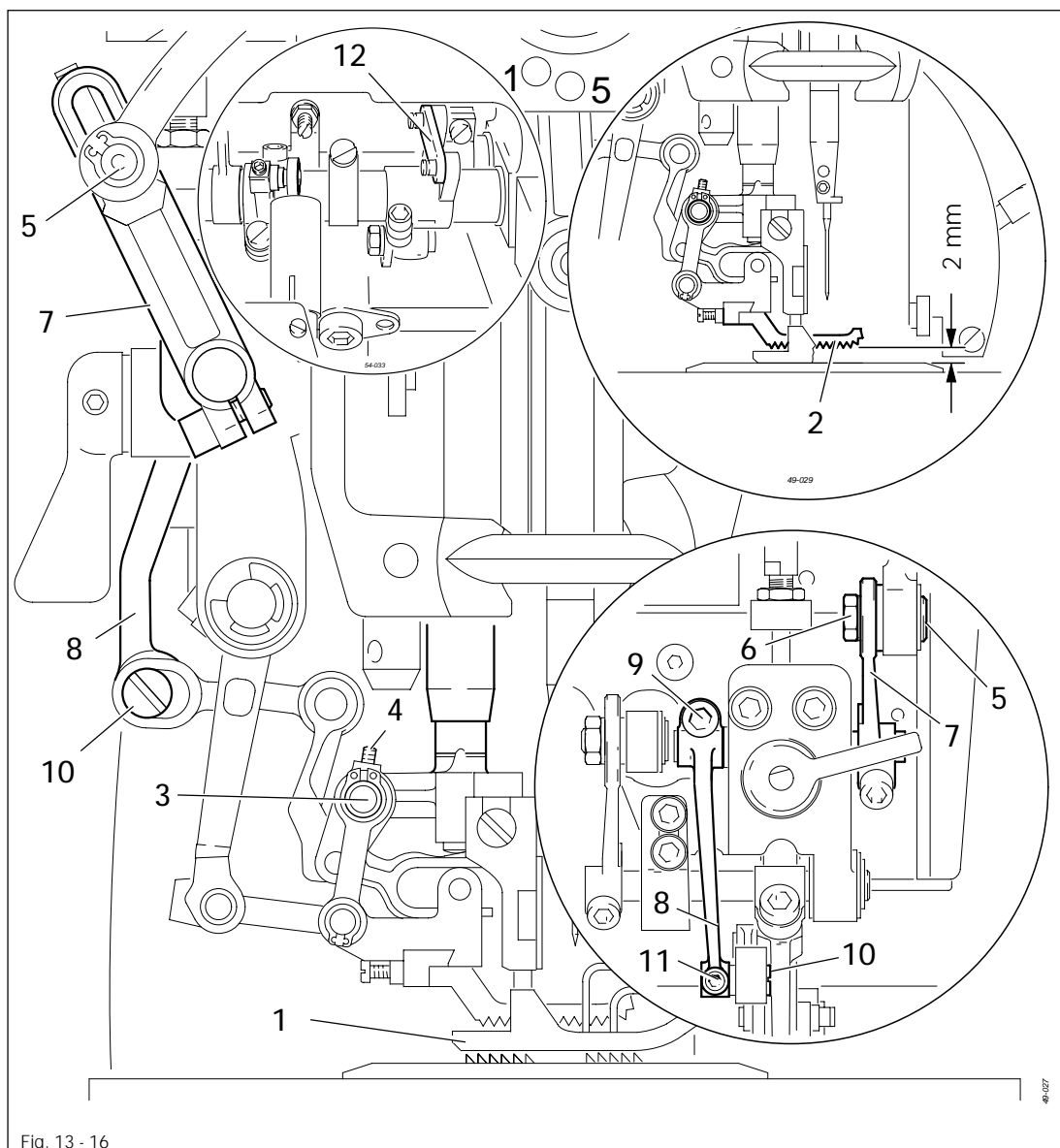
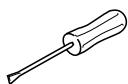


Fig. 13 - 16



- Lower the presser foot 1 onto the needle plate.
- Set stitch length at "3".
- By turning the balance wheel bring top feed dog 2 to its t.d.c.
- Turn eccentric pin 3 (screw 4) so that its greatest eccentricity points towards the needle.
- Bring bolt 5 (nut 6) down to rest in the elongated hole of lever 7.
- Adjust lever 8 (screw 9) for the pre-adjustment of the distance between the top feed dog 2 and the needle plate.
- Adjust eccentric pin 10 (screw 11) according to the requirement.

13.05.16 Lifting motion of the top feed dog

Requirement

When the stitch length is set at "4" and with adjustment gauge 3 fitted, the top feed dog should rest on the ascending bottom feed dog, when this reaches the top edge of the needle plate.

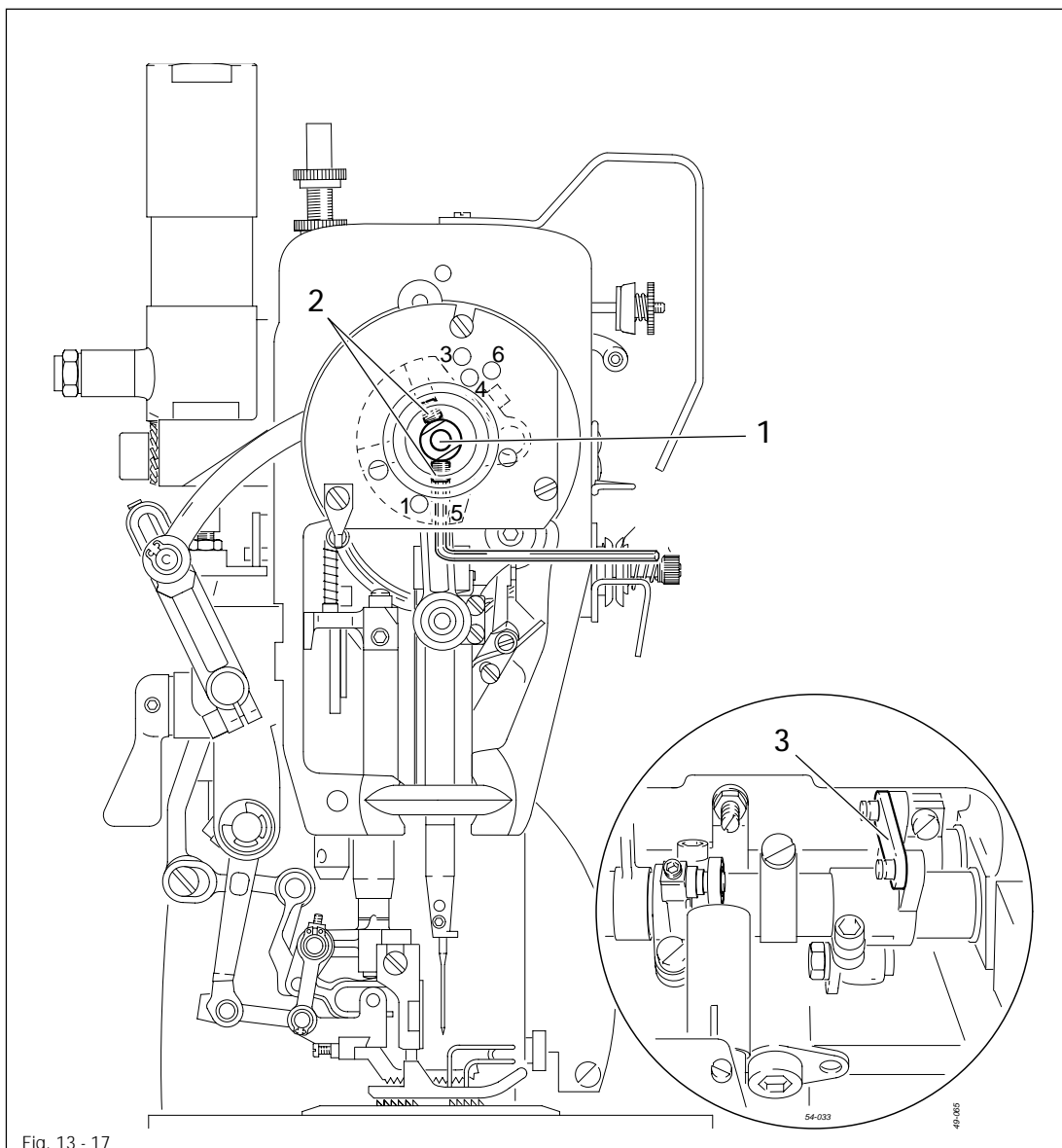
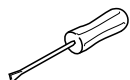


Fig. 13 - 17



- Set stitch length at "4".
- Adjust eccentric 1 (screws 2) according to the requirement.

13.05.17 Stitch length adjustment

Requirement

When set at "3" the stitch length must be the same size when sewing forwards or in reverse.

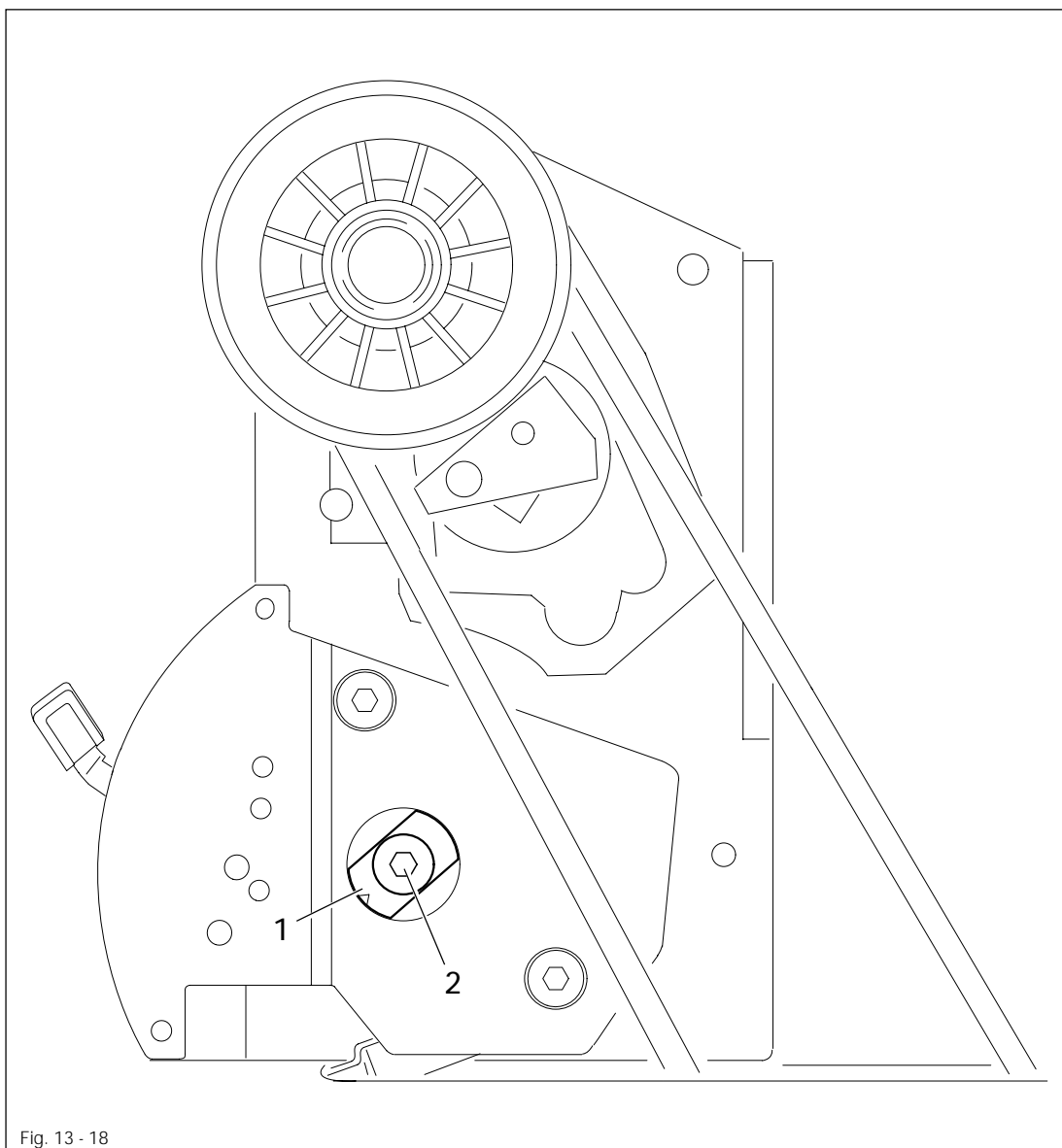
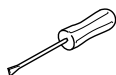


Fig. 13 - 18

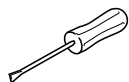
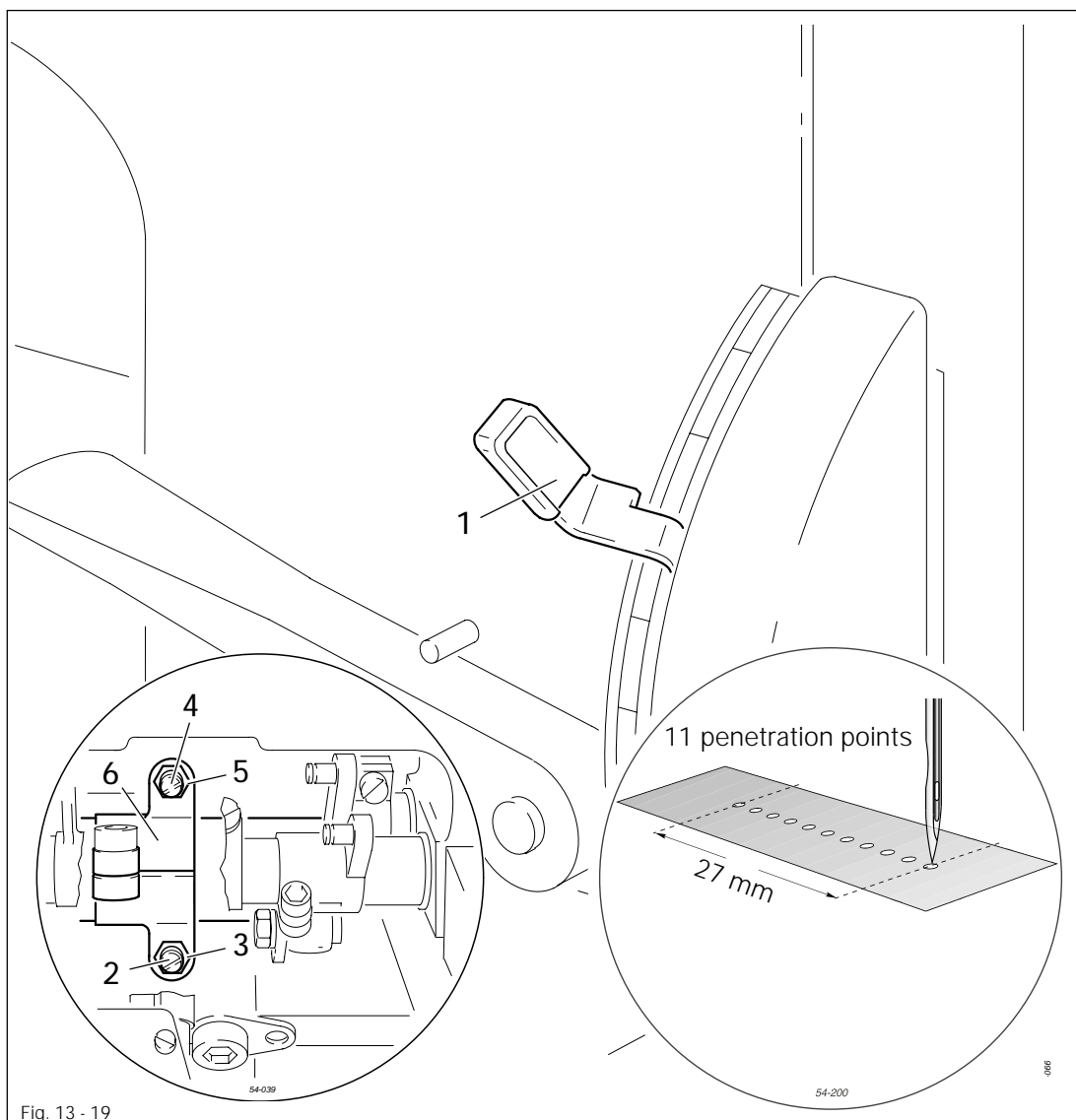


- Loosen screw 2.
- Adjust bush 1 according to the **requirement**. Take care that the eccentricity of bush 1 is in the lower range.
- Tighten screw 2.

13.05.18 Stitch length limitation

Requirement

1. The bottom stroke of rocking bar 6 should be set so that the maximum stitch length is **2.7 mm**.
2. The top stroke of rocking bar 6 should be set so that the stitch length is **2.7 mm** when the feed reverse key is pressed down as far as possible.

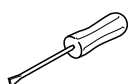
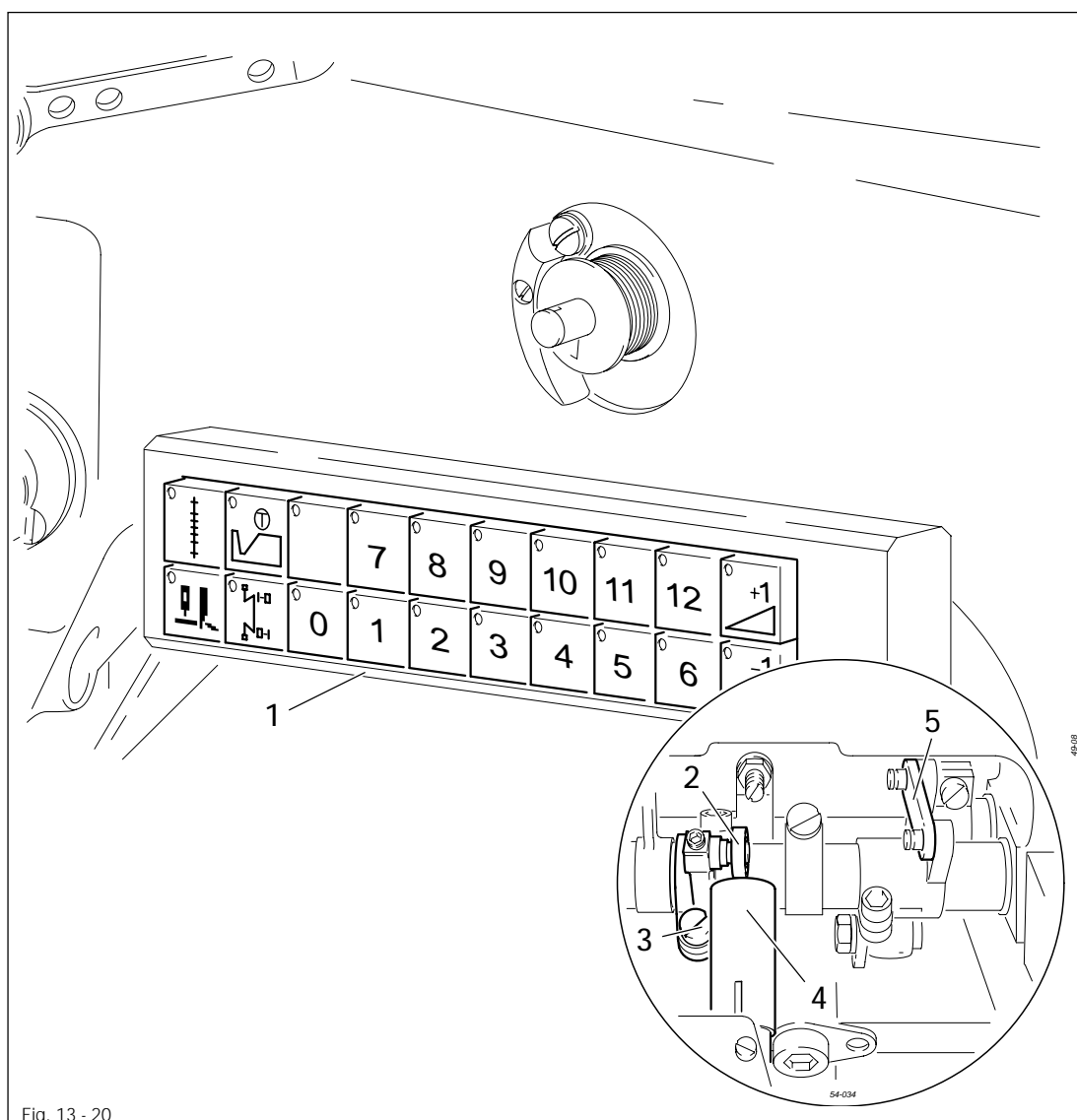


- Set the stitch length on lever 1 according to requirement 1.
- Adjust screw 2 (nut 3) according to requirement 1.
- Adjust screw 4 (nut 5) according to requirement 2.

13.05.19 Basic setting of the differential adjustment device

Requirement

With the fullness set at "0", the stitch length at "2.7" and the adjustment gauge 5 fitted, the roller 2 should be touching pressure sleeve 4.



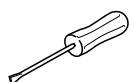
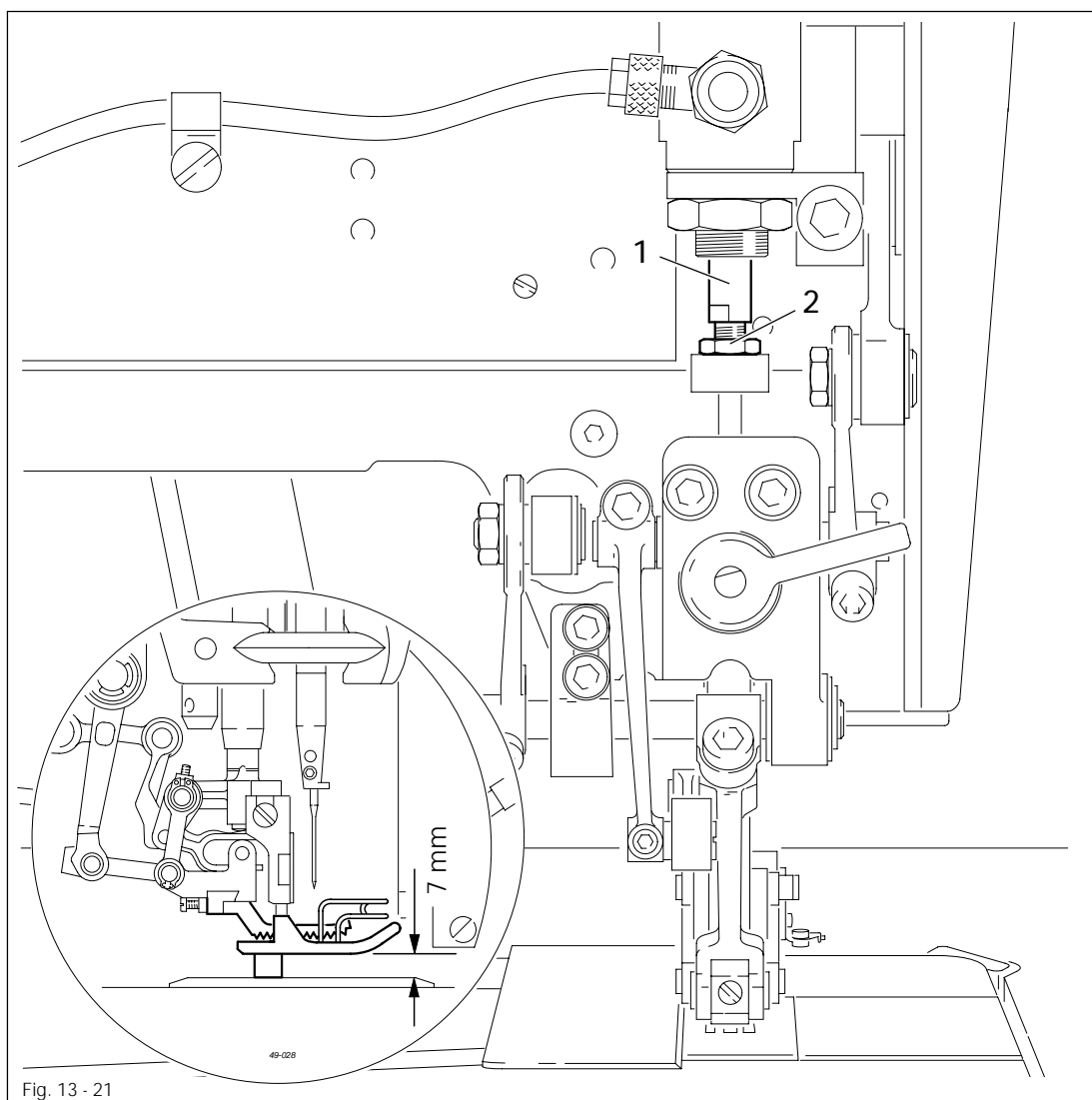
- Switch on the machine.
- Press key "0" on keyboard 1 (LED must light up).
- Switch off the machine.
- Adjust roller 2 (screw 3) according to the requirement.

Adjustment

13.05.20 Lifting height of presser foot with automatic presser foot lift

Requirement

When piston rod 1 is retracted, the distance between presser foot 3 and the needle plate should be 7 mm.



- Adjust piston rod 1 (nut 2) according to the requirement.

13.05.21 Eccentric hook shaft bearing and hook-to-needle clearance

Requirement

1. The slot in bearing 3 (see arrow) must be visible from below and there should be a slight but still noticeable amount of backlash between gears 5 and 7.
2. When the hook is resting lightly on the spinning disc 4 and the point of the hook is positioned towards the centre of the needle, there must be a clearance of **0.05 - 0.1 mm** between the point of the hook and the needle groove.
3. Gear 5 should be in alignment with gear 7.

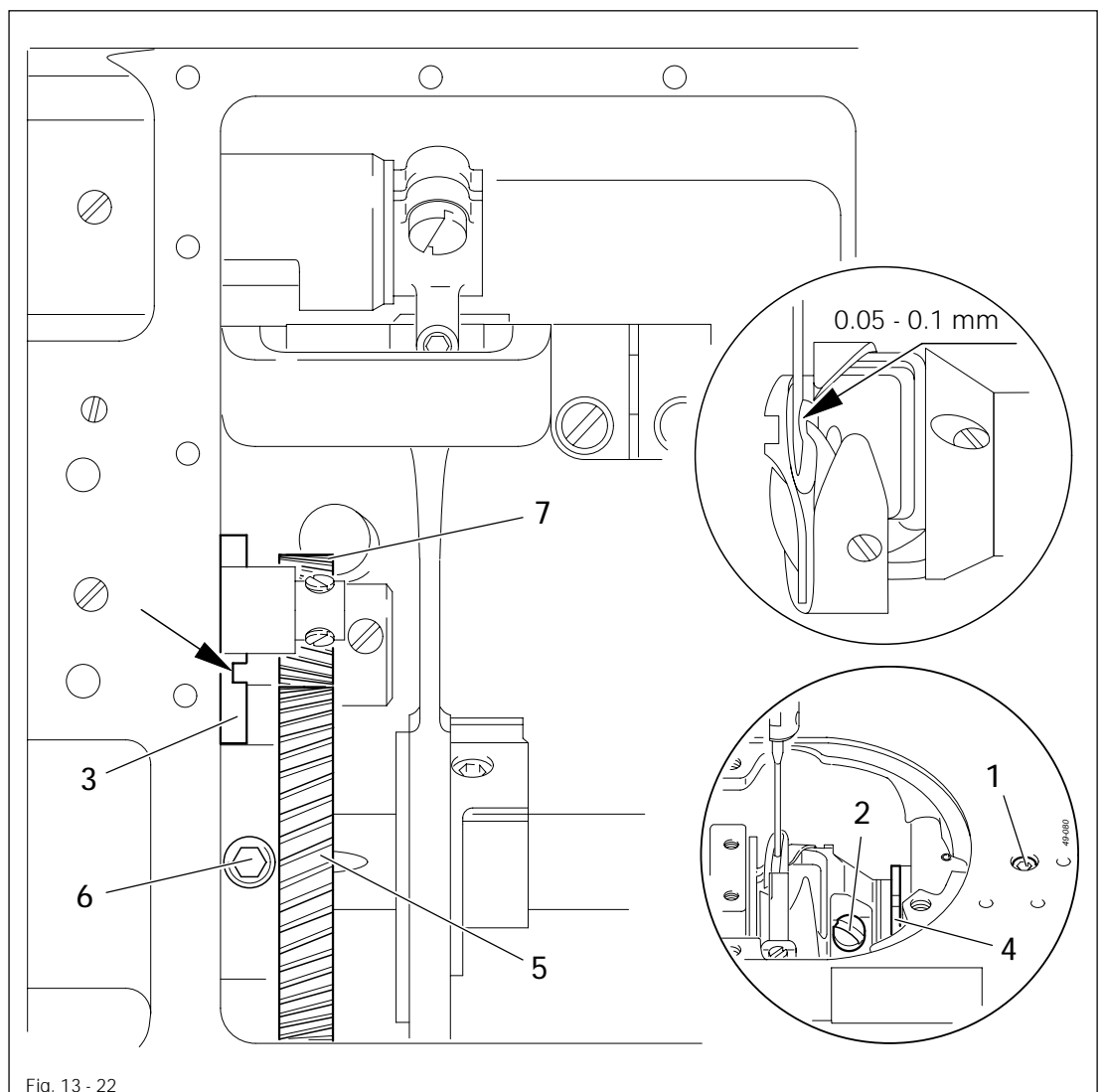
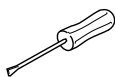


Fig. 13 - 22



- Loosen screws 1 and 2.
- Adjust bearing 3 according to **requirement 1**.
- Bring hook into light contact with spinning disc 4, adjust bearing 3 according to **requirement 2**, without distorting it, and tighten screw 1.
- Adjust gear 5 (screws 6) according to **requirement 3**.



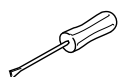
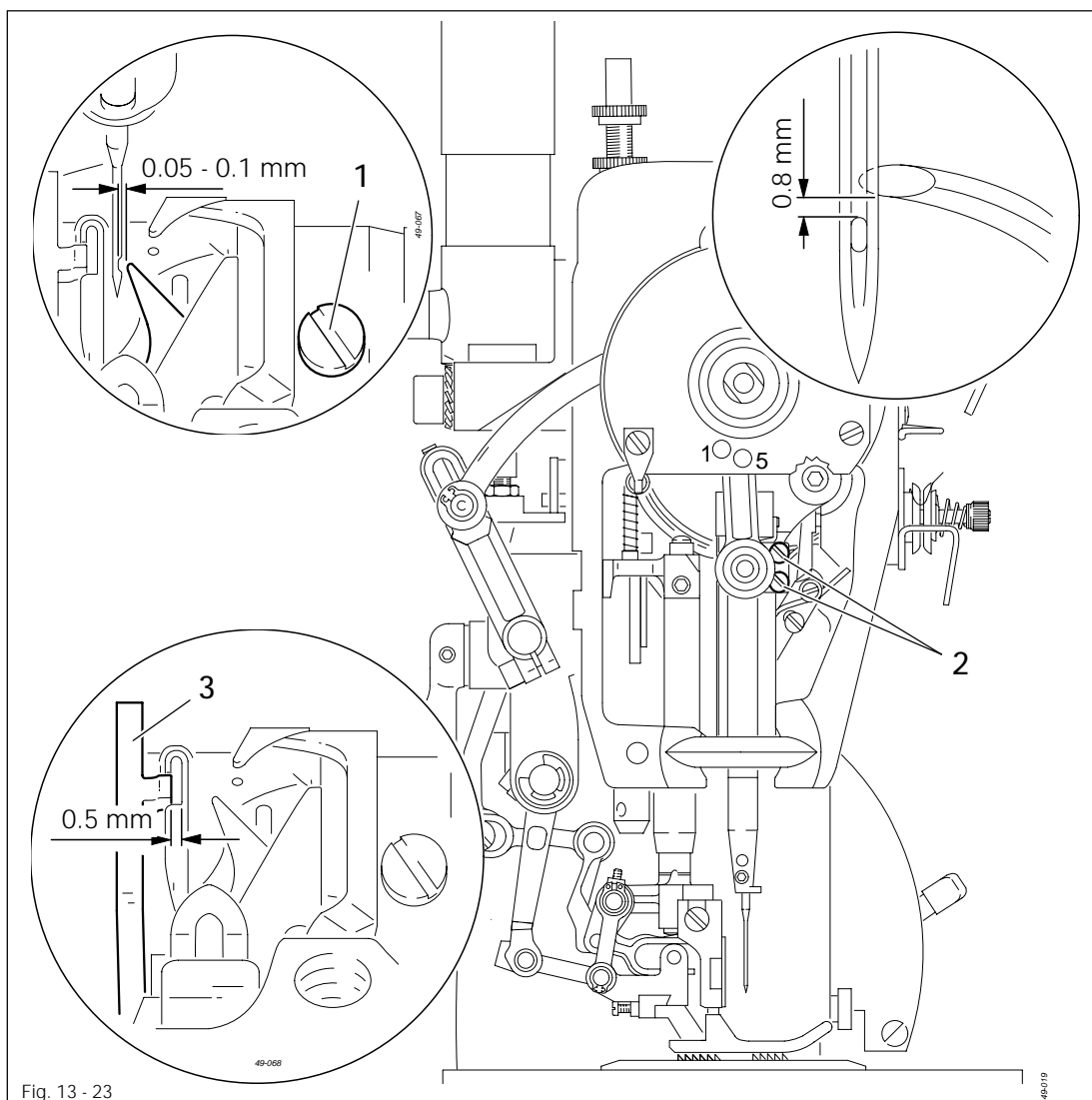
Screw 2 remains loosened for the next adjustment.

13.05.22 Needle bar rise, readjustment of the needle height and bobbin case position stop

Requirement

With the stitch length set at "0" and the needle bar positioned 1.8 mm past b.d.c. (adjustment hole 4)

1. The point of the hook should be in centre of the needle and the top edge of the needle eye should be **0.8 mm** below the hook point.
2. There should be a clearance of **0.5 mm** between the lug of position stop **3** and the bottom of the stop groove.



- Adjust the hook (screw **1**) and needle bar (screws **2**) according to **requirement 1** without twisting them.
- Position the lug of position stop **3** in the groove of the bobbin case base and adjust and fasten it according to **requirement 2**.

13.05.23 Bobbin opener height

Requirement

When bobbin opener 3 is at its left point of reversal, the top edge of its finger should be 0.5 mm above the bottom edge of the bobbin case cam.

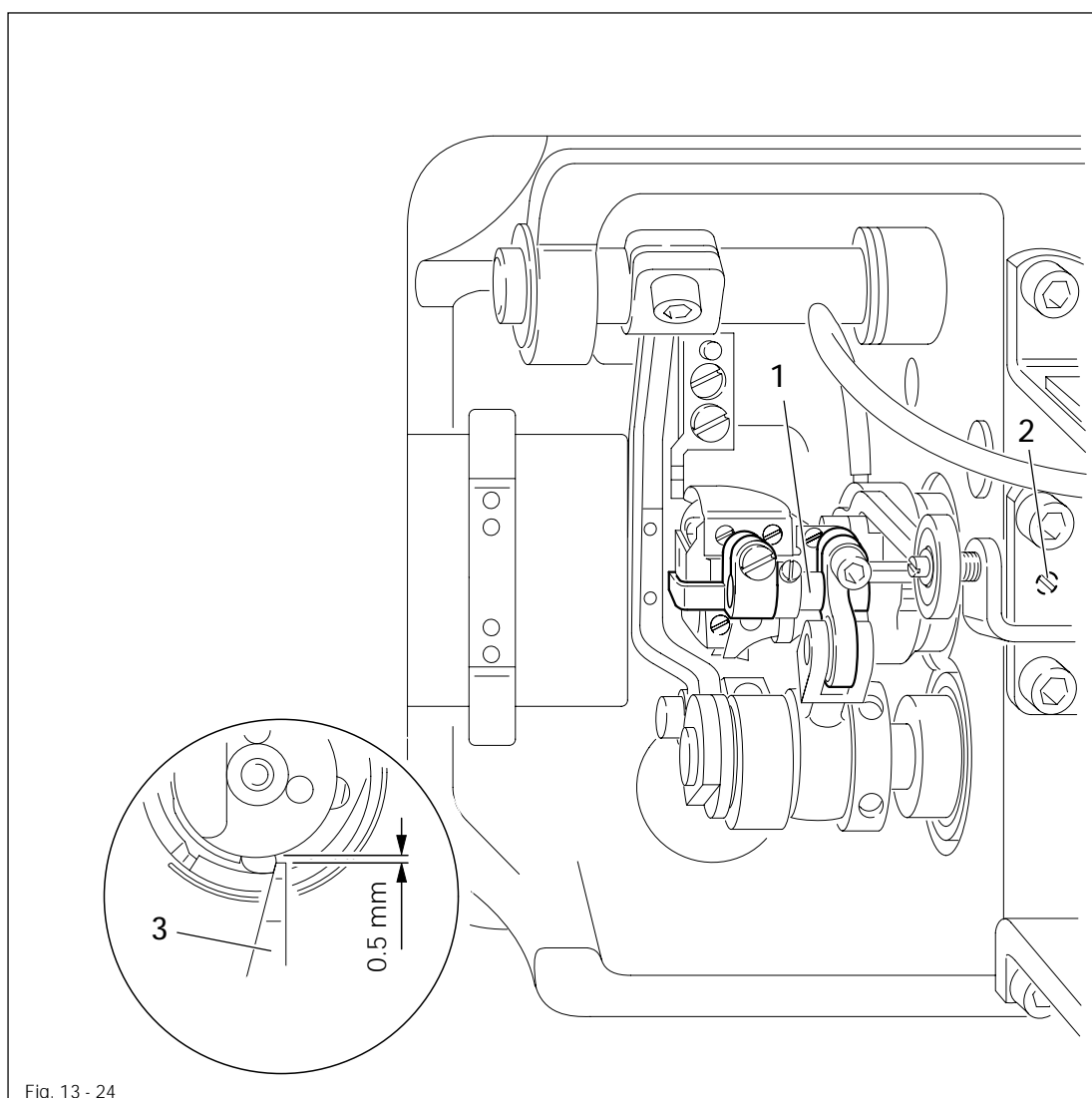
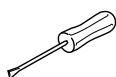


Fig. 13 - 24

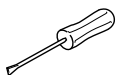
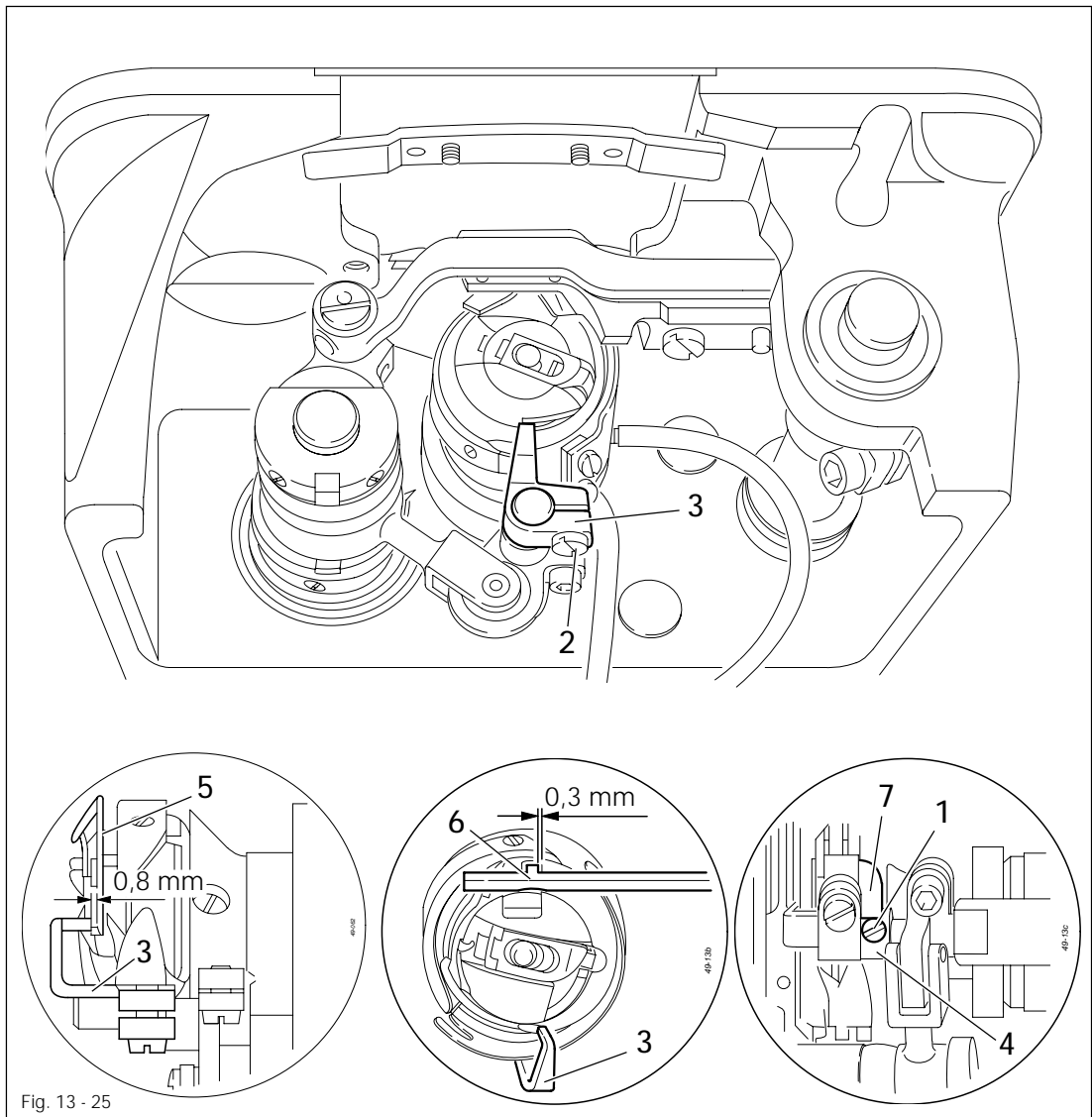


- Loosen screw 2.
- Adjust bobbin opener bearing 1 according to the requirement.
- Tighten screw 2.

13.05.24 Adjustment of the bobbin opener

Requirement

1. The distance between the finger of the bobbin opener 3 and the edge of the bobbin case base 5 must be **0.8 mm**.
2. When the bobbin opener 3 is at its left point of reversal, the bobbin case base 5 should be deflected by approx. **0.3 mm** by the retaining finger and screw 1 should be resting on stop pin 7.

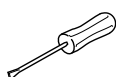
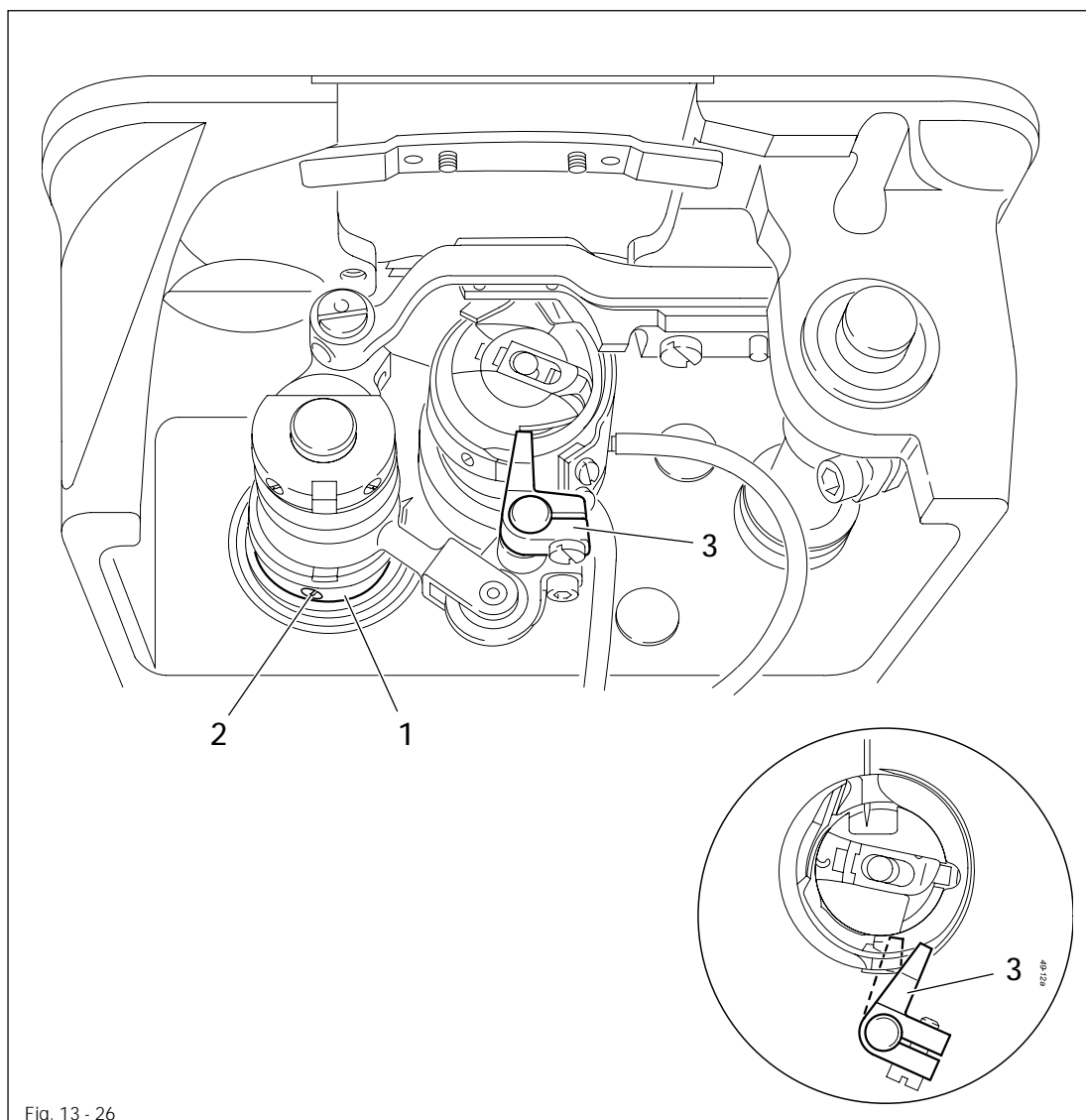


- Loosen screw 1 and loosen screw 2 so that the bobbin opener 3 is still held slightly.
- Adjust bobbin opener 3 according to **requirement 1**.
- Tighten screw 2.
- Adjust retaining collar 4 according to **requirement 2**.
- Tighten screw 1.

13.05.25 Bobbin case opener

Requirement

When the needle bar is positioned 1.8 mm past b.d.c., the bobbin opener 3 should be at its right point of reversal.



- Loosen screws 2.
- Adjust bobbin opener eccentric 1 according to the requirement.
- Tighten screws 2.

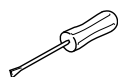
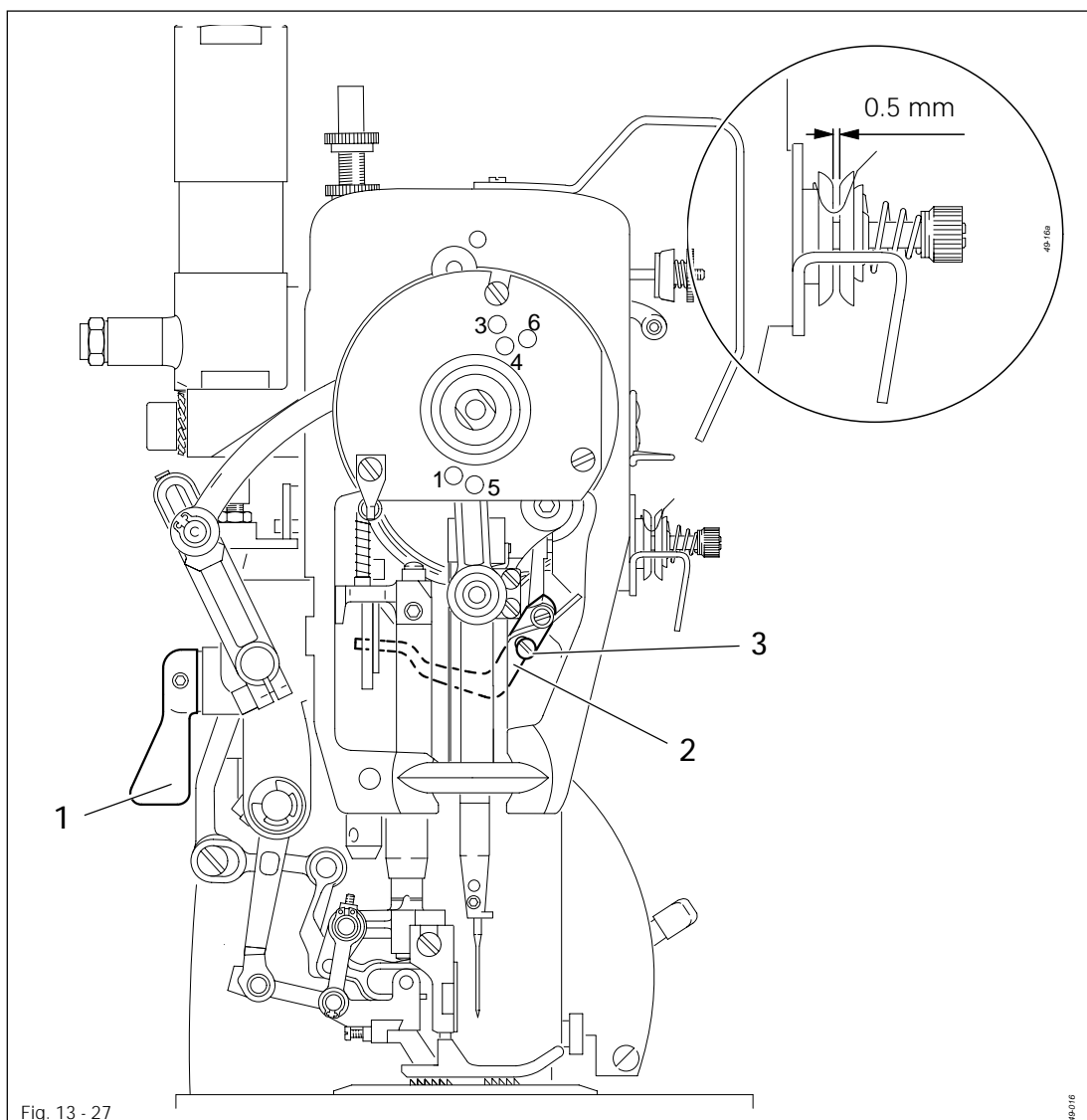


For better recognition a screwdriver can be inserted in the slit of bobbin opener 3.

13.05.26 Needle thread tension release

Requirement

When the hand lever 1 is raised, the tension discs should be at least 0.5 mm apart.

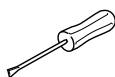
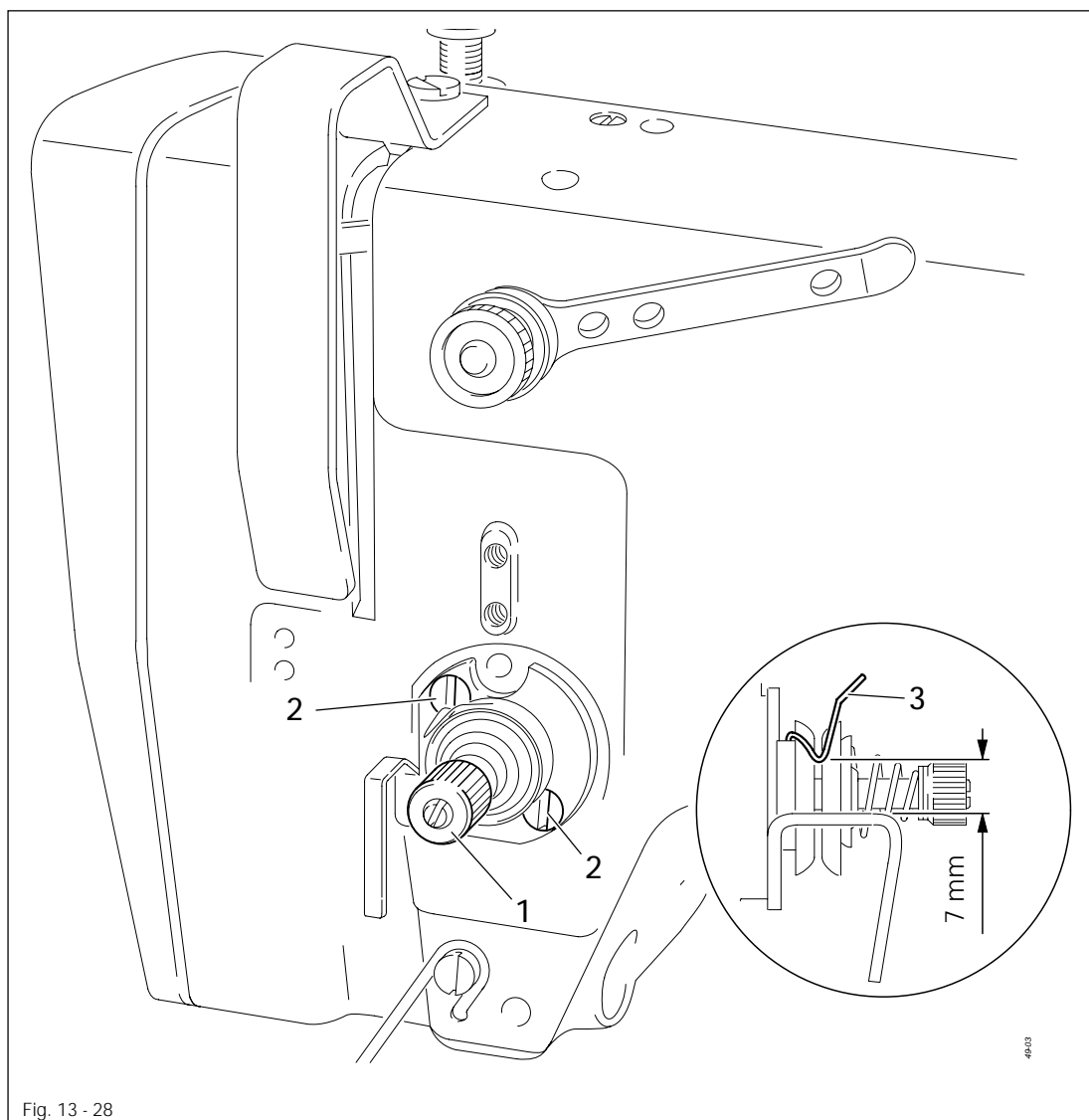


- Adjust tension release clip 2 (screw 3) according to the requirement.
- Lower the presser foot onto the needle plate. The tension must now be fully effective.

13.05.27 Thread check spring

Requirement

The movement of the thread check spring 3 must be finished when the needle point enters the material (spring path approx. 7 mm).



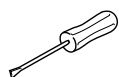
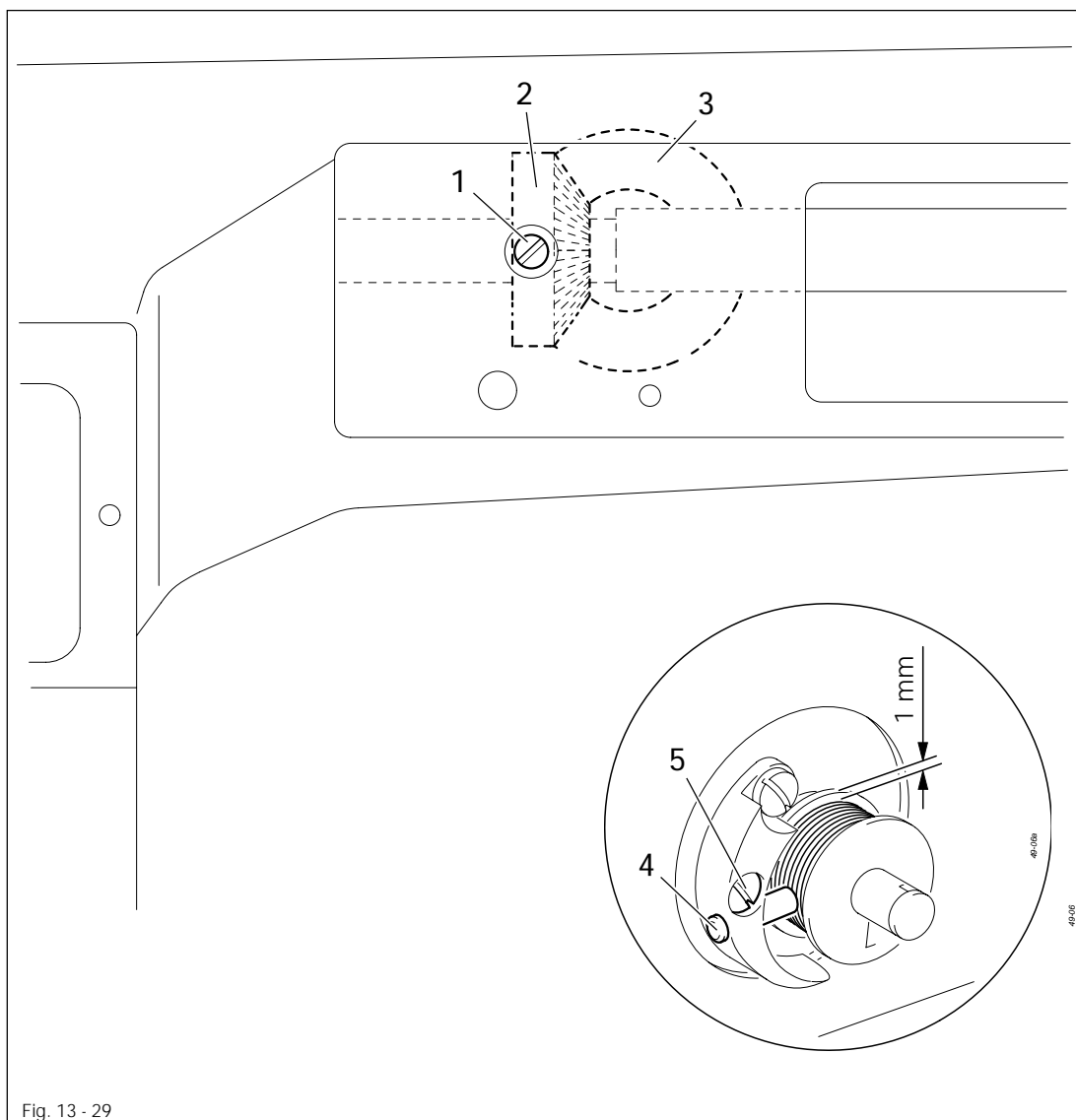
- Adjust thread tension 1 (screws 2) according to the requirement.



The path of thread check spring 3 is dependent on the material and thread and must be corrected in accordance with the sewing results.

Requirement

1. When the bobbin winder is engaged, the winding spindle must be driven reliably.
When it is disengaged, friction wheel 3 must not rest on drive wheel 1.
2. The bobbin winder should switch itself off, when the thread is **approx. 1 mm** from the edge of the bobbin.

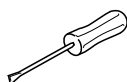
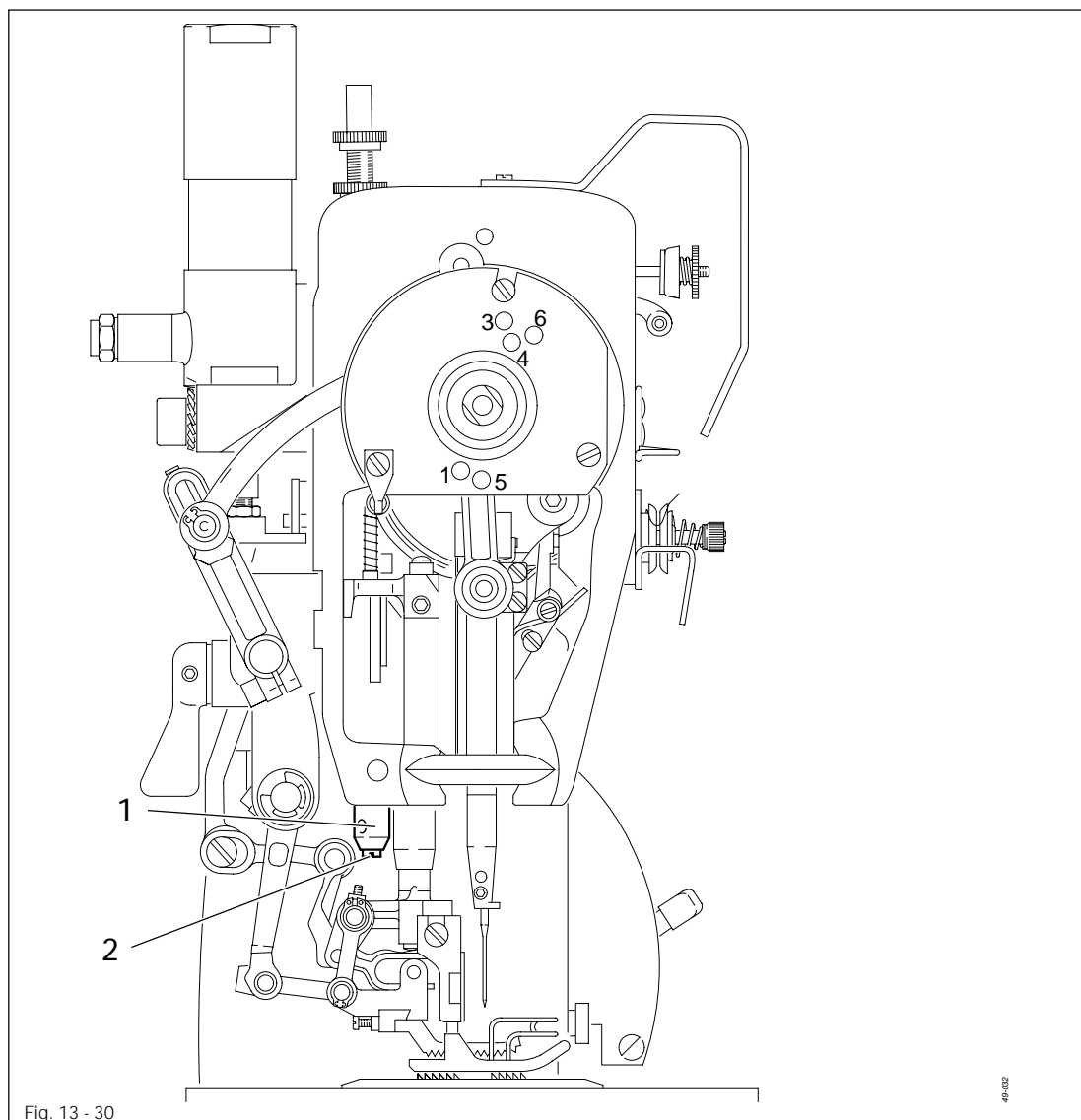


- Raise hand lever and switch on bobbin winder.
- By turning screw 1 position drive wheel 2 on friction wheel 3 according to requirement 1.
- Loosen screw 5 and adjust adjusting pin 4 according to requirement 2.
- Tighten screw 5 again.

13.05.29 Position of the top feed dog in relation to the sewing foot

Requirement

When the take-up lever is at its t.d.c., the teeth of the top feed dog should not be below the presser foot shoe, when the presser foot is raised.



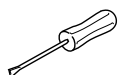
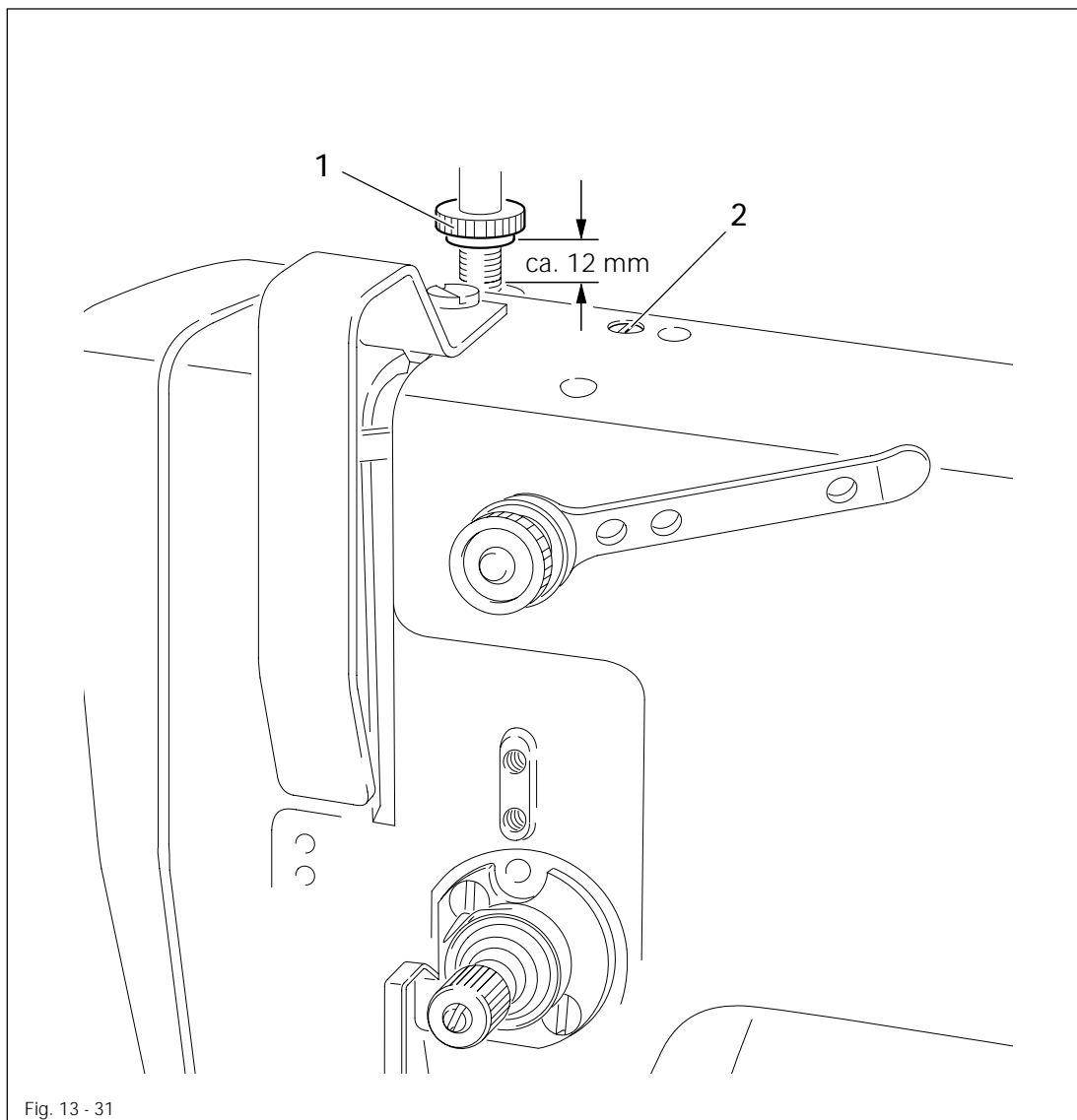
- Adjust eccentric sleeve 1 (screw 2) according to the requirement.

Adjustment

13.05.30 Top feed dog and sewing foot pressure

Requirement

Even at top speed, the material must be fed perfectly. No pressure marks should appear on the material.

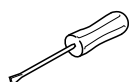
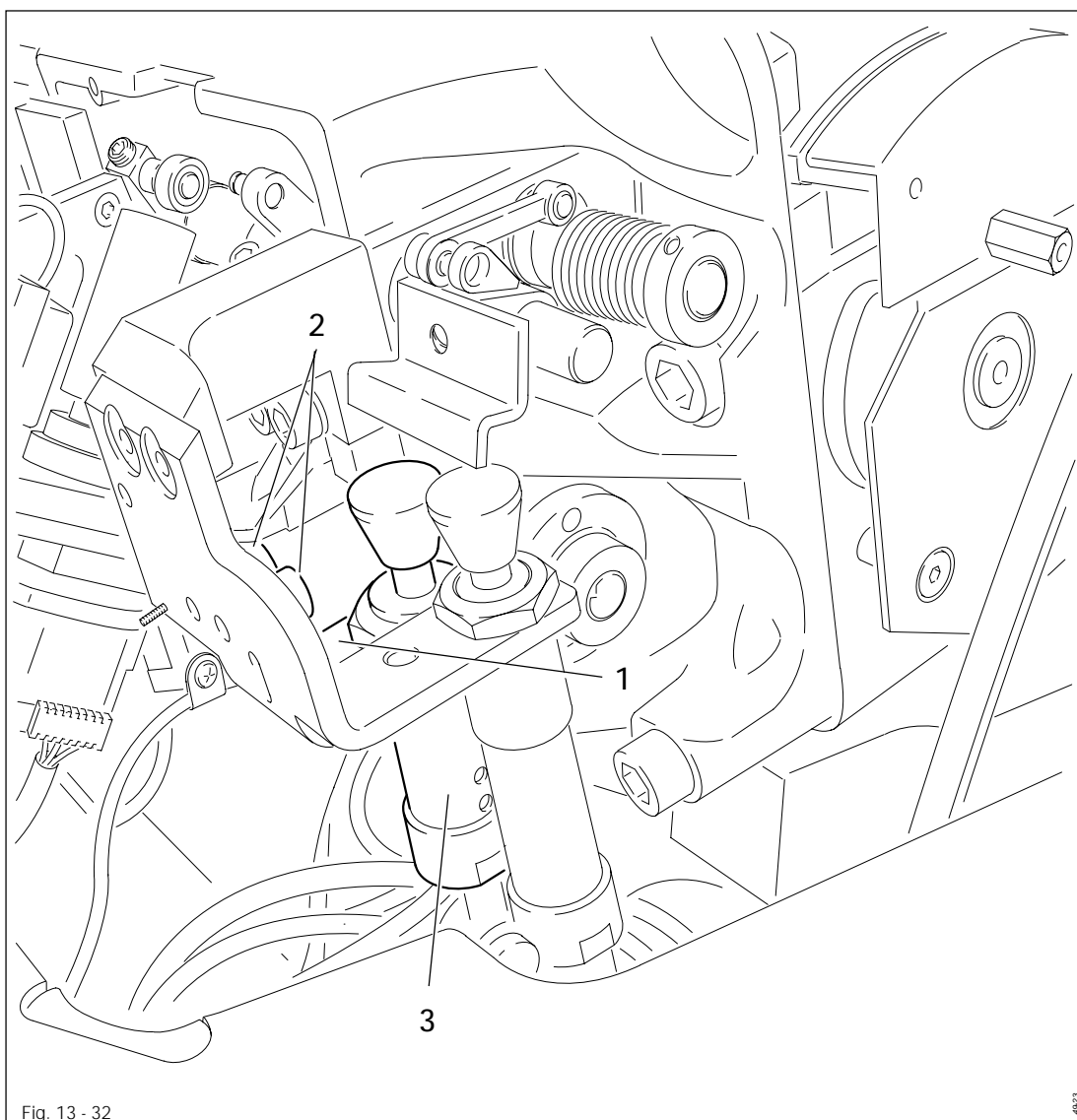


- Adjust screws 1 and 2 according to the requirement.

13.05.31 Stitch condensation

Requirement

When cylinder 3 is actuated, the machine must sew with a shorter stitch length than that indicated on the stitch length adjuster.



- Activate the stitch condensation and sew a test seam.
- If necessary adjust retaining bracket 1 (screws 2) accordingly.

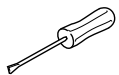
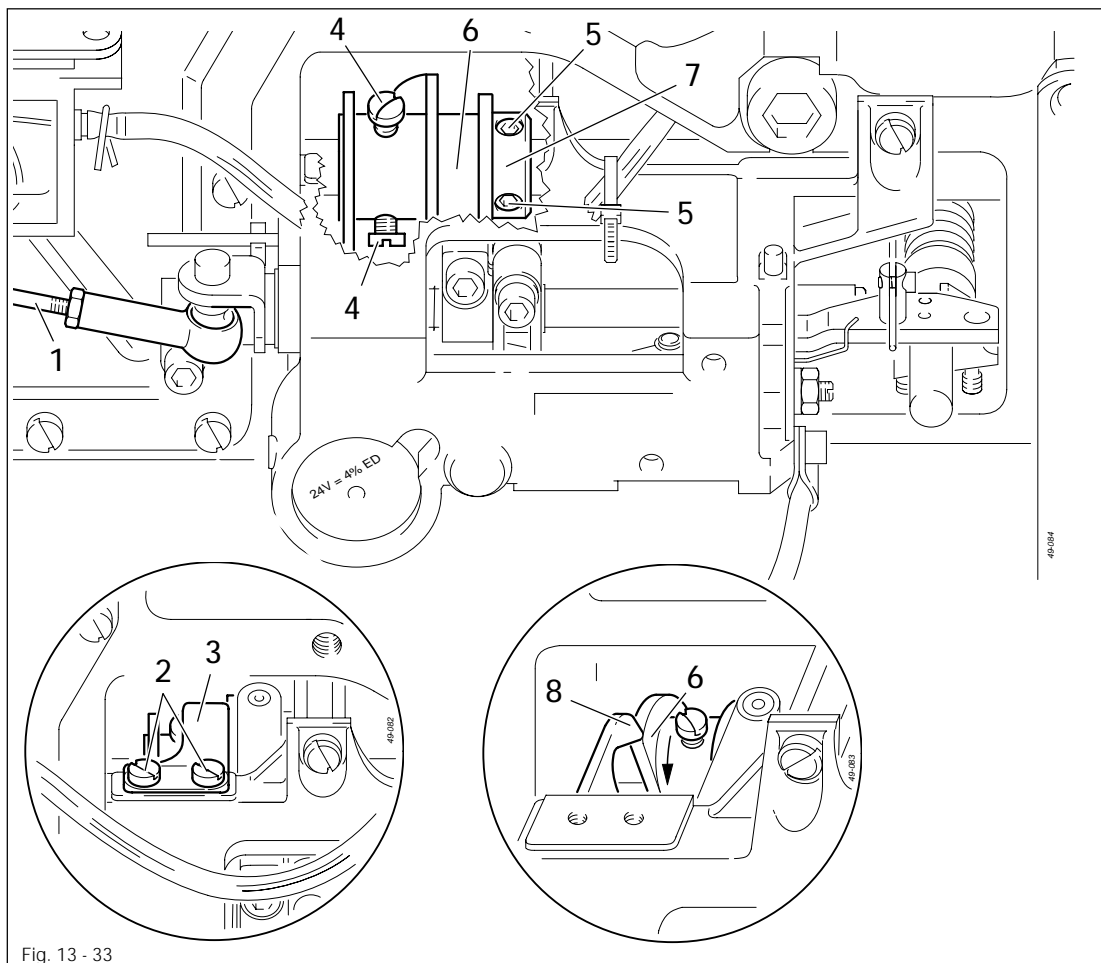
13.06 Adjusting the thread trimmer

13.06.01 Pre-adjusting the control cam

Requirements

At the t.d.c of the needle bar,

1. the beginning of the highest point of the trip of the control cam **6** should be positioned under the tip of pawl **8** and
2. the right-hand side of the trip should be flush with the right-hand side of pawl **8**.



- Pull the ball heads of connecting rod **1** off the ball pin at the cutting and control units and remove connecting rod **1**.
- Loosen screws **2** and retaining spring **3** together with the cover disk.
- Loosen screws **4** and **5**.
- Twist or shift control cam **6** in accordance with **requirement 1** or **requirement 2** as required.
- Tighten screws **4** firmly.
- Push fixing collar **7** onto control cam **6**.
- Tighten screws **5** firmly.



Connecting rod **1** and retaining spring **3** stay dismantled for further adjustments.

13.06.02 Roller lever

Requirements

When the needle bar is positioned 1.8 mm after the b.d.c.,

1. the roller of the roller lever 4 should engage easily with the control cam 7 and
2. the roller of roller lever 4 should be centred in the cam notch of the control cam 7

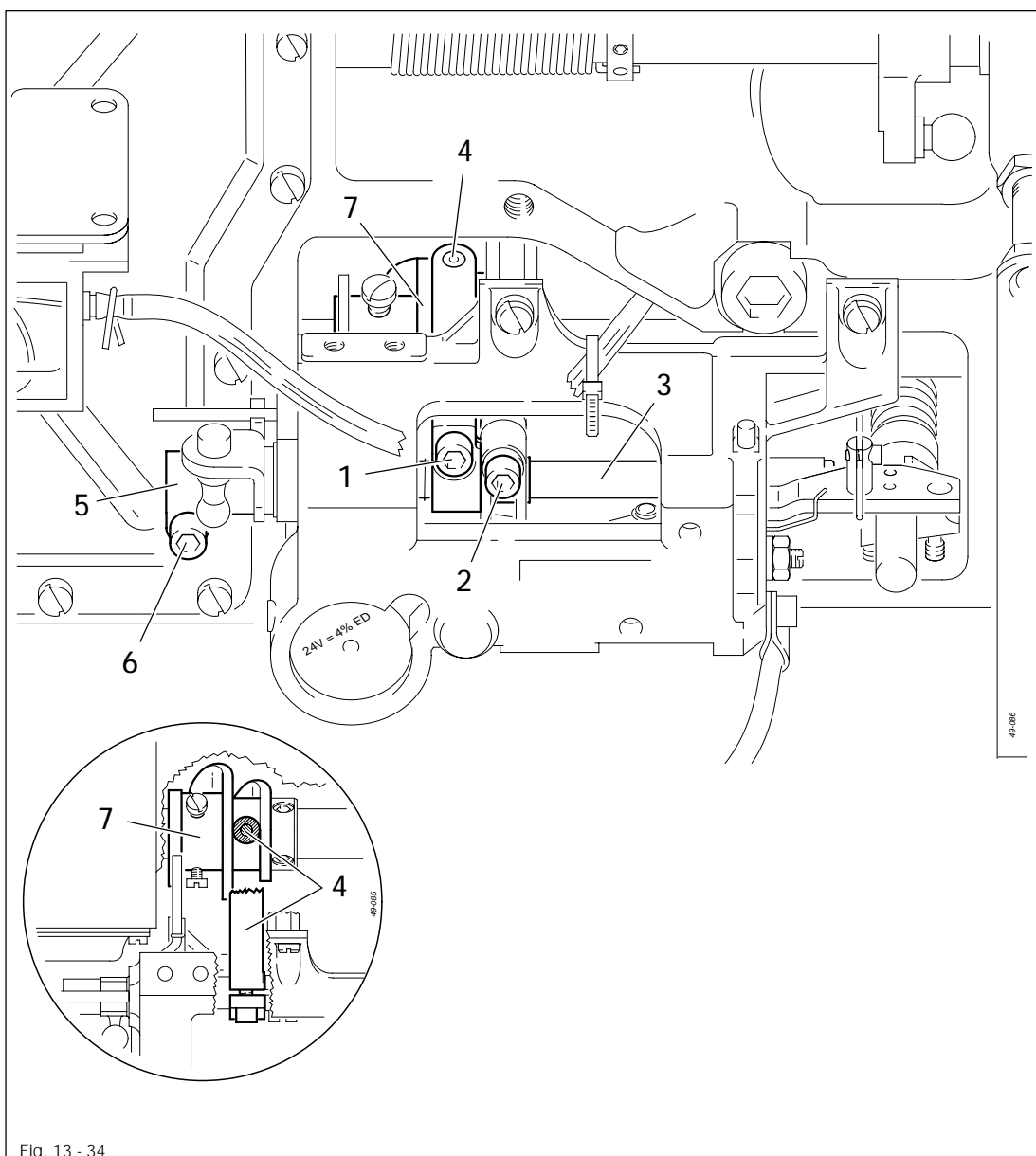
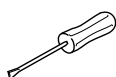


Fig. 13 - 34



- Unscrew screws 1 and 2.
- Put pressure on rockshaft 3 to the right.
- Adjust roller lever 4 in accordance with requirements 1 and 2.
- Tighten screw 1 firmly.
- Position the surface of the fixing collar 5 (bolt 6) parallel to the base plate.



Screw 2 stays undone for the following adjustment.

Requirement

With the thread trimmer in resting position, the distance between pawl 2 and the highest point of the control cam should be 0.3 mm.

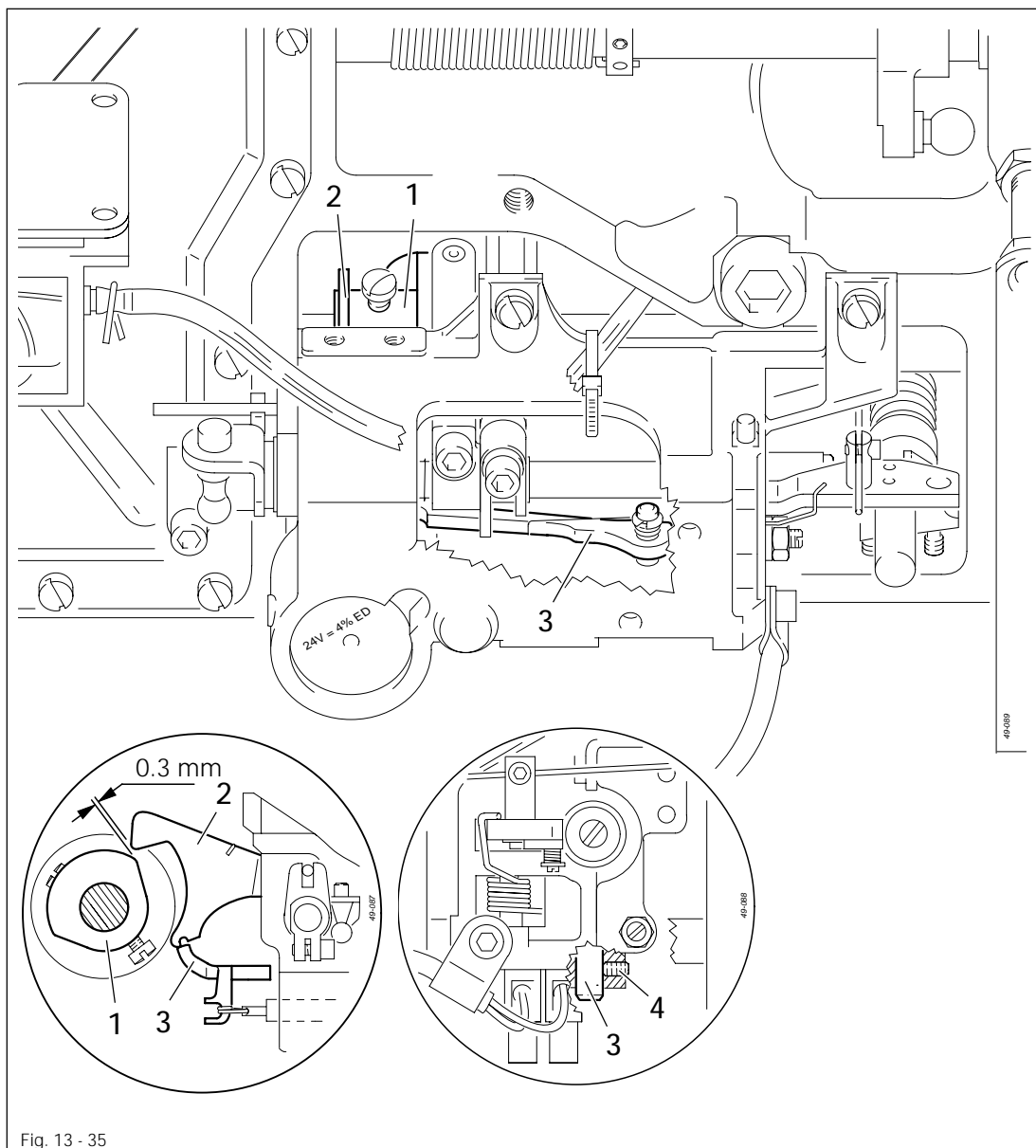
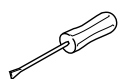


Fig. 13 - 35

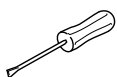
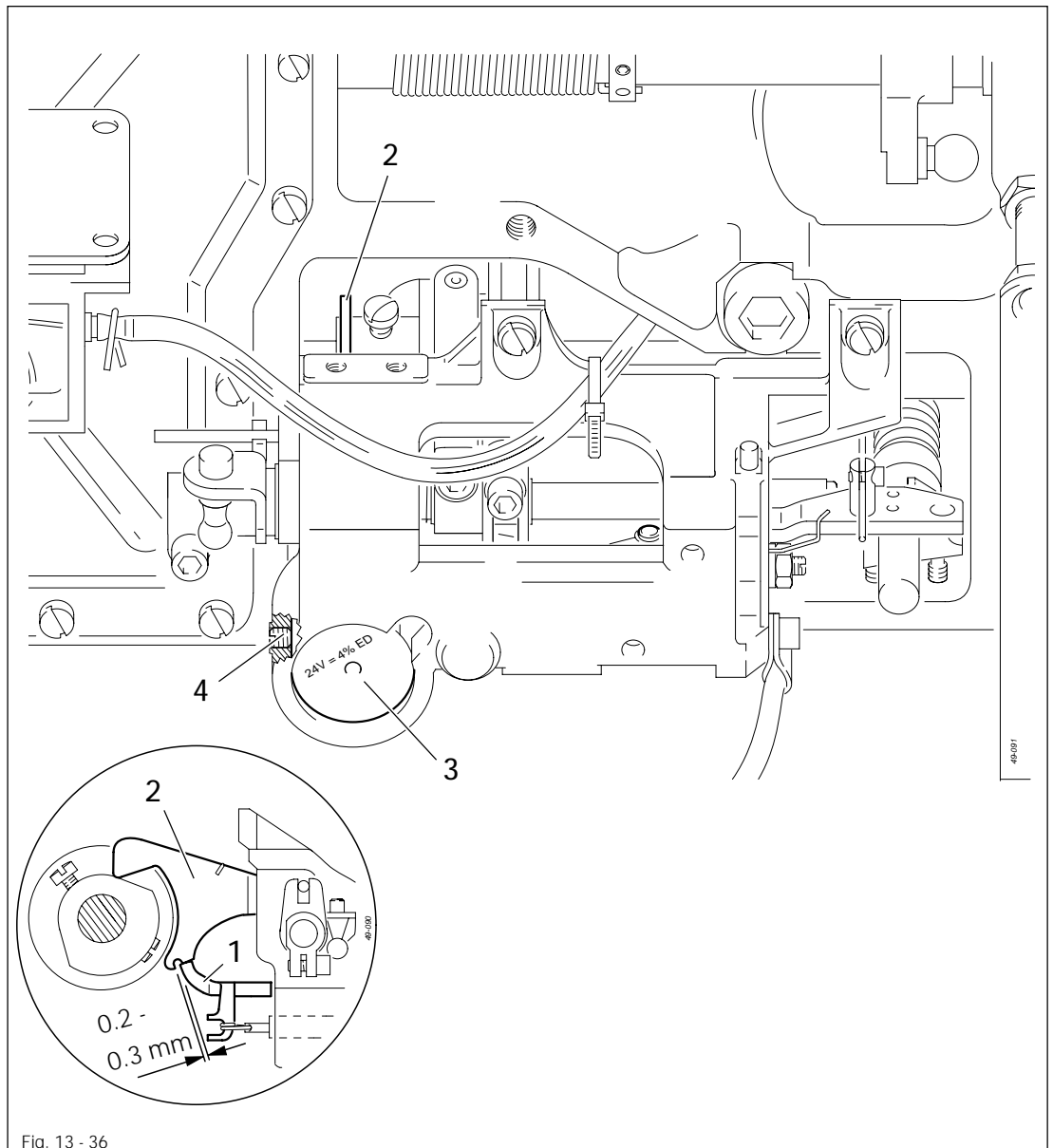


- Position the bearing surface of control cam 1 with its highest point below pawl 2 by turning the hand wheel.
- Shift pin 3 (screw 4) in accordance with the requirement.

13.06.04 Engaging solenoid

Requirement

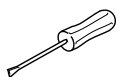
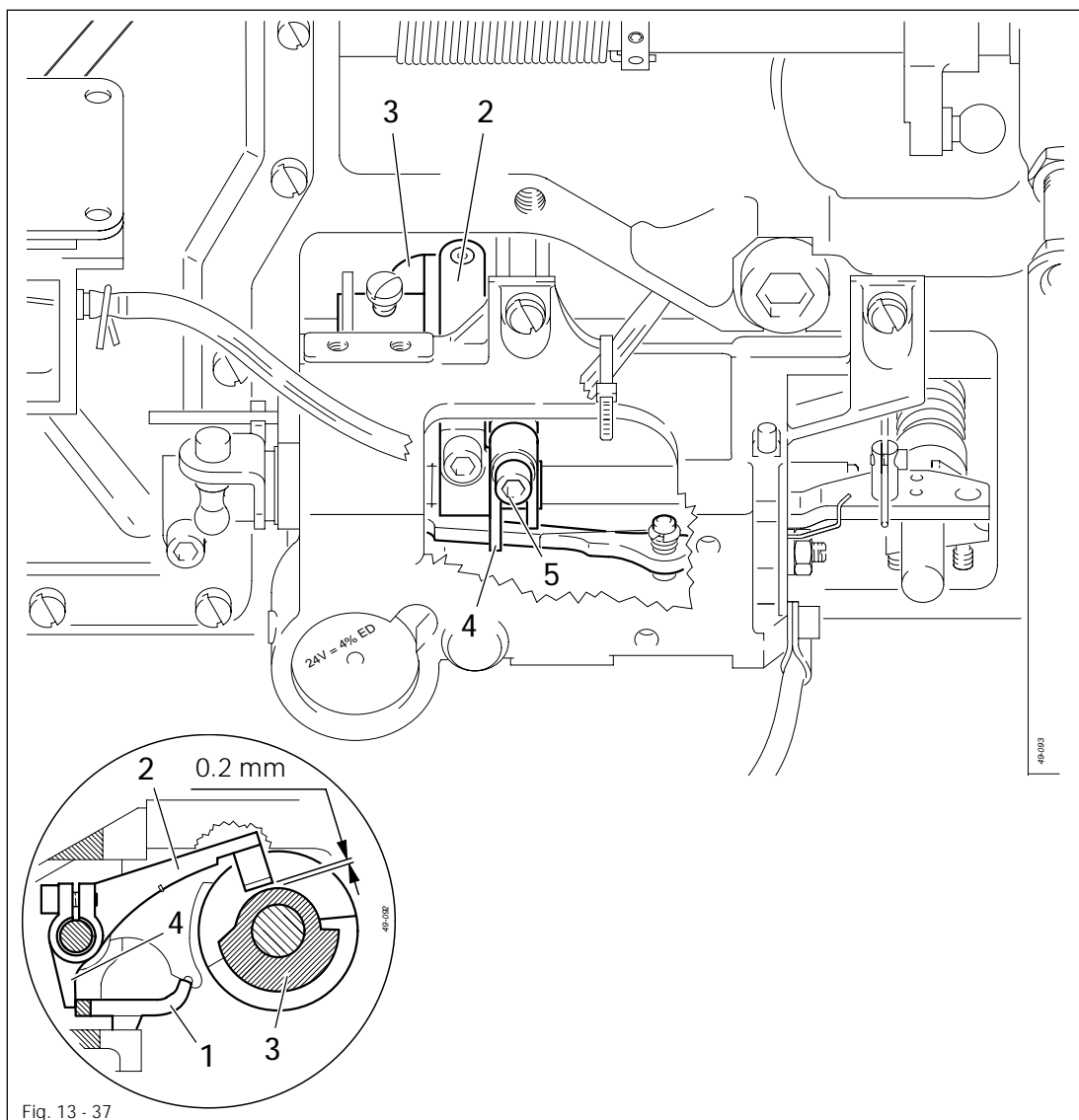
When the needle bar is positioned 1.8 mm after the b.d.c and the engaging solenoid is actuated, the distance between the engaging lever 1 and the pawl 2 should be between 0.2 and 0.3 mm.



- Position the needle bar 1.8 mm after b.d.c
- Manipulate engaging lever 1 until pawl 2 engages.
- Push magneto inductor into the magnet housing 3 as far as possible and move magnet housing 3 (screw 4) together with the magneto inductor in accordance with the requirement.

Requirement

When the needle bar is positioned 1.8 mm after the b.d.c and the engaging lever **1** is actuated, the distance between the roller of the roller lever **2** and the bottom of the control cam **3** must be approx. **0.2 mm**.

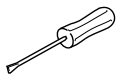
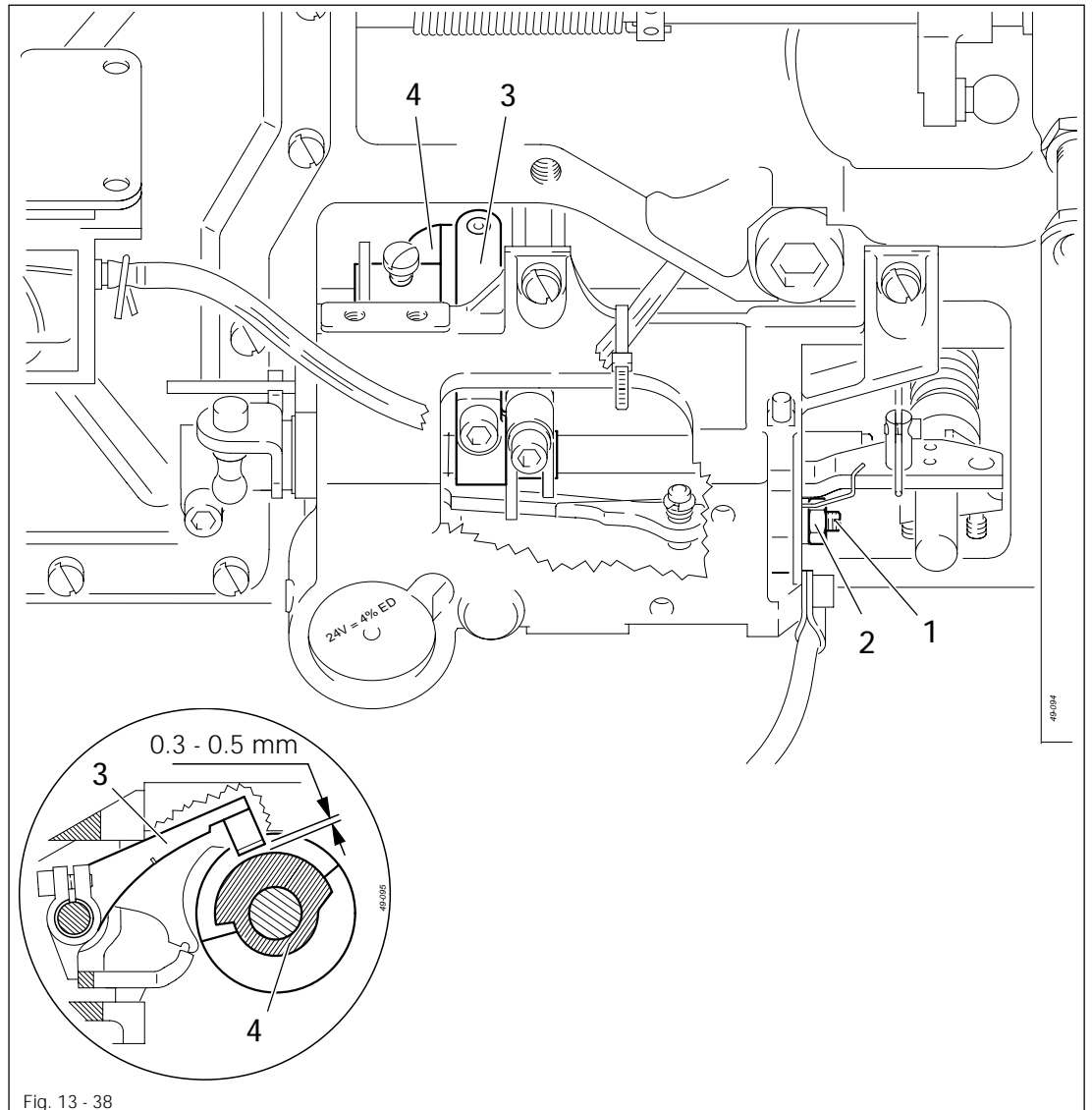


- Position needle bar 1.8 mm after b.d.c
- Activate engaging lever **1** manually.
- Push roller lever **2** onto the bottom of control cam **3**.
- Tighten screw **5** slightly.
- Push release lever **4** onto engaging lever **1**.
- Adjust the distance to control cam **3** to approx. **0.2 mm** by tapping the roller lever **2** and measuring repeatedly with lever **4** which must be in constant lateral contact with roller lever **2**.
- Tighten screw **5** firmly.

13.06.06 Engaging lever

Requirement

When the needle bar is at the t.d.c and the thread trimmer is in resting position, the distance between the roller of the roller lever 3 and the outer diameter of the control cam 4 should be between 0.3 and 0.5 mm.



- Turn screw 1 (nut 2) in accordance with the requirement.
- Check distance in accordance with the requirement.

13.06.07 Lateral adjusting of the thread catcher

Requirement

1. The tip of the thread catcher 6 should point exactly to the middle of the needle.
2. The thread catcher 6 should not touch anywhere when in motion.

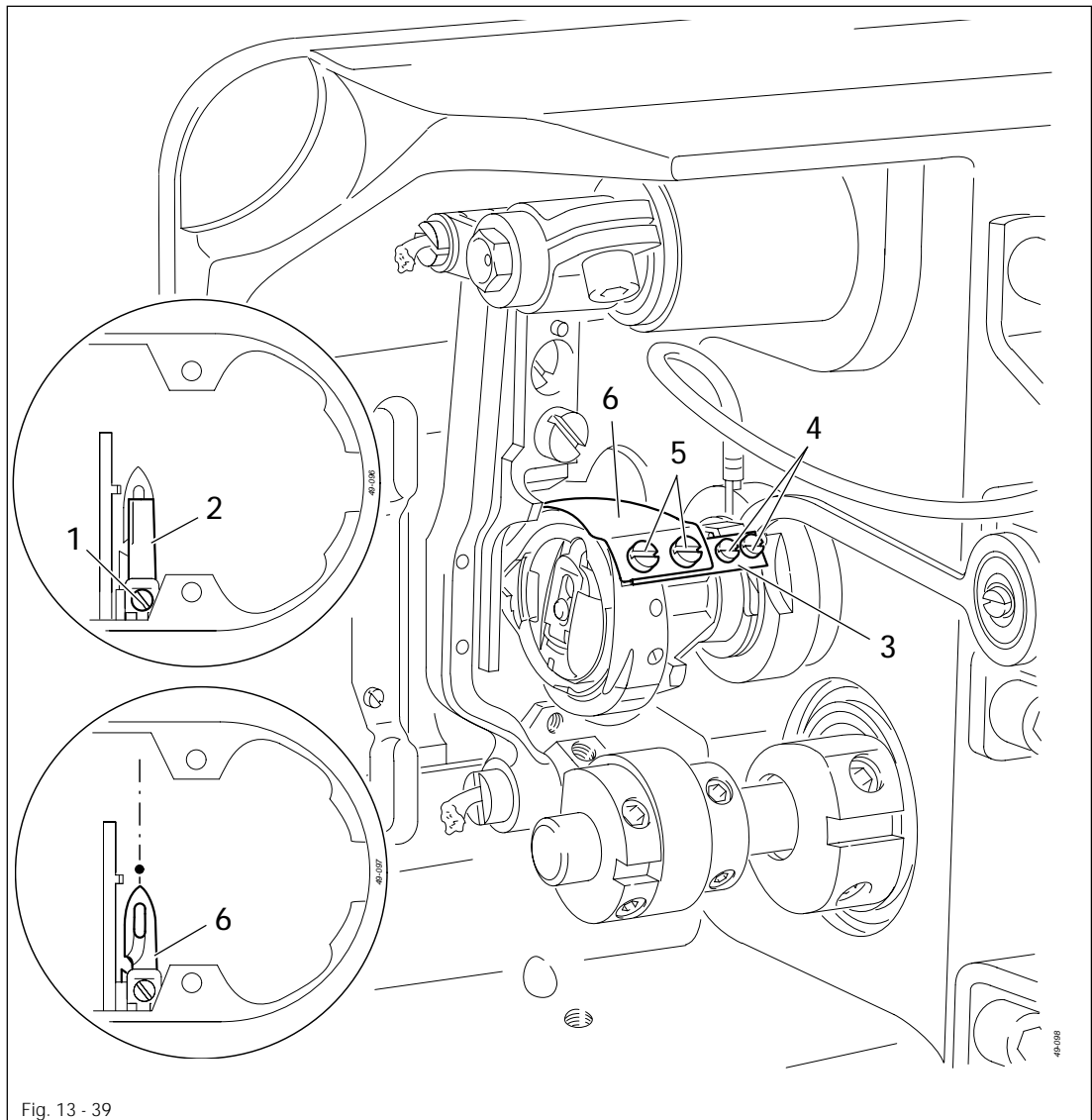
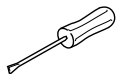


Fig. 13 - 39



- Unscrew needle plate and feed dog.
- Loosen screw 1 and remove knife 2.
- Position needle bar at b.d.c
- Push aside catcher stop 3 (screws 4).
- Loosen screws 5.
- Position the tip of thread catcher 6 in front of the needle by moving the thread catcher carrier.
- Adjust thread catcher 6 laterally in accordance with **requirement 1**.
- Tighten screws 5 firmly ensuring that the back of the thread catcher is horizontal.

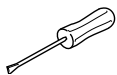
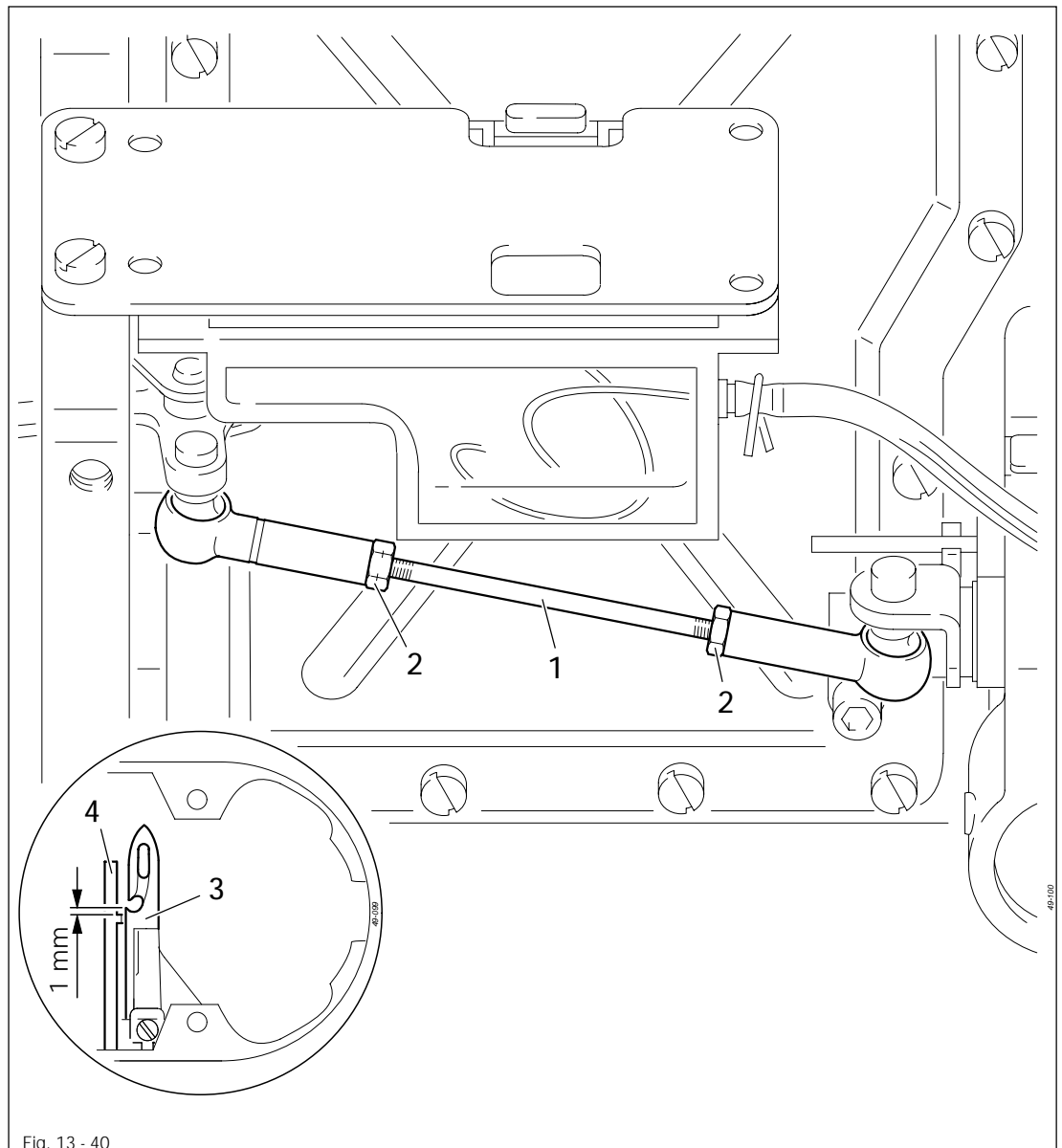


Needle plate, feed dog, knife 2 and catcher stop 3 stay dismantled for the following adjustments.

13.06.08 Front reversal point of the thread catcher

Requirement

In the front reversal point of the thread catcher 3 the rear edge of thread catcher cutout should be 1 mm in front of the bobbin case position finger 4.

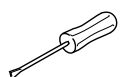
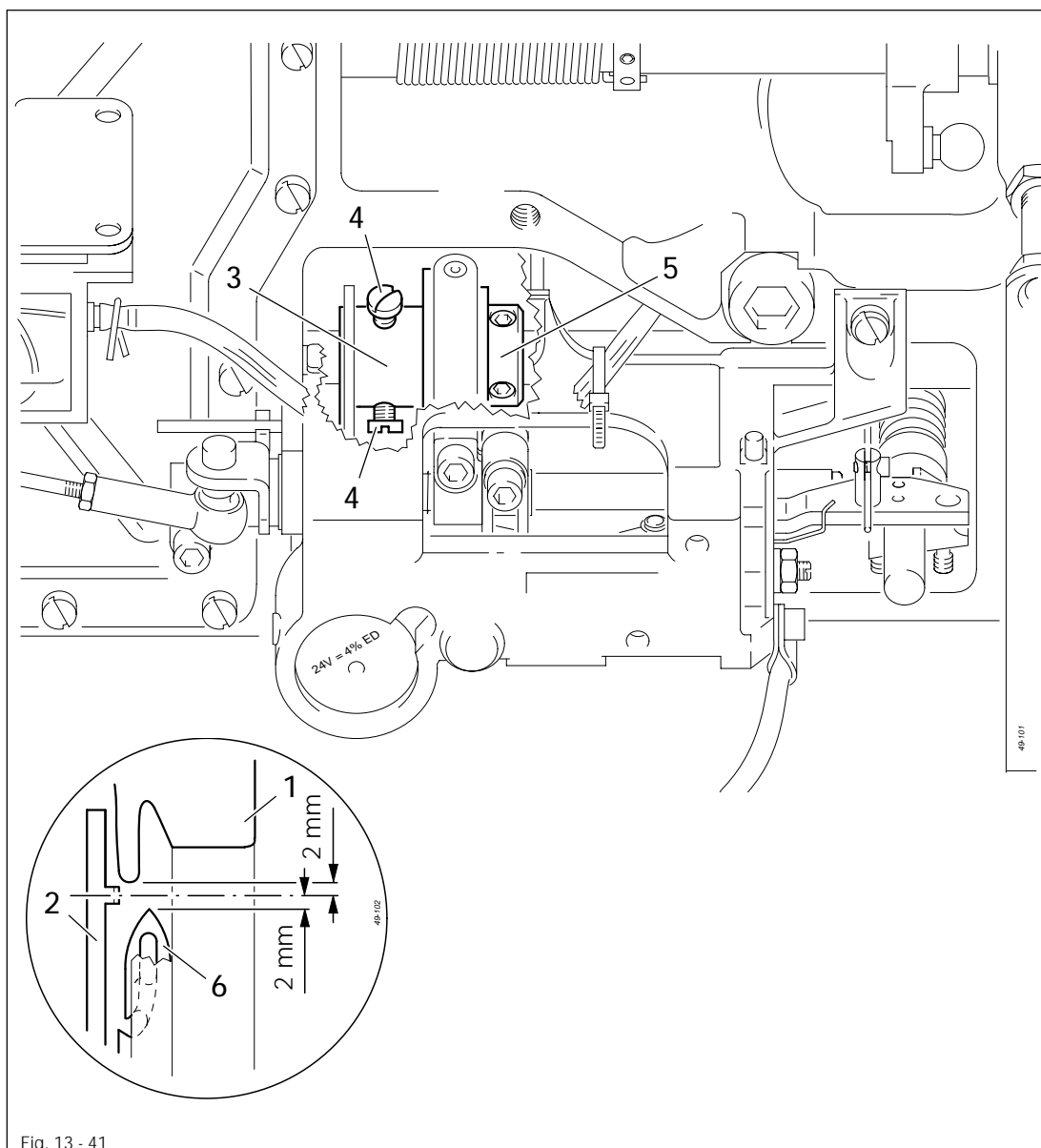


- Push balls of the connecting rod 1 onto the ball pins on the cutting and control units.
- Loosen nuts 2 (right-hand and left-hand thread).
- Position needle bar at t.d.c
- Activate the engaging lever manually.
- Bring thread catcher 3 to its front point of reversal by turning the hand wheel.
- Turn connecting rod 1 in accordance with the requirement.
- Lock connecting rod 1 by means of nuts 2.

13.06.09 Re-adjusting the control cam

Requirement

When the end of the hook plate 1 is positioned 2 mm behind the middle of the lug of the bobbin case position finger, the distance between the tip of the thread catcher 6 and the middle of the lug should also be 2 mm.

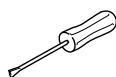
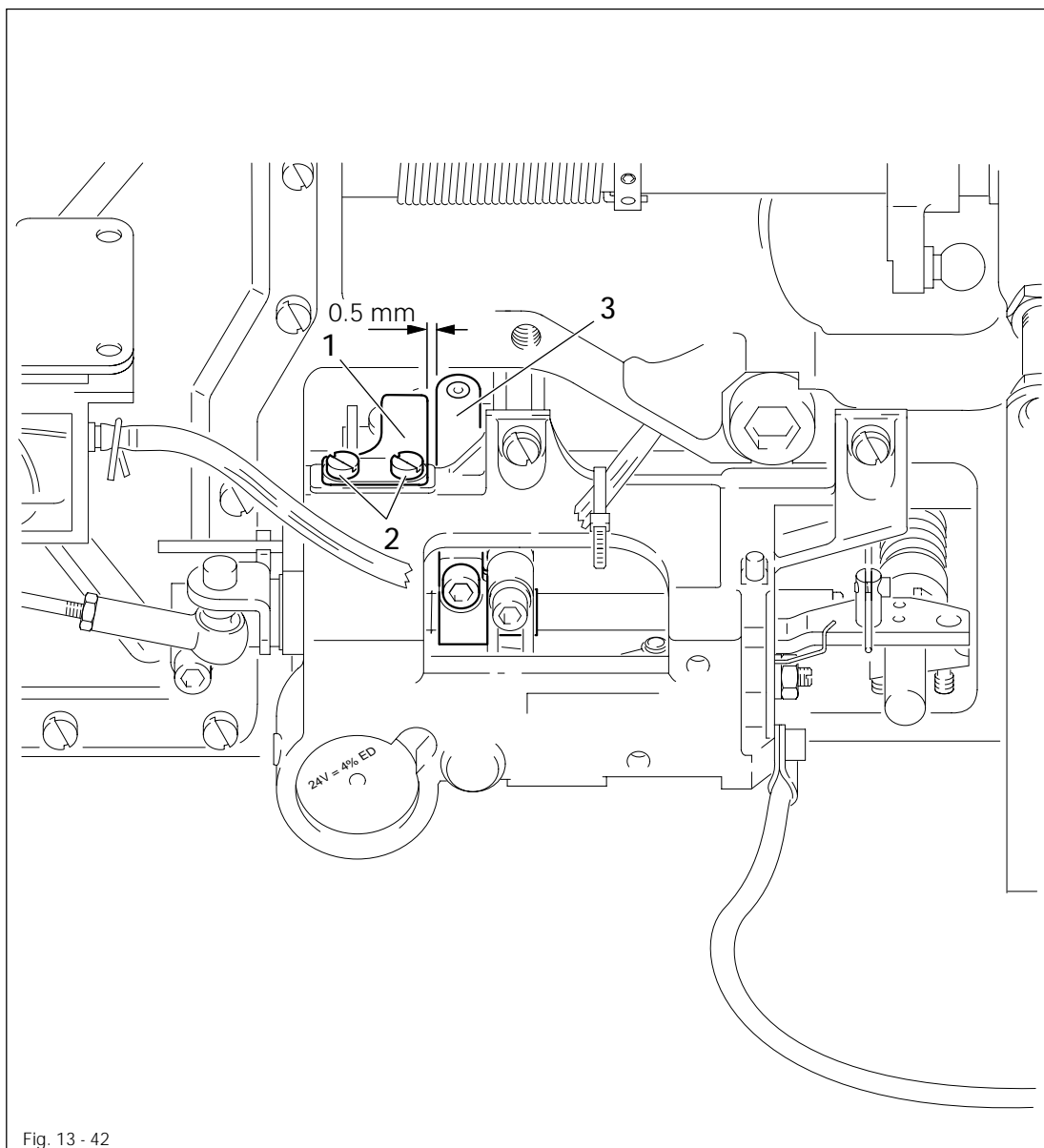


- Position the needle bar at b.d.c
- Activate the engaging lever manually.
- Turn the hand wheel until the distance between the end of hook plate 1 and the middle of the lug of the bobbin case position finger 2 is 2 mm.
- Turn control cam 3 (screws 4) in accordance with the requirement and bring it into contact with fixing collar 5.

13.06.10 Retaining spring

Requirement

When the thread trimmer is in resting position, the distance between the retaining spring **1** and the roller lever **3** should be **0.5 mm**.

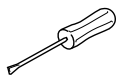
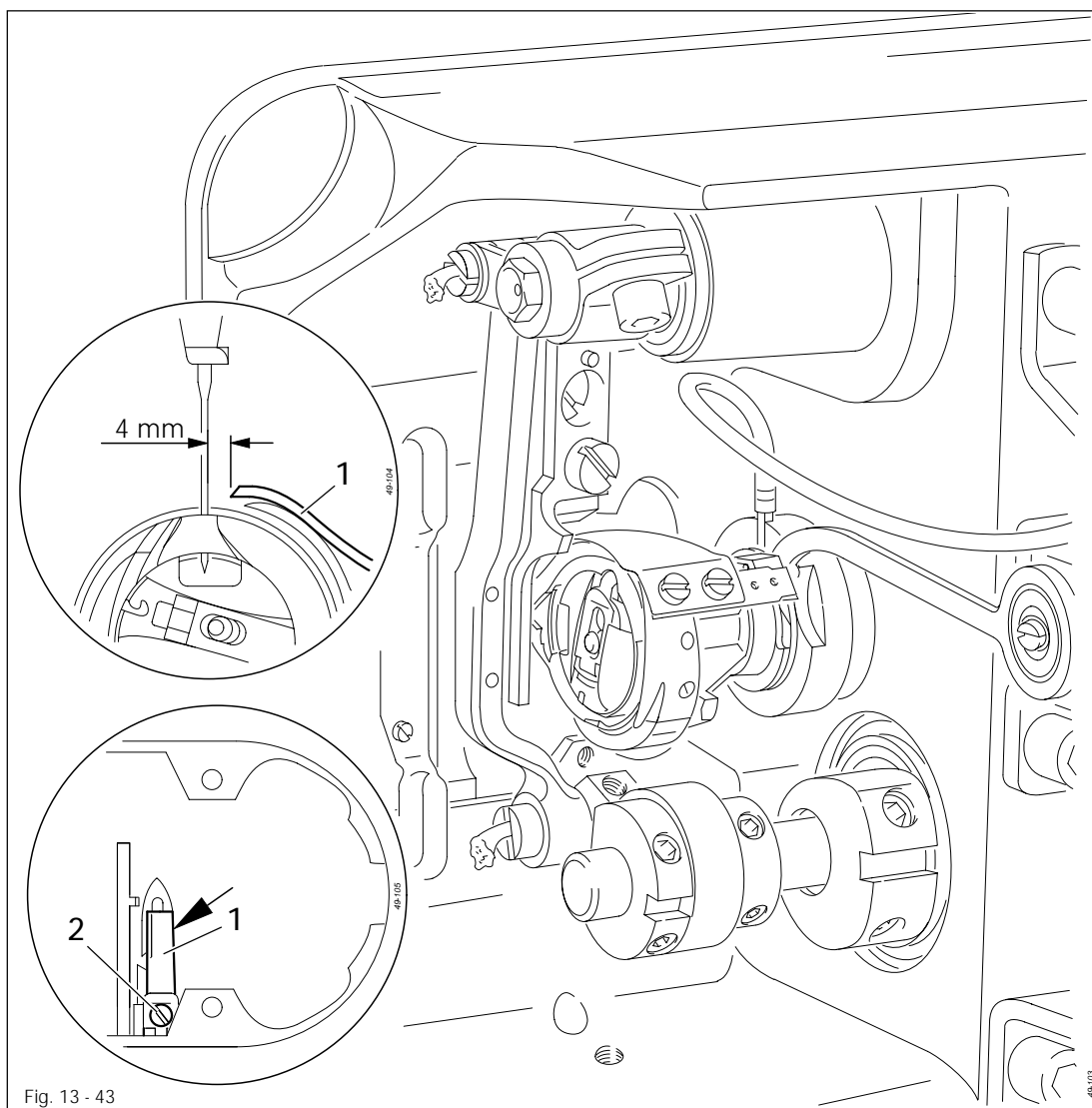


- Position retaining spring **1** together with the cover disk.
- Tighten screws **2** slightly.
- Push retaining screw **1** up to the stop and adjust in accordance with the requirement.
- Tighten screws **2** firmly.

13.06.11 Knife to needle clearance

Requirement

The distance between the front edge of the knife 1 and the needle should be 4 mm.



- On needle-feed machines set the stitch length to "0".
- Position the needle bar at b.d.c
- Push knife 1 under the safety plate and align in accordance with the **requirement**.
- Tighten screw 2 slightly.
- Activate the engaging lever manually.
- Turn the hand wheel until the cutting point in the thread catcher is positioned immediately in front of the knife blade.
- Adjust knife 1 so that the right edge of the knife does not protrude over the right edge of the thread catcher (see arrow).
- Tighten screw 2 firmly.

13.06.12 Manual trimming control

Requirement

Both threads have to be cut perfectly in the catcher cutout on both right and left-hand side.

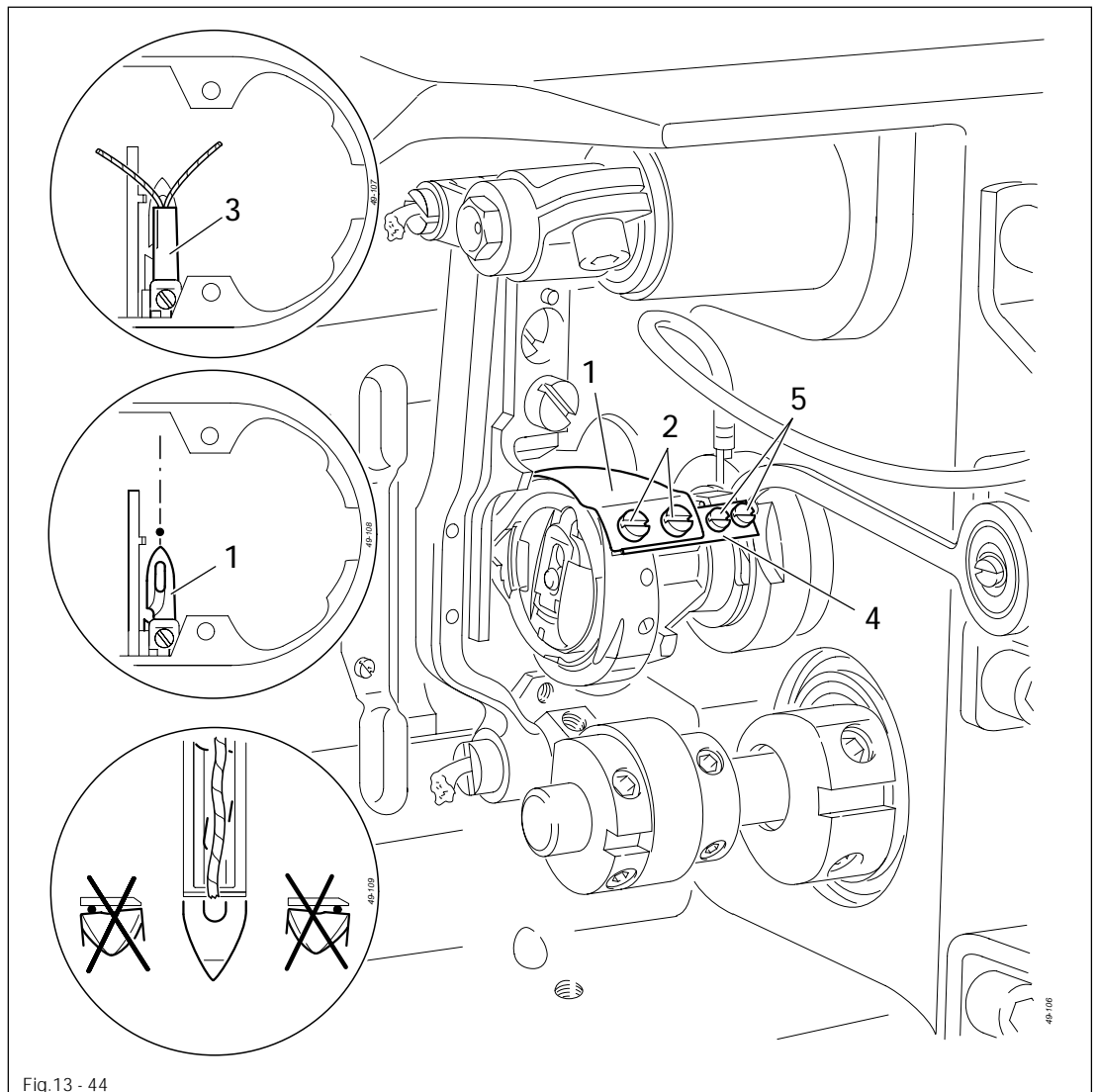
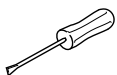


Fig.13 - 44

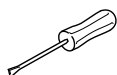
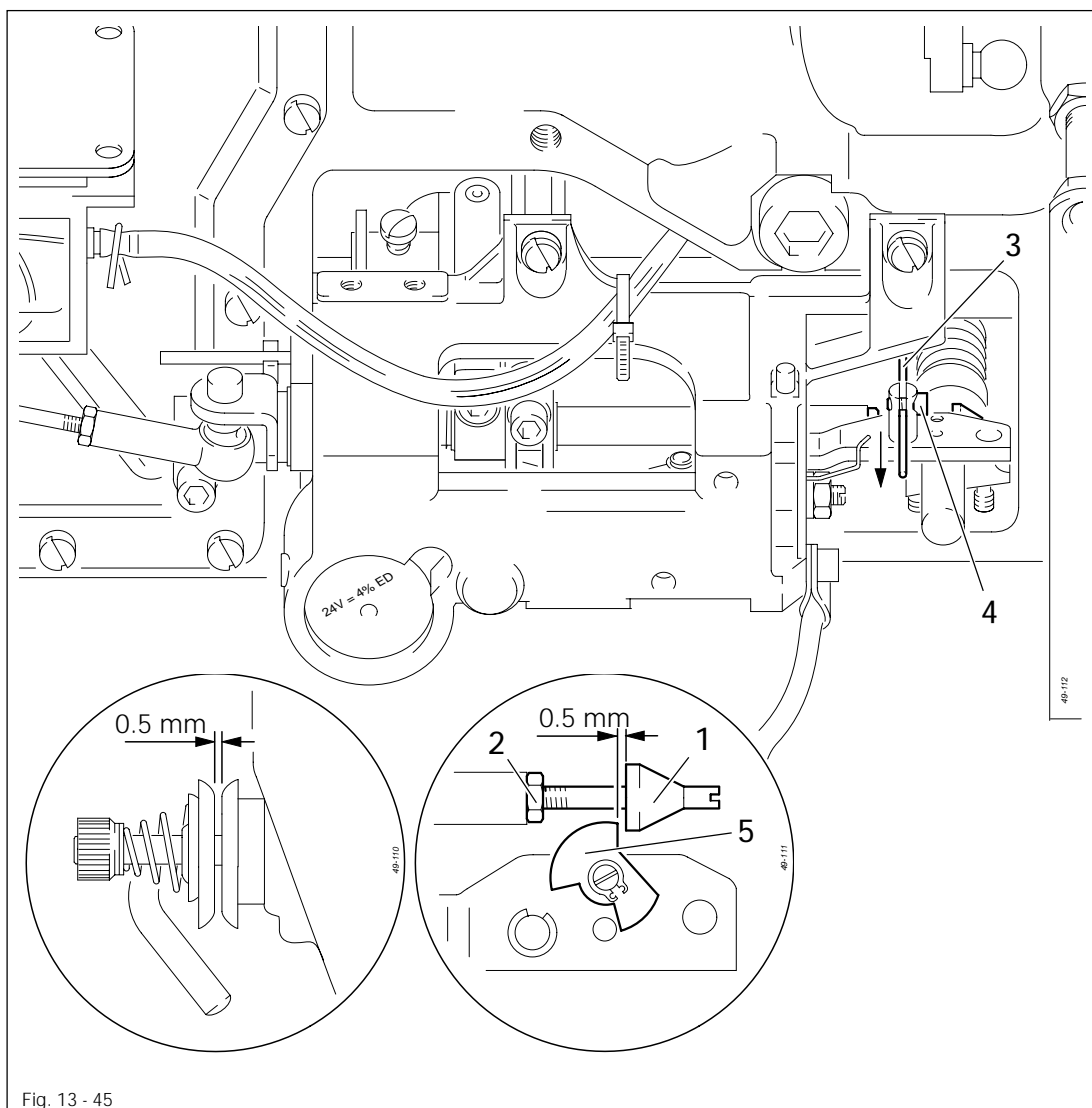


- Position the needle bar at b.d.c and activate the engaging lever manually.
- Turn the hand wheel until thread catcher 1 is its front reversal point.
- Double a thread and insert it into the cutout of thread catcher 1.
- Turn the hand wheel further until the trimming process is finished.
- If both threads are not trimmed in accordance with the **requirement**, loosen screws 2 and align thread catcher 1 with respect to knife 3 .
- Make sure that the tip of the thread catcher is pointing to the centre of the needle and tighten screws 2 firmly.
- Move catcher stop 4 onto thread catcher 1 and tighten screws 5 firmly.
- Screw on feed dog and needle plate, making sure that the movement of the feed dog in the needle plate cutout is not restricted.

13.06.13 Tension release of needle thread

Requirements

1. When the thread trimming unit is in resting position, trip 5 should be engaged and at a distance of **0.5 mm** from the release cone 1.
2. When trip 5 is positioned at the highest point of the release cone 1, the tension disks should be spaced at a minimum of **0.5 mm** from each other.



- Turn release cone 1 (nut 2) in accordance with **requirement 1**.
- Lower the presser foot onto the needle plate.
- Pull out the thread from between the tension disks.
- Pull down linkage 3 (screw 4) until you feel it stop.
- Position the needle bar at b.d.c and activate the engaging lever manually.
- Turn the hand wheel until trip 5 is positioned at the highest point of release cone 1.
- The tension disks now have to be spaced at a minimum of **0.5 mm** from each other.
- Bring the rock shaft back to its starting position by turning the hand wheel.
- Trip 5 now must be engaged, the needle thread must be under full tension.
- Grease release cone 1 slightly.

13.06.14 Mounting and dismounting the control unit

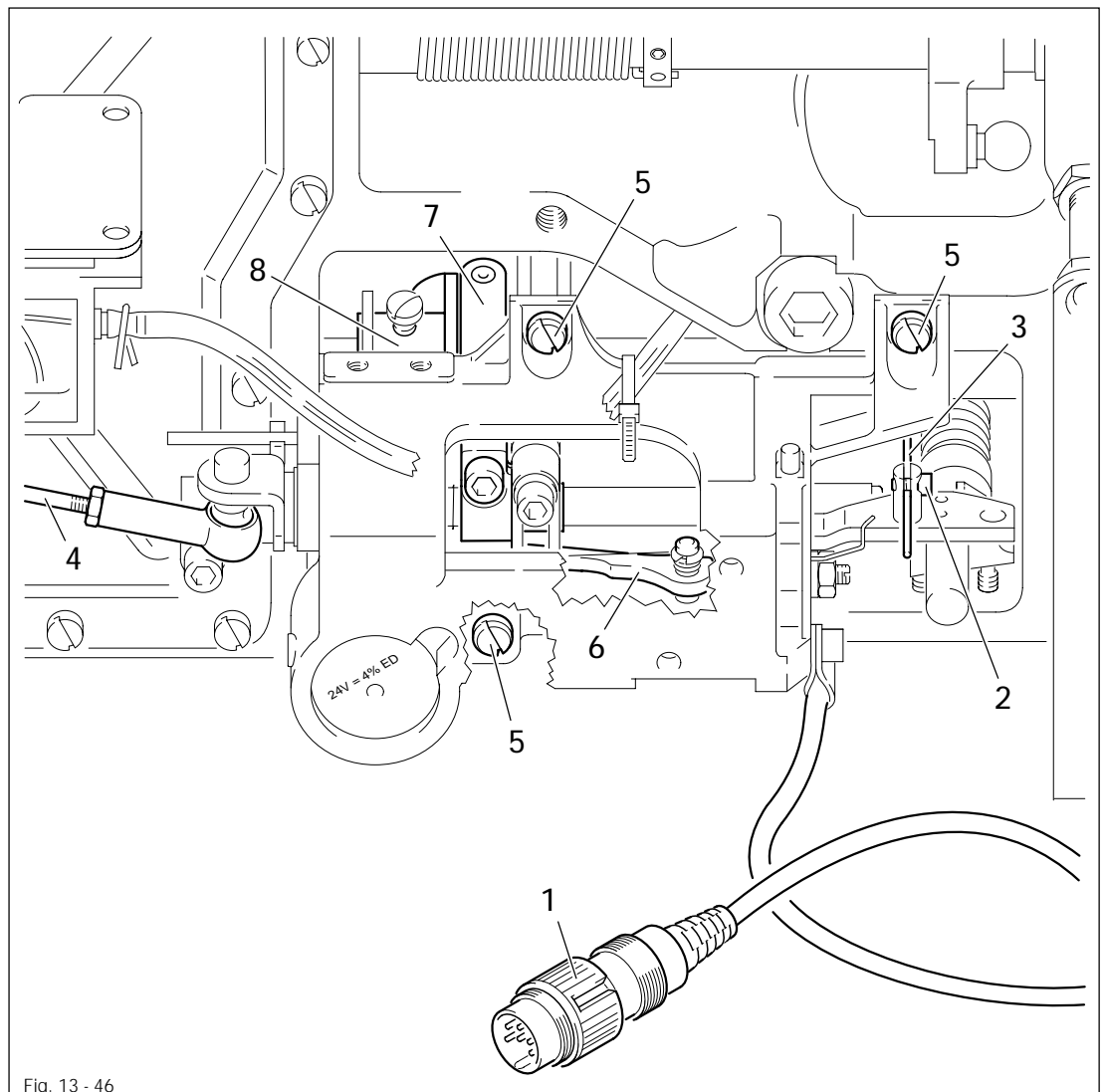
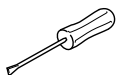


Fig. 13 - 46



- In order to dismount the control unit, pull plug 1 out of the socket of the motor control plate or the control box as applicable.
- Loosen screw 2 and remove linkage 3 from its slot.
- Remove connecting rod 4.
- Loosen screws 5 and take off complete control unit.
- In order to mount the control unit, position the needle bar at t.d.c
- Put the control unit back on and tighten screws 5 slightly.
- Activate engaging lever 6 manually, so that roller lever 7 engages with control cam 8.
- Align the control unit, so that the roller of roller lever 7 is centred in the cam notch 8.
- Tighten screws 5 firmly.
- Replace connecting rod 4 and linkage 3 and tighten screws 2 firmly.
- Plug in plug 1.
- Check performance manually.
- If engaging lever 6 is not released, repeat adjustment of control unit

Adjustment

13.07 Adjusting the edge trimming device on the PFAFF 3822-1/32 and -1/42

13.07.01 Knife stroke

Requirement

When the needle bar is at its t.d.c. (adjustment hole 5), the knife must be at the top of its stroke.

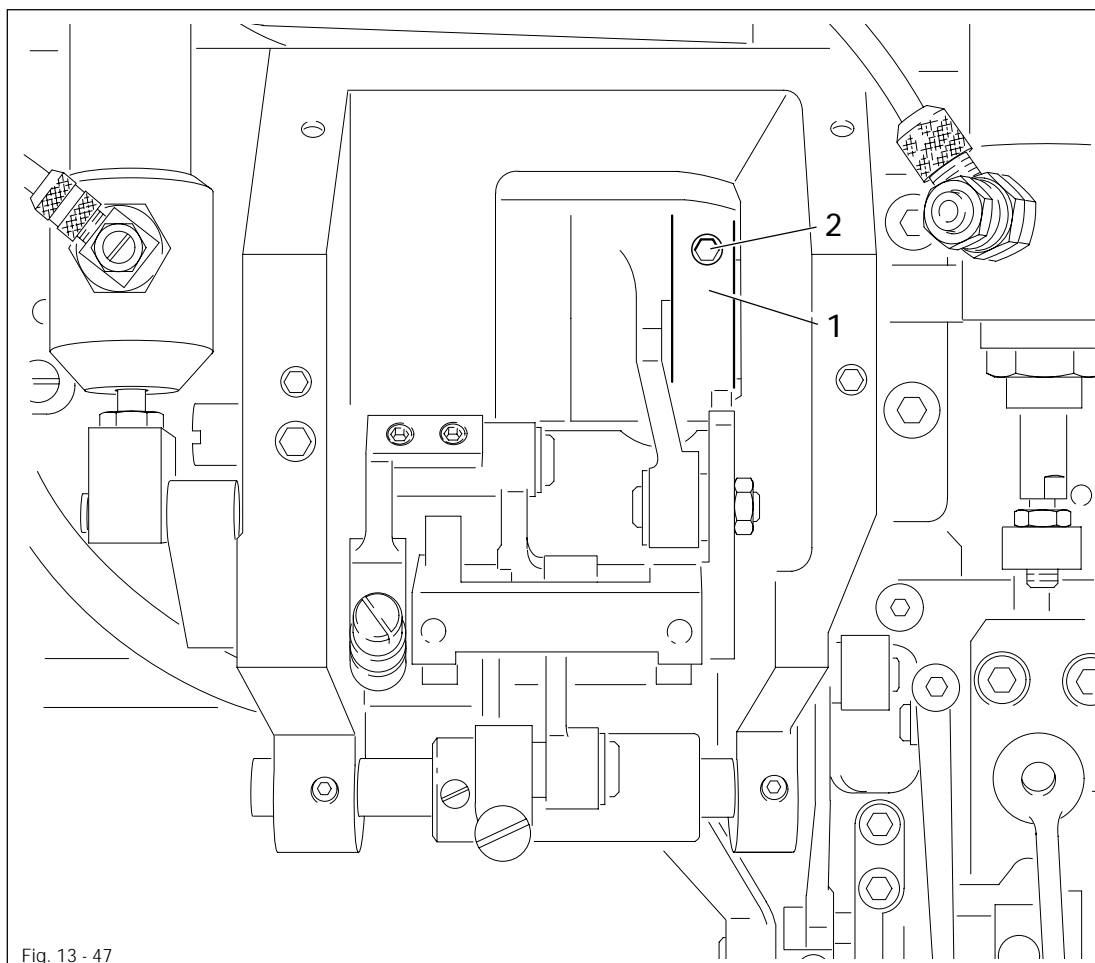
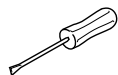


Fig. 13 - 47

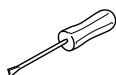
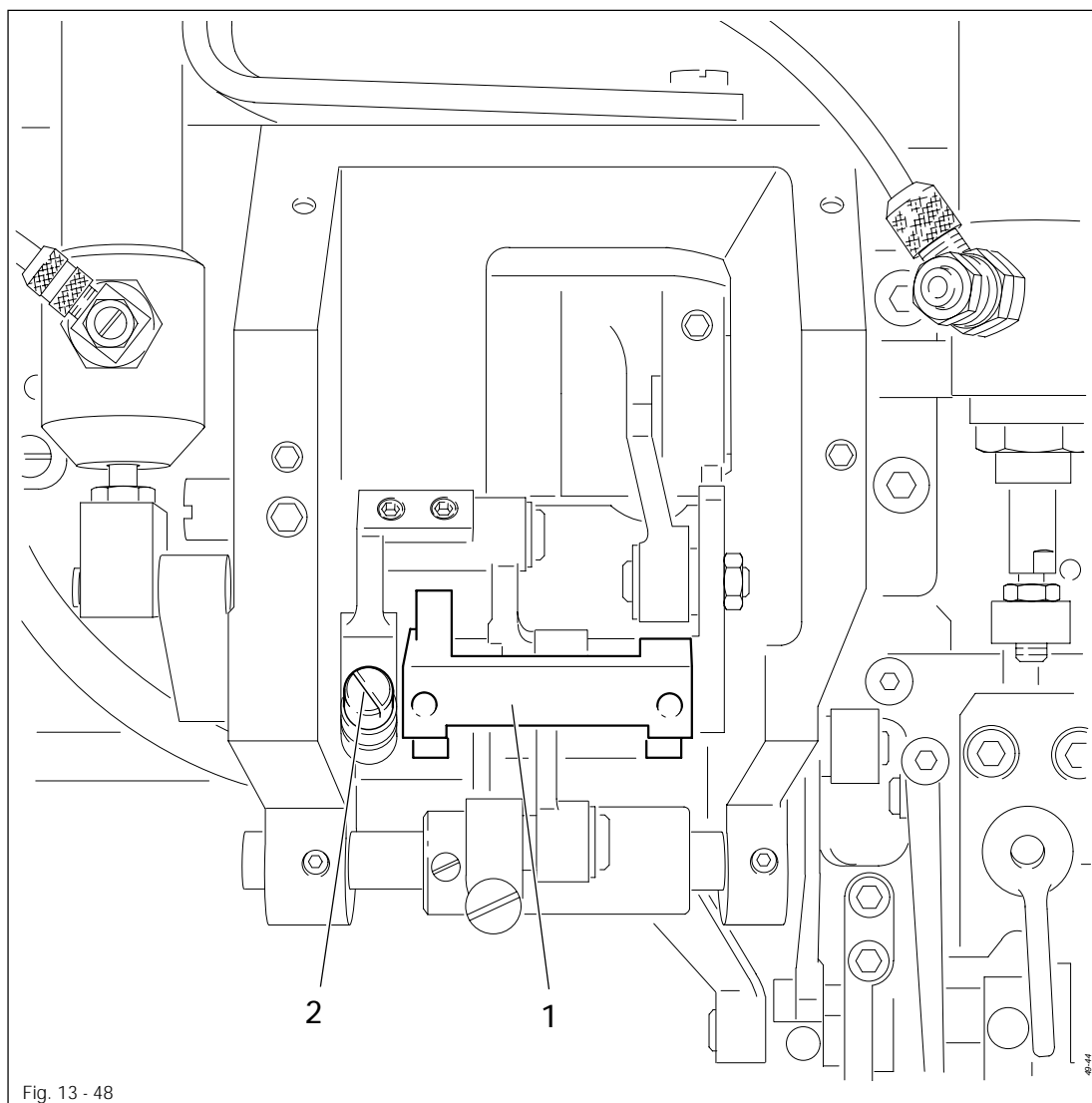


- Switch on the machine.
- Switch on the edge trimming device.
- Bring the needle bar to t.d.c.
- Adjust eccentric 1 (screw 2) according to the requirement.

13.07.02 Neutral position of the knife stroke

Requirement

When the edge trimming device is switched off, the top knife should not move when the balance wheel is turned.



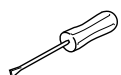
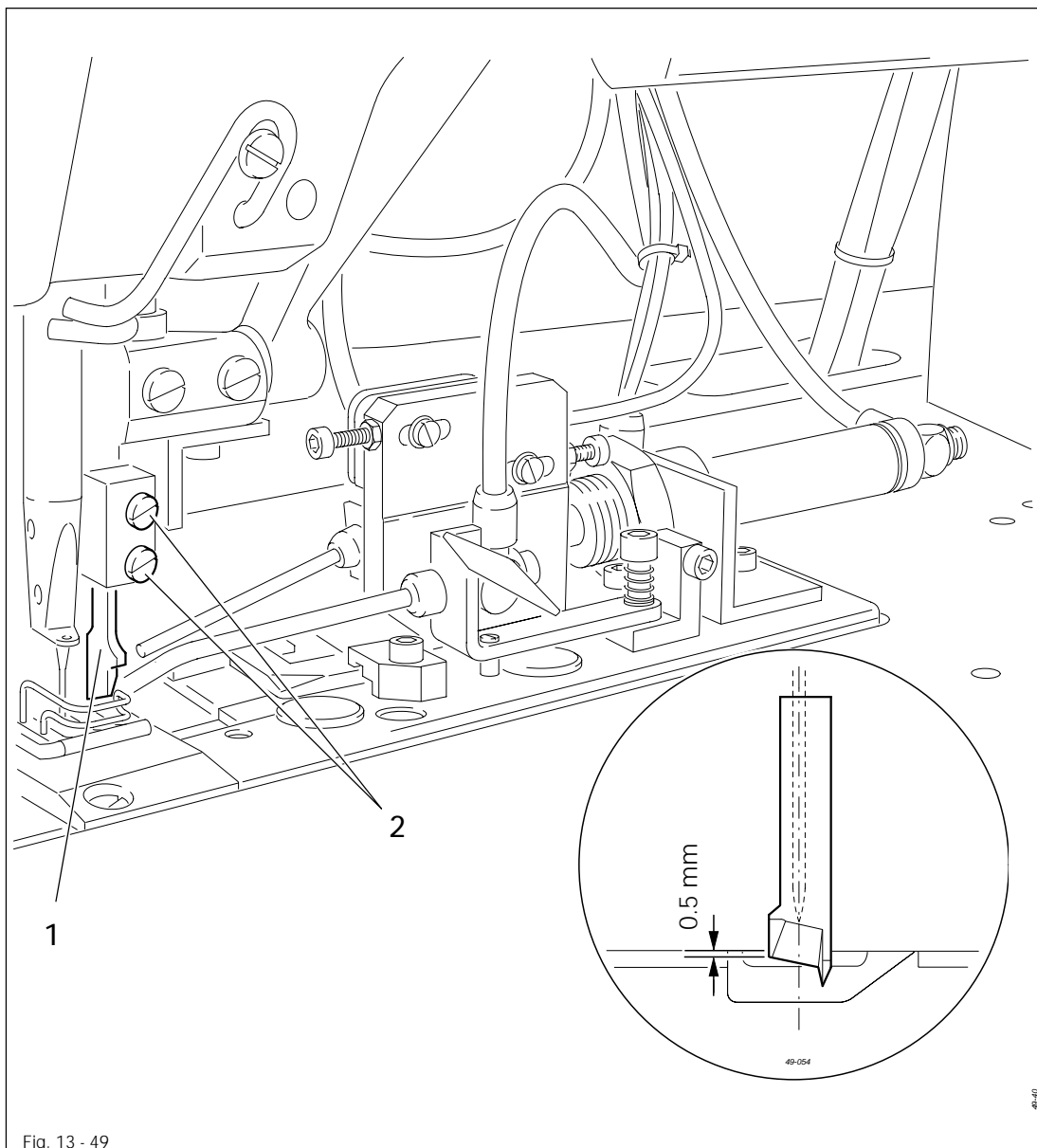
- Turn crank 1 (screw 2) according to the requirement.

Adjustment

13.07.03 Knife height

Requirement

When the knife 1 is in its lowest position, the front edge of the knife blade should be approx. 0.5 mm below the top edge of the needle plate.

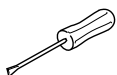
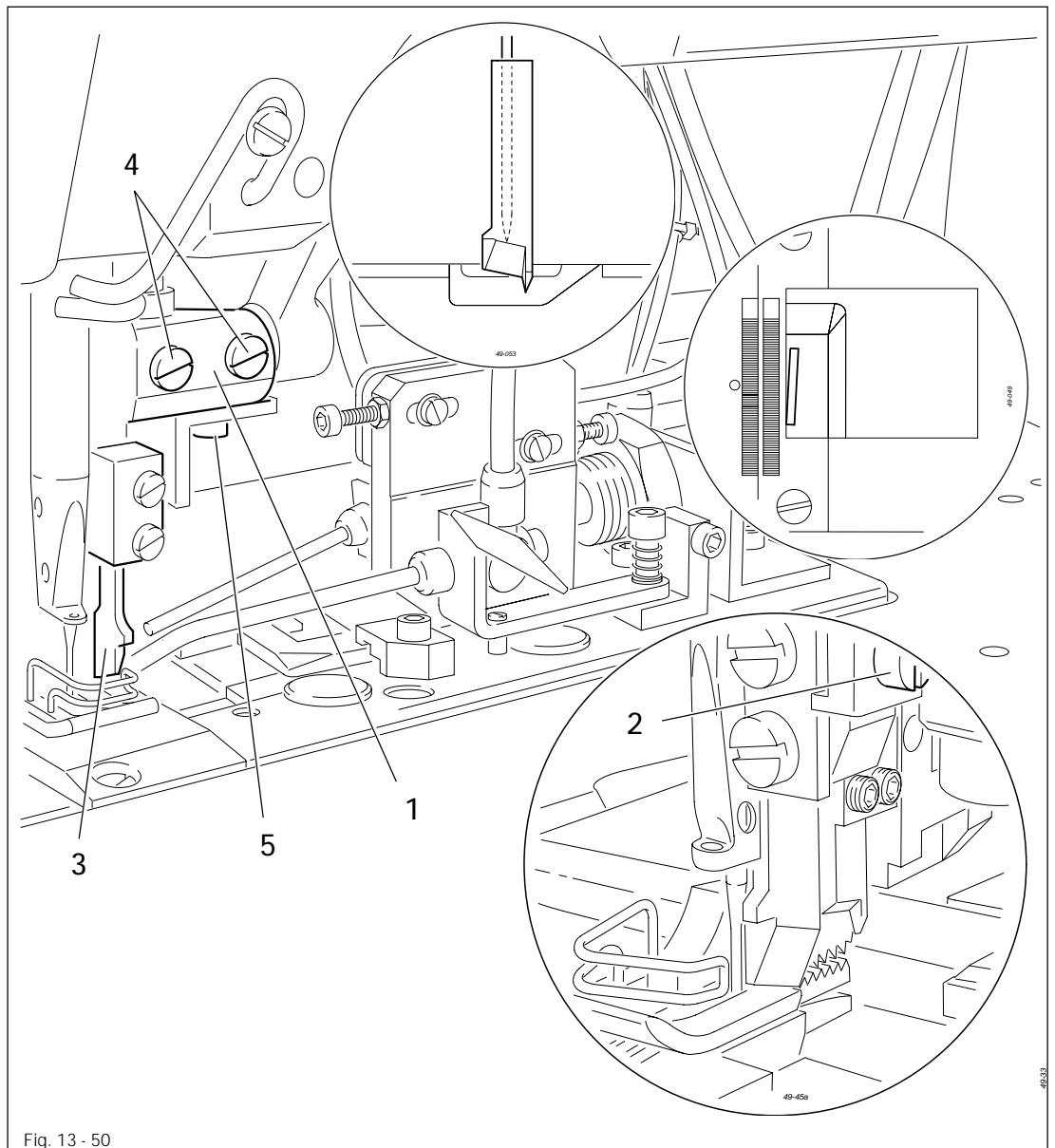


- Adjust knife 1 (screws 2) according to the requirement.

13.07.04 Aligning the knife

Requirement

1. The needle must be in the centre of the knife-edge.
2. The knife should be resting on the stationary knife with light pressure, without the knife spur striking the stationary knife.
3. The knife should stand slightly slanted to the stationary knife (shear effect).



- Adjust knife mounting 1 (screw 2) according to requirement 1.
- Switch on the machine
- Switch on the edge trimming device.
- Bring knife 3 into its lowest position by turning the balance wheel.
- Adjust knife 3 (screw 4) according to requirement 2.
- Adjust knife mounting 1 (screw 5) according to requirement 3.

13.07.05 Adjusting the stop eccentric

Requirement

When stop 4 is touching eccentric 2, there should be a distance of **approx. 5 mm** between the front edge of the case and lever 5.

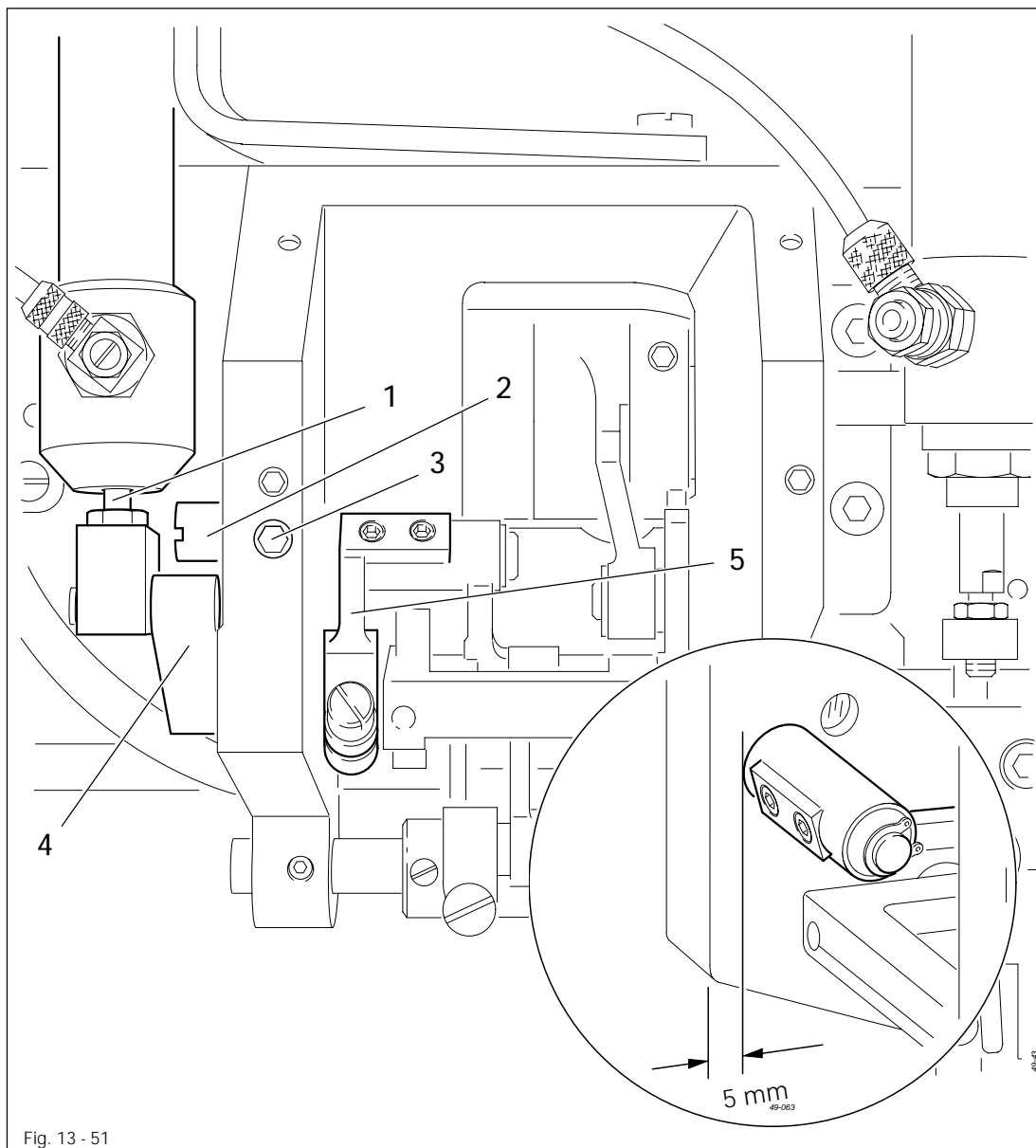
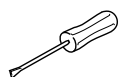


Fig. 13 - 51



- Pull down lifting rod 1 as far as possible.
- Adjust eccentric 2 (screw 3) according to the requirement.

13.08 Adjusting the feathered trimming device on the PFAFF 3822-1/34 and - 1/44

13.08.01 Top stroke motion of the knife

Requirement

The downward motion of the knife must begin, when the descending needle eye is level with the needle plate.

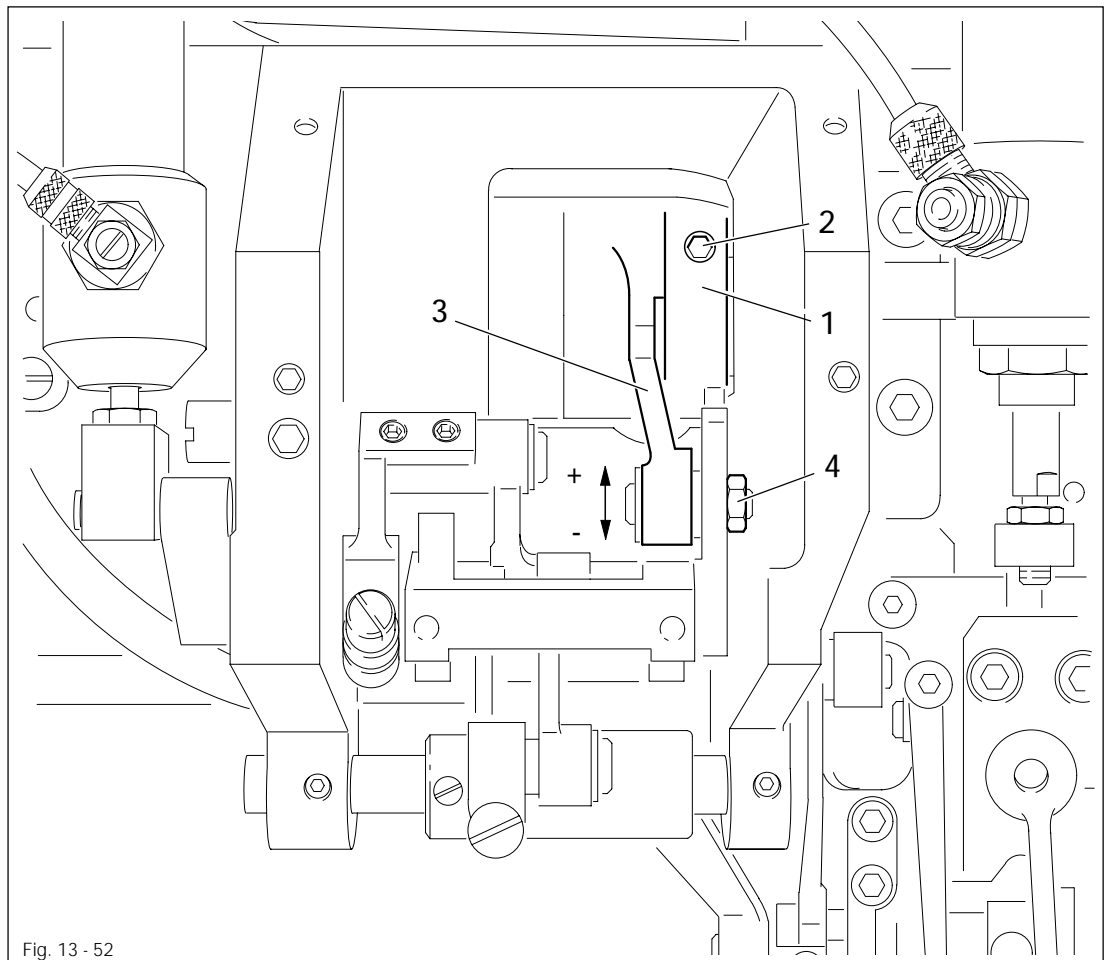
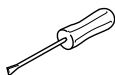


Fig. 13 - 52



- Switch on the machine.
- Switch on the feathered trimming device.
- Adjust eccentric 1 (screws 2) according to the requirement.



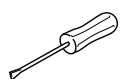
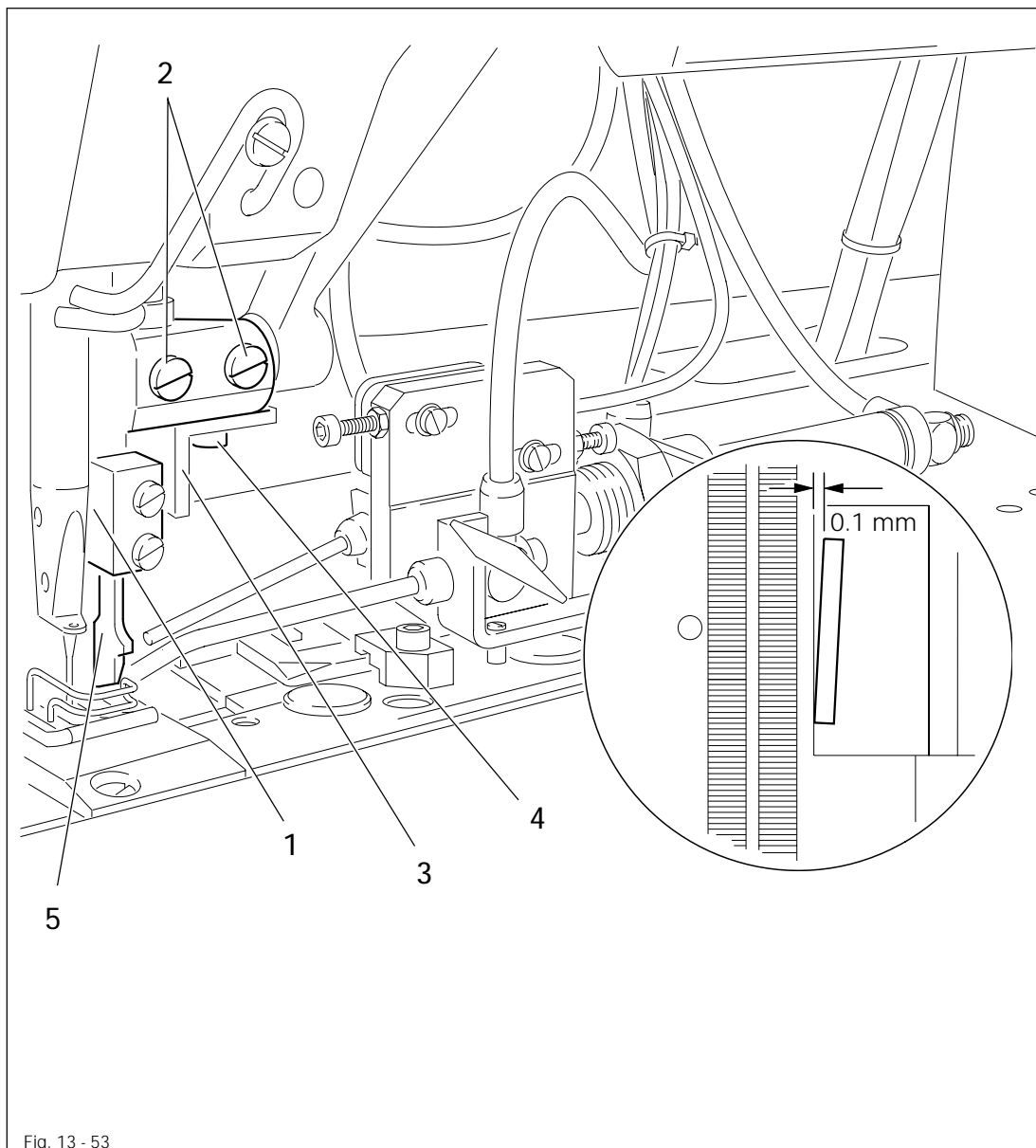
The knife stroke can be altered by adjusting lever 3 (nut 4).

13.08.02 Cutting angle of the front knife

Requirement

The knife 5 should

1. Touch the stationary knife without pressure and
2. Be at a 0.1 mm slant to the stationary knife.



- Adjust knife mounting 1 (screws 2) according to requirement 1.
- Adjust angle bracket 3 (screw 4) according to requirement 2.

13.08.03 Cutting position of the front knife

Requirement

The back edge of the knife 3 should be even with the edge of the needle plate cutout.

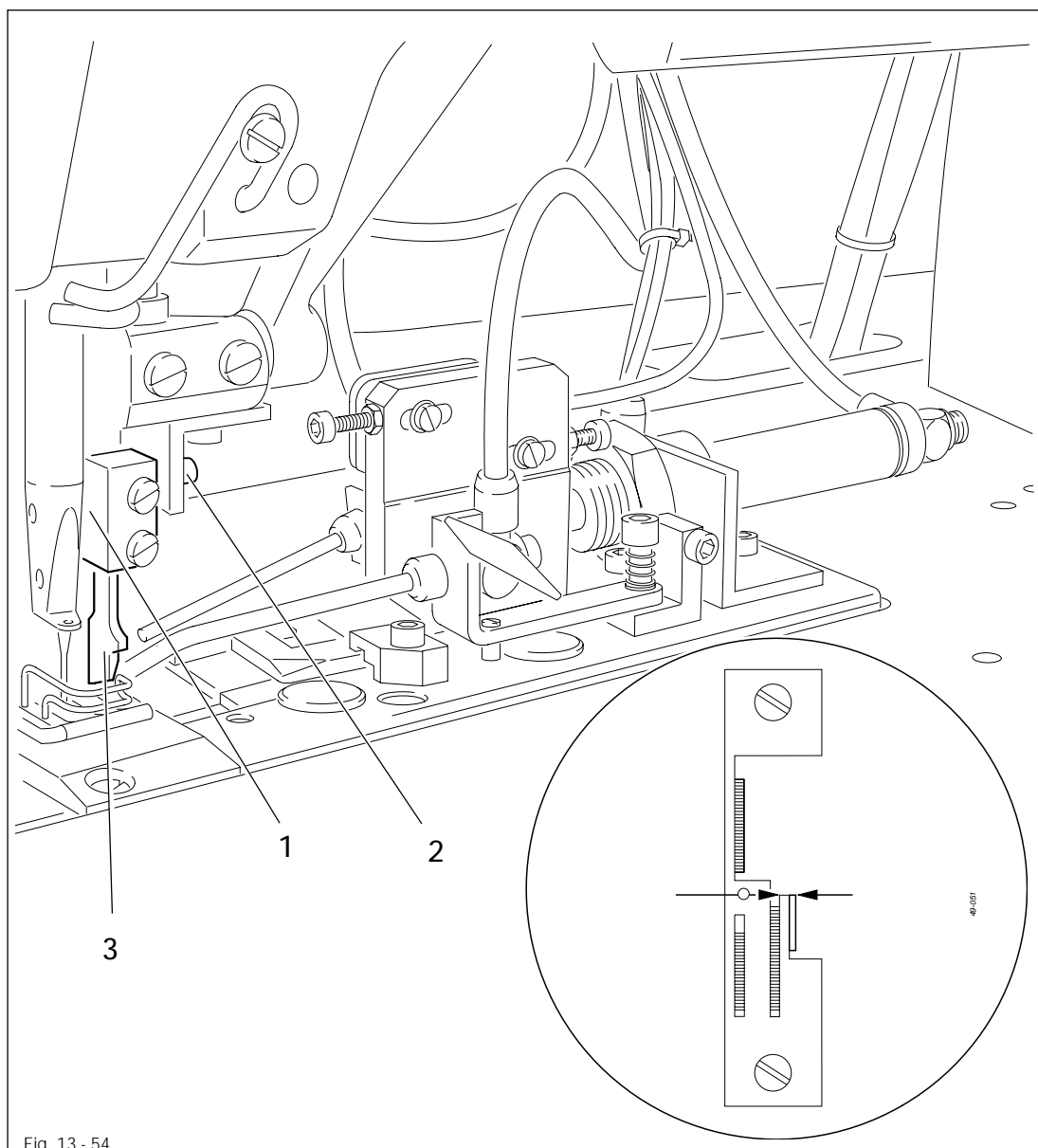
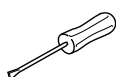


Fig. 13 - 54

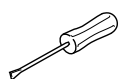
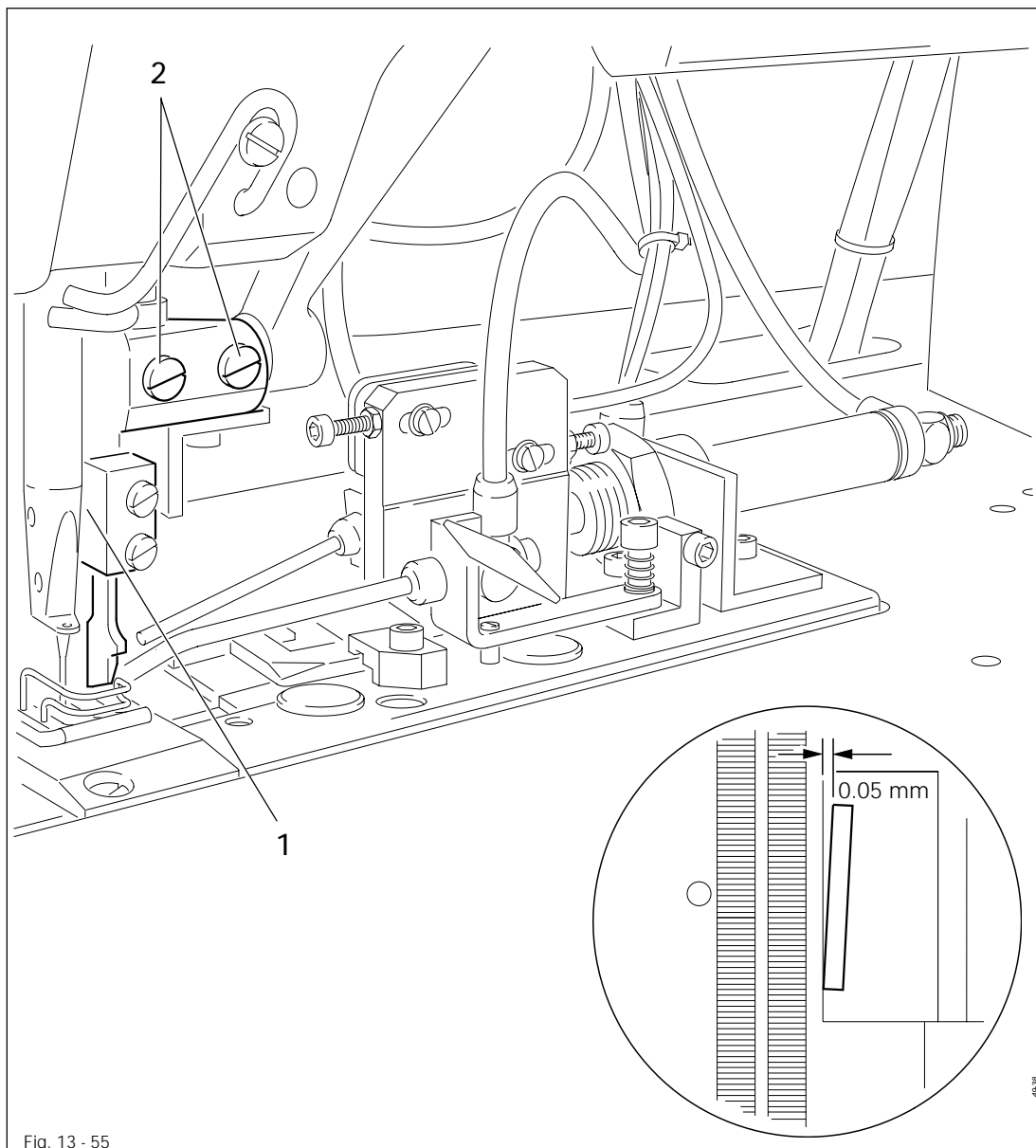


- Adjust knife mounting 1 (screw 2) according to the requirement.

13.08.04 Cutting pressure of the front knife

Requirement

1. Only as much cutting pressure as absolutely necessary should be applied.
2. After the cutting pressure has been set, the slant of the knife must not be less than 0.05 mm.

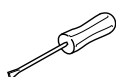
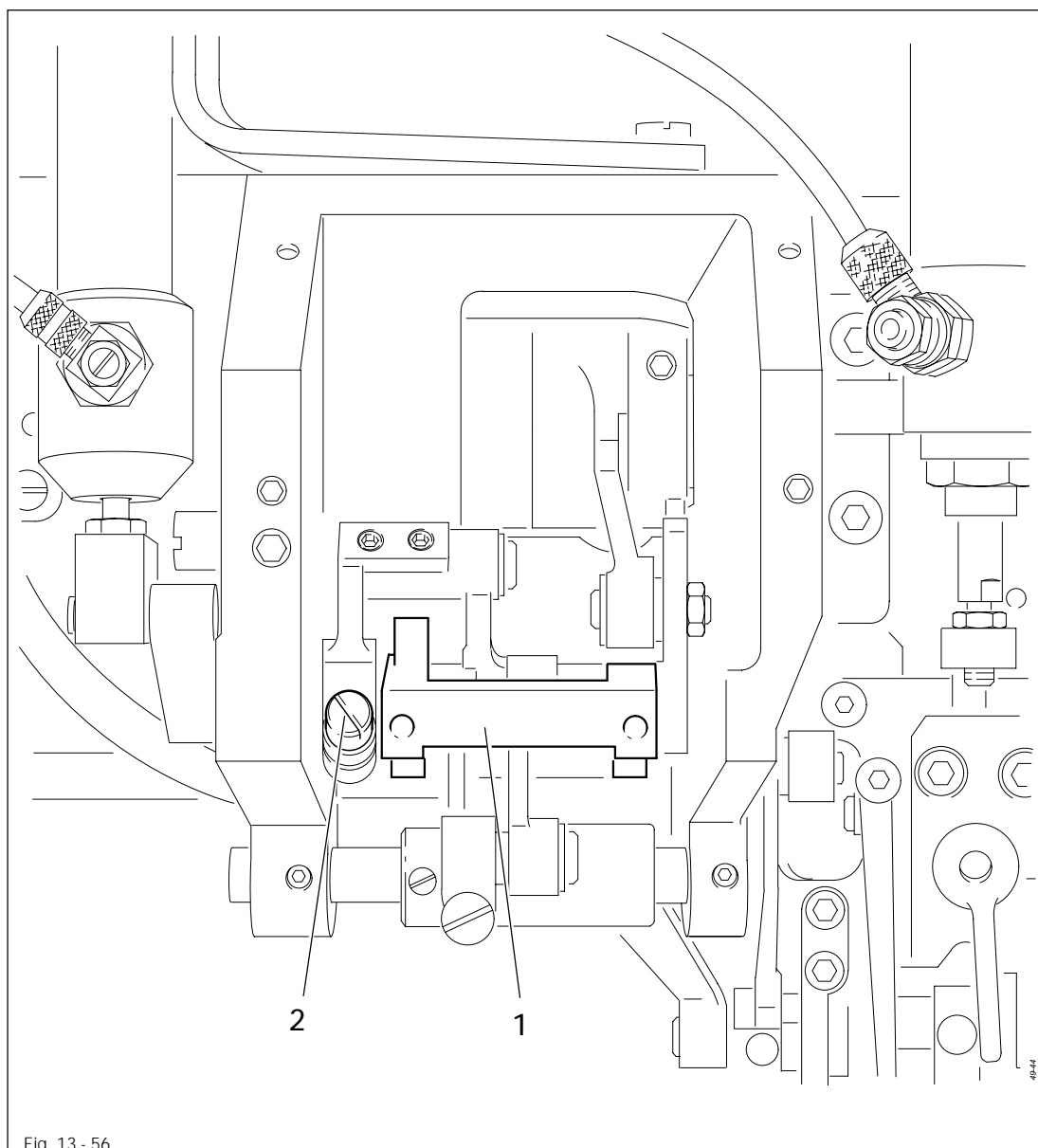


- Adjust knife mounting 1 (screws 2) according to the requirements.

13.08.05 Knife stroke zero point

Requirement

When the feathered trimming device is switched off, the top knives should not move when the balance wheel is turned.



- Adjust crank 1 (screw 2) according to the requirement.

Adjustment

13.08.06 Side position of the back knife in relation to the hook knife

Requirement

The back edge of the back knife 1 should be even with hook knife 3.

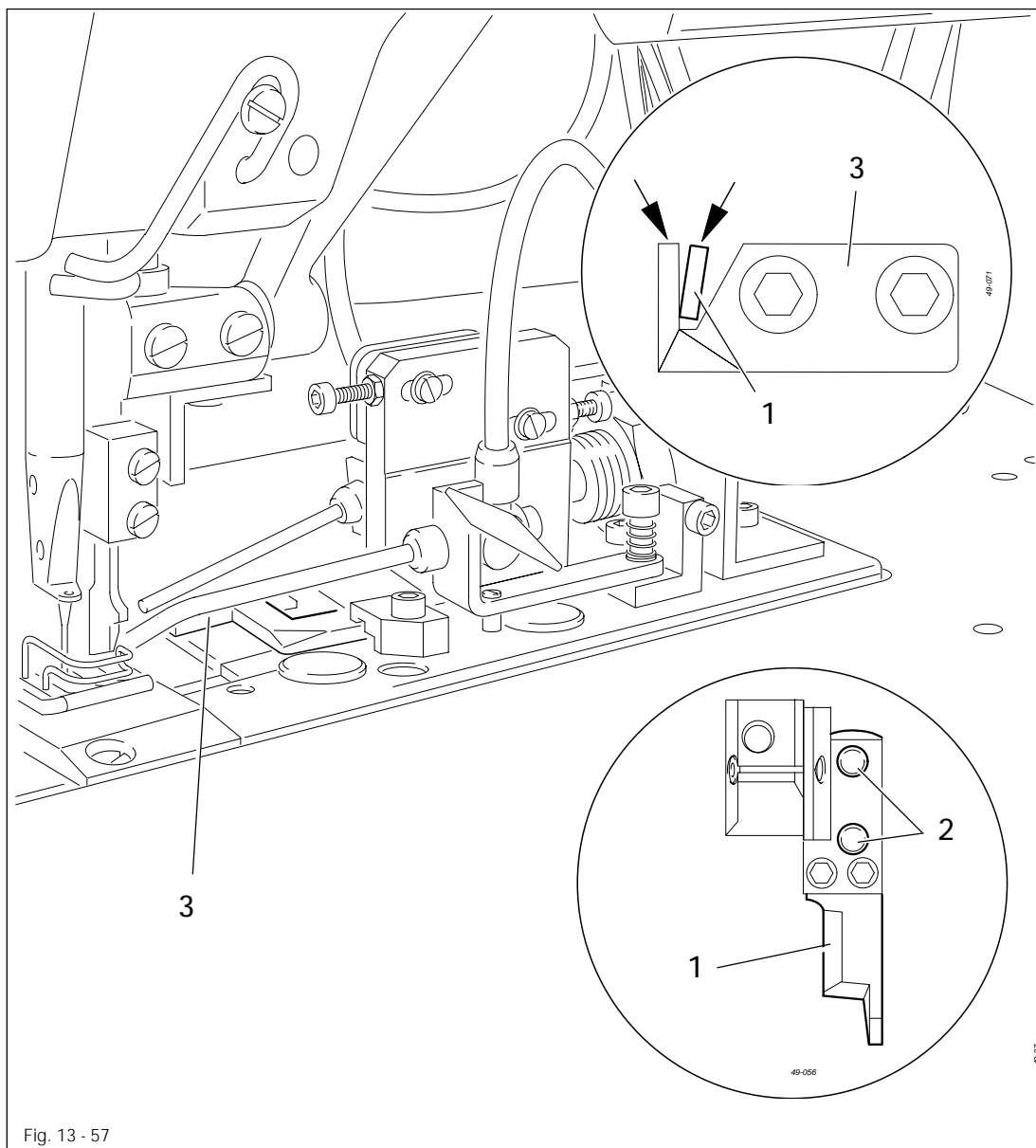
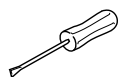


Fig. 13 - 57



- Adjust knife 1 (screws 2) according to the requirement.

13.08.07 Cutting angle of the back knife in relation to the hook knife

Requirement

The hook knife 1 should be at a 0.05 - 0.1 mm slant to the back knife 2.

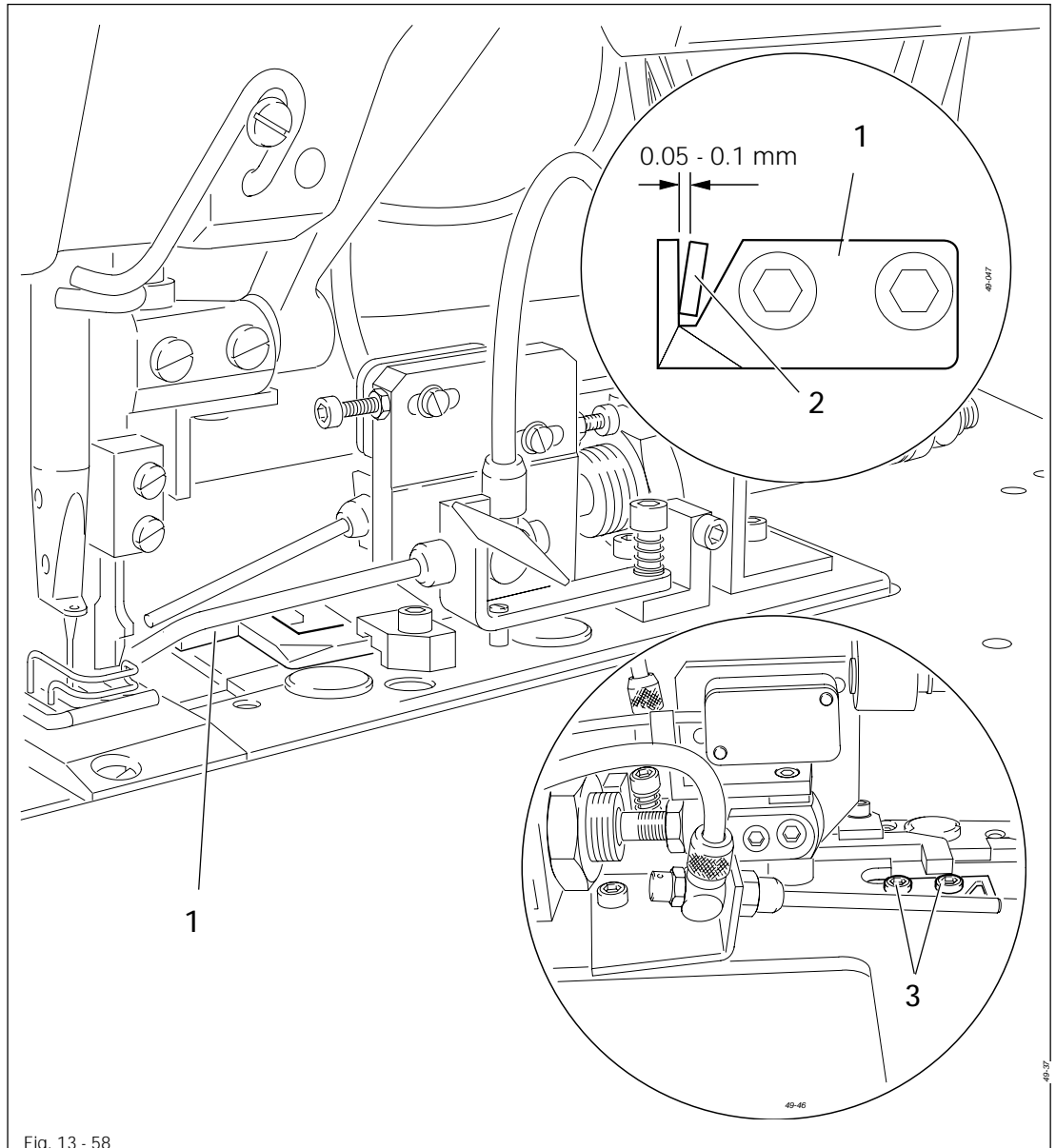
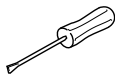


Fig. 13 - 58

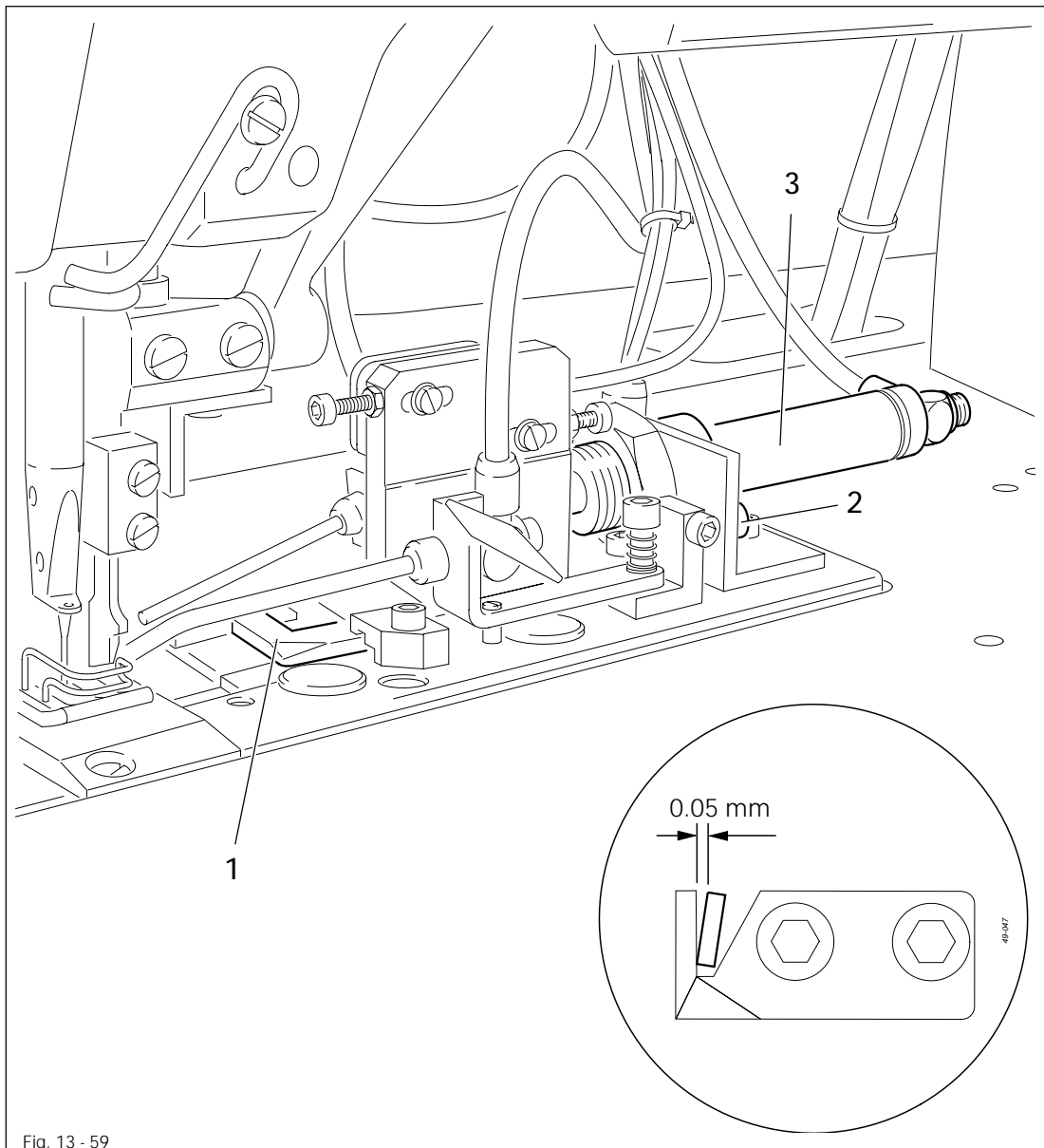


- Switch the machine on and let it move into position.
- Switch on the edge trimming and feathered trimming device.
- Slide hook knife 1 into cutting position by hand.
- By turning the balance wheel, bring back knife 2 into cutting position.
- Adjust hook knife 1 (screws 3) according to the requirement.

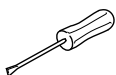
13.08.08 Cutting pressure between the back knife and the hook knife

Requirement

1. Only as much cutting pressure as absolutely necessary should be applied.
2. After the cutting pressure has been set, the slant of the back knife must not be less than 0.05 mm.



If the cutting pressure is too high, there is a risk of the hook knife breaking!



- Adjust angle bracket 1 (screw 2) according to the requirements.



Make sure that cylinder 3 moves as far as it can go.
No material scraps should accumulate near angle bracket 1.

13.08.09 Cutting depth of the back knife

Requirement

In its lowest position the back knife should move **approx. 0.5 mm** into the hook knife.

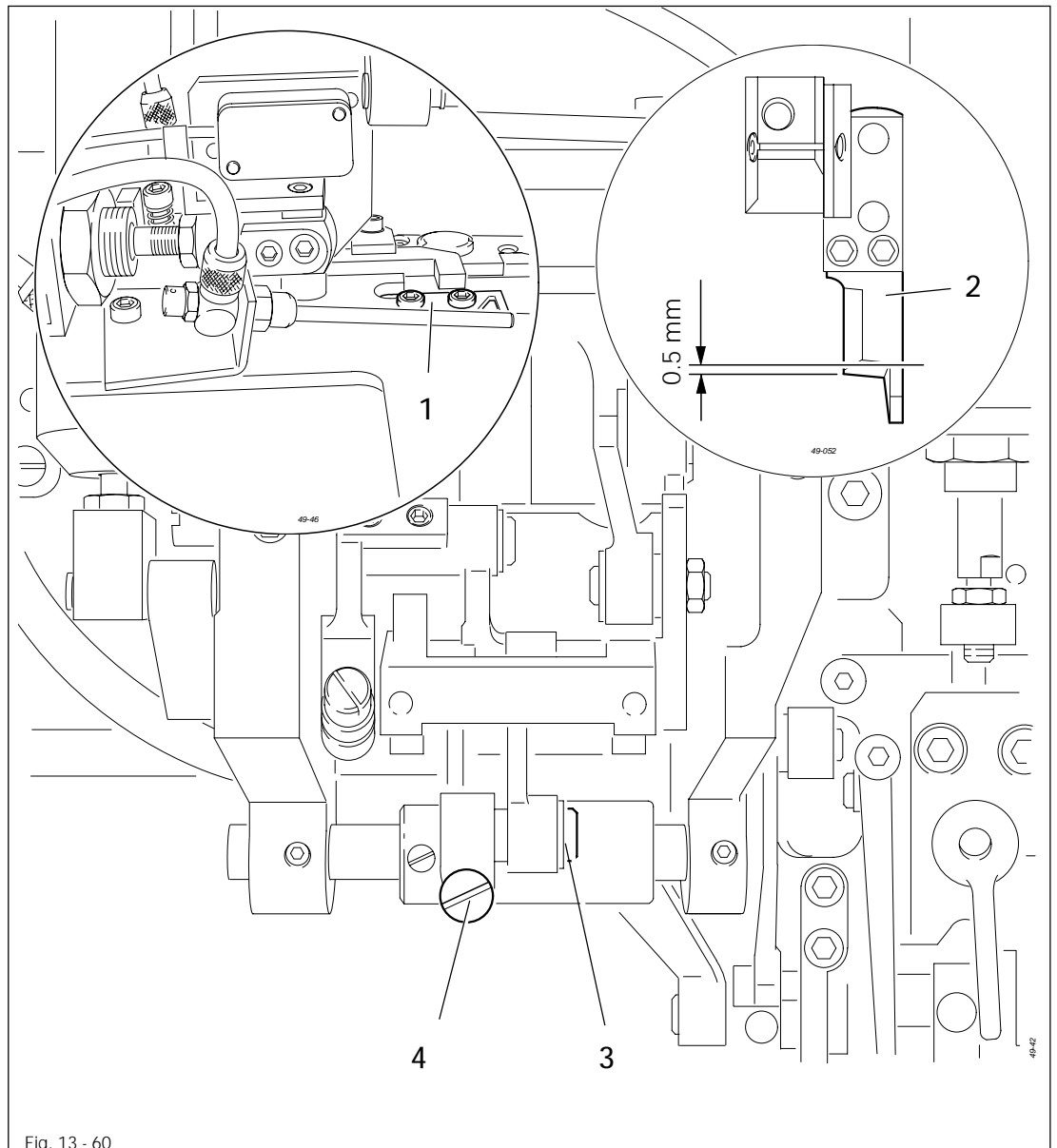
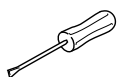


Fig. 13 - 60



- Switch the machine on and let it move into position.
- Switch on the edge trimming and feathered trimming device (keyboard).
- Bring hook knife 1 into cutting position (keyboard).
- By turning the balance wheel, bring back knife 2 into cutting position.
- Adjust eccentric 3 (screw 4) according to the **requirement**.
- Check the height of the front knife and adjust it if necessary, see **Chapter 13.07.03 Knife height**.

Adjustment

13.08.10 Cutting depth of the front knife

Requirement

When the back knife 3 begins cutting, the front knife 1 should already have completed 2/3 of its cut.

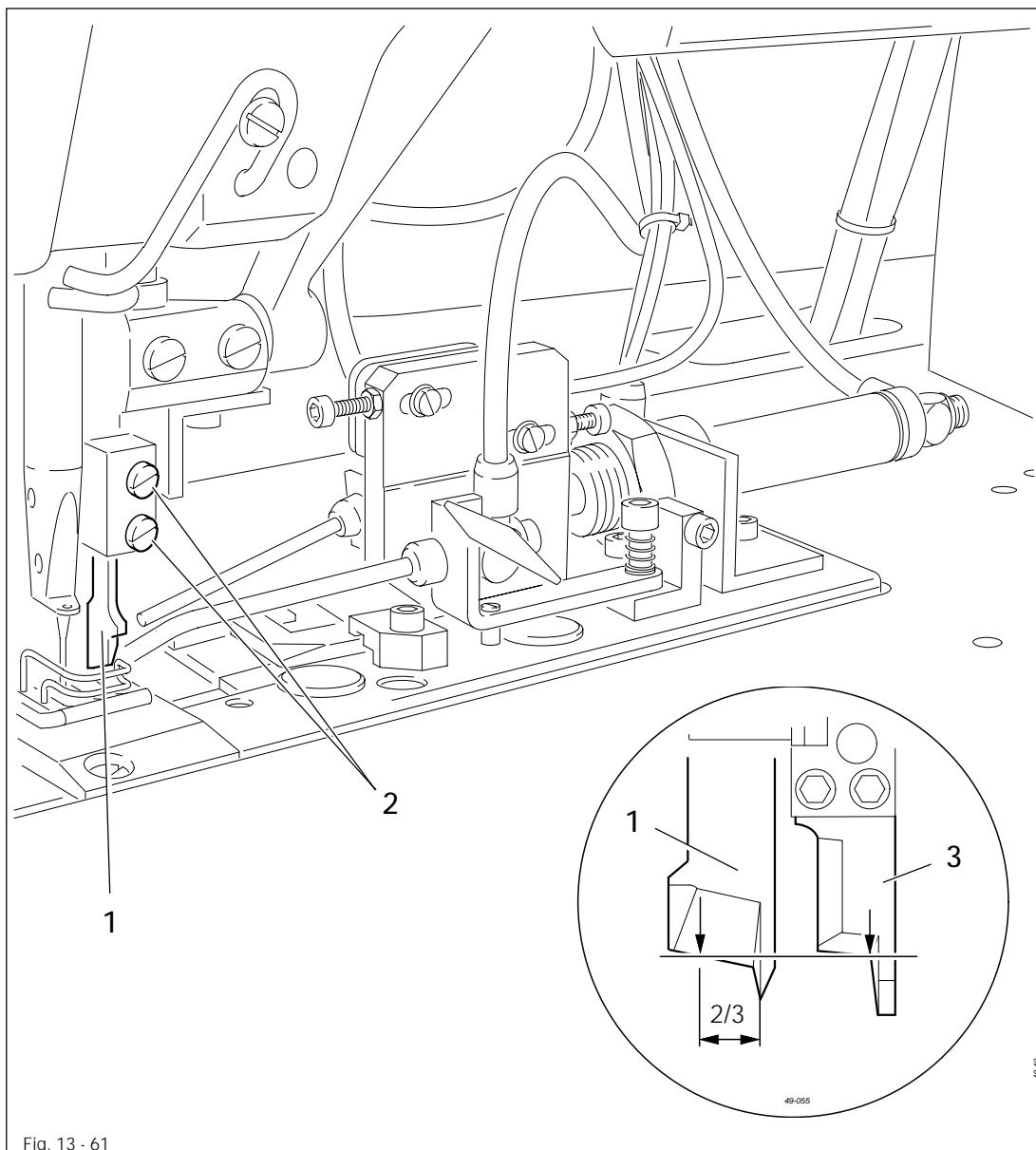
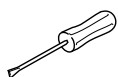


Fig. 13 - 61

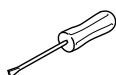
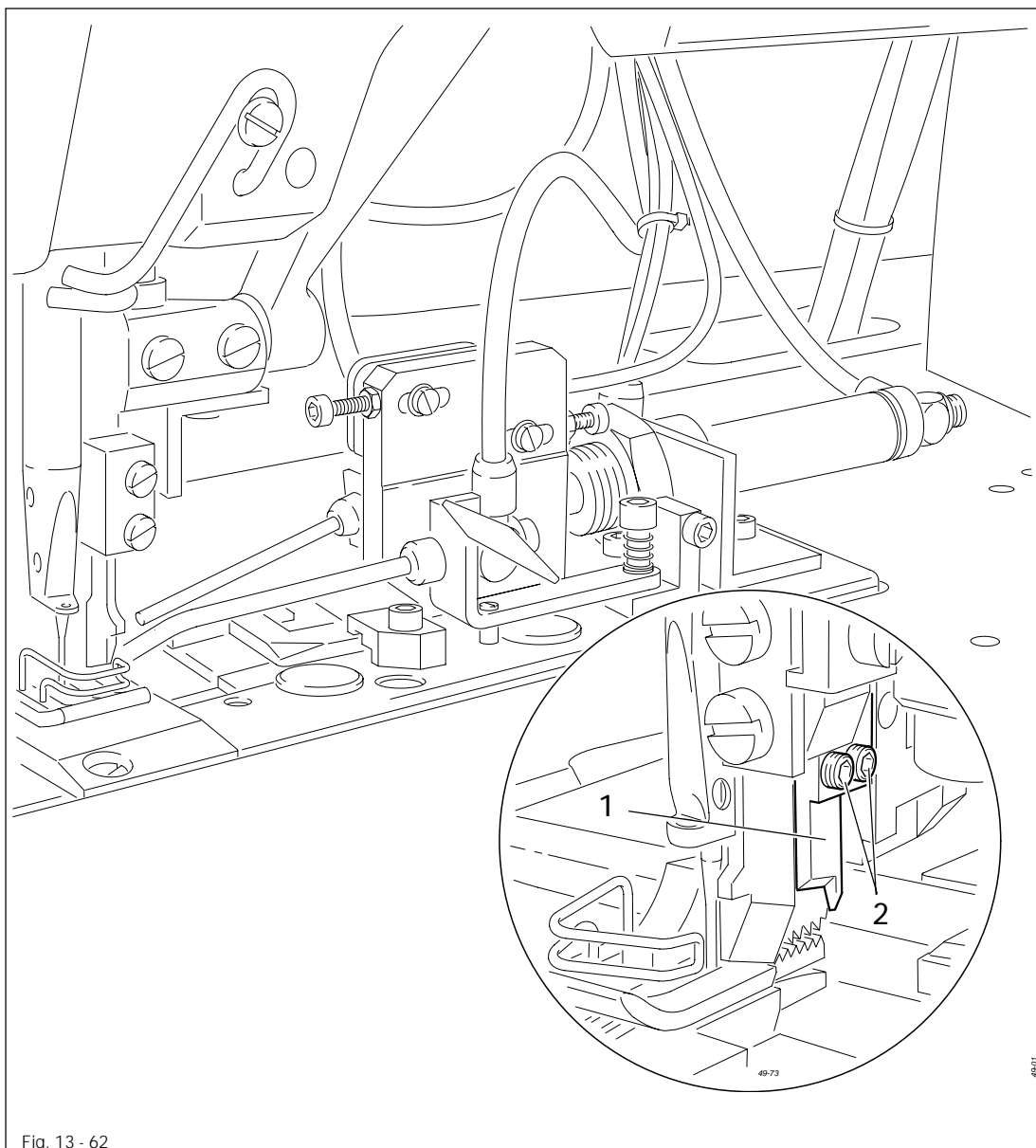


- Switch on the machine.
- Switch on the edge trimming device (keyboard).
- Bring the hook knife into cutting position (knee switch).
- Adjust front knife 1 (screws 2) according to the **requirement**.

13.08.11 Trimming margin

Requirement

The trimming margin should be 3.5 mm.



- Adjust knife 1 (screws 2) according to the **requirement**.
- Sew a test seam and check the trimming margin, if necessary repeat the adjustment.



Pay attention to the cutting pressure of the hook knife!

13.08.12 Sensor control of the hook knife

Requirement

When sewing with the feathered edge trimming device, the sewing and trimming operation must not begin until the hook knife is in cutting position.

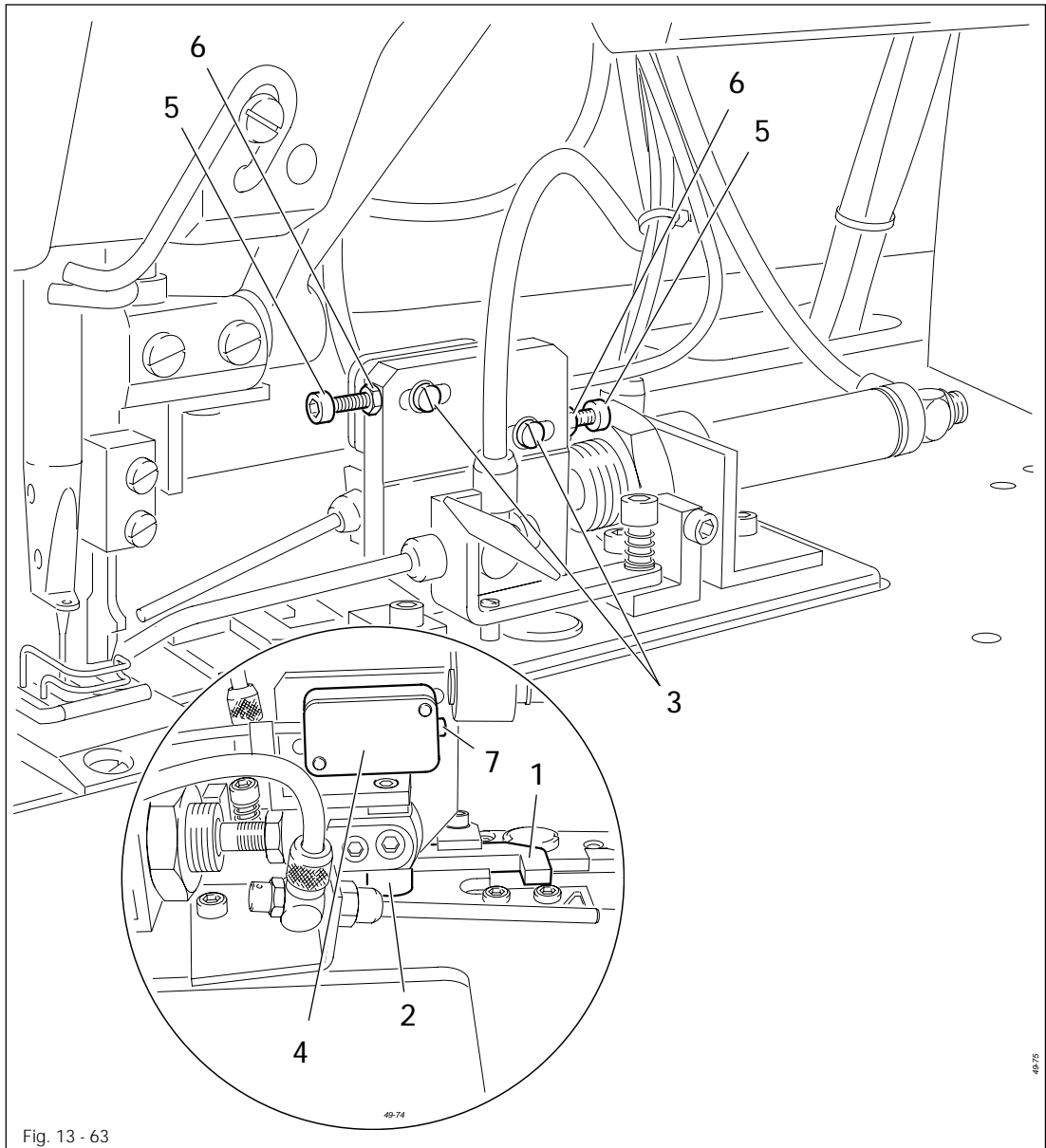
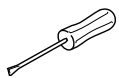


Fig. 13 - 63



- Switch the machine on and let it move into position.
- Hold the sensor gauge (0.1 mm) between stop plate 1 and pin 2.
- Bring hook knife into cutting position (keyboard).
- Slightly loosen screws 3.
- With screws 5 (nuts 6) move sensor 4 towards the hook knife, until LED 7 lights up.
- Move sensor 4 in the opposite direction, until LED 7 just goes out again and tighten screws 3.

13.08.13 Air-blast tube for separating the material plies

Requirement

The material plies should be blown far enough apart to enable the hook knife to move between both material plies without difficulty.

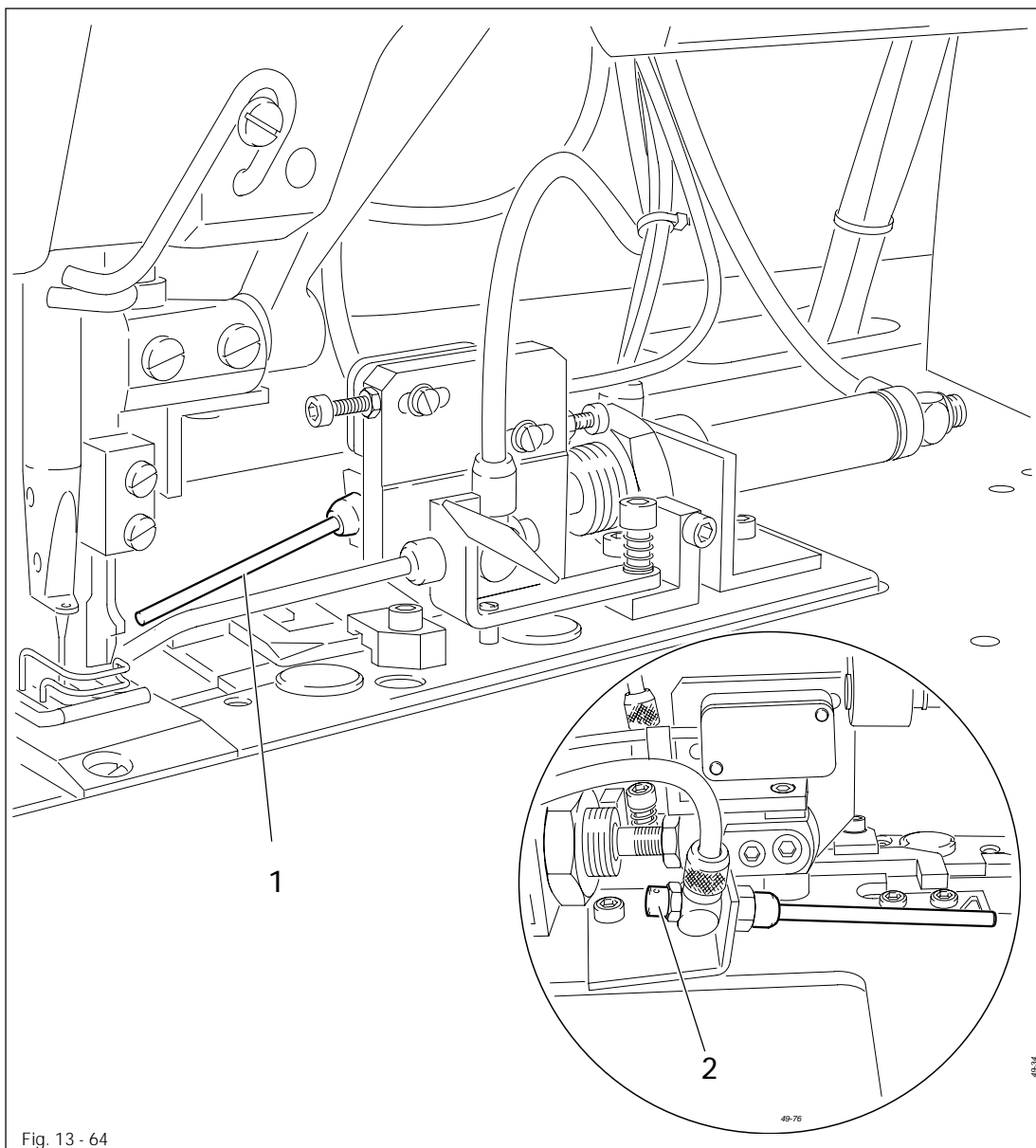
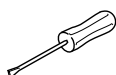


Fig. 13 - 64



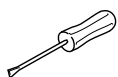
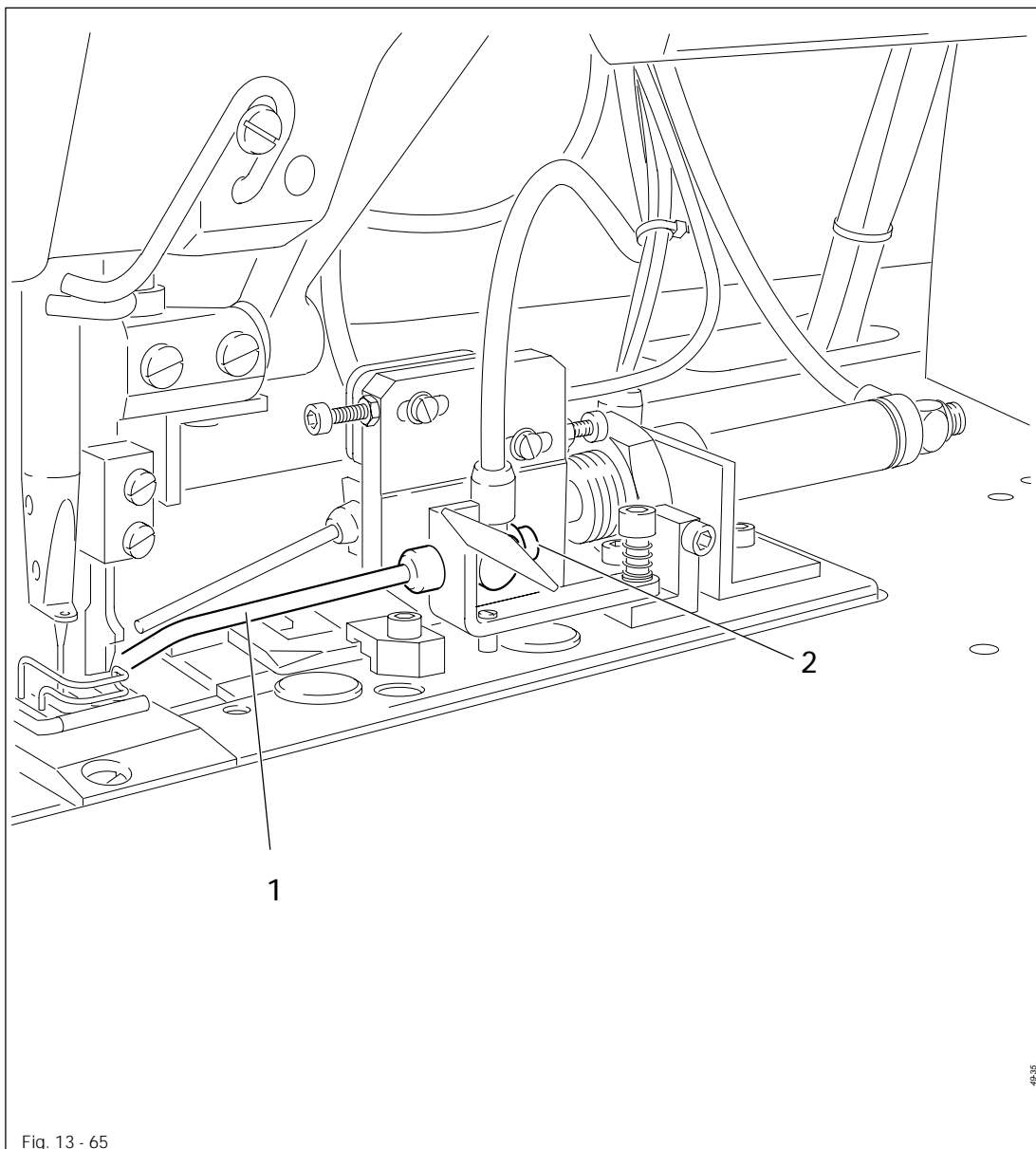
- Align air-blast tube 1 according to the requirement.
- Adjust air pressure (throttle valve 2) according to the requirement.

Adjustment

13.08.14 Air-blast tube for cutting waste

Requirement

The cutting waste should be guided into the waste channel as well as possible.



- Align air-blast tube 1 according to the requirement.
- Adjust air pressure (throttle valve 2) according to the requirement.

13.09 Parameter setting

Group	Parameter	Description	Adjustment range	Standard value
4	472	Hook knife I = yes II = no		I
5	585	Speed limiter N1		1200
	591	Speed limiter I = yes II = no	I	
6	605	Speed display I = yes II = no	I	I
	607	Max. speed	100 - 10000	3200 (-1/34 and -1/44) 4000 (-1/32 and -1/42)
	617	Inverted bartacks I = yes II = no		II
	665	Pedal lock I = contact closed II = contact open		I
	679	Pedal lock off by cancelling input signal		II
	680	Interruption of operation		II
7	700	Needle position 0 Needle reference position	0 - 239	
	702	-1/32 and -1/42: Needle position 1 (needle lowered) -1/34 and -1/44: First stop position, when tooth points of descending feed dog form a line with the top edge of the needle plate	0 - 239	
	703	Needle position 2 (take-up lever raised)	0 - 239	
	799	Machine class lockstitch		2



For more information see the motor instruction manual.

13.10 Table of inputs and outputs

Inputs				
Inputs	Signal	Terminal M-DX-6	Connection	Terminal
E1	Counting signal	1	Quick-Motor A16	X1/21
E2	Switch to next area	2	Knee switch S102	
GND		3	Initiator B15	X11/2
E3	Release hook knife	4	Quick-Motor A3	X1/7
E4	GST-stepping motor	5	Initiator B200	X12/3
GND		6	Initiator B200	X12/2
E5	Motor running	7	Quick-Motor A8	X1/4
E6	Trim thread	8	Quick-Motor A6	X1/19
GND		9	Knee switch S102 Knee switch S115	
E7	Hook knife at front	10	Initiator B15	X11/3
E8	Hook knife on	11	Knee switch S115	
GND		12	Quick-Motor 0 V	X1/24

Outputs					
Output	Code-number	Signal	Terminal PFAFF	Connection	Terminal
+ 24 V			13	Initiator B15 Initiator B200	X11/1
A1	1	Start inhibitor	14	Quick-Motor E6	X1/6
A2	2	Speed limiter	15	Quick-Motor E13	X1/20
+ 24 V			16	Valve Y14	
A3	3	Separate plies	17	Valve Y16	
A4	4	Suppress bartacks	18	Quick-Motor E3	X1/2
+ 24 V			19	Valve Y10 / Y16	
A5	5	Stitch condensation	20	Valve Y10	
A6	6	Suction air	21	Valve Y14	
+ 24 V			22	Valve Y13 / Y15	
A7	7	Hook knife	23	Valve Y15	
A8	8	Edge trimmer	24	Valve Y13	

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