PFAFF® Industrial

1245
1246

ADJUSTMENT MANUAL

This Adjustment Manual is valid for machines from the following serial numbers onwards:
2 726 559 →

296-12-18 599/002
Justieranleitung engl. 06.09

PFAFF Industriesysteme
und Maschinen AG

Hans-Geiger-Str. 12 - IG Nord
D-67661 Kaiserslautern

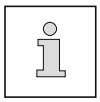
Contents ..... Page

Contents ..... Page

13 Adjustment

Please observe all notes from Chapter **1 Safety** of the instruction manual!
In particular care must be taken to see that all protective devices are refitted properly after adjustment, see Chapter **1.06 Danger warnings** of the instruction manual!

If not otherwise stated, the machine must be disconnected from the electrical power supply. Danger of injury due to unintentional starting of the machine!



The illustrations in this section show the PFAFF **1245** single-needle machine. For the PFAFF **1246** two-needle machine, various adjustments must be made twice, i.e. to the left- and right-hand sewing hooks. This will be pointed out in the respective sections, whereby it is often possible to apply the mirror image of the illustrations.

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.

13.02 Tools, gauges and other accessories for adjusting

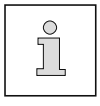
- Screwdrivers withi blade widths from 2 to 10 **mm**
- Spanners (wrenches) in sizes from 7 to 14 **mm**
- Allen keys from 1.5 to 6 **mm**
- Metal rule (part No. 08-880 218-00)
- Needle-rise gauge (part No. 61-111 600-01)
- Gauge, (top feed stroke 7 **mm**) (Part No. 61-111 633-61)
- Screw clamp (part No. 61-111 600-35)

13.03 Abbreviations

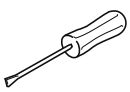
t.d.c. = top dead centre
b.d.c. = bottom dead centre

13.04 Explanation of the symbols

In this adjustment manual, symbols emphasize operations to be carried out or important information. The symbols used have the following meaning:



Note, information



Service, repair, adjustment, maintenance
(work to be carried out by qualified staff only)

13.05 Adjusting the basic machine

13.05.01 Positioning the feed dog across the direction of sewing

Requirement
The bottom feed dog must be the same distance from the left and right side of the needle-plate cutout.

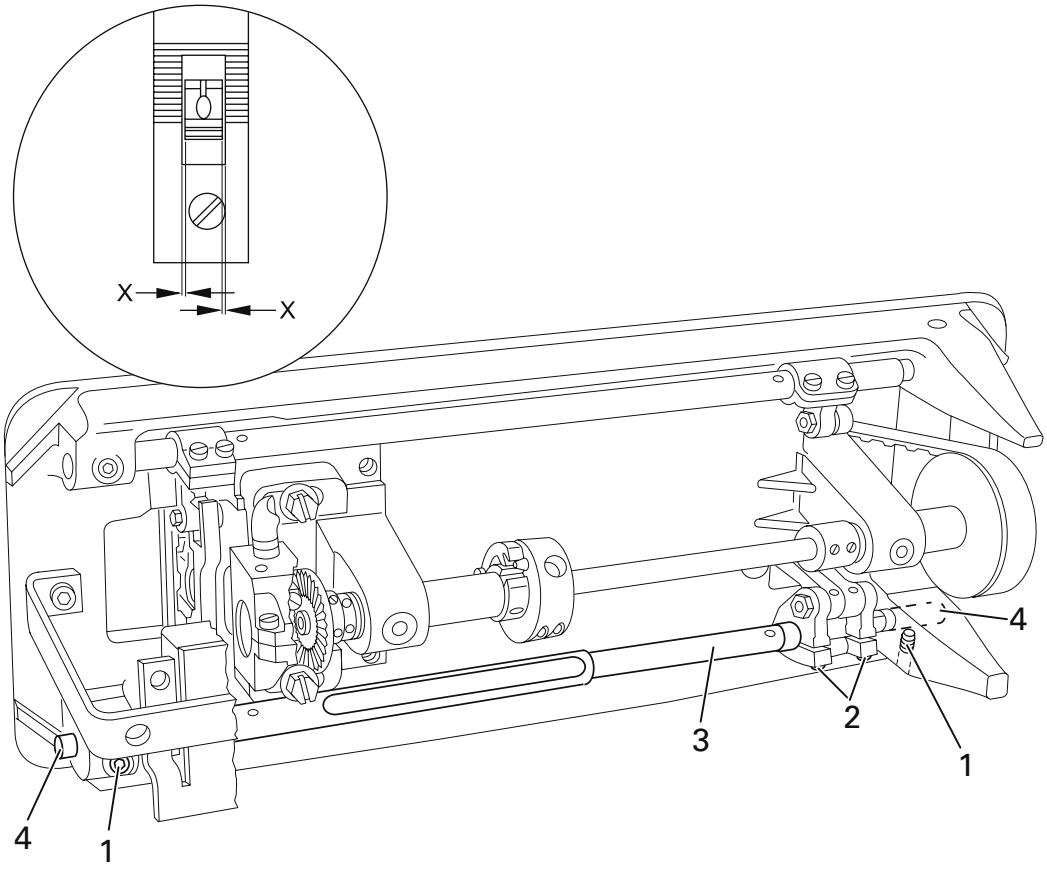
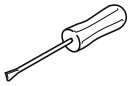


Fig. 13 - 01



- Loosen screws **1** and **2.**
- Laterally align rock shaft **3** in accordance with the **requirement**.
- Now tighten screws **1.**

The flat sides of pins **4** must be opposite the flat sides of screws **1** and rock shaft **3** must exhibit neither play nor stiffness.

- Screws **2** remain loose for the following adjustments..

13.05.02 Positioning the feed dog in the direction of sewing

Requirement
With the longest stitch set, the bottom feed dog must have the same clearance the front and the back with respect to the needle-plate cutout when feeding both forwards and backwards.

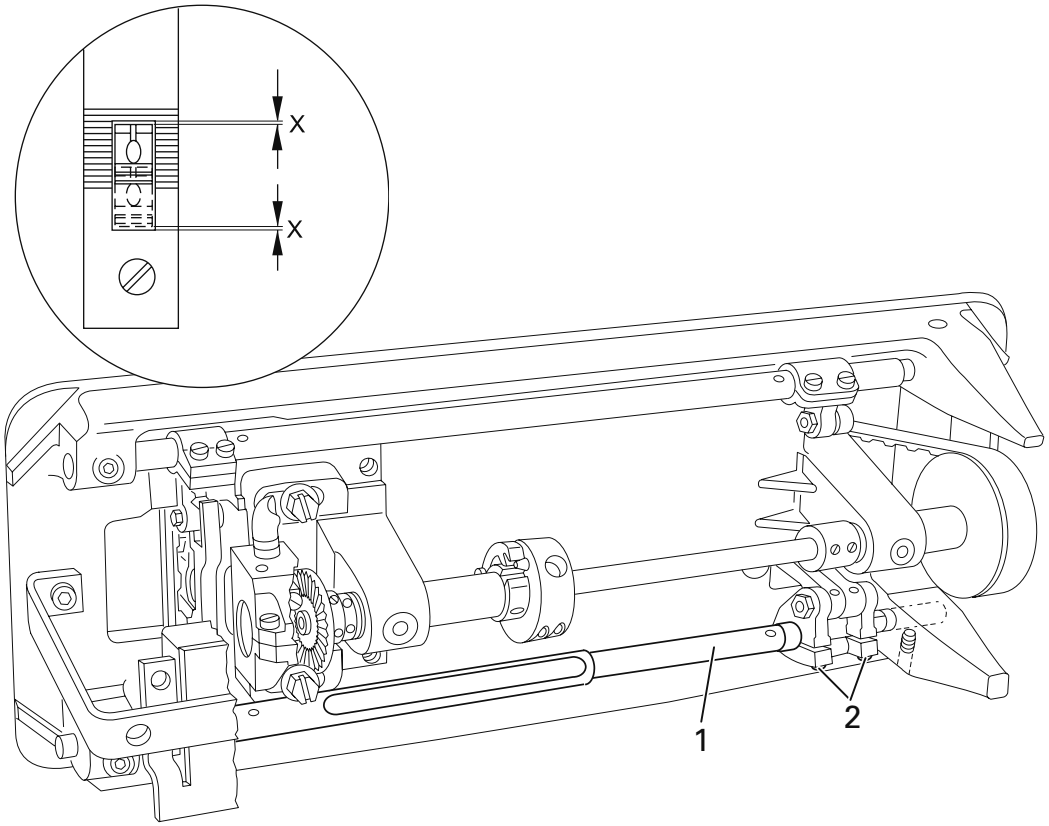
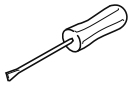


Fig. 13 - 02



- Set the longest stitch.
- Adjust rock shaft **1** in accordance with the **requirement** and tighten screws **2.**

13.05.03 Height of the bottom feed-dog

Requirement
With the stitch length set at "**0**", the bottom feed dog must protrude over the needle plate as high as the teeth when at TDC.

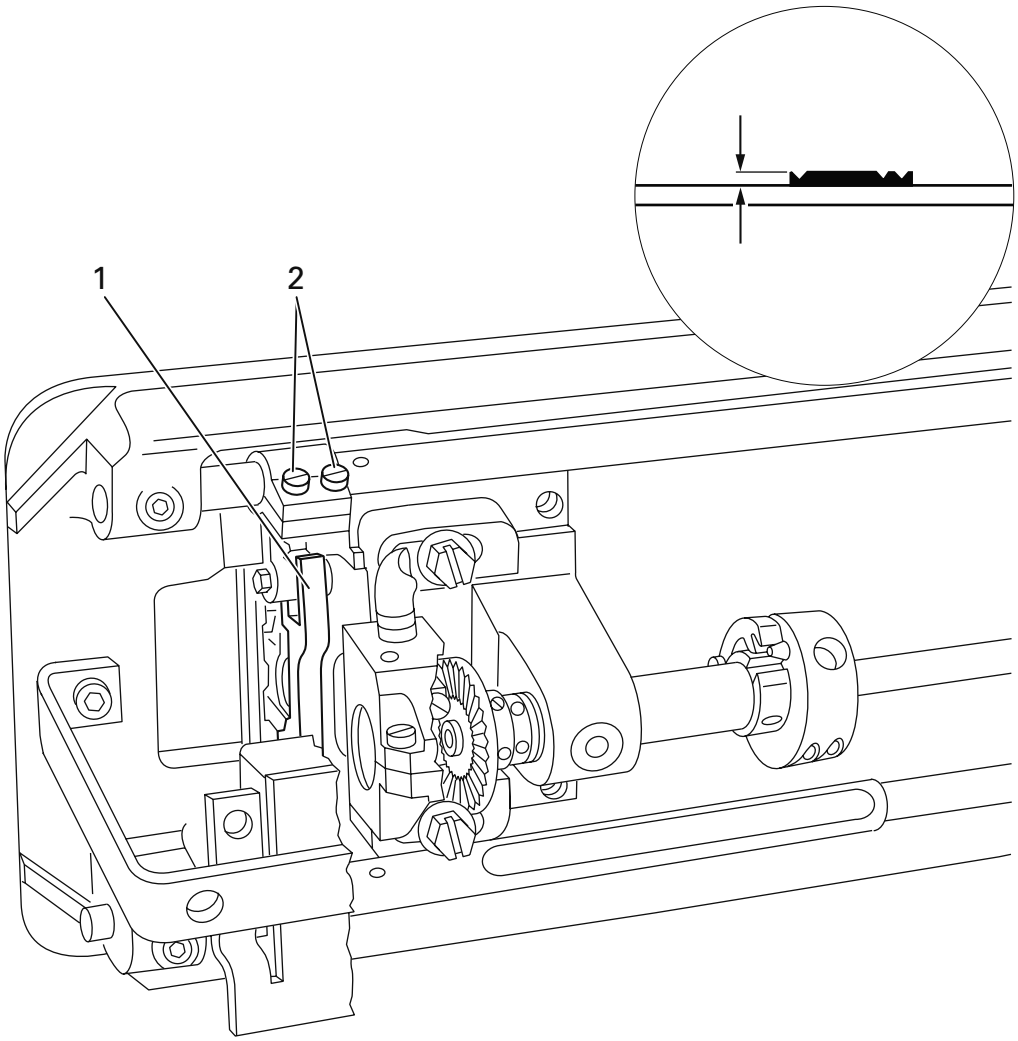
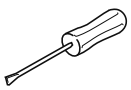


Fig. 13 - 03



- Set stitch length "**0**".
- Bring the bottom feed dog to its TDC by turning the handwheel.
- Adjust feed dog carrier **1** (screws **2**) in accordance with the **requirement**.

If required, the feed dog height can be reduced a little on machines without a bottom feed lifting phase (without P).

13.05.04 Pre-adjusting the needle height

Requirement
With the needle bar at BDC, the distance between the needle bar and the needle plate must be **15 mm**.

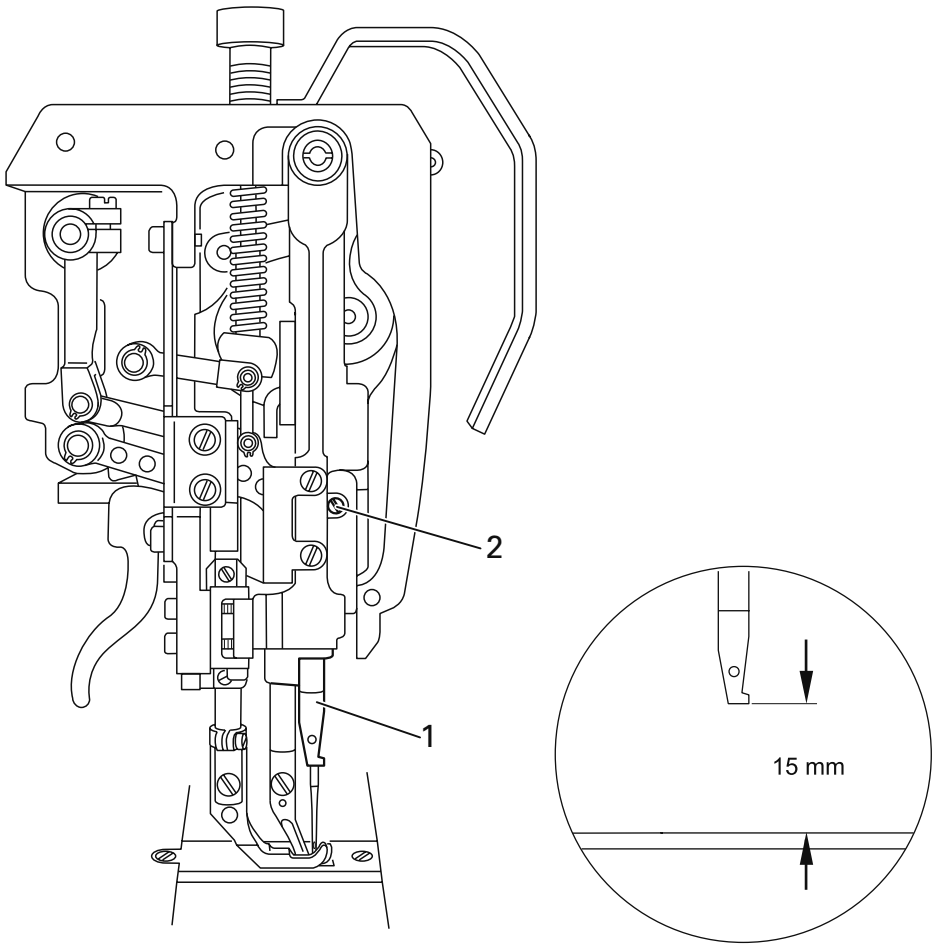
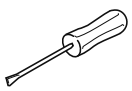


Fig. 13 - 04



- Move needle bar **1** (screw **2)** in accordance with the **requirement** without moving it laterally.

13.05.05 Centering the needle in the needle hole

Requirement
With the stitch length set at "**0**", the needle must enter the needle hole exactly in the middle.

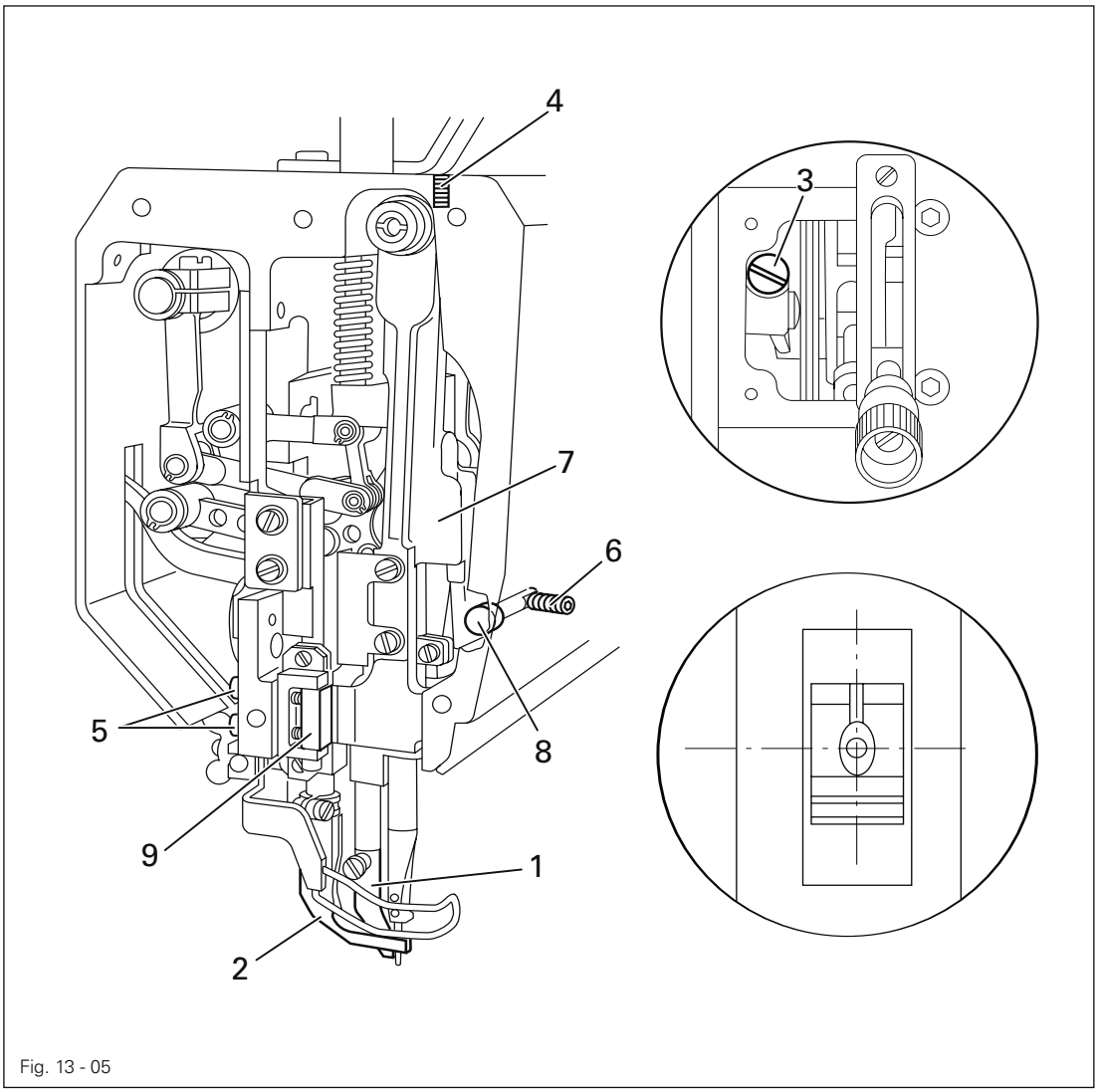
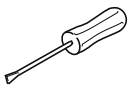


Fig. 13 - 05



- Unscrew vibrating presser **1** and presser foot **2.**
- Set stitch length "**0**" and bring the needle bar to its TDC.
- Insert a new needle. Loosen screws **3, 4, 5** and **6.**
- Position the needle directly over the bottom feed dog by turning the handwheel.
- Move needle bar frame **7** in accordance with the **requirement**.
- Tighten screws **3, 4** and **5.**
- Position stop **8** so that it is touching needle bar frame **7** and tighten screw **6.**

The movement of needle bar frame **7** in guide **9** and of the top feed drive bars must not be stiff.

13.05.06 Lifting motion of the bottom feed-dog (This adjustment does not apply for machines without a bottom feed lifting phase (without P).

Requirement

1. With the needle bar at its BDC, the bottom feed dog must be at its TDC.
2. With the longest stitch set, the bottom feed dog must reach the top surface of the needle plate at the same time as the needle point when the handwheel is turned.

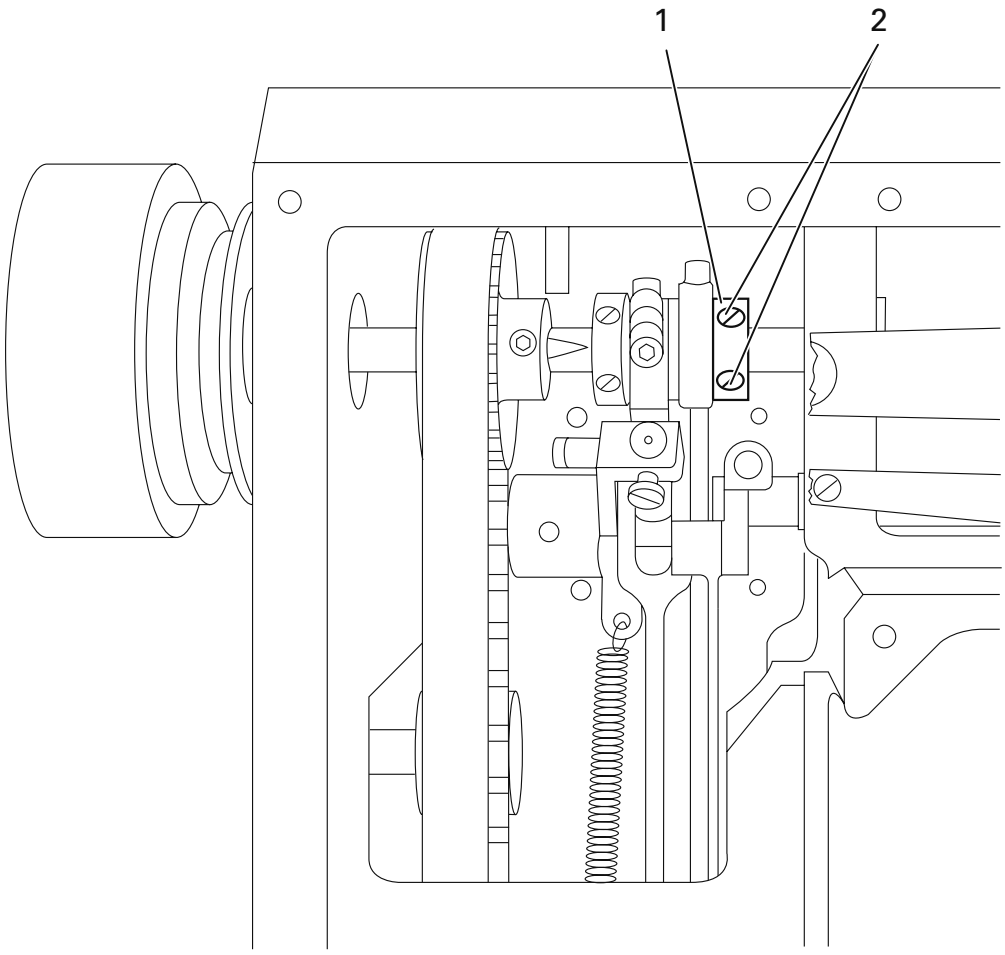
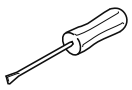


Fig. 13 - 6



- Bring the needle bar to its BDC.
- Turn feed lifting eccentric 1 (screws 2) in accordance with **requirement 1.**
- In this position, tighten the accessible screw 2 until feed lifting eccentric 1 can be turned with difficulty.
- Turn feed lifting eccentric 1 a little further in accordance with **requirement 2.**
- Tighten both screws 2.

13.05.07 Driving motion of the bottom and top feeds

Requirement
With the longest stitch length set and the needle bar at its BDC, the top and bottom feeds should not move when the reverse-feed lever is activated..

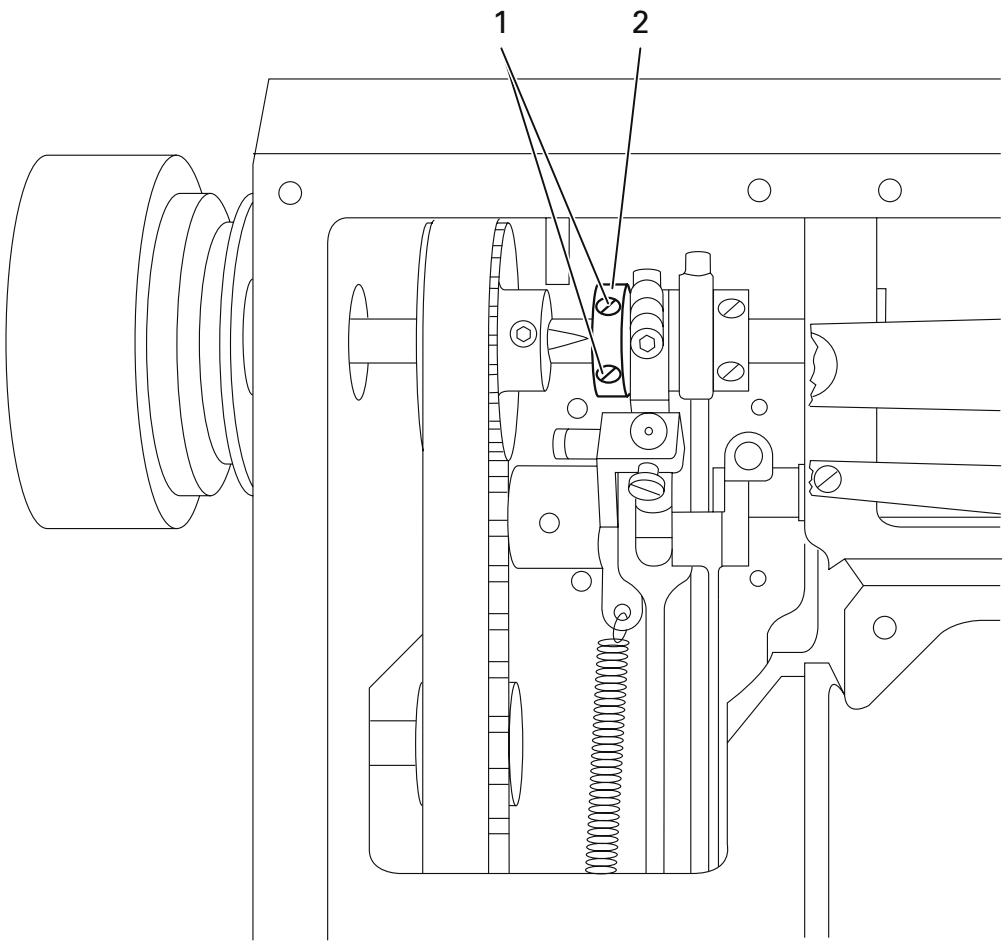
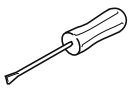


Fig. 13 - 7



- Set the longest stitch.
- Loosen screws **1** just far enough so that the feed driving eccentric **2** can be turned on the shaft with difficulty.
- Bring the needle bar to its BDC.
- Turn the feed driving eccentric **2** so that its eccentricity is facing downwards.
- Now turn it a little in the direction of rotation in accordance with the **requirement**.
- In this position, tighten screws **1.**
- Carry out a check in accordance with the **requirement**.

13.05.08 Hook-to-needle clearance, needle rise, needle height and needle guard

(On Model 1246 make these adjustments on both sewing hooks.)

Requirement

When the stitch length is set at "**3**" and with the needle rise position set (see table):

1. the hook point must be at "needle centre" with a hook-to-needle clearance of **0.05** to **0.1** mm;
2. the top of the needle eye must be **0.8 - 1,0 mm** below the hook point;
3. and needle guard **5** must touch the needle just lightly..

Needle rise position:

Model B: **1,8 mm** after b.d.c. off the needle bar

Model C: **2,0 mm** after b.d.c. off the needle bar

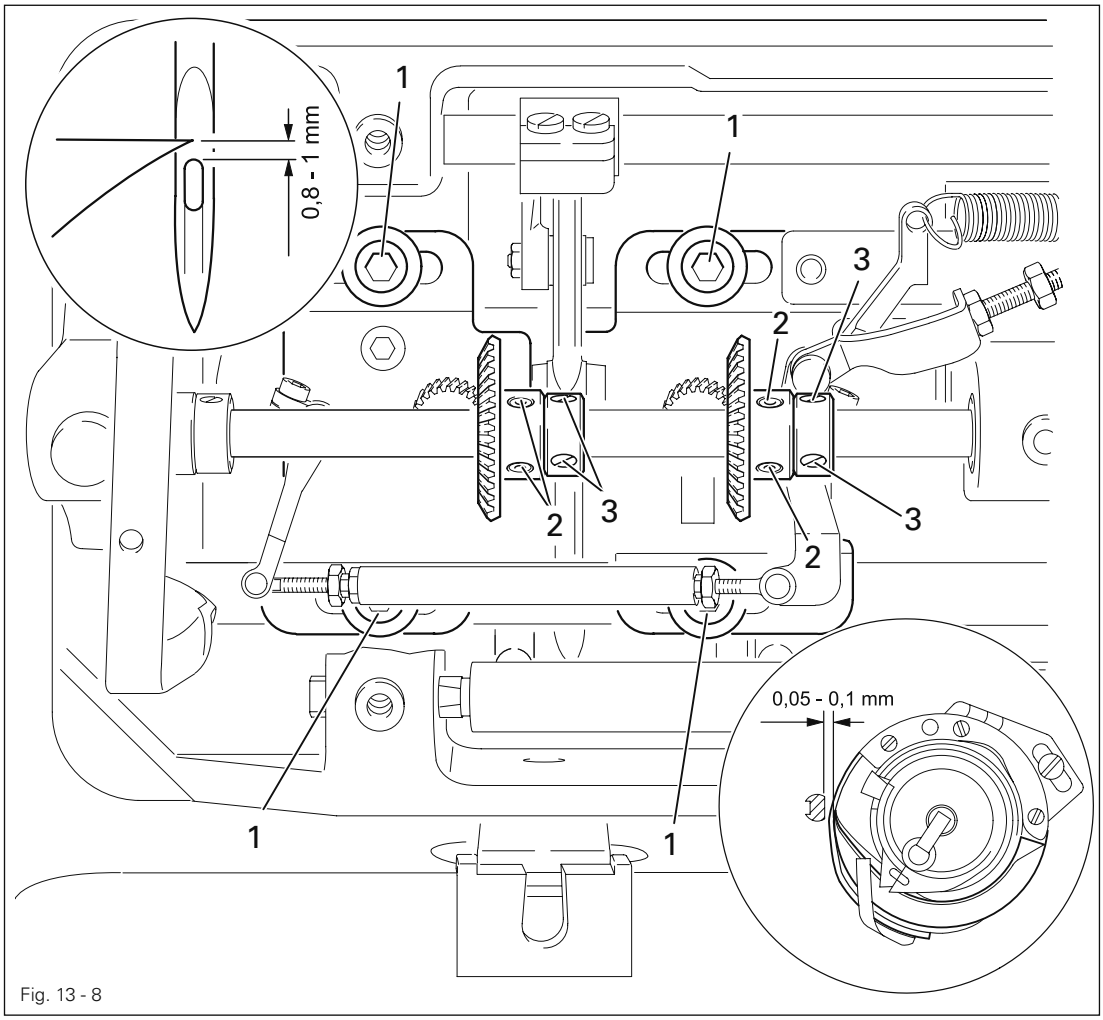


Fig. 13 - 8

- Set stitch length "**3**" and loosen screws **1, 2** and **3.**
- Bring the needle to its BDC and slide the appropriate feeler gauge under the needle bar bearing.
- Position the adjustable clamp against the feeler gauge and screw it tight.
- Remove the feeler gauge and turn the balance wheel in its direction of rotation until the adjustable clamp is touching the needle bar bearing.

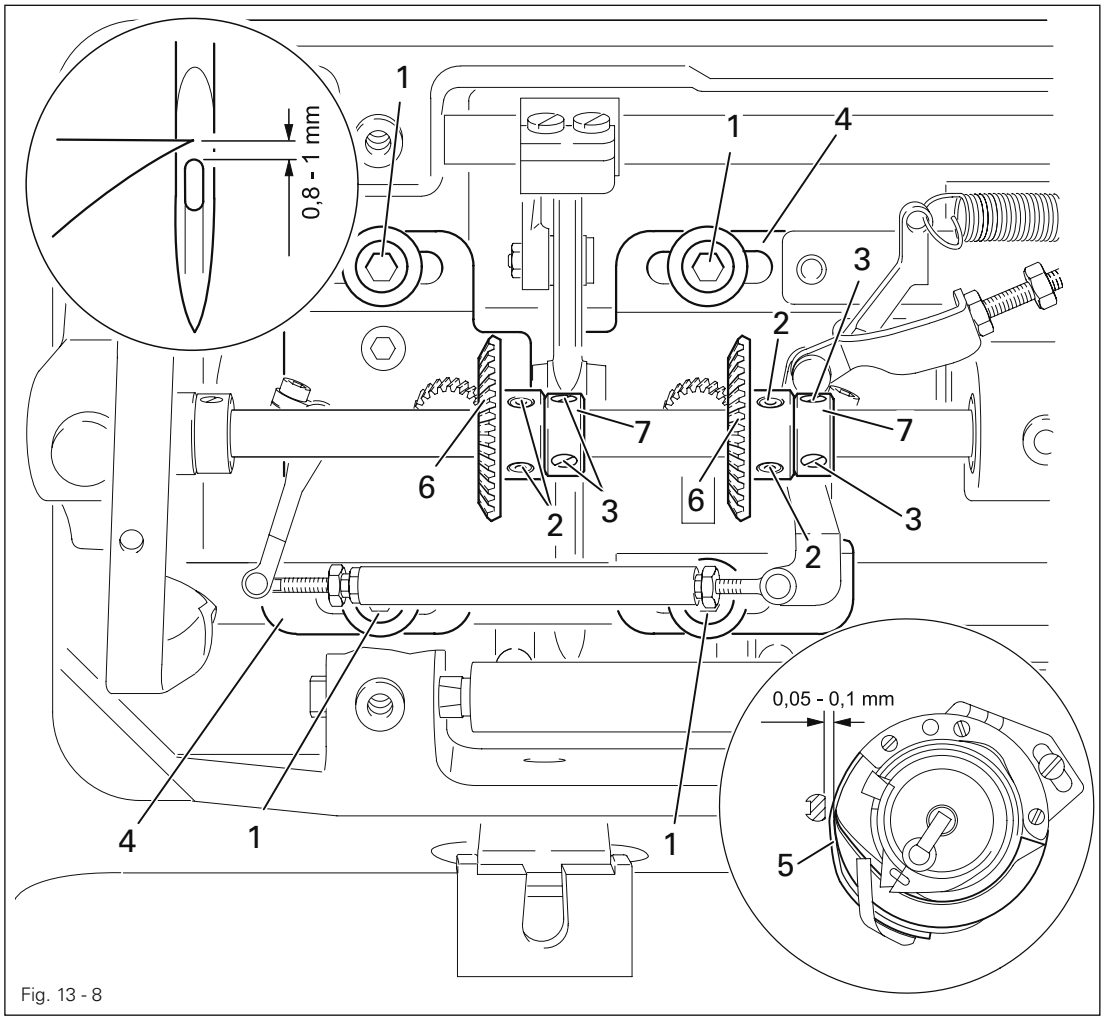


Fig. 13 - 8

- Move hook bearing **4** in accordance with **requirement 1.**
- Tighten screws **1.**
- Position the hook point at the needle centre, taking care to ensure that the needle is not deflected by needle guard **5.**
- While ensuring that bevel gear **6** is not too close, and that the hook does not have too much play, tighten screws **2.**
- Position retaining collar **7** so that it rests on bevel gear **6** and tighten screws **3.**
- Adjust the needle height in accordance with **requirement 2.**
- Align needle guard **5** in accordance with **requirement 3.**

On the PFAFF **1246** the linkage rod to the thread trimmer (also see Chapter **13.06.10)** must be readjusted if the needle gauge is altered.

13.05.09 Top-feed stroke

Requirement
At the largest top-feed stroke setting and stitch length "**0**", presser foot **1** and vibrating presser foot **2** must lift **7.0 mm** from the needle plate when the handwheel is turned.

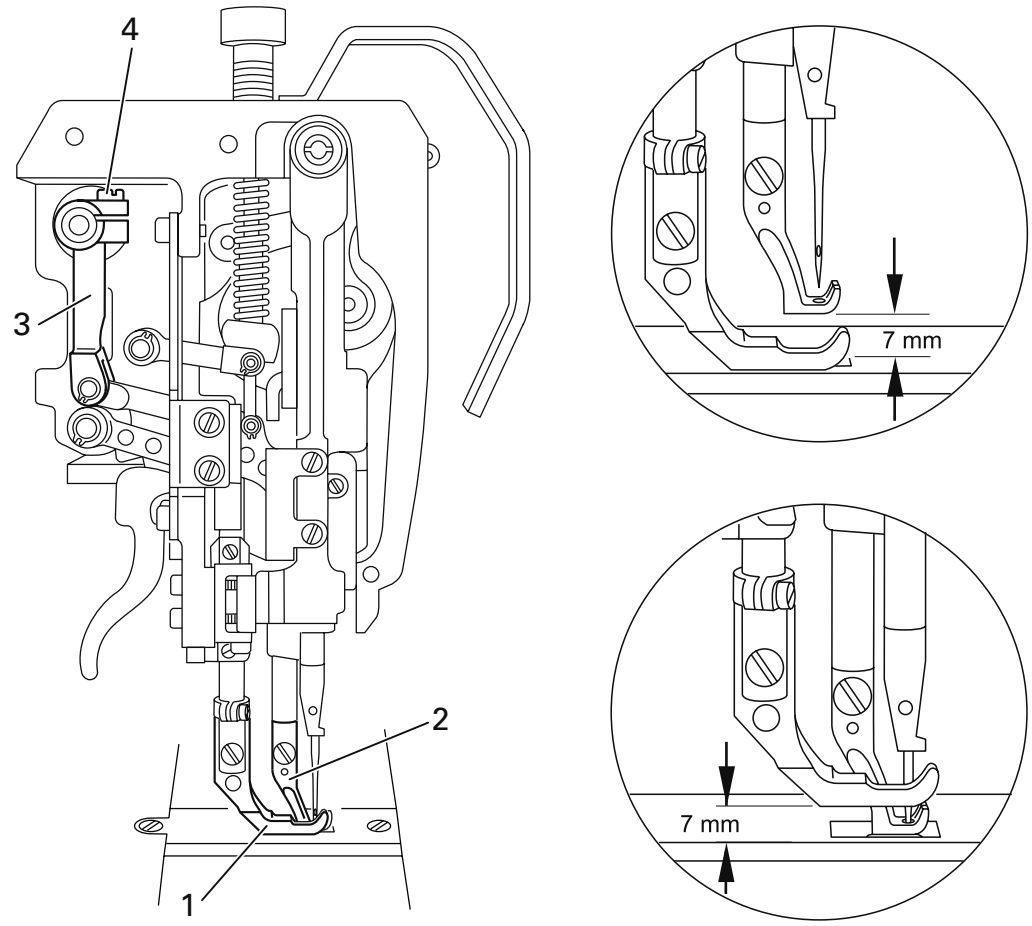
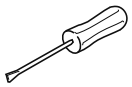


Fig. 13 - 9



- Set the largest top-feed stroke and the stitch length at "**0**".
- Bring presser foot **1** to rest on the needle plate.
- Turn the handwheel in the direction of rotation until vibrating presser foot **2** has reached its highest point.
- Turn crank **3** (screws **4**) in accordance with the **requirement**..

13.05.10 Lifting motion of the top feed

Requirement
When presser foot **1** is resting on the needle plate, the vibrating presser foot **4** and the point of the needle must both reach the needle plate at the same time when the top feed stroke is set at maximum.

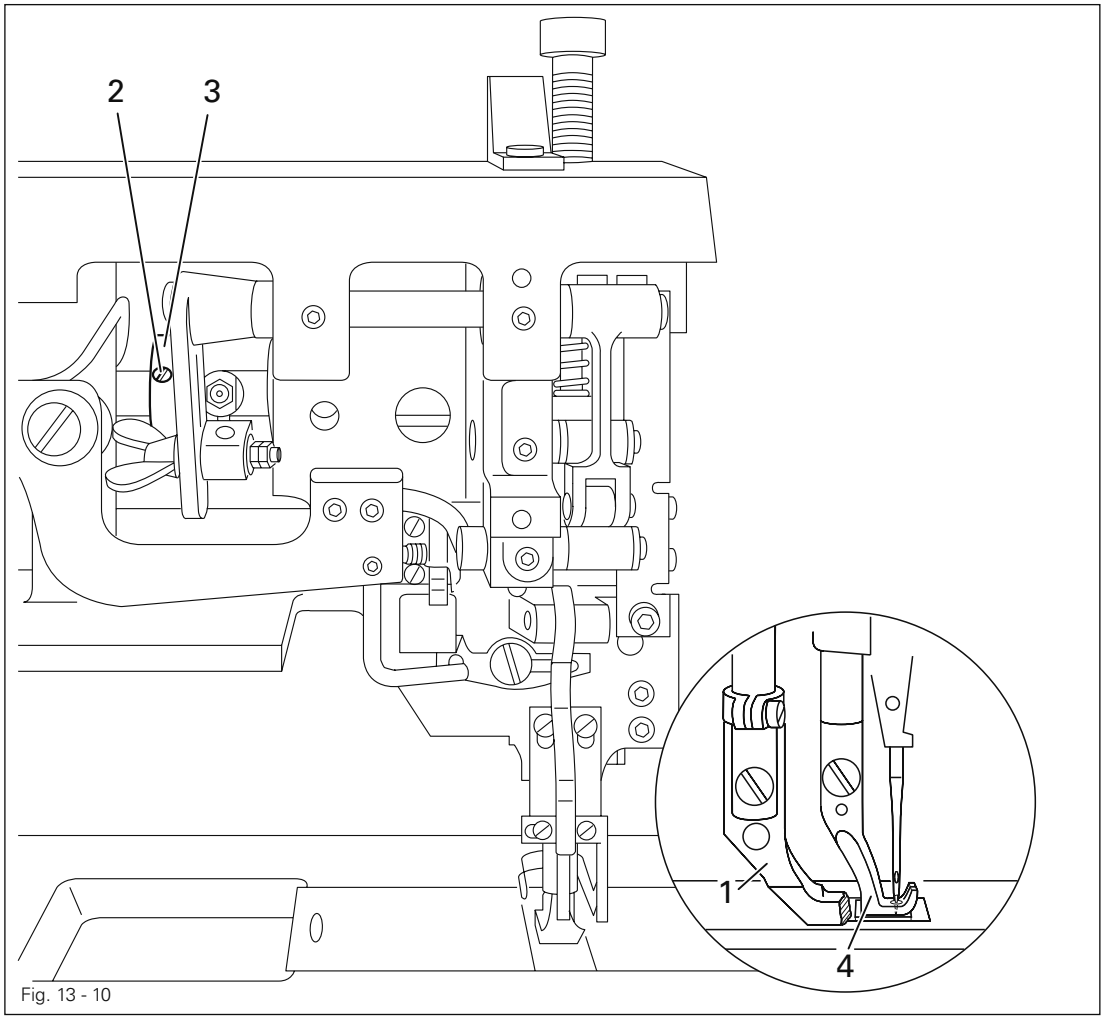


Fig. 13 - 10

- Allow presser foot **1** to rest on the needle plate.
- Loosen screws **2** until feed lifting eccentric **3** can be turned on its shaft with difficulty.
- Turn feed lifting eccentric **3** in accordance with the **requirement**.
- Tighten screws **2.**
- Carry out a check in accordance with the **requirement**.

13.05.11 Bobbin-case opener (On Model 1246 make these adjustments on both bobbin openers.)

Requirement
The needle thread must not be clamped between the bobbin-case opener **1** and the bobbin-case base **3** nor may it be clamped between projection **4** and the retaining trip of the needle plate (see arrows).

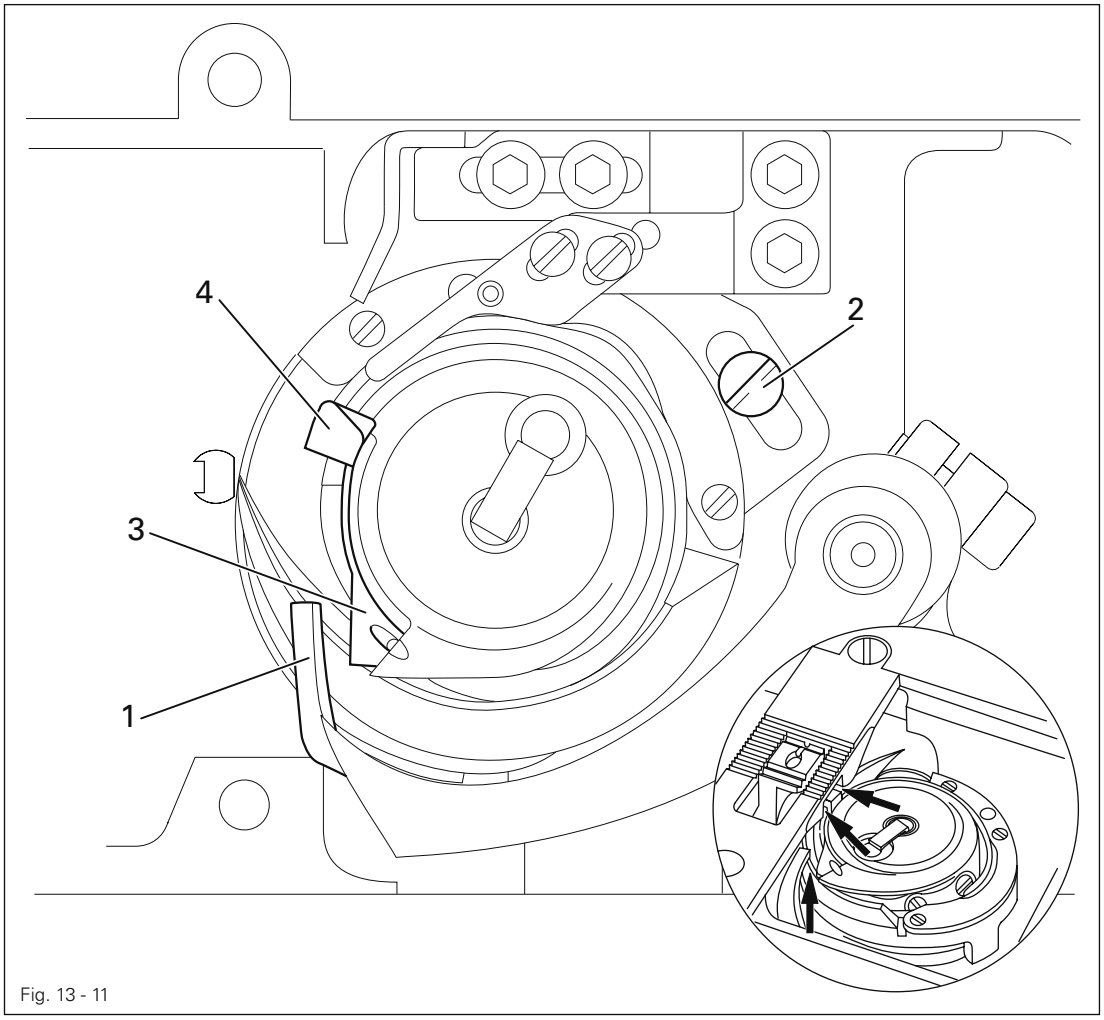
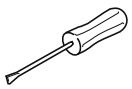


Fig. 13 - 11



- Thread the machine, insert test material and allow the presser foot to rest on the needle plate.
- Sew a few stitches by turning the handwheel and carry out a check in accordance with the **requirement**.
- Turn bobbin-case opener **1** (screw **2**) in accordance with the **requirement**.

13.05.12 Safety clutch

The safety clutch is set by the manufacturer and screws **5** are sealed.
If the thread jams, the safety clutch snaps out to prevent damage to the hook.
A description of how to snap the clutch back in follows.

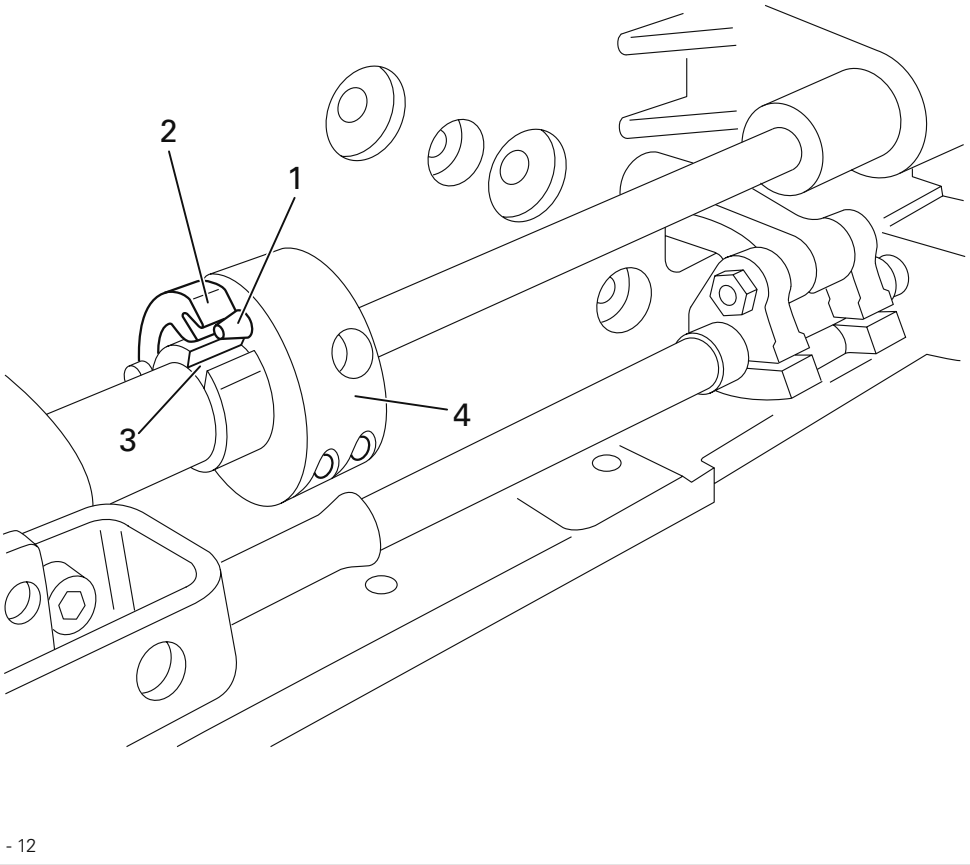


Fig. 13 - 12

- Remove the jammed thread.
- Press piston **1** and turn the handwheel until hook **3** of pawl **2** clicks into groove **4.**

13.05.13 Needle thread tension release

Requirement
With the presser foot raised, both of the tension discs must be at least **0.5 mm** apart.

The clearance of **0.5 mm** is a minimum and can increase to more than **1 mm** when using thick threads.

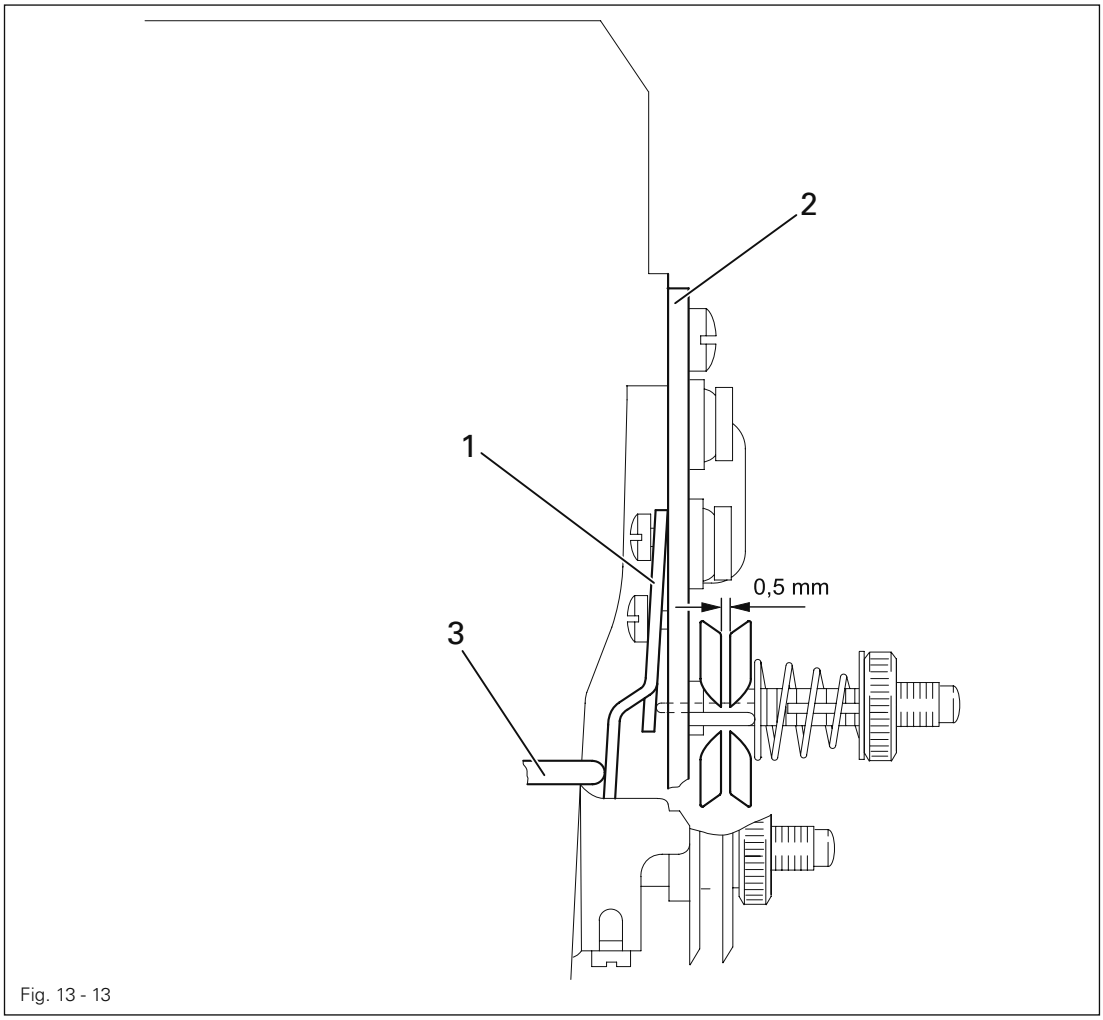


Fig. 13 - 13

- Mittels Handhebel den Stoffdrückerfuß hochstellen.
- Druckplatte **1** hinter der Spannungs-Trägerplatte **2** entprechend der **Requirement** richten.

If the tension is correct, release pin **3** must not be under pressure.

13.05.14 Thread check spring (on the PFAFF 1245 and 1246 without thread trimmer -900/56)

Requirement
The movement of thread check spring **2** must be finished when the needle point enters the material (approx. **7 mm** spring path).

Due to technical reasons, the length of the thread-check spring path can vary a little in either direction.

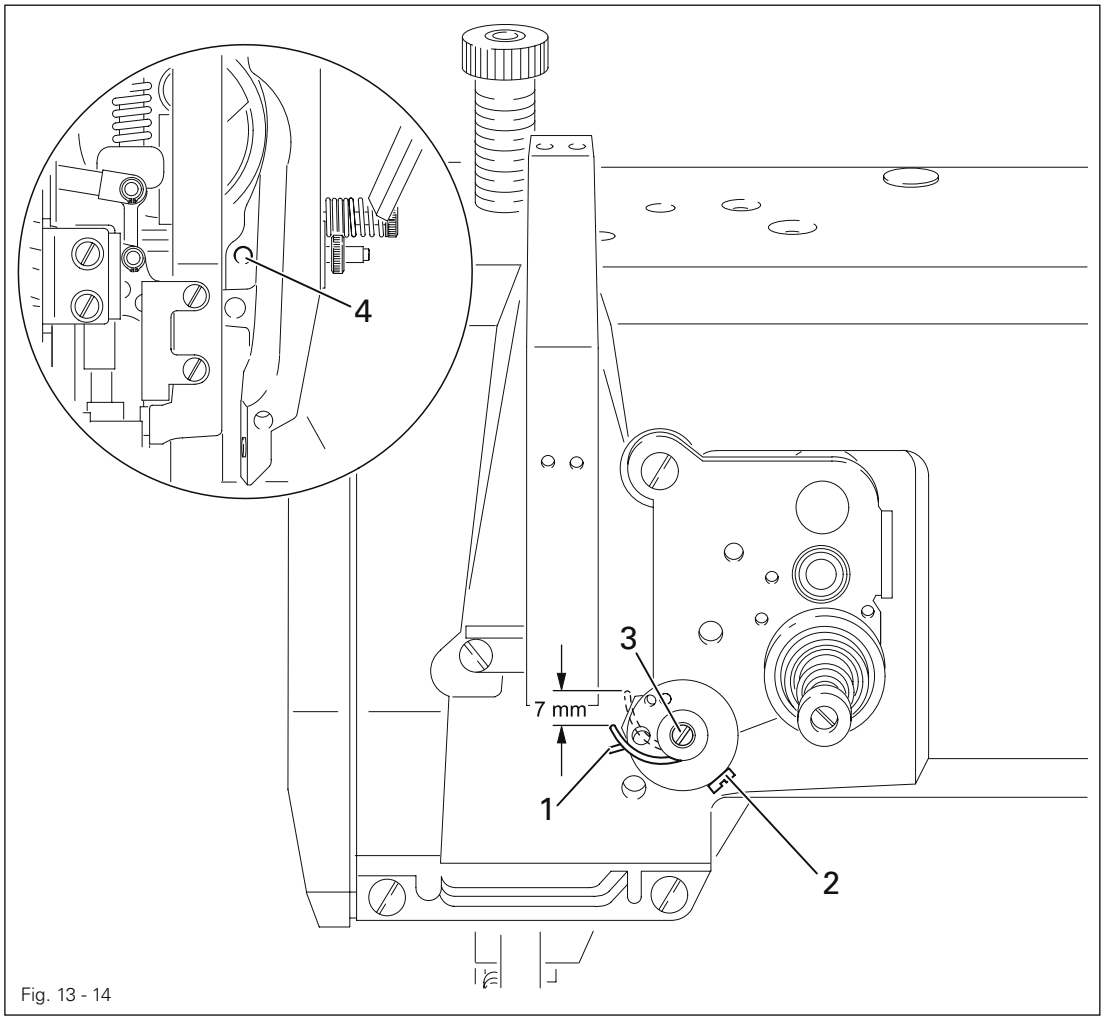


Fig. 13 - 14

- Adjust stop **1** (screw **2)** according to **requirement**.
- To adjust the pressure of the spring, turn screw **3** (screw **4).**

13.05.15 Thread check spring (on PFAFF 1246 with thread trimmer -900/56)

Requirement
The motion of thread controller springs **1** and **6** should cease as soon as the needle point penetrates the material (= about **7 mm** spring deflection).

Due to technical reasons, the length of the thread-check spring path can vary a little in either direction.

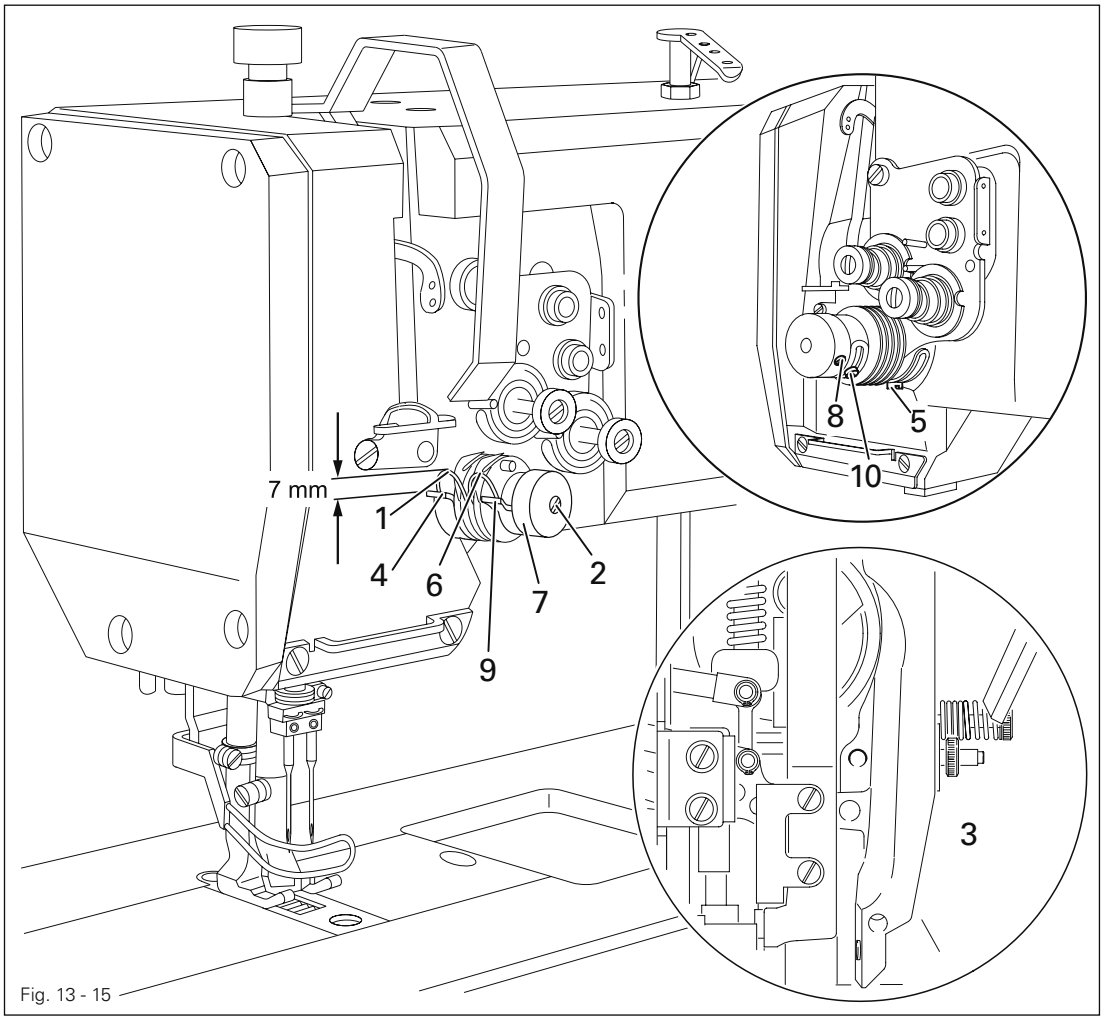


Fig. 13 - 15

- Turn screw **2** (screw **3)** to adjust the spring resistance of thread check spring **1.**
- Turn retainer **4** (screw **5)** according to the **requirement**.
- Turn screw **7** (screw **8)** to adjust the spring resistance of thread check spring **6.**
- Turn retainer **9** (screw **10)** according to the **requirement**.

13.05.16 Bobbin winder

Requirement

1. With the bobbin winder switched on, the bobbin winder spindle must engage reliably.
2. With the bobbin winder switched off, friction wheel **5** must not touch drive wheel **1.**
3. The bobbin winder must switch off automatically when the thread level is approximately **1 mm** from the edge of the bobbin.

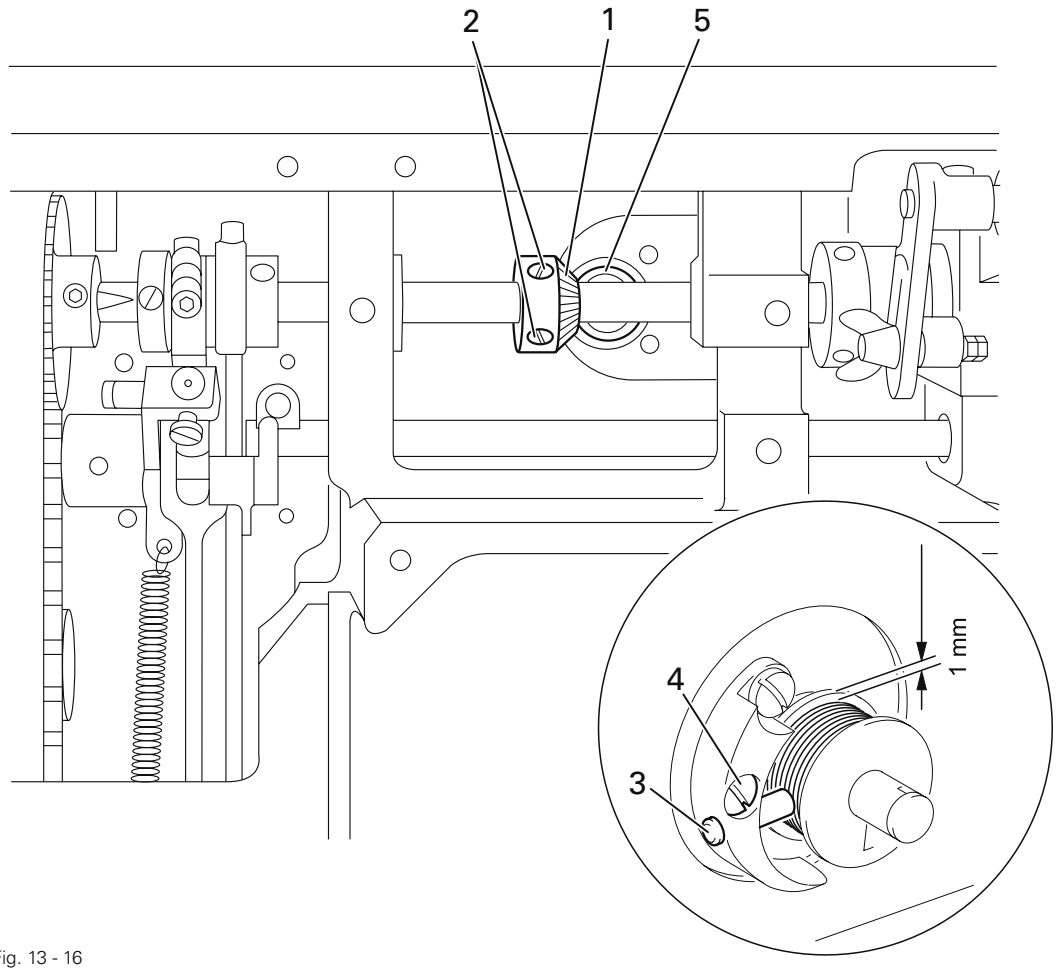
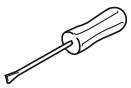


Fig. 13 - 16



- Move drive wheel **1** (screws **2)** in accordance with **requirement 1** und **2.**
- Move stop latch **3** (screws **4)** in accordance with **requirement 3.**

13.05.17 Presser-foot pressure

Requirement
The material must be fed reliably even at top sewing-speed. There mustn't be pressure marks on the material.

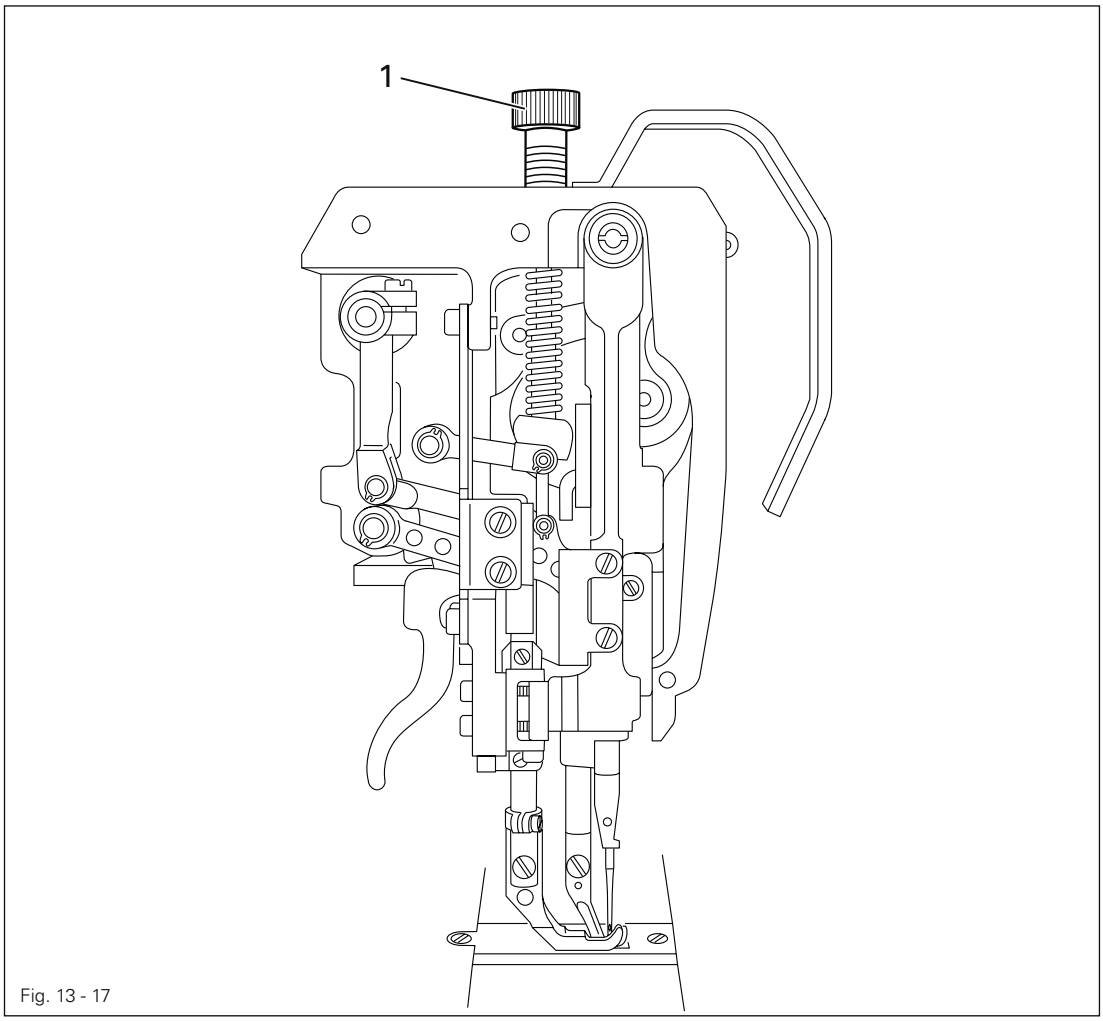
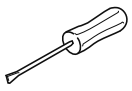


Fig. 13 - 17



- Turn screw **1** in accordance with the **requirement**.

13.06 Adjusting the thread trimmer -900/56

13.06.01 Pre-adjusting the control cam

Requirement

1. The eccentric bearing-surface of control cam **5** must be laterally in the middle of pawl **8.**
2. With the take-up lever at its TDC, the beginning of the largest eccentricity of the bearing surface (in the direction of rotation) must be underneath the point of pawl **8.**

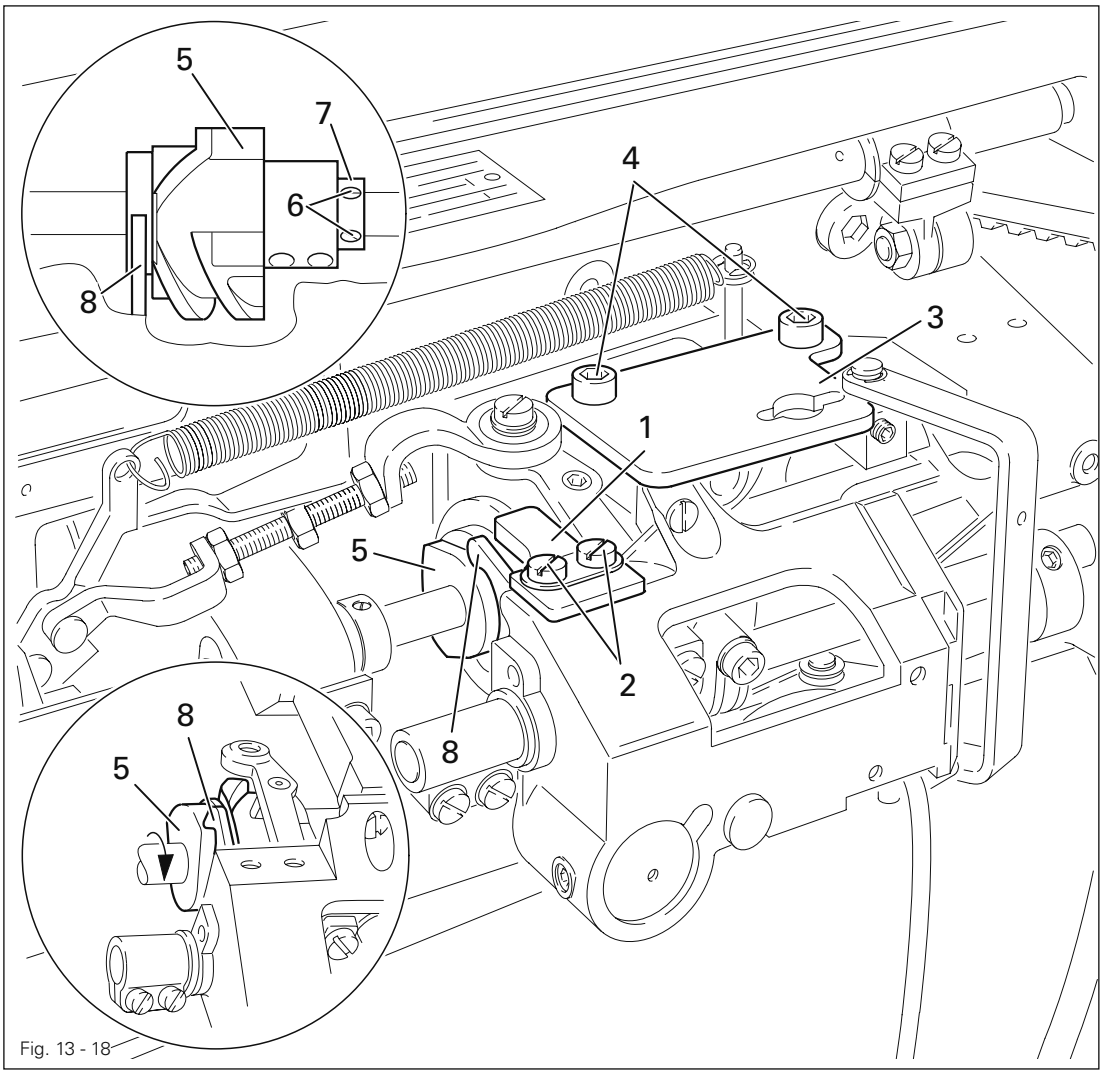


Fig. 13 - 18

- Remove catch **1** (screws **2**).
- Remove plate **3** (screws **4**).
- Loosen the four screws of control cam **5** and screws **6** of retaining collar **7.**
- Move control cam **5** laterally in accordance with **requirement 1.**
- In this position bring retaining collar **7** to rest on control cam **5** and tighten screws **6.**
- Bring the take-up lever to its TDC by turning the handwheel.
- Turn control cam **5** in the direction of rotation in accordance with **requirement 2,** taking care to note that it is touching retaining collar **7.**
- In this position, tighten the four screws on control cam **5.**

13.06.02 Tripping lever

Requirement
In needle rise position, the flattened pin of control lever **6** (see arrow) must fall slightly into the track of control cam **7** when activating lever **8** is activated.

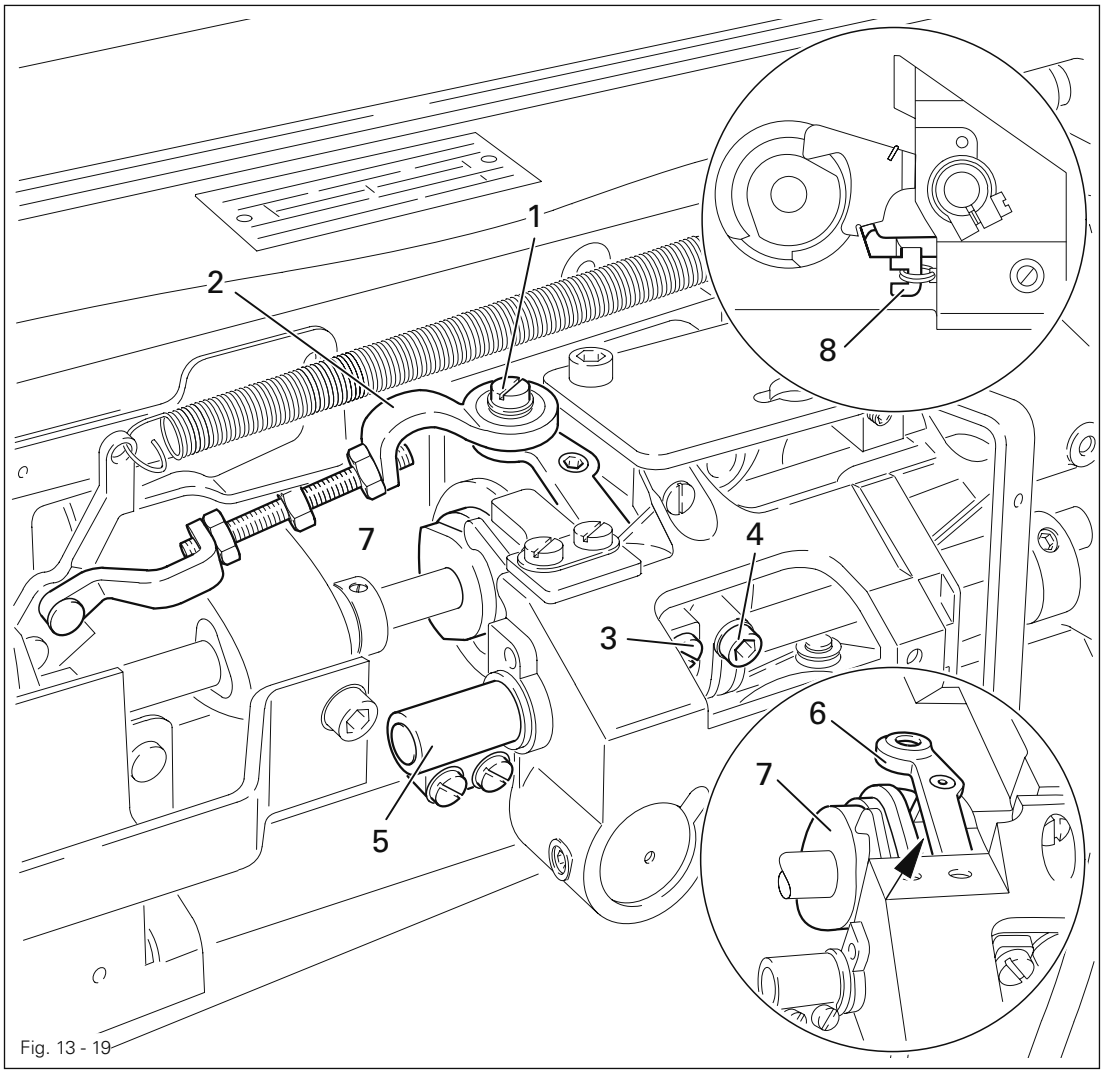


Fig. 13 - 19

- Screw out screw **1** and swing out connecting rod **2.**
- Loosen screws **3** and **4.**
- Bring the needle bar to needle rise position by turning the handwheel.
- Bring clamp **5** to rest on the right side of the housing.
- Keeping this position, move control lever **6** laterally in accordance with the **requirement** and then press control lever **6** onto the bottom of the cam track.
- In this position, tighten screw **3.**
- Carry out a check in accordance with the **requirement**.

Screw **4** remains loosened until the release trip is adjusted.

13.06.03 Pawl

Requirement
With the cut-off mechanism in resting position, there must be a distance of **0.3 mm** between the largest eccentricity of bearing surface **1** and pawl **2.**

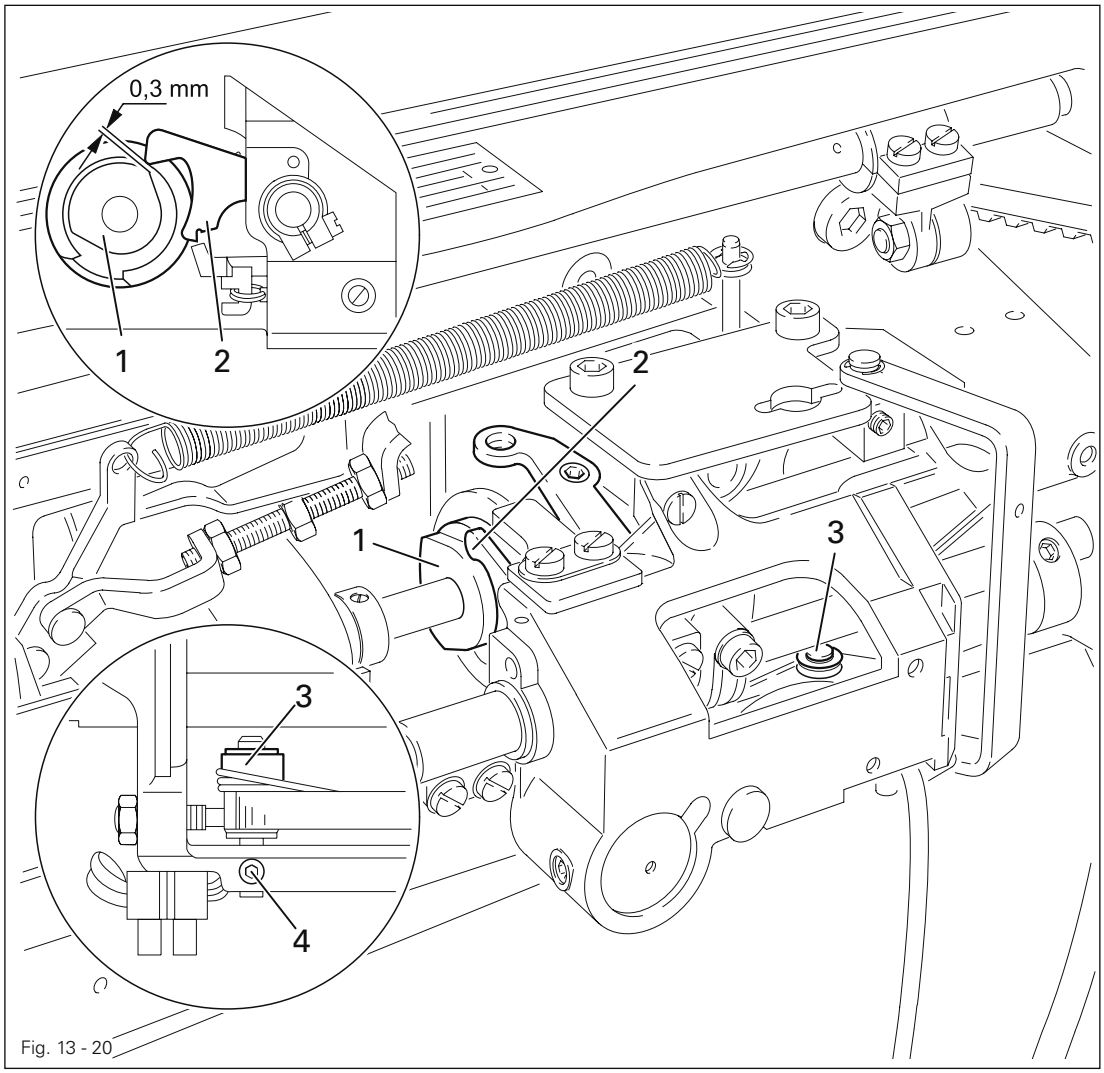


Fig. 13 - 20

- Position the largest eccentricity of bearing surface **1** underneath pawl **2** by turning the handwheel.
- Move bearing bolt **3** (screw **4)** in accordance with the **requirement**.

13.06.04 Engaging solenoid

Requirement
In needle rise position and with engaging solenoid **5** activated, there must be a distance of **0.3 mm** between engaging lever **2** and pawl **3.**

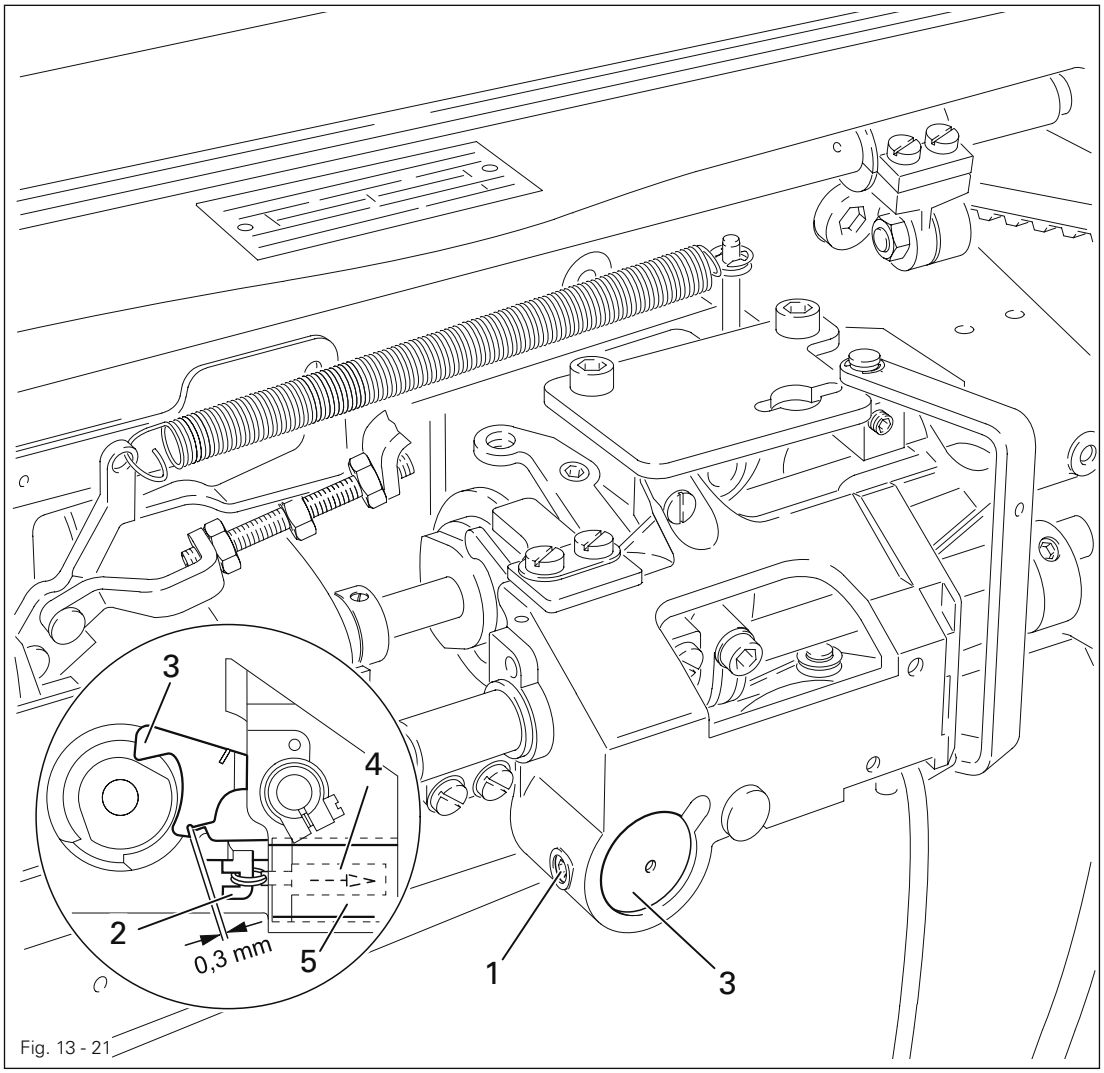
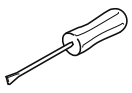


Fig. 13 - 21



- Bring the machine to needle rise position by turning the handwheel.
- Loosen screw **1** until the engaging solenoid can be turned with difficulty.
- Manually activate engaging lever **2** so that pawl **3** engages.
- Press magneto inductor **4** as far as possible into solenoid housing **5** and move both the solenoid housing and the magneto inductor in accordance with the **requirement**.
- In this position tighten screw **1.**

13.06.05 Release trip

Requirement
In needle rise position and with control lever **4** engaged, there must be a distance of approx. **0.3 mm** between the bolt of the control lever and the base of the cam track.

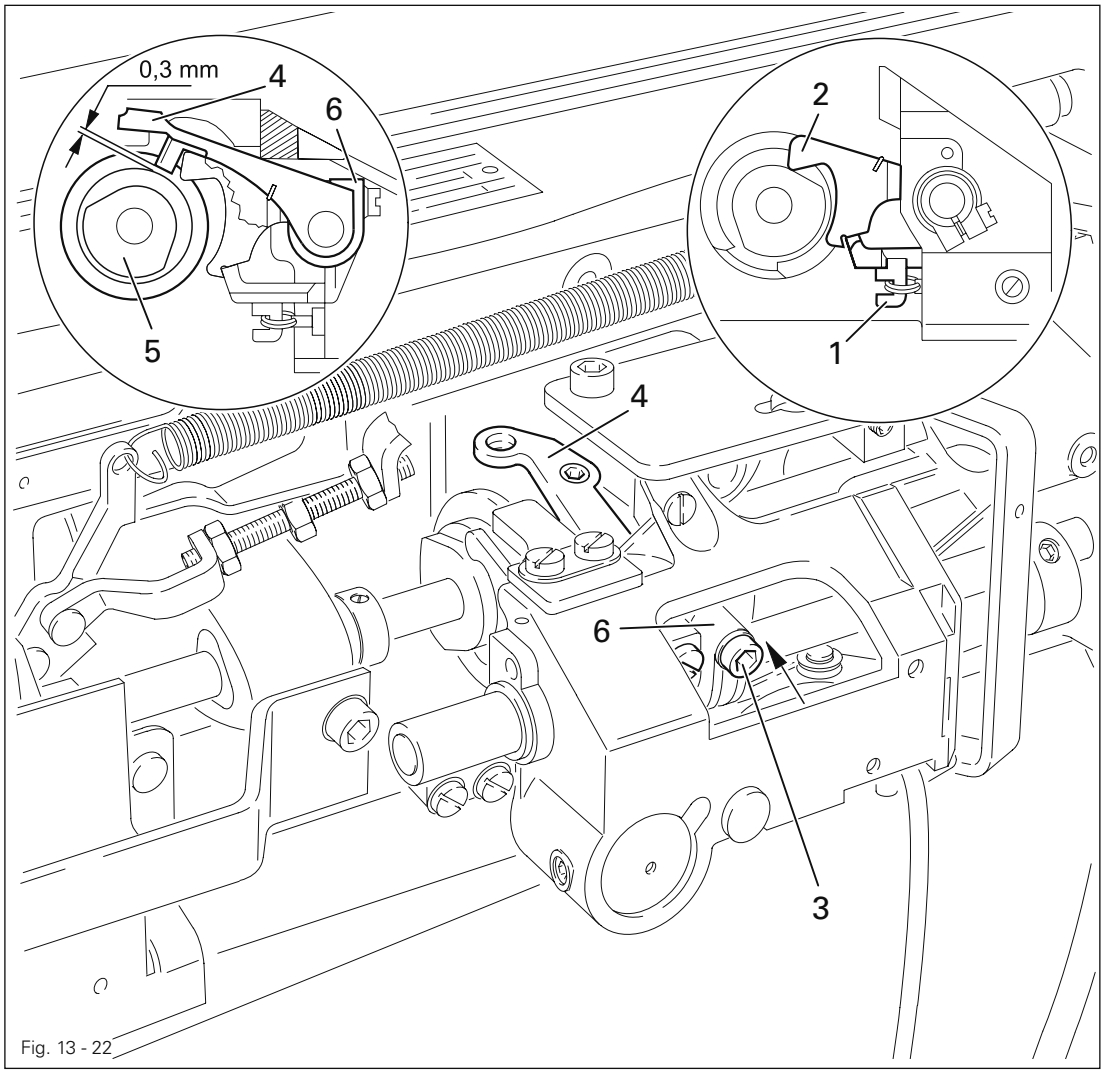


Fig. 13 - 22

- Bring the machine to needle rise position by turning the handwheel.
- Manually activate engaging lever **1** so that pawl **2** engages.
- Taking care to ensure that screw **3** is still loose, press control lever **4** down to the base of the track of control cam **5.**
- Maintaining this position, lightly tighten screw **3** while bringing release trip **6** into a resting position against engaging lever **1** and laterally against control lever **2** in the direction of the arrow.
- By lightly tapping on release trip **6** in the direction of the arrow, while simultaneously tapping control lever **4,** create a distance between the bolt and the base of the cam track which corresponds with the **requirement**.
- In this position tighten screw **3.**

13.06.06 Engaging lever

Requirement
With the needle bar at TDC and with control lever **3** at starting position, there must be a distance of approx. **0.3 mm** between bolt **4** and the outer diameter of control cam **5.**

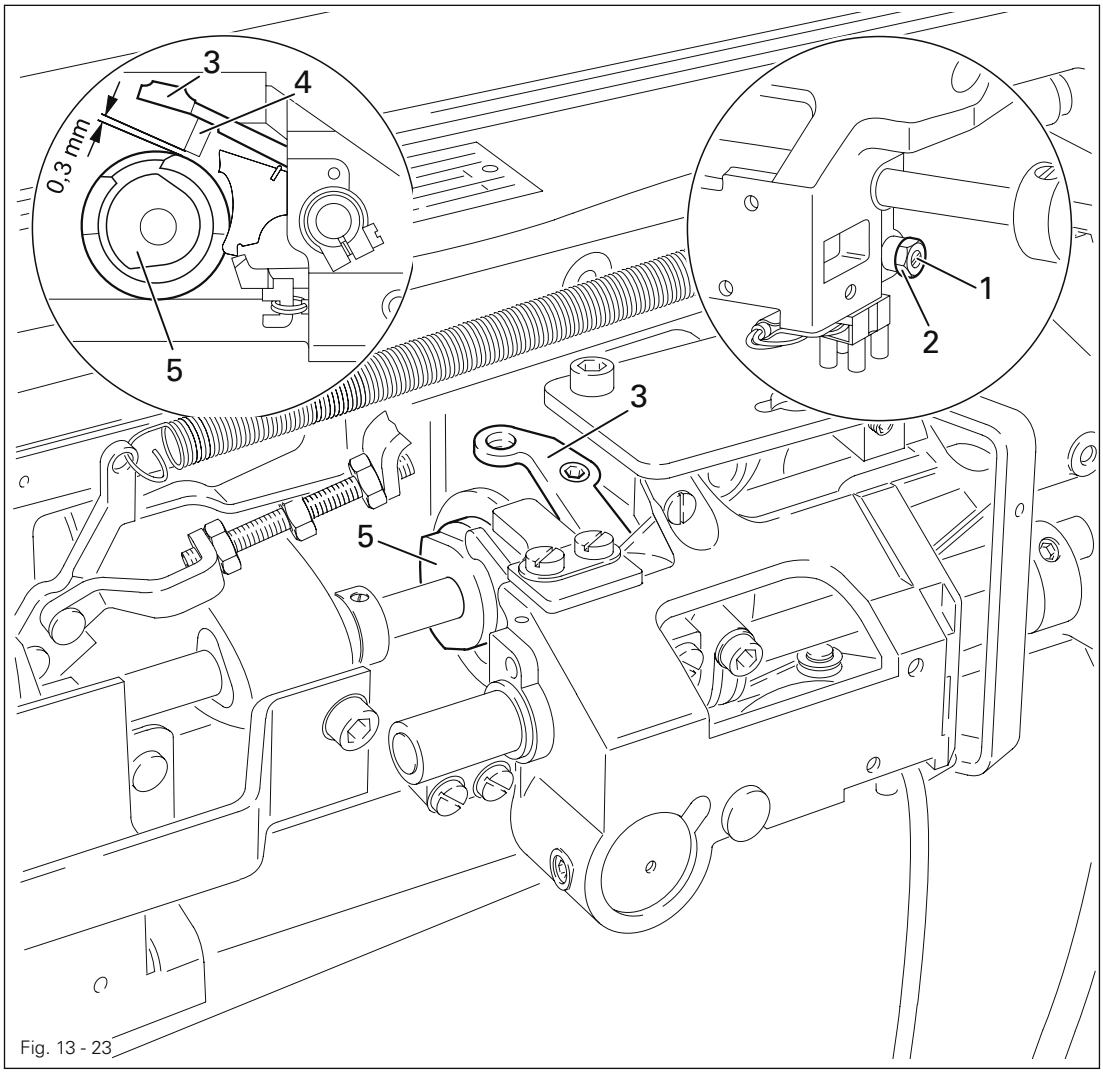


Fig. 13 - 23

- Bring the needle bar to TDC by turning the handwheel.
- Turn screw **1** (nut **2**) in accordance with the **requirement**.
- Carry out a check by tapping control lever **3.**

13.06.07 Linkage rod

Requirement
When shaft **8** begins its pushing motion, lever **6** must simultaneously lift from stop **7.**

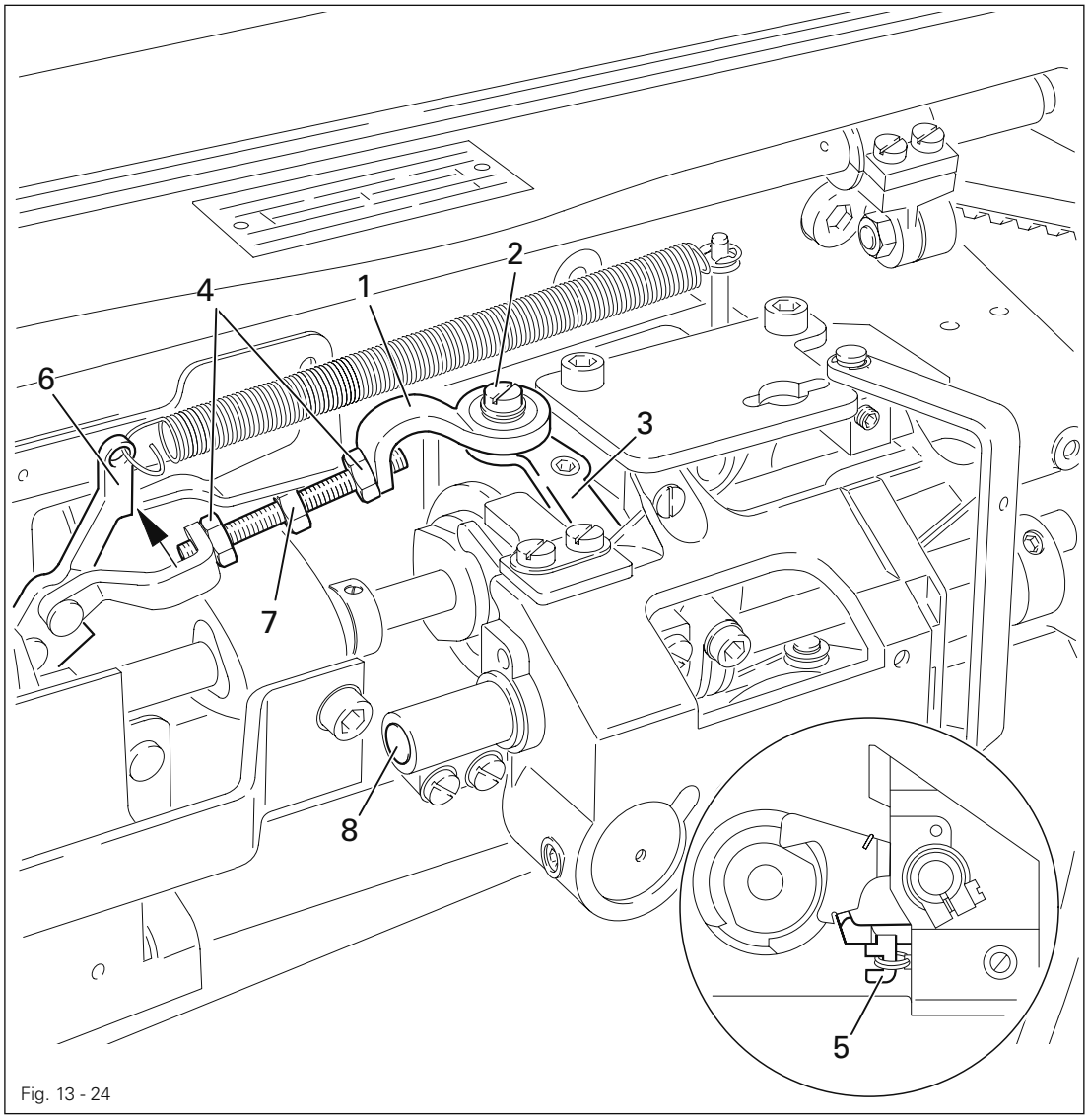


Fig. 13 - 24

- Affix ball joint **1** to control lever **3** using screw **2.**
- Loosen nuts **4** (right and left handed thread).
- Bring the machine to needle rise position by turning the balance wheel and activate engaging lever **5.**
- Taking care to ensure that lever **6** is touching stop (see arrow), turn linkage rod **7** in accordance with the requirement.
- In this position tighten both nuts **4.**

13.06.08 Final adjustment of the control cam

Requirement
When control lever **3** is engaged and the needle point is **12 mm** above the needle plate coming from its BDC, the motion of the thread catcher **5** must begin.

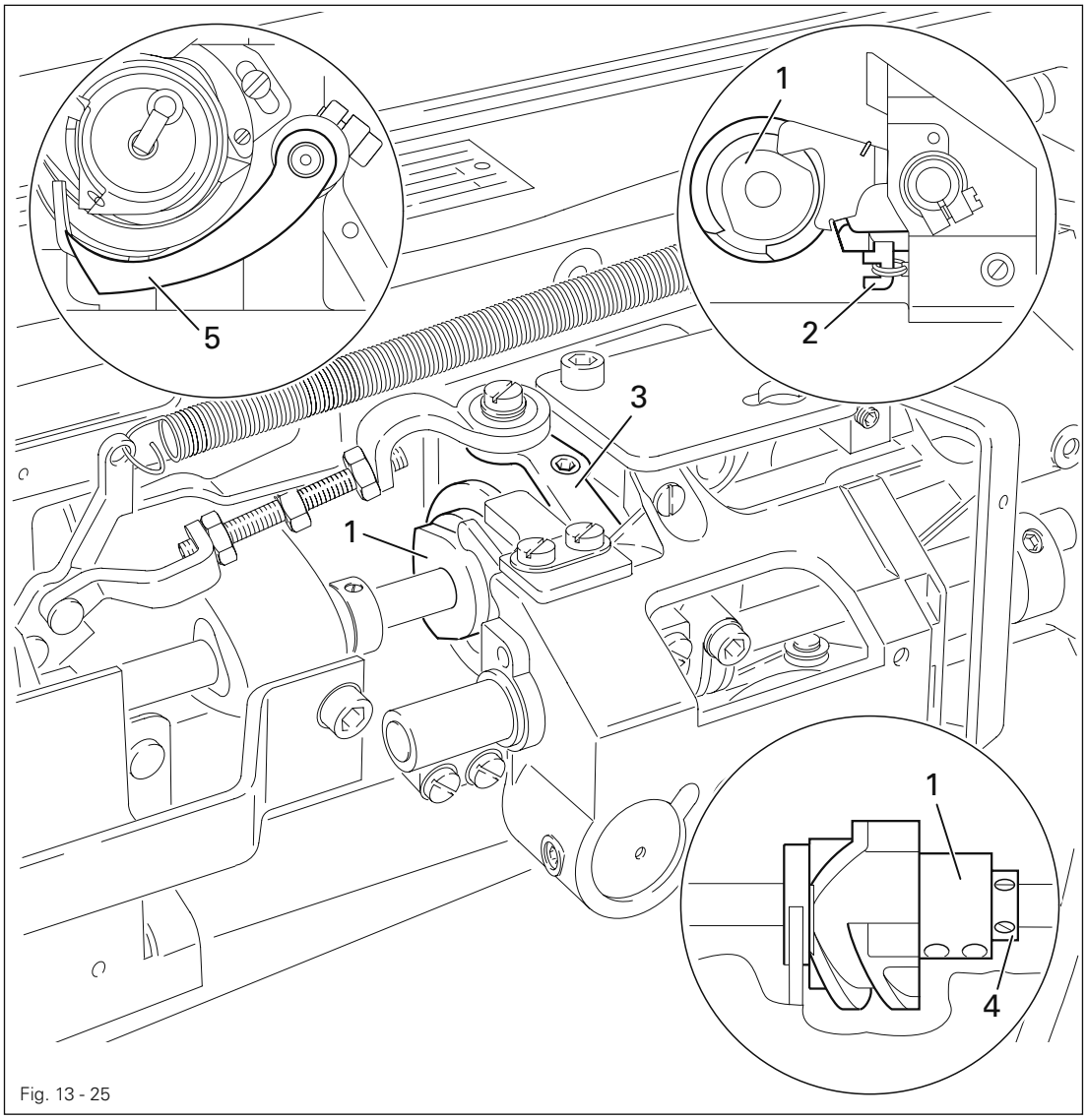


Fig. 13 - 25

- Bring the take-up lever to just past its TDC by turning the handwheel and loosen the accessible screws on control cam **1.**
- Continue turning the handwheel in its direction of rotation until the machine is in needle rise position and then activate engaging lever **2.**
- Taking care to ensure that control lever **3** is engaged, loosen the remaining screws on control cam **1.**
- Continue turning the handwheel in its direction of rotation until the point of the needle is **12 mm** above the needle plate.
- In this position, and taking care to ensure that control cam **1** is touching retaining collar **4,** turn in the direction of rotation until you feel some resistance.

- In this position, tighten the accessible screws on control cam **1.**
- Make the remaining screws on control cam **1** accessible and tighten these as well.

13.06.09 Catch

Requirement
With the cut-off mechanism in resting position, there must be a distance of approx. **5 mm** between catch **1** and control lever **6.**

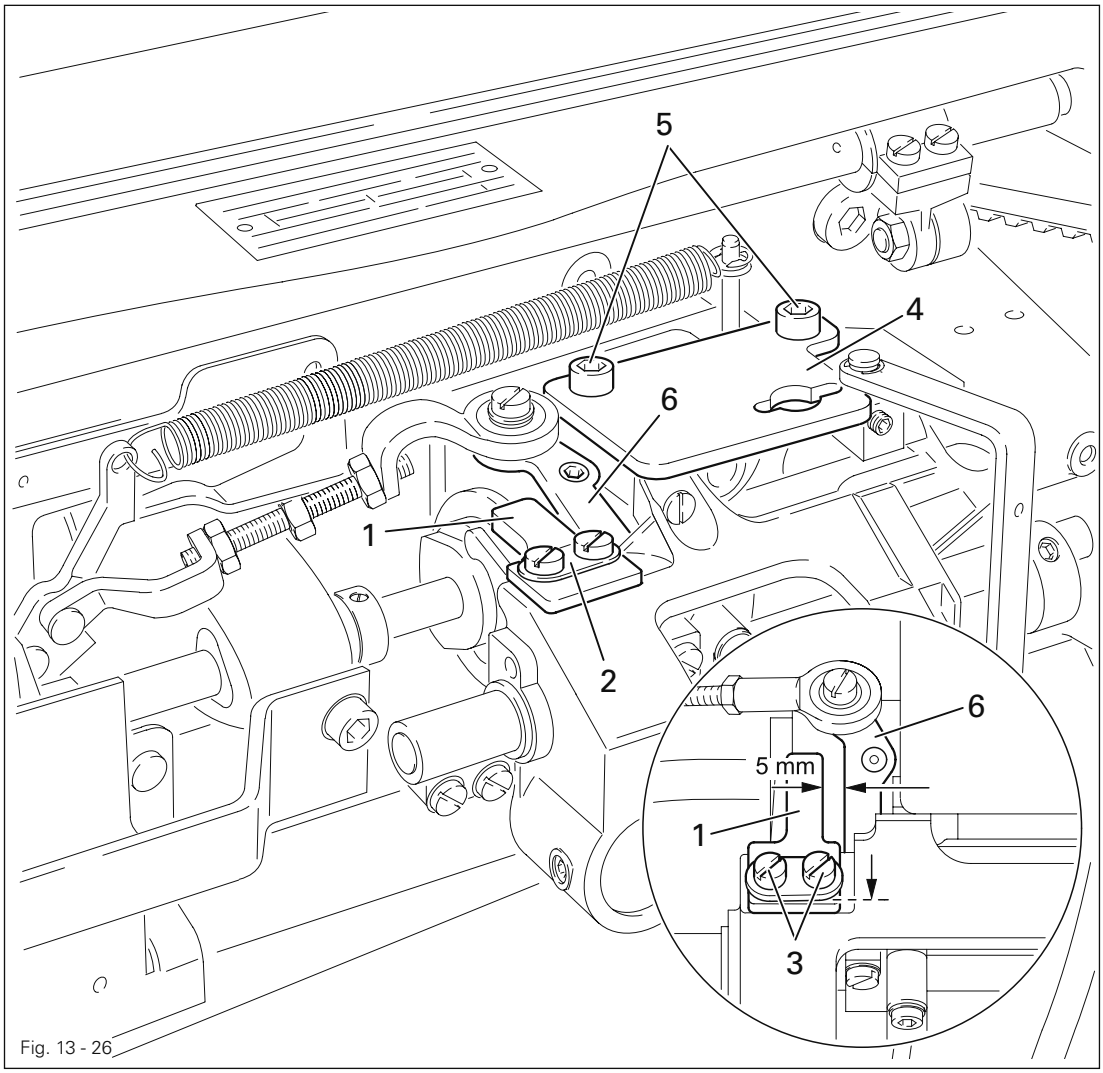
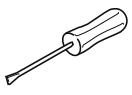


Fig. 13 - 26



- Lightly affix catch **1** and cover plate **2** using screws **3.**
- Move catch **1** as far as possible in the direction of the arrow and then move it laterally in accordance with the **requirement**.
- In this position, tighten screws **3.**
- Using screws **5,** screw plate **4** on.

13.06.10 Connecting rod (for PFAFF 1246 only)

Requirement
When the cutting device is in the off-position, the length of spacer rod **4** should be equal to the distance between shafts **2** and **3.**

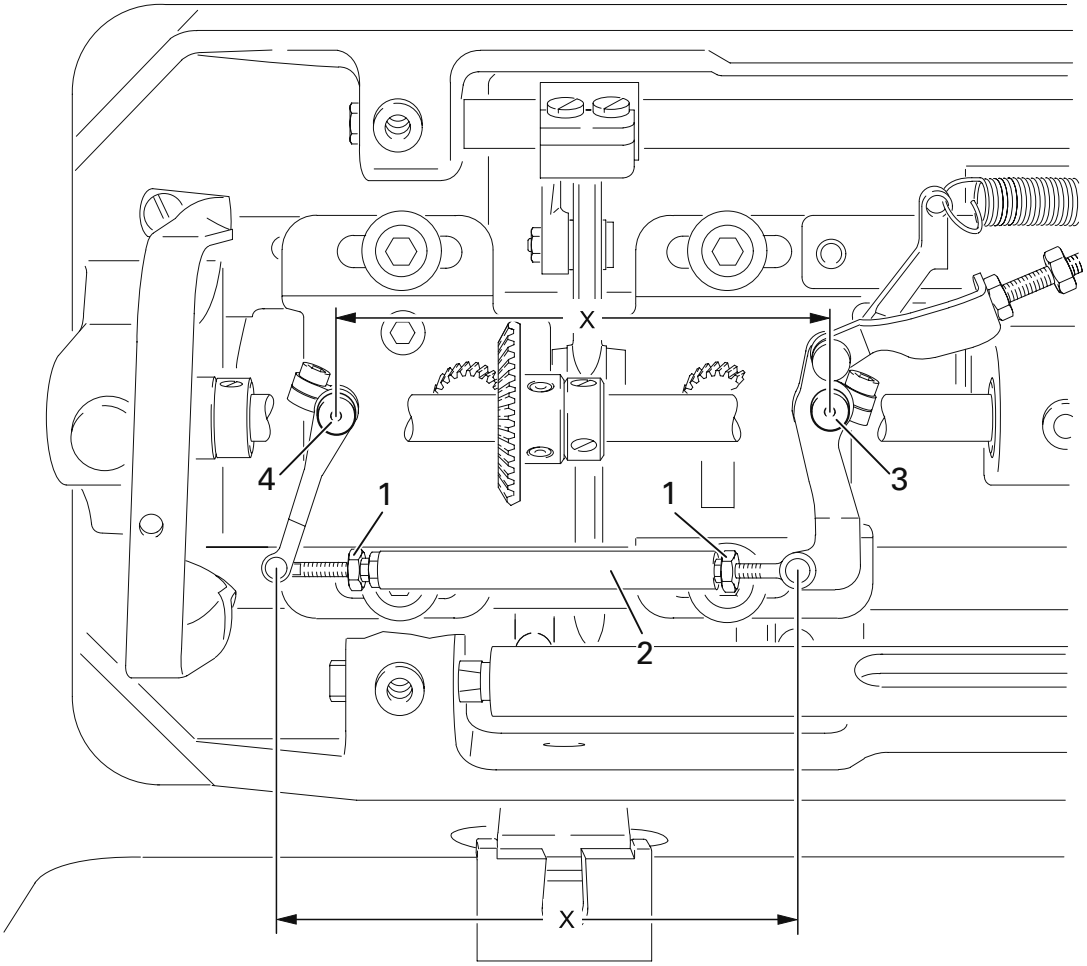


Fig. 13 - 27

- Loosen nuts **1** (right- and left-hand thread) when the cutting device is in the off-position.
- Measure the distance between shafts **2** and **3.**
- Rotate connecting rod **4** according to the **requirement**.
- Re-tighten nuts **1.**

13.06.11 Thread-catcher height (On Model 1246 make these adjustments on both thread catchers.)

Requirement
When thread catcher **2** is pushed forwards manually with the take-up lever at its TDC, the lower point of the thread catcher must pass **1 mm** over the back of hook **4.**

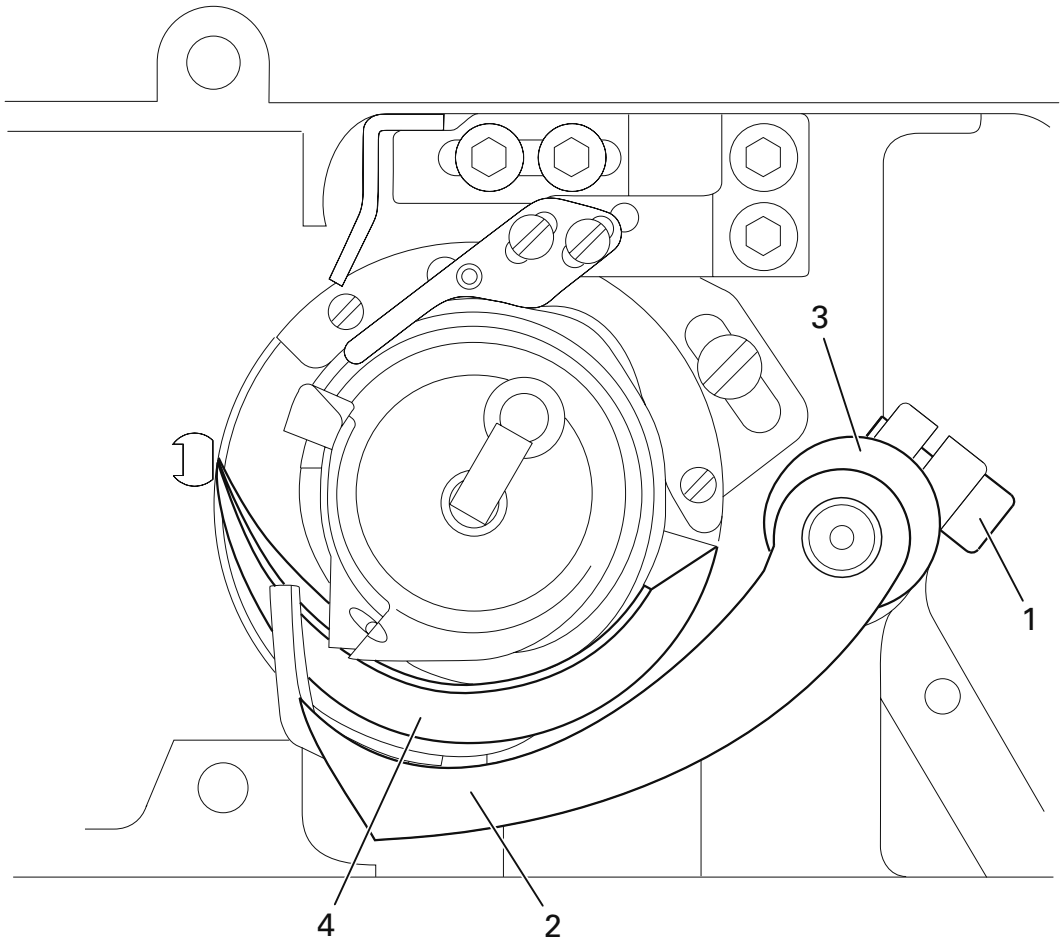
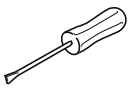


Fig. 13 - 28



- Loosen screw **1** enough so that thread catcher **2** can be turned.
- Loosen the screws in retaining collar **3.**
- Bring the take-up lever to its TDC by turning the handwheel.
- Move thread catcher **2** in accordance with the **requirement**.
- In this position, and taking care to ensure that retaining collar **3** is touching the shaft bushing, tighten screws **3** of the retaining collar.
- Carry out a check in accordance with the **requirement**.

Screw **1** remains loosened for the following adjustment.

13.06.12 Knife (On Model 1246 make these adjustments on both knives.)

Requirement

1. The elongated hole of knife **3** must be parallel to knife carrier **5** and the knife must not be touching the casting (see arrow).
2. When the point of needle catcher **4** protrudes approx. **3 mm** over the cutting edge of the knife, knife **3** must just touch thread catcher **4.**

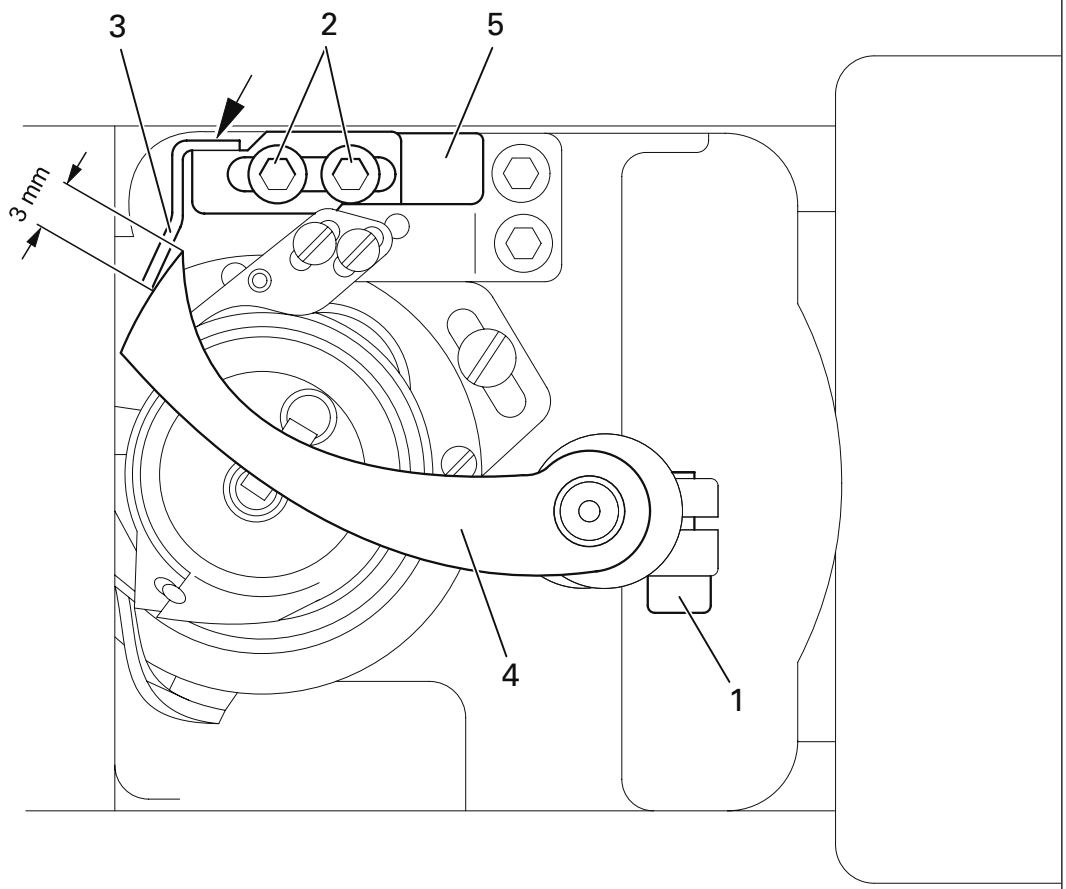
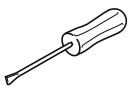


Fig. 13 - 29



- Loosen screws **2.**
- Move knife **3** in such a way that it cannot collide with thread catcher **4.**
- Taking care to ensure that screw **1** is loosened, manually turn thread catcher **4** in accordance with **requirement 2.**
- Bring knife **3** to rest against thread catcher **4** and align it in accordance with **requirement 1.**
- In this position tighten screws **2.**

Screw **1** remains loosened for the following adjustment.

13.06.13 Thread catcher reverse position

(On Model 1246 make these adjustments on both thread catchers.)

Requirement
At the front point of reversal of thread catcher **3,** its rear edge must be flush with the cutting edge of knife **4** (see arrow).

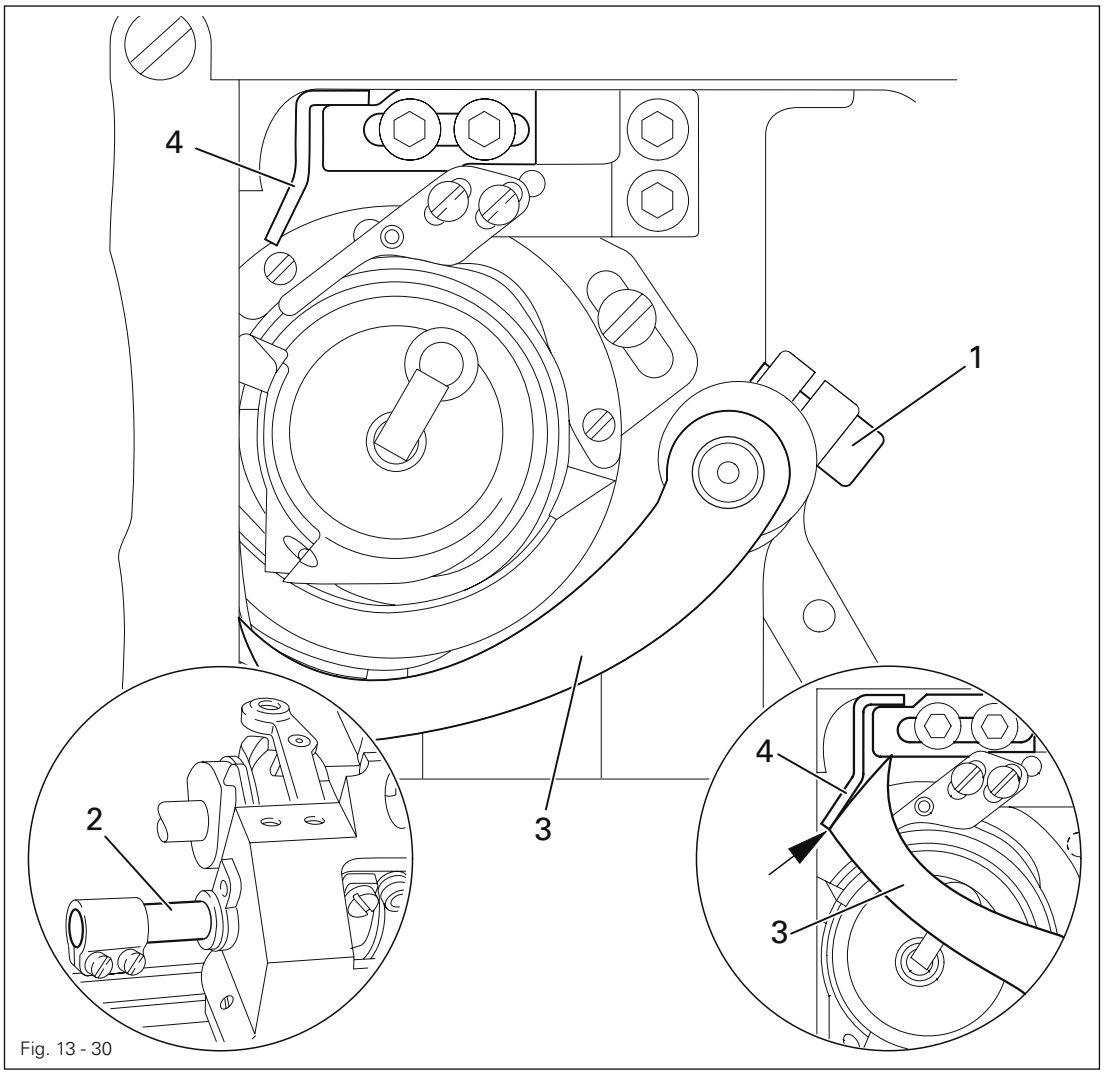
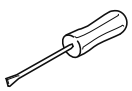


Fig. 13 - 30



- Taking care to ensure that screw **1** is loosened, bring the machine to needle rise position and activate the engaging lever.
- By continuing to turn the handwheel, bring rock shaft **2** to its left point of reversal.
- Maintaining this position, turn thread catcher **3** in accordance with the **requirement**.
- In this position and taking care to ensure that there is no horizontal play, tighten screw **1.**

13.06.14 Bobbin-thread clamp spring (On Model 1246 make these adjustments on both clamp springs.)

Requirement

1. Between clamp spring **5** and the bottom of thread catcher **4,** there must be a distance of **0.3 mm**.
2. At the front point of reversal of thread catcher **4,** the points of clamp spring **5** must be flush with the back edge of catcher **4** (see arrow).
3. There must be a distance of approx. **12 mm** between the inner edge of clamp spring **5** and guide sleeve **7.**
4. The bobbin-case must be able to be inserted and removed from the hook without any interference.

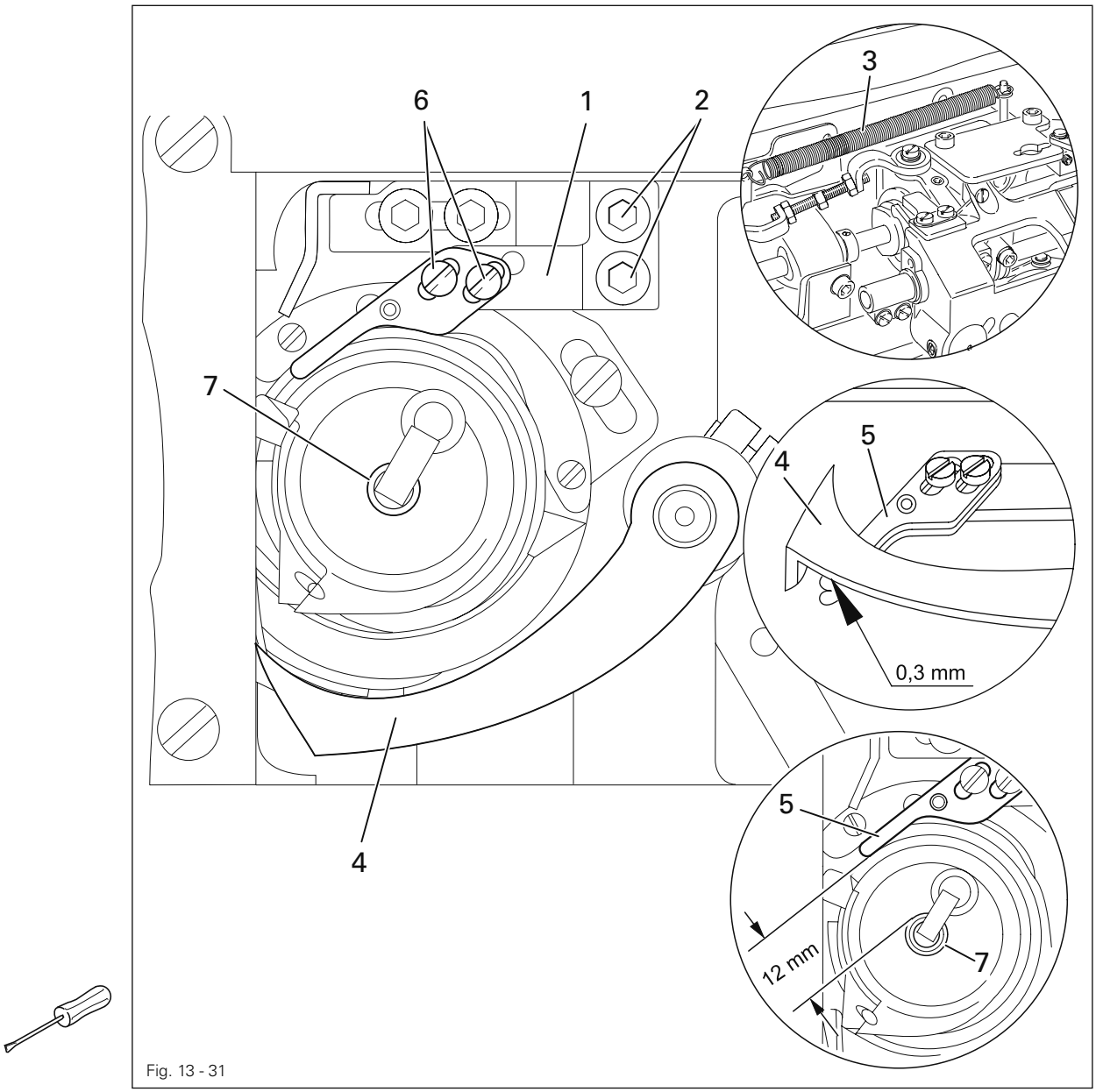


Fig. 13 - 31

- Align carrier **1** (screws **2**) in such a way that it is in the middle of its adjustment range and parallel to the bedplate of the machine.
- Unhook spring **3.**

- Manually pivot thread catcher 4 over clamp spring 5.
- Bend clamp spring 5 in accordance with requirement 1.
- Hook spring 3 back in again.
- Bring the machine to needle rise position, activate the engaging lever and bring the thread catcher to its front point of reversal by turning the handwheel.
- Align clamp spring 5 (screws 6) in the elongated hole in accordance with requirement 2 - if necessary carrier 1 (screws 2) as well.
- In this position, and taking care to ensure that carrier 1 is parallel to the machine bedplate, tighten screws 2 and 6.

13.06.15 Tension release bar

Requirement

1. With the cut-off mechanism in resting position and the presser foot raised, there must be a distance of approx. **7** mm between the left edge of release bar **8** and housing **9.**
2. When the point of thread catcher **5** is at the same height as the rear edge of stop trip **6** of the needle plate (see arrow) with the presser foot resting on the needle plate, the tension discs must be loosened to such an extent that the needle thread can be easily pulled through them.

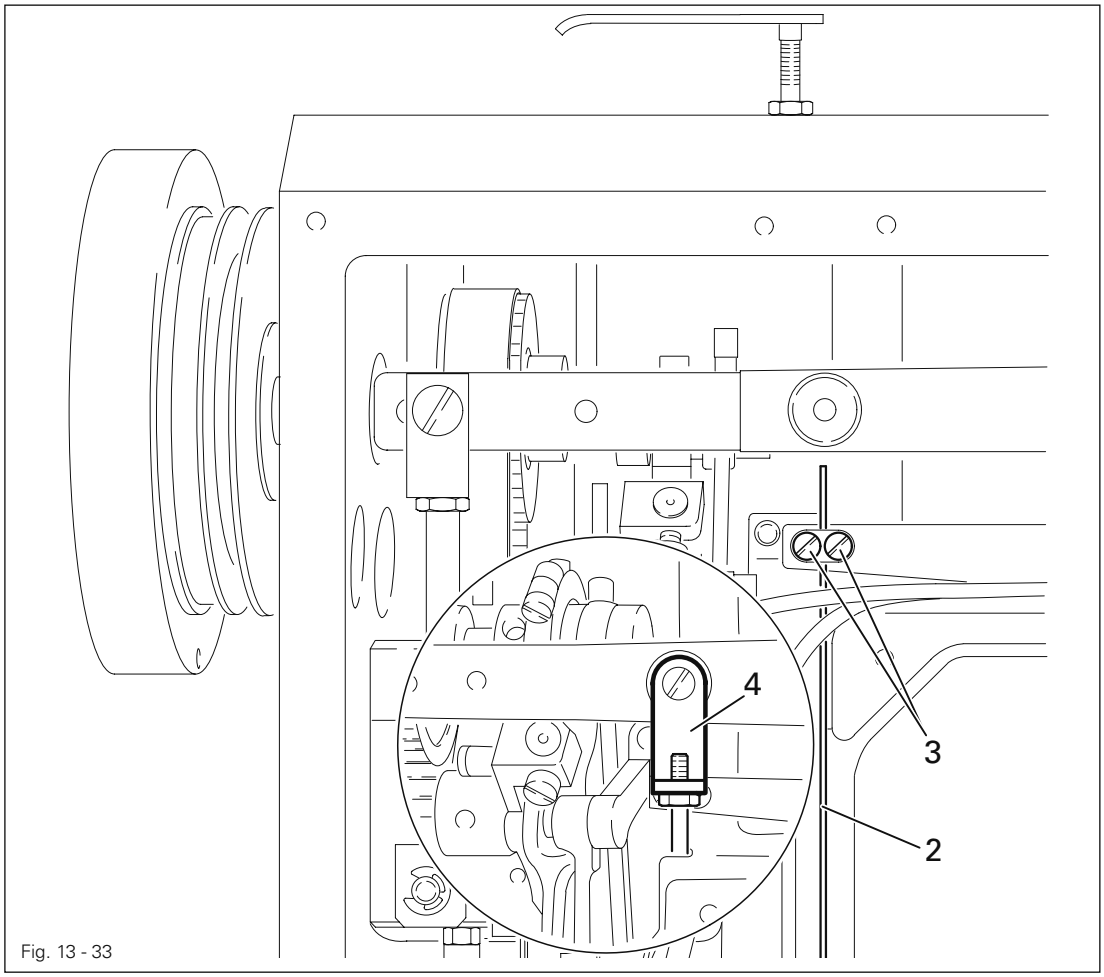
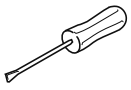


Fig. 13 - 33



- Taking care to ensure that the cut-off mechanism is in resting position, raise the presser foot.
- Loosen screws **1.**
- Set transmission bar **2** (screws **3)** to the height stipulated in **requirement 1.**

On machines without automatic presser-foot lifter (subclass -**911/97),** bracket **4** must be unscrewed to obtain access to screws **3.**

- By turning the handwheel, bring the machine to needle rise position and manually activate the engaging lever.

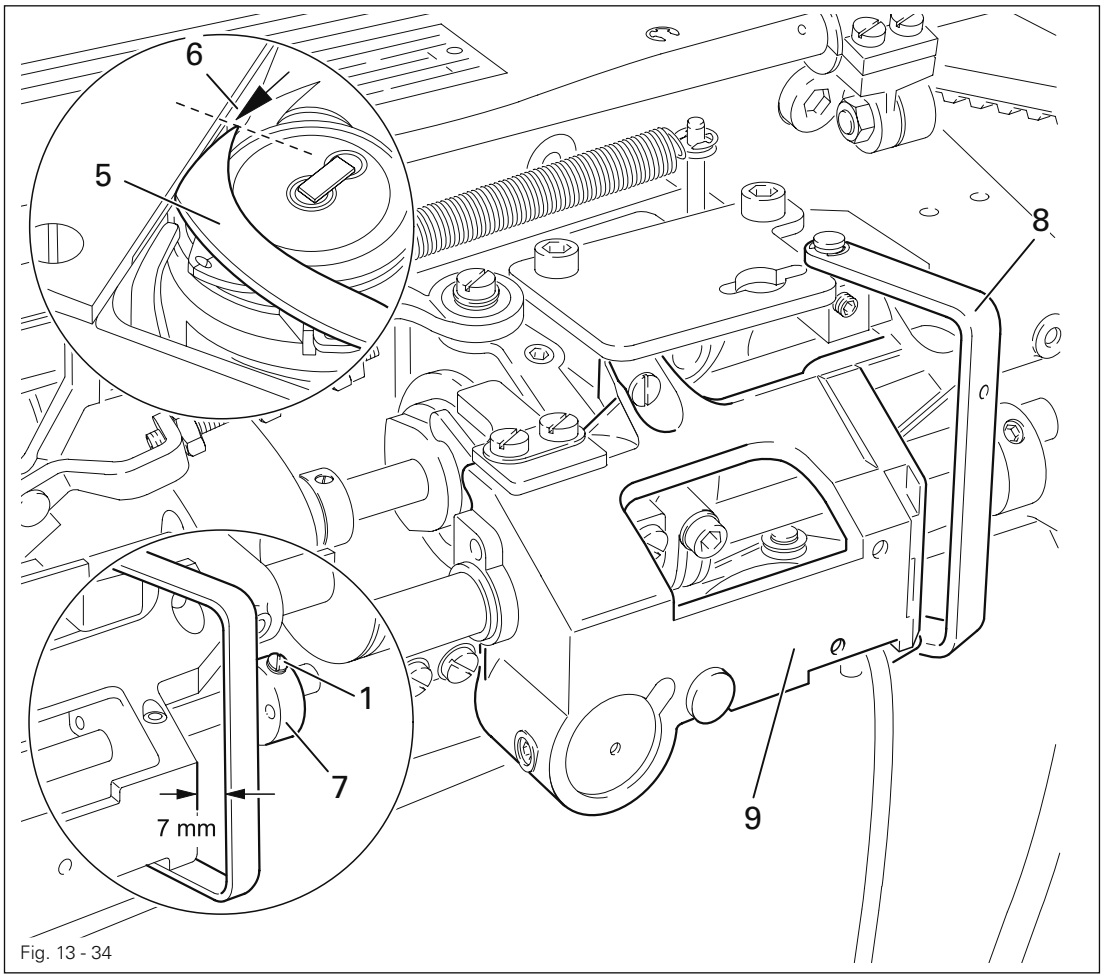


Fig. 13 - 34

- Allow the presser foot to rest on the needle plate.
- By continuing to turn the handwheel, position the point of thread catcher **5** at the same height as the edge of rear stop trip **6** of the needle plate and press release bar **8** to the left in accordance with **requirement 2** using retaining collar **7.**
- In this position tighten screws **1.**

The eccentricity of retaining collar **7** must be pointing downwards.

- Carry out a check in accordance with the requirement.

13.07 Parameter settings

(only on machines with Quick-EcoDrive and control unit P40ED)

- The selection of the user level and the alteration of parameters is described in the separate instruction manual for the drive unit.

13.07.01 Parameter list

Group	Parameter	Description	User lever	Setting range	Set value
1	105	Speed for start backtack	B, C	300 - 2000	800
	110	Speed for end backtack	B, C	300 - 2000	1000
6	607	Speed max.	B, C	300 - 2000	▲
	609	Cutting speed 1	B, C	60 - 300	180
7	700	Needle position 0 (needle reference position)	B, C	0 - 255	*
	702	Needle position 1 (needle lowered)	B, C	0 - 255	85
	703	Needle position 2 (take-up lever raised)	B, C	0 - 255	225
	705	Needle position 5 (end cutting signal 1)	B, C	0 - 255	100
	706	Needle position 5 (start cutting signal 2)	B, C	0 - 255	85
	707	Needle position 9 (start thread tension release/start thread catcher)	B, C	0 - 255	195
	722	Acceleration ramp	B, C	0 - 255	50
	723	Brake ramp	B, C	0 - 255	40
	734	Tact output A2 (thread trimming)	B, C	001 - 009	0
	760	Multiplier for the fixed value (200) stitch count	A,B, C	0 - 250	5
	799	Selected machine class	C	1 - 4	2
8	800	Rotating direction of the motor	C	0 - 1	1
	884	Proportional sensitivity of the speed control unit	B,C	03 - 24	12
	897	Variant mini-motor, 1 = long, 2 = short	C	0 - 1	1
9	900	Additional P- sensitivity of the speed control unit	B,C	1 - 24	10

▲ See Chapter 3 Specifications

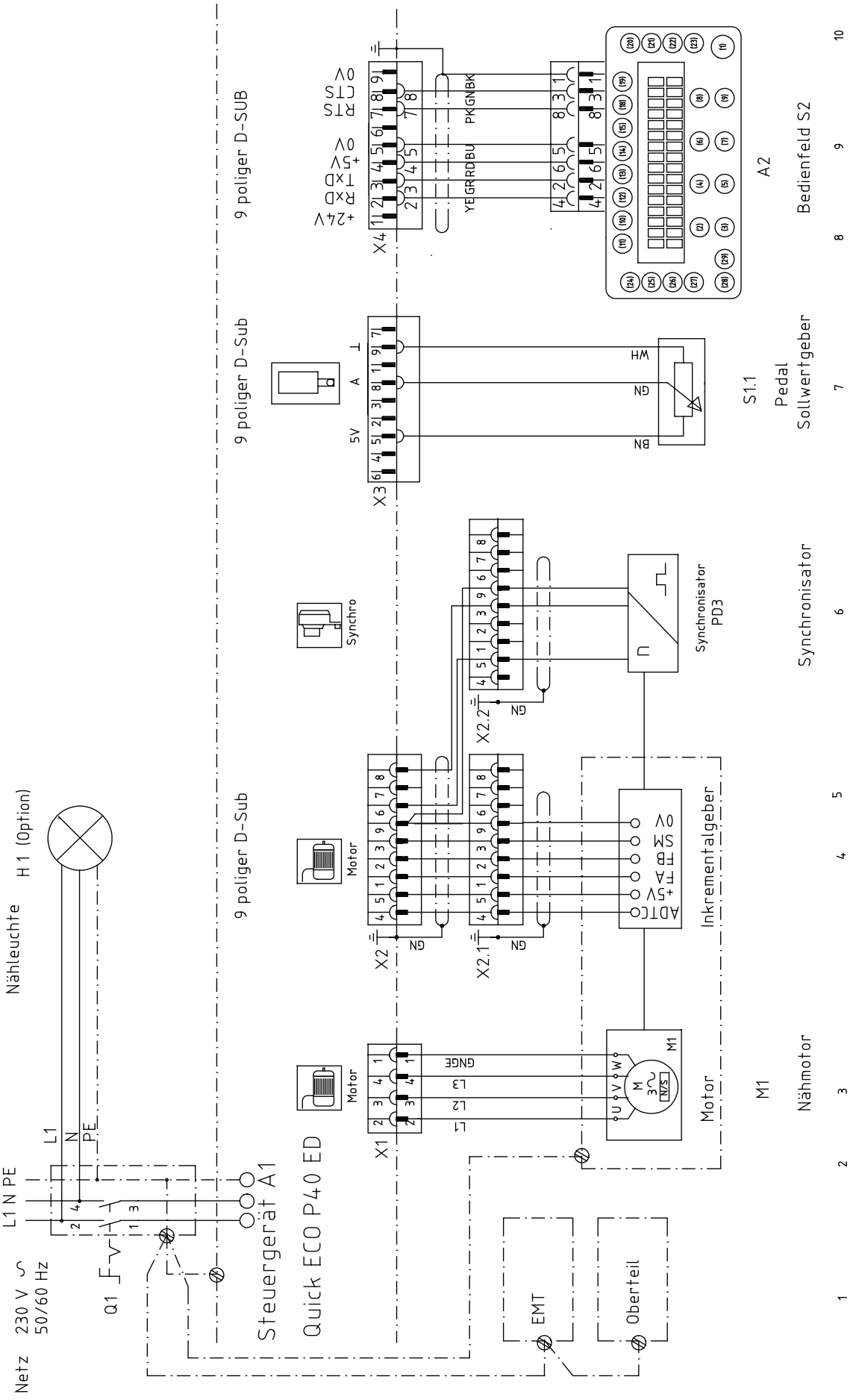
* Adjustment see Chapter 8.05 Basic position of the machine drive unit (in the machine instruction manual).

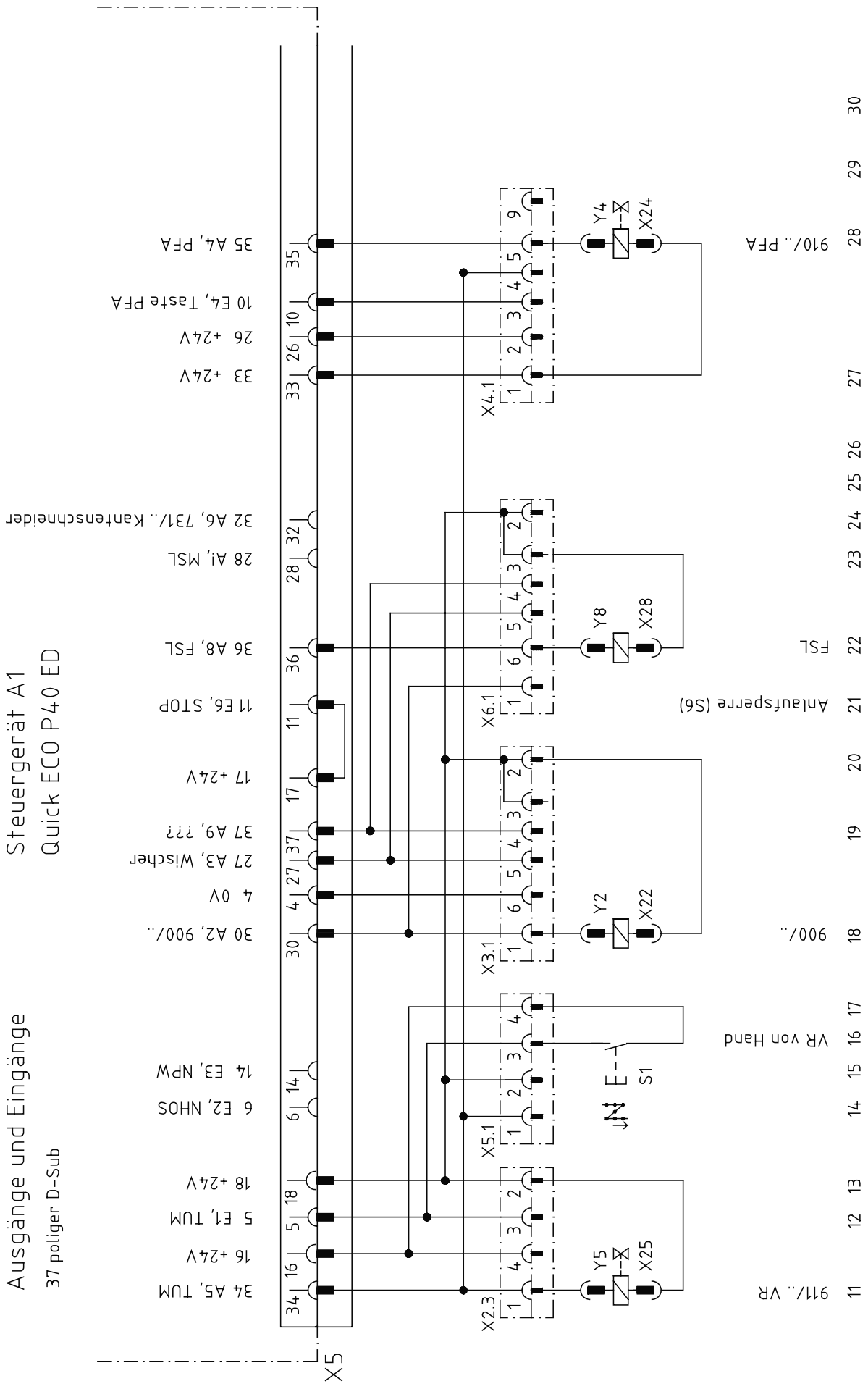
Further parameters and the description for an internet update of the machine software and reset /cold start of the machine can be found in the instruction manual for the control panel.

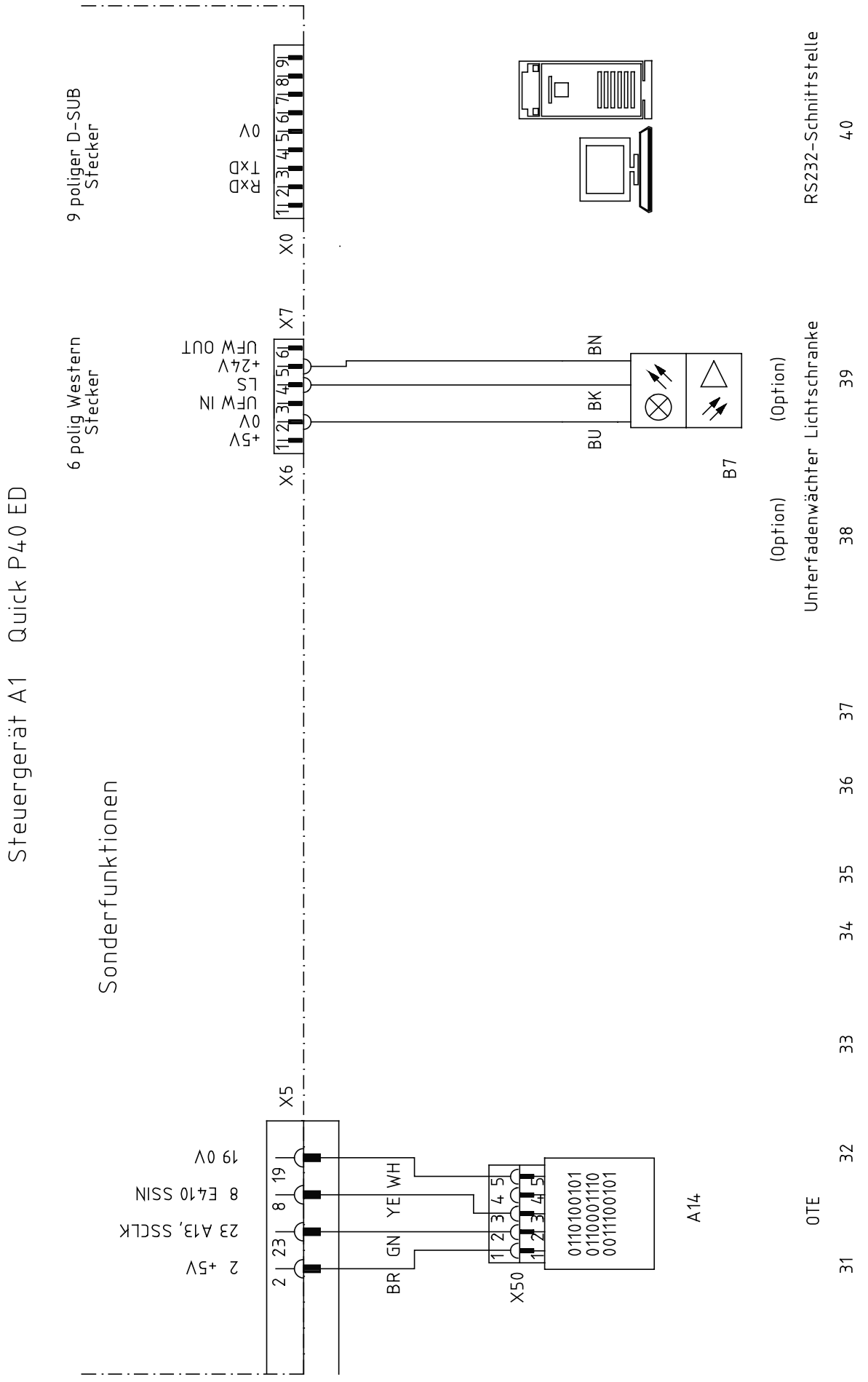
14 Circuit diagrams

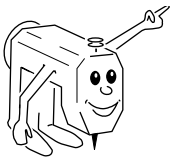
Reference list for the Circuit diagrams

A1	Control unit Quick P40 ED
A2	Control panel BDF S2
A14	Sewing head recognition system (OTE)
H1	Sewing lamp (optional)
H10	LED stitch counter
M1	Sewing motor
Q1	Main switch
S1	Manual backtacking key
S1.1	Pedal speed control unit
S2	Needle position change key
S3	Single stitch key
S6	Start inhibitor (E6 stop)
X0	PC-interface (RS 232)
X1	Motor
X2	Incremental transducer
X2.1	Incremental transmitter adapter
X2.2	Synchronizer adapter
X2.3	Y5-911/.. backtacking device
X3	Speed control unit
X3.1	Y2-900/.. thread trimmer (FS)
X4	A2 control panel plug BDF S2
X4.1	Y4 -910/.. automatic foot lift
X5	Out-/input
X6	Bobbin thread monitor (optional)
X6.1	Y8 Thread tension release
X7	Photoelectric barrier (optional)
X22	Y2 -900/.. thread trimmer (FS)
X24	Y4 -910/.. automatic foot lift
X25	Y5 -911/.. backtacking device
X28	Y8 Thread tension release
X40	S1-3 Control panel
X50	A14 Sewing head recognition system (OTE)
Y2	-900/.. thread trimmer
Y4	-910/.. automatic foot lift
Y5	-911/.. backtacking device
Y8	Thread tension release


Netz 230 V ~ 50/60 Hz
L1 N PE
Q1
Steuergerät A1
Quick ECO P40 ED
Nähleuchte H1 (Option)
9 poliger D-Sub
9 poliger D-Sub
9 poliger D-Sub
X1
X2
X2.1
X2.2
X3
X4
Motor
Motor
Synchro
Motor
Inkrementalgeber
Synchronisator PD3
Synchronisator
Pedal Sollwertgeber
S1.1
A2
Bedienfeld S2
M1
Nähmotor
EMT
Oberteil
1
2
3
4
5
6
7
8
9
10


Steuergerät A1
Quick ECO P40 ED
Ausgänge und Eingänge
37 poliger D-Sub
X5
34 A5, TUM
16 +24V
5 E1, TUM
18 +24V
6 E2, NHOS
14 E3, NPW
30 A2, 900/..
4 0V
27 A3, Wischer
37 A9, ???
17 +24V
11 E6, STOP
36 A8, FSL
28 A1, MSL
32 A6, 731/.. Kantenschneider
33 +24V
26 +24V
10 E4, Taste PFA
35 A4, PFA
X2.3
X5.1
X3.1
X6.1
X4.1
Y5
X25
S1
Y2
X22
Y8
X28
Y4
X24
911/.. VR
VR von Hand
900/..
FSL
Anlaufsperre (S6)
910/.. PFA


Steuergerät A1 Quick P40 ED
Sonderfunktionen
9 poliger D-SUB Stecker
6 polig Western Stecker
X0
X6
X7
X5
X50
A14
B7
0V
TxD
RxD
+5V
0V
UFW IN
LS
+24V
UFW OUT
BU
BK
BN
WH
YE
GN
BR
0110100101
0110001110
0011100101
RS232-Schnittstelle
Unterfadenwächter Lichtschranke
(Option)
(Option)
OTE
40
39
38
37
36
35
34
33
32
31



Notes

PFAFF® Industrial

Europäische Union
Wachstum durch Innovation – EFRE

PFAFF Industriesysteme
und Maschinen AG

Hans-Geiger-Str. 12 - IG Nord
D-67661 Kaiserslautern

Phone: +49-6301 3205 - 0
Fax: +49-6301 3205 1386
E-mail: info@pfaff-industrial.com

Hotlines:
Technical service: +49-175/2243-101
Application consultance: +49-175/2243-102
Spare-parts hotline: +49-175/2243-103

Printed in Germany