

1245

1246

ADJUSTMENT MANUAL

This adjustment manual applies to machines from the serial number **7 262 454** and software version **0435/002** onwards.

Reprinting, reproduction and/or translation of PFAFF adjustment manuals (including parts thereof) is only permitted with our prior agreement and citation of the source.

**PFAFF Industriesysteme
und Maschinen GmbH**

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

	Contents	Page
13	Adjustment	5
13.01	Tools, gauges and other accessories	5
13.02	Abbreviations	5
13.03	Explanation of symbols	5
13.04	Adjusting basic machine	6
13.04.01	Feed dog position crossways to sewing direction	6
13.04.02	Feed dog position in sewing direction	7
13.04.03	Feed dog height	8
13.04.04	Needle position to needle hole	9
13.04.05	Needle height (pre-calibrating)	10
13.04.06	Bottom and top feed sliding movement	11
13.04.07	Bottom transporter stroke movement (only in machine versions with a P)	12
13.04.08	Hook-to-needle clearance, needle bar rise, needle height and needle guard	13
13.04.09	Top feed lift	14
13.04.10	Top feed stroke movement	15
13.04.11	Bobbin case opener (make this adjustment on both bobbin case openers with the Pfaff 1246)	16
13.04.12	Safety clutch	17
13.04.13	Needle thread tension release	18
13.04.14	Thread check spring (with the PFAFF 1245 and PFAFF1246 without thread trimmer -900/56) .	19
13.04.15	Thread check spring (with the PFAFF 1246 with thread trimmer -900/56)	20
13.04.16	Bobbin winder	21
13.04.17	Presser foot pressure	22
13.05	Adjusting thread trimmer -900/56	23
13.05.01	Control cam (pre-calibrating)	23
13.05.02	Tripping lever	24
13.05.03	Pawl	25

Table of Contents

	Contents	Page
13.05.04	Engaging solenoid.....	26
13.05.05	Release cam	27
13.05.06	Engaging lever	28
13.05.07	Connecting rod	29
13.05.08	Control cam (pre-calibrating)	30
13.05.09	Catch.....	31
13.05.10	Connecting rod (only with the PFAFF 1246)	32
13.05.11	Thread catcher height (make this adjustment on both thread catchers with the PFAFF 1246)	33
13.05.12	Knife (make this adjustment on both knives with the PFAFF 1246)	34
13.05.13	Thread catcher reverse position (make this adjustment on both thread catchers with the PFAFF 1246)	35
13.05.14	Bobbin thread clamp spring (make this adjustment on both clamp springs with the PFAFF 1246)	36
13.05.15	Tension release lever.....	37
13.06	Adjusting lifting lever with subclass -911/97.....	38
13.07	Adjusting lifting lever without subclass -911/97.....	39
13.08	Parameter settings	40
13.09	Internet update of control P40 CD	40
14	Circuit Diagrams 91-191 585-95	41

13 Adjustment



The illustrations in this chapter show the **PFAFF 1245** single-needle machine. Various settings must be duplicated with the **PFAFF 1246** two-needle machine, i.e. in the left and right hook area.

An indication is given in the respective chapters where some illustrations are to be considered as a mirror image.



Observe and comply with all instructions in the operating manual's **chapter 1 Safety!** In particular make sure that all safety covers are installed again correctly after making adjustments, see **chapter 1.06 Operating manual** hazard information!



Unless otherwise stated, the machine must be disconnected from the power supply before all adjustment work!
Risk of injury due to accidental machine start-up!

Notes on adjustment

All adjustments in this manual are based on a fully assembled machine and may only be carried out by technical 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 that have to be completely adjusted. Both the preceding and following chapters must be observed if only specific individual work steps are carried out. Screws and nuts indicated in brackets () are fastenings for machine parts, which must be loosened before any adjustment and tightened again afterwards.

13.01 **Tools, gauges and other accessories**

- 1 set of screwdrivers with knife widths from 2 to 10 mm
- 1 set of wrenches with jaw widths from 7 to 14 mm
- 1 set of Allen keys from 2 to 6 mm
- 1 metal ruler (order no. 08-880 218-00)
- Needle rise gauge (order no. 61-111 600-01)
- Screw clamp (order no. 61-111 600-35)
- Top feed lift gauge (order no. 61-111 633-61).

13.02 **Abbreviations**

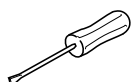
t.d.c. = top dead centre
b.d.c. = bottom dead centre

13.03 **Explanation of symbols**

Activities to be performed or important information in this adjustment manual are emphasised by symbols. The symbols used have the following meaning:



Note, information



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

13.04 Adjusting basic machine

13.04.01 Feed dog position crossways to sewing direction

Rule

The bottom transporter should have the same clearance on the right and left in the needle plate recess.

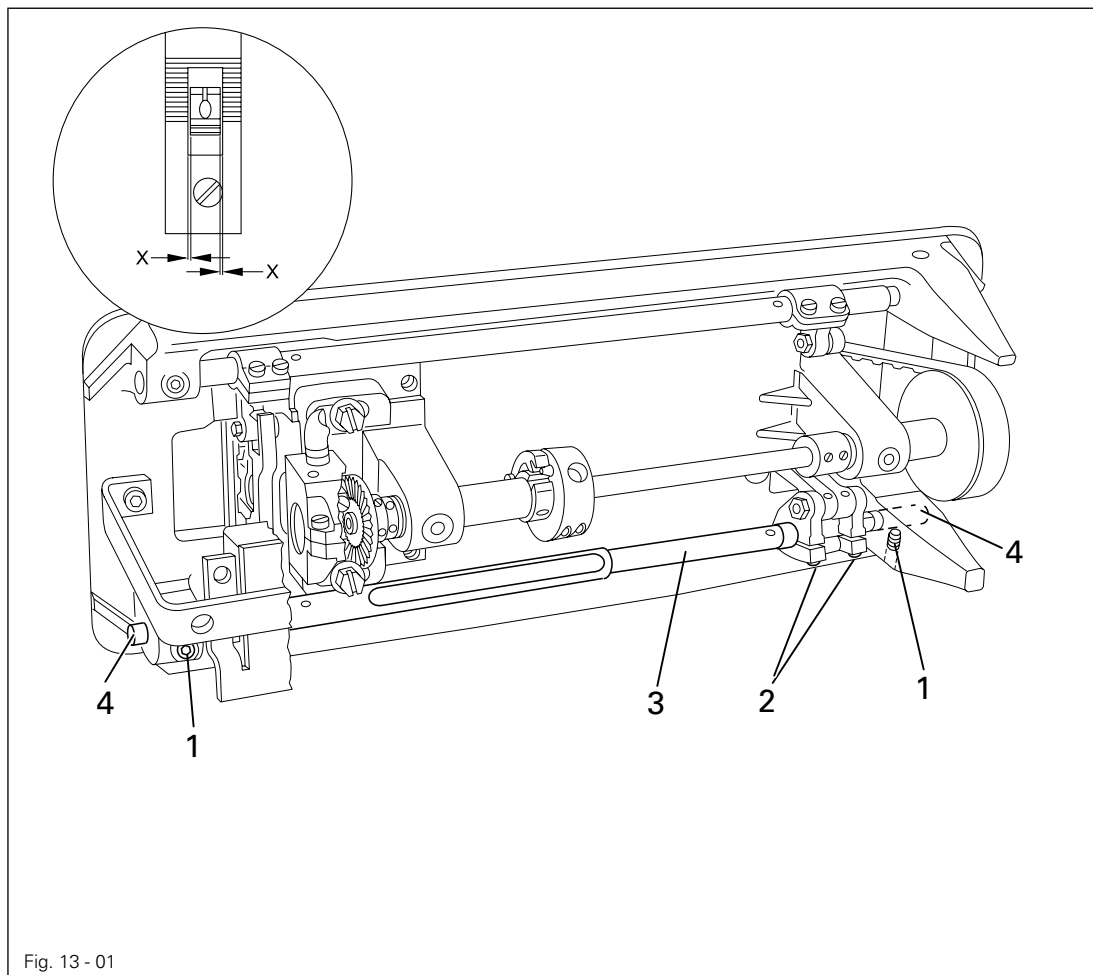
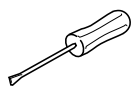


Fig. 13 - 01



- Loosen both of the screws 1 and 2.
- Adjust the rock shaft 3 according to rule 1.
- Tighten the screws 1



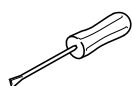
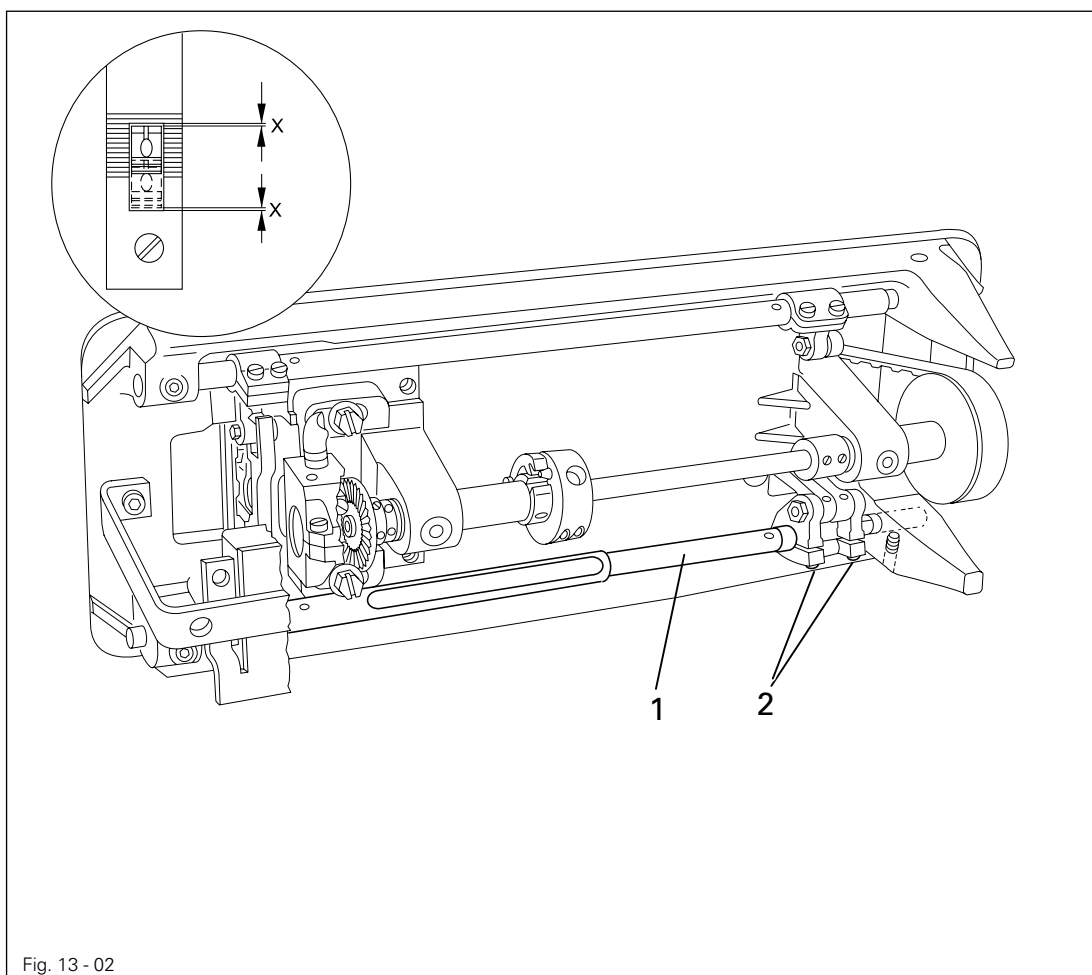
The surfaces of the tacks 4 must face the screws 1 and the rock shaft 3 must have no backlash nor move sluggishly.

- The screws 2 remain loosened for the subsequent adjustments.

13.04.02 Feed dog position in sewing direction

Rule

The bottom transporter should have the same clearance at the front and back in the needle plate recess in forward and reverse feed at the maximum stitch length setting.

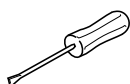
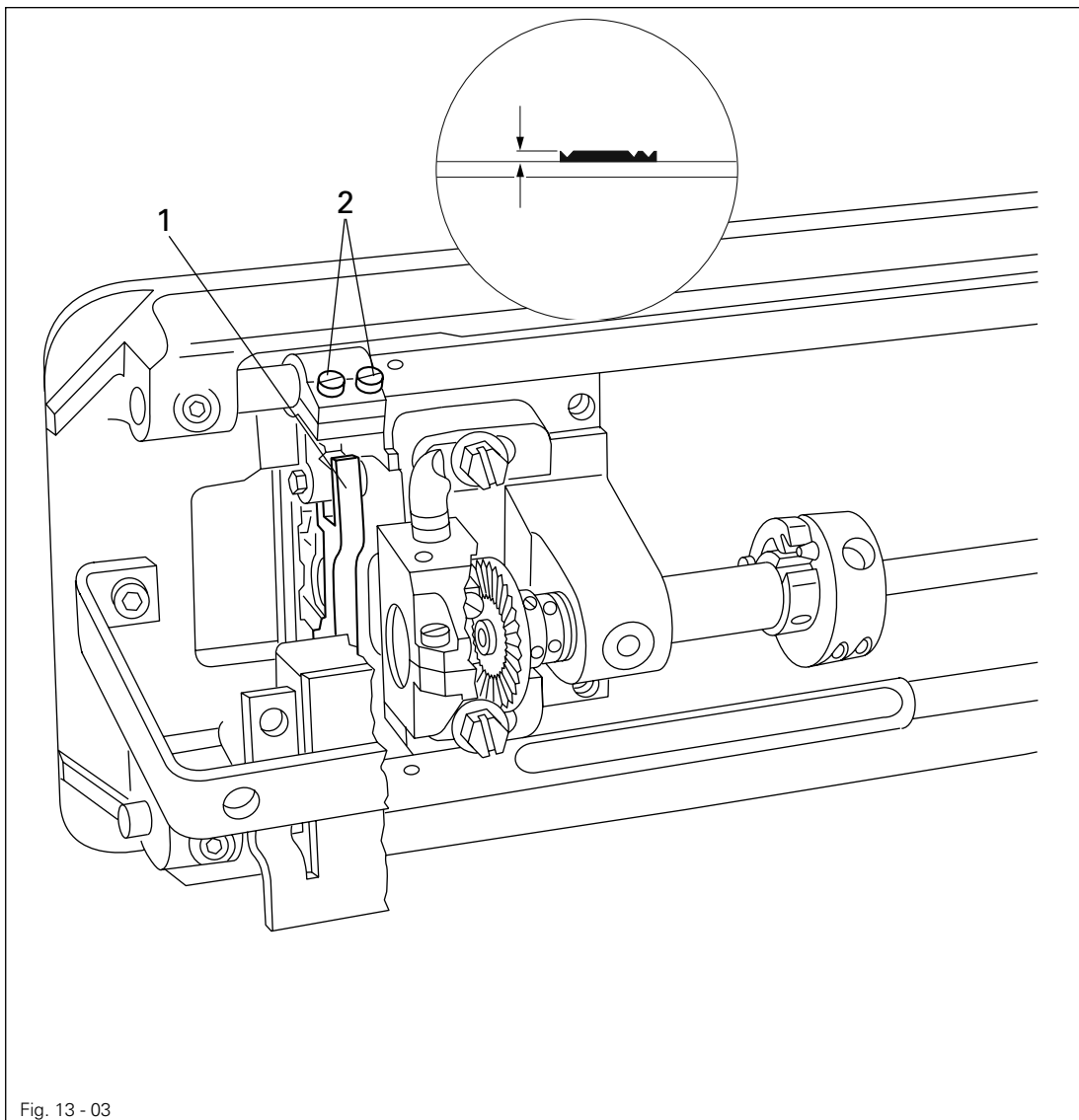


- Set the maximum stitch length.
- Turn the rock shaft **1** according to the **rule** and tighten the screws **2**.

13.04.03 Feed dog height

Rule

The bottom transporter should protrude above the needle plate by the tooth height in its upper turning point at stitch length regulation "0".



- Set the stitch length to "0".
- Move the feed dog to its upper turning point by turning the handwheel.
- Adjust the bracket 1 (screws 2) according to the rule.



The feed dog height can be reduced slightly if required in machines without a bottom feed lifting stage (without P).

13.04.04 Needle position to needle hole

Rule

The needle should pierce the middle of the needle hole exactly (with stitch length regulation "0").

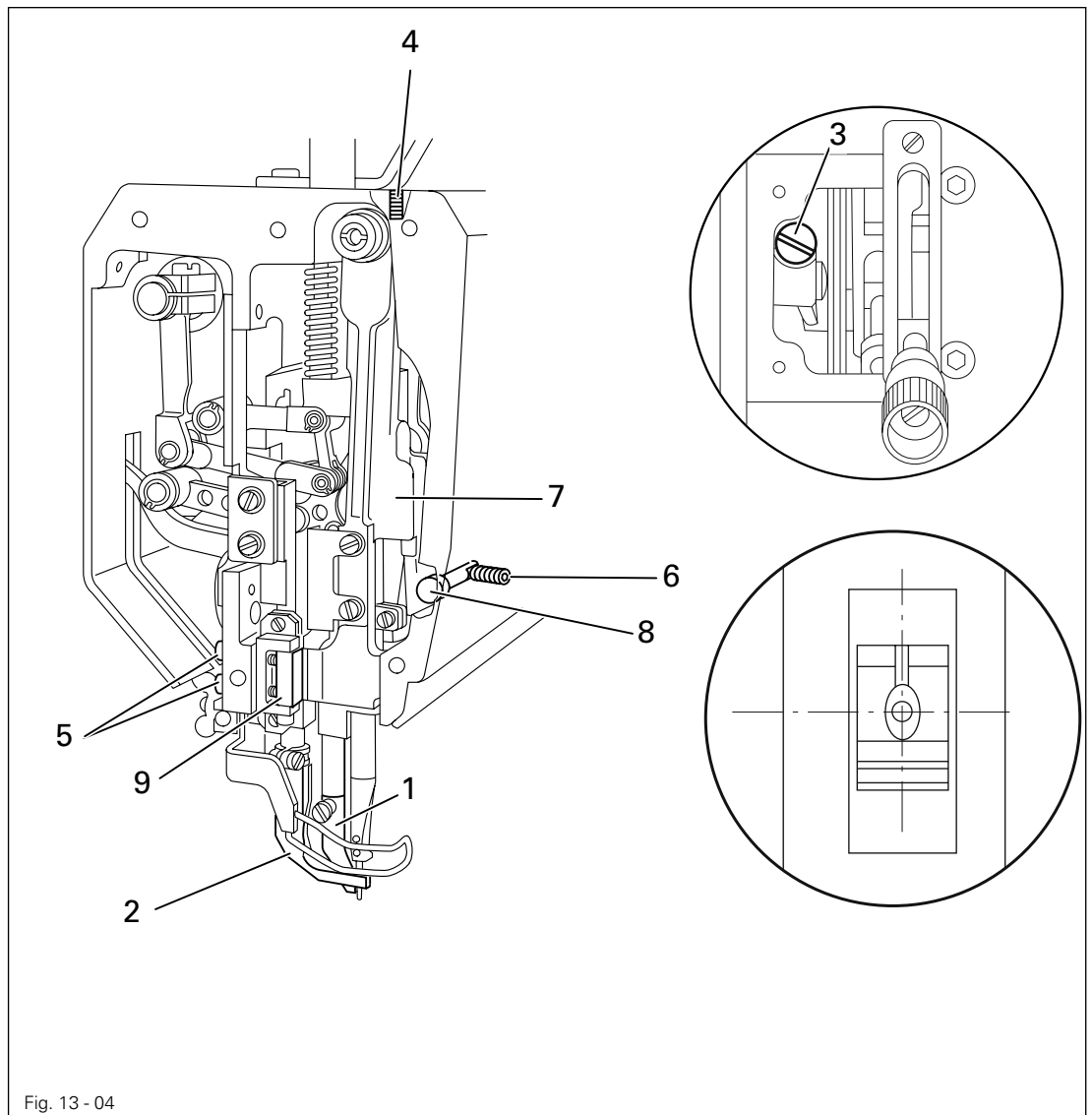
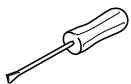


Fig. 13 - 04



- Unscrew the top feed foot 1 and the presser foot 2.
- Set the stitch length to "0" and move the needle bar to t.d.c.
- Insert a new needle, loosen the screws 3, 4, 5 and 6.
- Move the needle directly over the needle hole by turning the handwheel.
- Move the needle bar frame 7 according to the rule.
- Tighten the screws 3, 4 and 5.
- Move the stop 8 so that it touches the needle bar frame 7 and tighten the screws 6.

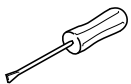
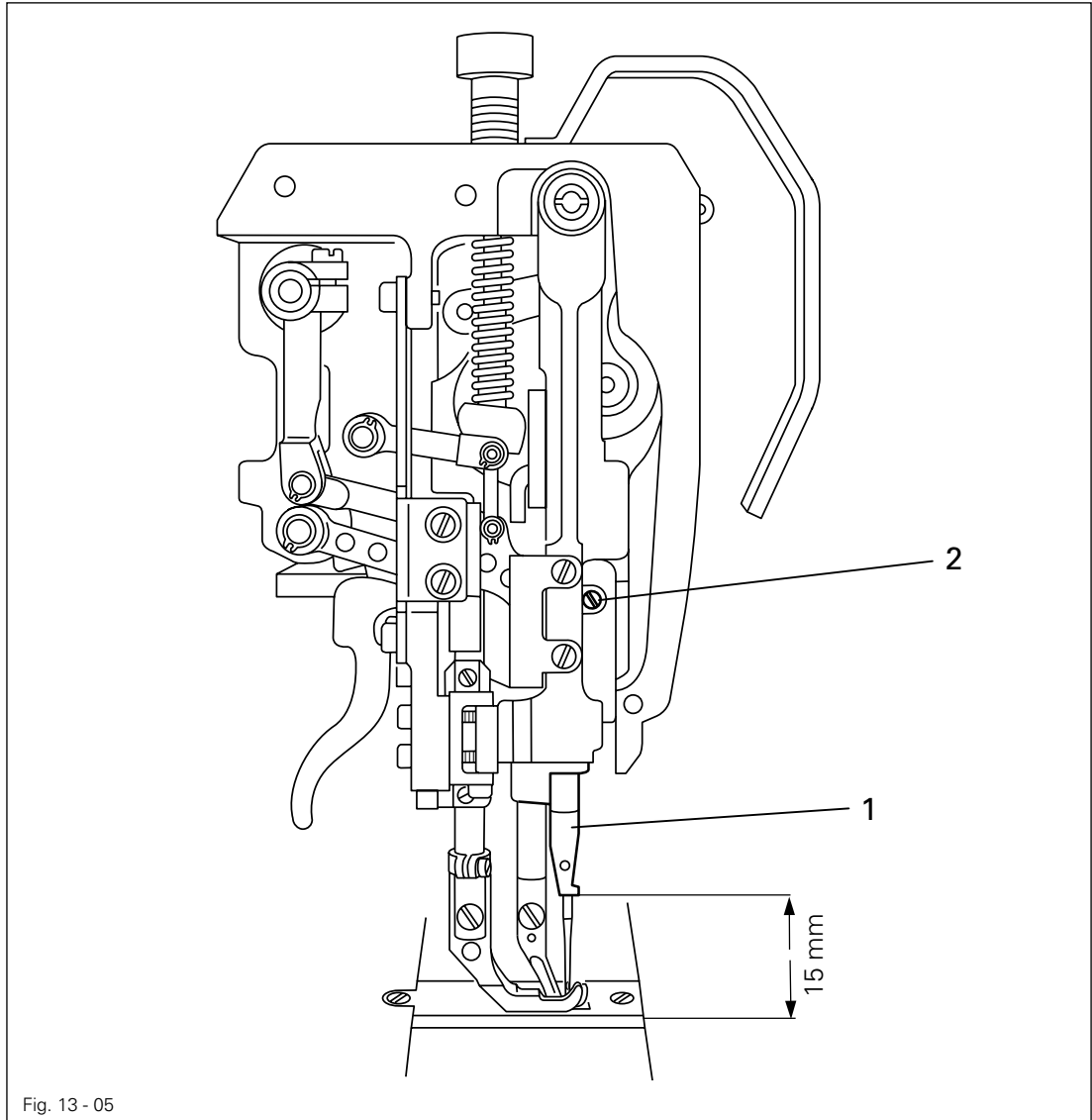


The needle bar frame 7 in the guide 9 and the top feed drive rods should move easily.

13.04.05 Needle height (pre-calibrating)

Rule

When the needle bar is in b.d.c., the clearance between the needle bar and needle plate should be **15 mm**.

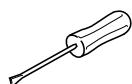
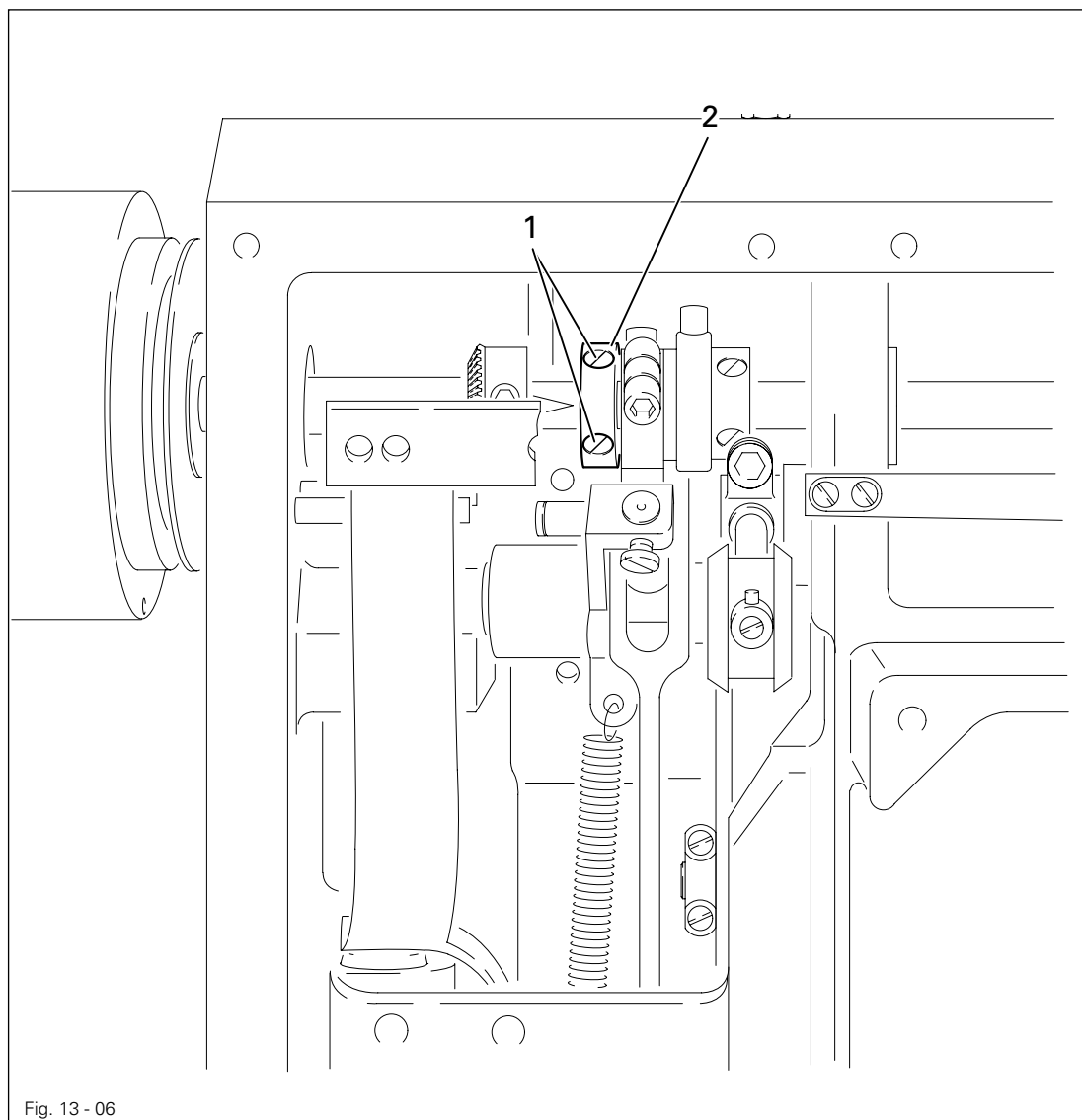


- Adjust the needle bar 1 (screw 2) without twisting according to the rule.

13.04.06 Bottom and top feed sliding movement

Rule

The top and bottom feed should not move when the reverse-feed lever is activated with maximum stitch length regulation and when the needle bar is in b.d.c.

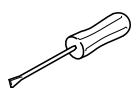
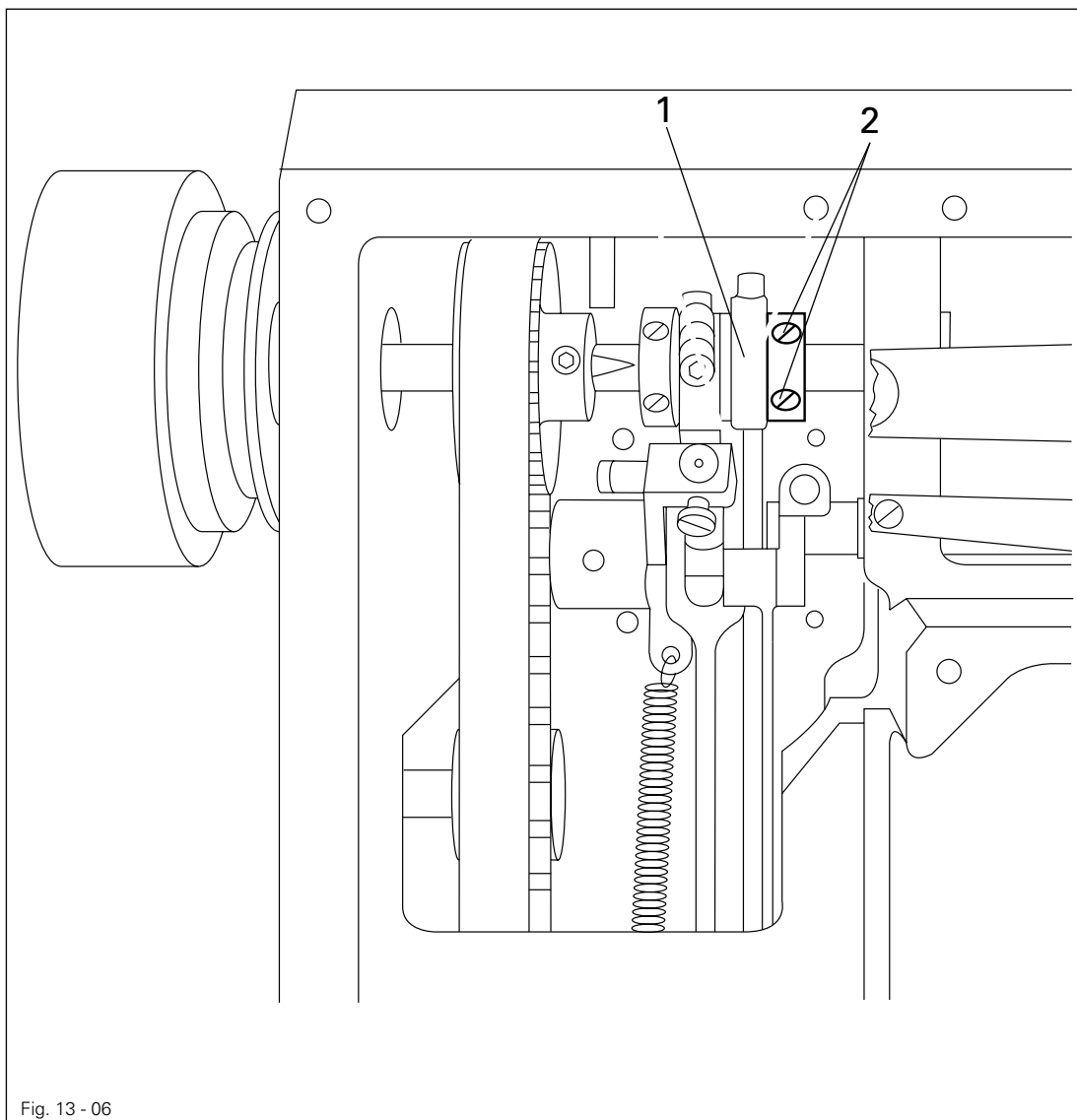


- Set the maximum stitch length.
- Loosen the screws 1 only to such an extent that the eccentric 2 is difficult to turn on the shaft.
- Move the needle bar to b.d.c.
- While maintaining this position, initially position the eccentricity of the eccentric 2 to "up" and then adjust it slightly so that it complies with the rule when the reverse-feed lever is activated.
- Tighten the screws 1.

13.04.07 Bottom transporter stroke movement (only in machine versions with a P)

Rule

1. The bottom transporter should be in its upper turning point when the needle bar is in b.d.c.
2. The tooth tips of the feed dog should be at the same level as the surface of the needle plate with maximum stitch length regulation, when the needle points pierce the middle of the needle holes.



- Move the needle bar to b.d.c.
- Turn the eccentric 1 (screws 2) according to rule 1.
- Tighten the accessible screw 2 in this position so that the eccentric 1 is still difficult to turn.
- Turn the eccentric 1 a little further according to rule 2.
- Tighten both the screws 2.

13.04.08 Hook-to-needle clearance, needle bar rise, needle height and needle guard (The setting of the left hook is omitted with the PFAFF 1245)

Rule

When the needle rise is positioned 2.0 mm after b.d.c. of the needle bar and with stitch length regulation "3",

1. the hook point should be at the needle midpoint and have a clearance of 0.05 to 0.1 mm to the needle.
2. The upper edge of the needle eye should be 0.8 to 1.0 mm under the tip of the hook.
3. the needle guard 5 should lightly touch the needle.

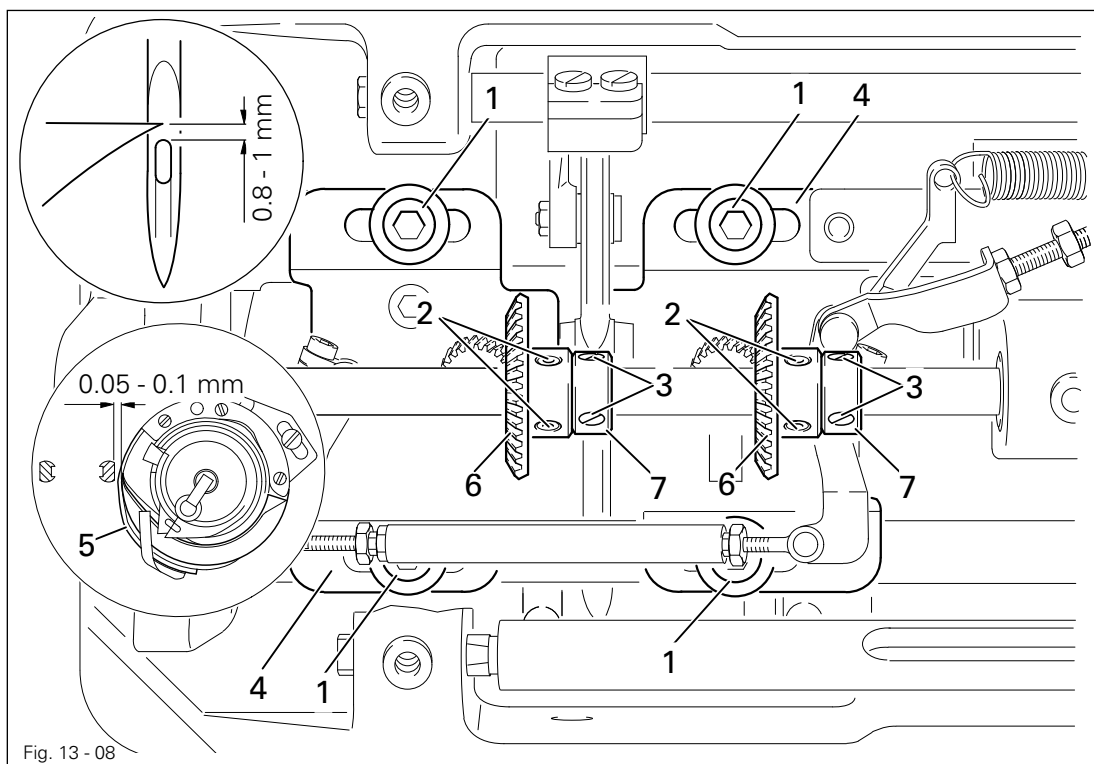
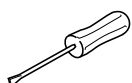


Fig. 13 - 08



- Set the stitch length to "3".
- Loosen the screws 1, 2 and 3.
- Move the needle bar to b.d.c. and slide the feeler gauge corresponding to the version with its recess tightly under the lower needle bar bearing. Move the screw clamp so that it touches the feeler gauge and tighten it.
- Remove the feeler gauge and turn the handwheel in the direction of rotation until the screw clamp rests on the needle bar bearing
- Adjust the hook bearing bracket 4 according to rule 1.
- Tighten the screws 1
- Set the hook point on the middle of the needle and take care that the needle is not squeezed by the needle guard 5.
- Tighten the screws 2, ensuring that the bevel gear 6 is not too tight, but that there is not too much play on the hook.
- Adjust the retaining collar 7 up against the bevel gear 6 and tighten the screws 3.
- Adjust the needle height according to rule 2.
- Align the needle guard 5 according to rule 3.

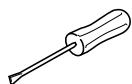
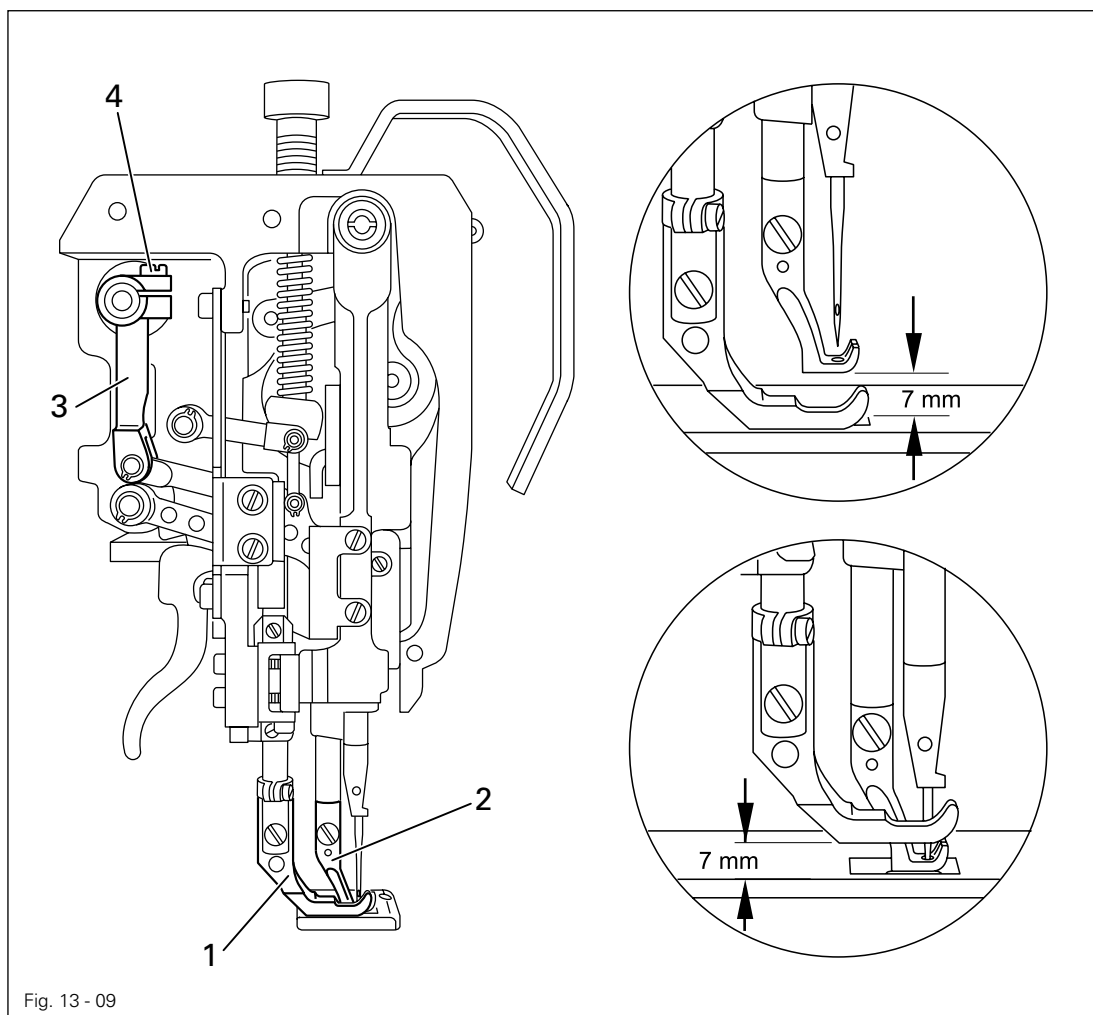


With the PFAFF 1246 it is important to readjust the position of the connecting rod to the thread trimmer attachment after changing the needle gauge (see chapter 13.05.10 Connecting rod) .

13.04.09 Top feed lift

Rule

The presser foot 1 and top feed foot 2 should each lift 7.0 mm off the needle plate when turning the handwheel at the maximum top feed lift position and when the stitch length is set to "0".



- Set the maximum top feed lift and set the stitch length to "0".
- Fit the presser foot 1.
- Turn the handwheel in the direction of rotation until the top feed foot 2 has reached its highest point.
- Turn the crank 3 (screws 4) according to the rule.
- Carry out a check according to the rule.

13.04.10 Top feed stroke movement

Rule

The presser foot **6** and the needle point should reach the needle plate at the same time at maximum top feed lift if the presser foot **1** rests on the needle plate.

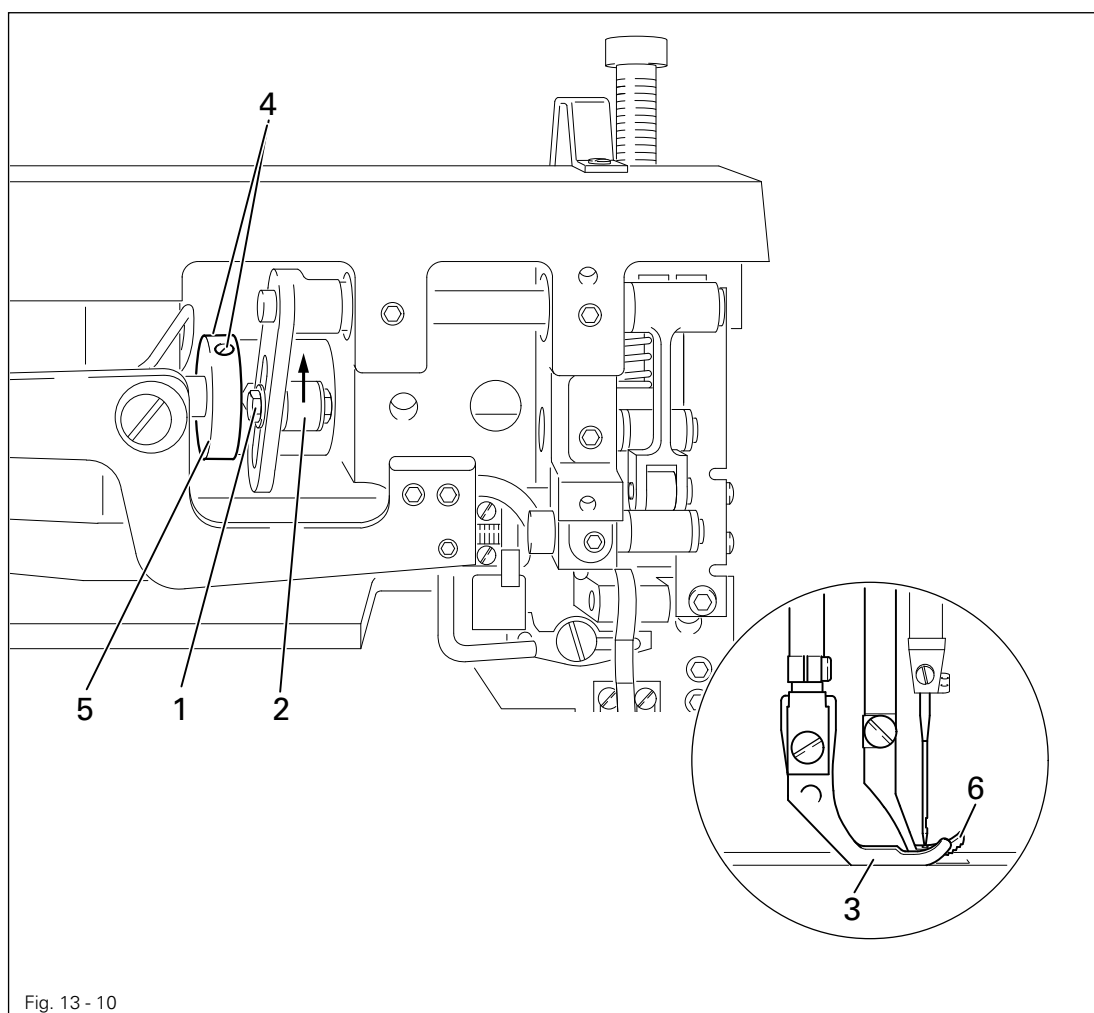
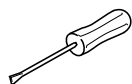


Fig. 13 - 10



- Loosen the screw **1**.
- Slide the lever **2** in its slotted lever until you feel it reach the upper stop (maximum top feed lift); tighten the screw **1**.
- Lower the presser foot **3** onto the needle plate.
- Loosen the screws **4** until the eccentric **5** is difficult to turn.
- Turn the eccentric **5** according to the **rule**.
- Tighten the screws **4**.
- Carry out a check according to the **rule**.

Adjustment

- 13.04.11 Bobbin case opener (make this adjustment on both bobbin case openers with the Pfaff 1246).

Rule

The needle thread should not become jammed between the bobbin case opener **1** and the bobbin case base **3** or between the retaining lug **4** and the retaining dog of the needle plate.

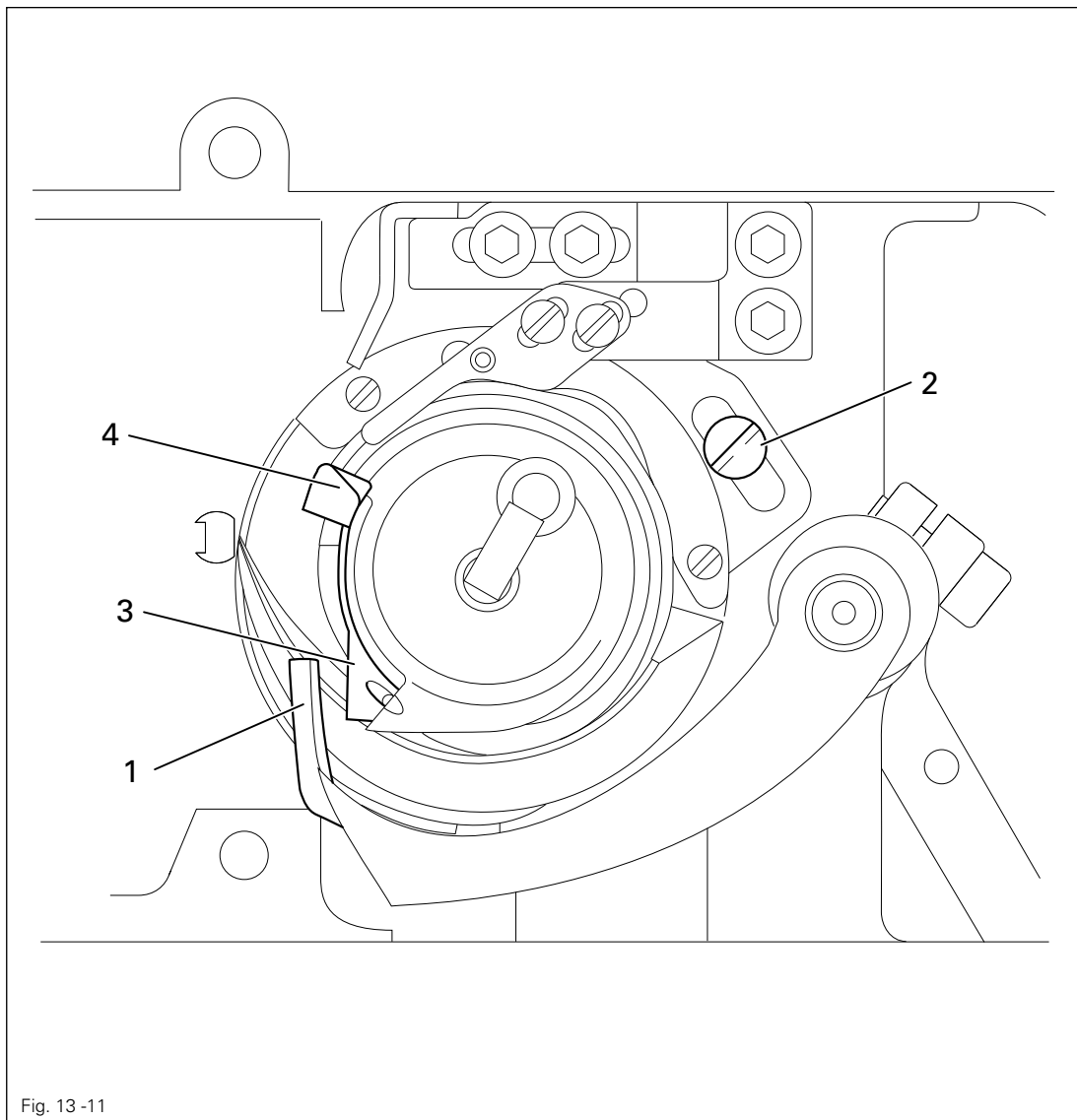
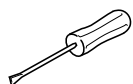


Fig. 13-11



- Thread the machine and insert the testing material.
- Fit the sewing foot.
- Sew a few stitches by turning the handwheel and carry out a check according to the rule.
- Turn the bobbin case opener **1** (screw **2**) according to the rule.

13.04.12 Safety clutch



The safety clutch 4 is set ex works. If the thread jams, the safety clutch 4 disengages to avoid damage to the hooks. The process to engage the clutch is described below.

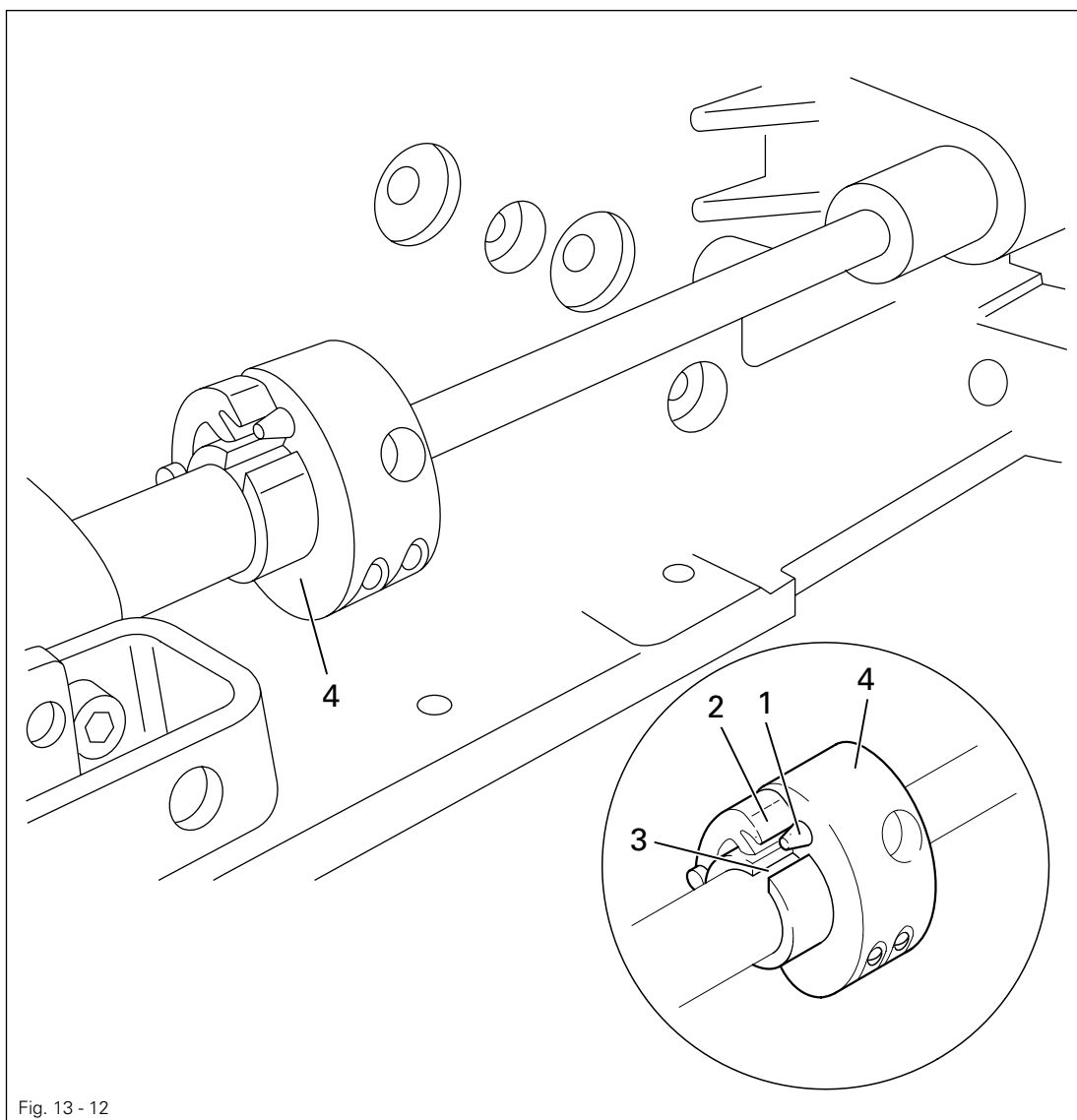
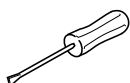


Fig. 13 - 12



- Remove the thread jam.
- Press the catch 1 and turn the handwheel until the pawl 2 engages in the groove 3.

13.04.13 Needle thread tension release

Rule

When the presser foot is raised, both tension discs should be at least **0.5 mm** apart.



The clearance of **0.5 mm** is the minimum size and may be over **1 mm** with thick types of yarn.

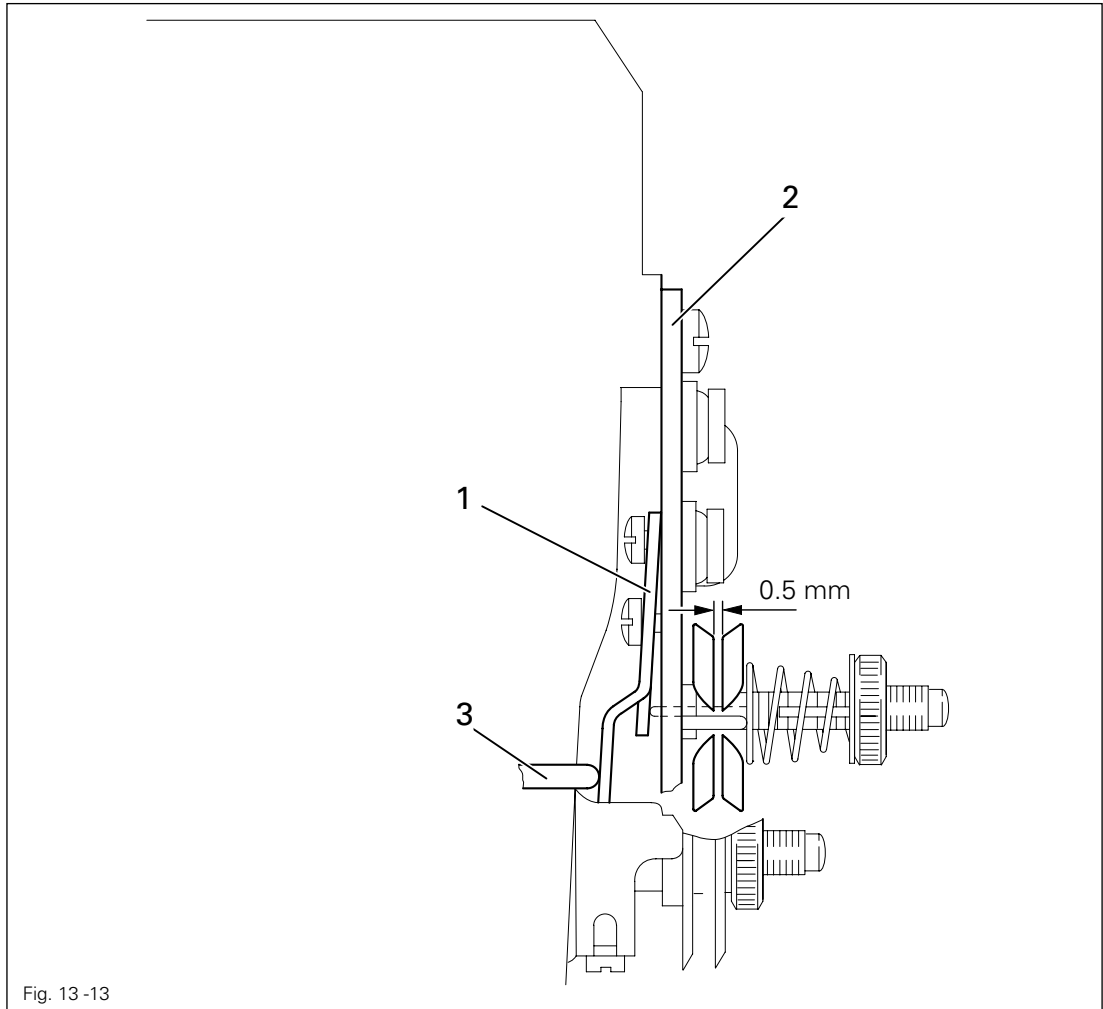
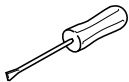


Fig. 13 -13



- Raise the presser foot with the hand lever.
- Align the pressure plate **1** behind the tension mounting plate **2** according to the **rule**.



The release pin **3** must not be loaded with effective tension.

13.04.14 Thread check spring (with the PFAFF 1245 and PFAFF1246 without thread trimmer -900/56)

Rule

The movement of the thread check spring **5** should be finished when the needle point punctures the material (spring deflection = approx. **7 mm**).



The length of the thread check spring deflection may deviate slightly upwards or downwards for reasons relating to the sewing technology.

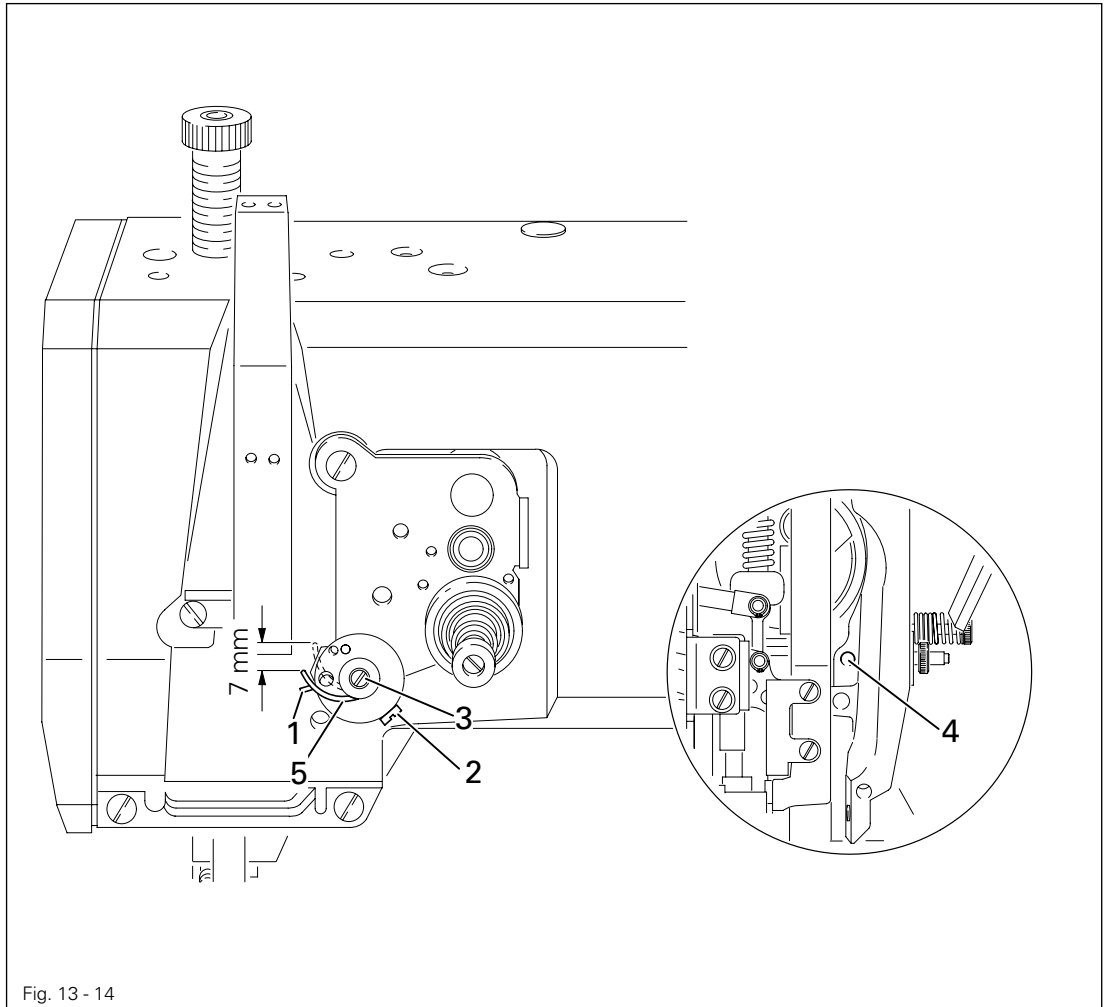
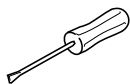


Fig. 13 - 14



- Adjust the stop **1** (screw **2**) according to the rule.
- Turn the screw **3** (screw **4**) to set the spring tension

Adjustment

13.04.15 Thread check spring (with the PFAFF 1246 with thread trimmer -900/56)

Rule

The movement of the thread check springs **1** and **6** should be finished when the needle points puncture the material (spring deflection = approx. **7 mm**).



The length of the thread check spring deflection may deviate slightly upwards or downwards for reasons relating to the sewing technology.

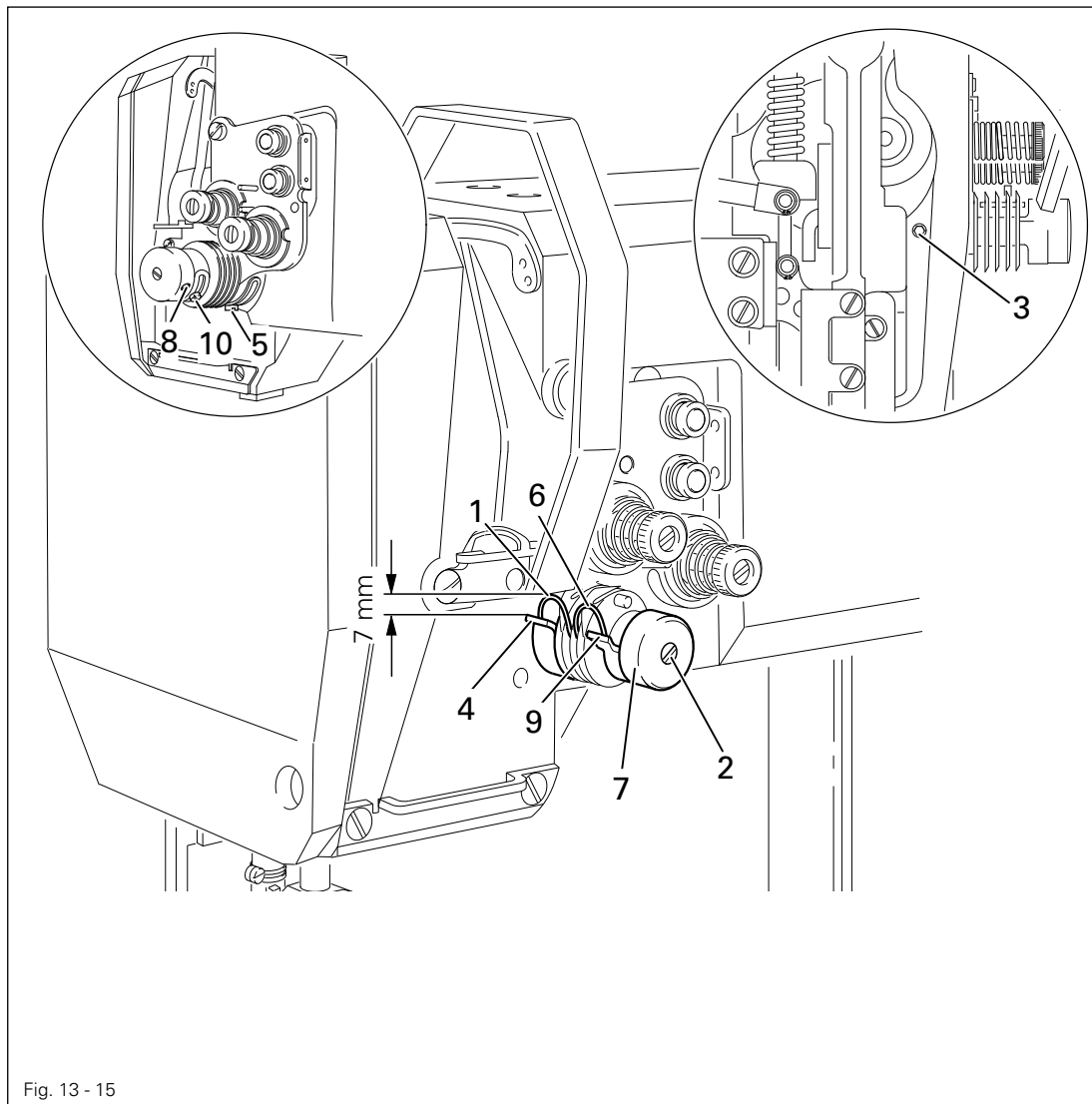
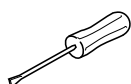


Fig. 13 - 15

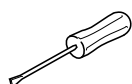
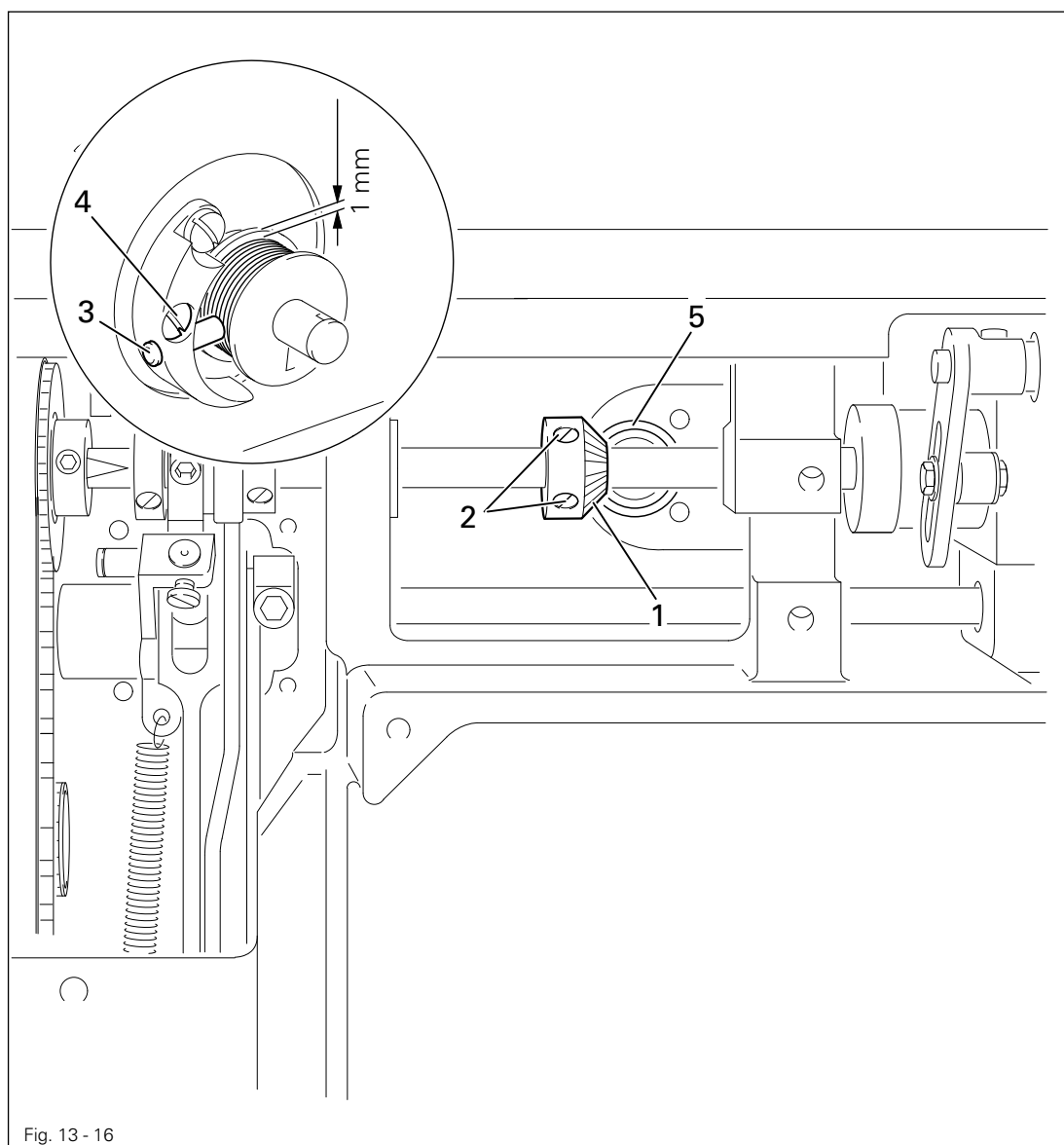


- Turn the screw **2** (screw **3**) to set the spring tension of the thread check spring **1**.
- Turn the support **4** (screw **5**) according to the **rule**.
- Turn the screw **7** (screw **8**) to set the spring tension of the thread check spring **6**.
- Turn the support **9** (screw **10**) according to the **rule**.

13.04.16 Bobbin winder

Rule

1. When the bobbin winder is switched on, the bobbin winder spindle should be moved easily; when the bobbin winder is switched off, the friction wheel **5** must not touch the drive wheel **1**.
2. The bobbin winder should switch off automatically when the fill amount is still around **1 mm** from the edge of the bobbin.

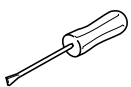
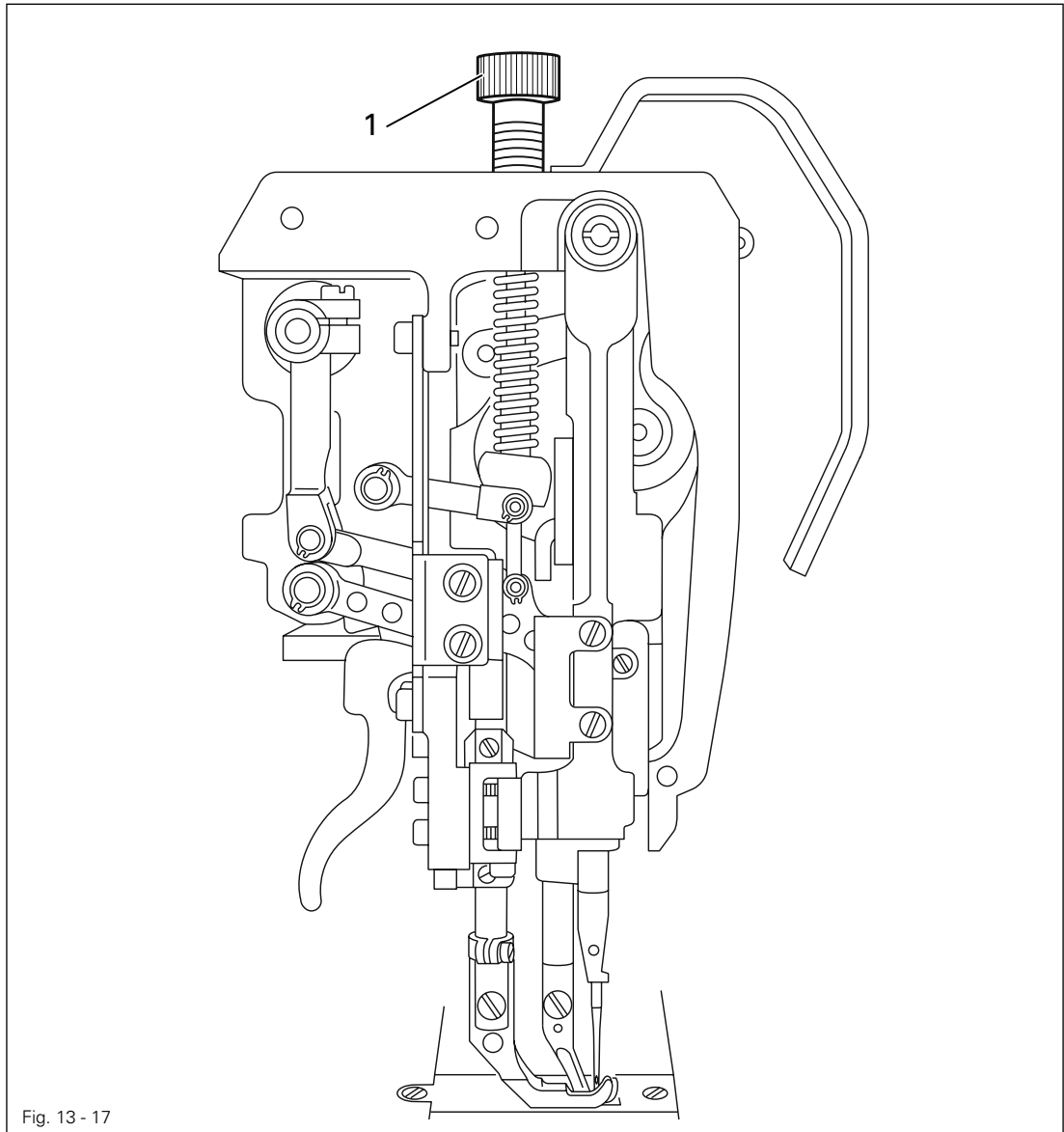


- Adjust the drive wheel **1** (screws **2**) according to rule 1.
- Adjust the bolt **3** (screws **4**) according to rule 2.

13.04.17 Presser foot pressure

Rule

The material should be transported properly even at top sewing speed.
No pressure marks should appear on the material.



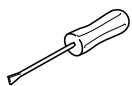
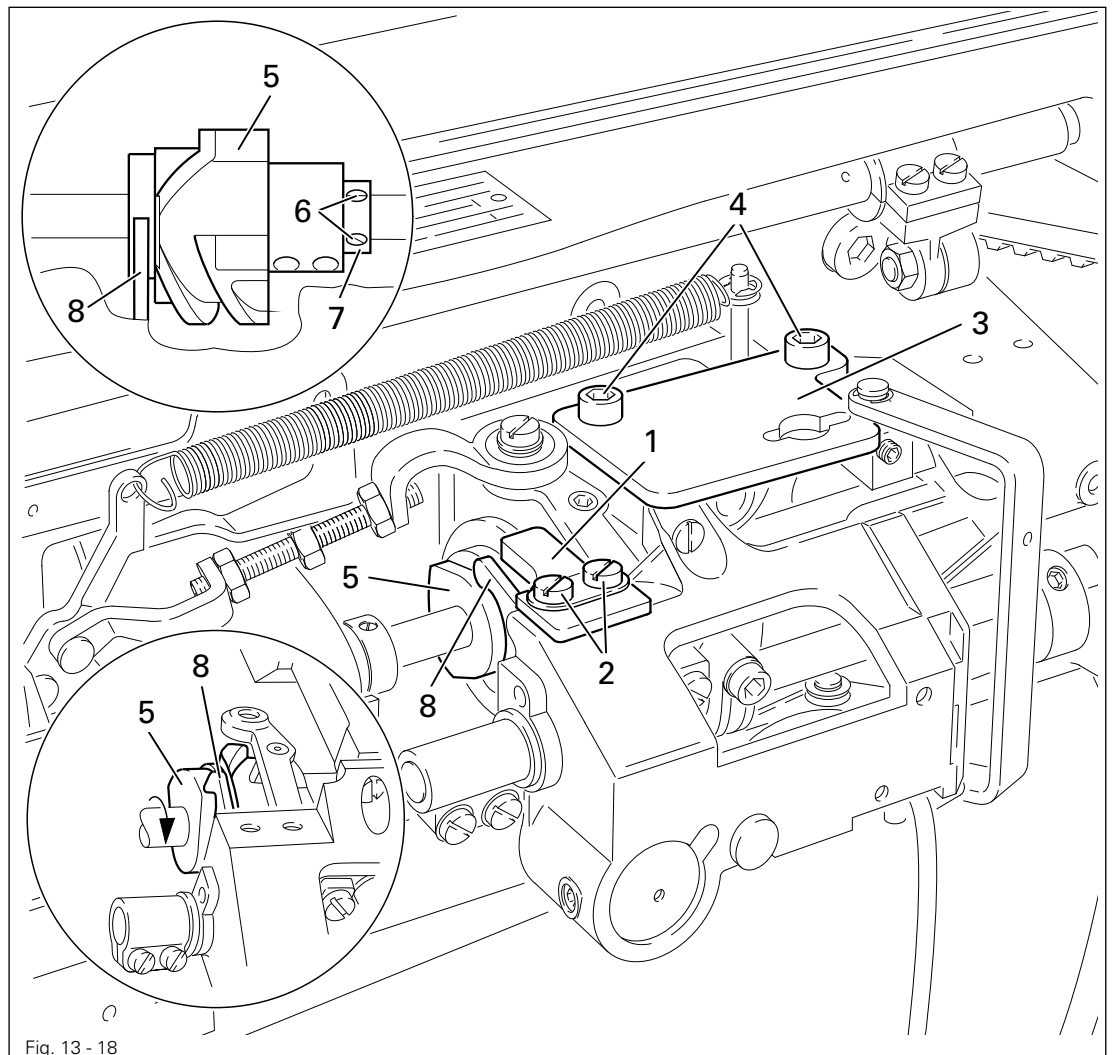
- Turn the screw 1 according to the rule.

13.05 Adjusting thread trimmer -900/56

13.05.01 Control cam (pre-calibrating)

Rule

1. The bearing surface of the control cam 5 should be positioned centrally to the pawl 8 on the side.
2. When the thread lever is at t.d.c., the start of the largest eccentricity of the bearing surface (in the direction of rotation) should be under the tip of the pawl 8.

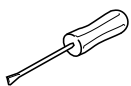
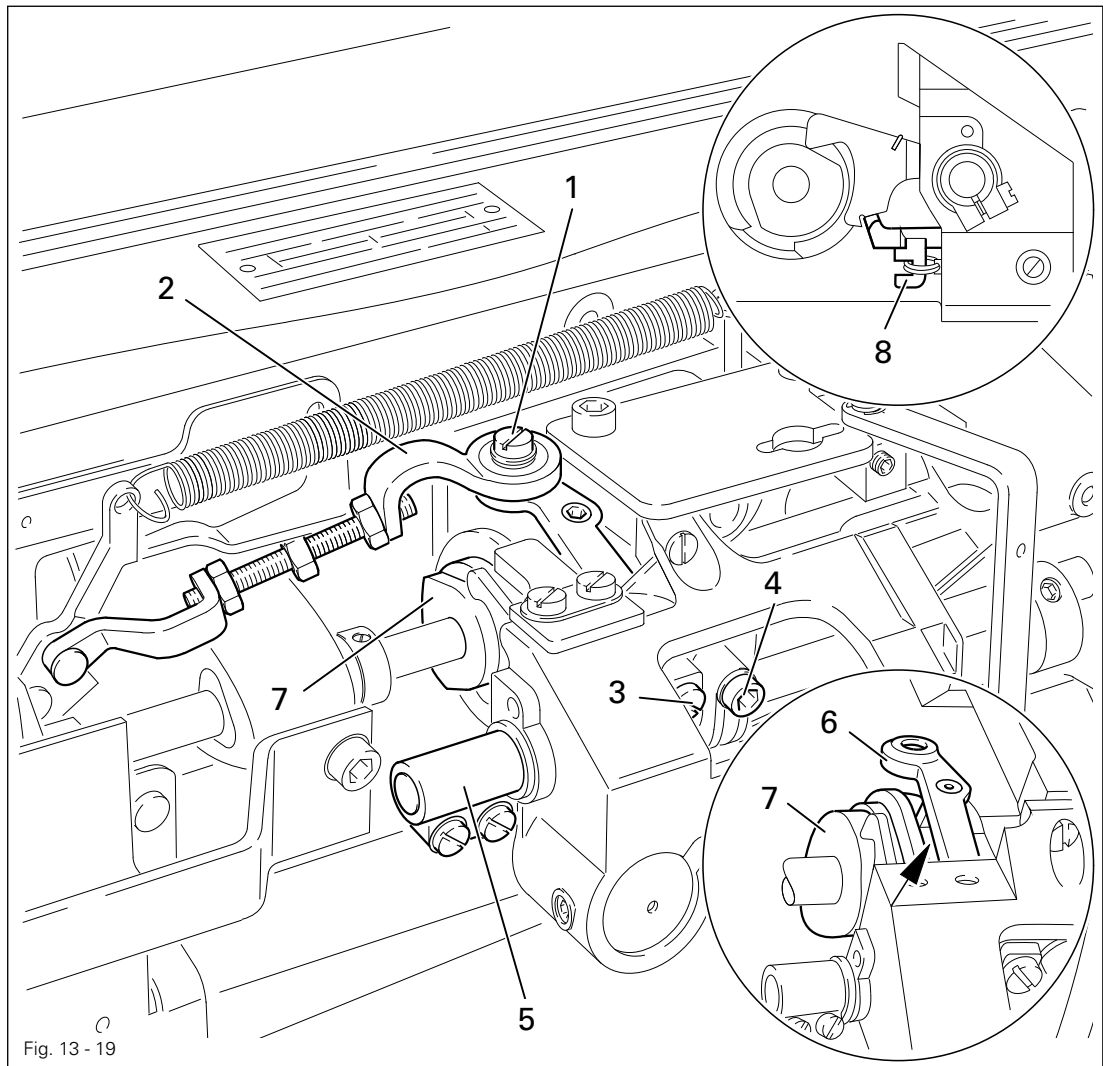


- Remove the catch 1 (screws 2).
- Remove the plate 3 (screws 4).
- Loosen the four screws of the control cam 5 and the screws 6 of the retaining collar 7.
- Move the control cam 5 sideways according to rule 1.
- Adjust the retaining collar 7 in this position so that it touches the control cam 5 and tighten the screws 6.
- Move the thread lever to t.d.c. by turning the handwheel.
- Turn the control cam 5 in the direction of rotation according to rule 2, ensuring that it rests on the retaining collar 7.
- Tighten the four screws of the control cam 5 in this position.

13.05.02 Tripping lever

Rule

The bevelled bolt of the tripping lever **6** (see arrow) should drop easily into the track of the control cam **7** when the engaging lever **6** is activated in the needle rise position.



- Unscrew the screw **1** and swivel the connecting rod **2** away.
- Loosen the screws **3** and **4**.
- Move the needle bar to the needle rise position by turning the handwheel.
- Move the clamping piece until it abuts the housing on the right.
- While maintaining this position, press the tripping lever **6** to the bottom of the cam track and adjust according to the **rule**.
- Tighten the screw **3** in this position.

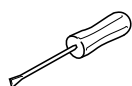
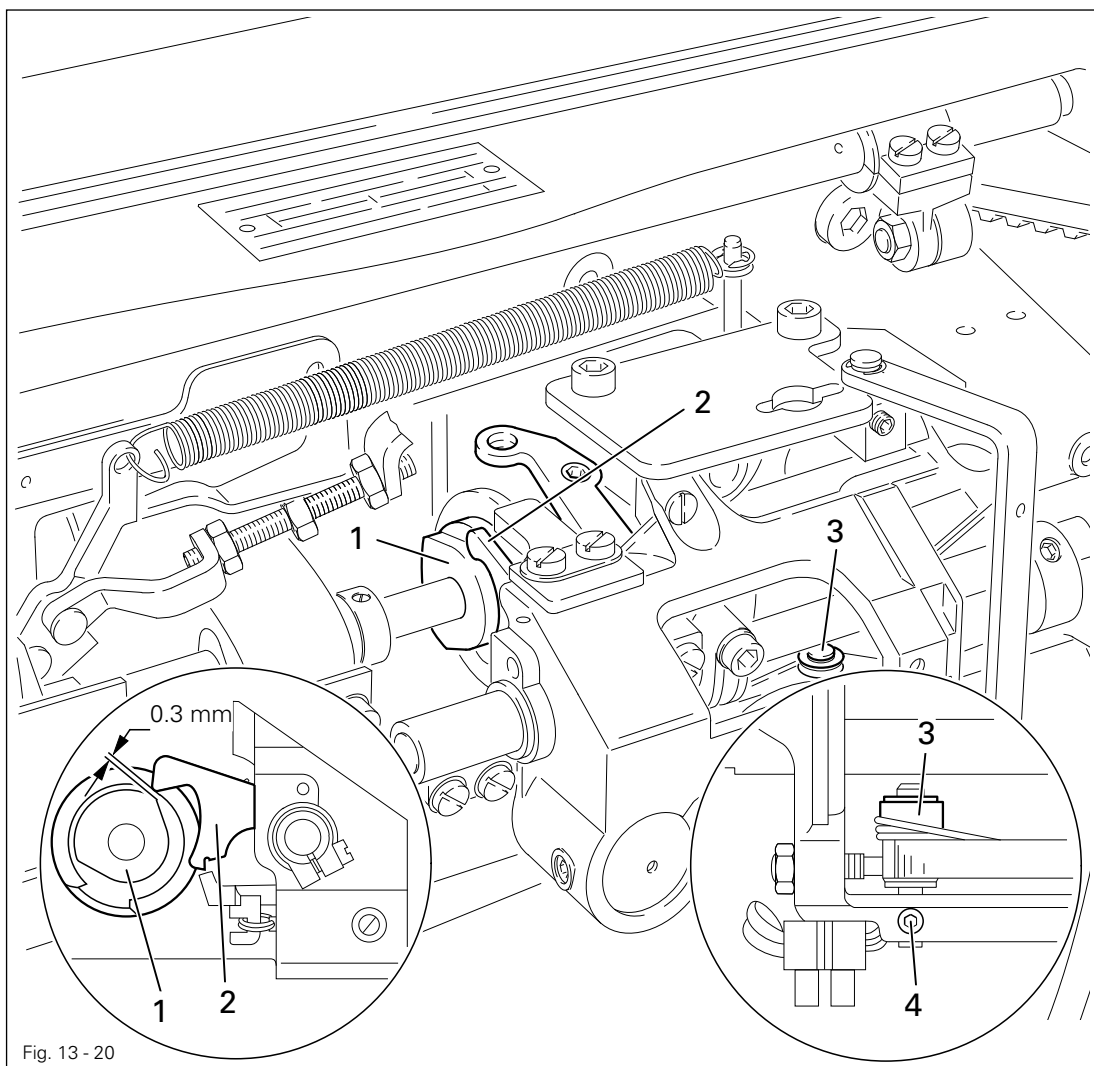


The screw **4** remains loosened to set the release cam.

13.05.03 Pawl

Rule

There should be a clearance of **0.3 mm** between the largest eccentricity of the control cam **1** and the pawl **2** when the thread trimmer attachment is in the neutral position.



- Position the control cam **1** with its largest eccentricity under the pawl **2** by turning the handwheel.
- Adjust the bearing bolt **3** (screw **4**) according to the rule.

Adjustment

13.05.04 Engaging solenoid

Rule

There should be a clearance of **0.3 mm** between the engaging lever **2** and the pawl **3** in the needle rise position and when the engaging solenoid **5** is activated.

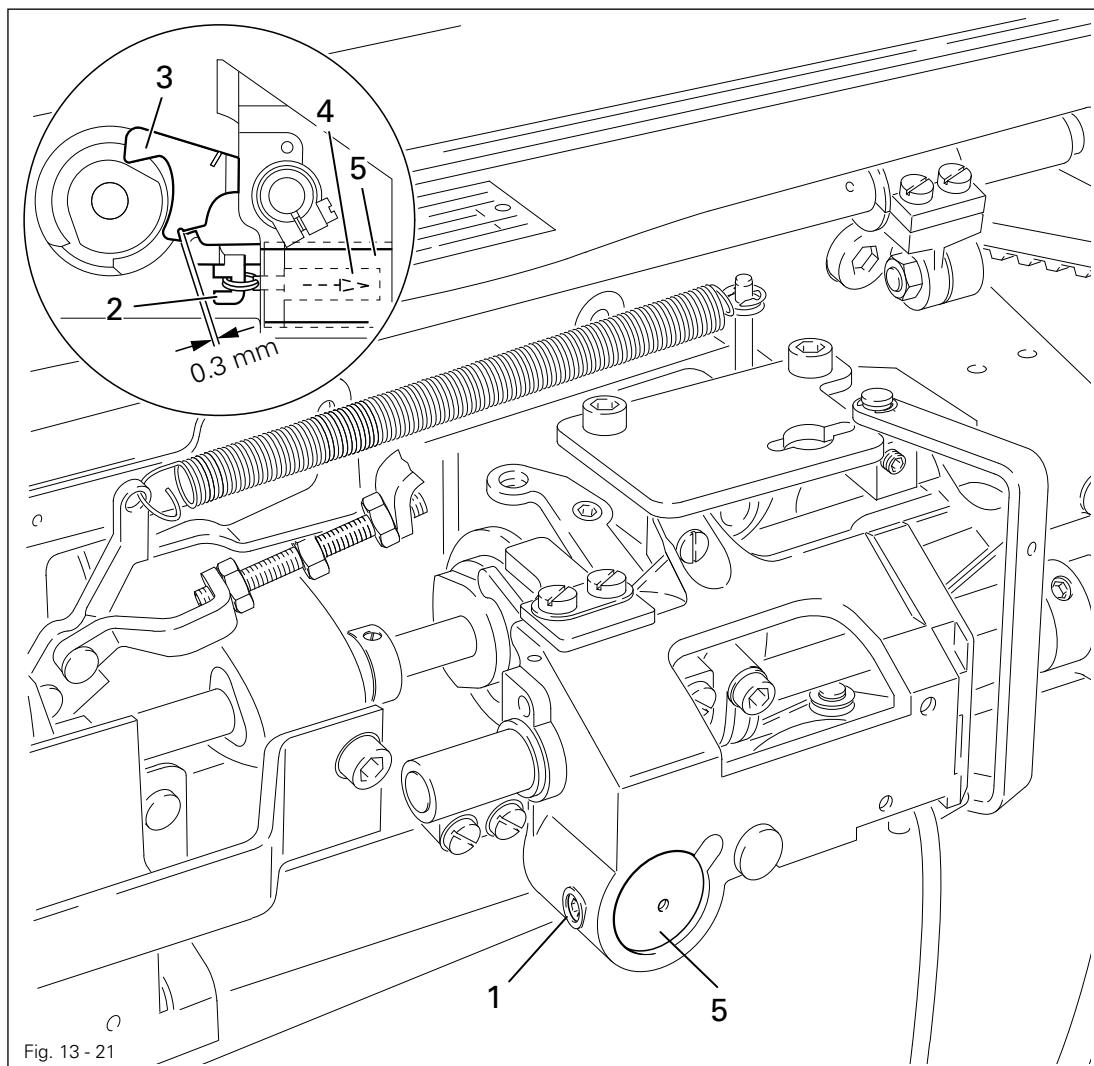
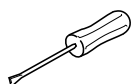


Fig. 13 - 21



- Move the machine to the needle rise position by turning the handwheel.
- Loosen the screw **1** until the engaging solenoid is hard to push.
- Activate the engaging lever **2** by hand so that the pawl drops into place.
- Press the magnet armature **4** into the magnet housing **5** up to the stop and adjust the magnet housing together with the magnet armature according to the **rule**.
- Tighten the screw **1** in this position.

13.05.05 Release cam

Rule

There should be a clearance of approx. **0.3 mm** between the tripping lever bolt and the bottom of the cam track in the needle rise position and when the engaging lever 4 is dropped in place.

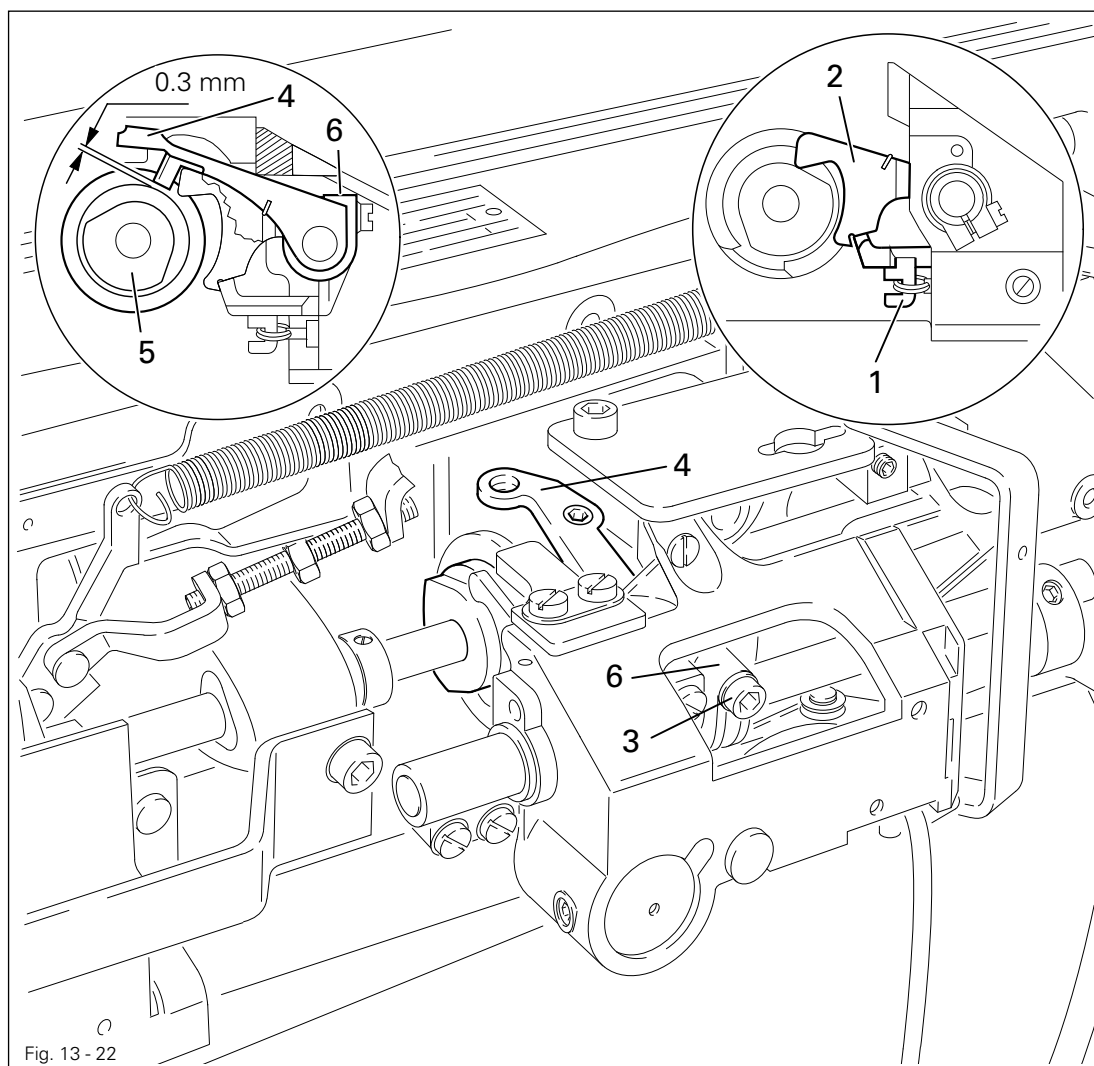
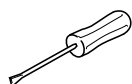


Fig. 13 - 22



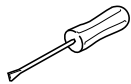
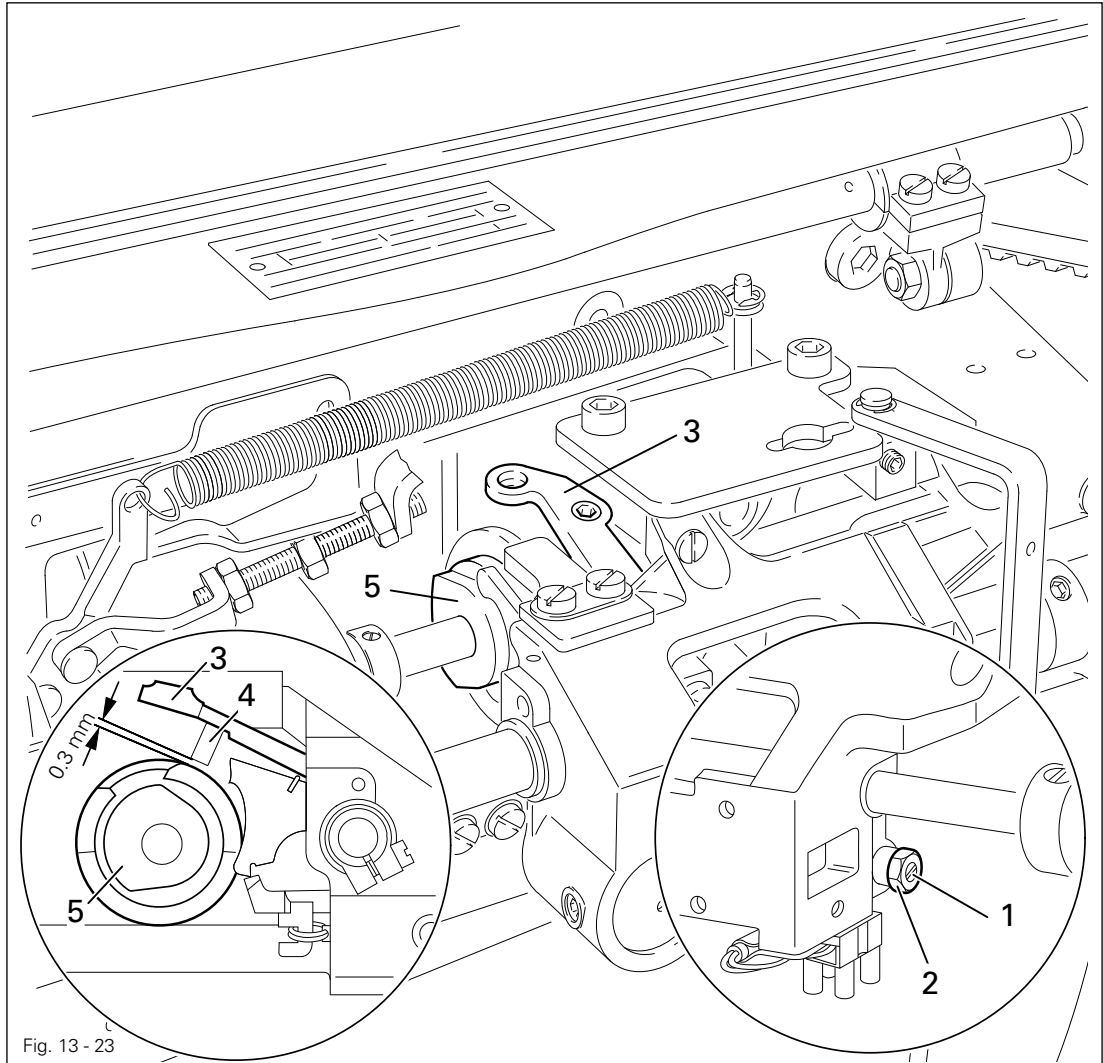
- Move the machine to the needle rise position.
- Activate the engaging lever 1 by hand so that the pawl 2 drops into place.
- Press the tripping lever 4 to the bottom of the control cam 5, ensuring that the screw 3 is still loosened.
- While maintaining this position, move the release cam 6 in the direction of rotation so that it touches the engaging lever 1 and the side of the tripping lever 4 and then gently tighten the screw 3.
- Create a clearance between the bolt and the bottom of the cam track according to the rule by gently knocking on the release cam 6 in the direction of rotation and tapping on the tripping lever 4 at the same time.
- Tighten the screw 3 in this position.

Adjustment

13.05.06 Engaging lever

Rule

When the needle bar is at t.d.c. and the tripping lever **3** is in the basic position, there should be a clearance of approx. **0.3 mm** between the bolt **4** and the outside diameter of the control cam..

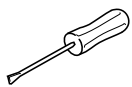
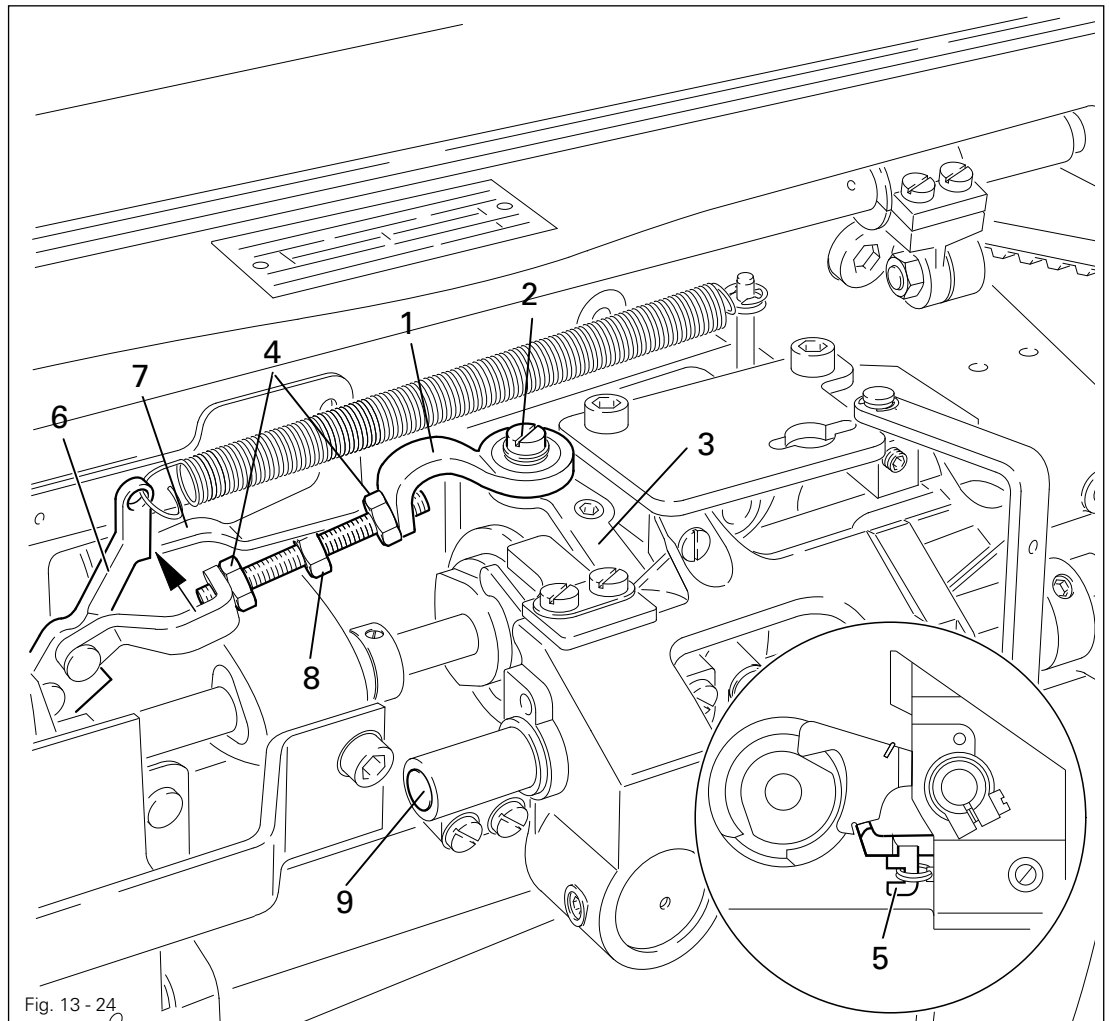


- Move the needle bar to t.d.c. by turning the handwheel.
- Turn the screw **1** (nut **2**) according to the rule.
- Carry out a check by tapping on the tripping lever **3**.

13.05.07 Connecting rod

Rule

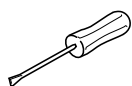
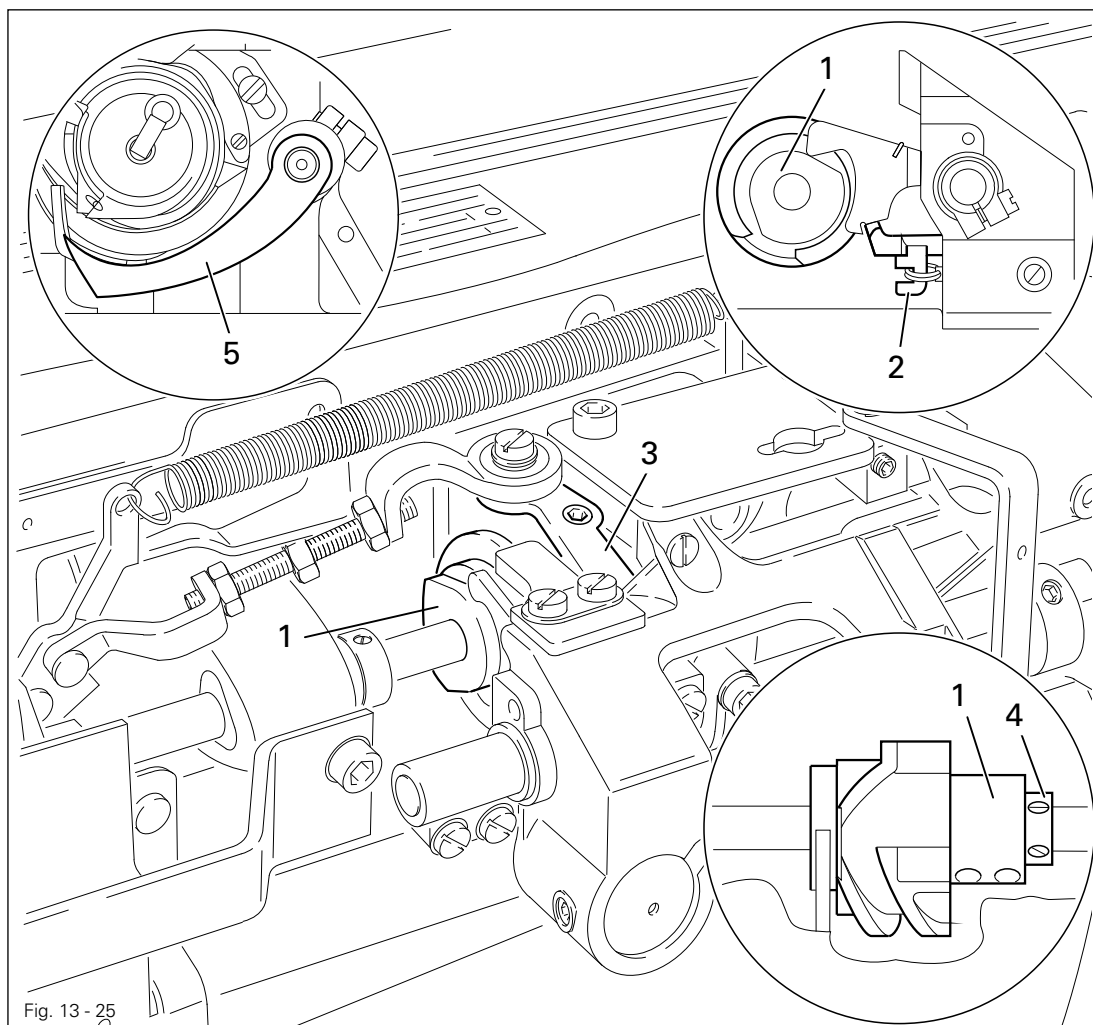
The lever **6** should lift off the stop **7** when the shaft **9** starts to move with a sliding motion.



- Fasten the ball head to the tripping lever **3** with the screw **2**.
- Loosen the nuts **4** (right and left-hand thread).
- Move the machine to the needle rise position and activate the engaging lever **5** by turning the handwheel.
- Turn the connecting rod **8** according to the **rule**, ensuring that the lever **6** rests on the stop **7** (see arrow).
- Tighten both of the nuts **4** in this position.

Rule

The movement of the thread catcher should start when the tripping lever **3** is dropped in place and the point of the needle coming from b.d.c. is positioned **12 mm** above the needle plate.



- Quickly move the thread lever after t.d.c. by turning the handwheel and loosen the accessible screws of the control cam **1**.
- Continue turning the handwheel in the direction of rotation until the machine is in the needle rise position and then activate the engaging lever **2**.
- Loosen the remaining screws of the control cam **1**, ensuring that the tripping lever **3** has dropped in place.
- Continue turning the handwheel in the direction of rotation until the needle point is positioned **12 mm** above the needle plate.
- Turn the handwheel in the direction of rotation in this position until you feel resistance, ensuring that the control cam **1** rests on the retaining collar **4**.
- Tighten the accessible screws of the control cam **1** in this position.
- Make the remaining screws of the control cam **1** accessible and tighten them.

13.05.09 Catch

Rule

There should be a clearance of approx. **5 mm** between the catch **1** and the tripping lever **6** when the thread trimmer attachment is in the neutral position.

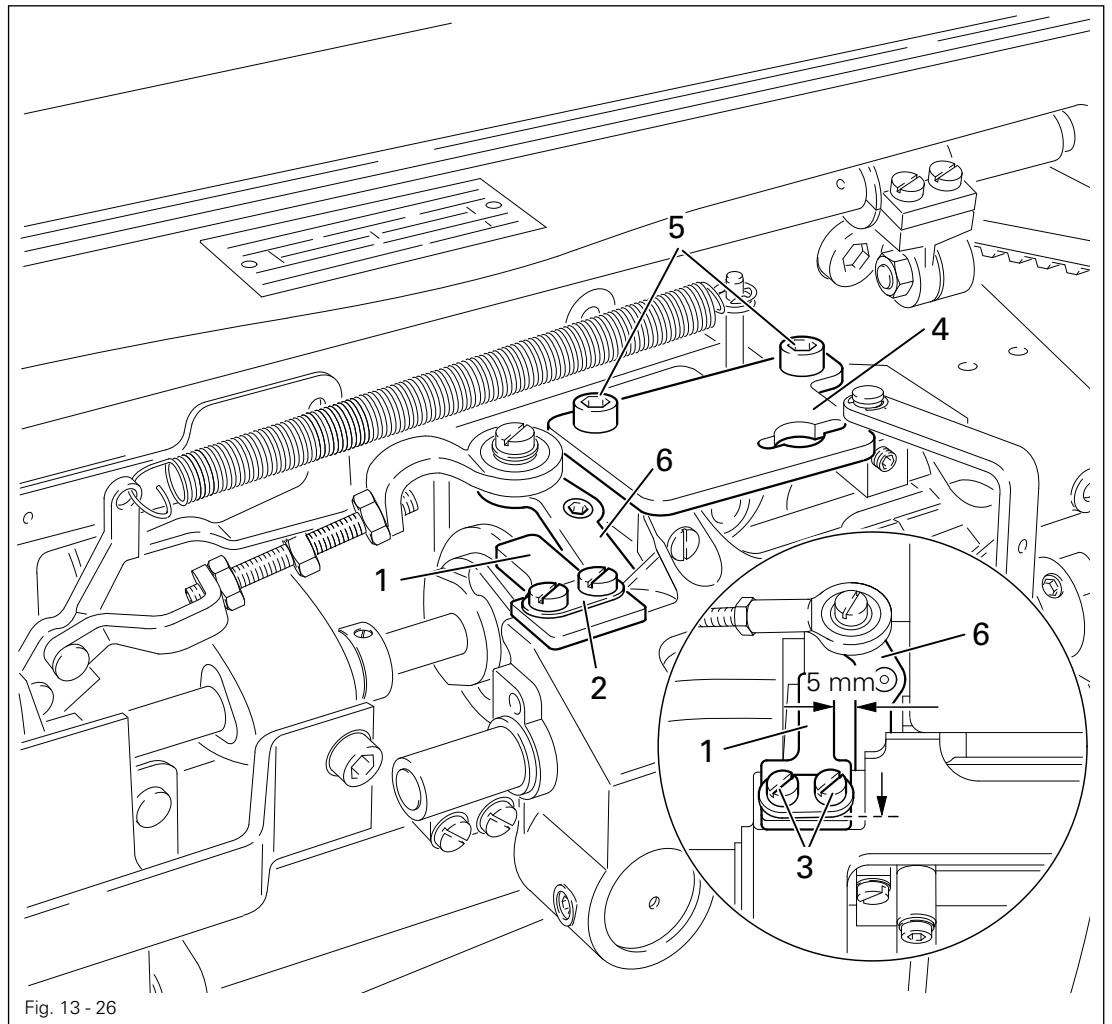
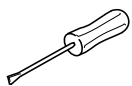


Fig. 13 - 26



- Gently secure the catch **1** and the cover plate **2** with the screws **3**.
- Move the catch **1** to the stop in the direction of the arrow and move it sideways according to the **rule**
- Tighten the screws **3** in this position.
- Attach the plate **4** with the screws **5**.

13.05.10 Connecting rod (only with the PFAFF 1246)

Rule

The length of the connecting rod **2** should correspond to the clearance between the shaft **3** and the shaft **4** when the thread trimmer attachment is in the neutral position.

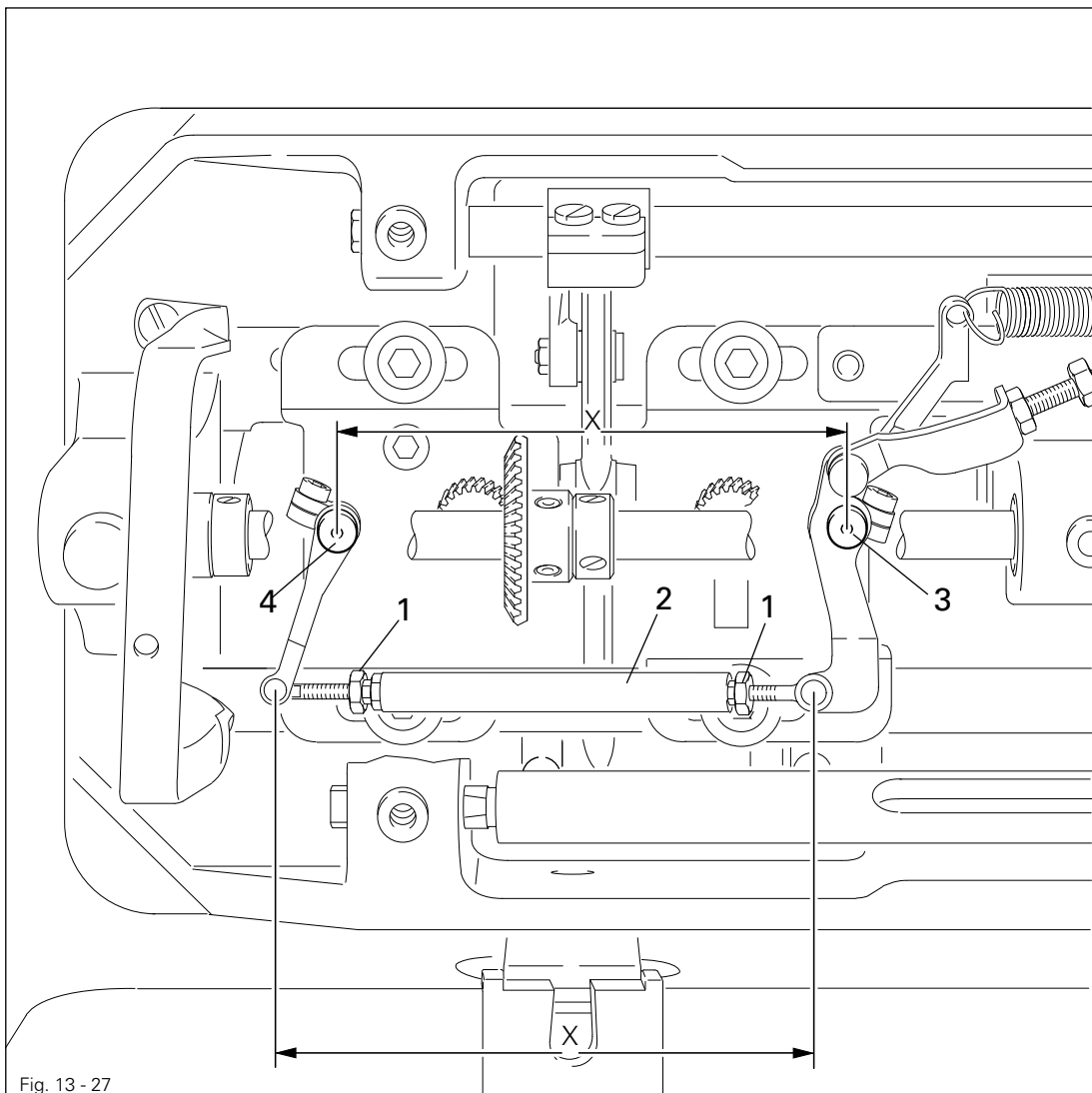
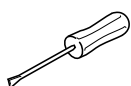


Fig. 13 - 27

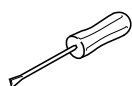
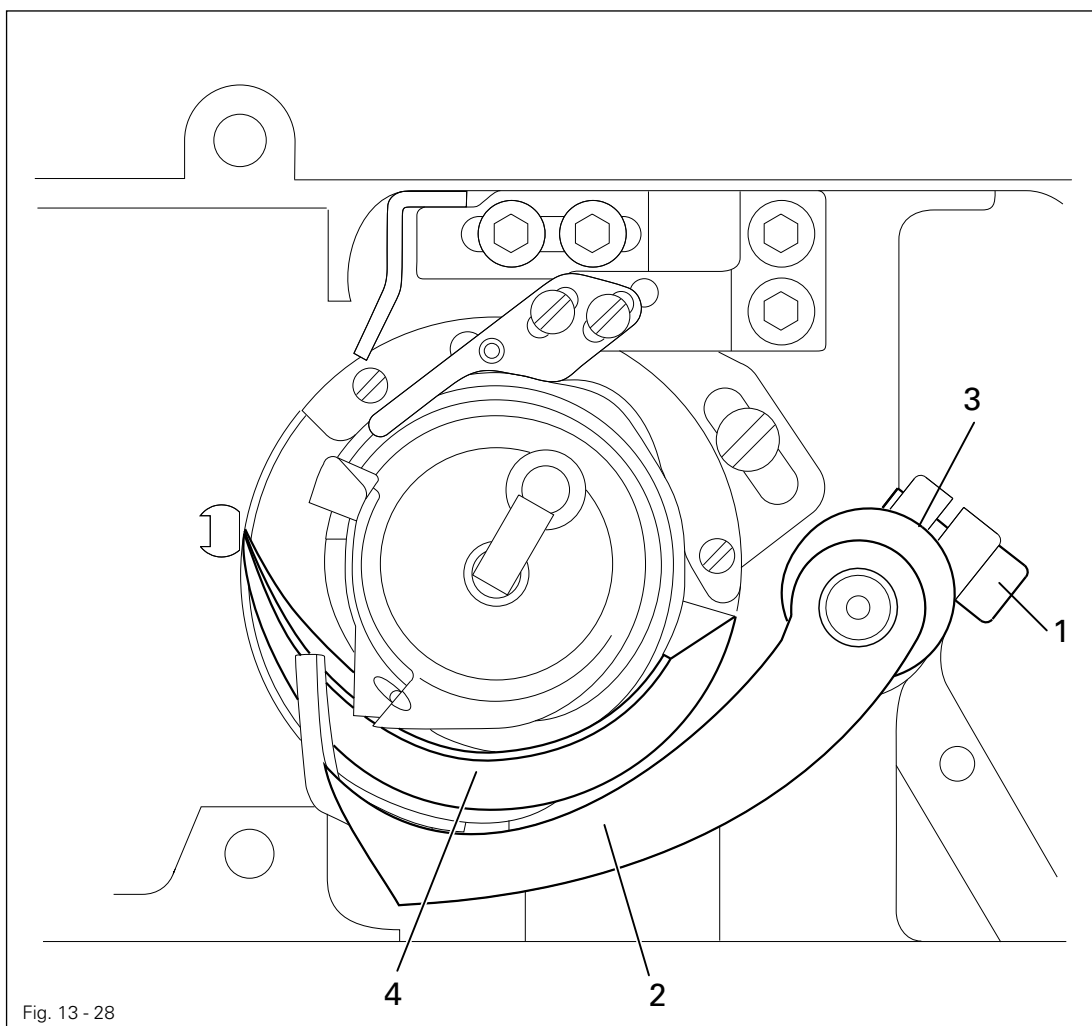


- Loosen the nuts **1** (right and left-hand thread) when the thread trimmer attachment is in the neutral position.
- Turn the connecting rod **2** according to the rule.
- Tighten the nuts **1**.

13.05.11 Thread catcher height (make this adjustment on both thread catchers with the PFAFF 1246)

Rule

If the thread catcher 2 is pushed forward by hand when the thread lever is at t.d.c., the lower thread catcher point should be **0.1 mm** above the back of the hook 4.



- Loosen the screw 1 until the thread catcher can be turned.
- Loosen the screws in the retaining collar 3.
- Move the thread lever to t.d.c. by turning the handwheel.
- Move the thread catcher 2 according to the rule.
- Tighten the screws of the retaining collar 3 in this position, ensuring that the retaining collar 3 rests on the shaft bushing.



The screw 1 remains loosened for the subsequent adjustment.

Adjustment

13.05.12 Knife (make this adjustment on both knives with the PFAFF 1246)

Rule

1. The elongated hole of the knife **3** should run parallel to the knife carrier; the knife should not rest on the metal edge (see arrow).
2. If the tip of the thread catcher **4** protrudes approx. **3 mm** above the knife edge, the knife **3** should slightly touch the thread catcher **4**.

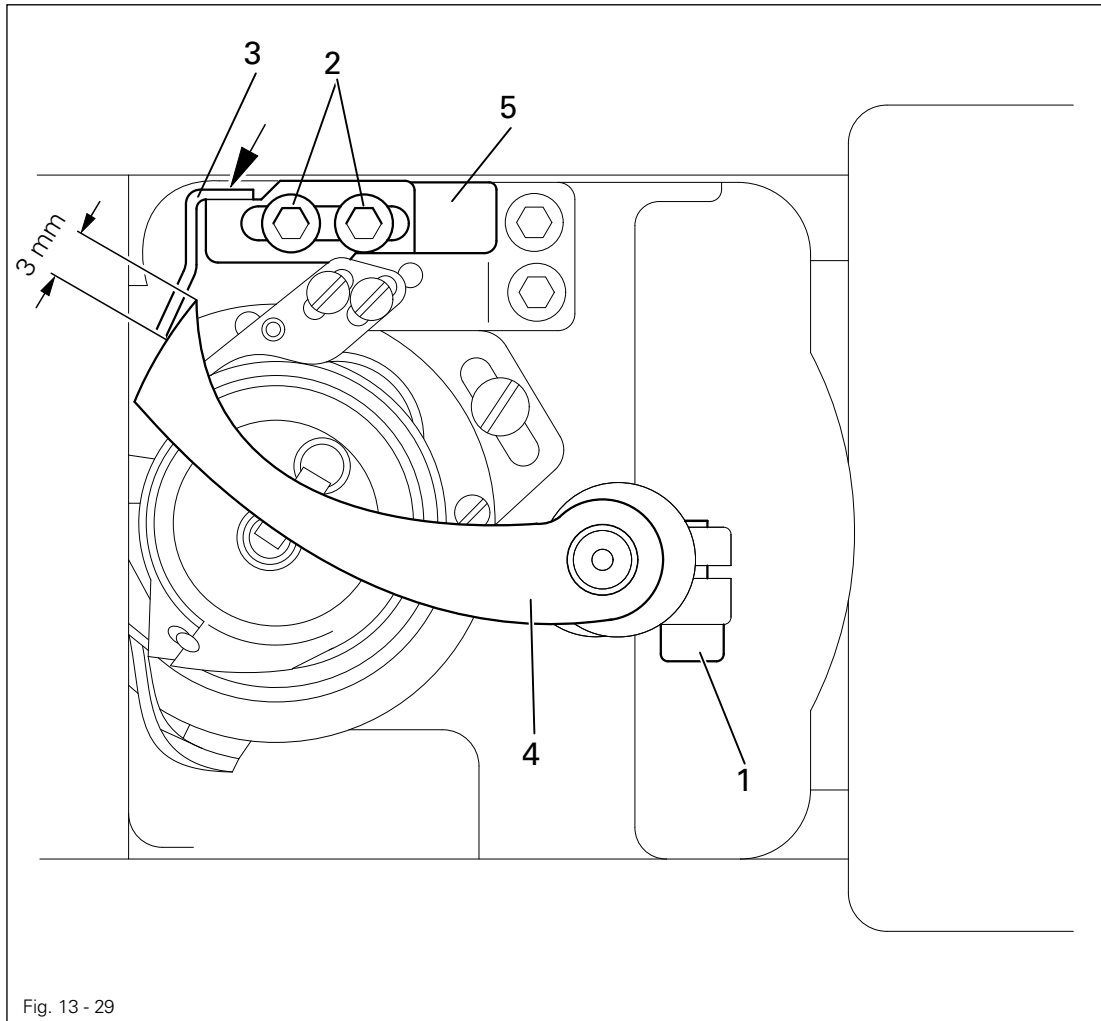
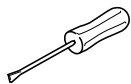


Fig. 13 - 29



- Loosen the screws **2**.
- First adjust the knife **3** so that it cannot collide with the thread catcher **4**.
- Turn the thread catcher **4** by hand according to **rule 2**, ensuring that the screw **1** is loosened.
- Move the knife **3** slightly so that it touches the thread catcher **4** and align it according to **rule 1**.
- Tighten the screws **2** in this position.



The screw **1** remains loosened for the subsequent adjustment.

13.05.13 Thread catcher reverse position (make this adjustment on both thread catchers with the PFAFF 1246)

Rule

The back edge of the thread catcher **3** should be flush with the cutting edge of the knife **4** when it is in the front turning point.

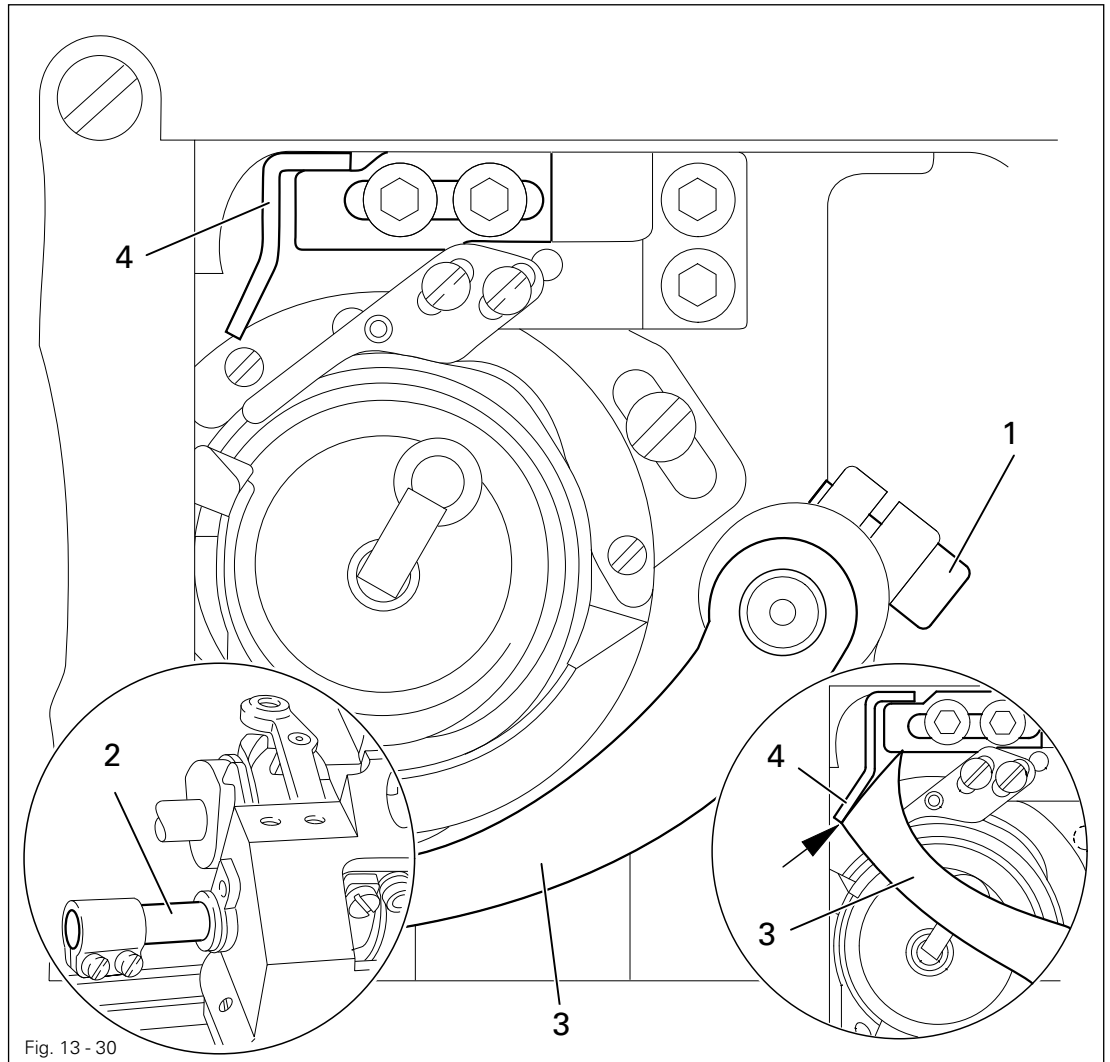
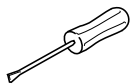


Fig. 13 - 30



- Move the machine to the needle rise position and activate the engaging lever, ensuring that the screw **1** is loosened.
- Move the rock shaft **2** to its left turning point by continuing to turn the handwheel.
- While maintaining this position, turn the thread catcher **3** according to the rule.
- Tighten the screw **1** in this position, ensuring that there is no vertical play.

Adjustment

13.05.14 Bobbin thread clamp spring (make this adjustment on both clamp springs with the PFAFF 1246)

Rule

1. There should be a clearance of **0.3 mm** between the clamp spring **5** and the underside of the thread catcher.
2. The tips of the clamp spring should be flush with the back edge of the thread catcher **4** when the thread catcher **4** is in the front turning point (see arrow).
3. There should be a clearance of approx. **12 mm** between the inner edge of the clamp spring **5** and the guide bushing **7**.
4. It should be easy to insert and remove the bobbin case from the hook.

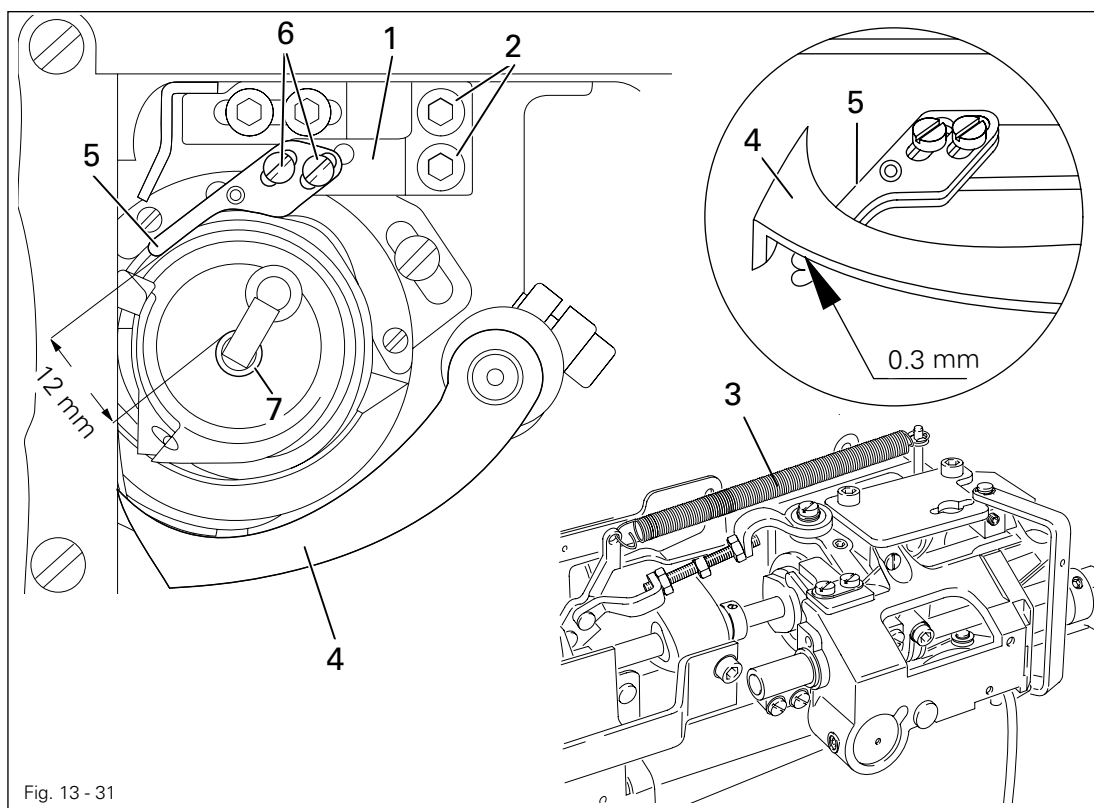
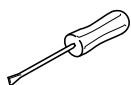


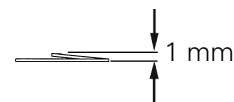
Fig. 13 - 31



- Align the bracket **1** (screws **2**) so that it is parallel to the machine bed plate and is positioned in the centre of its range.
- Remove the spring **3**.
- Swivel the thread catcher **4** by hand over the clamp spring **5**.
- Bend the clamp spring according to **rule 1**.
- Insert the spring **3**.
- Move the machine to the needle rise position, activate the engaging lever and move the thread catcher to its front turning point by turning the handwheel.
- Align the clamp spring **5** (screws **6**) - and the bracket **1** (screws **2**) if necessary in the elongated hole - according to **rules 2 and 3**.
- Tighten the screws **2** and **6** in this position, ensuring that the bracket **1** is still parallel to the machine bed plate.



Check the height of the spring below the bobbin in the hook if you have sewing problems after trimming the thread.
The height of the spring should be approx. **1 mm**.



13.05.15 Tension release lever

Rule

1. There should be a clearance of approx. **7 mm** between the left edge of the release lever **8** and the housing **9** when the thread trimmer attachment is in the neutral position.
2. The tension discs should be loosened far enough that the needle thread can be pulled through easily when the tip of the thread catcher **5** is at the same level as the back edge of the stop cam **6** of the needle plate (see arrow) when the sewing foot is fitted.

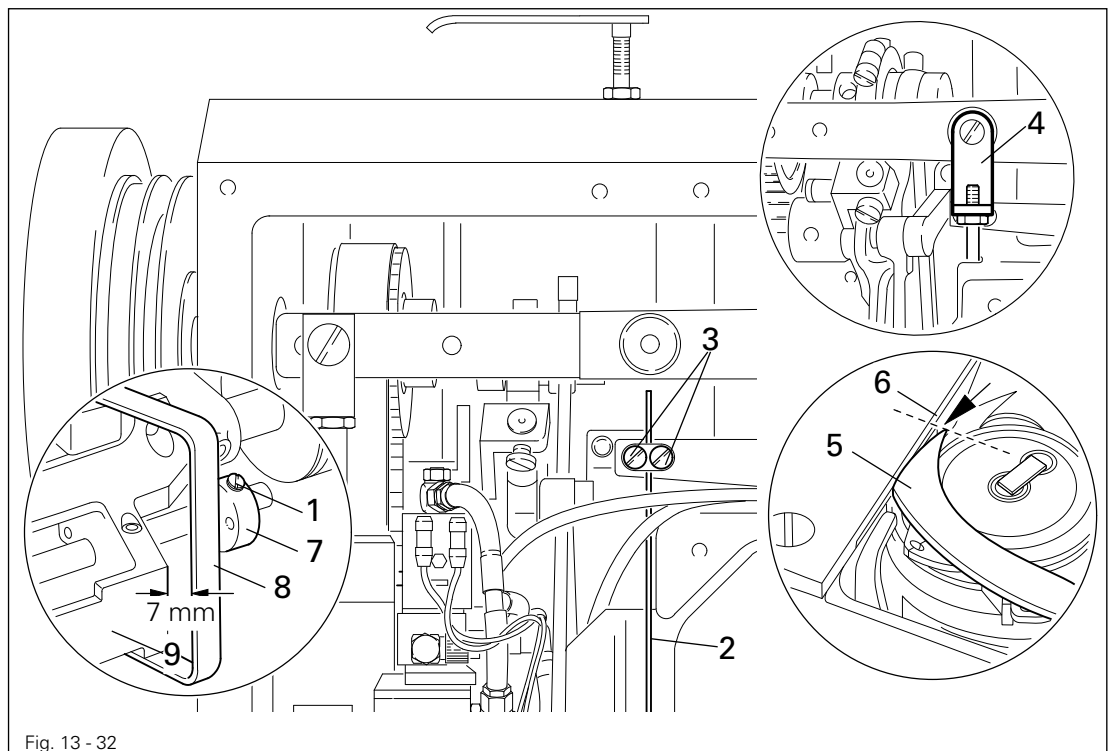
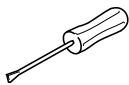


Fig. 13 - 32



- Raise the sewing foot, ensuring that the thread trimmer attachment is in the neutral position.
- Loosen the screws **1**.
- Adjust the height of the connecting rod **2** (screws **3**) according to **rule 1**.



The angle bracket should be unscrewed to access the screws **3** in machines without automatic backtacking and presser foot lift (-911/97).

- Move the machine to the needle rise position and activate the engaging lever by hand by turning the handwheel.
- Lower the sewing foot onto the needle plate.
- Set the tip of the thread catcher **5** to the same height as the edge of the rear stop cam **6** of the needle plate by continuing to turn the handwheel and use the retaining collar **7** to push the release lever **8** to the left according to **rule 2**.
- Tighten the screws **1** in this position.



The eccentricity of the retaining collar **7** must point downwards.

13.06 Adjusting lifting lever with subclass -911/97

Rule

When the automatic presser foot lift is activated

1. The presser foot must lift **7 mm** off the needle plate and
2. The tension discs of the thread tension must be **0.5 mm** apart from each other.

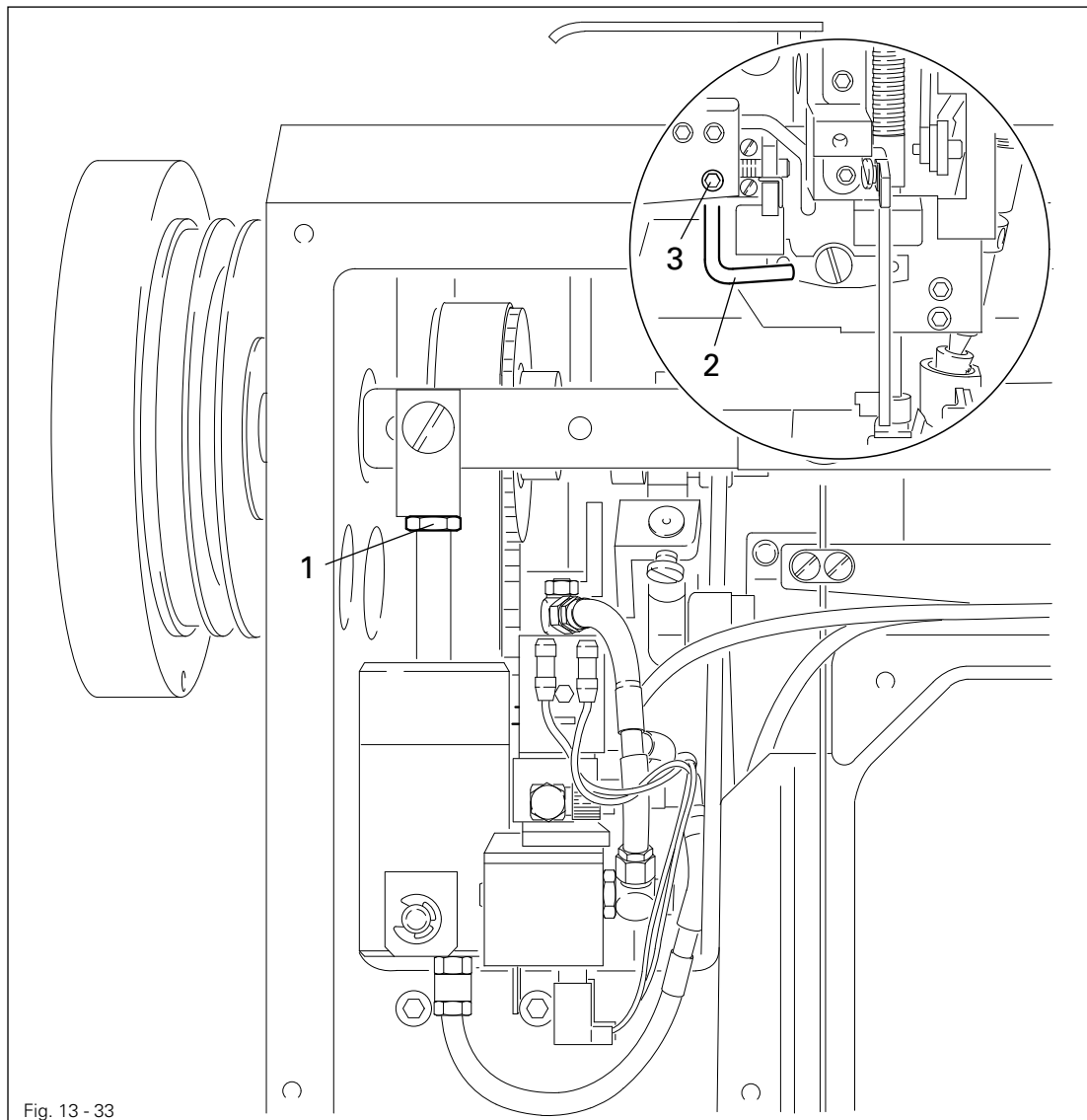


Fig. 13 - 33

- Turn the nut **1** according to **rule 1**.
- Adjust the lever **2** (screw **3**) according to **rule 2**.
- Check if the raised hand lever lowers under its own weight when the automatic presser foot lift is activated; readjust the nut **1** accordingly if necessary.

13.07 Adjusting lifting lever without subclass -911/97

Rule

When the knee lever is activated

1. The presser foot must lift **7 mm** off the needle plate and
2. The tension discs of the thread tension must be **0.5 mm** apart.

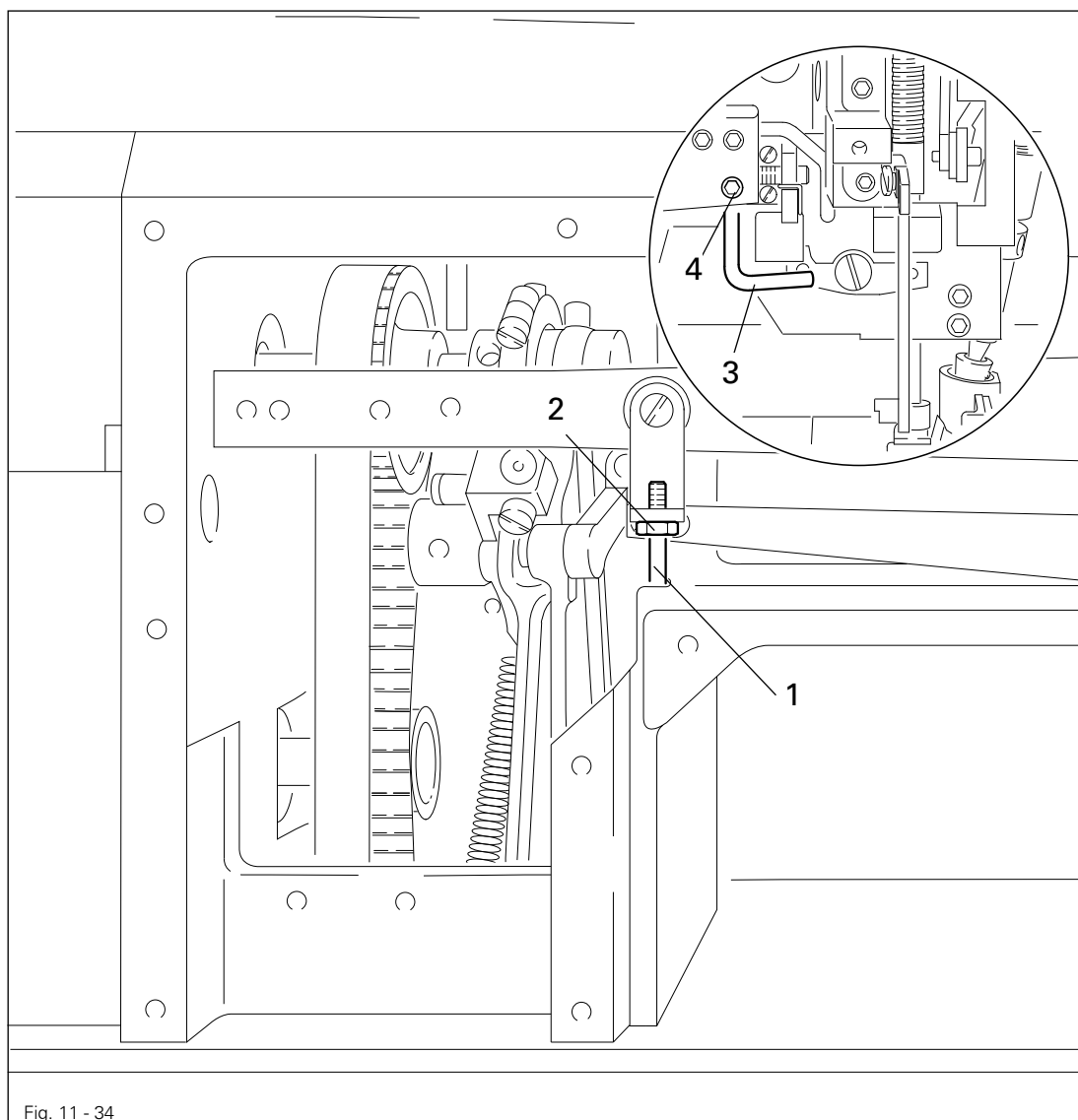


Fig. 11 - 34

- Turn the linkage 1 (nut 2) according to rule 1.
- Adjust the lever 3 (screw 4) according to rule 2.
- Check if the raised hand lever lowers under its own weight when the knee lever is activated; readjust the linkage 1 accordingly if necessary.

13.08 Parameter settings

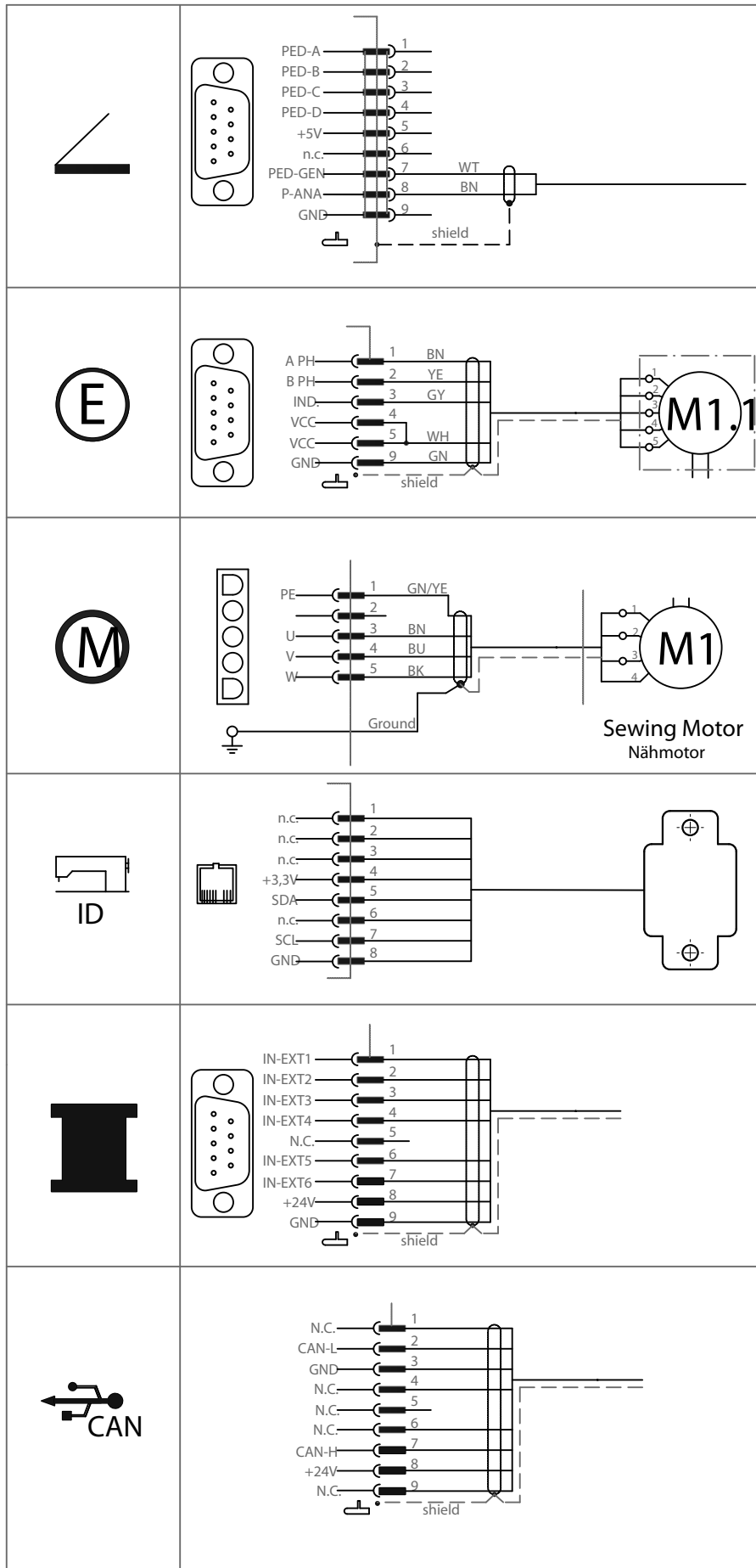
- The separate parameter list for the machine describes how to select the user level and change parameters (see **chapter 1.1.2 Technician level**).

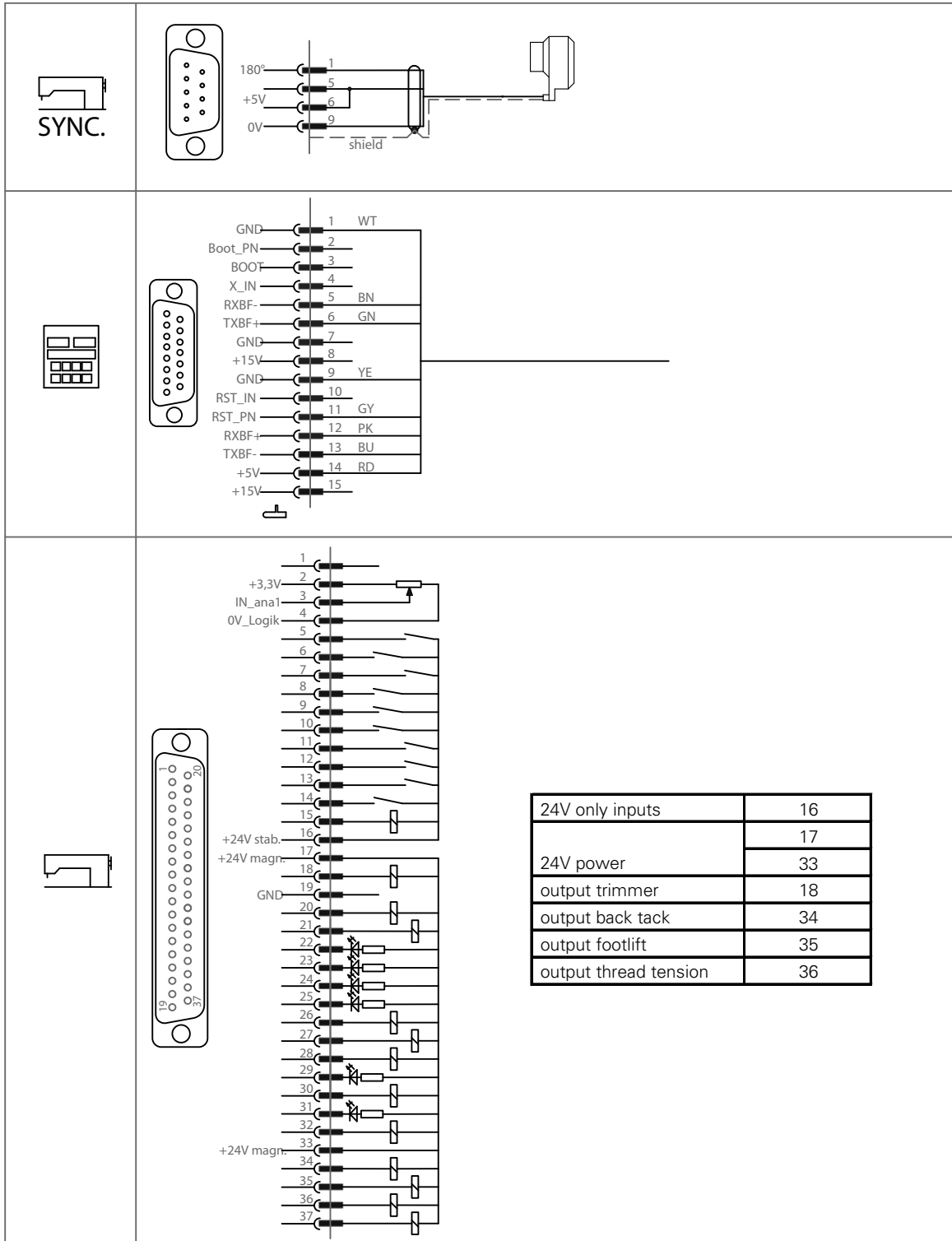
13.09 Internet update of control P40 CD

- You need a dongle with the appropriate machine software to be able to perform a control update.
- You can obtain an empty dongle using the order number **72-250 303-91**.
- The "**DongleCopy**" PC tool is needed to upload software onto the dongle.



A description of how to perform an Internet update of **control P40 CD** as well as the "**DongleCopy**" PC tool can be downloaded from the Internet address <https://partnerweb.pfaff-industrial.com/>.





24V only inputs	16
	17
24V power	33
output trimmer	18
output back tack	34
output footlift	35
output thread tension	36



Europäische Union
Wachstum durch Innovation – EFRE

PFAFF Industriesysteme und Maschinen GmbH

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

Tel.: +49-6301 3205 - 0

Fax: +49-6301 3205 - 1386

E-mail: info@pfaff-industrial.com