PFAFF®

Service Manual

-748/56;/58;/69

for 418,438,483,489,5483,5489 and 5642

Nr. 296-12-14 560

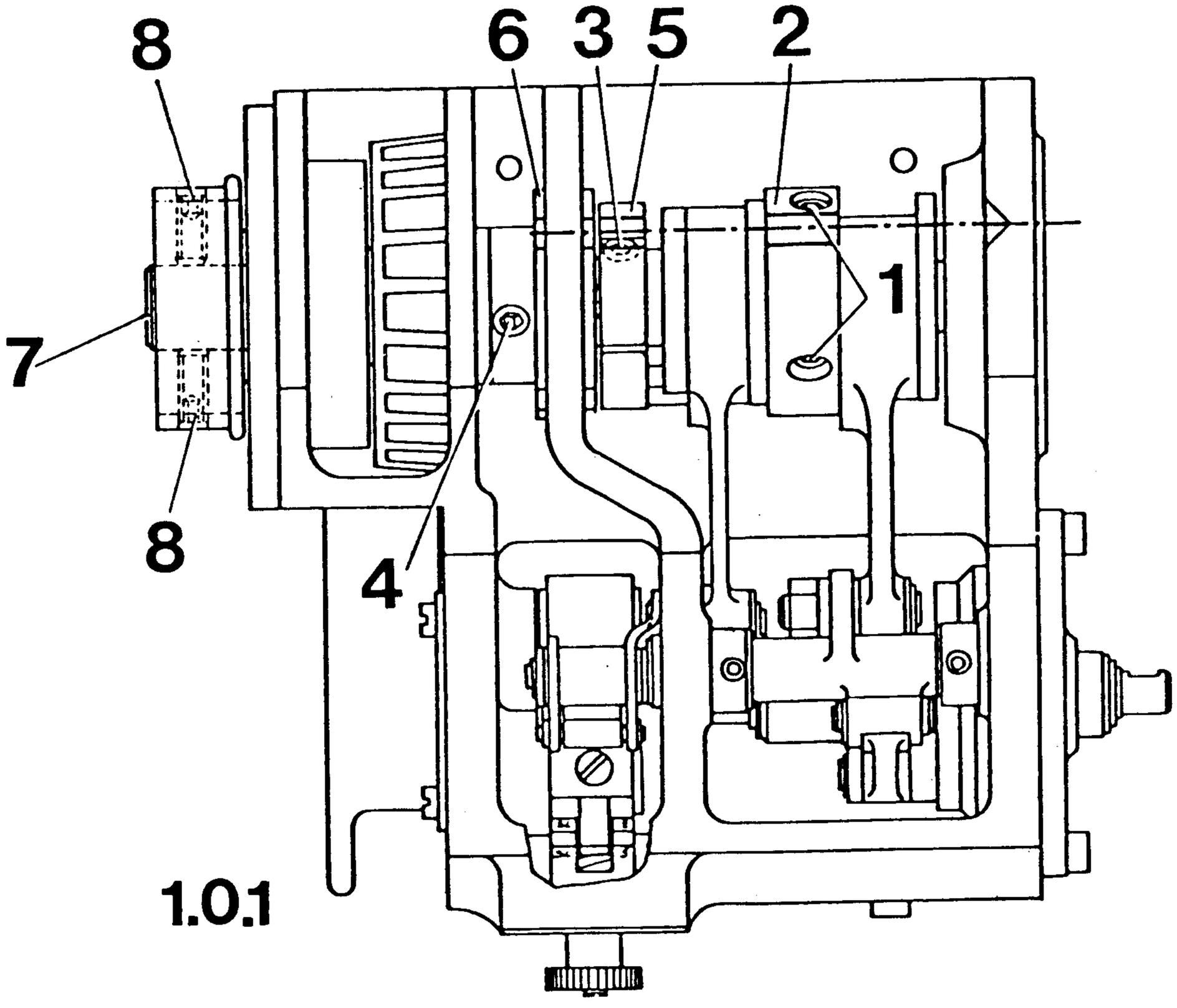
engl. HD 6/82

1 Timing the puller feed and pre-tensioning the centrifugal brake

Setting:

The ground surfaces of eccentric 2 and centrifugal brake carrier 5 must be aligned with the notch in the housing (see Fig. 1.0.1) when the machine is set at the following position according to the class:

Cl. 418; 438:	1.0 mm past t.d.c.
Cl. 483; 489:	0.6 mm past t.d.c.
Cl. 5483; 5489:	0.6 mm before t.d.c.
Cl. 5642:	b.d.c.

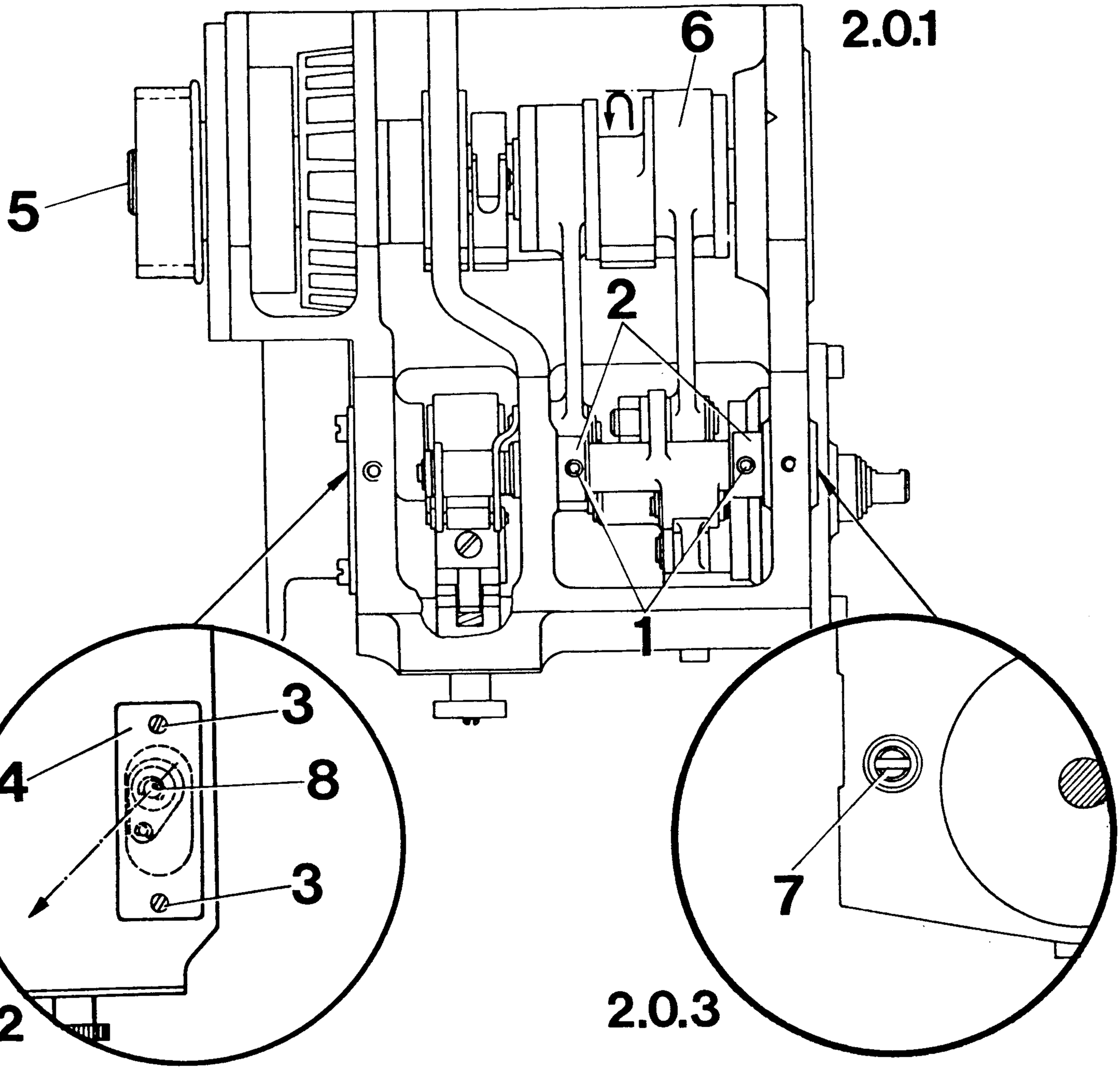


Note: When the puller feed unit is fitted to existing machines, synchronization of puller- and drop feeds can only be achieved by turning shaft 7 after loosening screws 8. Loosening of screws 1, 3 and 4 is then not required.

1.1 Remove the cover at the back of the machine.
1.2 Set the needle bar at the required position (see setting).
1.3 Loosen screws 1 and turn eccentric 2 so that the ground surface of eccentric 2 is aligned with the housing notch.
1.4 In this position tighten screws 1.
1.5 Loosen screws 3 and 4.
1.6 Turn centrifugal brake carrier 5 so that its ground surface is aligned with that of eccentric 2.
1.7 In this position tighten screw 3.
1.8 Turn bush 6 to align its cutout with the cutout on centrifugal weight carrier 5 and tighten screw 4.
1.9 Carry out a check (see setting).

2 Eccentric pin

Setting: When the lobe of eccentric 6 is at the top, the slot of eccentric pin 7 must be horizontal. Also the lobe of eccentric stud 8 must face the standard of the machine (see Fig. 2.0.2 and 2.0.3).



2.0.1

2.0.2

2.0.3

2.1 Loosen screws 1 of fixing collar 2.

2.2 Take out screws 3 and remove cover 4.

2.3 Turn shaft 5 to set the lobe of eccentric 6 at the top.

2.4 In this position turn eccentric pin 7 so that its slot is horizontal and the lobe of eccentric stud 8 faces the standard (see Fig. 2.0.2 and 2.0.3).

2.5 Tighten screws 1 of fixing collar 2.

2.6 Replace cover 4.

Note: If adjustment of the eccentric pin is necessary, the centrifugal brake also has to be newly adjusted, see Section 3.

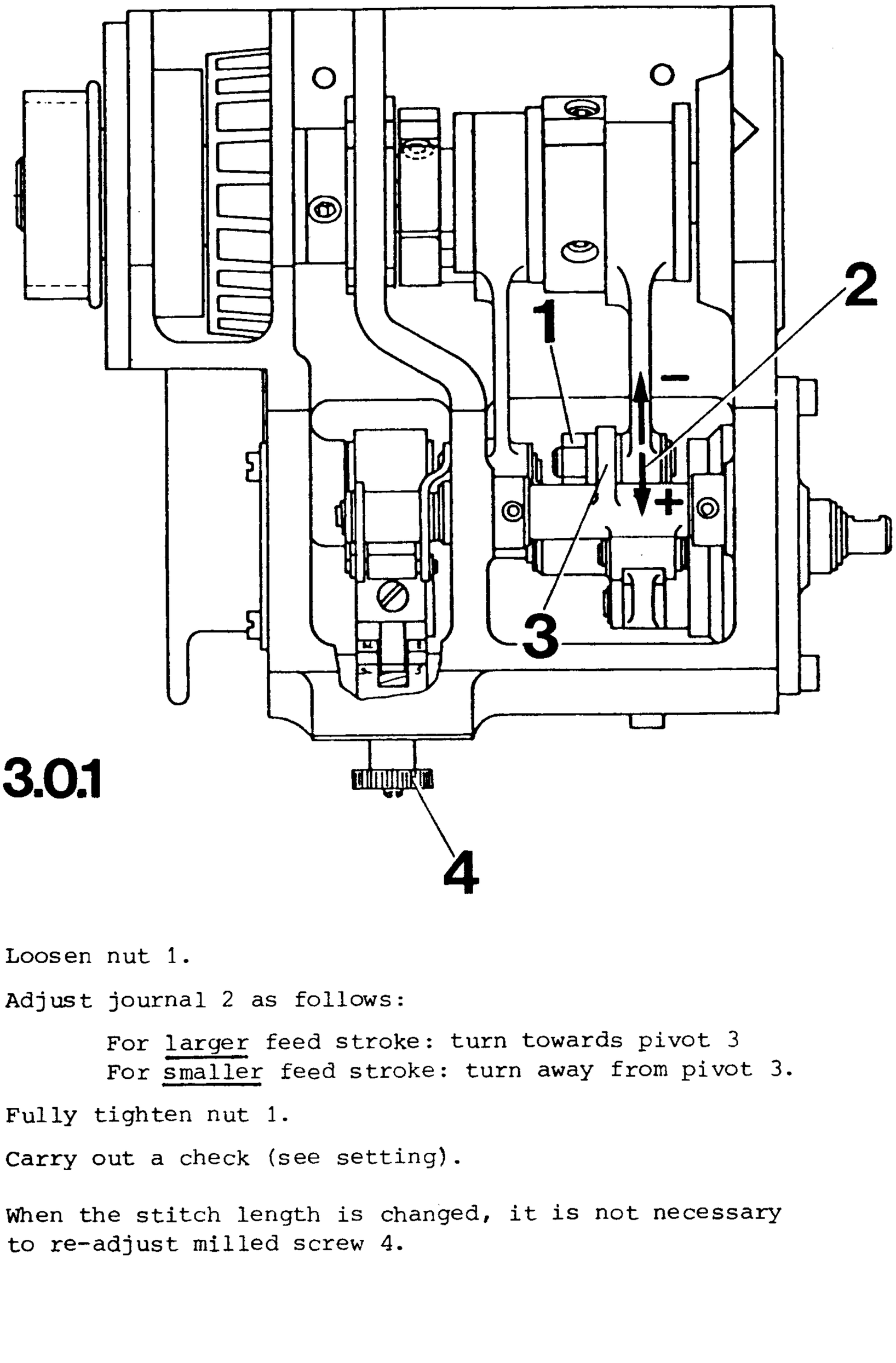
3. Feeding stroke of the puller feed

Setting:

The feeding stroke of the puller feed must coincide with that of the feed dog of the machine.

Note

Slight differences in stroke between puller and machine feed can be evened out by adjusting the machine feed regulator.



3.0.1

3.1 Loosen nut 1.

3.2 Adjust journal 2 as follows:

For larger feed stroke: turn towards pivot 3
For smaller feed stroke: turn away from pivot 3.

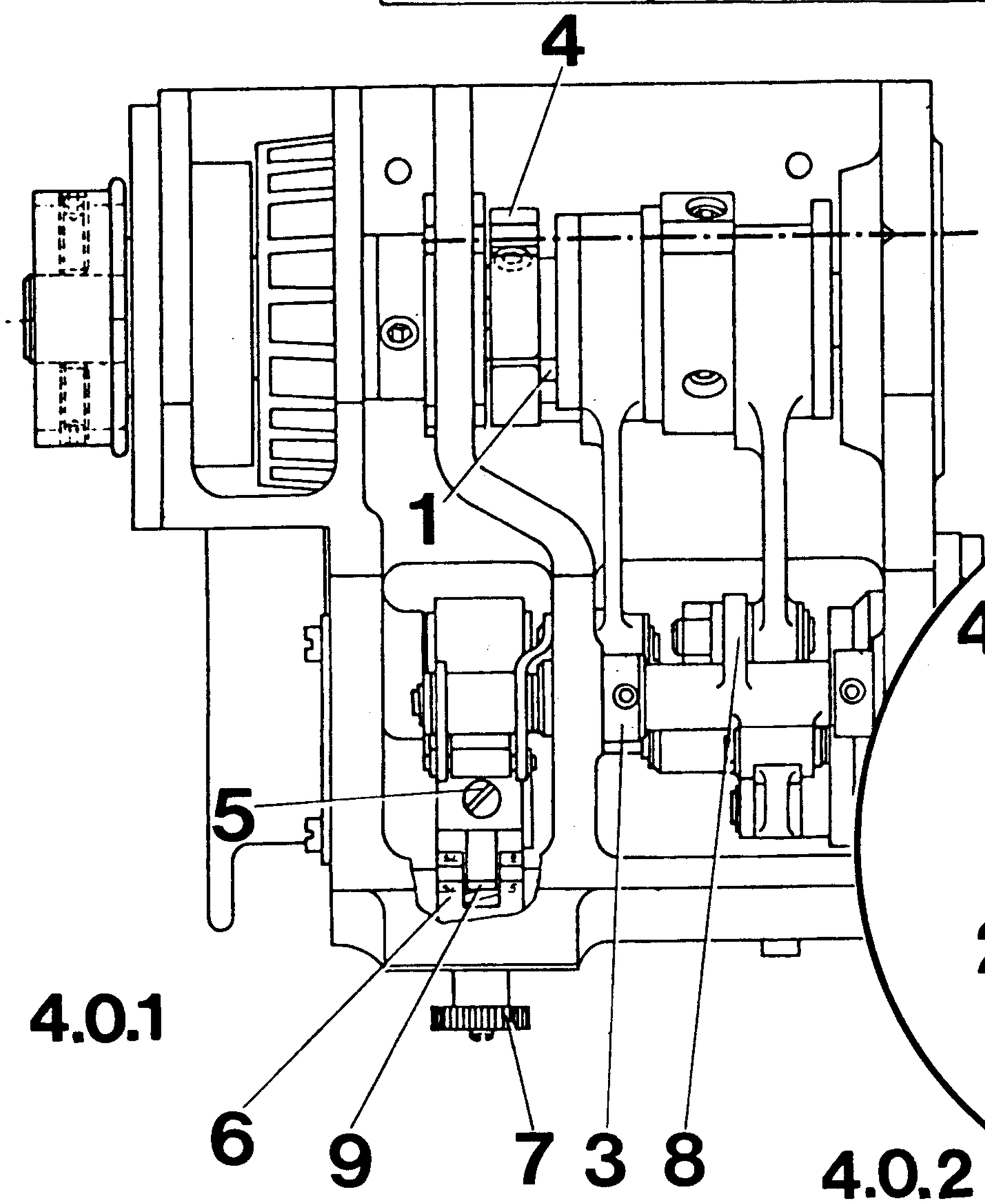
3.3 Fully tighten nut 1.

3.4 Carry out a check (see setting).

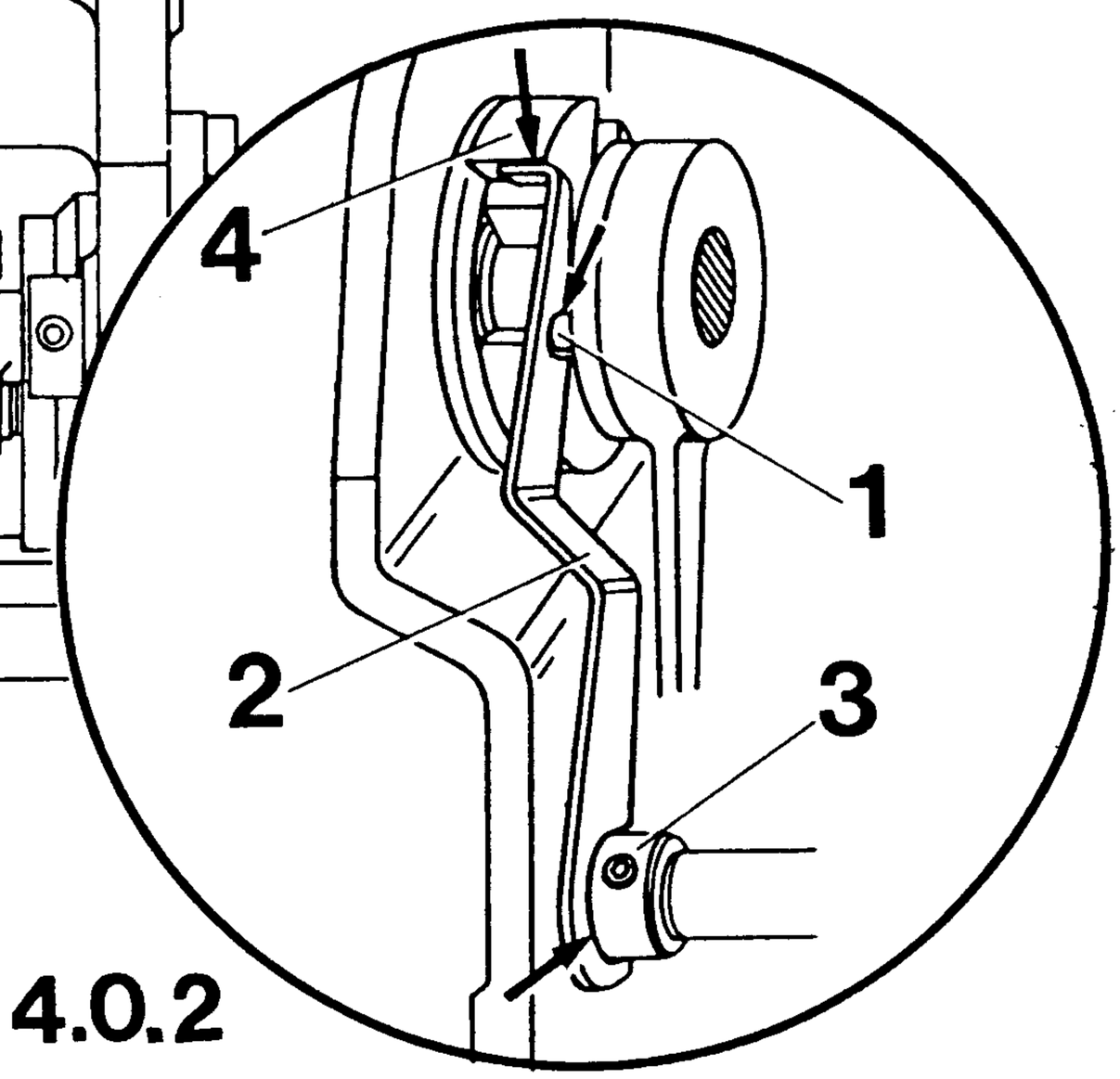
Note: When the stitch length is changed, it is not necessary to re-adjust milled screw 4.

4 Centrifugal brake

Setting: The centrifugally controlled brake must be set so that the set stitch length is retained at all sewing speeds.



4.0.1



4.0.2

4.1 Turn the balance wheel in sewing direction until spring-loaded pin 1 is visible.

4.2 Locate gauge 2 (part No. 91-176 672-15) so that it rests on lower fixing collar 3 and on spring-loaded pin 1 and the end of the gauge rests against centrifugal brake carrier 4 (see arrows in Fig. 4.0.2).

4.3 Loosen screw 5.

4.4 Adjust spring-loaded stop 6 by turning milled screw 7 to the setting used on rocker 8 (see Section 3).

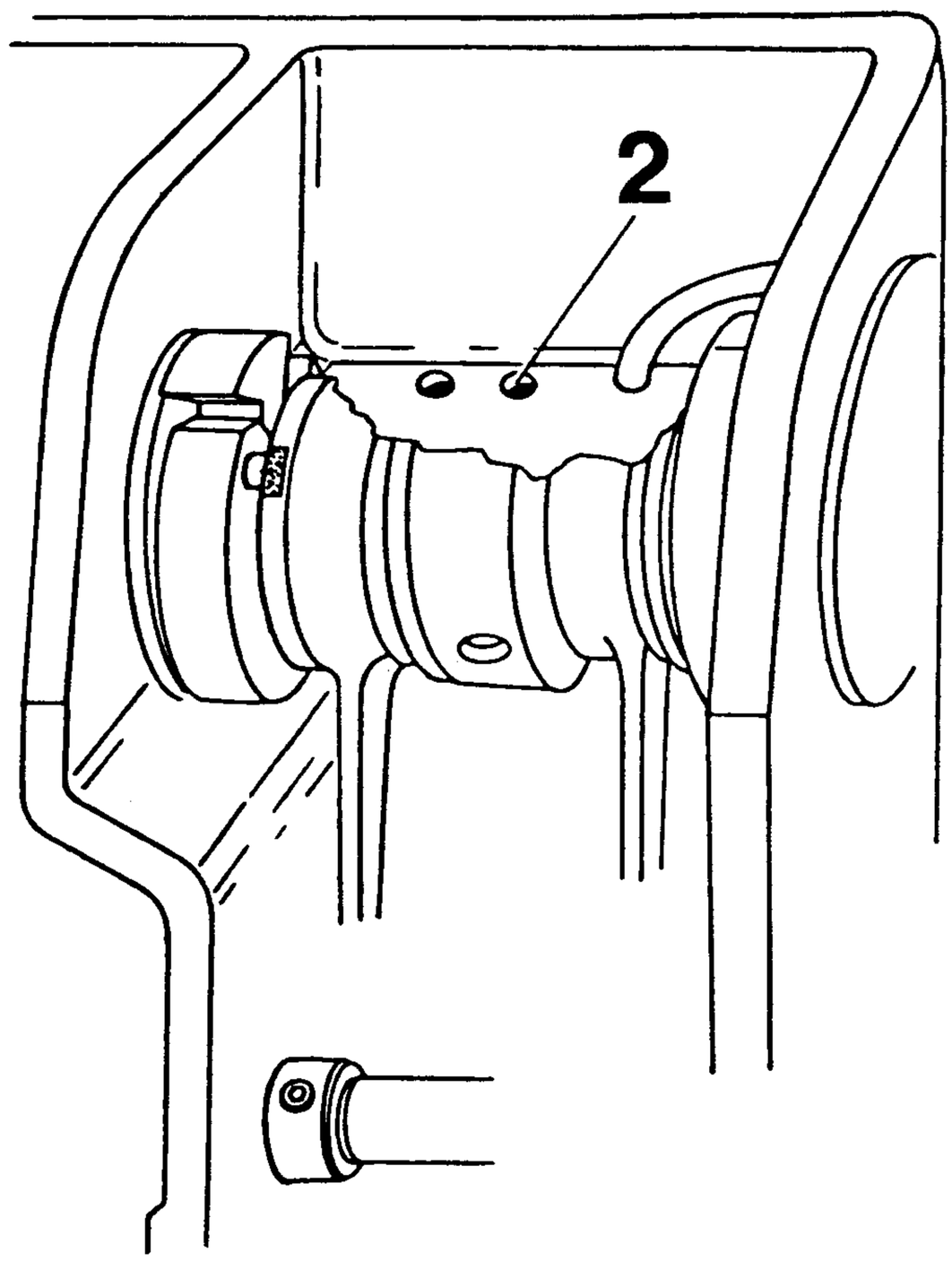
4.5 Push dog 9 on the adjusting slide about 3 mm downwards and allow it to spring back.

4.6 In this position tighten screw 5.

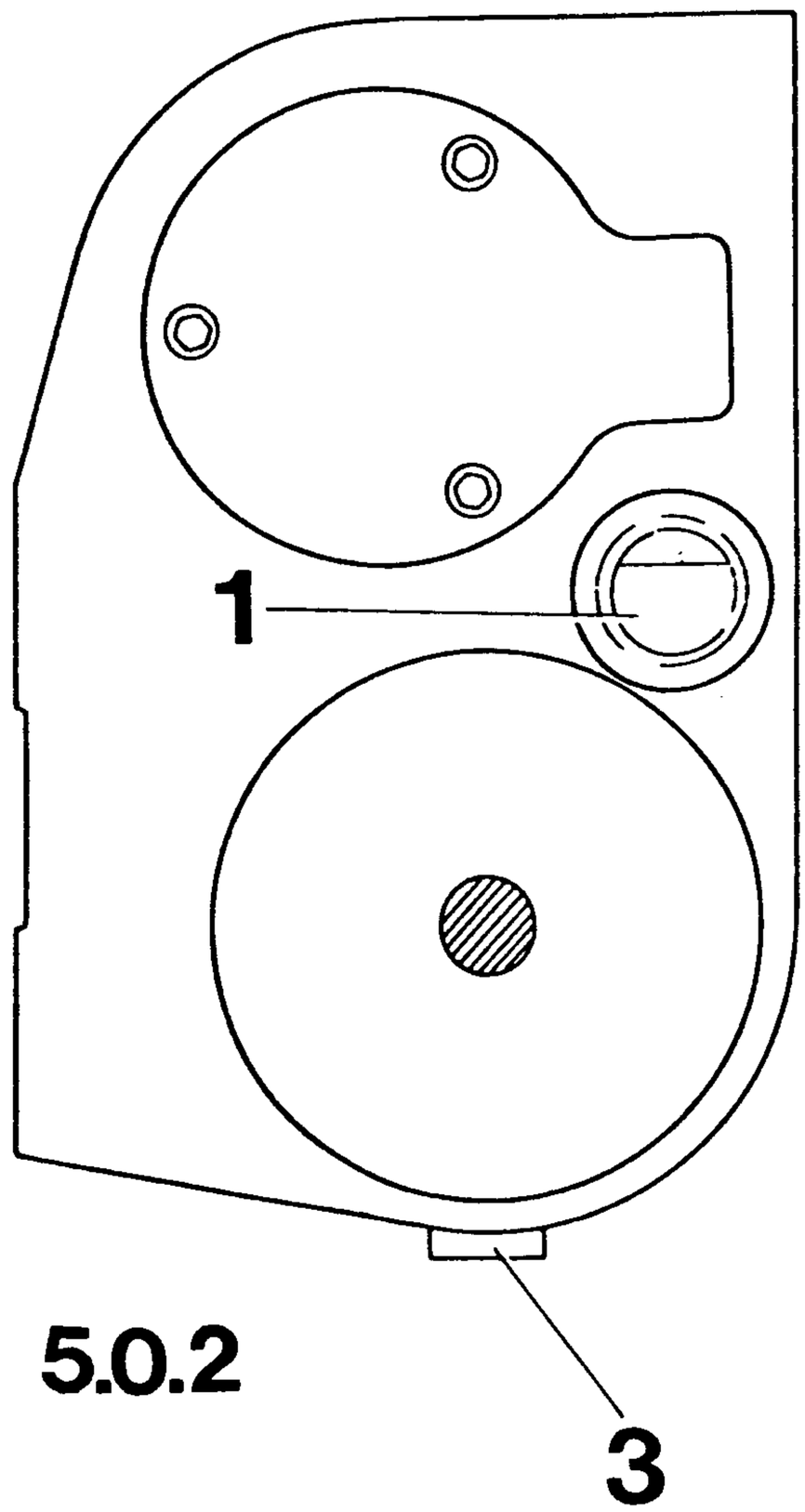
4.7 Remove the adjusting gauge.

5 Lubrication

Note: Only use oil with a viscosity of 16 $mm^2/sec.$ at $50^{\circ}C$ and density of .87 kg/dm^3. We recommend Pfaff sewing machine oil, part No. 280-120144.



5.0.1



5.0.2

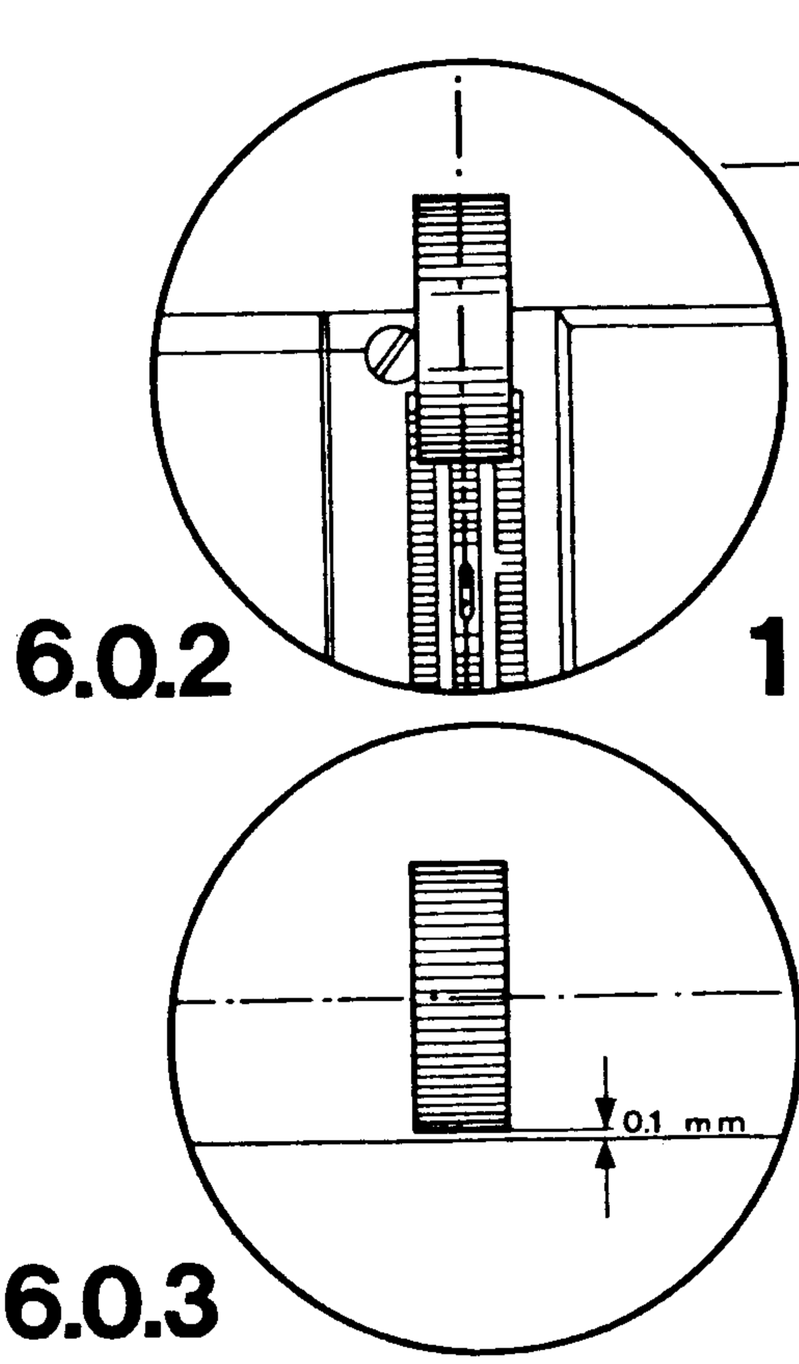
5.1 Check the oil level at oil sight glass 1 once a week and if necessary top up through hole 2 with oil described above.

5.2 From time to time remove screw 3, drain off the old oil and top up with new oil.

6 Roller

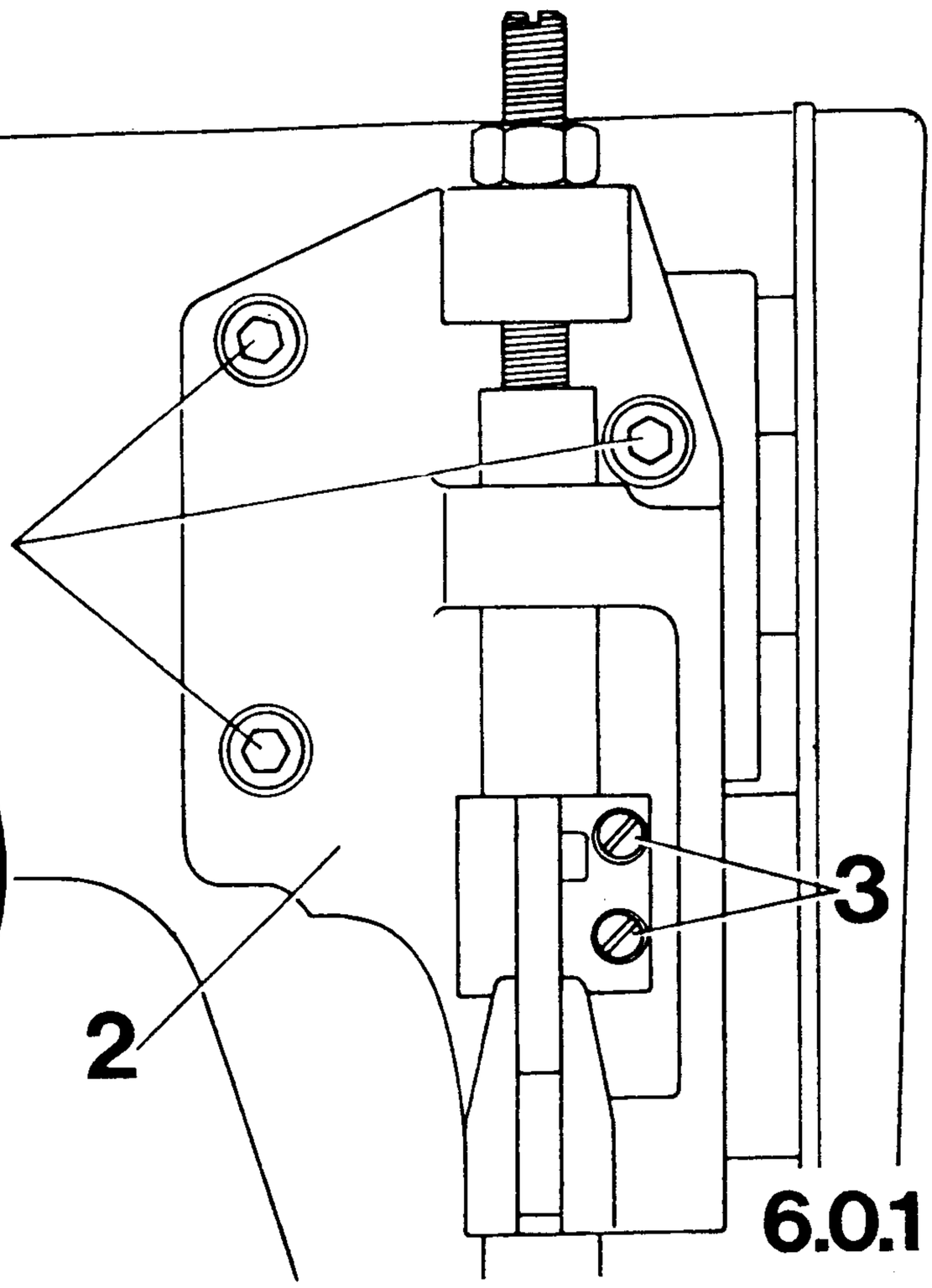
Setting:

In sewing direction the roller must be parallel with the centre-line of the needle plate (see Fig. 6.0.2). The mounting bracket of the roller must be positioned so that the roller is parallel with the surface of the needle plate (see Fig. 6.0.3). Also, on version 748/56 there must be a clearance of .10 mm between roller and needle plate when the roller is lowered (see Fig. 6.0.3).



6.0.2

6.0.3



6.0.1

6. 1 Loosen screws 1 a little.

6. 2 Position roller bracket 2 so that the roller is parallel with the surface of the needle plate (see Fig. 6.0.3).

6. 3 In this position tighten screws 1.

6. 4 Loosen screws 3 a little and turn the roller so that it is parallel with the centre-line of the needle plate (see Fig. 6.0.2).

6. 5 In this position tighten screws 3.

Roller height adjustment (only on 748/56)

6. 6 Lift the roller by means of the hand lever.

6. 7 Place a piece of paper under the roller and lower the roller onto it.

6. 8 Loosen screw 3 again and push the roller onto the paper a little. This will produce a clearance of about .10 mm (see Fig. 6.0.3).

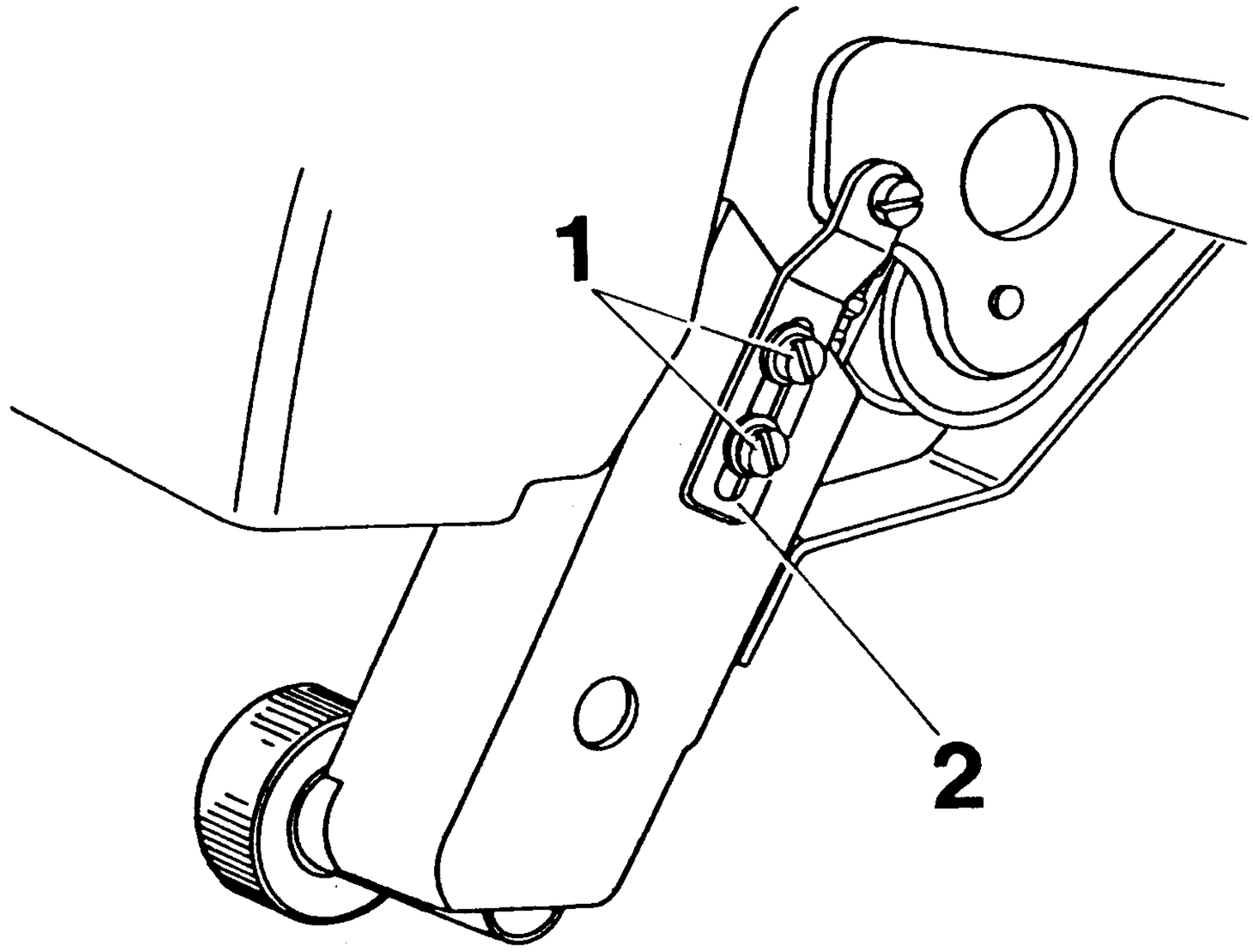
6. 9 Tighten screws 3 again.

6.10 Carry out a check (see "setting").

7 Belt drive of the roller

Setting:

The drive belt must be taut enough to remove any backlash in the rotation of the roll.



7.0.1

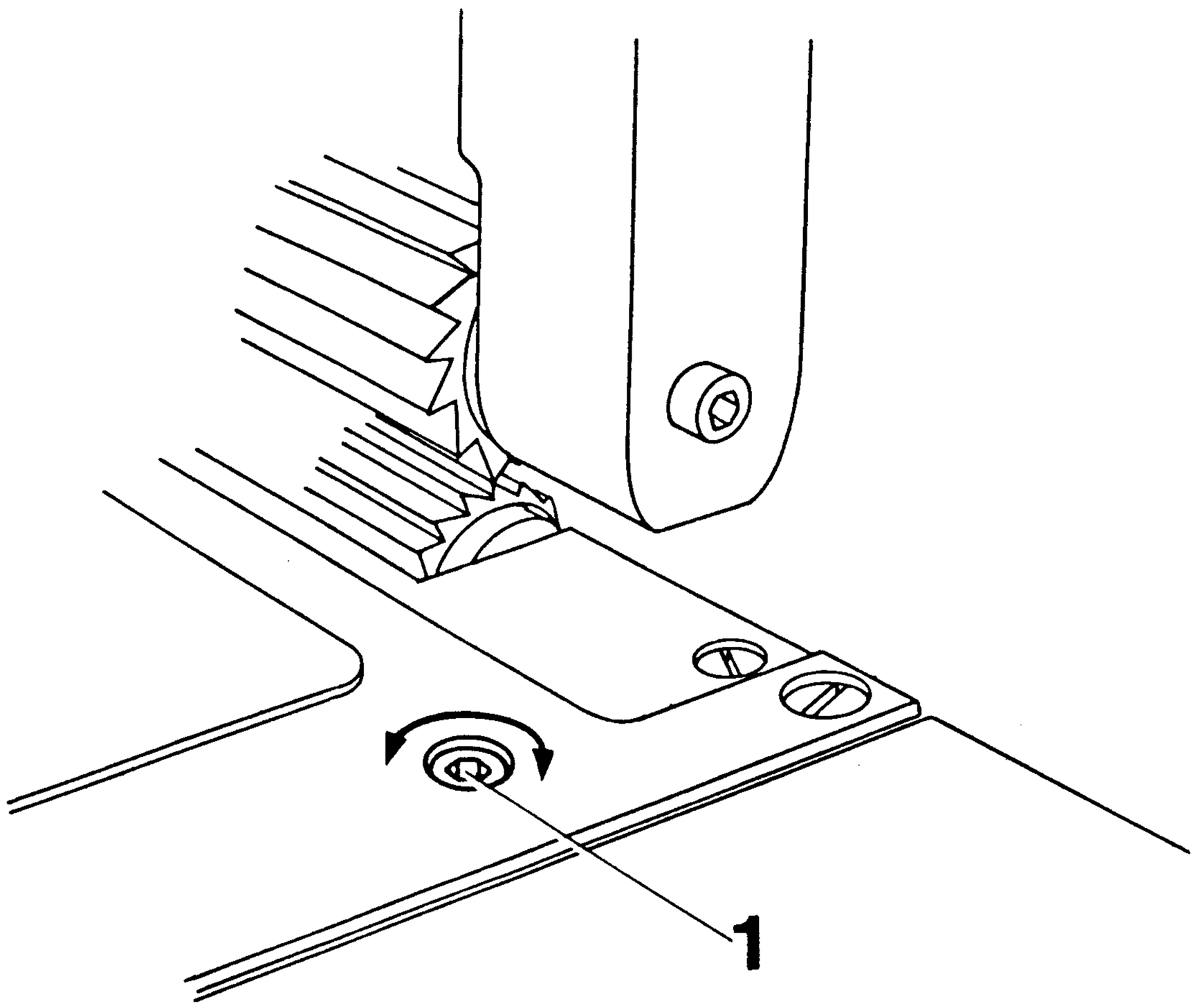
7.1 Loosen screws 1.

7.2 Adjust link 2 so that there is no backlash in the roller.

7.3 In this position tighten screws 1.

8 Pressure of the lower, spring-loaded roller (only on 748/69)

Setting: The pressure of the lower spring-loaded roller must be a little weaker than that of the top roller.



8.0.1

8 1 Raise the top roller by means of the hand lever.

8 2 Turn screw 1 accordingly:

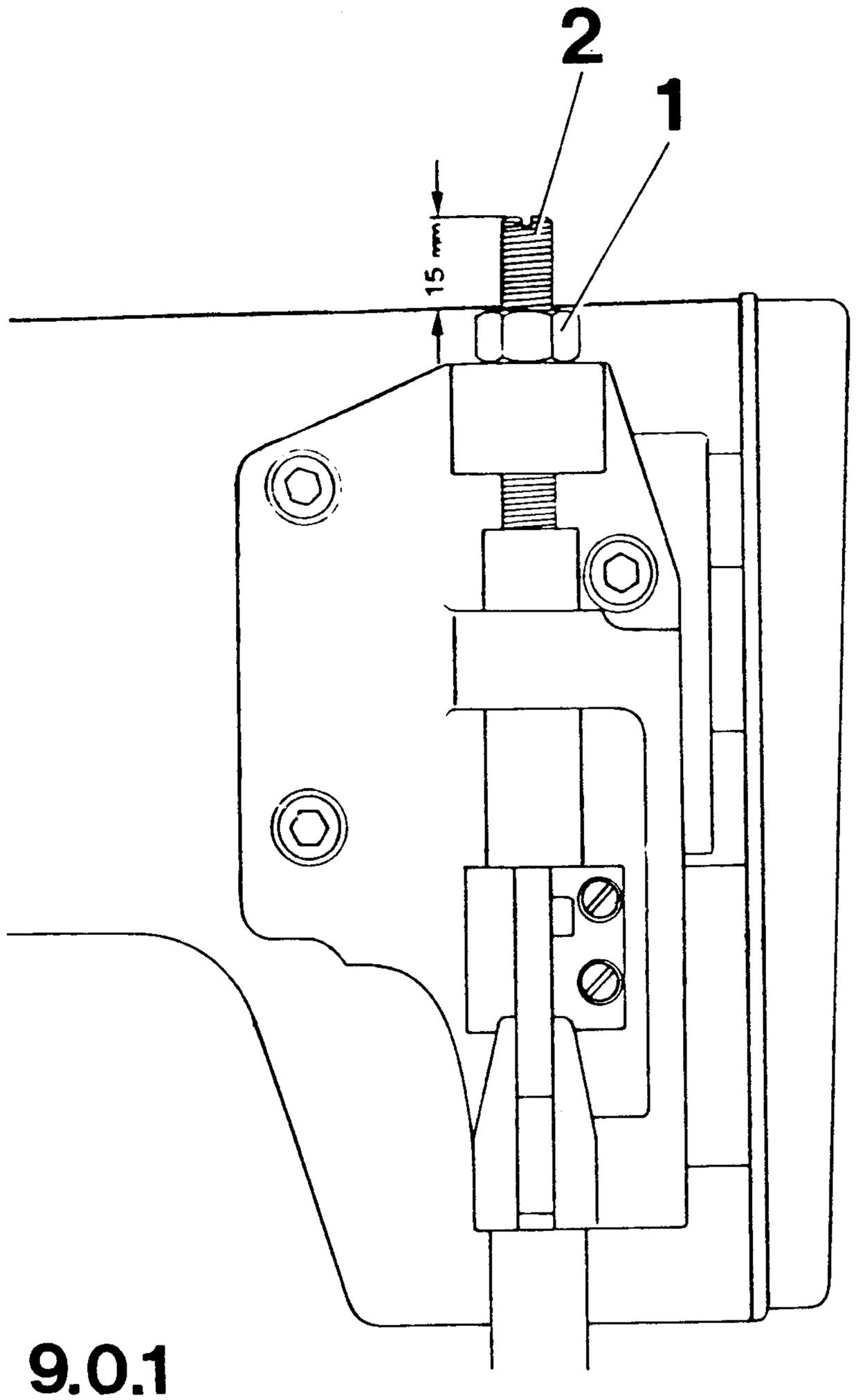
To increase pressure: turn right

To decrease pressure: turn left

8 3 Carry out a check (see setting).

9 Pressure of the top roller

Setting: Regulating screw 2 must project from the top of locknut 1 by about 15 mm. This is a basic setting which can be altered slightly if required.



9.0.1

9.1 Loosen locknut 1.

9.2 Turn regulating screw 2 to a position in which it stands out of locknut 1 by roughly 15 mm.

9.3 In this position,tighten locknut 1.