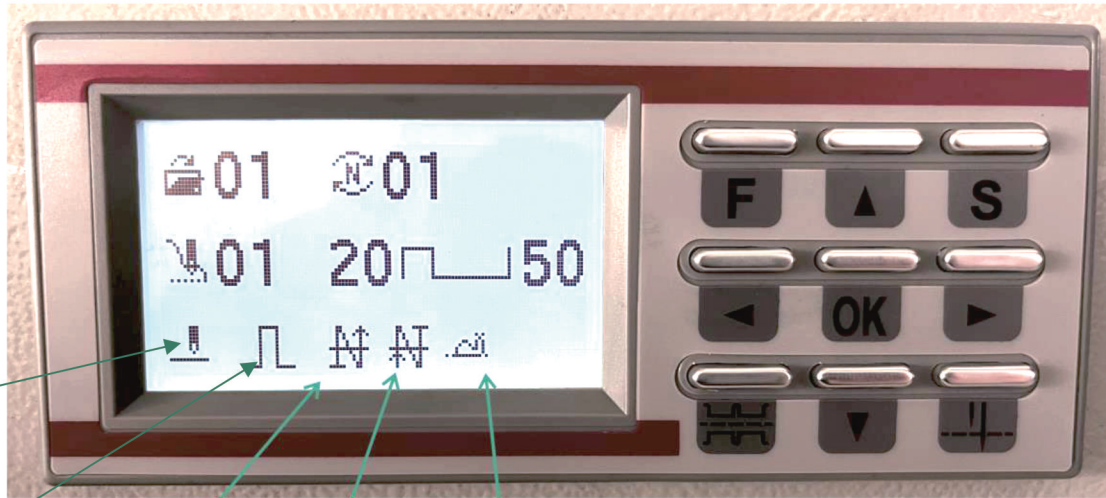


795GA PRANEL



半针

Half needle



上下珠点转换

Purl and knit change



前回针

Sewing starting



后回针

Sewing ending



软启动

Soft start sewing



iron adjust date stitching



Program number

The program number value range is (00-99), and it can store (memorize) 100 combinations of stitch length values. One program number stands for one sewing cycle.



Total stitch number

It refers to the total stitch number in one program number, with a value range of (00-15), and one program number may consist of 15 stitches at most.



Stitch ordinal

The stitch ordinal value shows the stitch ordinal in the current program number sewing cycle.



Purl stitch length

The purl stitch length value stands for the purl stitch length of the current needle size and the purl stitch length data range (05-70) is approximately 0.5-7mm.



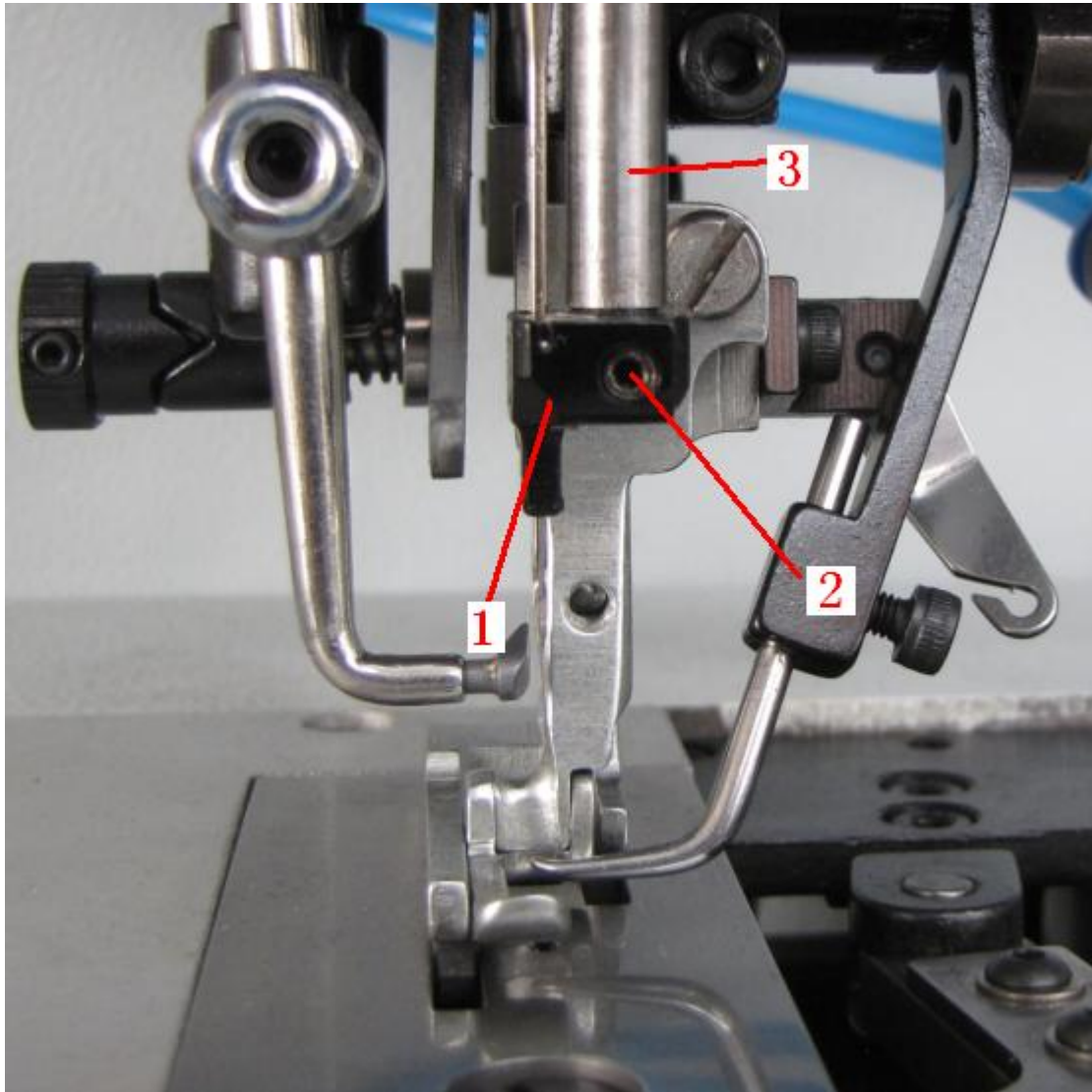
Knit stitch length

The knit stitch length value stands for the knit stitch length of the current needle size and the knit stitch length data range (05-70) is approximately 0.5-7mm.



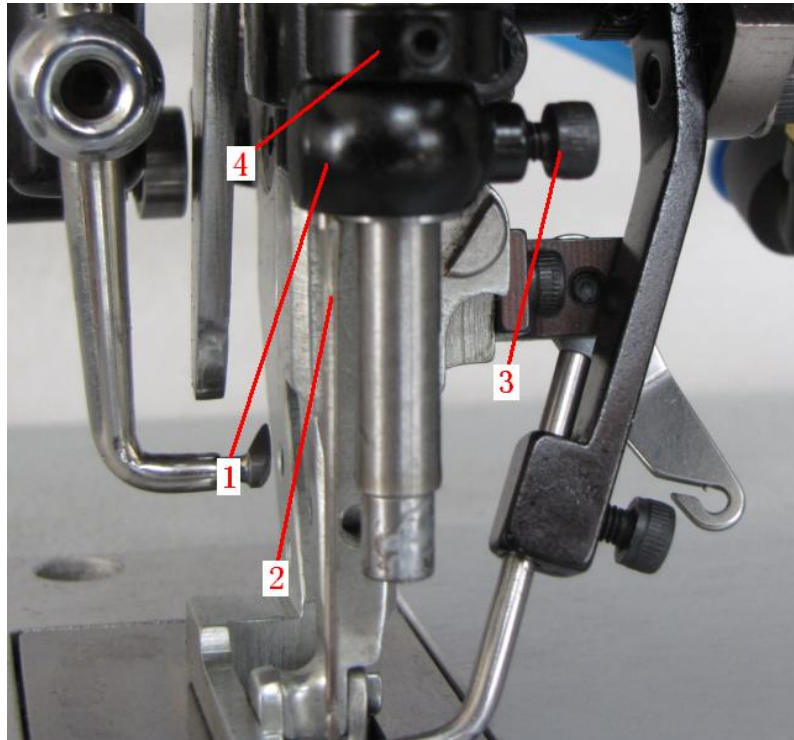
Press these iron to adjust Program

If you need to replace the worn needle or change the needle type, please install the needle follow the steps below.



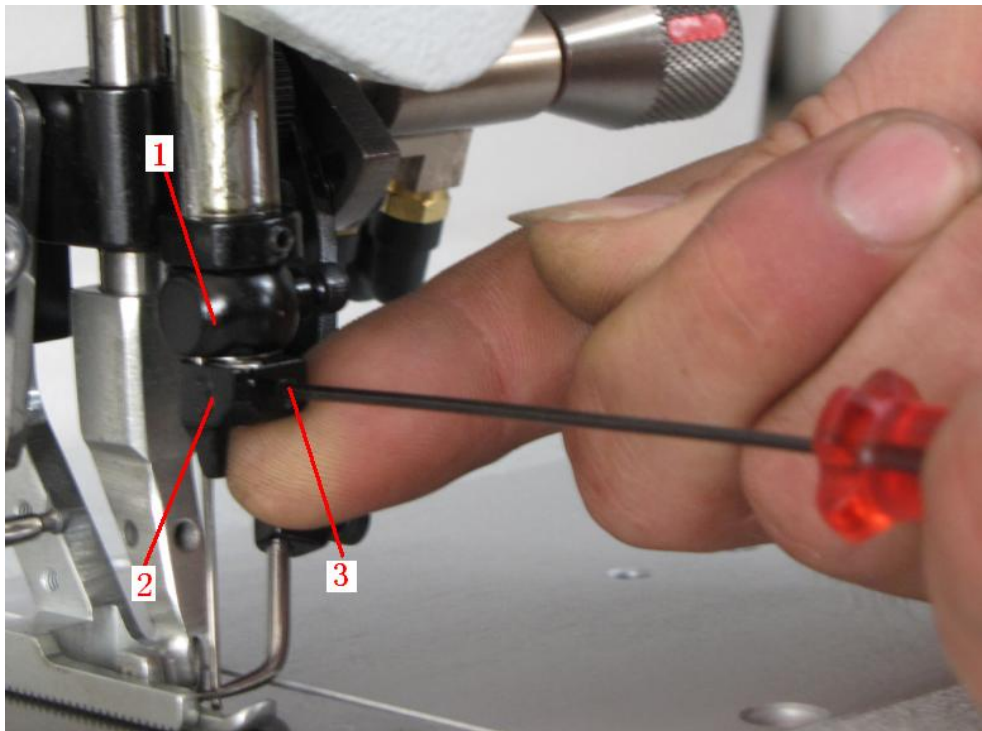
(Picture 23)

1. Loosen the screw (23-2) and remove the fabric clip (23-1) from the fabric clip lever (23-3).



(Picture 24)

2. Loosen the fixing screw (24-3) in needle camp (24-1), remove the old needle (24-2) and reinstall the new needle into the needle camp. The needle eye should position at the operator. Lift the needle to reach the hoop (24-4) and tighten the screw (24-3).

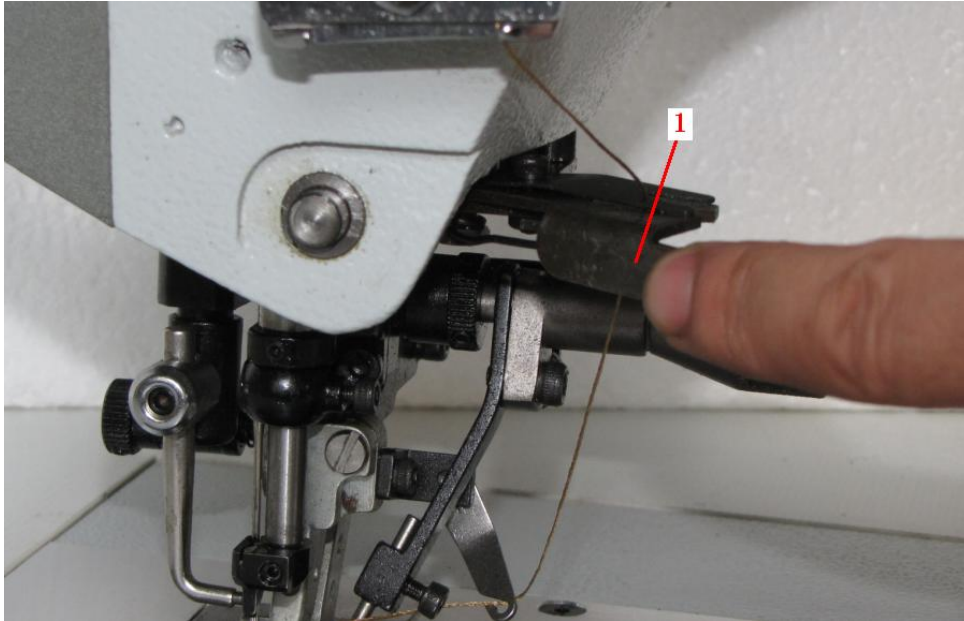


(Picture 25)

3. Put the fabric clip (25-2) on the fabric clip lever, move the fabric clip (25-2) and the fabric clip lever to the upper dead centre. Tighten

the screw (25-3). Check the movement of the fabric clip and the position of the needle. If the fabric clip cannot move freely or the needle is not vertical, please loosen the screw (25-3) and readjust the position of the fabric clip.

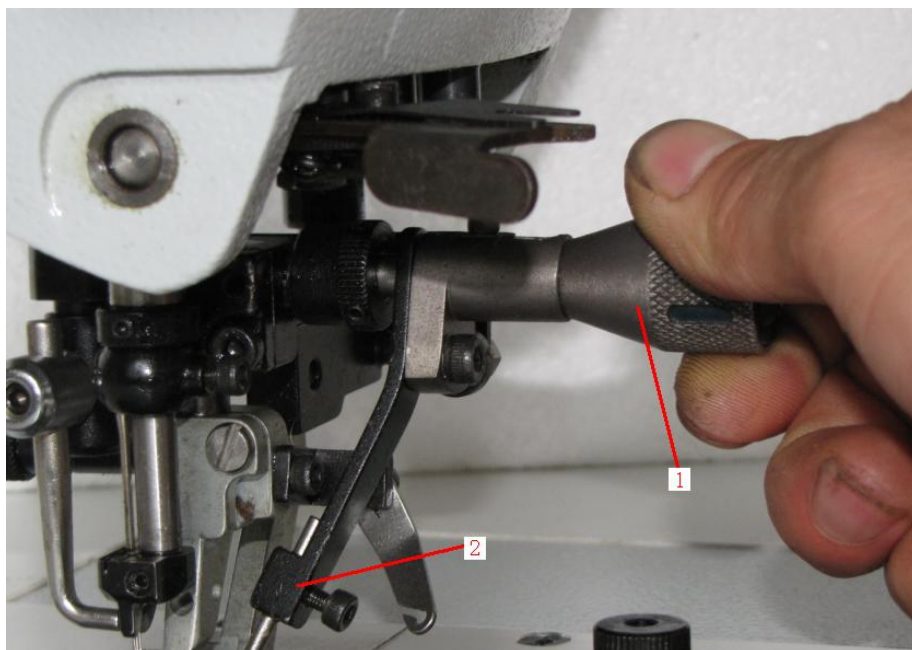
[9] Manual Trimming



(Picture 26)

Note: Automatic trimming is available when the power supply is EFKA motor. When the thread hangs on the blade, and machine has sewn 4-5 stitches, move the blade (26-1) by hand to cut the thread.

[10] Thread tightness adjustment

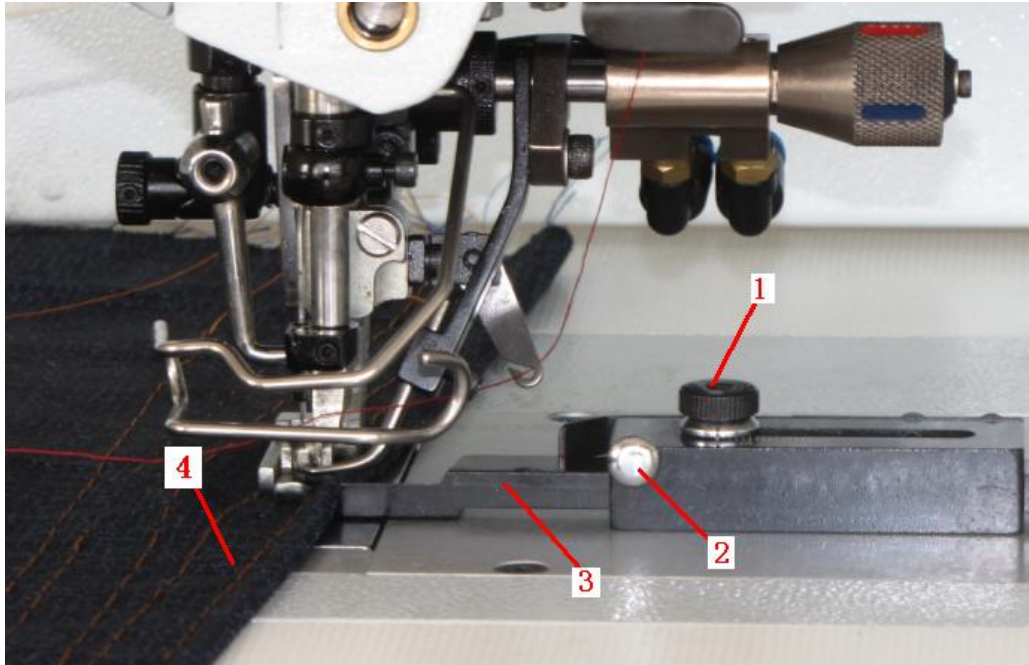


(Picture 27)

Turn the stitch slackening adjustment knob (27-1) by hand and the

stitch slackening finger (27-2) moves. If the stitch slackening finger moves to left, the stitch tightness will be weaker. If the stitch slackening finger moves to right, the stitch tightness will be stronger.

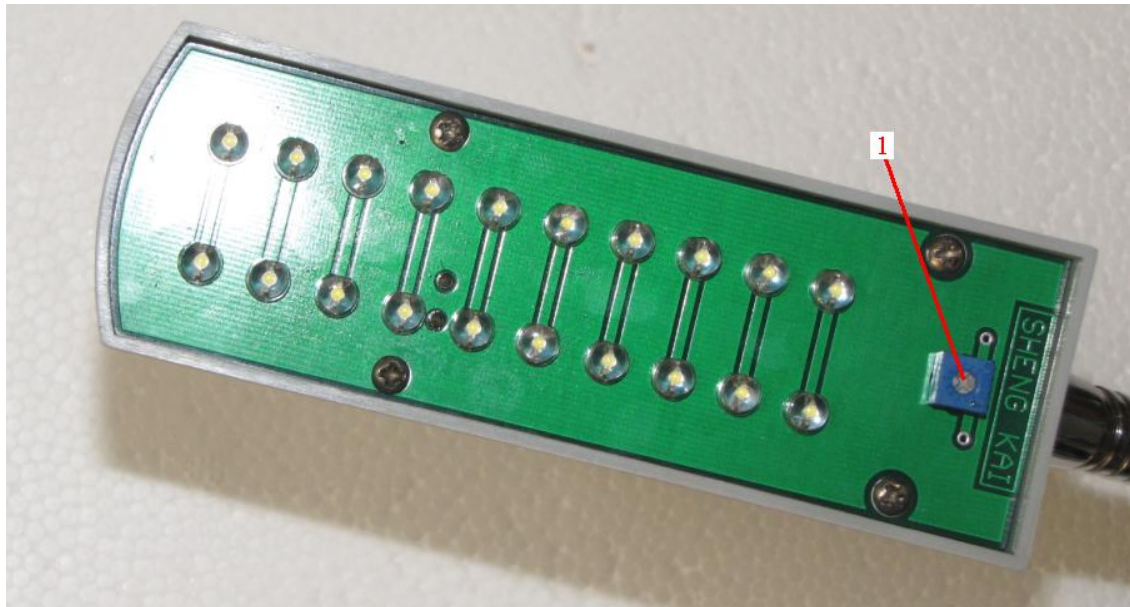
[11] Adjustment of the location block



(Picture 28)

The distance between the location block (28-3) and the middle of the needle decide the distance between the sewing stitch and the edge of the fabric (28-4). Loosen the screw (28-1) and move the location block (28-3) to the correct position by hand, and tighten the screw (28-1). If you need to reset the position of the location block (28-3), please loosen the screw (28-1) and press the reset button (28-2). And then tighten the screw (28-1) to finish the reset.

[12] Adjustment of LED Lamp Brightness



(Picture 29)

LED lamp Brightness could be adjusted by turning the screw (29-1) by screw driver.

F – MACHINE ADJUSTMENT AND MAINTANENCE

- [1] DIAGRAMS ILLUSTRATING THE TWO WORK CYCLES
- [2] Adjustment of the Cams
- [3] ADJUSTMENT OF THE NEEDLE GUARD
- [4] Adjustment of Eye-cover Tongue
- [5] ADJUSTMENT TONGUE HEIGHT
- [6] Adjustment of Fabric Clip Height
- [7] Adjustment of the Slide on Inner Rod
- [8] Adjustment of Inner Rod
- [9] Adjustment of Clamp Feet Pressure
- [10] Adjustment of Distance between Lower Feeder and Throat Plate
- [11] Adjustment of Distance between Upper Feeder and Throat Plate
- [12] Adjustment of Thread Catcher
- [13] Adjustment of the Movement of Thread Catcher
- [14] Adjustment of Upper Hook
- [15] Adjustment of Thread-Loading Wheel
- [16] Adjustment of Lower Rotatory Hook
- [17] Adjustment of Thread Lifts
- [18] Adjustment of Tension Unit
- [19] Adjustment of Thread Loader
- [20] Lubrication and Cleaning

F – MACHINE ADJUSTMENT AND MAINTANENCE



CAUTION!

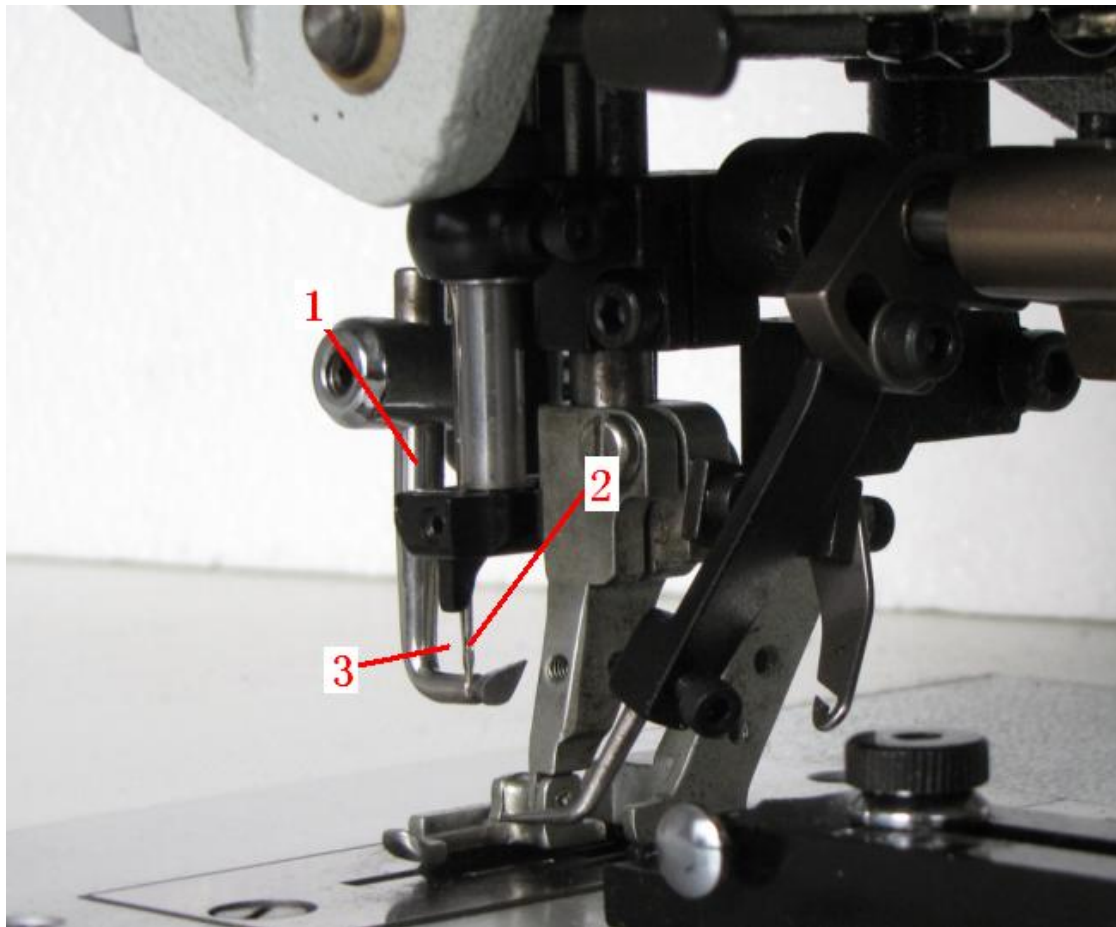
All the maintenance and adjustment of machine should be done by skilled personnel.

All the maintenance and adjustment of machine should be done after switching off the power.

[1] DIAGRAMS ILLUSTRATING THE TWO WORK CYCLES

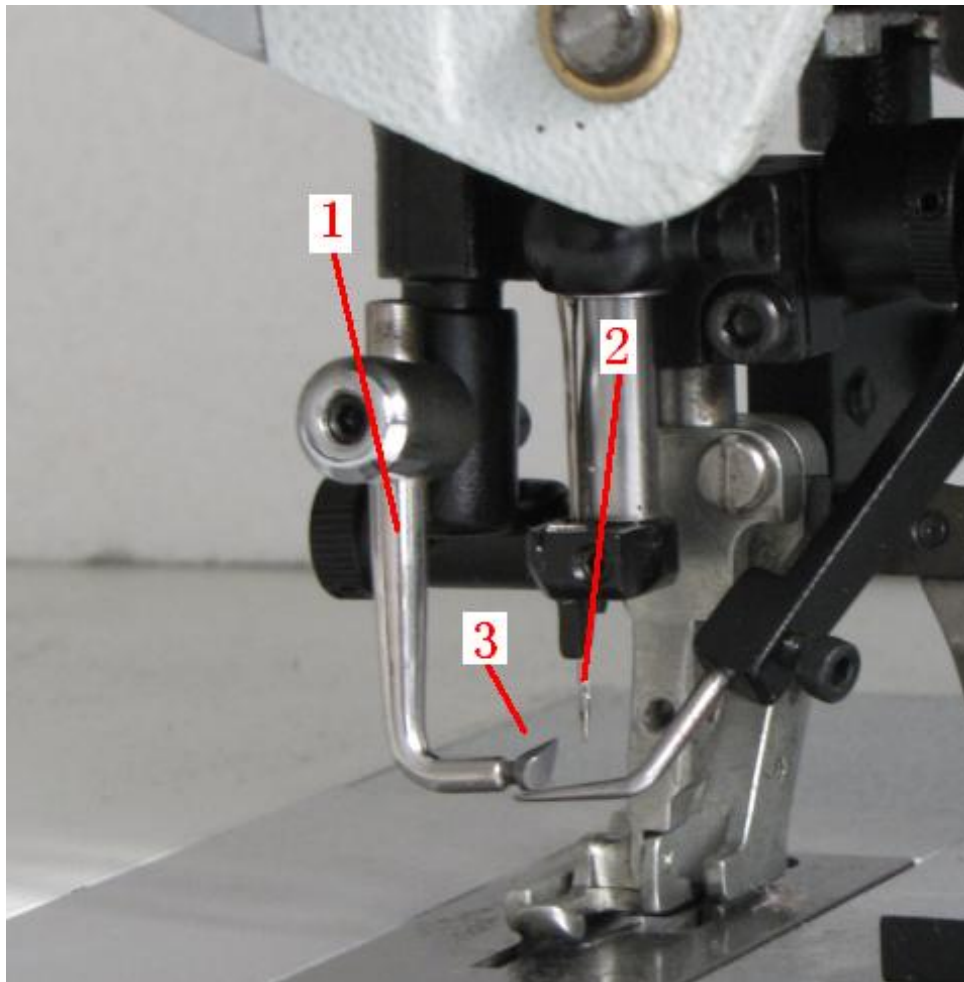
The formation of a complete stitch takes place in two work cycles.

(Picture 30)



1st cycle: Formation of the stitch on the upper part of the fabric. The

first cycle begins with the threaded needle (30-2) that descends from the upper dead centre with the upper hook (30-1), beginning the stroke in which it picks up the thread on the needle. It finishes with the needle (30-2) back at upper dead centre without thread, whilst the upper hook (30-1) is in its resting position (30-3) behind the needle.



(Picture 31)

2nd cycle: Formation of the stitch on the lower part of the fabric. The second cycle begins when the needle, without the thread, descends from the upper dead point, with the upper hook in its resting position behind the needle. It finishes with the threaded needle stroke in which it picks up the thread on the needle.

NOTE:

When the upper hook stops at the resting position, the first cycle is finished.

When the upper hook stops at the starting position, the second cycle is finished.

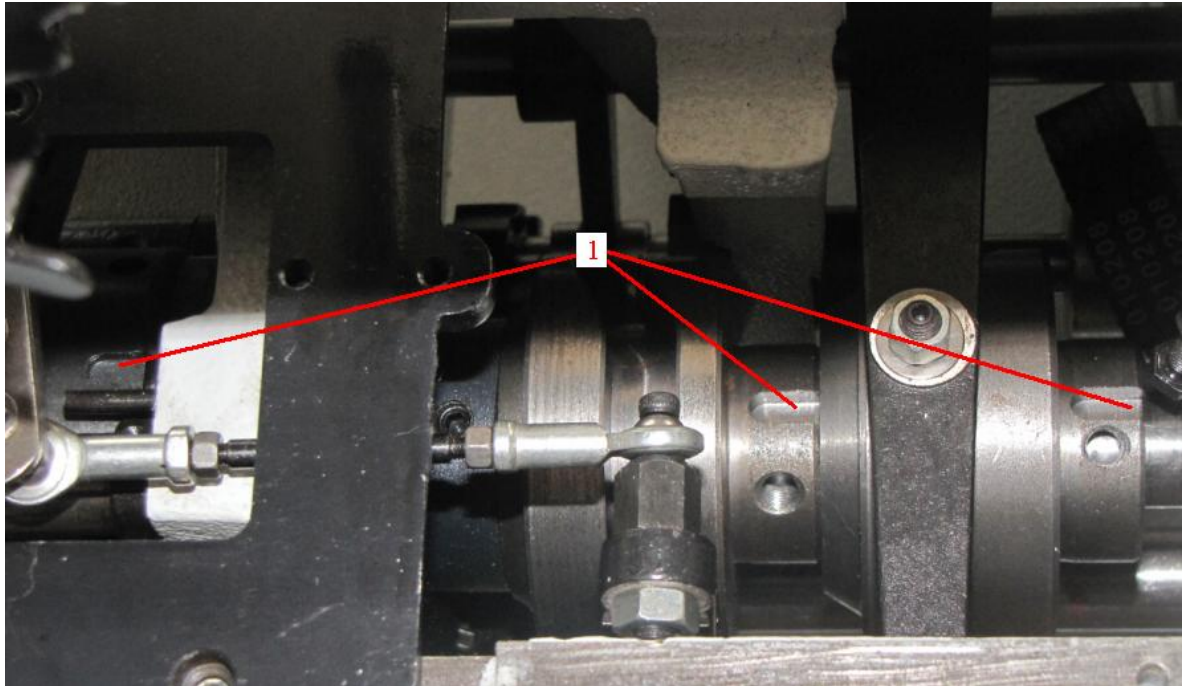
[2] Adjustment of the Cams

The correct positions of cams are critically important to the proper

running of sewing machine. All the adjustment of the machine should base on the correct positions of cams. For your convenience, we developed the mark holes or grooves and locating accessories, which are helpful for adjustment of the cams.

Note: Every cam has two fixing screws, which need loosen before adjustment and tighten after adjustment.

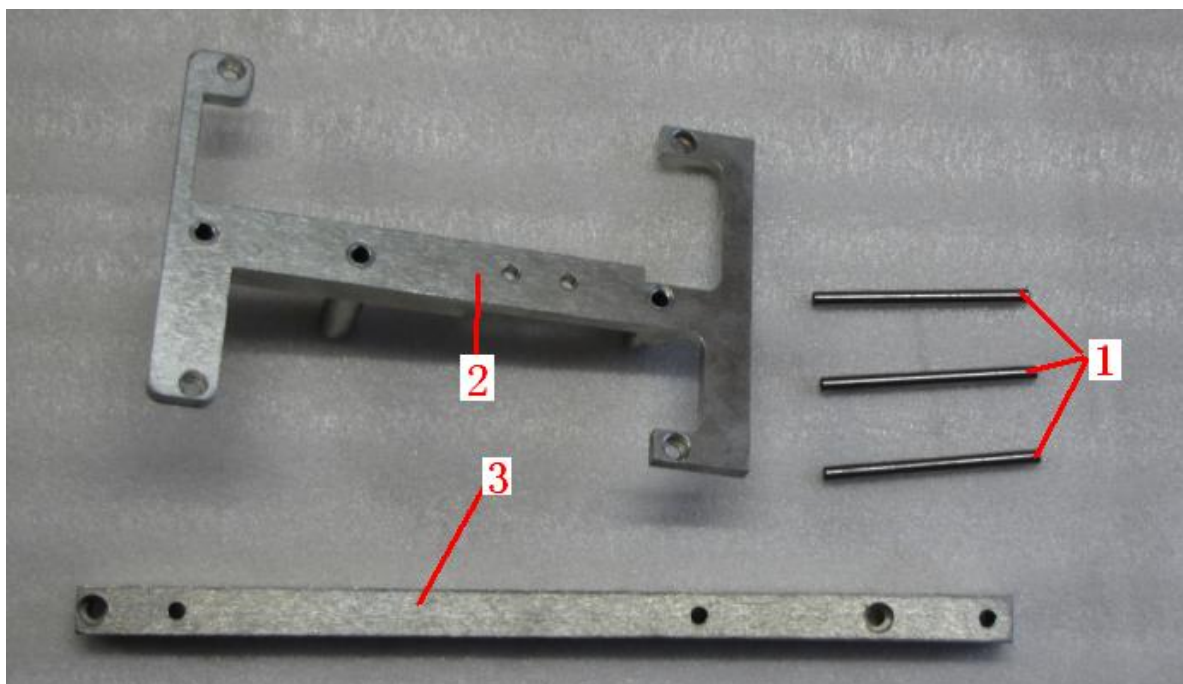
All the cams have mark grooves.



(Picture 32)

Picture 32 shows the mark grooves (32-1) in some of the cams.

(Picture 33)

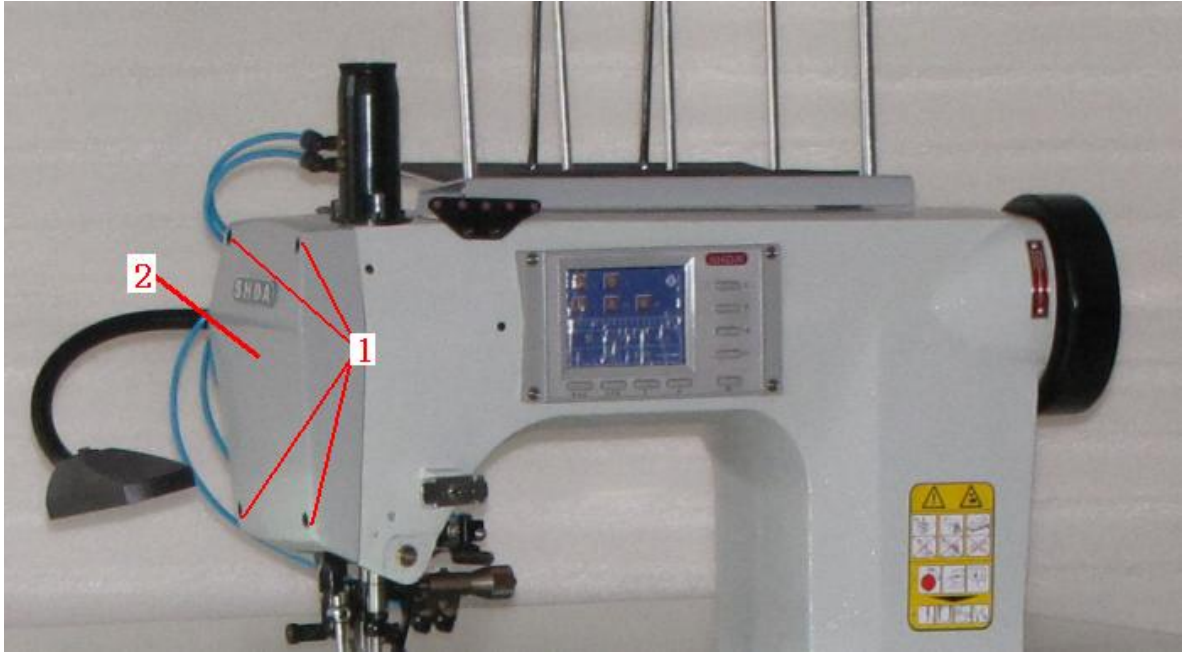


The locating assembly is optional.

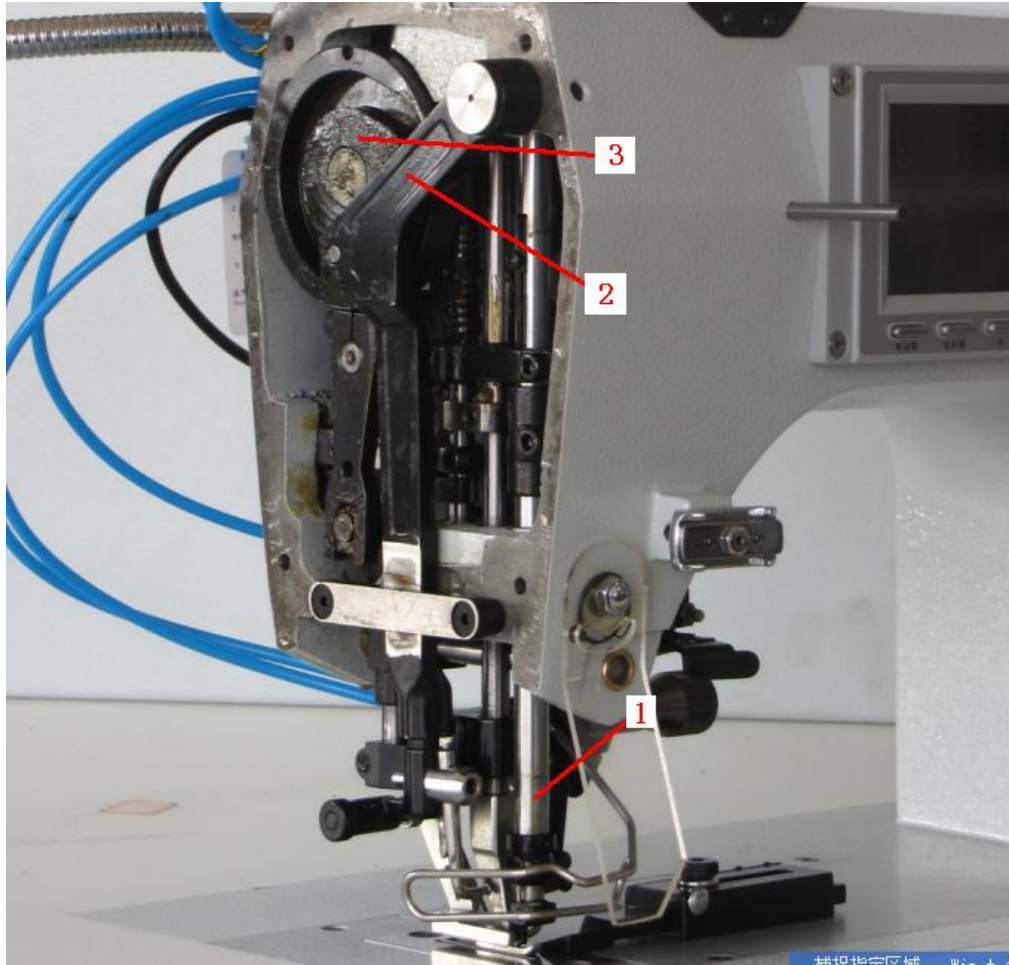
Three locating pins (33-1) 5.0mm in diameter, locating frame (33-2) and locating strip (33-3) are included in locating assembly.

Follow the steps below to check and adjust the cams.

(Picture 34)



1. Loosen the screws (34-1) and open the machine head cover.



(Picture 35)

2. Turn the hand wheel to move the needle bar (35-1) to the lower dead centre.



(Picture 36)

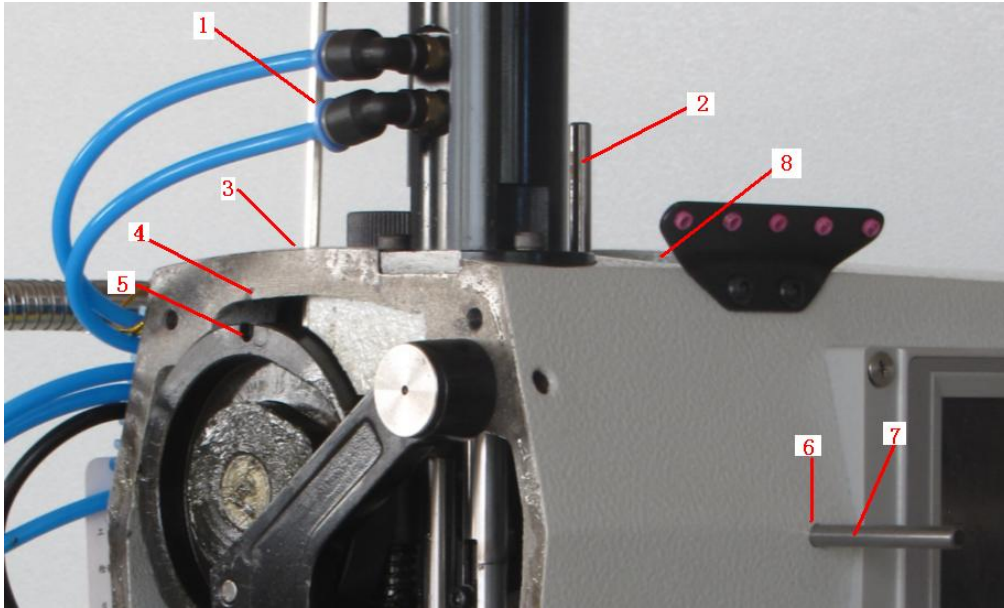
3. Check and adjust the position of needle bar crank

Remove the machine head hole (36-1) cap. Loosen the screw (36-5) and turn the needle bar crank. Place the locating pin (36-2) into the mark hole (36-4) in the needle bar crank through the locating hole (36-3). Tighten the screw (36-5).

Note: Remain the locating pin (36-2) inside the mark hole (36-4) until all the adjustments below are finished.

Remove the machine head hole (36-6) cap.

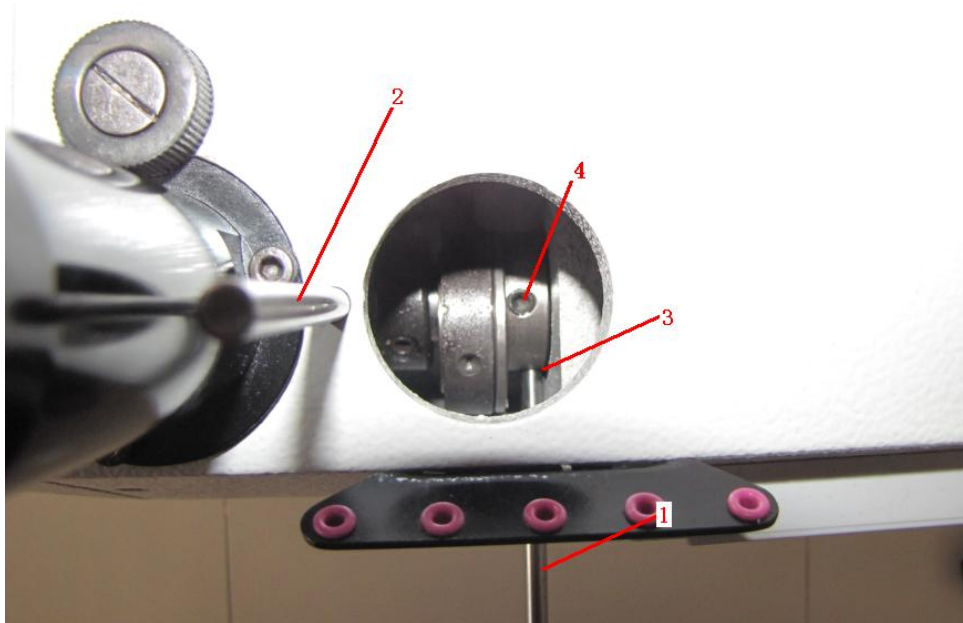
4. Check and Adjustment of Upper Loper Drive Cam



(Picture 37)

Keep the locating pin (36-2) inside the mark groove (36-4). Use the hexagonal key (included in accessories) (37-1) to loosen the screw inside the machine head hole (37-3). Turn the upper looper drive cam to make the mark groove (37-5) in the upper looper drive position at the mark groove (37-4) in the machine head. Use the hexagonal key (37-1) to tighten the screw inside the machine head hole (37-3).

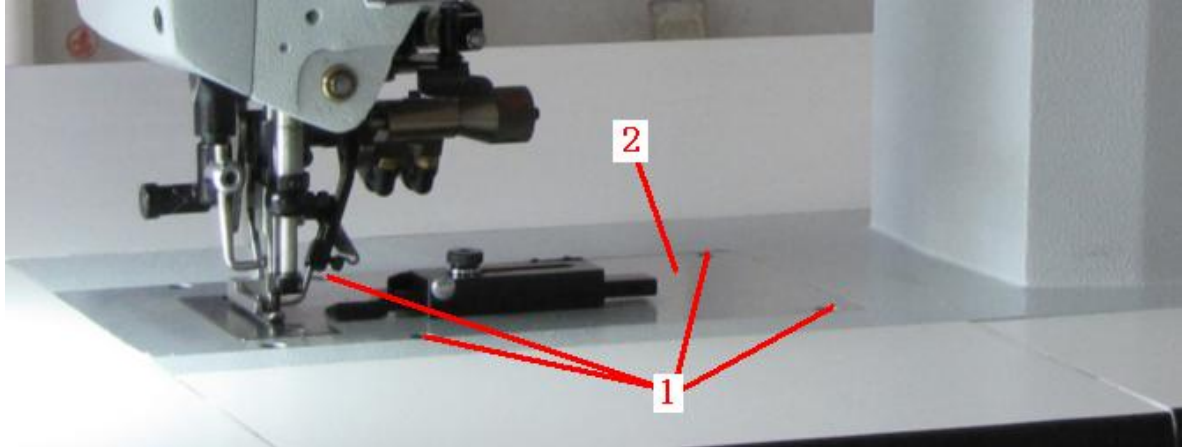
5. Check and adjust the walking presser lifting eccentric



(Picture 38)

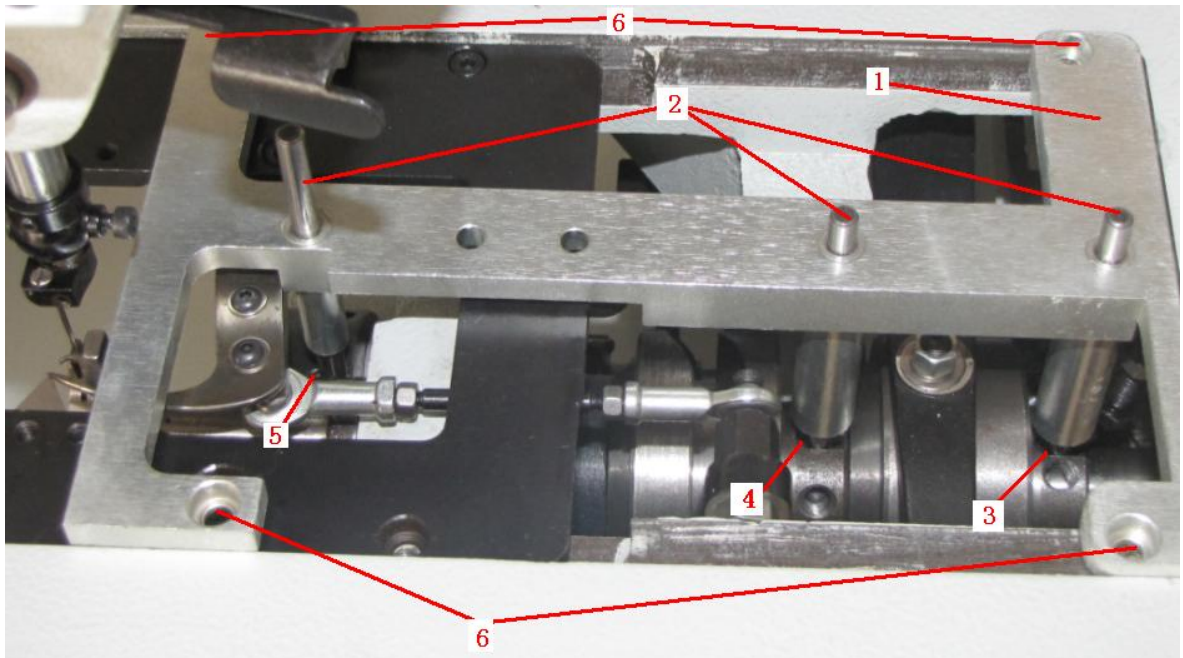
Keep the locating pin (36-2) inside the mark hole (36-4). Use the hexagonal key (included in accessories) (37-1) to loosen the screw (38-4) inside the machine head hole. Turn the walking presser lifting eccentric to insert the locating pin (38-1) into the mark hole (38-3) in the walking presser lifting eccentric. Tighten the screw (38-4).

6. Check and Adjust the thread lifting cam, thread loader cam, tension drive cam



(Picture 39)

Loosen the screws (39-1) and open the right cover (39-2).



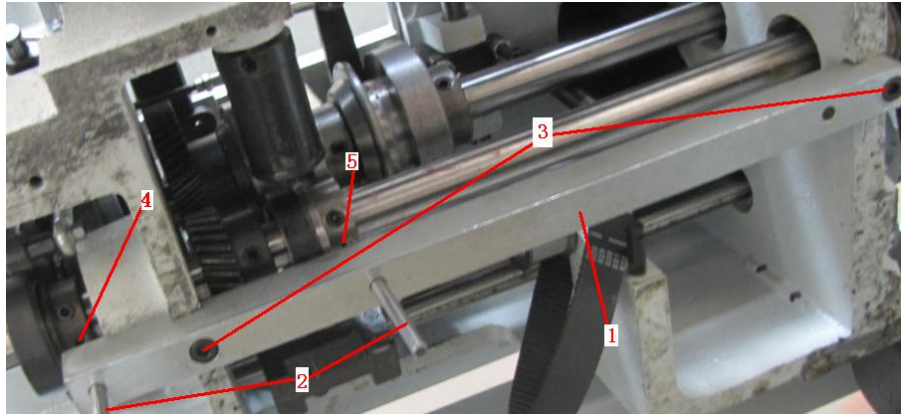
(Picture 40)

Keep the locating pin (36-2) inside the mark hole (36-4).

Loosen the fixing screws of the thread lifting cam, thread loader cam, tension drive cam. Insert the locating frame (40-1) and tighten it with screws (included in accessories). Insert the locating pins (40-2) into the mark grooves (40-3, 40-4 and 40-5) in the thread lifting cam, thread loader cam, tension drive cam. Tighten the fixing screws.

Loosen the screws and remove the locating frame (40-1).

7. Check and adjust feeder lift eccentric and main feeder eccentric



(Picture 41)

The feeder lift eccentric and the main feeder eccentric are located at the bottom of the machine.

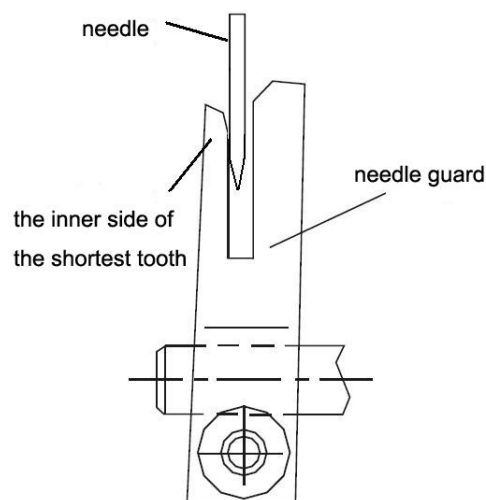
Insert the locating strip (41-1) and tighten it with screws (41-3) (included in accessories). Loosen the fixing screws of the feeder lift eccentric and the main feeder eccentric and turn the feeder lift eccentric and the main feeder eccentric. Insert the locating pins (41-2) into the mark hole (41-4) in the feeder lift eccentric and the mark hole (41-5) in the main feeder eccentric. Tighten the fixing screws.

Loosen the screws (41-3) and remove the locating strip (41-1).

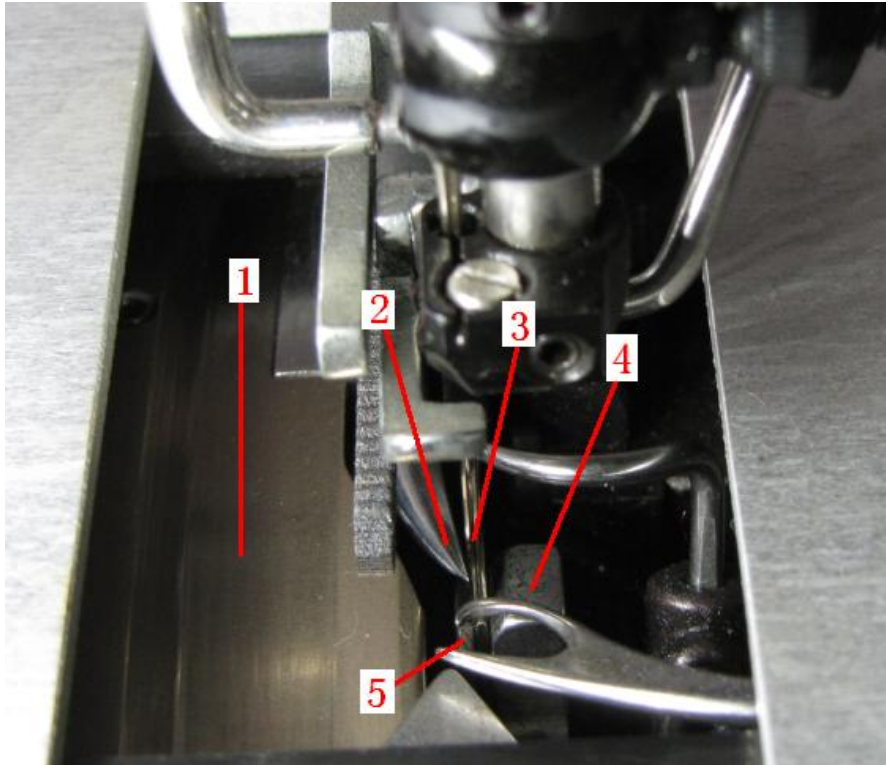
[3] ADJUSTMENT OF THE NEEDLE GUARD

The needle guard protects the needle from any possible contact with the tip of the rotary hook. This contact could be caused by the needle bending when sewing very thick pieces of fabric, or when joining two pieces of fabric together that are too thick when placed one on top of the other etc.

The part of the needle guard that performs this function is the inner side of the shortest tooth.

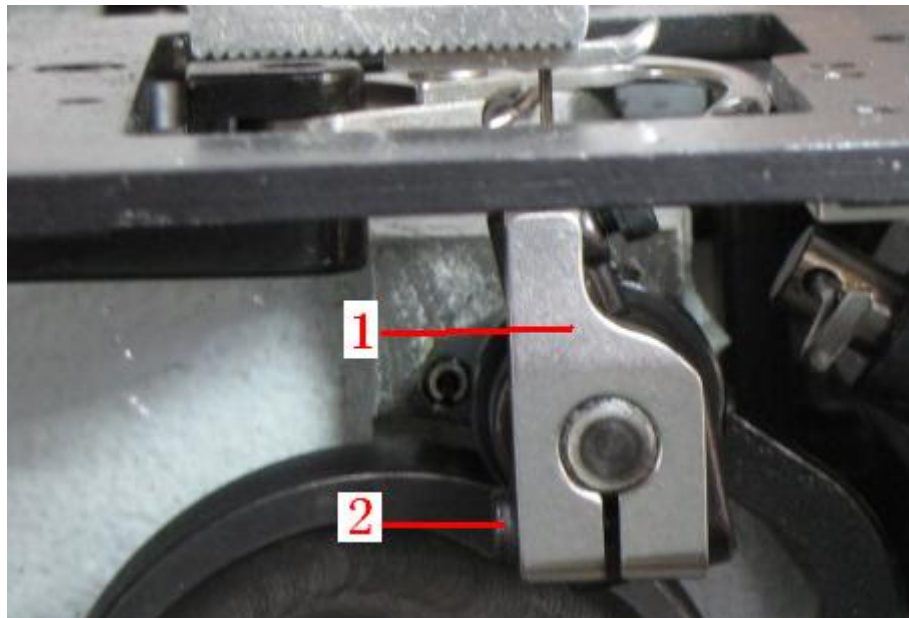


(Picture 42)



(Picture 43)

Keep turning the hand wheel to rotate the wheel (43-1), until the lower hook needle point align the needle (43-3). The needle (43-3) should be still in contact with the inner side of the needle guard's (43-4) shortest tooth (43-5).



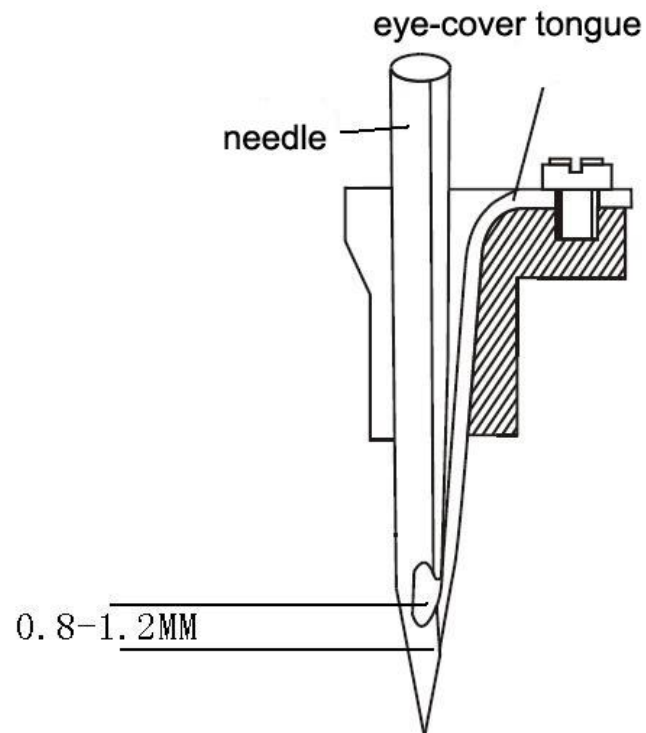
(Picture 44)

Replacement and Adjustment:

Loosen the screw (44-2) in needle guard (44-1), remove the needle guard

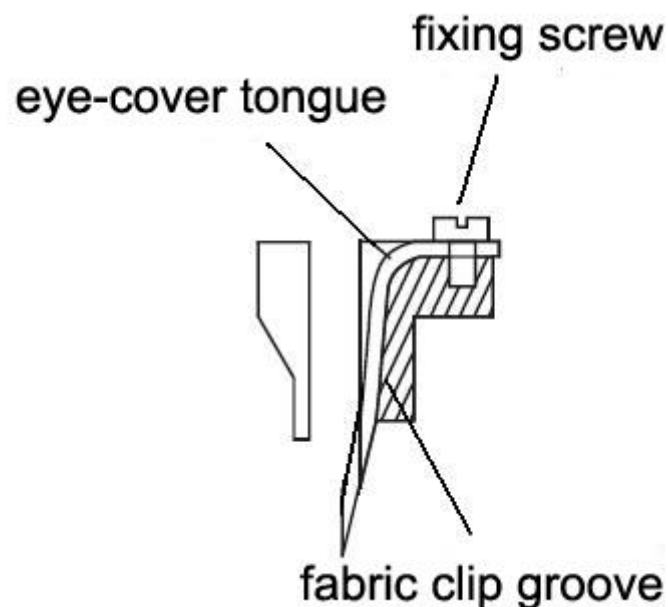
(44-1) and replace it. After adjusting the needle guard to the correct position, tighten the screw (44-2).

[4] Adjustment of Eye-cover Tongue



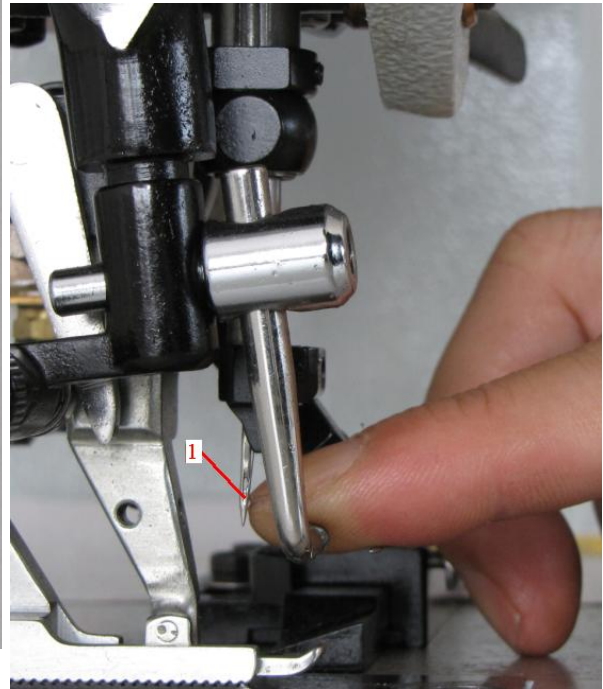
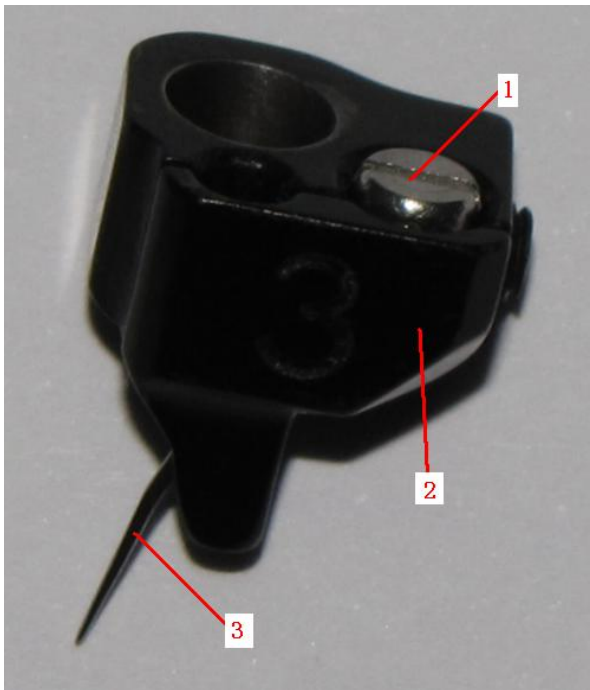
(Picture 45)

The height of the tongue is in related to the needle. The height is correct if the tip of the tongue closes the space between the two hooks of the needle, extending 0.8-1.2mm beyond the tip of the lower hook, and the needle bar is at its upper dead point. If the worn tongue can not reach require, please replace it.



(Picture 46)

(Picture 47)



(Picture 48)

Replacement and Adjustment:

Take the needle and the fabric clip off the internal bar. Choose the appropriate needle size.

To assemble new tongue (47-3), insert the tongue into the fabric clip. Then fit a new needle of matching gauge. The tongue should be placed in the longest groove of the needle and then fixed tight with screw (47-1) in such a way that the tip exerts a slight (as small as possible to decrease the wear of the tongue) pressure on the needle.

After tightening the tongue's clamping screw, check that the fabric clip is straight and runs smoothly along the needle.

[5] ADJUSTMENT TONGUE HEIGHT



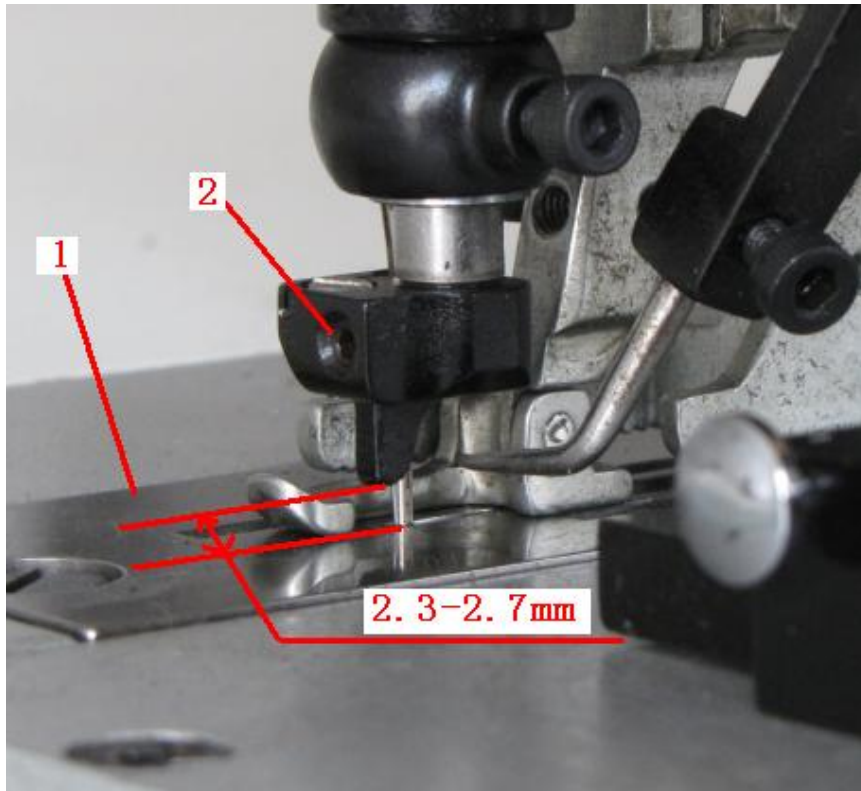
(Picture 49)

The height of the tip of the eye-cover tongue should be set in relation to the needle. The height is correct if the tip of the eye-cover tongue closes the space between the two hooks of the needle, extending 0.8-1.2mm (depending on the gauge of the needle) beyond the tip of the lower hook, and the needle bar is at its upper dead centre.

The adjustment is made by turning the aluminium cap after loosening the screw (49-1). Turning it clockwise raises the tongue and turning it anti-clockwise lowers it.

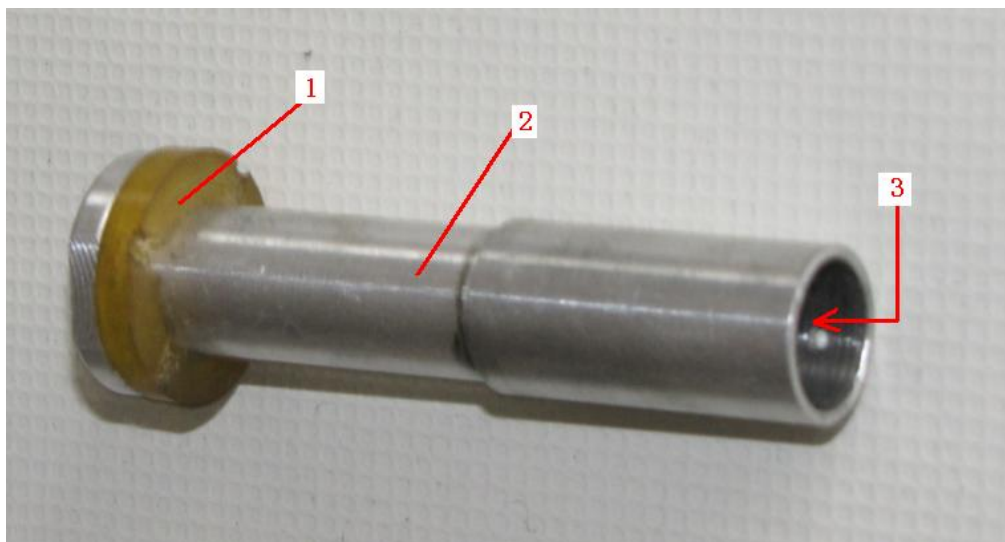
Once the adjustment has been made, fix the setting by tightening the screw (49-1).

[6] Adjustment of Fabric Clip Height



(Picture 50)

When the needle moves is at its lower dead centre, the distance between the bottom of the fabric clip (50-2) and the throat plate (50-1) ranges from 2.3mm to 2.7mm.



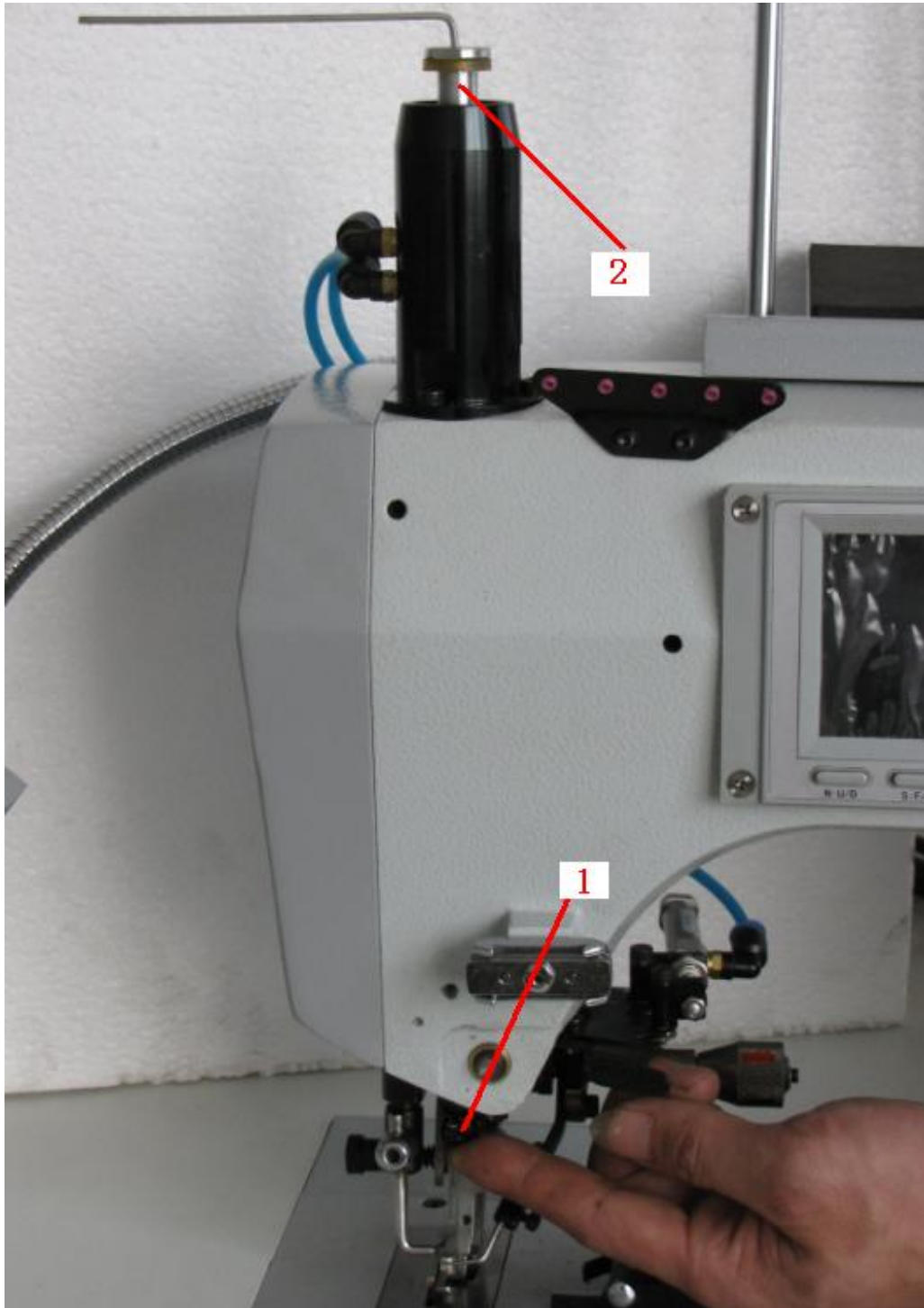
(Picture 51)

Note:

The distance between the bottom of the fabric clip (50-2) and the throat plate (50-1) is decided by the attrition of the seal ring on the cylinder (51-2).

The attrition of the outer seal ring (51-1) will cause the distance between the bottom of the fabric clip (50-2) and the throat plate (50-1) decrease. If the distance is smaller than 2.3mm, please replace the outer seal ring.

The attrition of the inner seal ring (51-3) will cause the distance between the bottom of the fabric clip (50-2) and the throat plate (50-1) increase. If the distance is bigger than 2.7mm, please replace the inner seal ring, which is placed inside the seal piston (51-2).



(Picture 52)

The replacement of the seal ring

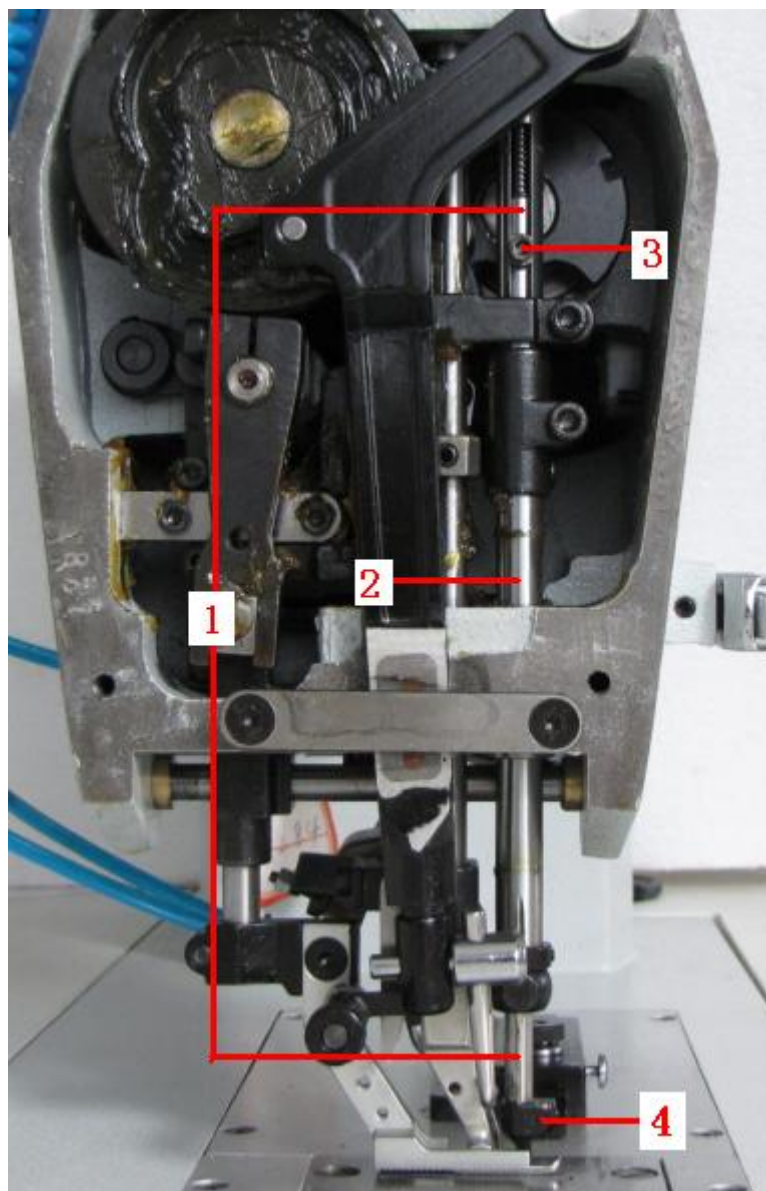
Move the needle to the upper dead point and open the cylinder cap, loosen the screw inside by open end wrench (included in accessories). Lift the fabric clip (52-1) by hand to raise the seal piston (52-2), remove the

seal piston (52-2) and replace the worn seal rings.

CAUTION:

When reinstall the seal piston, be careful to keep the tip of the tongue closes the space between the two hooks of the needle, extending 0.8-1.2mm beyond the tip of the lower hook, and the needle bar is at its upper dead point.

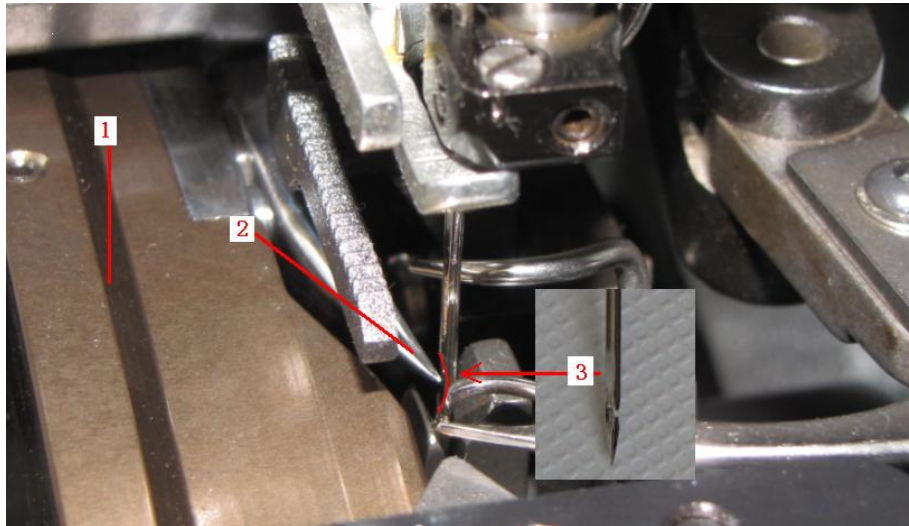
[7] Adjustment of the Slide on Inner Rod



(Picture 53)

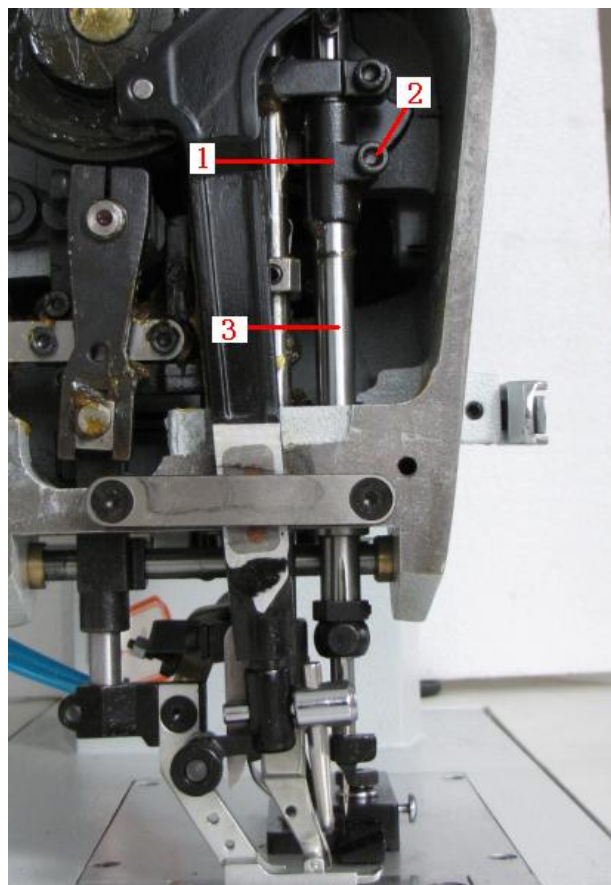
Turn the hand wheel to move the needle downward until the tip of the needle reached the throat plate level. Move the fabric clip by hand, and check that the inner rod (53-1) of the needle bar slides freely inside the boss (53-2). If necessary, loosen the screw (53-4) and adjust the slide (53-3) to move the inner rod to the correct position.

[8] Adjustment of Inner Rod



(Picture 54)

Turn the hand wheel to rotate the thread-loading wheel (54-1). When the lower rotatory hook (54-2) points at the needle, the tip of the rotatory hook should be positioned at the centre of the groove on needle.

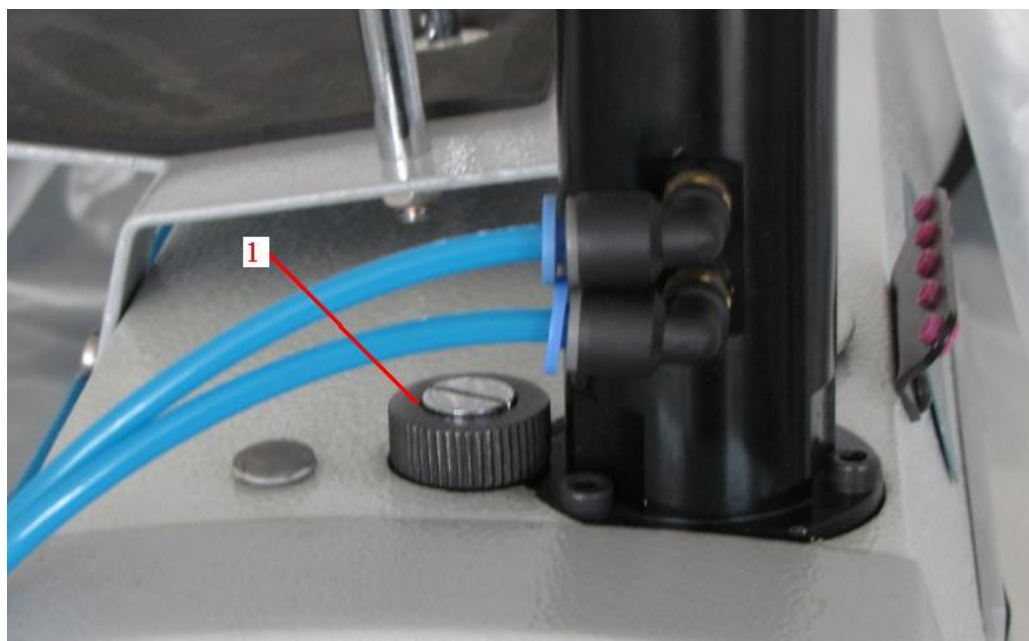


(Picture 55)

If not-loosen the screw (55-2) of the guide clamp (55-1) and adjust the height of the inner bar. Tighten the screw (55-2).

CAUTION! Be careful when tighten the screw (55-2) in order to avoid the stuck of the inner bar.

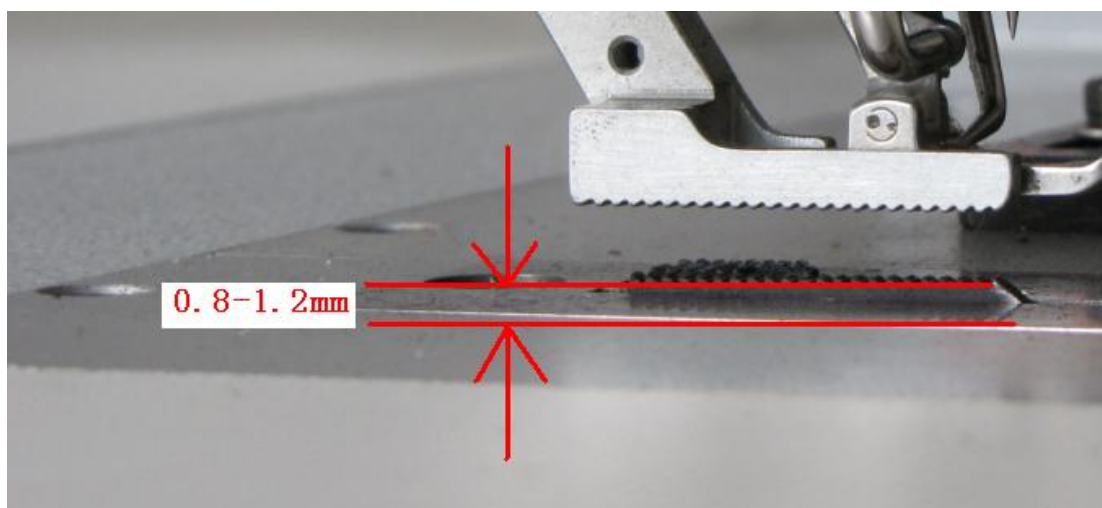
[9] Adjustment of Clamp Feet Pressure



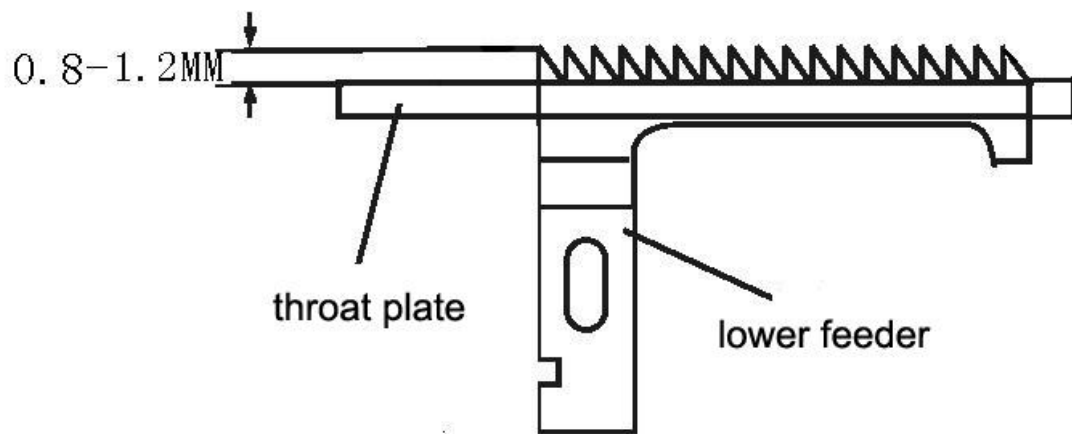
(Picture 56)

The pressure of the clamp feet should be adjusted to suit the fabric being sewn. This pressure should be adjusted so as to ensure that the fabric is transported in a uniform and safe manner, without being damaged. By turning the regulator (56-1) in a clockwise direction, the pressure is increased, and whereas turning it in an anti-clockwise direction reduces it.

[10] Adjustment of Distance between Lower Feeder and Throat Plate

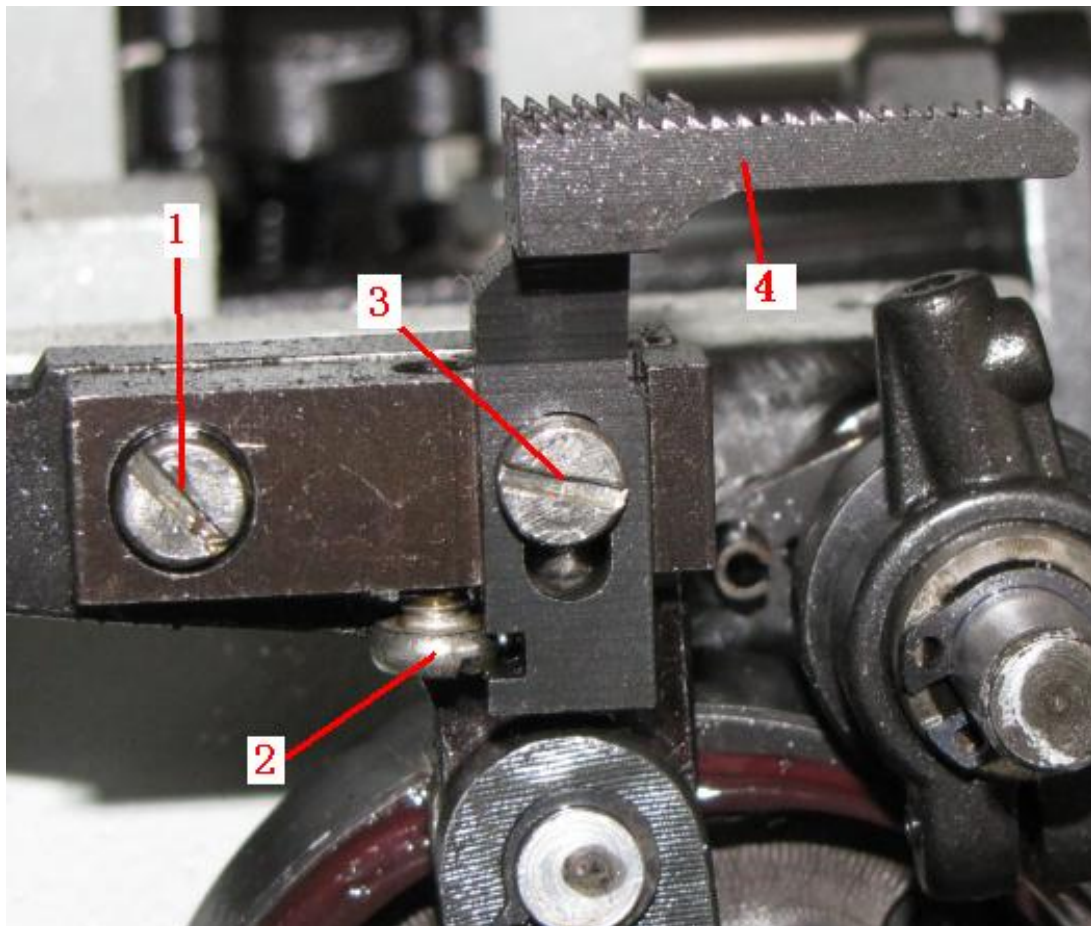


(Picture 57)



(Picture 58)

Shows as picture 57 and picture 58, turn the hand wheel to bring the lower feeder to its highest point, above the throat plate. The distance between the lower feeder and the throat plate should range from 0.8mm to 1.2mm.



(Picture 59)

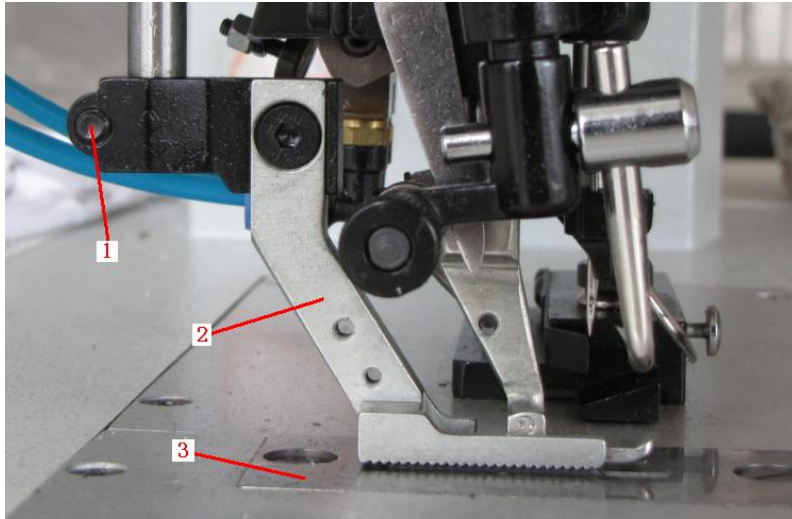
Adjustment:

1. Adjust the screw (59-1) to make the lower feeder parallel with the throat plate.

2. Use the screw (59-2) to adjust the distance between the lower feeder and the throat plate.
3. Fix the lower feeder by tightening the screw (59-3) and the screw (59-1).

Warning: The lower feeder should not reach the throat plate.

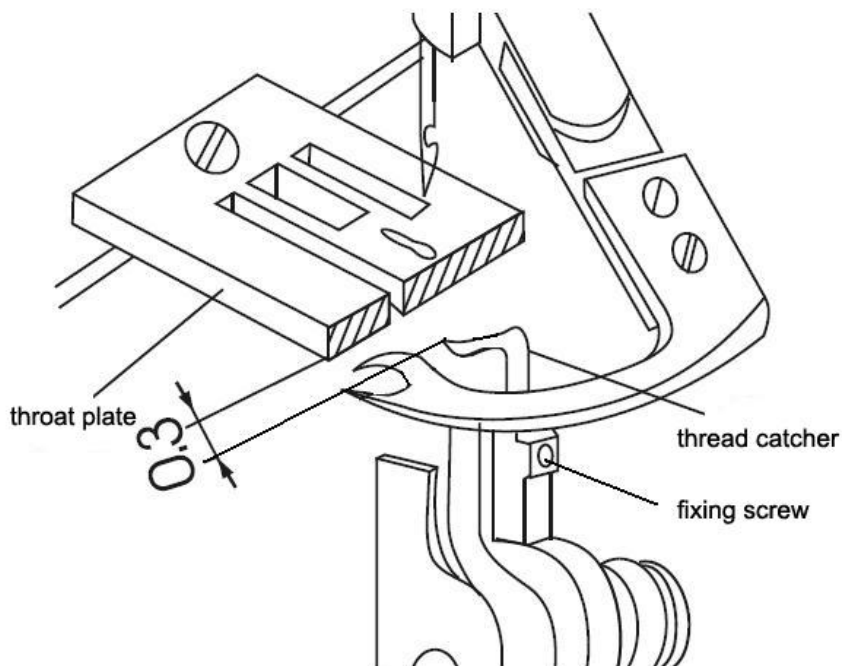
[11] Adjustment of Distance between Upper Feeder and Throat Plate



(Picture 60)

Release the clamp feet. When the needle is moved to its lower dead centre, the upper feeder should reach the throat plate. If not—use the screw (60-1) to move the feeder to correct place.

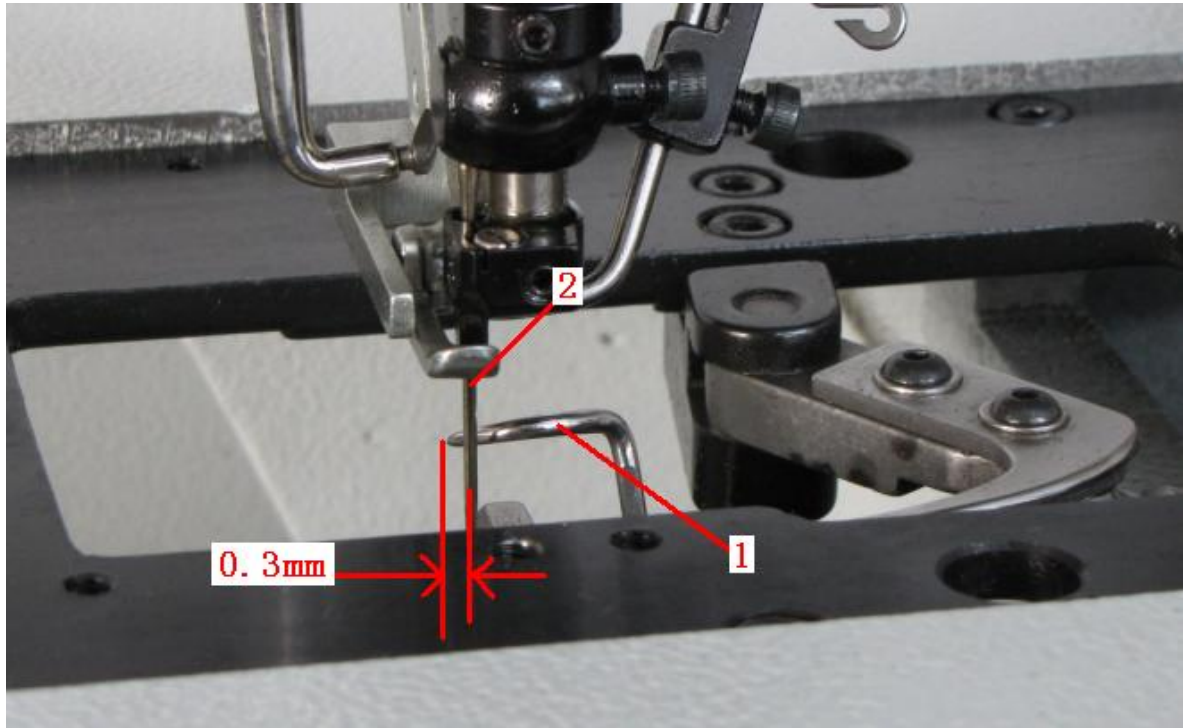
[12] Adjustment of Thread Catcher



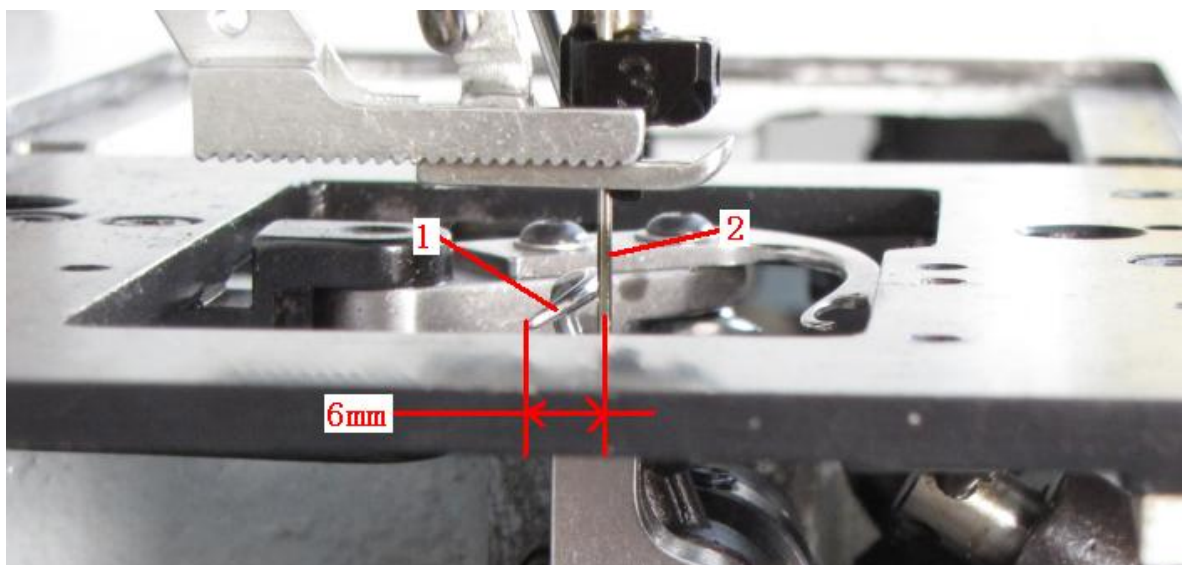
(Picture 61)

(1) Turn the hand wheel until the thread catcher reaches the top of its stroke, and then adjust its height so that there is a distance of 0.3mm between the lower part freed from the throat plate and the highest point of the thread catcher.

(2) Shows as picture 61, bring the thread catcher to the end of its stroke behind the needle and adjust it so that the external part of its projects 0.3mm to the left of the needle.

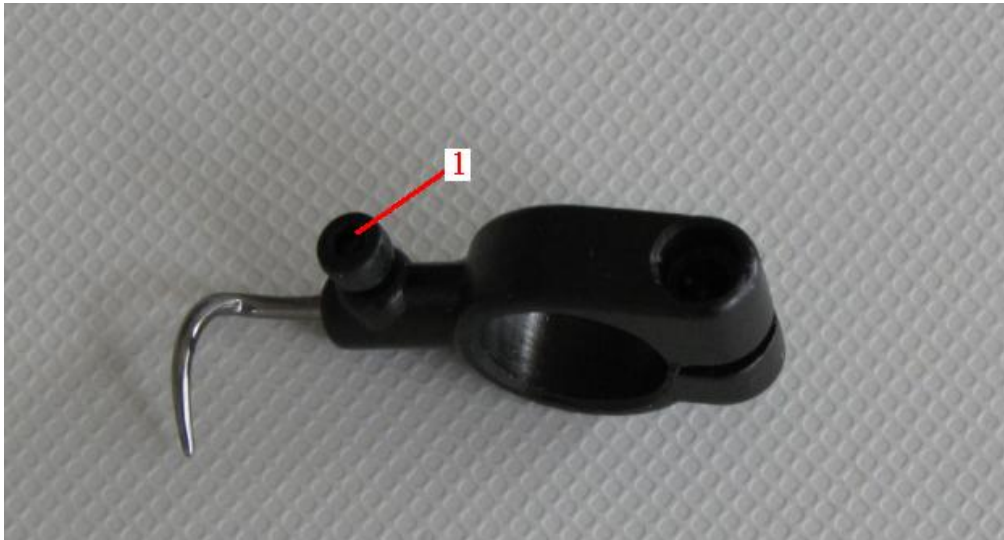


(Picture 61)



(Picture 62)

(3) Shows as picture 62, bring the thread catcher to the end of its stroke behind the needle and adjust it so that the external part of its projects 6.0mm behind the needle.



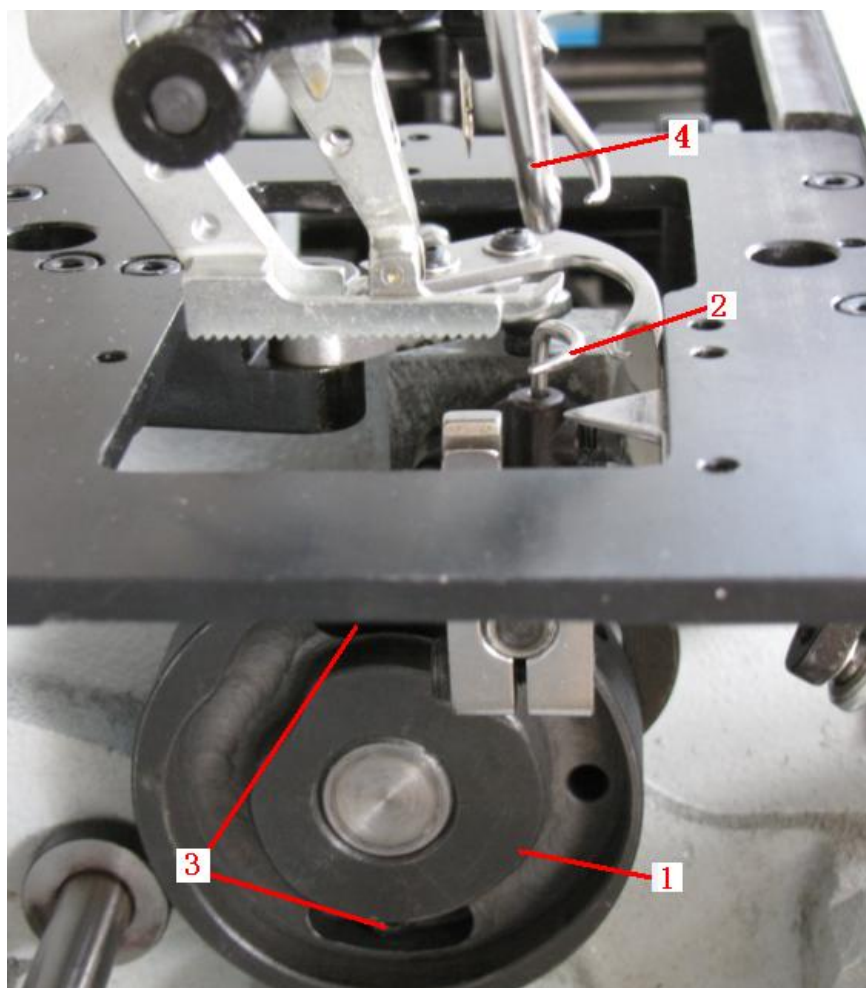
(Picture 63)

Adjustment:

Loosen the screw (63-1) to adjust the position of thread catcher.

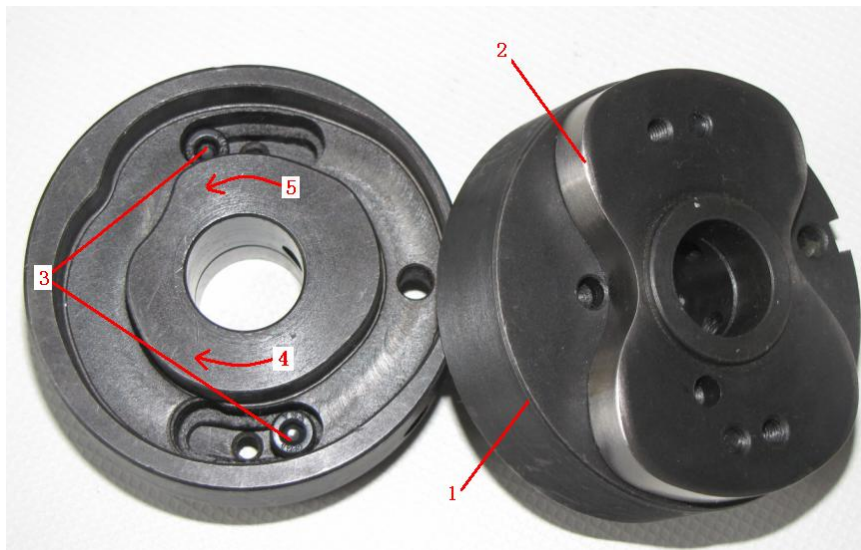
Note: The thread catcher should never reach the throat plate.

[13] Adjustment of the Movement of Thread Catcher



(Picture 64)

The position is correct if the tip of the needle descends to the height of the tip of the thread catcher (64-2) at the same time as the thread catcher (64-2) comes to the end of its stroke behind the needle.

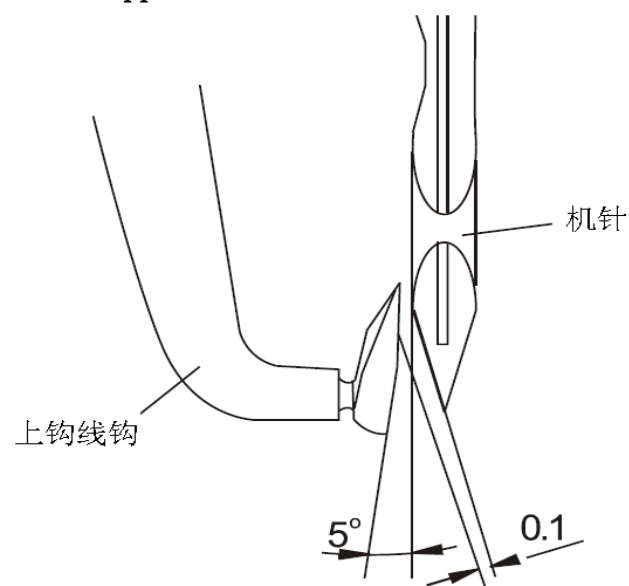


(Picture 65)

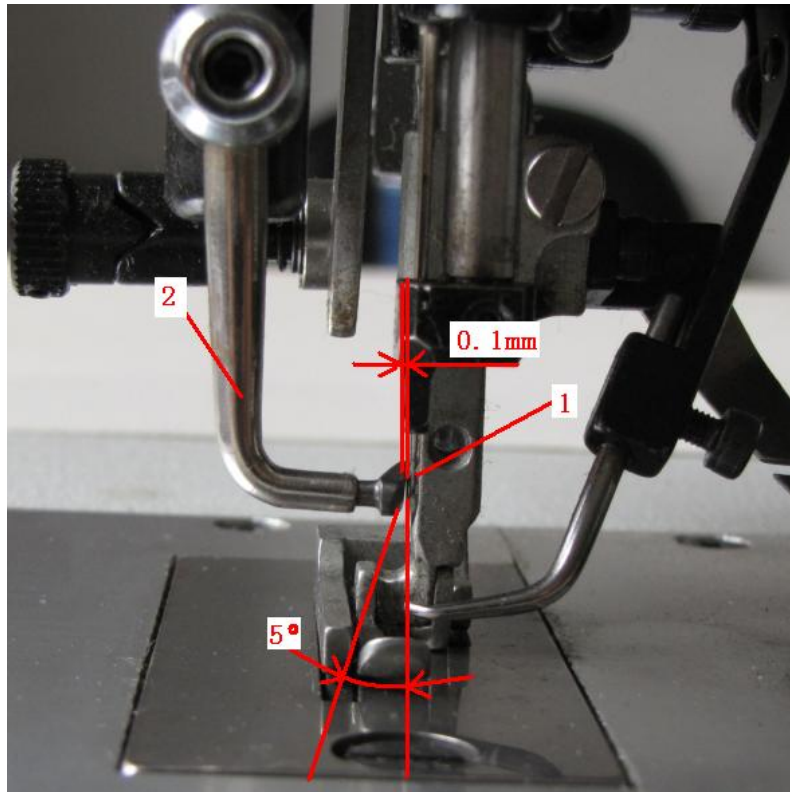
Adjustment:

The movement of the thread catcher is controlled by the thread catcher cam (65-2). The thread catcher cam is placed behind the tension unit cam (65-1). Loosen the screws (65-3) on the tension unit cam (65-1), and turn the thread catcher cam (65-2). By turning the thread catcher cam clockwise, the thread catcher moves ahead of time. By turning the thread catcher cam anti-clockwise, the thread catcher moves behind time. Tighten the screws (65-3) after adjustment.

[14] Adjustment of Upper Hook

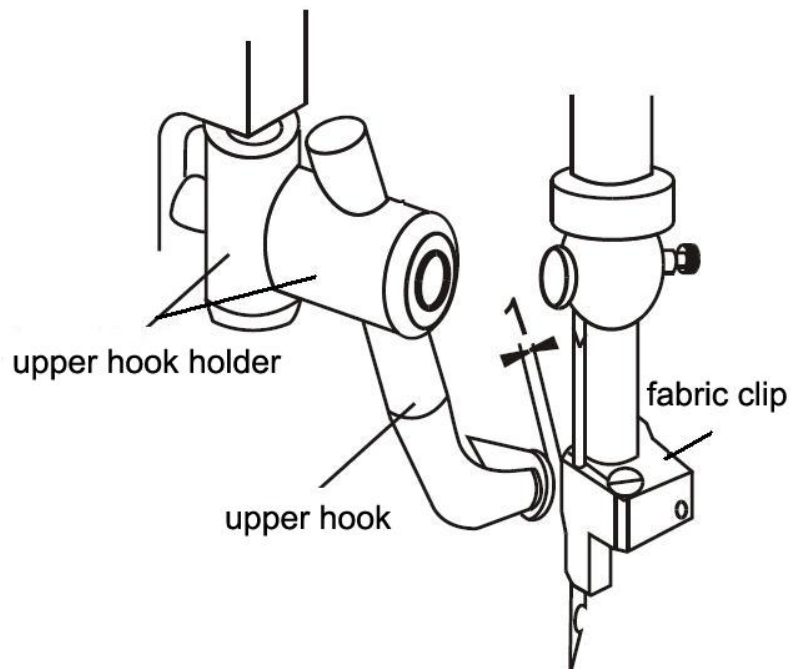


(Picture 66)

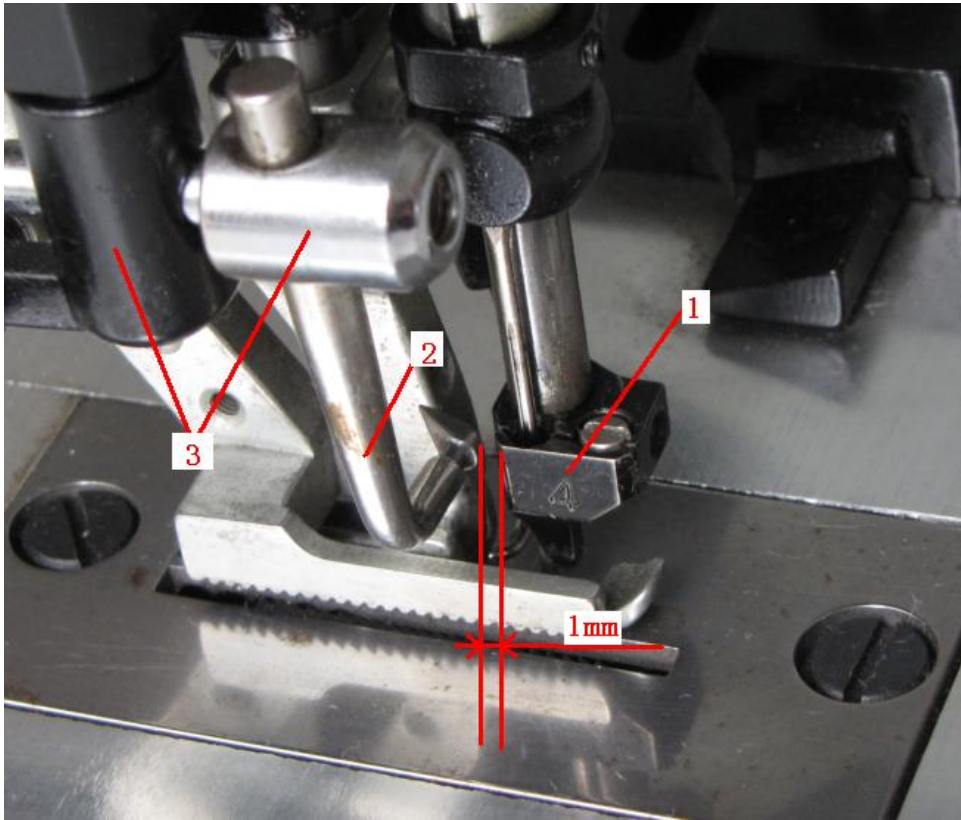


(Picture 67)

(1) The tip of the upper hook (67-2) should be inclined at an angle of about 5° to the needle (67-1) and 0.1mm to the needle (67-1) in order to avoid any possibility of the needle breaking during its stroke.



(Picture 68)



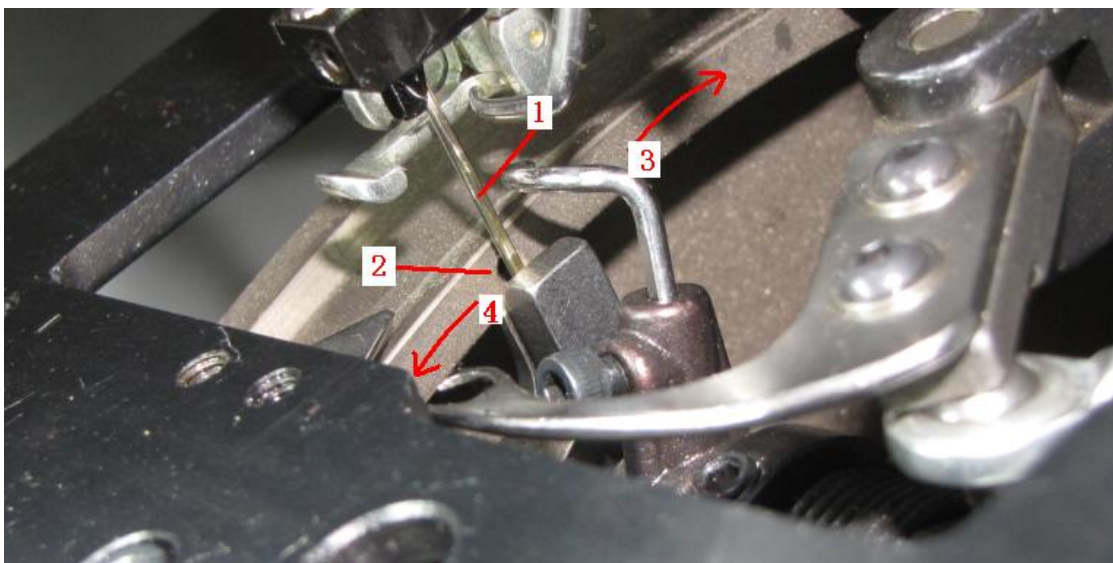
(Picture 69)

(2) The upper hook (69-2) returns to its starting position at the end of the second cycle. Remaining in the second cycle, turn the hand wheel so as to bring the back of the fabric clip (69-1) in line with the upper hook (69-2).

Adjust the transverse position so that there is a distance of 1mm between the rear part of the hook and the rear part of the fabric clip.

This is done by moving the hook holder (69-3) forward and backward in its support.

[15] Adjustment of Thread-Loading Wheel



(Picture 70)

Turn the hand wheel to move the needle (70-1) to its lower dead centre. The centre of the mark hole in the thread-loading wheel should position at the centre of the needle.

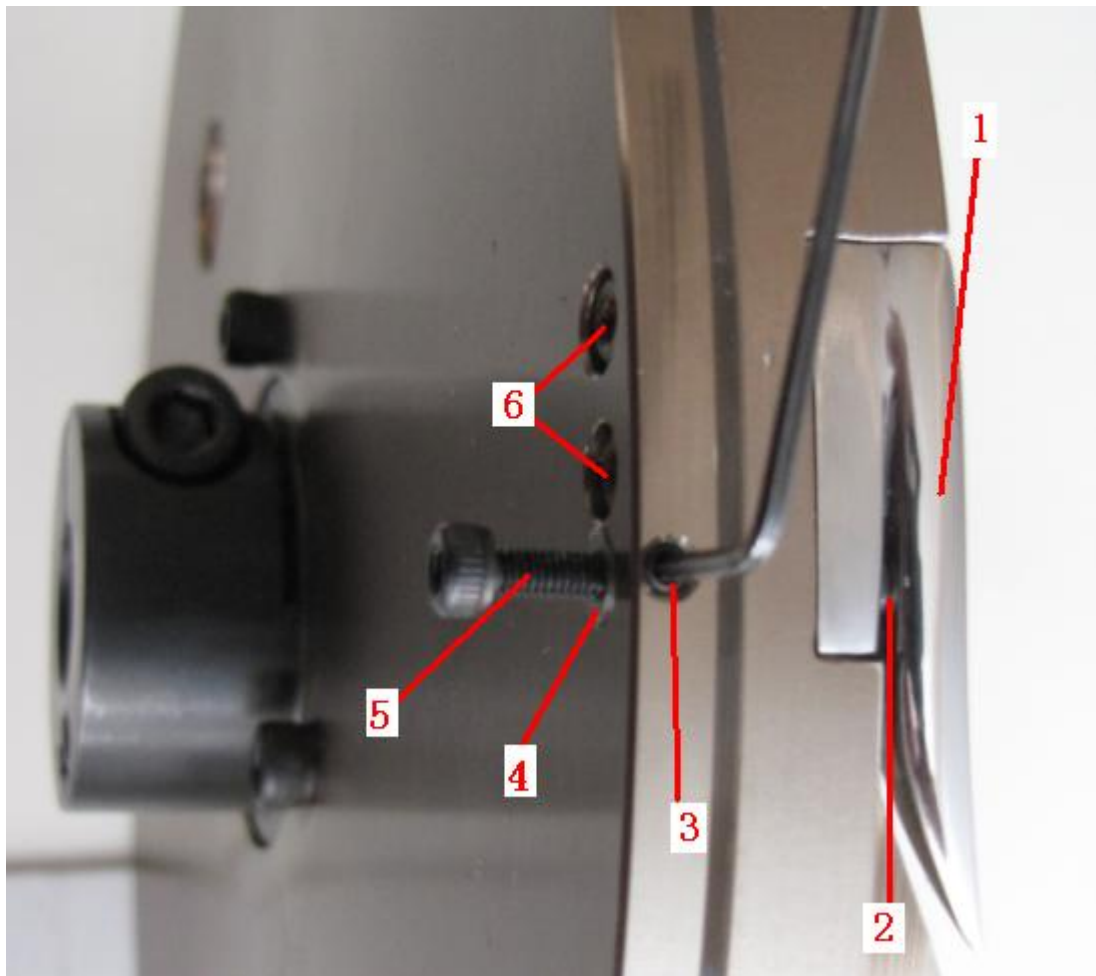
Note:

If the mark hole is at the right side (70-3) of the needle, the loop increases. If the mark hole is at the left side (70-4) of the needle, the loop decreases.

Adjustment:

Loosen the screw and adjust the thread-loading wheel to the correct position. Tighten the screw.

[16] Adjustment of Lower Rotatory Hook



(Picture 71)

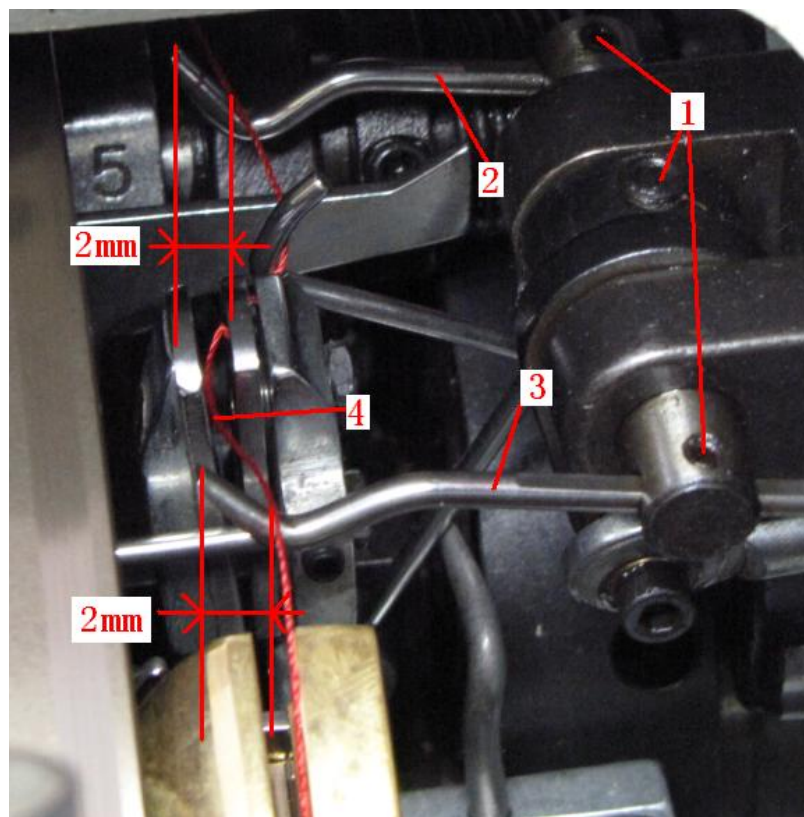
Remove the thread-loading wheel, making sure that the shaft has no end play. Remove the rotatory hook (71-1) from the thread-loading wheel. Remove the gudgeon pin and bearing (71-4) and clean everything carefully. Check the rotatory hook, and remove any marks or notches. Polish all the surfaces that come into contact with the thread.

To eliminate marks and burrs, it is advisable to clean and polish the pieces with a buffer. If this is not available use a very fine-grained

whetstone.

Insert the gudgeon pin and bearing in its hole on the thread-loading wheel. Mount the rotatory hook in its place, and tighten the screws (71-6). Try to align the hook's profile with that of the wheel as much as possible. The pin and the bearing should be placed against the rotatory hook and pushed into its hole. Then the screw (71-3) should be tightened. Check that the bearing turns freely by running some thread along it. Check the thread-loading wheel and make sure that it is perfectly smooth, especially in the sections where the thread passes. The thread-loading wheel should be carefully cleaned to get rid of any grease and oil residues etc.

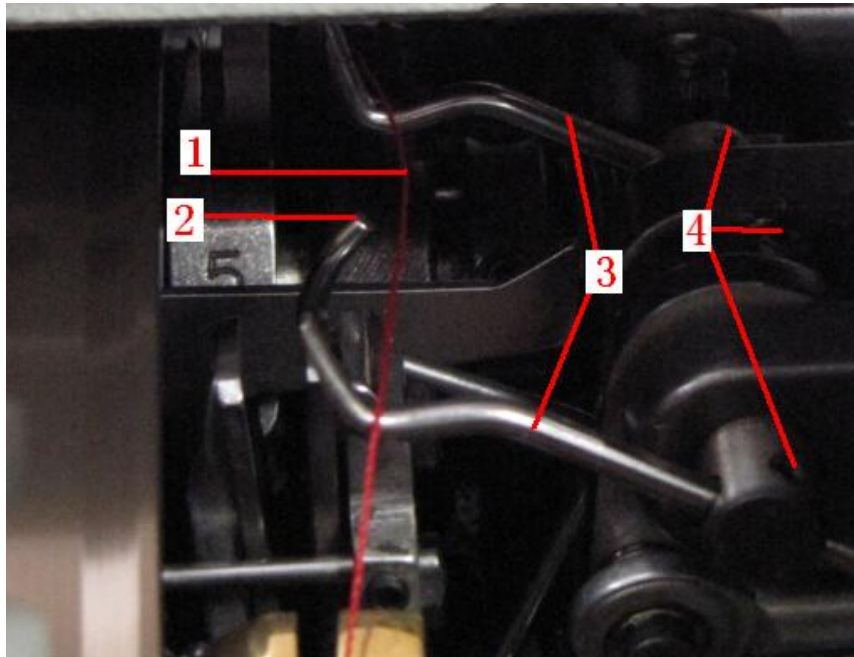
[17] Adjustment of Thread Lifts



(Picture 72)

To distinguish the two thread lifts, the one closest to the operator will be called the front thread lift (72-3) and the one closest to the needle, the rear thread lift (72-2).

Turn the hand wheel. When the front thread lift (72-3) is raised to reach the thread (72-4), the tip of the front thread lift should be at a distance of 2.0mm from the thread. When the rear thread lift (72-2) is raised to reach the thread (72-4), the tip of the rear thread lift should be at a distance of 2.0mm from the thread.



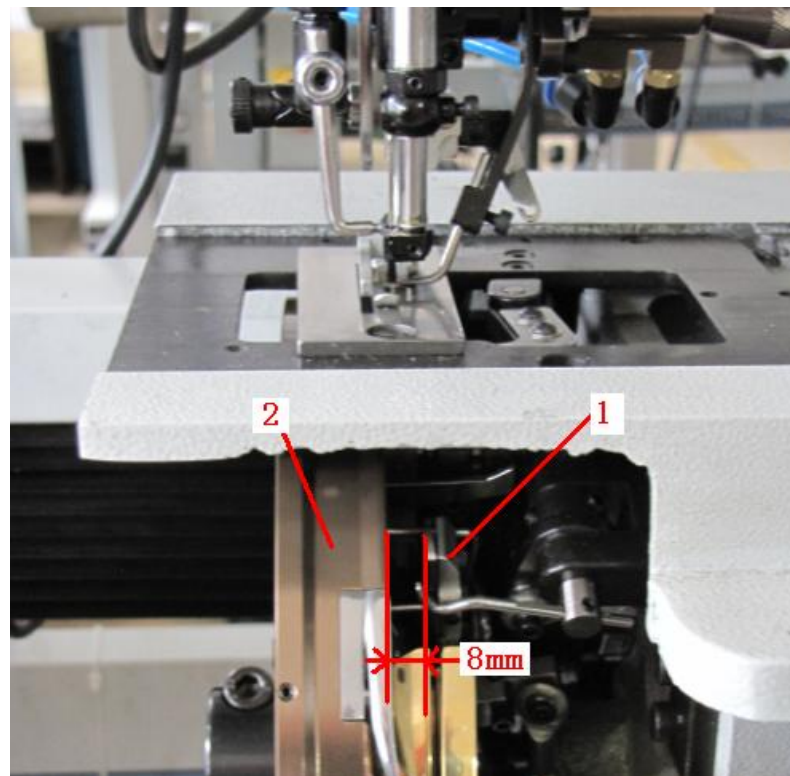
(Picture 73)

When the thread lifts (73-3) move to the upper dead point, the thread (73-1) should be higher than the tip of the thread catcher (73-2).

Adjustment:

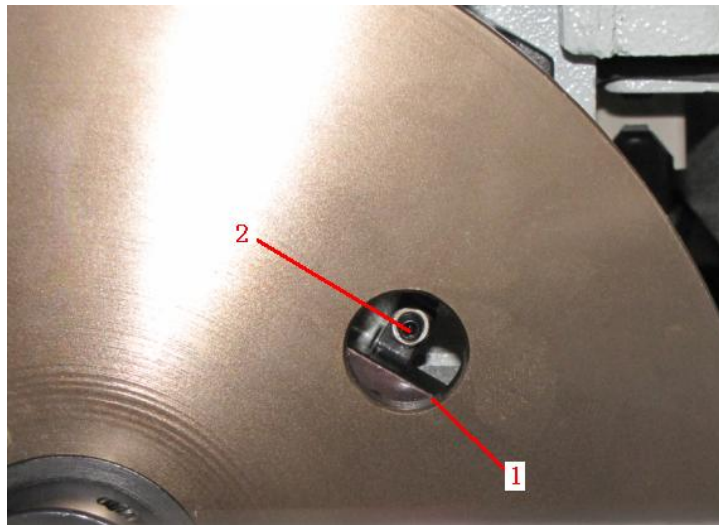
Loosen the three screws (72-4)/(73-4), adjust the thread lifts to the correct positions. Tighten the three screws (72-4)/(73-4).

[18] Adjustment of Tension Unit

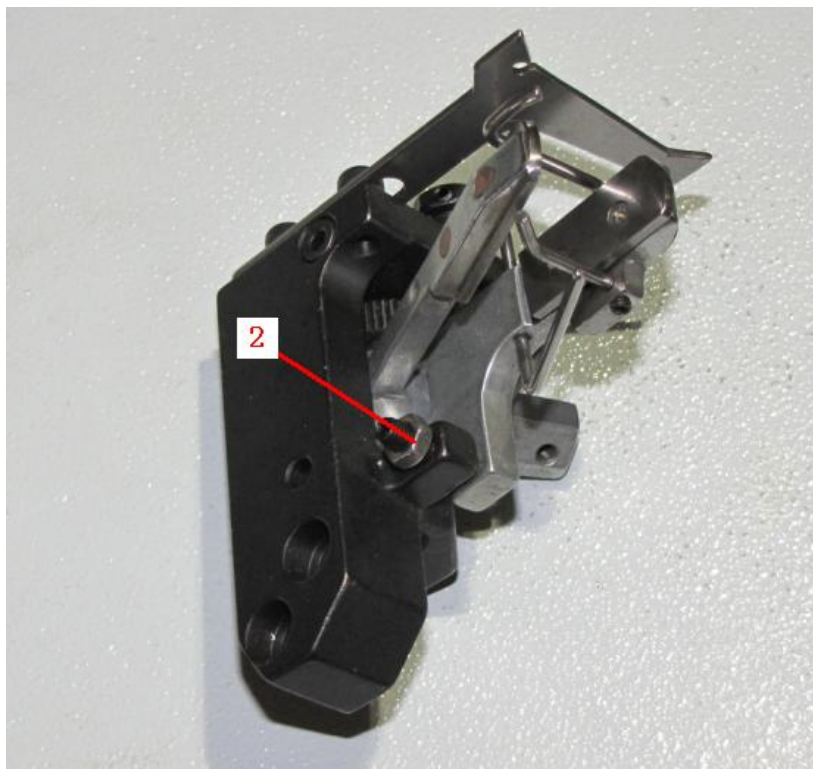


(Picture 74)

Turn the hand wheel and bring the tension unit to the position as picture 74 shows. The distance between the tension unit and the right edge of the thread-loading wheel should be 8mm.



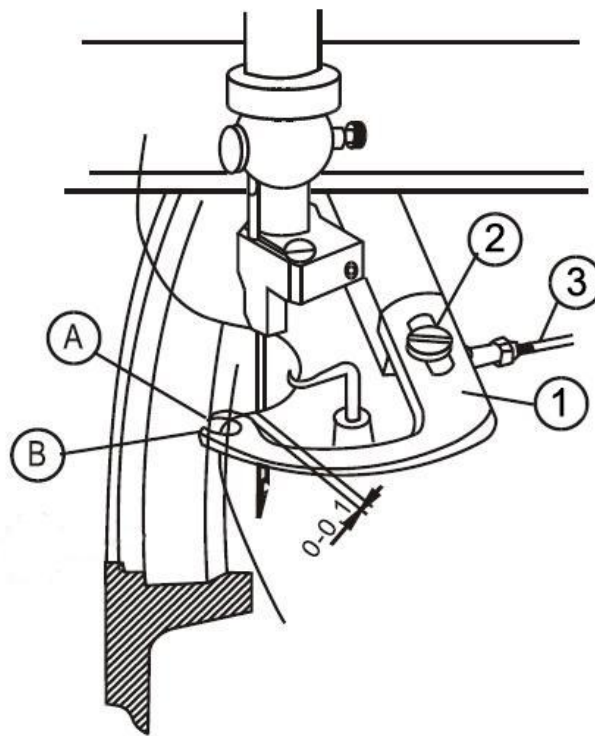
(Picture 75)



(Picture 76)

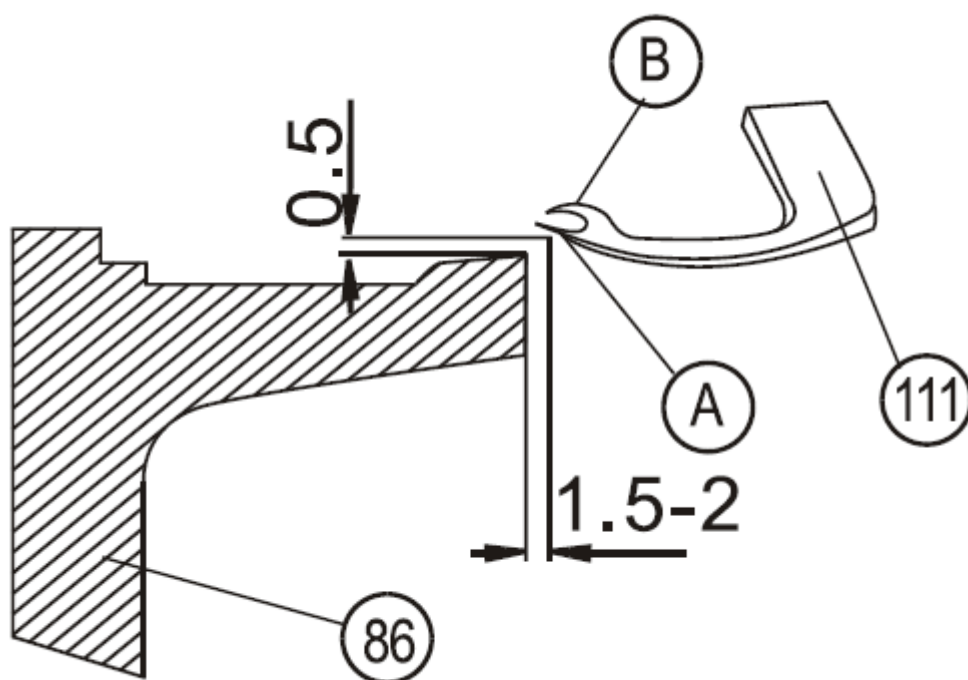
Adjust the screw (75-2)/(76-2) inside the thread-loading wheel to move the tension unit to correct position.

[19] Adjustment of Thread Loader



(Picture 77)

The thread loader (77-1) is used to load the thread onto the needle. When positioned closest to the needle as picture 77 shows, the rear part (A) of the thread loader should graze the needle without bending it. The position can be adjusted by loosening the two screws (77-2) and moving the thread loader.



(Picture 78)

When the thread loader is at the end of its traverse to the right, the distance between the tip of the rear part (A) and the right-hand edge of the thread-loading wheel (78-1) should be 1.5-2.0mm.

The correct distance is obtained by adjusting the tie rod (77-3) between the two joints.

[20] Lubrication and Cleaning

The machine must be lubricated and cleaned periodically, at least once a month. Remove dust and any yarn residues that have built up on the movement of the lower transport. Lubricate all the parts that move when the machine is running, with the exception of the ball bearings and the various obligatory passages of the thread. The tracks of the cams and the gears should be lubricated with special gear grease, while all the other moving parts should be lubricated with industrial sewing machine oil.