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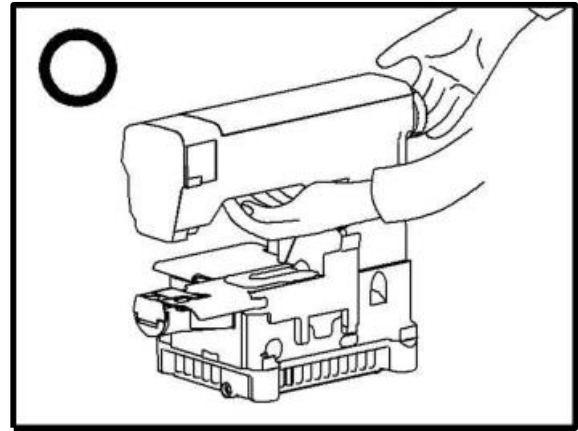
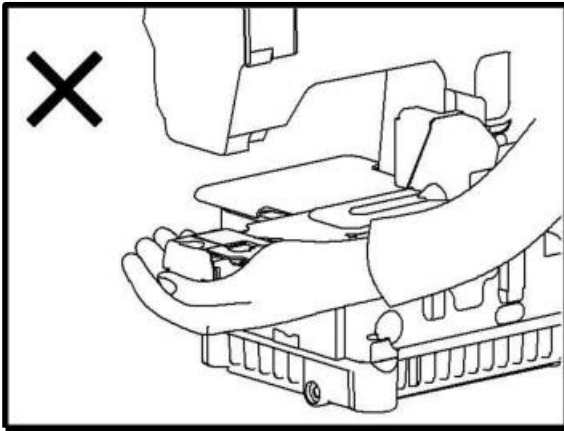
1.Specifications

Model	MU 812
Description	High-speed cartridge-type three-needle, five-thread bandage sewing machine with left trimming mechanism
Size	L 470mm x W 220mm x H 415mm
Working Space	Circumference 340mm
Weight	41.5 kg
Application	For hemming of light material knitted fabric
Sewing speed	Max. 4500rpm (during intermittent operation)
Stitch distance	1.4mm-3.6mm 7-18 stitches per inch; 8-21 stitches per 30mm
Stitch type	UY x 128GAS #10-#14 (Standard: #10)
Stitch distance	Three needles: 4.8mm, 5.6mm, 6.4mm (Two needles: 3.2mm, 4.0mm)
Needle Stroke	31mm
Top Tool Stroke	3.0mm-6.5mm
Chip suction system	Compressed air system
Lifting foot	5.6mm stitch pitch with trim line: 5.5mm, without trim line: 7.0mm
Feeding method	Adjustment screw (fine adjustment)
Differential ratio	Standard: 1:0.9 1:1.4 1:0.9 1:1.8 (for normal differential stitch lengths up to 2.5mm or less) 1:0.6 1:1.1 (adjustable by changing the position of the feed rod connection)
Differential feed adjustment	Fine adjustment of the regulator can be adjusted by moving the external lever even during operation
Lubrication	Automatic lubrication of oil pump
Lubrication oil	OIL No.22
Oil tank capacity	800 cc
Installation type	Counter top installation

2.Installation

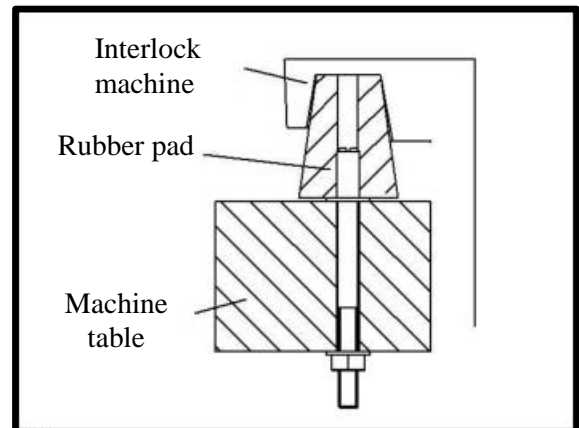
2.1 Shipping and Handling

Hold the machine arm and hand wheel (as shown in the picture) while moving. Do not hold the cylinder or the machine may be damaged.



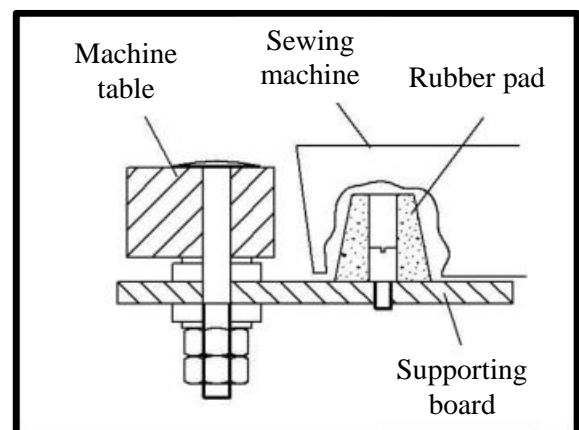
2.2 Tabletop Installation

(1) Fix the nut and bolt under the working table of the machine. (2) Attach the rubber pad to the bolt. (3) Lock the sewing machine firmly above the machine table.



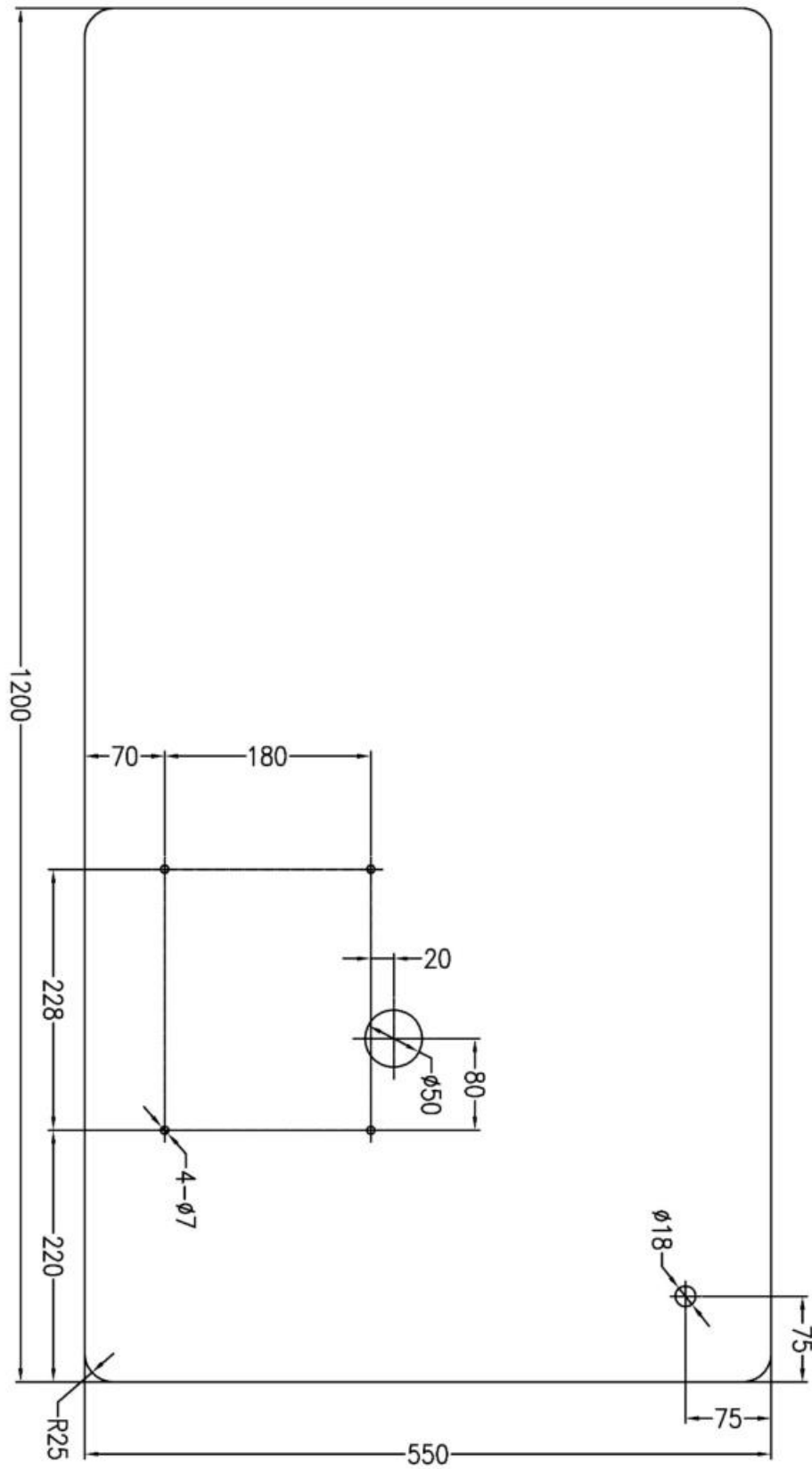
2.3 Drop down installation

(1) Lock the screws on the support plate. (2) Install the support plate on the machine table. (3) Put the rubber pad on the screw. (4) Lock the sewing machine firmly on top of the machine table.



2.Installation

☆ Tabletop B model



3. Lubrication

3.1 Lubricant

Use OIL No.22

! Warning!

Do not pour additives into the oil. If you do, it may cause oil deterioration and machine damage.

3.2 Lubrication

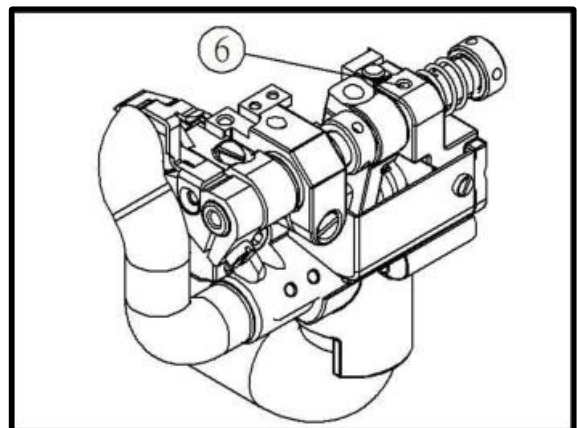
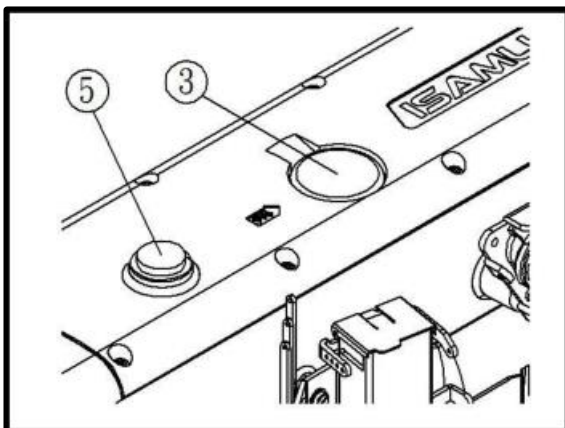
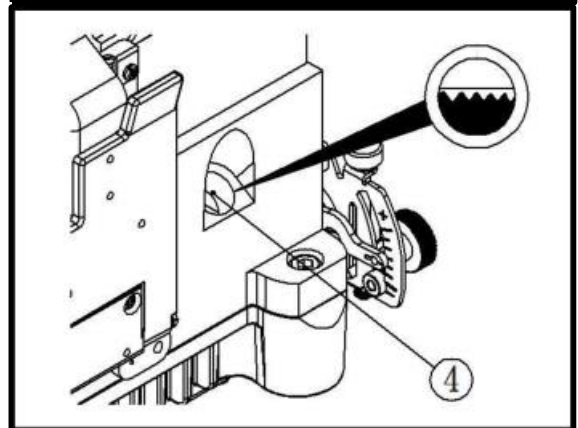
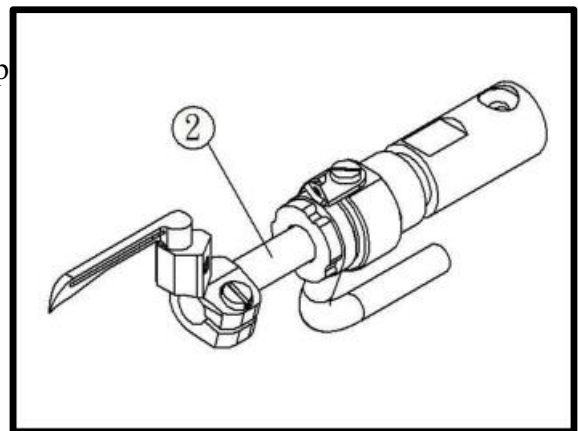
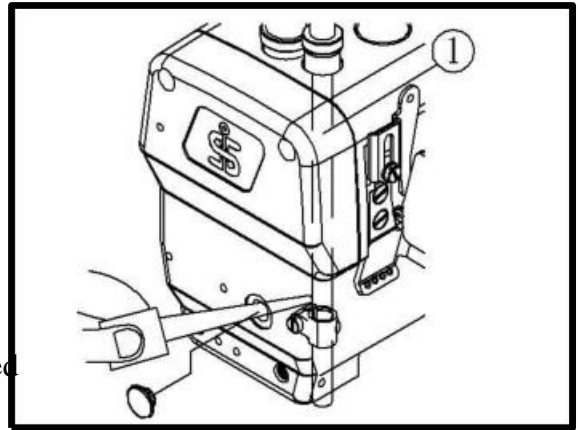
When using a new machine or if you have not operated the machine for a while, add a few drops of oil to the needle bar ① and the bent needle bar ②. Remove the sealing plug marked "OIL" ③ and pour oil into the top line of the oil gauge ④.

When the machine is in operation, check the nozzle in the oil gauge ⑤ for oil spattering.

If oil does not spatter from the nozzle, see 4.4 Checking and Replacing the Oil Filter.

! Warning!

(1) Too much oil or not enough oil will cause oil leakage and machine failure. Be sure to maintain the oil level between the lines. Excessive lubrication can also lead to oil dispersion and material contamination.
(2) Periodically add a few drops of oil to hole ⑥ to maintain lubrication.

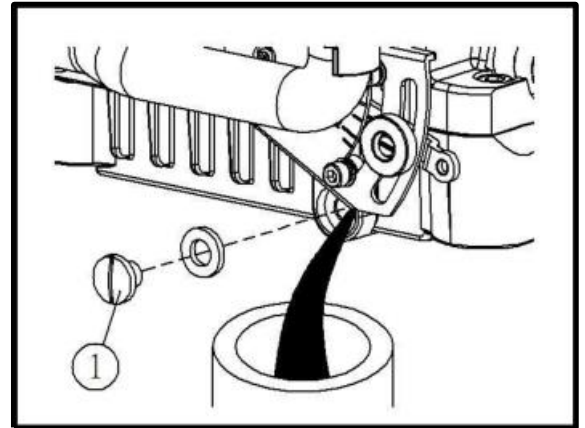


3.Lubrication

3.3 Oil change

Change the oil after 200 hours (approximately one month) of use on a new machine. After that, change the oil once or twice a year.

- (1) Loosen the screw ① and drain the oil.
- (2) Tighten the screw ①.
- (3) Attach the sewing machine back to the work table.
- (4) Pour in new Oil No.22.



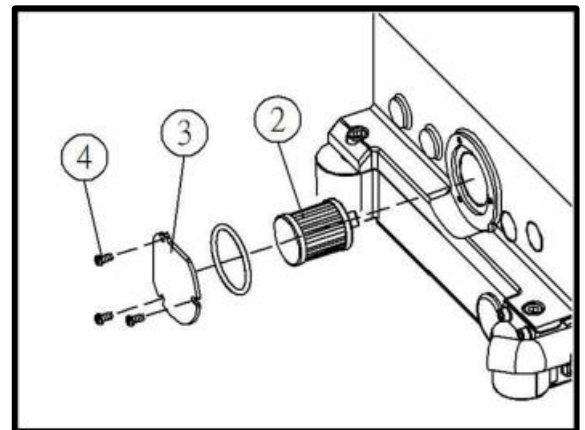
3.4 Check and replace the oil filter

If the oil filter ② is clogged with dust, the oil supply cannot be lubricated reliably.

Remove the oil filter cover ③ and oil filter ② every six months for inspection.

(2) for inspection. If they are clogged or cracked, clean or replace the oil filter.

Replace the oil filter if it is clogged or cracked. If there is not enough oil spattered from the nozzle or many air bubbles while the oil is fully retained, check or replace the oil filter.



Note: When loosening the screw ④, check and replace it carefully so that the oil in the oil filter ② does not spill out.

4. Operational Procedures

4.1 Needles

Uses UY x 128GAS (UY128GAS).

Japanese	9	10	11	12	13	14
Metric	65	70	75	80	85	90

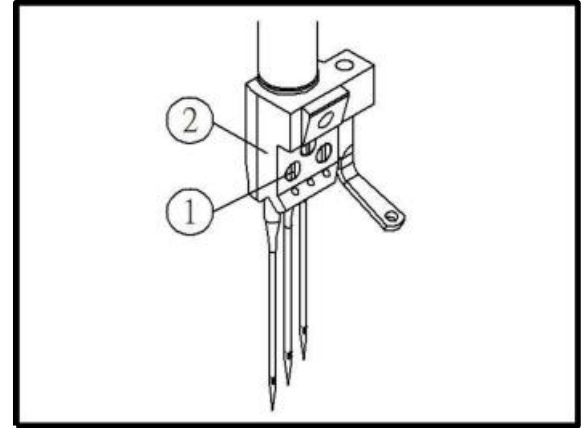
Choose the right needle according to the thickness and type of fabric.

4.2 Needle Mounting

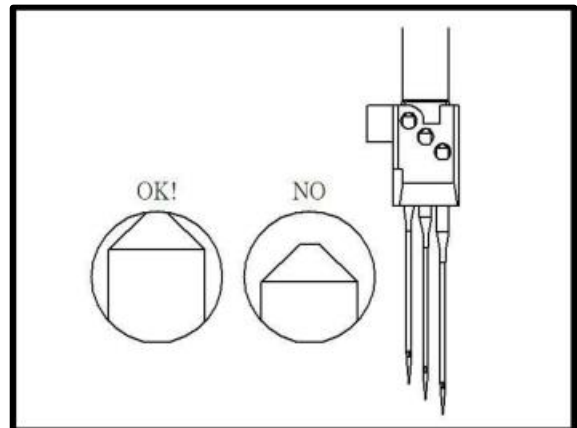
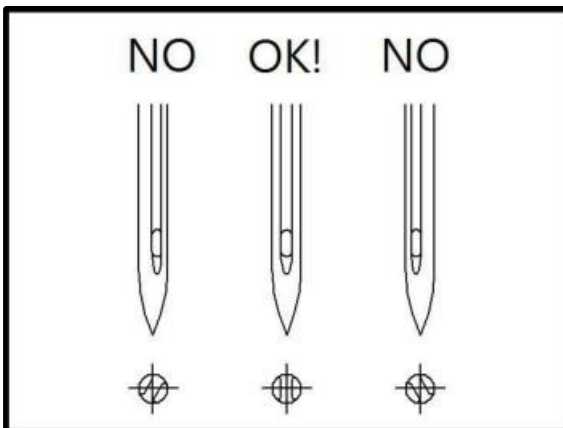
! Warning !

Prior to installation, be sure to turn off the power switch and check that the machine has stopped.

- (1) Loosen the screw ① with a screwdriver.
- (2) Use the tweezers to remove the old needle.
- (3) Insert the new needle into the needle clamp ② with the groove facing backwards.
- (4) Use a screwdriver to tighten the screw ①.



Note: Tighten the screw ① with a force of 0.6N-m (6kgf-cm).



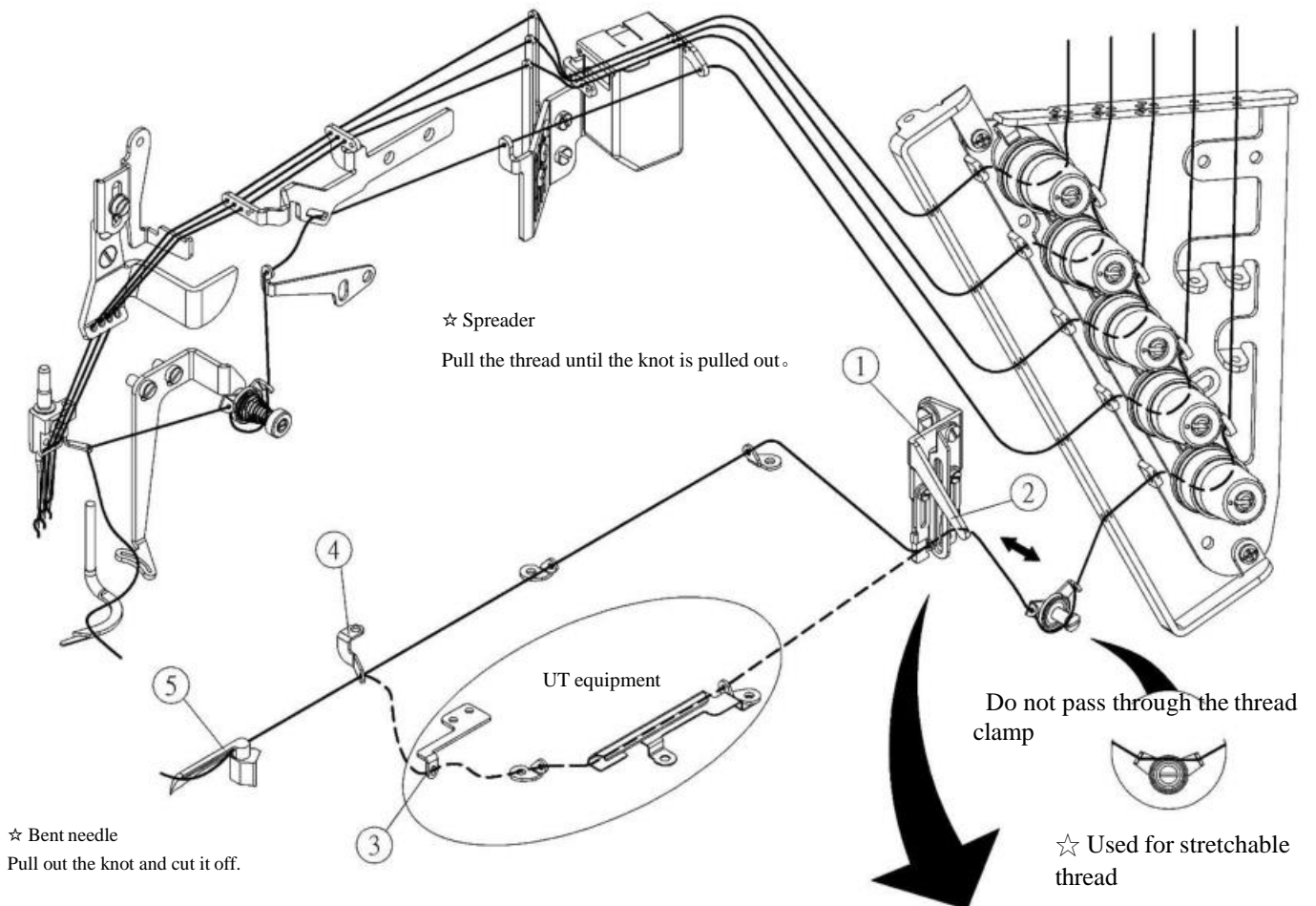
4. Operational Procedures

4.3 Threading

When not threaded, please refer to the following diagram to thread the machine.

When threaded, tie a new thread to close the knot and pull the thread again.

☆ Needle thread: Pull the thread until it reaches the front of the needle. Then cut off the knot in front of the needle hole and re-thread the thread. The correct threading method is to thread the left needle at the innermost position as shown in the figure.



Note: Threading for sewing machines with UT equipment. Pass through the tension release block ③, then through the crochet thread crossing hole ④ and finally through the bent needle ⑤.

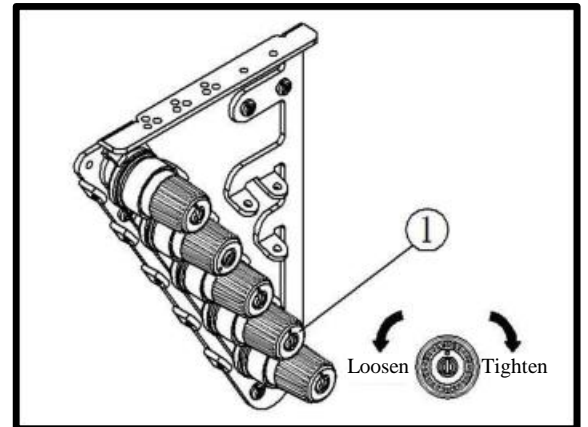
Note: To facilitate threading, please pull the lever ① of the thread take-up eyelet bracket ②. After threading, push the lever ② to return the thread take-up eyelet bracket ① to its original position.

4. Operational Procedures

4.4 Adjust Tension

Depending on the fabric type, thread type, stitch width, stitch length and other sewn items, use the thread tension spring cap ① to adjust the thread tension.

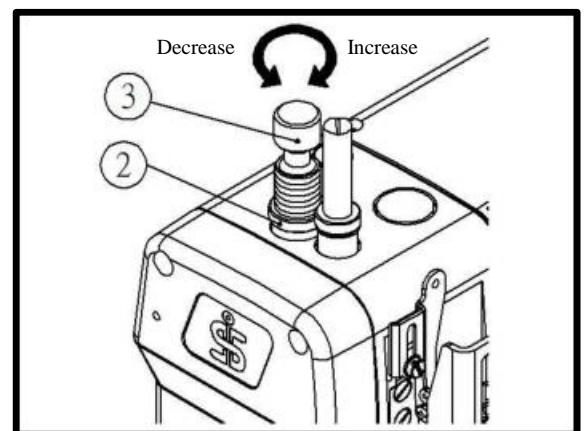
- Rotate the cover clockwise to tighten the tension.
- Rotate the cover counterclockwise to loosen the tension.



4.5 Presser foot pressure

Loosen the nut ② and turn the adjusting screw ③ to adjust the pressure.

- Rotate clockwise to tighten the presser foot pressure.
- Rotate counterclockwise to loosen the presser foot pressure. Keep the pressure at the minimum pressure to ensure stable sewing performance.



Note: Do not use the adjusting screw ③ to adjust the pressure when the presser foot is in operation.

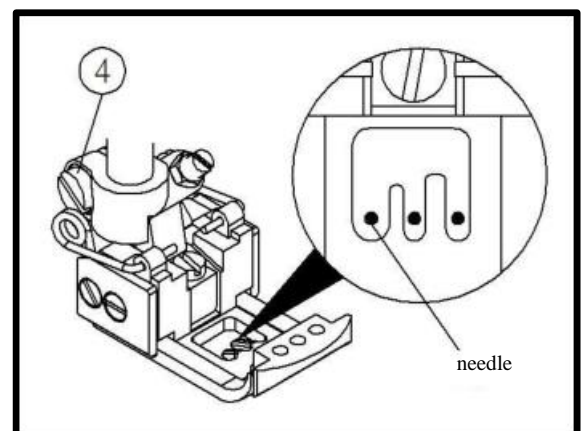
4.6 Presser foot position adjustment

! Warning!

Prior to adjustment, be sure to turn off the power switch and check that the machine has stopped.

Adjust the left and right positions of the presser foot pin holes.

- (1) Loosen the screw ④.
- (2) Move the edges of the presser foot from side to side so that each needle falls into the center of the hole.
- (3) Tighten the screws ④.



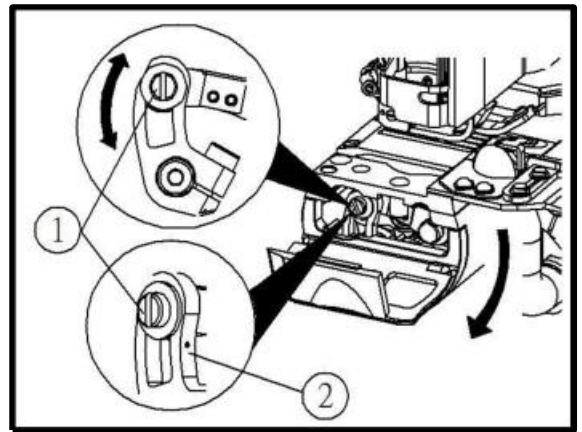
4. Operational Procedures

4.7 Differential adjustment

When the center of screw ① and point ② are aligned, the differential ratio is 1:1.

- (1) Loosen the screw ①.
- (2) When sewing tightly, move the screw ① upward (maximum positive differential ratio is 1:1.4). For tension stitching, move the screw ① downward (max. contrast ratio 1:0.8).
- (3) Locking screw ①.

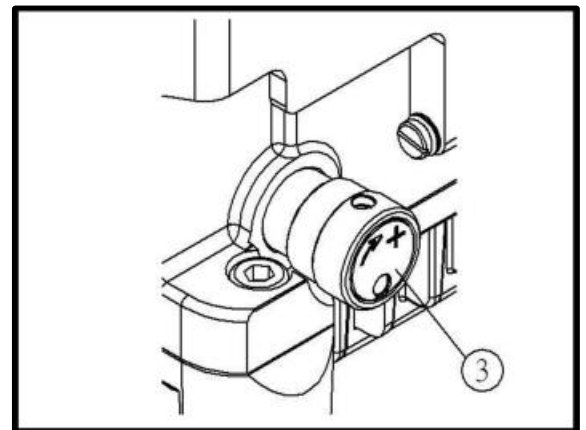
Note: The maximum positive differential ratio is 1:1.2 at a needle pitch of 4.2mm.



4.8 Needle pitch adjustment

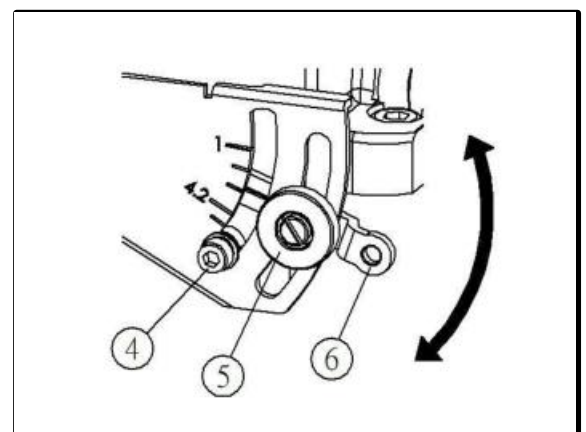
Adjustable needle pitch range 1.4mm to 4.2mm.

- To increase the needle pitch, turn the knob ③ clockwise and move the feed bar connection ⑥ down.
- To decrease the needle pitch, turn the knob ③ counterclockwise and move the feed bar connection ⑥ up.



The number of stitches per inch and per 30mm is shown in the table below

Needle Pitch (mm)	Stitches	
	inch	mm
4.2	6	7.5
3.6	7	8
2.4	10.5	12.5
1.4	18	21



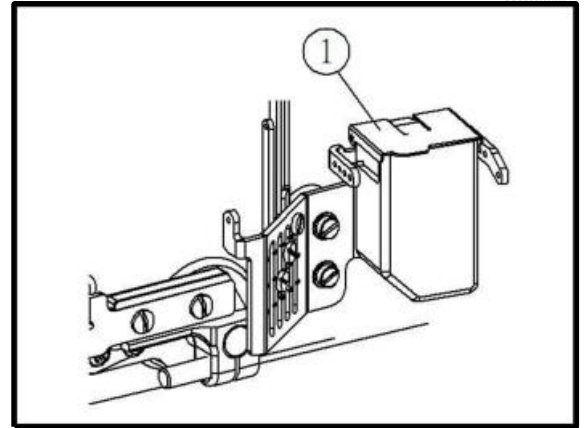
4. Operational Procedures

4.9 SP Device

When running machines at high speeds or using synthetic threads and fibers, use the standard SP device (needle and thread oiling) to prevent thread breakage and skipped stitches. Use dimethyl silicone oil.

Note:

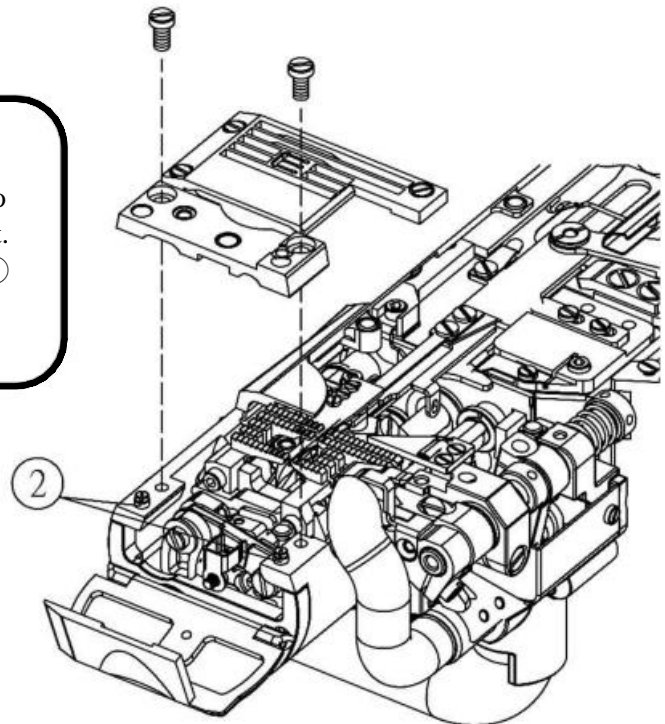
- (1) Sometimes it is necessary to open the cover of the SP device ① to check the oil level. If the oil level is insufficient, please replenish it.
- (2) Do not supply silicone oil to the machine. If silicone oil is spilled inside the machine, wipe it off completely with a cloth, otherwise it may cause damage to the machine.



4.10 Cleaning Sewing Machine

Waste thread and dust inside the sewing machine can cause messiness. The sewing machine should be cleaned regularly. The grooves of the needle plate and the area around the fabric feed teeth should be especially cleaned.

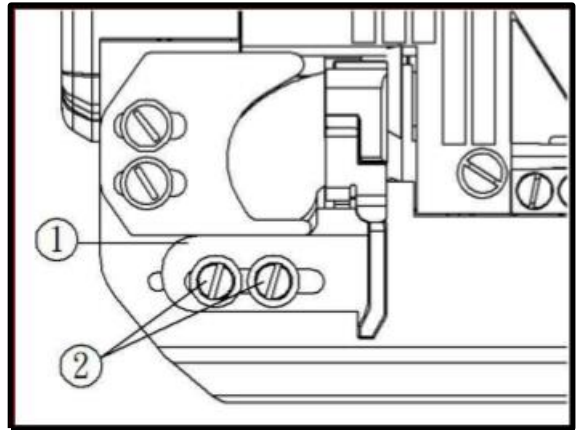
Note: Please be careful when using an air gun to remove dust and waste threads from the product. Do not loosen the positioning bushing screws ② on the needle plate holder.



4. Operational Procedures

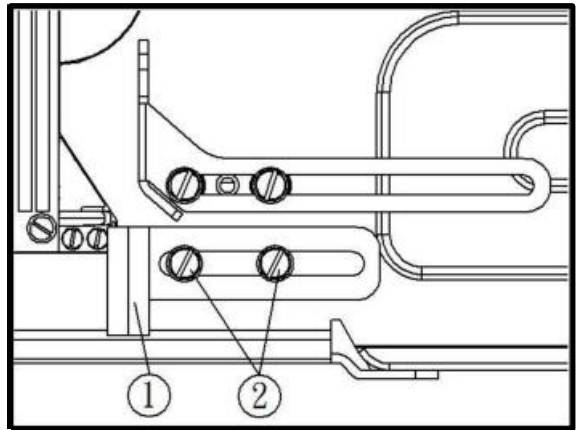
4.11 Fabric guide (left)

- (1) Loosen the screws ② on the fabric guide plate (left) ①.
- (2) Align the rightmost side of the guide of the fabric guide ① with the top thread trimmer ③.
- (3) Tighten the screws ②.



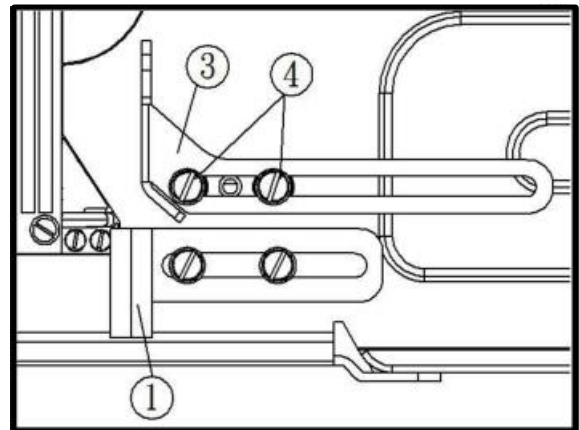
4.12 Fabric guide (front)

- (1) Loosen the screws ② of the fabric guide (front) ①.
- (2) Align the fabric guide (front) ① with the right end of the hem width of the folded cloth.
- (3) Tighten the screws ②.



4.13 Fabric guide (back)

- (1) Loosen the screws ④ on the fabric guide (rear) ③.
- (2) Align the left side of the fabric guide (rear) ③ with the guiding part of the fabric guide (front) ①.
- (3) Tighten the screws ④.



5. Adjustment Device

! Warning!

Prior to adjustment, be sure to turn off the power switch and check that the machine is stopped.

5.1 Stitch Tension

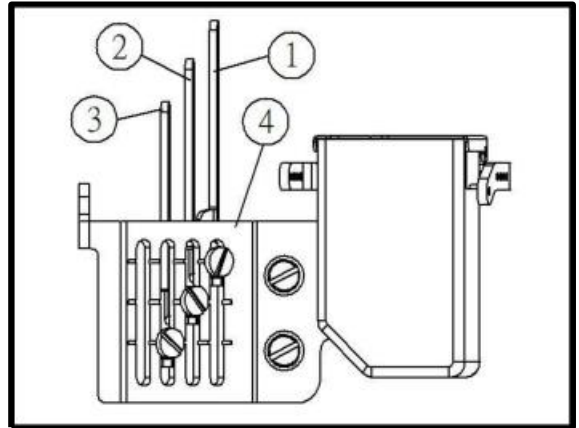
Stitch hole position:

The standard position of each stitch hole is shown in the figure.

Care should be taken to align the center of the screw with the stitch hole holder (4).

Right stitch hole (1): Top thread. Middle stitch hole (2): center line. Left needle thread hole (3): Bottom thread.

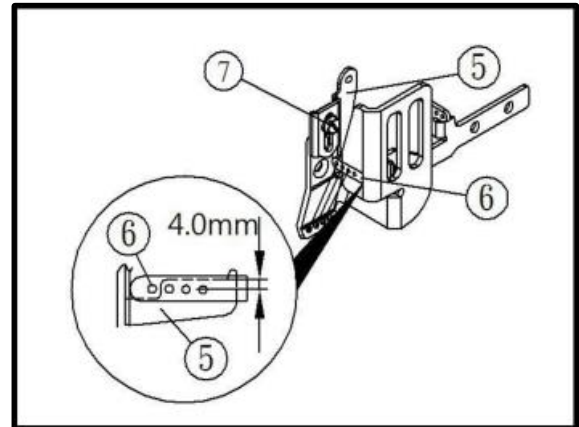
- To tighten the needle thread, raise the needle thread hole.
- To loosen the needle thread, lower the needle thread hole.



Stitch top piece:

When the thread take-up (6) is at the bottom, the standard position is 4.0mm from the center of the thread hole of the thread take-up (6) to the top of the stitch top piece (5).

- To increase the thread loop or to use a retractable thread, loosen the screw (7) and raise the thread top (5).
- To reduce the needle loop, loosen the screw (7) and lower the top piece of the needle thread (5).



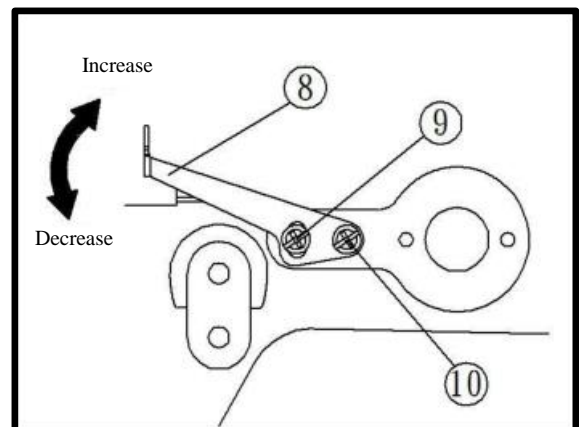
5.2 Spreader Tension

Align the center of the slot in the top trim rod (top) (8) with the center of the screws (9).

Loosen the screws (9) and (10) to adjust.

- Increase the amount of thread feeding, and raise the top thread crossing lever (top) (8).
- Decrease the amount of thread feed, and lower the top thread crossing lever (top) (8).

Note: When using a stretchable thread such as wool, set the top thread crossing lever (top)(8) higher than the standard value.

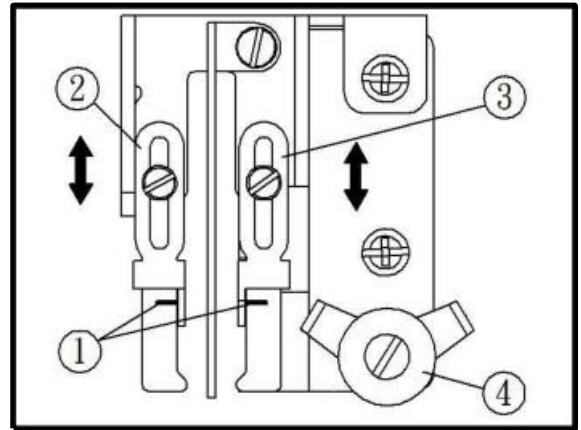


5. Adjustment Device

5.3 Bent needle thread tension

Align the lead hole (left)(2) and (right)(3) with the marker line (1) on the lead hole holder as a standard. Loosen the threads of the two lead holes for adjustment.

- Tighten the bent needle thread tension and raise the thread holes (left)(2) and (right)(3).
- Loosen the bent needle thread tension and lower the thread holes (left)(2) and (right)(3).

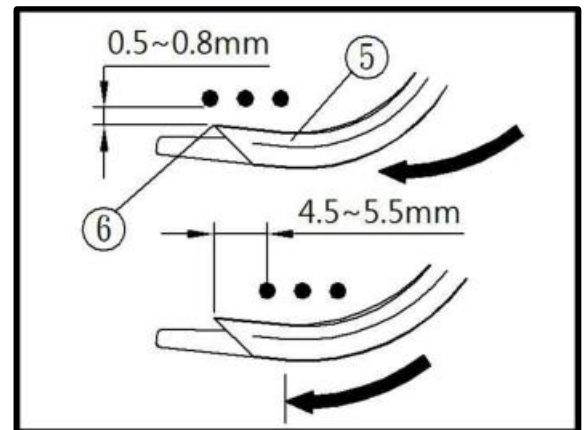


Note: When using a retractable thread, move the thread guide holes (2) and (3) to the lowest point and do not pass through the top cover tension plate (4).

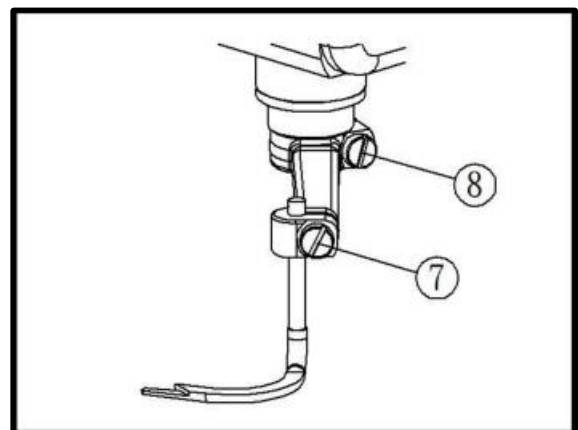
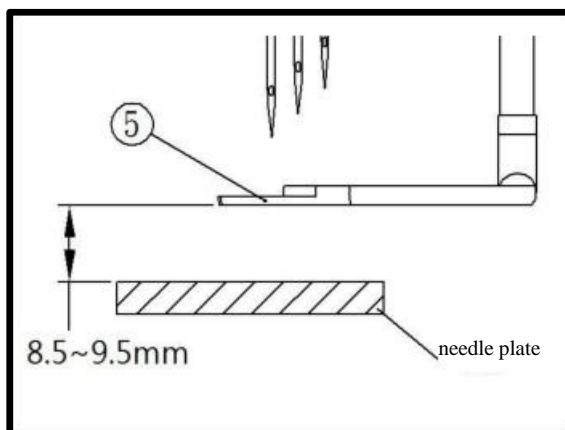
5.4 Needles and top trim hooks

5.4.1 Installation of spreader hooks

- (1) Loosen the screws (7) and (8) on the hook holder.
- (2) Keep the distance between the left needle and the tip of the hook (6) on the hook (5) from 0.5mm to 0.8mm.
- (3) Keep the distance between the center of the left needle and the tip of the hook (6) at 4.5mm to 5.5mm when the hook (5) is at the leftmost end and tighten the screws (8).
- (4) Set the distance between the needle plate surface and the bottom of the eye (5) to 8.5mm to 9.5mm and then tighten the screw (7).



Note: Adjust the height of the spreader hook, so that the spreader thread passes behind the right needle and is caught by the left needle within the adjustable range of the needle distance.

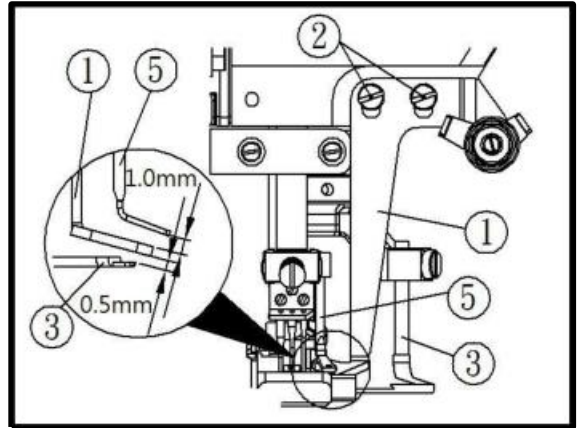


Needle

5. Adjustment Device

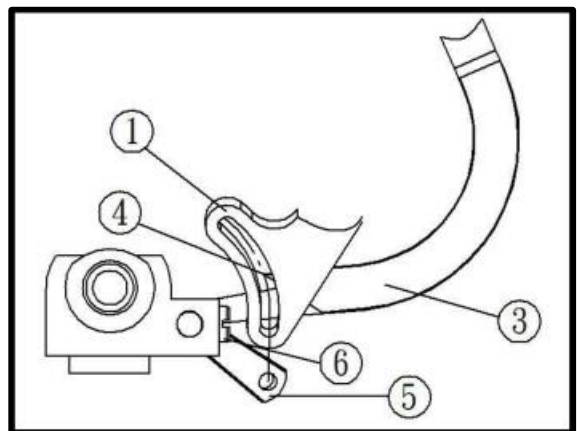
5.4.2 Installation of the spreader guide

- (1) Loosen the screws ② on the spreader guide ①.
- (2) Make the distance between the top of the spreader hook ③ and the bottom of the spreader guide ① 0.5 mm.
- (3) When the spreader hook ③ is at the rightmost end, place the tip of the hook ④ in the center of the groove of the spreader plate ① and tighten the screw ②.



5.4.3 Installation of the spreader guide hole

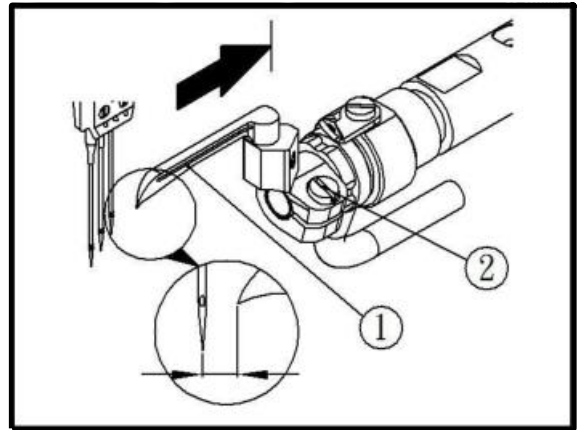
- (1) Loosen the screws ⑥ on the spreader guide hole ⑤.
- (2) When the needle bar is at its lowest point, allow a distance of 1.0 mm between the top of the spreader guide plate ① and the bottom of the spreader guide hole ⑤.
- (3) Set the spreader guide hole ⑤ along the line protruding from the slot of the spreader guide plate ①.
- (4) Tighten the screws ⑥.



5. Adjustment Device

5.5 Distance between the needle and the bent needle

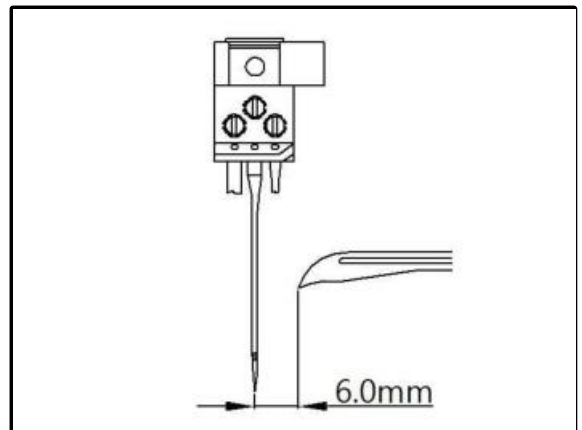
The distance between the tip of the bent needle and the center of the right needle depends on the distance when the needle is at its lowest point and the bent needle ① is on the far right. After referring to the table, loosen the screw ② in the bent needle holder to adjust the distance.



Note: The distance between the center of the needle bar and the tip of the bent needle ① is still 6.0 mm even if the needle pitch is changed.

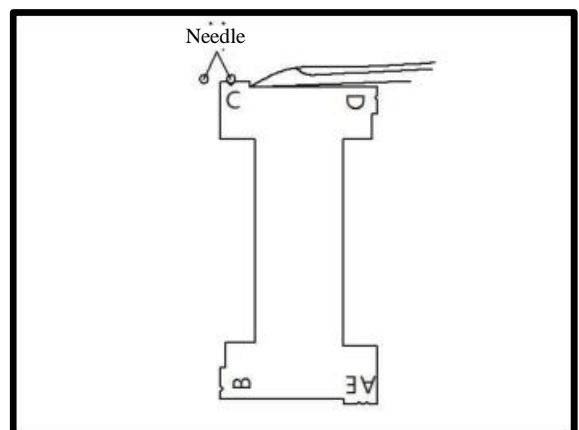
Needle Pitch	Measurement denomination	Bent needle distance
3.2mm (32)	A	4.4mm
4.0mm (40)	B	4.0mm
4.8mm (48)	C	3.6mm
5.6mm (56)	D	3.2mm
6.4mm (64)	E	2.8mm

Measuring gauges make it easier to adjust distances.



5.6 Utilizing a gauge

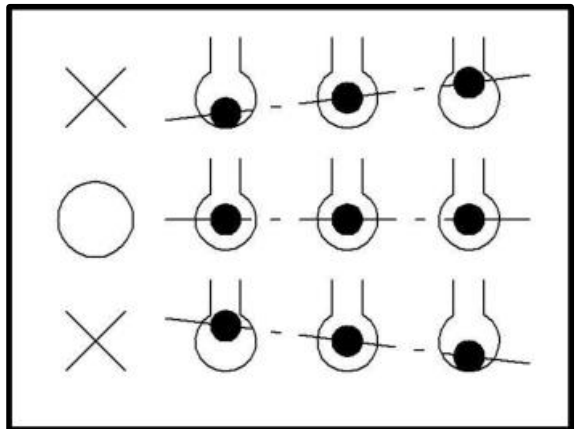
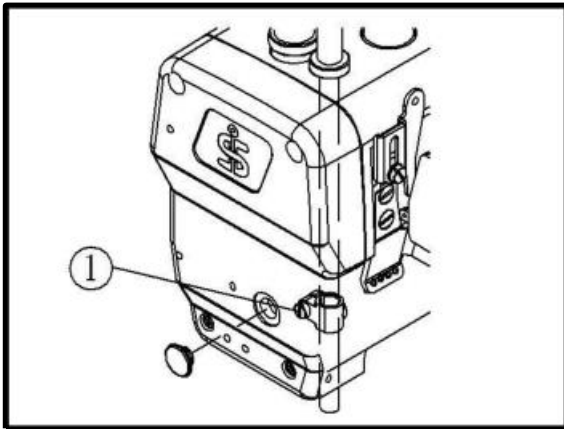
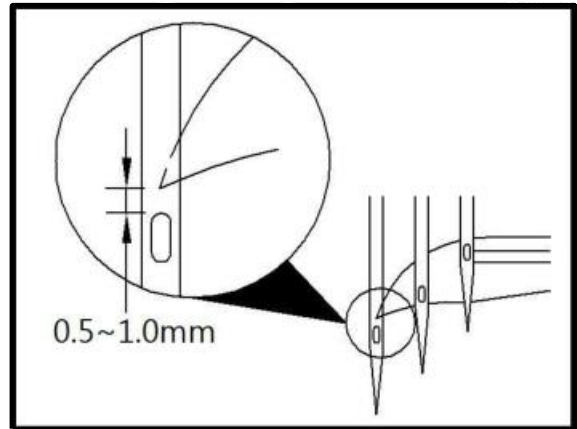
Gauges are marked on each gauge (A, B, C, D, E) with different specifications for different gauges. Move the bent needle to the far right, place the right needle in the "V" slot of the corresponding gauge, and move the tip of the bent needle to the edge of the gauge.



5.Adjustment Device

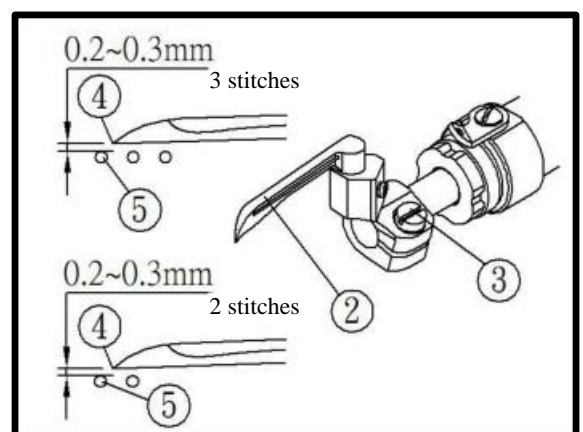
5.7 Needle height

- (1) Attach the needle to the left side of the needle.
- (2) Check that the needle is fully inserted in the needle holder.
- (3) Turn the handwheel until the needle tip and the center of the needle meet.
- (4) Loosen the screw ① on the needle bar holder and move the needle bar up and down so that the tip of the needle is 0.8 mm to 1.3 mm above the top of the needle eye.
- (5) Tighten the screw ① and check that the needle falls in the center of the needle hole of the needle plate.



5.8 Anterior and posterior position of needle and bent needle

- (1) Turn the handwheel until the tip of the needle bend ④ moves to the center of the left needle ⑤.
- (2) Loosen the screw ③ and move the needle bender so that the distance between the back of the left needle ⑤ and the tip of the needle bender is 0.2 mm to 0.3 mm. Then tighten the screw ③.



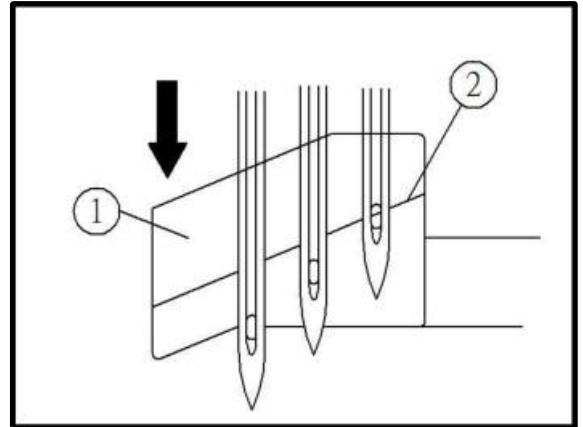
Note: After tightening the screws(3), the positions of the front and back of the bent needle may move. Check the position again after tightening.

5.Adjustment Device

5.9 Needle and needle guard (rear)

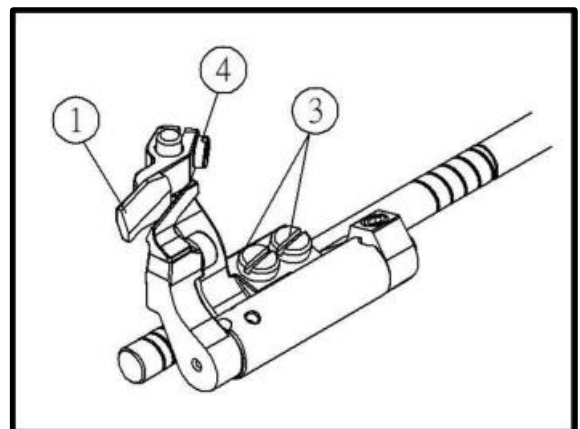
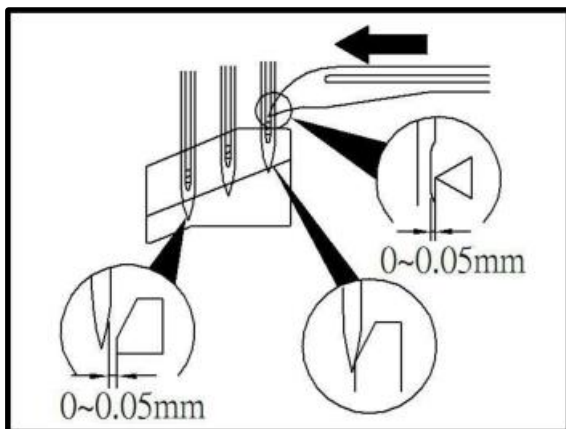
☆Needle guard (rear) height

- (1) Turn the hand wheel until the needle is lowered to the lowest point.
- (2) Loosen the screws ④.
- (3) Adjust the needle guard (rear) ① so that the line ② of the needle guard (rear) is aligned with the center of the rightmost needle hole.
- (4) Temporarily tighten the screws ④.



☆ The front and back position and angle between the needle guard (rear) and the needle

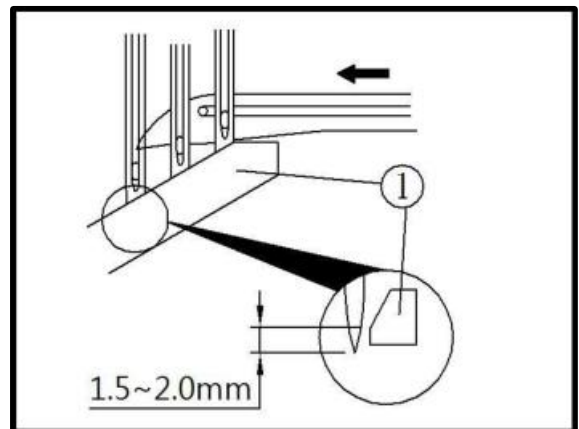
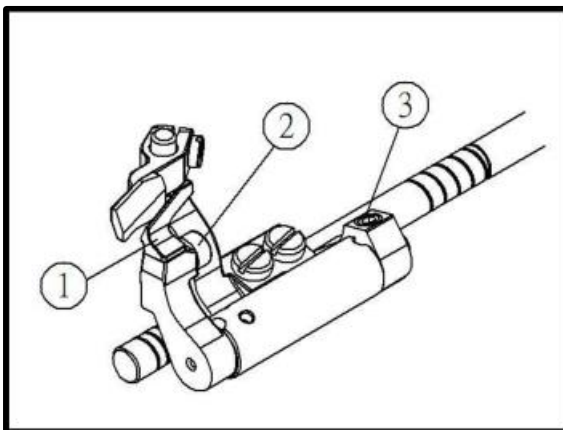
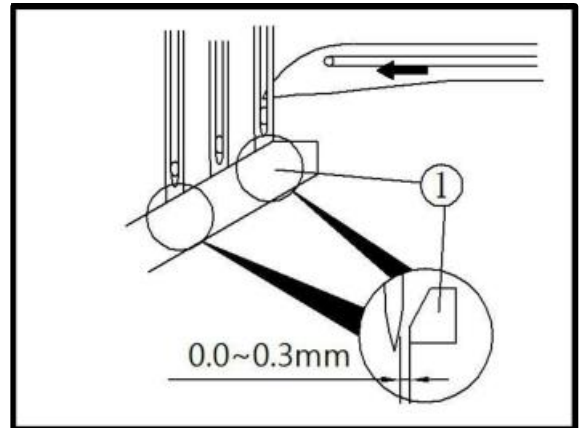
- (1) Loosen the screws ③ and ④.
- (2) When the point of the bent needle intersects the center of the right needle, touch the needle guard to the needle so that the distance between the needle and the bent needle is 0mm to 0.05mm.
- (3) Make the distance between the left needle and the needle guard (rear) 0mm to 0.05mm.
- (4) Tighten the screws ③ and ④.



5.Adjustment Device

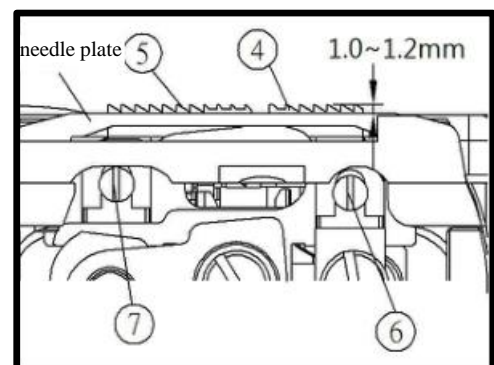
5.10 Needle and needle guard (front)

- (1) Loosen the screw ③ when the tip of the bent needle enters the center of the right needle. Looking down from the top, place the needle guard (front) ① parallel to the alignment line ② and temporarily tighten the screw ③.
- (2) Turn the handwheel clockwise until the bent needle tip enters the center of the left needle.
- (3) Loosen screw 3 and adjust the needle guard (front) ① so that the needle tip is 1.5~2.0mm below the tangent of the needle guard (front) ①.
- (4) Tighten the screws ③
- (5) Loosen the screw ③. Make the gap between the top needle piece (front) ① and the right and left needles 0.3~0.4mm.
- (6) Tighten the screw ③.



5.11 Height of cloth delivery gears

The height of the differential gear ④ and the main gear ⑤ is 1.0~1.2 mm from the needle plate surface when the feed gear is in the highest position, and is parallel to the needle plate surface. This can be adjusted by loosening the screws ⑥ and ⑦.



6. Adjustment of feeding wheelset structure

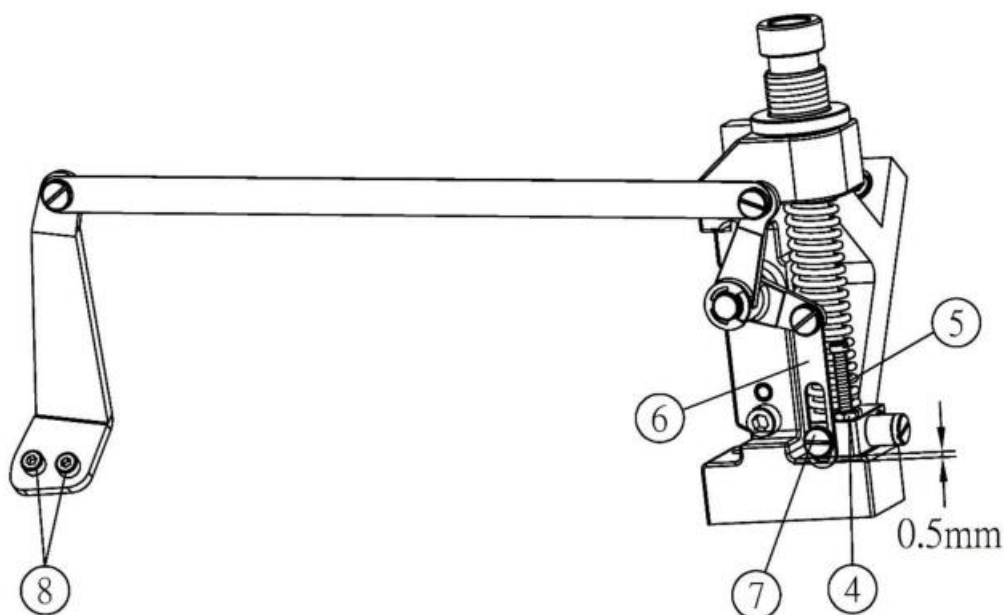
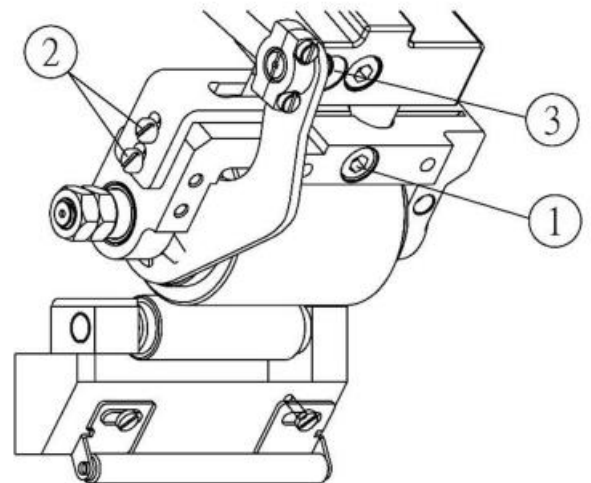
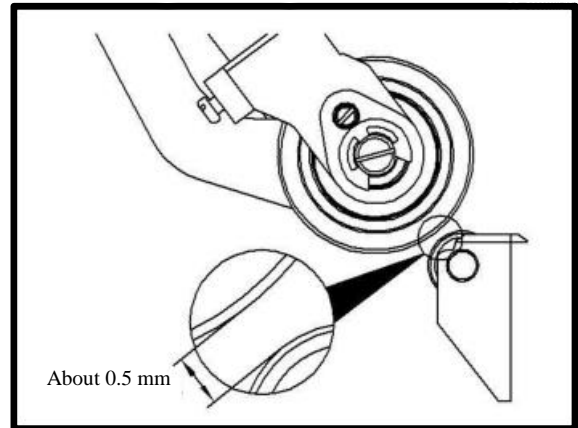
6.1 Position of the upper feed rollers

The gears of the upper feed roller must be parallel to the gears of the lower feed roller. The gap between the upper feed roller and the lower feed roller must be 0.5 mm after releasing the upper feed roller. Such is the standard.

* Adjust the gears of the upper and lower feed rollers to be parallel to each other. Loosen the screws ① of the upper feed roller bracket, the screw ② of the guide, and the screw 3 of the pin to make the adjustment. Position the screws ① and ② to ensure that they can be moved up and down slowly and then tighten the screws ③.

* Leave a 0.5 mm gap between the upper feed rollers and the lower feed rollers. Loosen the upper feed roller, loosen the nut ④, and use the adjusting screws ⑤ to adjust. Adjust the gap according to the fabric thickness.

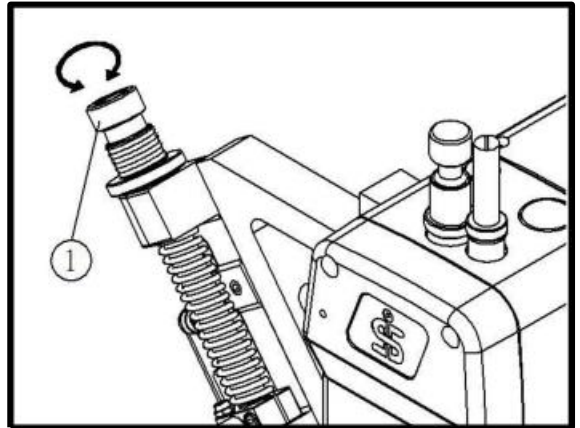
* Leave a 0.5 mm gap between the bottom of the lift connection plate slot ⑥ and the screw ⑦ when the presser foot is placed on the surface of the needle plate. Loosen the screws ⑧ on the upper feed roller lifter (right) to make the adjustment.



6. Adjustment of feeding wheelset structure

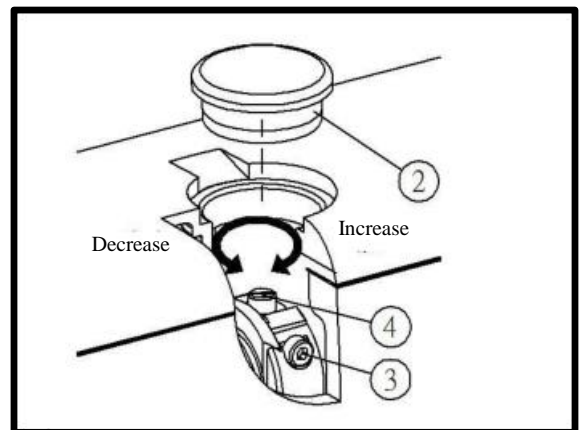
6.2 Pressure of the upper feed rollers

Hold the fabric between the upper and lower feed rollers and set the pressure to the minimum. Turn the adjusting screw ① clockwise to increase the pressure and counterclockwise to decrease the pressure.



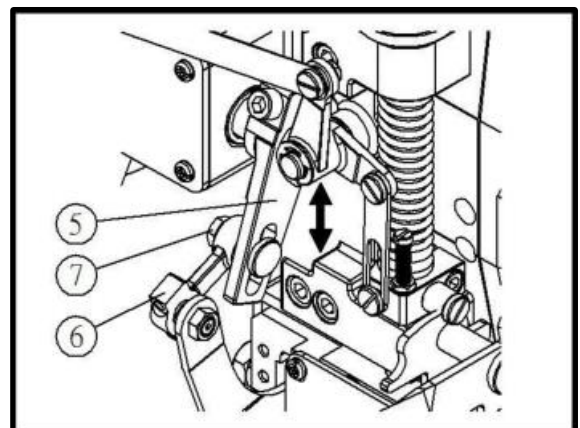
6.3 Adjustment of feed volume of feed wheelset structure

- (1) Remove the top cover sealing plug ②.
- (2) Rotate the handwheel until the upper trailing wheel adjuster screw ③ is in the upper position. Loosen the screw ③.
- (3) Rotate the handwheel so that the adjusting screws ④ is positioned up.
- (4) Turn the adjusting screws ④ to adjust the feed amount.
 - Rotate clockwise to decrease the feed amount.
 - Rotate counterclockwise to increase the amount of feed.
- (5) Tighten the screw ③ with a force of 2.5N-m.



To make fine adjustments, loosen the screws ⑦ on the swing arm ⑤ and the level switch ⑥. Move the screws ⑦ up and down to make adjustments.

- Move up to decrease the amount of feed.
- Move down to increase the amount of feed.



7. Fabric Cutting Mechanism

! Warning!

Prior to adjustment, be sure to turn off the power switch and check that the machine is stopped.

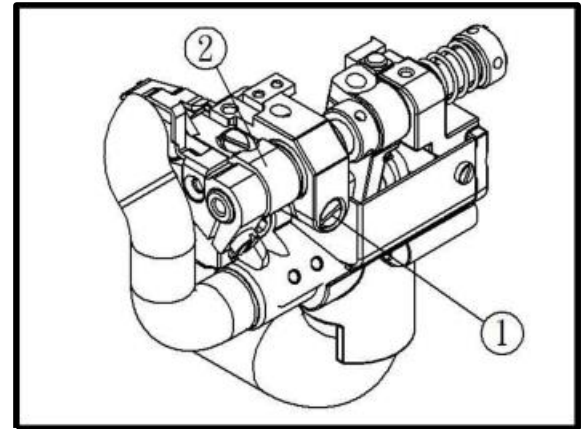
7.1 Adjustment of the cutting position of the fabric

Loosen the screw ① of the tool table.

- (1) Move the under thread trimmer holder ② to the left or right.
- (2) Tighten the screws ① with a force of 1.5 N-m to 2 N-m (15 kg to 20 kg).

Note: After changing the fabric cutting position, please refer to 6.2

Adjustment of suction pipe (front) and 6.3
Adjustment of suction pipe cover.



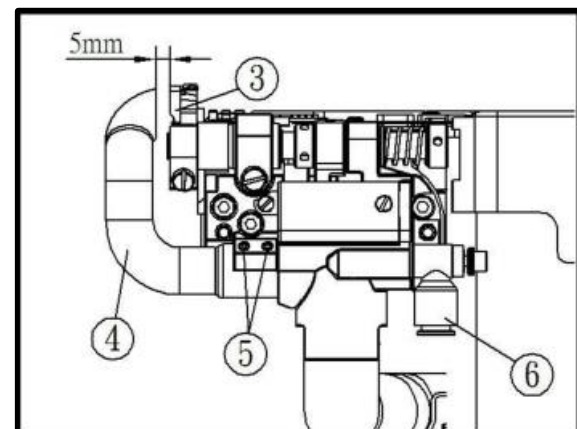
7.2 Adjustment of suction pipe (front)

Place the suction nozzle of the suction pipe (front) ④ and the left side of the chip guide ring ③ about 5 mm apart.

Loosen the screws ⑤ to adjust the position of the suction pipe (front) ④ or remove it.

Adjust the suction power with the speed control valve ⑥.
The minimum pressure is required for smooth suction of the cloth.

Note: Suction pipes ④ may be difficult to adjust if the screws ⑤ are too tight.

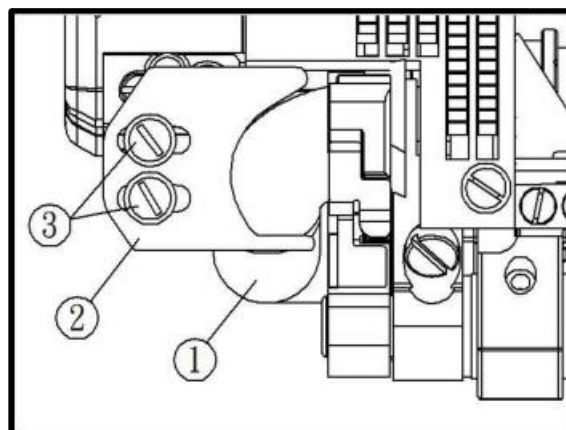


7. Fabric Cutting Mechanism

7.3 Adjustment of suction pipe cover

Once the position of the suction pipe ① has been changed, adjust the position of the suction pipe cover ②.

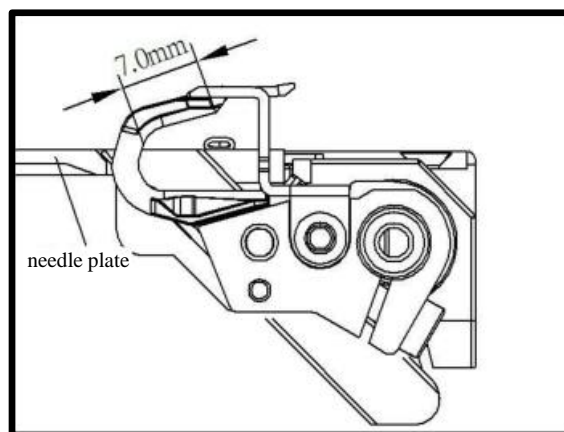
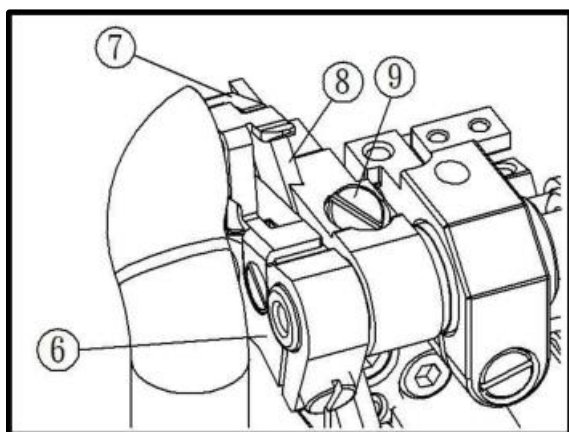
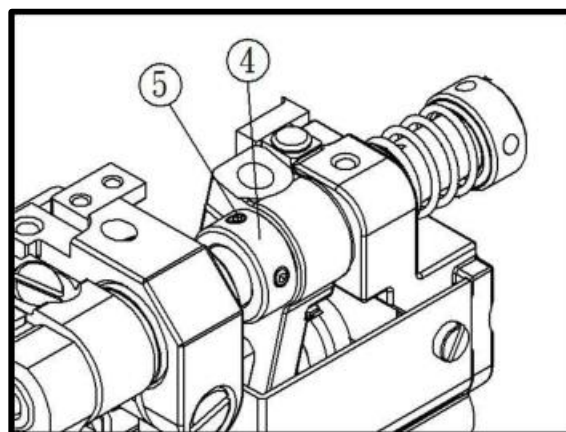
- (1) Loosen the screws ③ on the suction pipe cover ②.
- (2) Place the right side of the suction pipe cover ② as close to the suction pipe (front) as possible ①.
- (3) Tighten the screws ③.



7.4 Replacement of under thread trimmer

To remove the under thread trimmer:

- (1) Loosen the screws ⑤ on the shaft ring (left) ④.
- (2) Move the upper cutter holder ⑥ to the left to leave a gap between the upper cutter ⑦ and the under thread trimmer ⑧.
- (3) Tighten the screws ⑤.
- (4) Loosen the screws ⑨ holding the under thread trimmer ⑧ and pull the under thread trimmer ⑧ down.



To install the under thread trimmer:

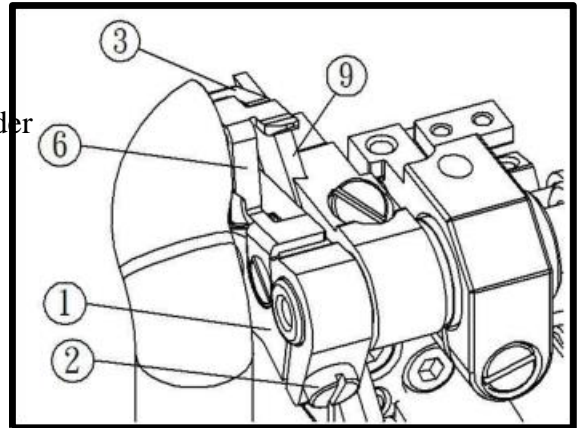
- (1) Align the blade of the under thread trimmer ⑧ with the top surface of the needle plate and tighten the screws ⑨.
- (2) Loosen the screws ⑤ and make contact between the top thread trimmer ⑦ and the under thread trimmer ⑧ by the force of the spring.
- (3) Place a line between the top thread trimmer ⑦ and the under thread trimmer ⑧ and turn the handwheel to check the sharpness of the blade.
- (4) Adjust the tip of the top thread trimmer ⑦ (at the bottom of the blade) and the top blade of the under thread trimmer ⑧ to 7.0 mm apart and tighten the screws ⑤.
- (5) Recheck the cutting line for smoothness.

7. Fabric Cutting Mechanism

7.5 Replacement of top thread trimmer

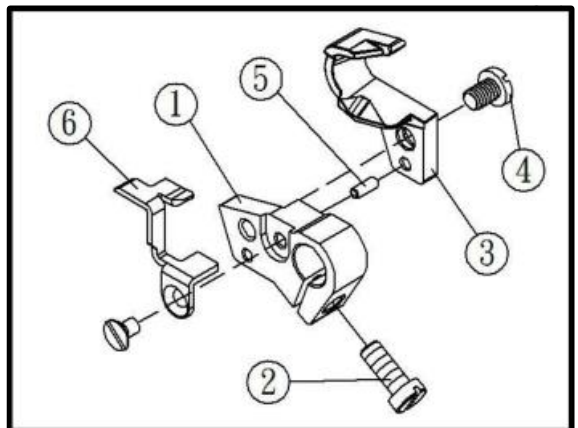
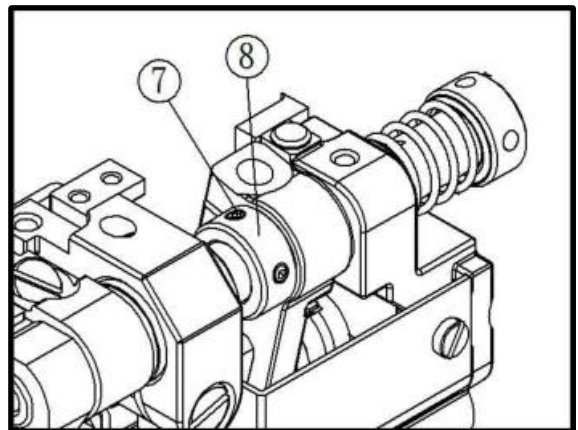
Remove the top thread trimmer:

- (1) Loosen the screws ② on the top thread trimmer holder ①.
- (2) Remove the top thread trimmer holder ①.
- (3) Loosen the screws ④ on the top thread trimmer ③.
- (4) Remove the top thread trimmer ③.

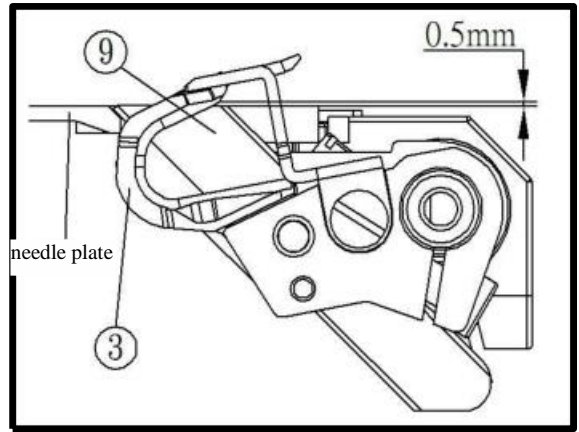
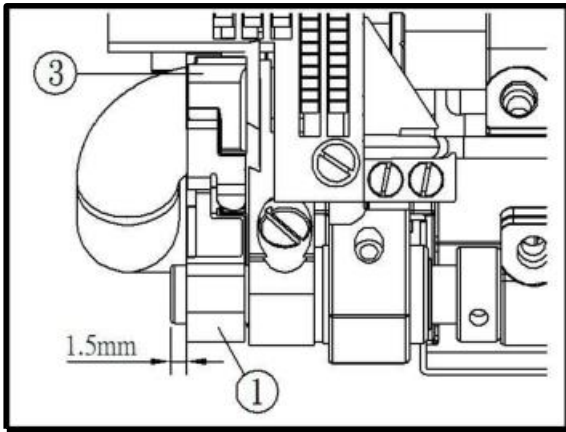


To install the top thread trimmer:

- (1) Attach the top thread trimmer ③ to the pin (5) of the top thread trimmer holder ① and tighten the screws ④.
- (2) Attach the left end of the cutting ring (6) of the top thread trimmer holder ① to the left end of the top thread trimmer shaft (10) at a distance of 1.5 mm.
- (3) Turn the hand wheel to lower the top thread trimmer ③ to the lowest point. Move the top thread trimmer holder ① so that the tip of the top thread trimmer is 0.5mm above the bottom cutter blade, then tighten the screws ②.
- (4) Loosen the screws ⑧ on the shaft ring (left) ⑦ and bring the top thread trimmer ③ into contact with the under thread trimmer ⑨ by the force of the spring.
- (5) Place a line between the top thread trimmer ③ and the under thread trimmer ⑨ and turn the handwheel to check the sharpness of the blade.
- (6) Adjust the tip of the top thread trimmer ③ (at the bottom of the blade) and the top blade of the under thread trimmer ⑨ to 7.0 mm apart and tighten the screws ⑧.
- (7) Recheck the cutting line for smoothness.



7. Fabric Cutting Mechanism



7. Fabric Cutting Mechanism

7.6 Adjustment of top thread trimmer stroke

The top thread trimmer stroke can be adjusted from 3.0mm to 6.5mm, which was adjusted to 4.0mm at the factory.

The adjustment procedure is as follows:

(1) Loosen the screw ② on the adjusting crank ① to make the adjustment.

- Move in the Y direction to decrease the stroke.
- Move in the X direction to increase the stroke.

(2) Tighten the screws ②.

(3) Loosen the screw ④ of the top thread trimmer holder (3), and then gently tighten.

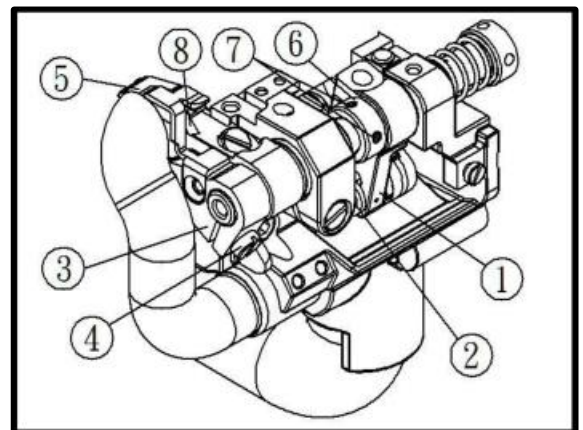
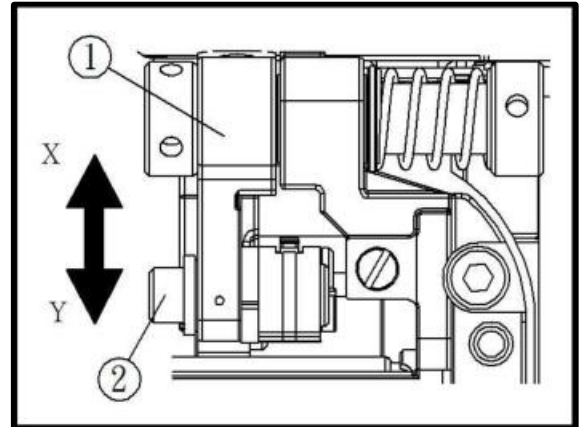
(4) Turn the handwheel to lower the top thread trimmer ⑤ to its lowest point. Move the top thread trimmer holder ③ so that the tip of the top thread trimmer is 0.5 mm above the under thread trimmer blade, then tighten the screw ④.

(5) Loosen the screw ⑦ on the shaft ring (left) ⑥ and bring the top thread trimmer ⑤ into contact with the under thread trimmer ⑧ by the force of the spring.

(6) Place a line between the top thread trimmer ⑤ and the under thread trimmer ⑧ and turn the handwheel to check the sharpness of the blade.

(7) Adjust the tip of the top thread trimmer ⑤ (at the bottom of the blade) and the top blade of the under thread trimmer ⑧ to 7.0mm apart and tighten the screws ⑦.

(8) Recheck the cutting line for smoothness.



7. Fabric Cutting Mechanism

7.7 Knife sharpening

If the cutter is badly worn, sharpen the under thread trimmer ②. Prepare cold water and resharpen the under thread trimmer while keeping it cool. Readjust the correct angle as shown in the picture.

