SunStar

USER'S MANUAL

SC 8200J Series

Direct Drive,
Feed-off-the-Arm
3 Needle 6 Thread Double
Chain Stitch M/C

1) FOR AT MOST USE WITH EASINESS, PLEASE CERTAINLY READ THIS MANUAL BEFORE STARTING USE.
2) KEEP THIS MANUAL IN SAFE PLACE FOR REFERENCE WHEN THE MACHINE BREAKS DOWN.

SunStar CO., LTD.

MME-100407

1. Thank you for purchasing our product. Based on the rich expertise and experience accumulated in industrial sewing machine production, SUNSTAR will manufacture industrial sewing machines, which deliver more diverse functions, high performance, powerful operation, enhanced durability, and more sophisticated design to meet a number of user's needs.
2. Please read this user's manual thoroughly before using the machine. Make sure to properly use the machine to enjoy its full performance.
3. The specifications of the machine are subject to change, aimed to enhance product performance, without prior notice.
4. This product is designed, manufactured, and sold as an industrial sewing machine. It should not be used for other than industrial purpose.

SUNSTAR CO., LTD.

Machine Type

Code	Puller type
B	Roller Type Puller(For Heavy weight Materials)
R	Belt Type Puller(For Light Materials)

SC 8200 J / 01 - □ / □□

Sunstar Chain Stitch

J : Jean
L : Light Materials

Code	Motor
01	Direct Motor
02	Clutch Motor

Code	Presser foot type
PF	Structure of pneumatic presser foot(Direct)
MF	Structure of Mechanism presser foot(Clutch)

* Machine Type
  SC 8200J/01-B/PF
  SC 8200J/02-B/MF
  SC 8200L/01-R/PF
  SC 8200L/02-R/MF

Contents

1

Machine Safety Regulations

Safety instructions on this manual are defined as Danger, Warning and Caution.
If you do not follow the instructoins, physical injuries and machine damages might be occurred.

Danger : This indication should be observed definitely. If not, there will be a danger during the installation, conveyance and maintenance of the machine.
Warning : When you follow this indication, injuries from the machine can be prevented.
Caution : When you follow this indication, error on the machine can be prevented.

1) Transporting machine  Danger	Those in charge of transporting the machine should have a full understanding of the machine. The following indications should be followed when the machine is being transported. ⓐ More than 2 people must transport the machine. ⓑ To prevent accidents from occurring during transportation, wipe off the oil on the machine compeletely.
2) Installing machine  Warning	The machine may not work properly or breakdown, if installed in certain places, Install the machine where the following qualifications agree. ⓐ Remove the package and wrappings from the top. Take special notice on the nails on the wooden boxes. ⓑ Dust and moisture stains and rusts the machine. Install an airconditioner and clean the machine regularly. ⓒ Keep the machine out of the sun. ⓓ Leave sufficient space of more than 50cm behind, and on the right and left side of the machine for repairing. ⓔ EXPLOSION HAZARDS Do not operate in explosive atmospheres. To avoid explosion, do not operate this machine in an explosive atomsphere including a place where large quantities of aerosol spray product are being used or where oxygen is being administered unless it has been specifically certified for such operation. ⓕ The machine is not provided with a local lighting due to the feature of machine. Therefore the illumination of the working area must be fulfilled by end user. [Refer] Details for machine installation are described in 4. Installation.
3) Repairing machine  Caution	When the machine needs to be repaired, only the assigned troubleshooting engineer educated at the company should take charge. ⓐ Before cleaning or repairing the machine, turn off the main power and wait 4 minutes till the machine is completely out of power. ⓑ Not any of the machine specifications or parts should be changed without consulting the company. Such changes may make the operation dangerous. ⓒ Spare parts produced by the company should only be used for replacements. ⓓ Put all the safety covers back on the machine after the machine has been repaired.

4) Operating machine

Warning

SC8200 Series are designed as industrial sewing machines performing sewing on denim and other similar materials. Please observe the following instructions during the machine operation.

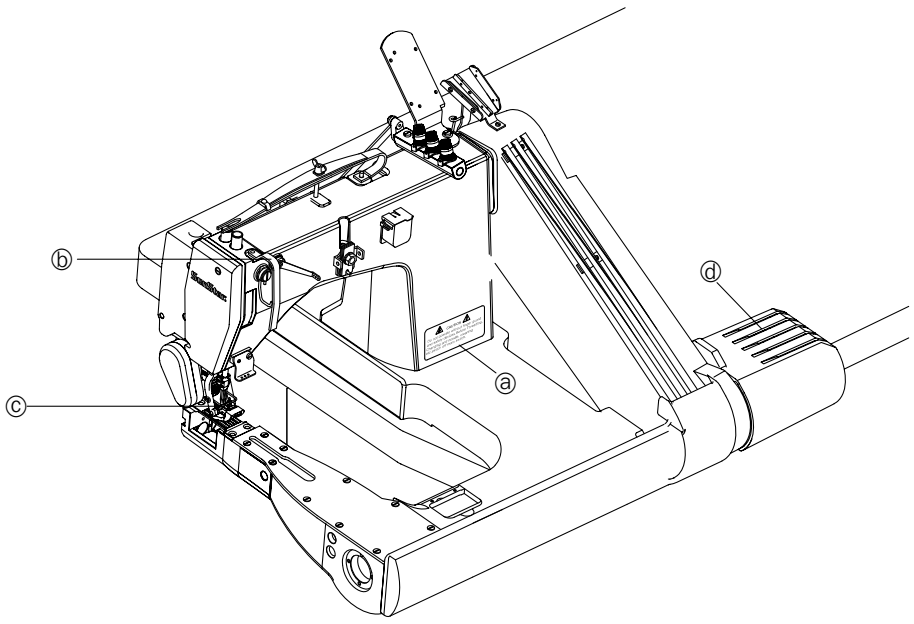
ⓐ Read through this manual carefully and completely before operating the machine.
ⓑ Wear proper clothes for work.
ⓒ When the machine is in operation, do not bring your hands or body near the moving parts of the machine, such as needle, looper, spreader, thread take-up lever and pulley, etc.
ⓓ Keep the covers and safety plates in place during operation.
ⓔ Be sure to connect the earthing conductor.
ⓕ Turn off the main power and check if the switch is turned "off" before opening electric boxes such as the control box.
ⓖ Stop the machine before threading the needle or checking after work.
ⓗ Do not step on the pedal when turning the power on.
ⓘ Do not operate the machine with any cooling fan blocked.
The air-filter on control box must be cleaned once a week.
ⓙ If possible, install the machine away from source of strong electrical noise such as high frequency welding machines

[Warning]
Keep cover in place before operating, turn off power before inspecting or adjusting in order to prevent physical injury from belt.

5) Safety devices

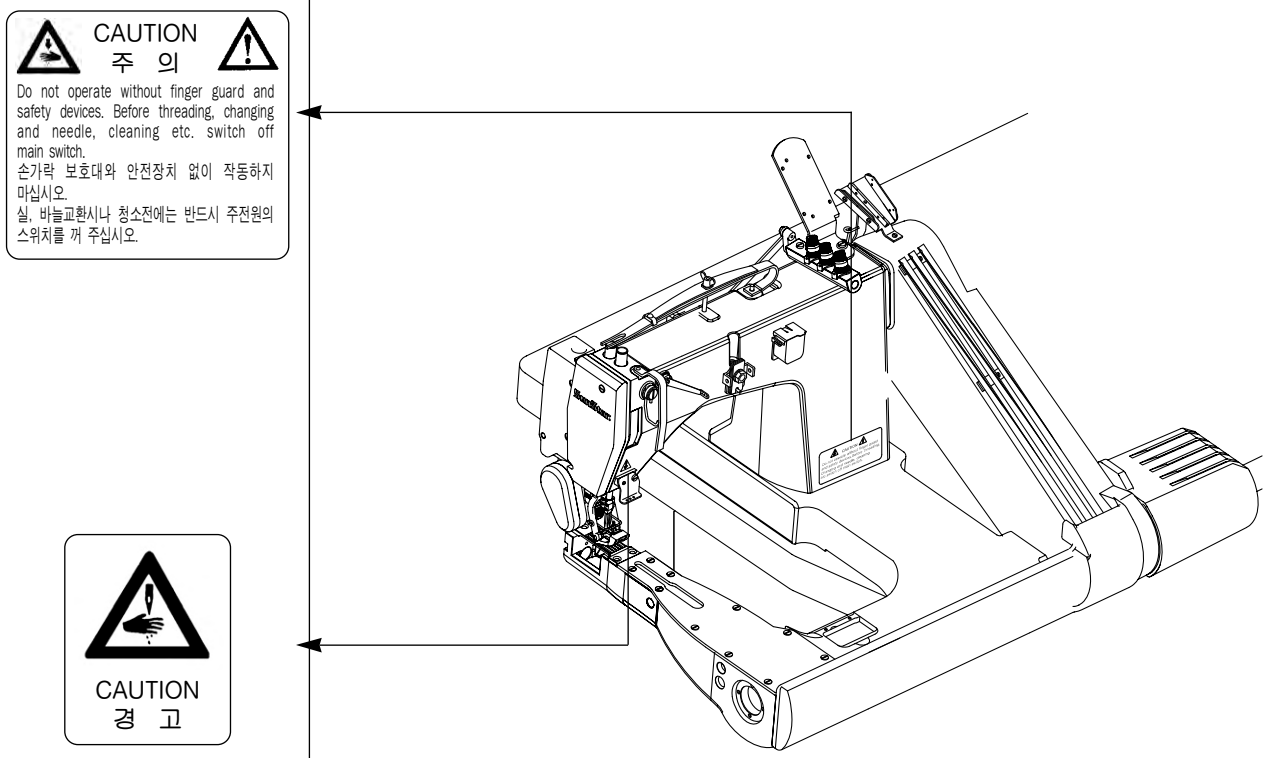
Caution

ⓐ Safety label : Things to be kept in mind during operation are described.
ⓑ Thread take-up lever cover : Prevents the contact between a body part and the thread take-up lever
ⓒ Safety plate : Prevents the contact between needles and fingers.
ⓓ Motor cover : Prevents any potential accidents from occurring while a motor is in operation.



6) Caution mark position

Caution mark is attached on the machine for safety.
When you operate the machine, follow the directions on the mark.



7) Contents of marks

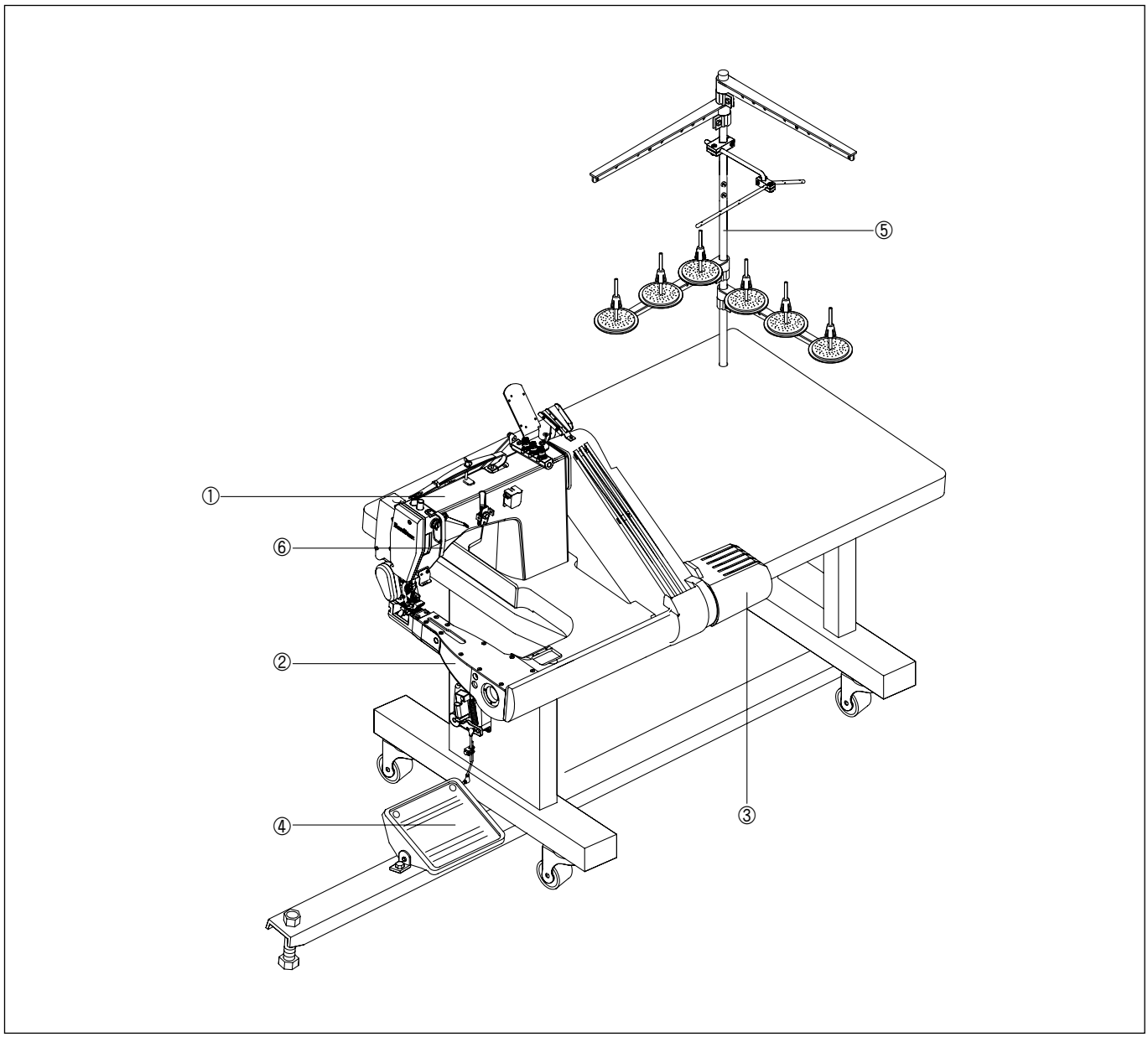
Caution

(1)

(2)

2

Machine Parts



① Arm
② Bed
③ Main Shaft Motor Cover
④ Pedal
⑤ Thread Stand
⑥ Thread Take-up Lever Cover

3

Specifications

Model	SC 8200J/01	SC 8200J/02	SC 8200L/01	SC 8200L/02
Usage	Heavy weight Materials(Jeans)		Light Materials	
Stitch Length (mm)	2-4.2		1.1-3.1	
Needle Bar Stroke (mm)	35		27	
Feed Dog Height (mm)	1.2		0.9	
Needle	TVX5#Nm22		TVX64NY#11PSU	
Attachment	1/4XH, 1/4X		1/4M	
Puller	Belt-type , Roller Type Puller		Roller Type Puller	
Presser Foot Climb Sensor	O	X	X	X
Presser Bar Pneumatic Type	O	X	O	X
Pulley Size	X	60Hz : 80, 50Hz : 100	X	60Hz : 80, 50Hz : 100
Main Motor	AC Servo (FORTUNA4)	Clutch 2P 60Hz 400W	AC Servo (FORTUNA4)	Clutch 2P 60Hz 400W
		Clutch 2P 50Hz 400W		Clutch 2P 50Hz 400W
Max. Sewing Speed (spm)	4000	4000 (default setting: 3500)	4000	4000 (default setting: 3500)
Lubrication	Oil tank type			

Power : Main Shaft Motor for Clutch (SMC-1701D), Hand Pulley 80
In case of 3500 RPM : 2P 60HZ(1-phase high-speed) → Motor pulley 80, V belt M Type 43 inch
2P 50HZ(1-phase high-speed) → Motor pulley 100, V belt M Type 44 inch

Table for Clutch Motor S/M Spin Number

Table for sewing machine rotation number in the event of a clutch motor (external diameter of hand pulley: 80mm)

External diameter of the sewing machine pulley (mm)	60	65	70	75	80	85	90	95
Number of sewing machine rotation (rpm)	2583	2799	3014	3229	3445	3665	3875	4091

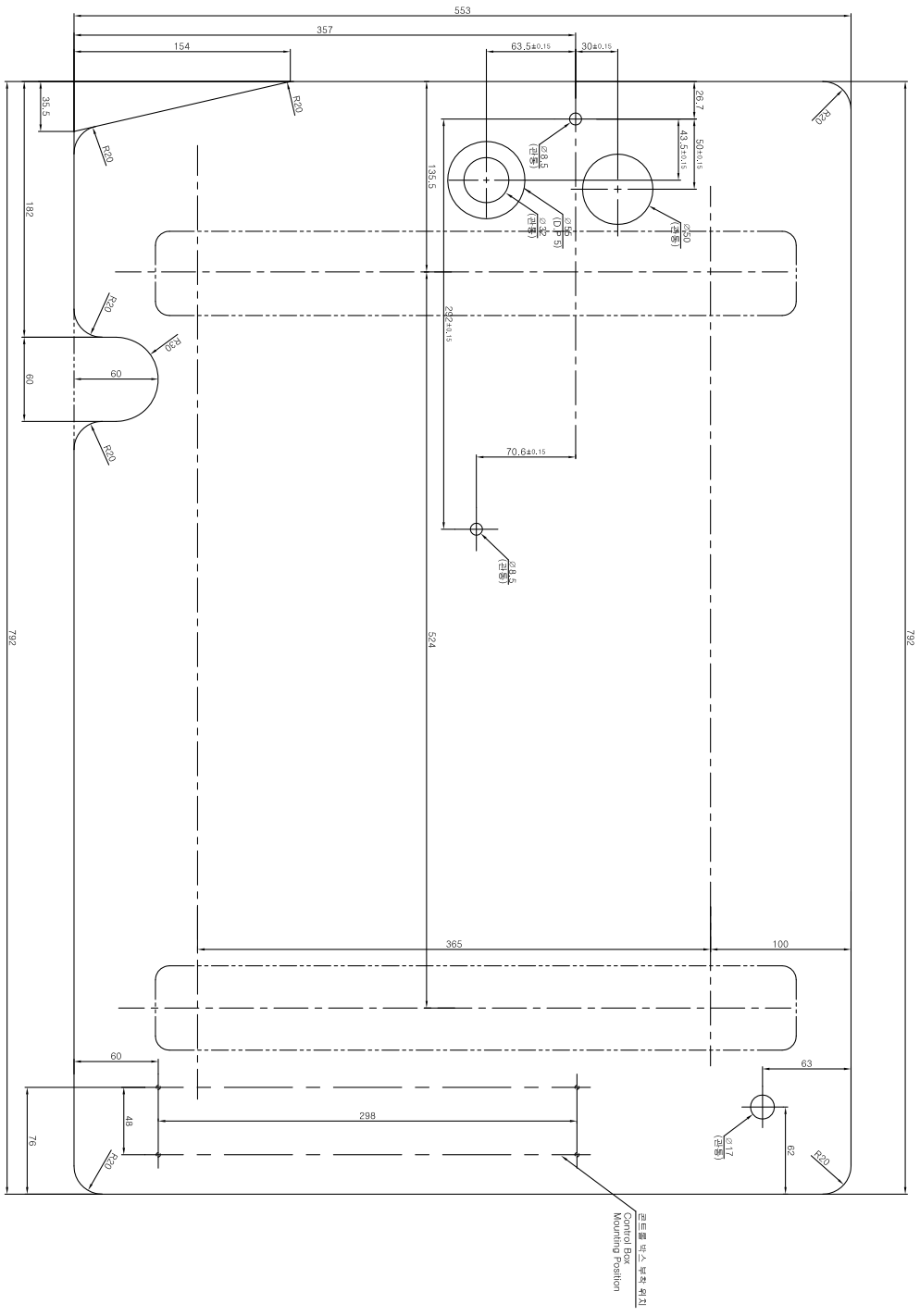
Computation is according to anumber of regularity rotation.

4

Installation

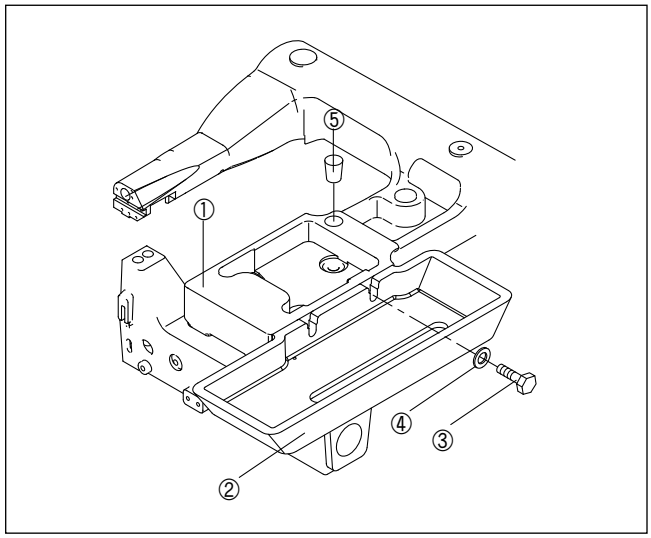
1) Table Installation

(1) Table Type

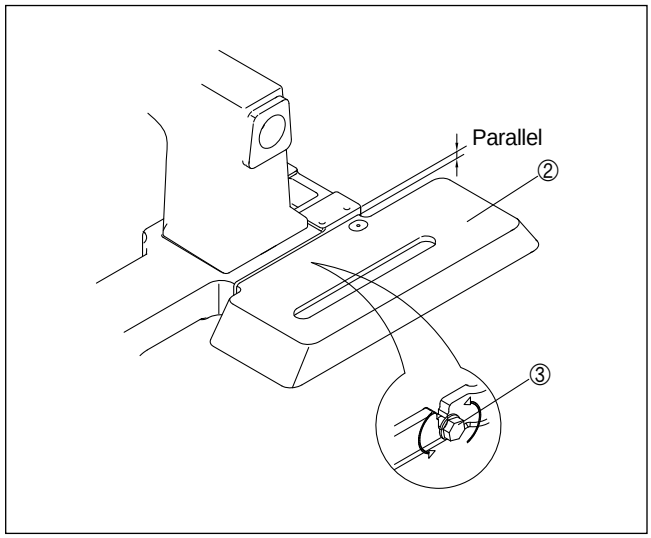


2) Machine Head Installation

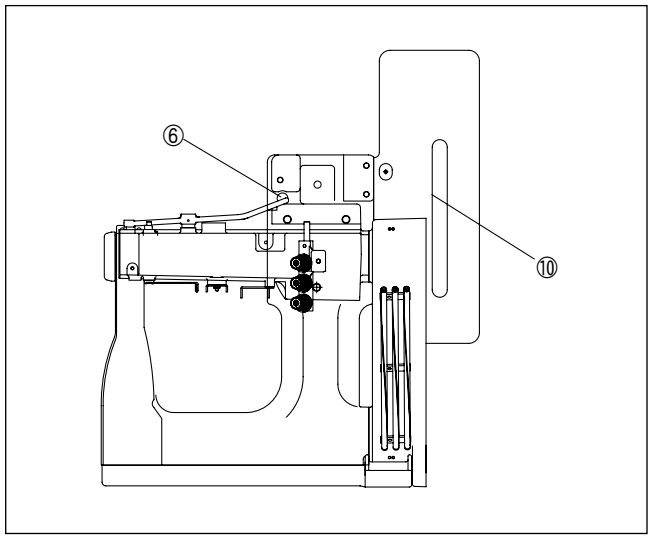
A. Assemble the pulley cover base ② to the machine bed ① using two hexagonal bolts ③ and two washers ④.
Insert two bar cushions ⑤ into the holes under the bed.



B. When placing the two hexagonal bolts ③, make sure that they are deeply inserted into the notches on the pulley cover base ②. And make sure that the pulley cover base ② is in parallel with the bed (if not, the pulley cover might contact the machine pulley).

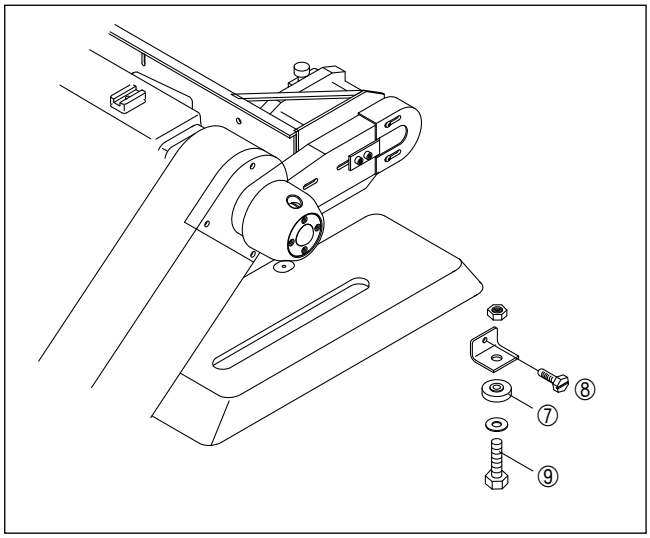


C. Place the machine head on the table and properly place the hole of the presser bar lifter chain ⑥. Then locate the belt hole ⑩ in the slant direction from the presser bar lifter chain. Make the front and back adjustments.



D. Assemble the cushion ⑦ to the machine bed and the pulley cover base using the fixed screw ⑧, and use the screw ⑨ to fix it to the table.

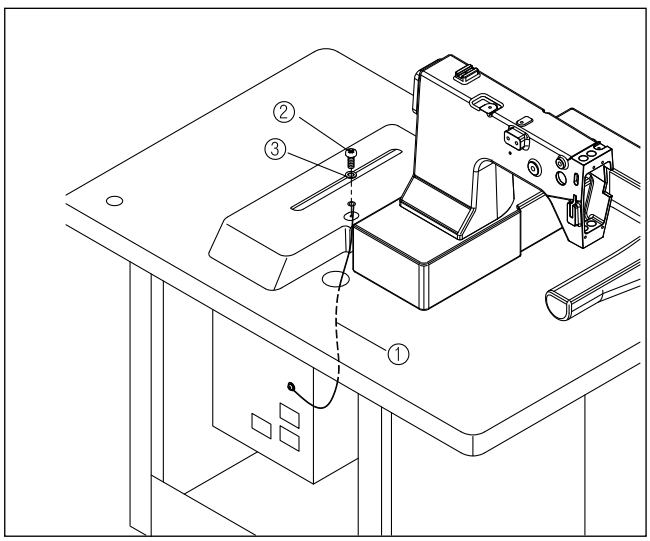
※ Place the machine head on the table and make sure it is well balanced. If the balance of the machine head is not right, lubrication may not properly take place.



3) Ground Wire Connection

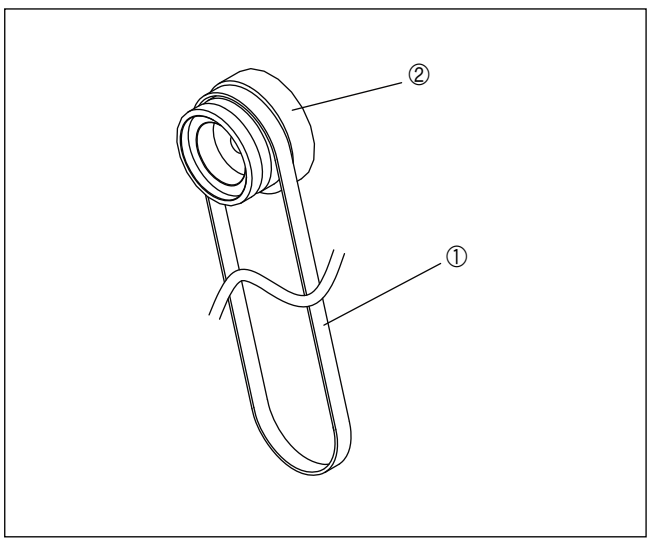
Connect the ground wire to the base and the control box.

A. Connect the ground wire ① to the base using a screw ② and a washer ③.
B. Pass the ground wire ① through the hole on the table.
C. Connect the ground wire ① to the control box.

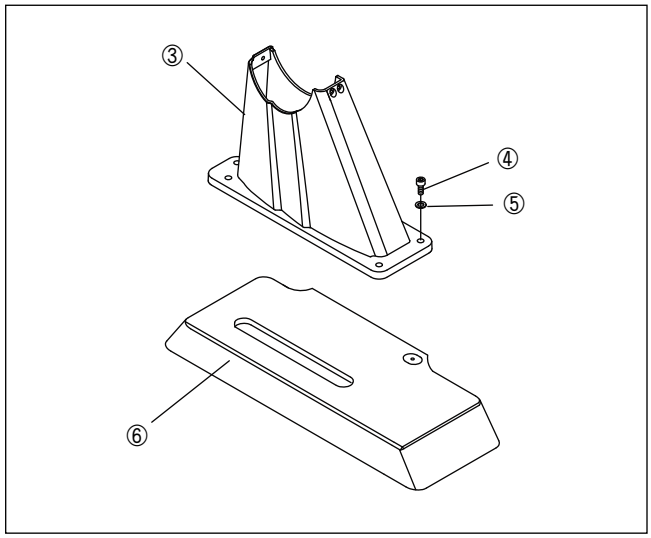


4) Attaching the pulley cover(clutch type)

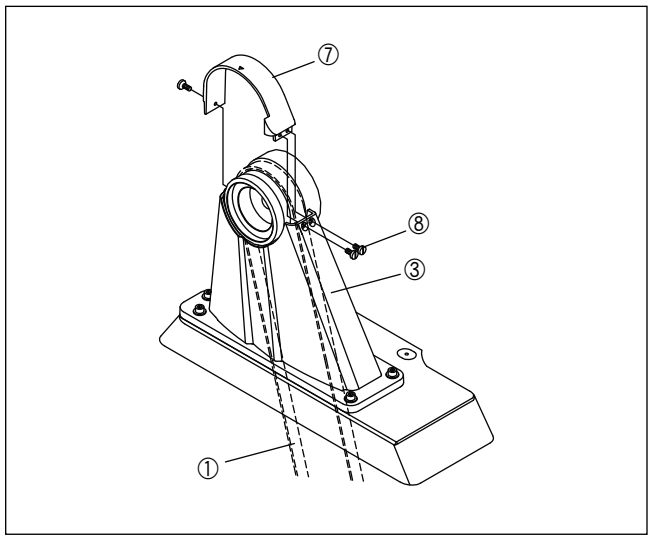
A. Place the belt① on the pulley② and lift the belt.



B. With the belt pulled upward, ④ the belt cover (Dn) ③ to the base⑥ using the screws④ and the washers ⑤ (5EA).

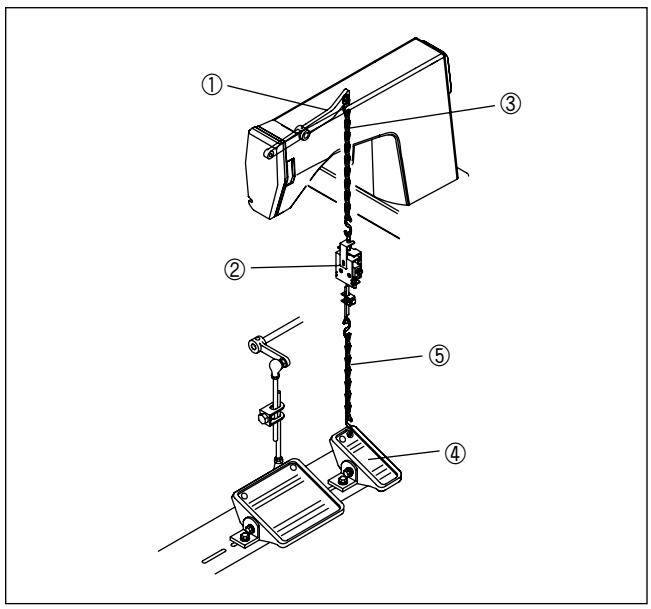


C. Insert the belt① into the belt cover (Dn)③ and fix the belt cover⑦ using the screws⑧ (3EA).



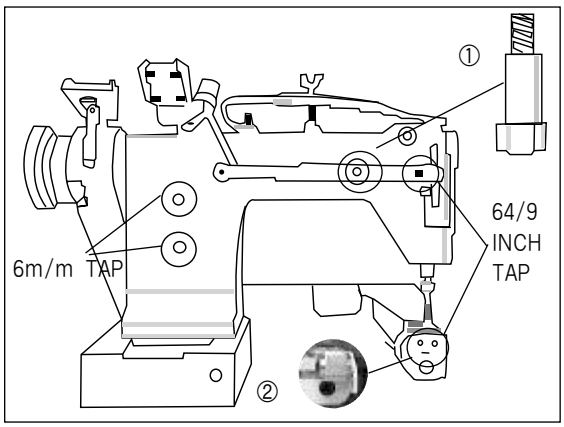
5) Connection to clutch-type pedal

Connect the lap lift lever① and the pneumatic pressure switch② to Chain ③.
And then connect the pneumatic switch② to Chain ⑤ on the foot pedal④.

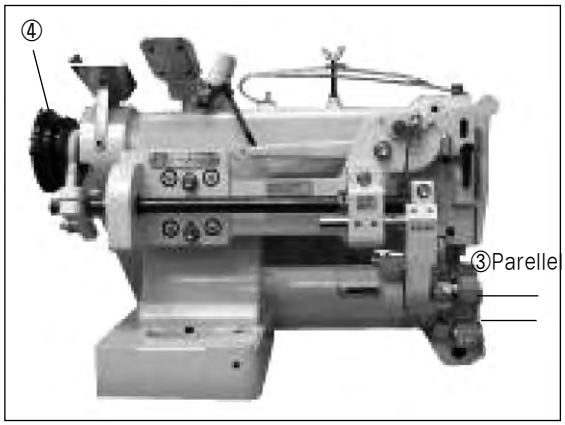


6) LRP Puller Attachment

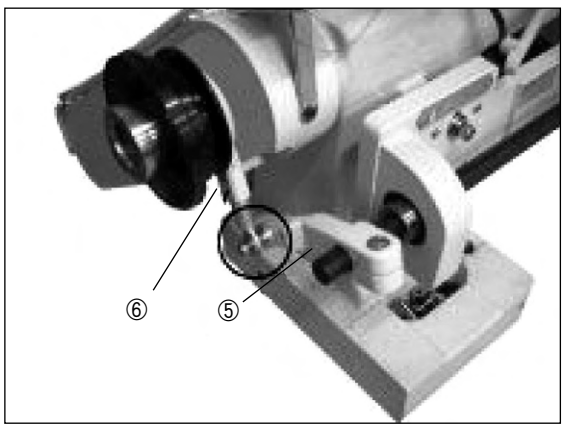
A. Replace the no. ① presser foot bolt with the decelerator bolt.
B. Attach the no.② lower roller to the machine.
* Refer to clause H.



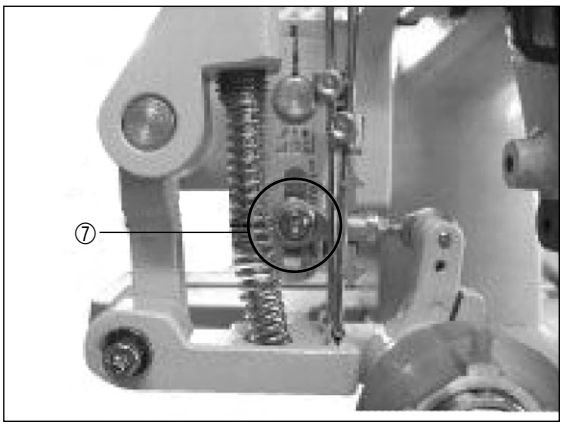
C. Attach the no.③ decelerator to the machine.
※ Adjust the no.③È upper/ lower roller horizontally.
D. Replace the pulley of the no.④ machine with the decelerator pulley.



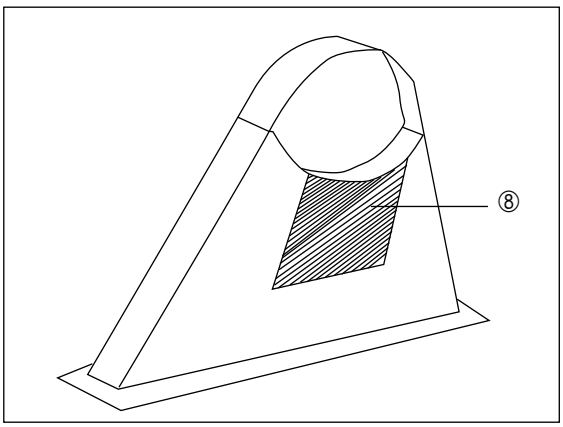
E. Connect the no.⑤ shaft lever with the no.⑥ pulley lever.



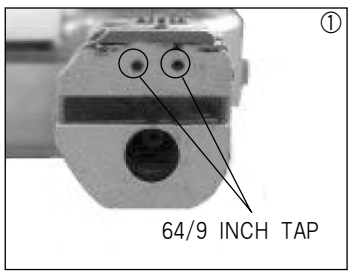
F. No. ⑦: Stitch Lever
(The stitch is getting wider by lowering from
1 to 4 one by one)

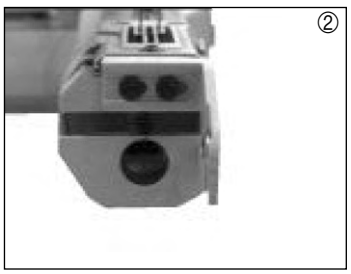


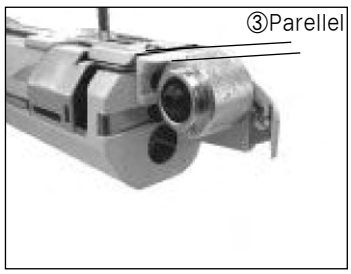
G. A belt cover should be installed.
※The belt cover should be cut out like no.⑧ for a
brand new machine.



G. H. Lower roller installation
Attach the bracket to the no.① fixed tap hole like no. ② and keep parallel like no.③

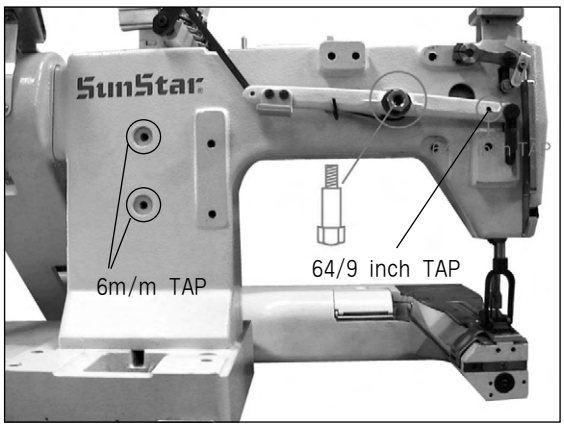






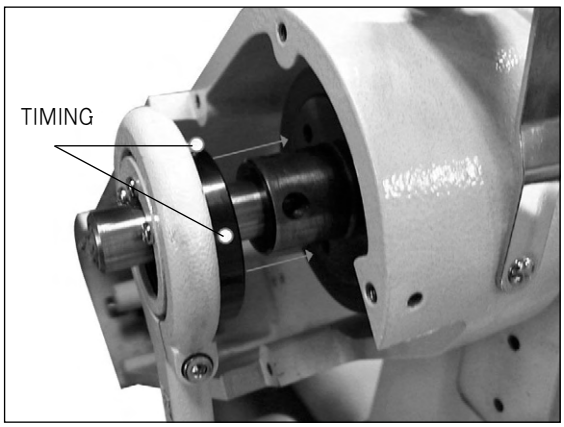
7) SRP Puller Attachment

A. Replace the presser foot bolt with the puller bolt.

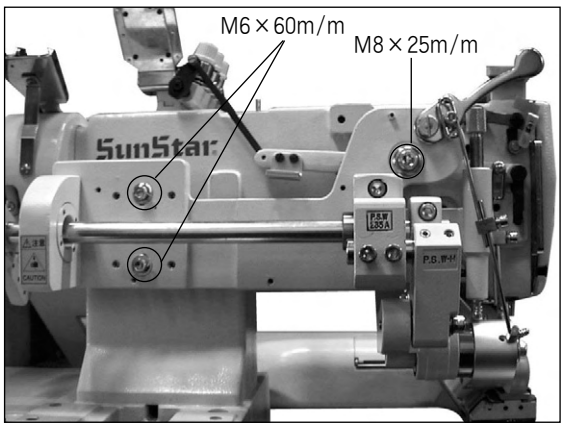


B. Open the pulley cover of 8200 and fix the pulley of the puller to the shaft.

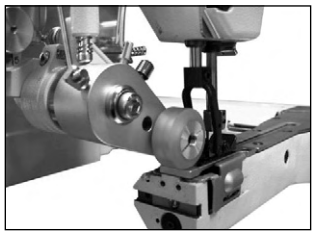
C. The position of the timing is the place to adjust the pulling of the roller.
After operate no. 6 of the manuals, adjust the wheel movement identically.

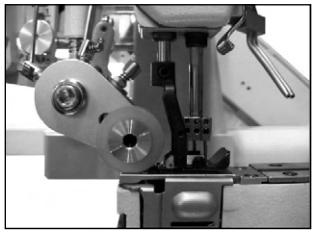


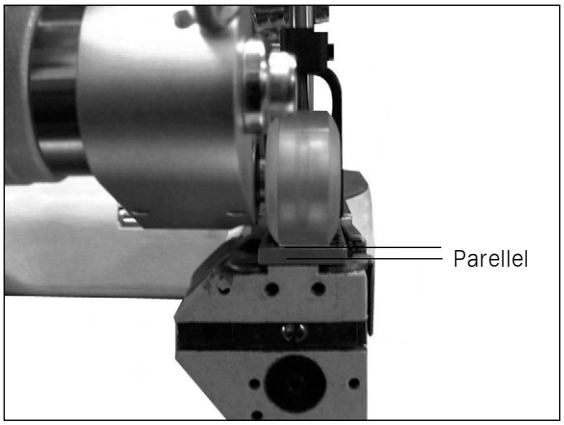
D. Attach the puller to the body of 8200.
(Use the M8X25m/m, M6X60m/m bolt.)



E. In case fixing the puller, adjust a needle plate base and a urethane roller base of the puller in parallel.

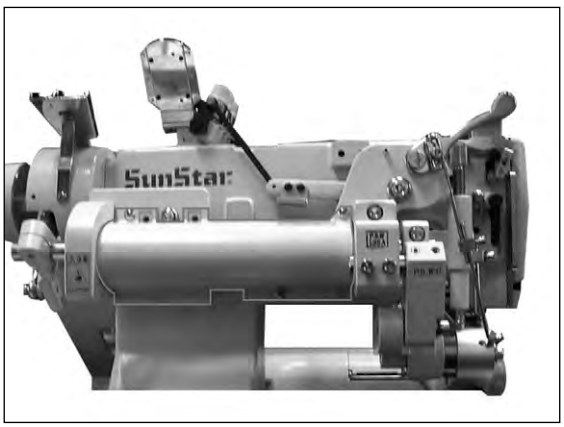






F. Fix a pulley lever of the puller and a pulley.

G. Install the cover of the puller.

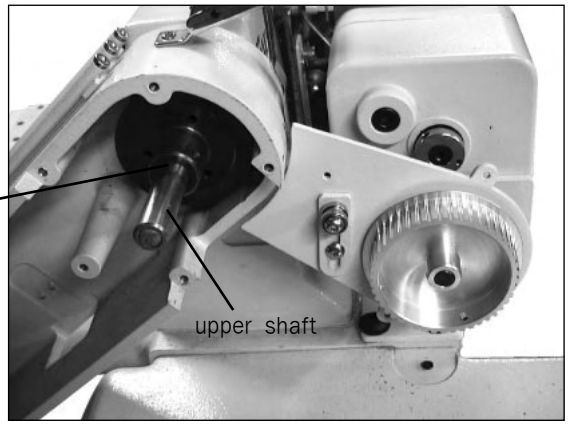


8) MODEL : BP(Belt Puller Type)

Sewing of several clothes as one (FEED-OFF-ARM)

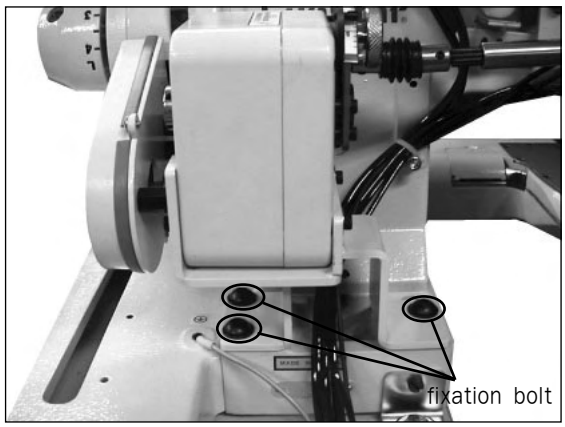
Attaching & Setting Puller to Sewing Machine

Timing Belt Pulley A

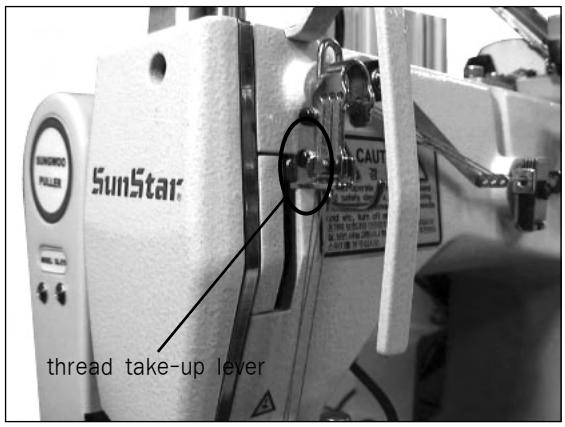


A. Insert Timing Belt Pulley A into the upper shaft of M/C.
B. Attach the Belt Puller to the M/C.

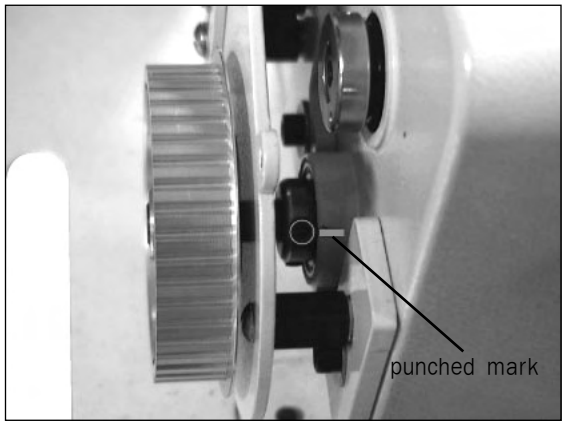
C. Fix the Puller with the fixation bolt (M10 * 20m/m-3EA) during attachment.



D. Locate the red-marked thread take-up lever position on the top.



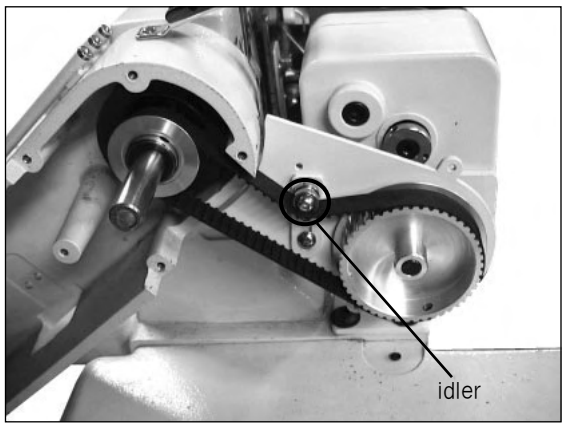
E. Fix it to conform to the red-marked part. (The machine and the time of the puller accord well)



Caution

Saw teeth movement of the machine and the timing of puller need to be united.

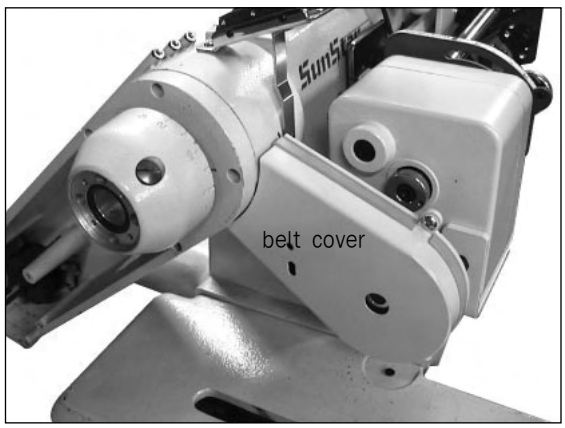
F. Adjust the belt tension using idler on the red-marked part to keep the position unchanged when the puller timing belt is connected to the timing belt pulley A.



Caution

Fix the belt with proper tension not too loosely or tightly.

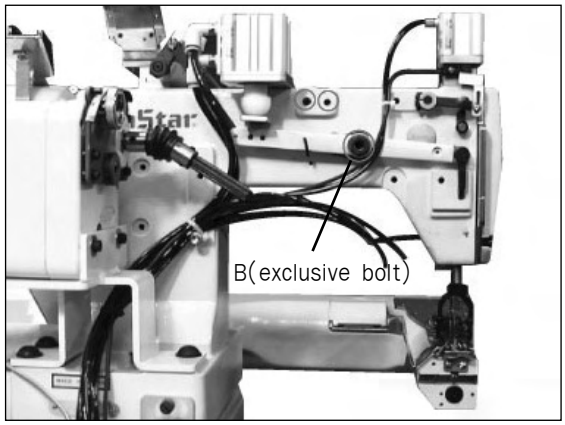
G. Put the belt cover.



Caution

Fix the belt cover not to interfere in the machine.

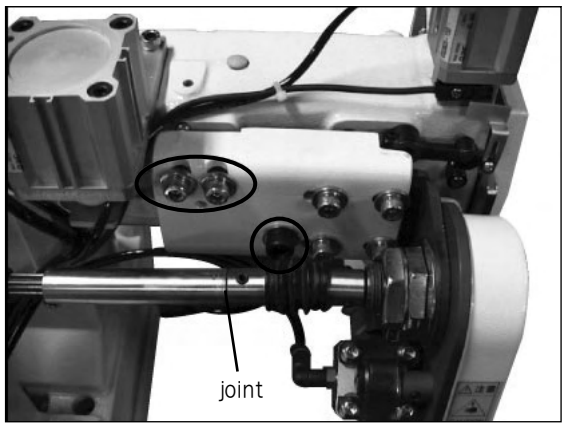
H. Locate the body of the puller on the red-marked part.



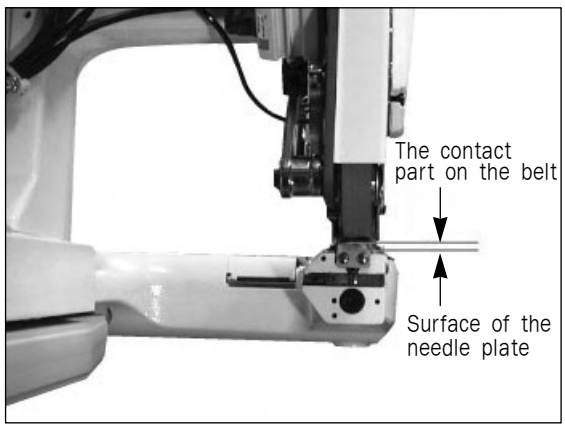
Caution

Please use the exclusive bolt for belt puller when fixing the part B.

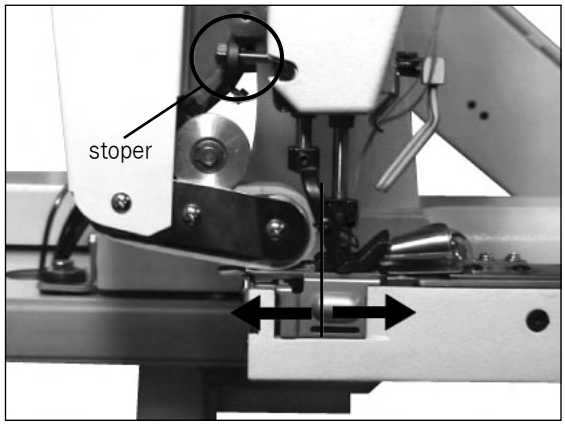
I. Connect the fixation screw (M6x40m/m-2EA,M8x20m/m-1EA) of the red-marked part to the joint before the puller body is fixed.



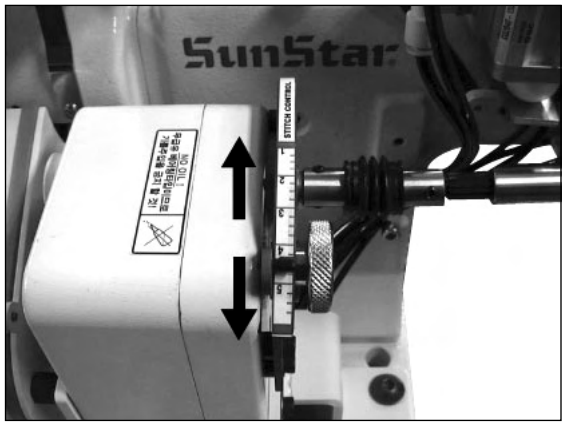
J. Fix the puller body to make the needle plate of the machine and the contact part horizontally.



K. Adjust the stopper not to interfere with the puller when the needle is moving up and down.



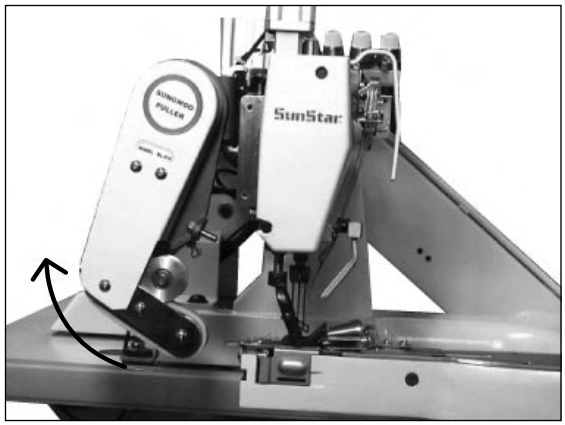
L. Stitch width adjustment
Adjust the stitch width of the puller.
(1-1m/m,2-2m/m,3-3m/m, 4-4m/m,5-5m/m)



Caution

The punched mark should be matched to adjust the stitch width exactly. (Refer to the No.5 item)

M. Check
Please change the belt or detach the puller body by pulling it when checking the machine.

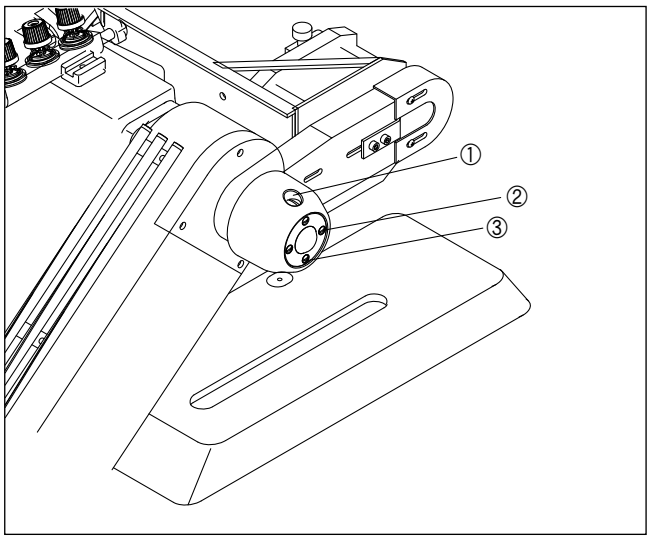


5

Machine Preparation

1) Oil Supply

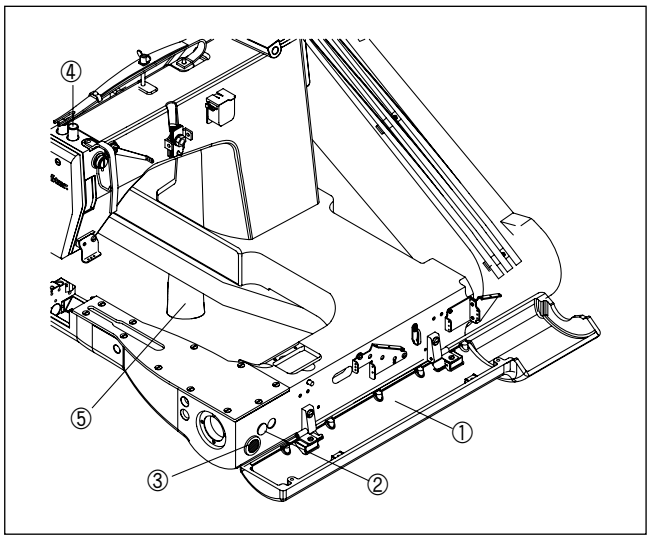
A. Make the oil supply slot screw ① pointed upward and turn the hand pulley. Then remove the screw ① and supply oil to the oil tank ② until it reaches above the central line ③.



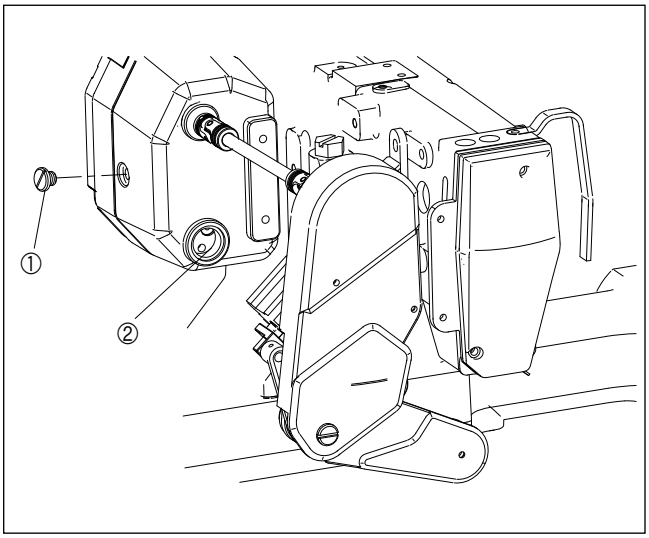
Caution

If oil is supplied below the central line, oil cannot be sucked into the upper shaft, and sufficiently supplied to the upper shaft.

B. Open the front cover ① and remove the rubber plug ②. Supply lubricant until it reaches the central line on the oil window ③.
C. Place back the rubber plug ② and close the front cover ①.
D. Supply one or two drops of oil to the needle bar lubrication hole ④ once a week.
E. Replace the waste oil tank ⑤ on a regular basis after long-term use.



F. Loosen the oil tank lid screw ① and supply lubricant until the mark reaches the middle on the oil window ②.
G. Place back and fasten the screw ①.



Caution

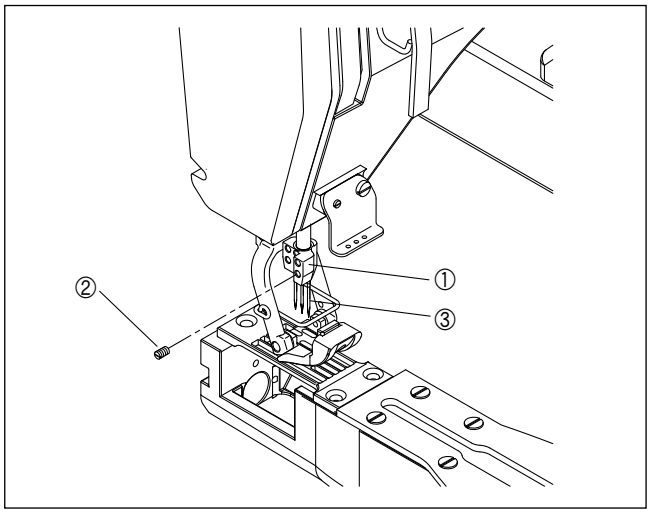
When the oil level drops below the central line, additional oil must be supplied.

6

Sewing Preparation

1) Needle Installation

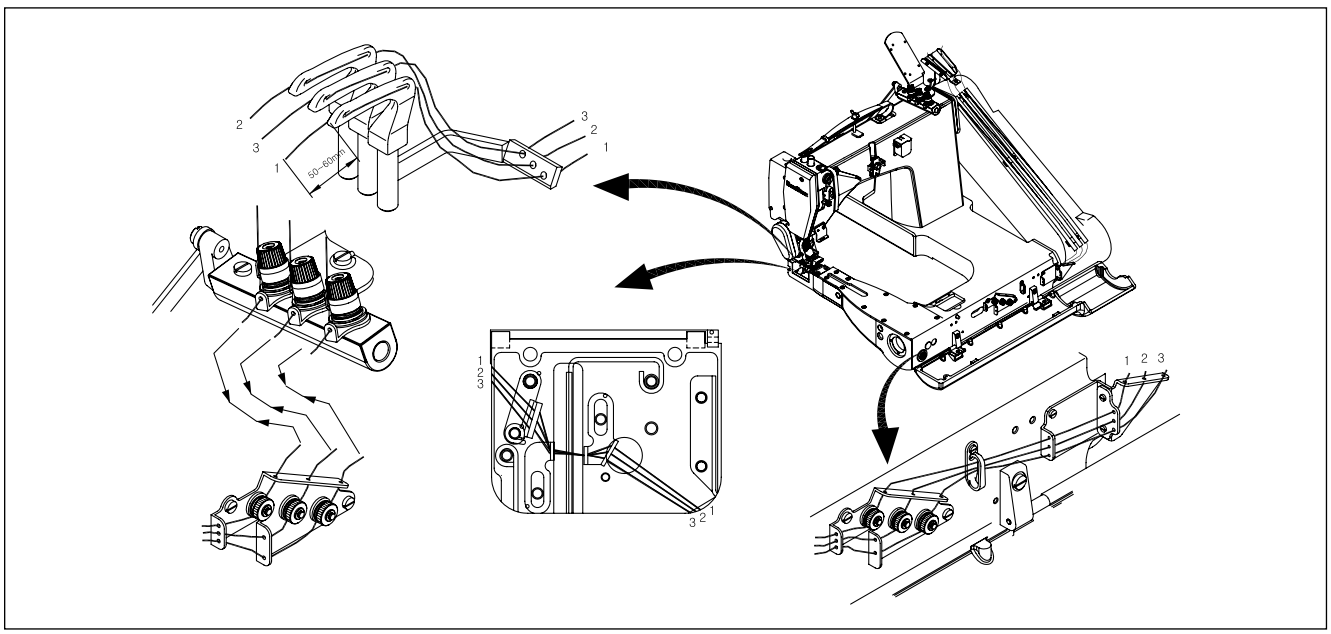
A. Turn the hand pulley to make the needle holder ① reaches the highest position.
B. Loosen the needle fixing screw ②. Make the long groove of the needle ③ headed forward and then fasten the fixing screw again ②.



> **Caution**
> Make sure to turn off the power before needle installation.
> Otherwise, injury might occur due to the mistaken operation of the pedal.

2) Lower Thread Placement

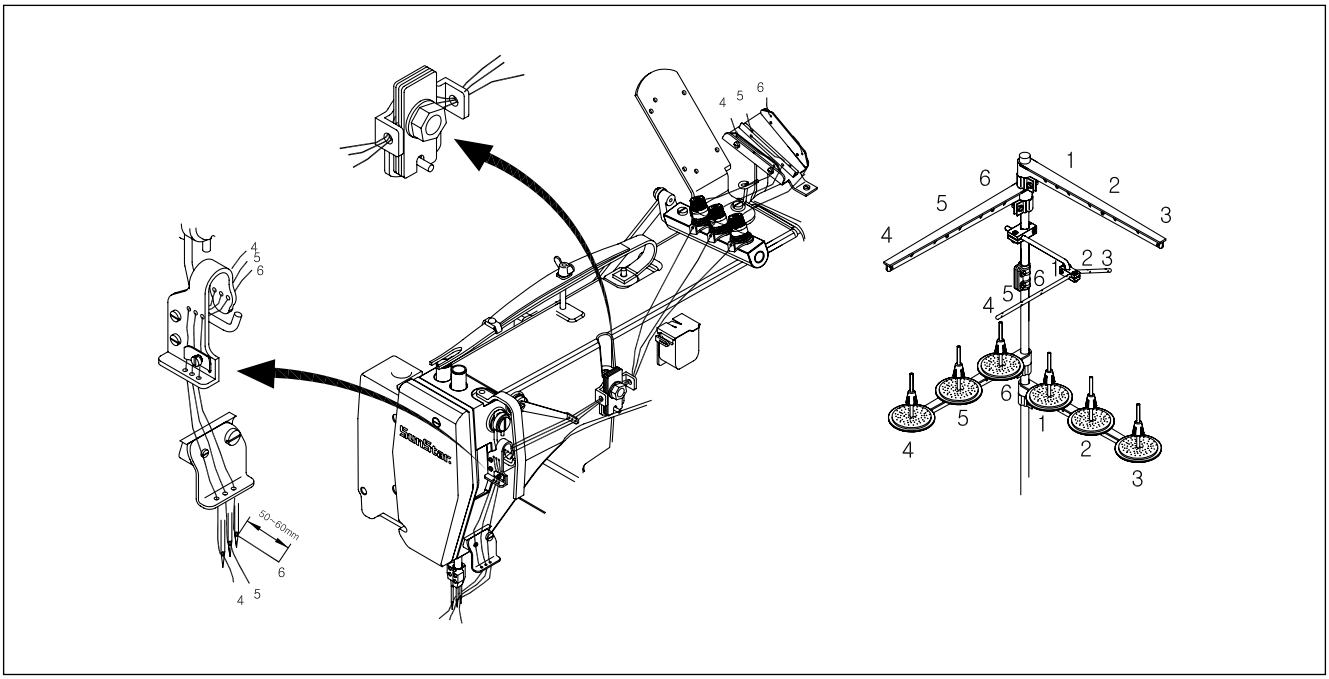
Place the lower thread as in the figure below.



> **Caution**
> Make sure to turn off the power before lower thread placement.
> Otherwise, injury might occur due to the mistaken operation of the pedal.

3) Upper Thread Placement

Place the upper thread as in the figure below.



> **Caution**
>
> Make sure to turn off the power before lower thread placement.
> Otherwise, injury might occur due to the mistaken operation of the pedal.

4) Handling of Waste Oil

When the waste oil can beneath the table is filled with waste oil, remove it to empty the can.

> **Caution**
>
> When removing or assembling the waste oil can, oil might drop to the floor. Place a cloth, paper, or oil dish during the oil can removal and assembly.

7

Sewing

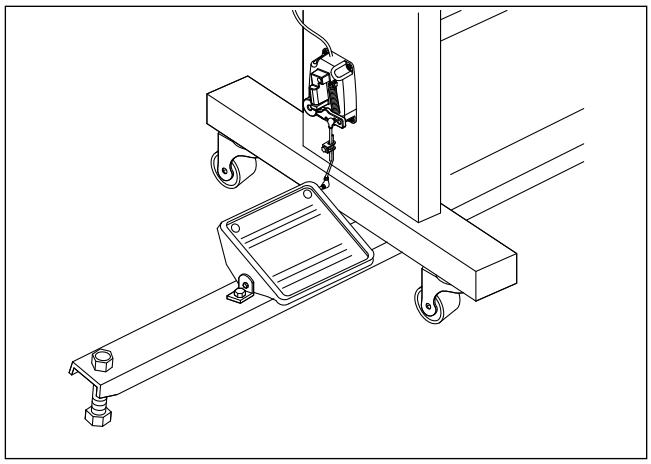
1) Sewing

Caution	Properly install all safety devices before using the machine. Otherwise, injury might occur.

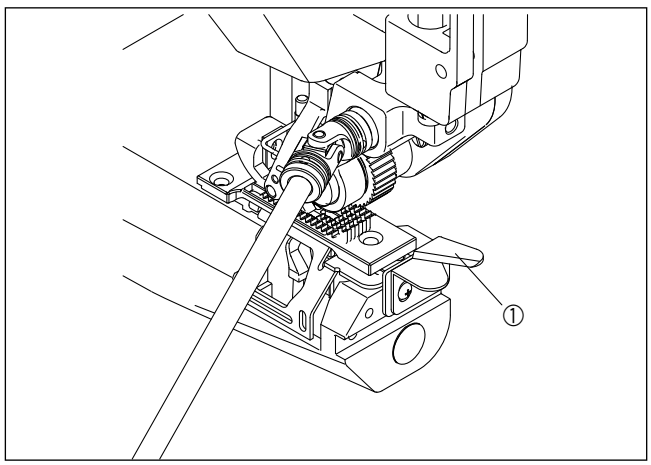
Caution	In the following situations, please turn off the power. Otherwise, injury might occur due to the mistaken operation of the pedal. ① Thread placement on the needle ② Needle replacement ③ When the machine is not used or user should be away from the machine for a long time

Caution	Do not touch the operating sections or the input device during sewing. It may negatively affect the machine or become the cause of injury.

A. Turn on the power.
B. Press Pedal A and place the fabric below the presser bar.
C. Remove a foot from Pedal A.
D. When stepping Pedal B, the machine starts operating.



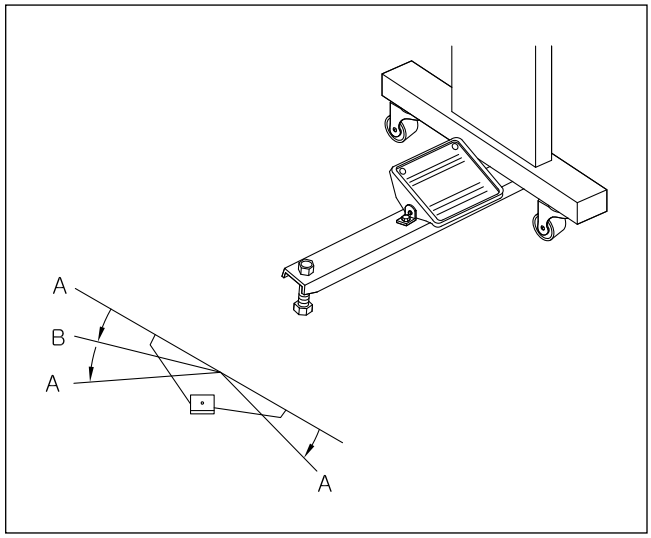
E. When the sewing is complete, conduct pseudo sewing until the cutter ① and trim the thread at the cutter ①.



2) Trial Operation (pedal operation method)

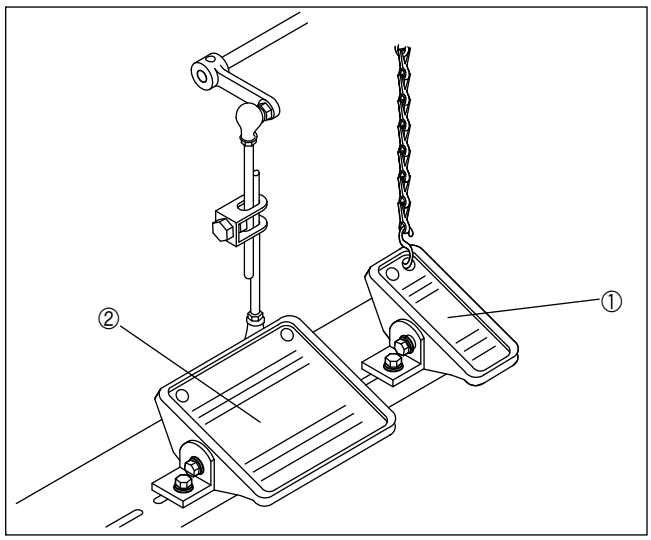
Caution	Do not touch or press with other object the revolving or moving parts while the machine is in operation. Injury or mechanical damage might occur.

A. Lightly step the pedal until B to check if slow sewing is possible.
B. Press the pedal until C to check if fast sewing is possible.
C. Press the pedal forward (B or C) and place it at the neutral A position. Then the needle stops below the needle plate face (when the lower stop function is set).
D. When the pedal is pressed until D (or press the pedal until D and place it to neutral A position), the needle stops above the needle plate face after trimming.



3) Trial sewing (How to operate a clutch-type pedal)

A. When the pedal① is pressed, the presser foot starts vertical movement. With the pedal① being pressed, set the sewing position for trial sewing.
B. Remove a foot from the pedal①, and then the presser foot starts descending and fixes the sewing materials.
C. Pressing the pedal② starts operating the trial sewing.

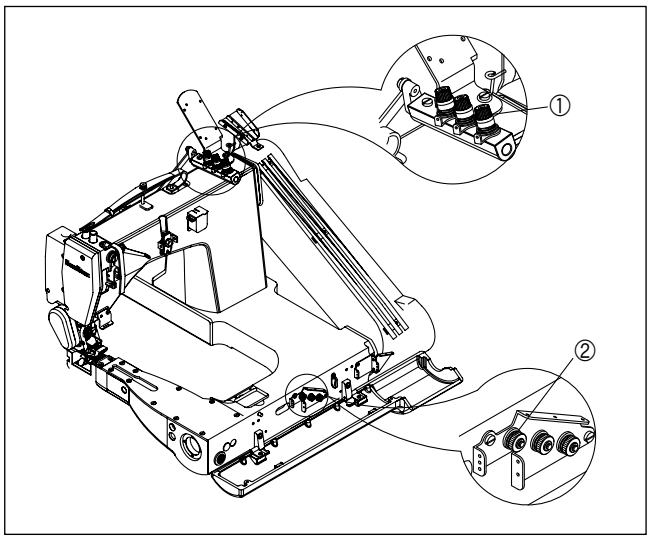


8

Thread Tension

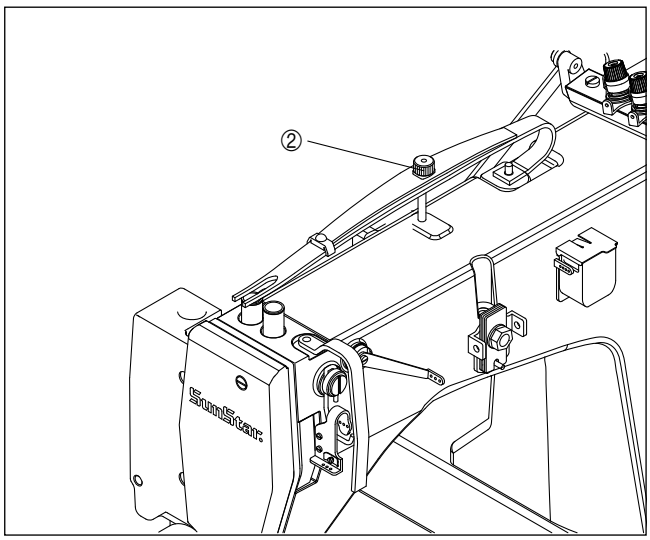
1) Thread Tension Adjustment

A. Turn the upper thread adjusting nut ① to properly adjust the upper thread tension.
B. Turn the lower thread adjusting nut ② to properly adjust the lower thread tension.



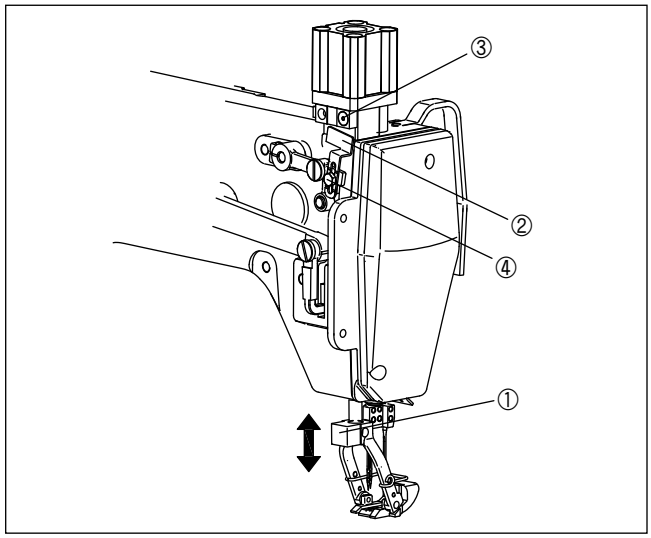
2) Adjustment of Presser Bar Pressure

Use the pressure adjusting nut ① to adjust the pressure of the presser bar.

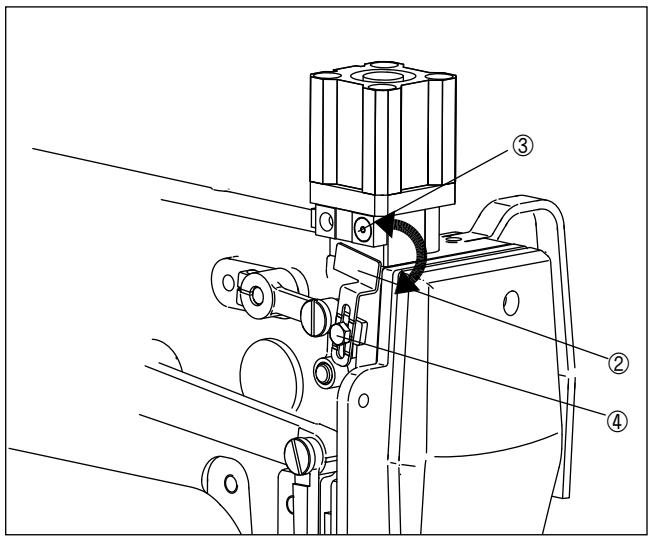


3) Adjusting the pneumatic presser bar

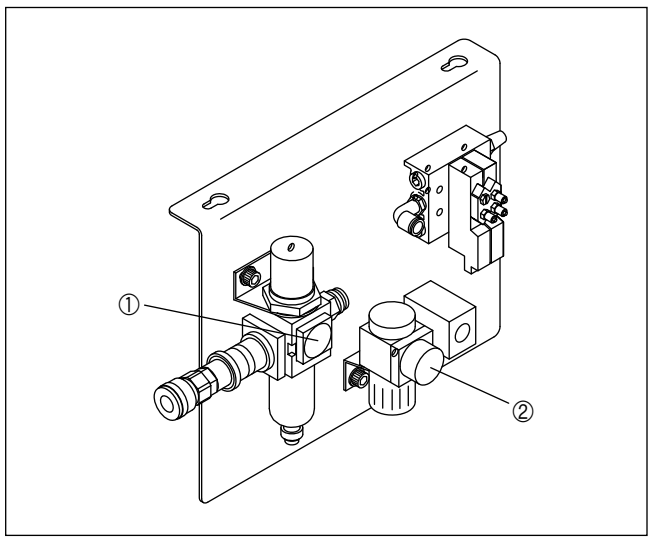
The presser bar① can be adjusted for its pressure in two steps depending on height.
When the first part② is detected by the second part③, the pressure is changed. The initial pressure is 2.5~3.5kg, and it changes to 6.5~7.5kg.



A. Loosen the screw④.
B. Lift the presser foot① to the extent of placing it at a desired position. (Max. lift: 11mm, the default height of presser foot is 5mm)
C. With the presser foot lifted to the desired position, move the center of the sensor③ to the most top of the sensor plate②.
D. Fasten the screw④.



※ The first gauge① is the scale showing the maximum adjustable pressure of the presser foot (default value: 0.4MPa), and the second gauge② is the scale showing the minimum adjustable pressure of the presser foot(default value: 0.1MPa).



9

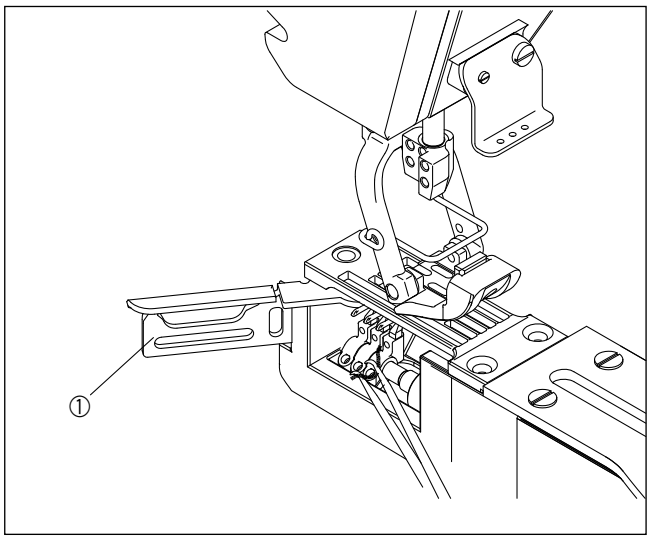
Cleaning

1) Daily Cleaning

A. Dust removal
- Open the looper cover and remove thread scraps and dusts.
- When all dusts are removed, put back the looper cover.

B. Oil Supply
- See the oil supply section of the manual.

C. Check
- Ensure that thread is properly placed.
- If the tip of the needle is broken, immediately replace the needle.
- Conduct trial sewing.



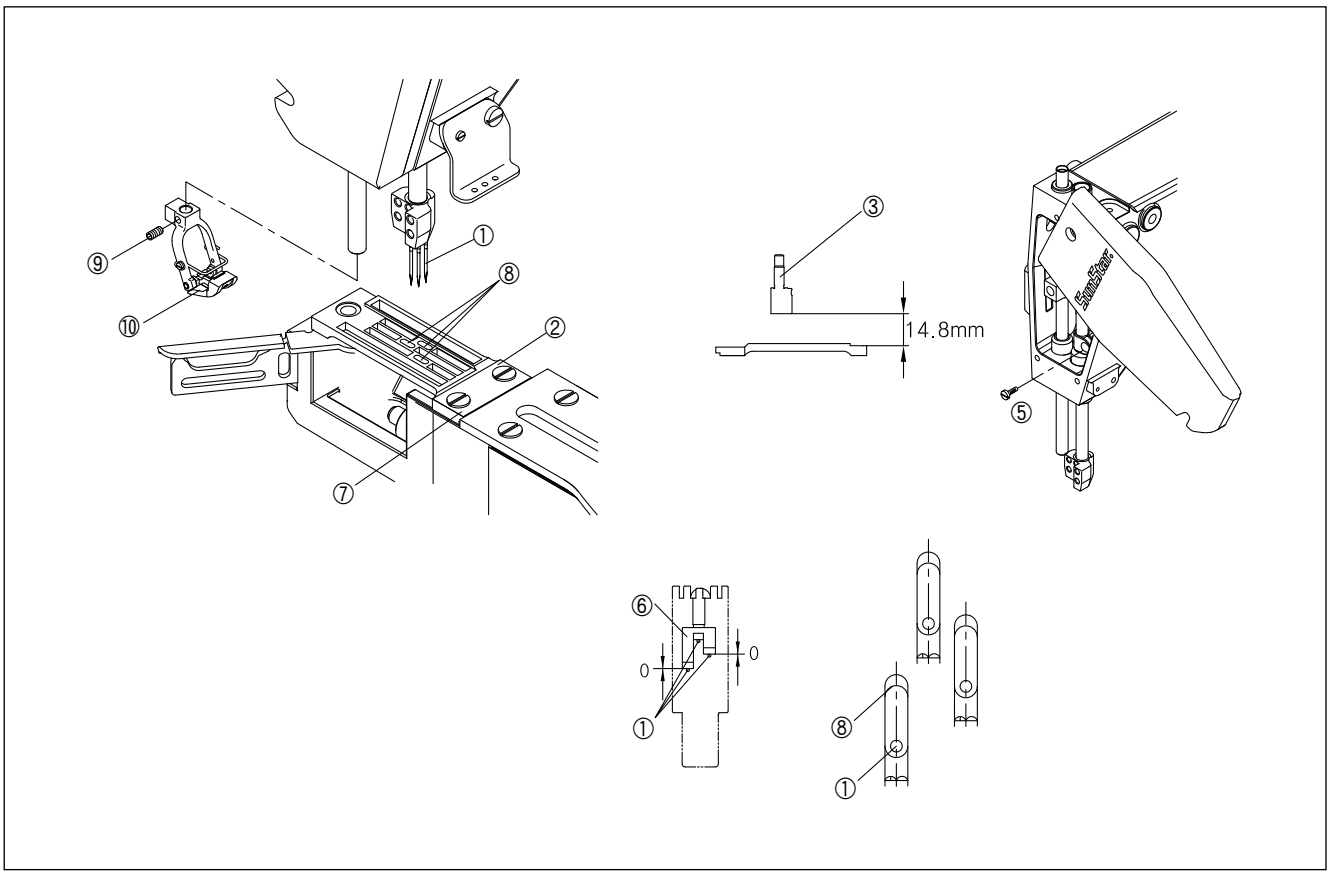
10

Adjustment

1) Adjustment of Needle Bar Height

Adjust the height of the needle bar ①.
Make sure that each needle ① is at the center of the needle hole ⑧ on the needle plate ②.

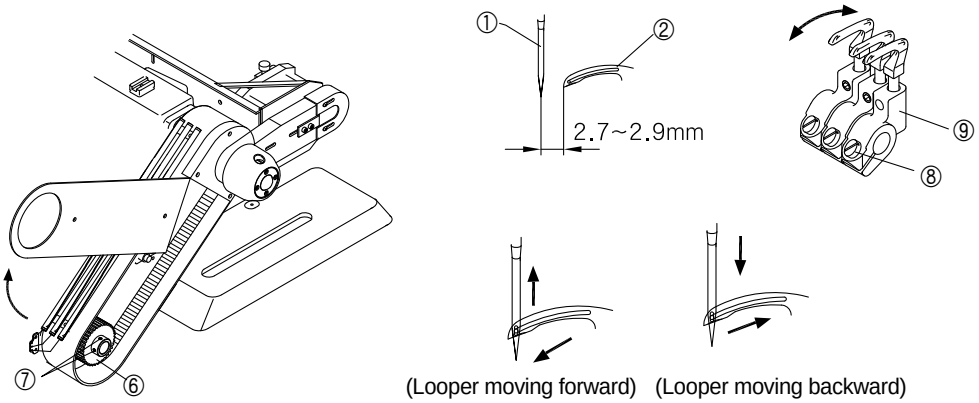
A. Remove the screw ⑨ and then remove the presser foot ⑩.
B. Turn the pulley until the needle bar is located at the lowest position.
C. Loosen the needle bar clamp screw ⑤ and adjust the distance between the bottom of the needle clamp ③ and the needle plate ② at 14.8mm(For light materials:11.5mm).
   ※ With the needle clamp adjustment as set forth above, when the needle clamp ③ reaches the highest position, the distance between the needles ① and the needle plate ② becomes 14mm(For light materials:9mm). (applicable to heavy and super heavy materials).
D. Remove three screws ⑦ and then remove the needle plate ②.
E. Turn the pulley to place the needles ① and the needle guard ⑥ in parallel. Then adjust the slant of the needle clamp ③ to remove the space between left, right needles ① and the needle guard ⑥.
   Use the three screws ⑦ to assemble the needle ②. Check that the needles ① are at the center of the needle holes ⑧, and then fasten the needle bar clamp screw ⑤.
F. Use the screw ⑨ to assemble the presser foot ⑩.



2) Adjustment of Needle and Looper Timing

When the needle ① descends, and the lowest looper ②'s backward movement is complete, the distance between the center of the needle and the looper becomes 2.7~2.9mm.

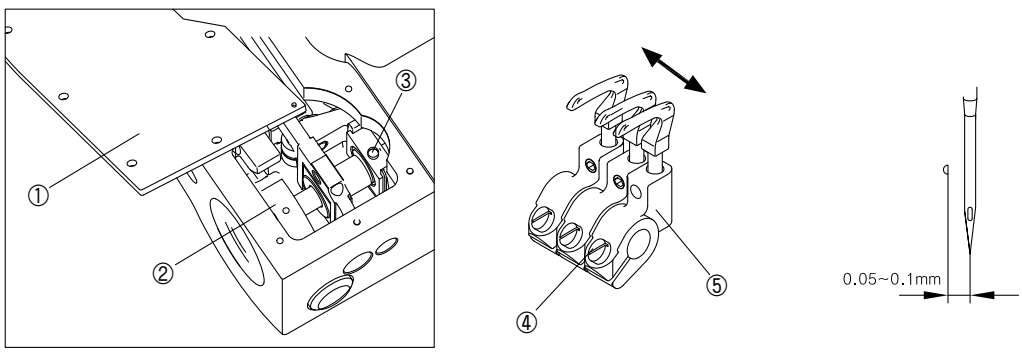
A. Remove the presser foot, the needle plate, and the feed dog.
B. Turn the pulley until the looper ②'s backward movement is complete.
C. Loosen the two adjusting screws ⑦ on the lower shaft pulley ⑥.
D. Turn the pulley toward the user side until the needle ① reaches the lowest position.
E. Tightly fasten the two adjusting screws ⑦.
F. Loosen the adjusting screw ⑧ and move the looper holder ⑨ in the arrow direction until the distance between the needle center and the tip of the looper becomes 2.7~2.9mm. The tightly fasten the adjusting screw ⑧ again.
G. Check if the looper thread eyes match needle eyes while the loopers are moving back and forth.
H. Assemble the presser foot, the needle plate, and the feed dog.



3) Needle Avoiding Looper Timing

When the looper moves forward, it moves behind the needle. When the looper moves backward, it moves in front of the needle. For the forward movement, adjust the distance between the needle and the looper at around 0.05~0.1m.

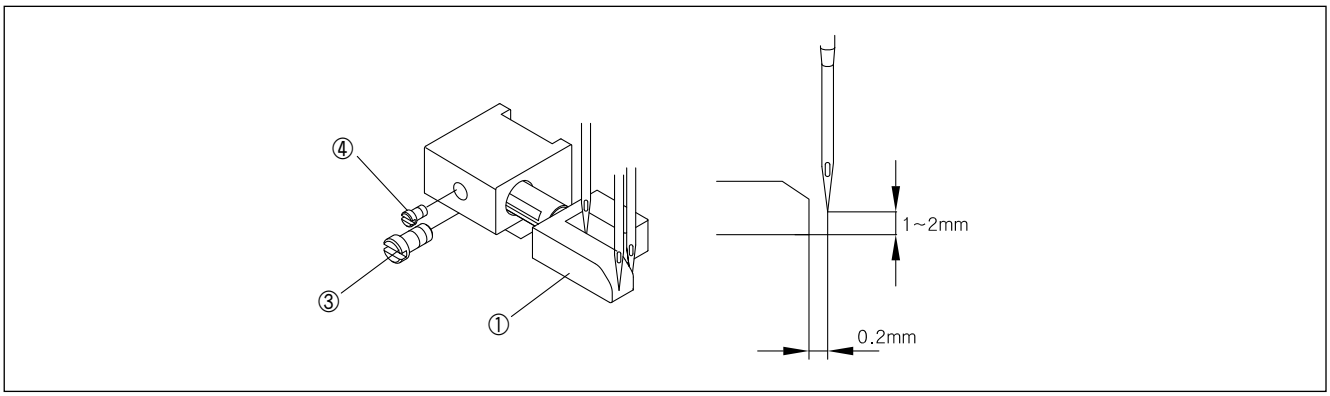
A. Remove the forward feed arm cover ①.
B. Adjust the timing of the looper heading forward and backward. The adjusting screws on the back which move in the same direction of the cam moving back and forth should match the screw adjusting hole ③. Then, the adjusting screws on the back which move in the same direction of the cam moving up/down should match the looper connecting road adjustment hole ②. For adjustment, loosen the adjusting screw on the front which moves in the same direction of the cam moving back and forth. Then loosen the adjustment screw on the back to adjust the cam moving back and forth. When adjustment is completed, tightly fasten the two adjusting screws.
C. Loosen the looper holder screw ④. When the tip of the next looper and the needle center are in a straight line, move the looper holder ⑤ in the arrow direction to adjust the distance between them at 0.05~0.1mm. Do not move the looper holder ⑤ in any other direction than the instructed direction. If you did, see "10-2. Adjustment of Needle and Looper Timing" in page 16 for making adjustment.
D. Assemble the forward feed arm cover ①.



4) Adjustment of Needle Bar Guide

When the stitch length is the minimum and the looper moves toward the needle, the distance between the needle guard and the needle should be 0.2mm.
The height should remain as low as possible to the extent that the looper does not break.

A. Adjust the stitch length to be minimal (see page 12).
B. Spin the pulley toward the user side to make the needle center and the looper in the straight line.
C. Loosen the adjusting screw ③. Then move the needle bar guide to set the distance between the needle bar guide bottom ① and the needle to be 1~2mm.
D. Tightly fasten the adjusting screw ③.
E. Loosen the adjusting screw ④. To set the distance between the needle bar guide and the needle at 0.2mm, move the needle bar guide left and right.
F. Tightly fasten the adjusting screw ④.



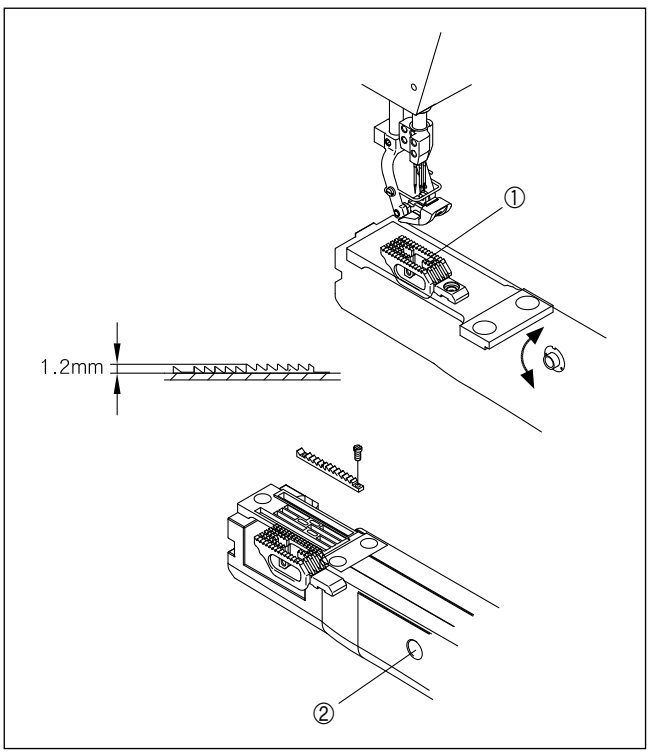
Caution

When setting the stitch length depending on fabrics and thread used, the closer the needle bar guide and the needle becomes, the better the sewing result is.

5) Adjustment of Feed Dog Height

Adjust the highest part of the feed dog to be 1.2mm(For light materials:0.9mm) above the needle plate surface when the feed dog ① is at the highest position.
Adjust the height of the feed dog ① by spinning the feed bar eccentric shaft ②.

A. Spacer Installation (for denim sewing)
If irregular stitches occur during the sewing of super heavy materials, adjust the sub feed dog to the accurate height using the spacer.
- Remove the adjusting screw ① and the sub-feed dog ②.
- Locate the spacer ③ below the sub-feed dog ② and fasten the adjusting screw ①.
※ Spacer is included in the parts box.

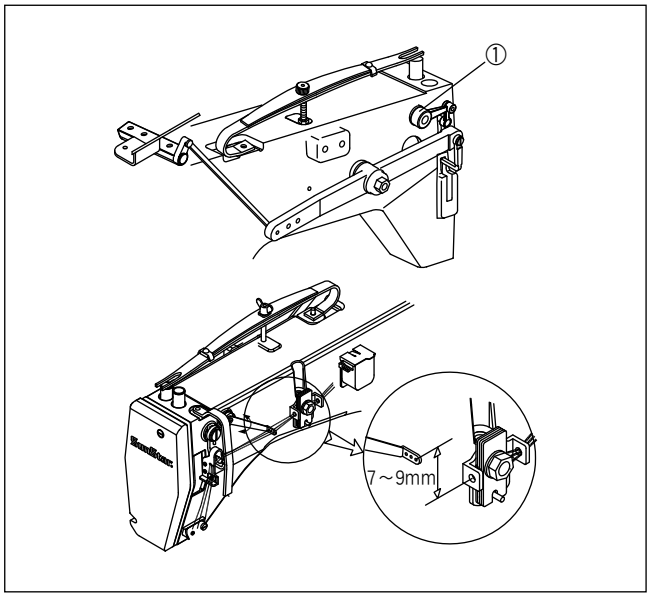


6-1) Adjustment of Thread Release Lever

Adjust the thread release lever's thread hole center to be 7~9mm above the thread hole center on the upper thread tension adjusting device when the needle bar is at the lowest position.

A. Turn the pulley until the needle bar descends to the lowest position.
B. Loosen the screw ① and move the thread release lever ② up and down to adjust the thread release lever thread hole center to be 7~9mm above the thread hole center on the upper thread tension adjusting device.
C. Fasten the adjusting screw ① again.

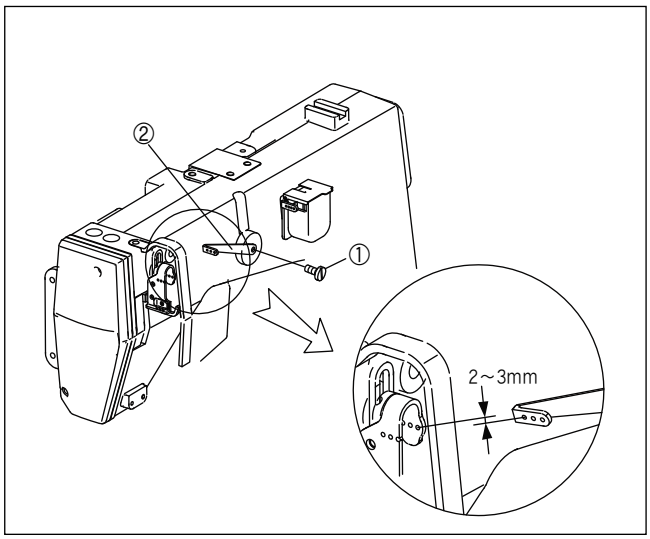
※ As the thread release lever moves higher, the stitches become firmer.



6-2) Adjustment of Thread Release Lever

When the needle bar is at the lowest position, adjust to place the center of the thread release lever thread hole at 2 to 3mm below from the center of the thread hole of the thread take-up lever thread guide.

A. Turn the pulley until the needle bar is lifted to the highest position.
B. Loosen the screw① and adjust the thread release lever② up or down to place the center of the thread release lever tread hole at 2~3mm below from the tread guide's thread hole.
C. Fasten the adjusting screw ① again.

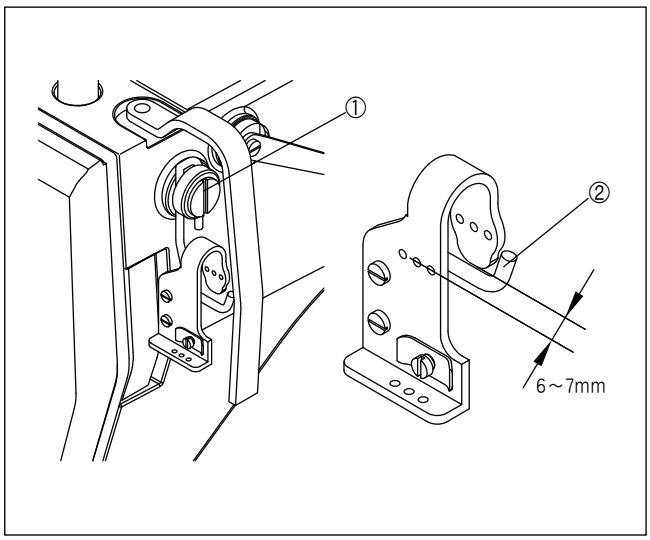


7) Adjustment of Thread Take-up Guide

Adjust the distance between the thread take-up's thread guide hole and the thread take-up guide's upper part to be 6~7mm(For light materials:3mm).

A. Turn the pulley toward the user's position when the needle bar reaches the lowest position.
B. When the screw ① is loosened, move the thread take-up guide ② up and down to set the distance between the upper part of the thread take-up guide ② and the thread guide hole to be 6~7mm.
C. Fasten the screw ①.

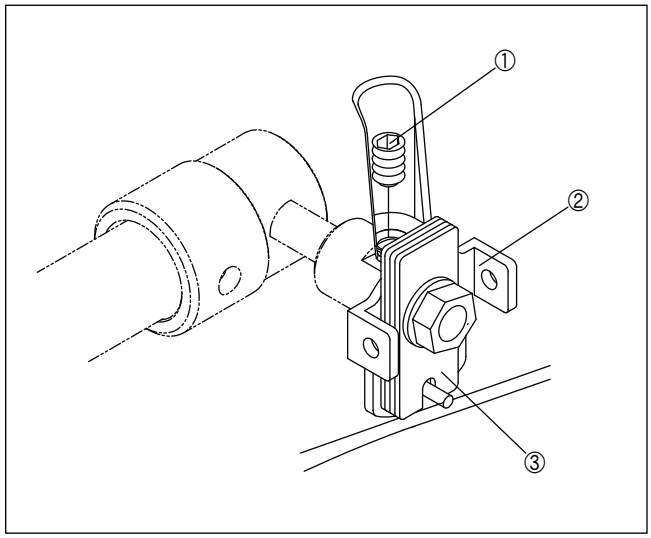
※ As the thread take-up guide ② moves higher, the upper thread loops become larger.



8) Adjustment of Upper Thread Adjusting Cam

The maximum tolerance between the upper thread tension adjuster ② and the upper thread tension plate ③ is 0.5~0.7mm (2-needle) or 0.8~1.0mm (3-needle). Loosen the adjusting screw ① and move the upper tension adjuster ② in and out to set the maximum tolerance between the adjuster ② and the upper thread tension plate ③ to be 0.5~0.7mm (2-needle) or 0.8~1.0mm (3-needle).

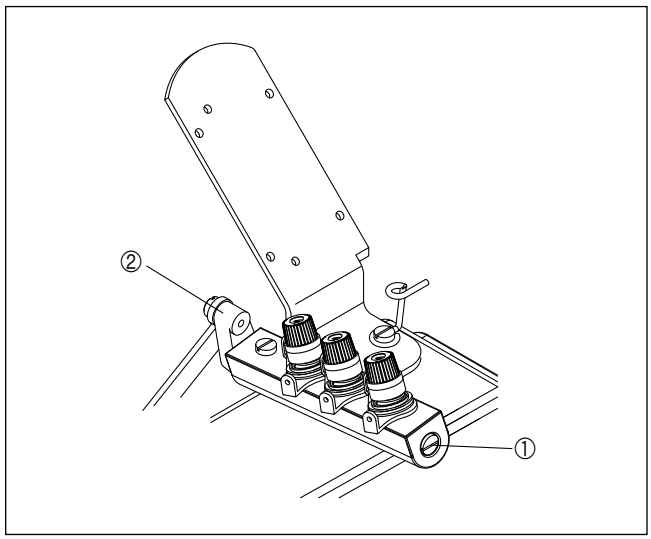
※ If tolerance between the upper thread adjuster ② and the upper thread tension plate ③ is reduced, the tension gets higher.



9) Adjustment of Thread Release Shaft

Adjust the thread release shaft to ensure when the presser foot ascends, the thread tension discs are released and to ensure when the presser foot descends, the thread tension discs are tightened.

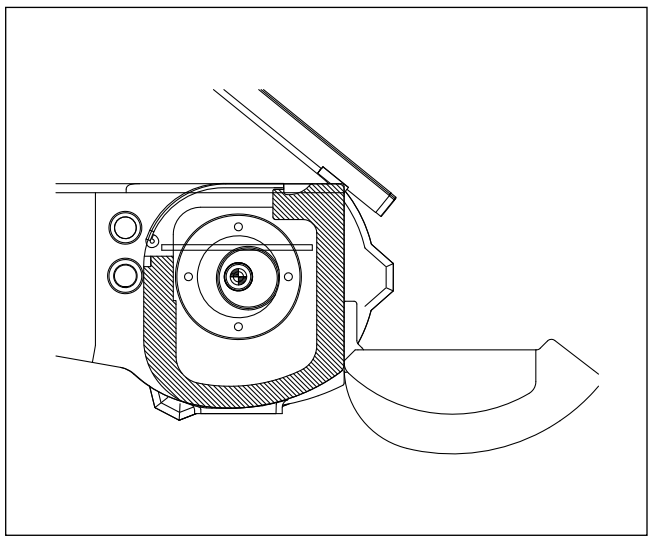
A. Loosen the adjusting screw ①.
B. Spin the thread release shaft ② to make the thread tension discs start loosening when the presser foot is 4mm above the needle plate.
C. When the adjustment is complete, tightly fasten the adjusting screw ①.



10) Adjustment of Lower Thread Take-up Timing

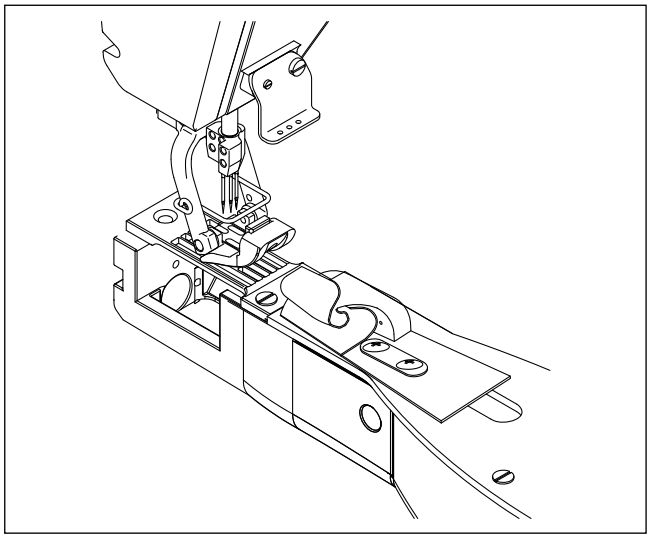
When the looper starts moving backward, make adjustment to let the lower thread take-up ① contact the thread ② and 7mm away from the lower thread take-up base ③.

A. Insert the screwdriver into the adjustment hole on the lower thread take-up base and loosen the two adjusting screws④.
B. Lift the lower thread take-up ① from the lower thread take-up base by 7mm.
C. Tightly fasten the two screws ④ after adjustment.



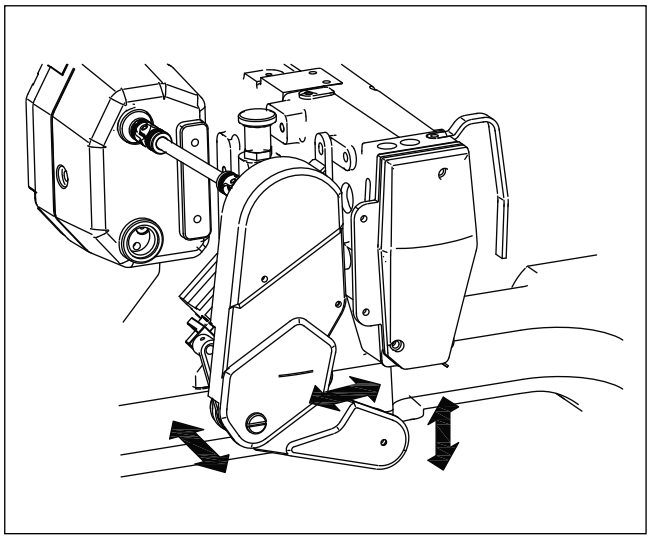
11) Lapper Installation

Insert the lapper guide pin into the overall hole on the upper bed cap. Check if the end of the lapper is not too close to the presser foot.

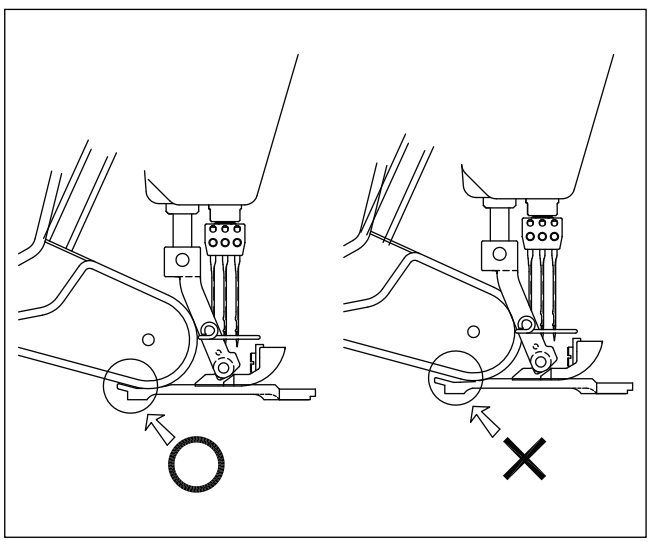


12) Adjusting position of the belt puller

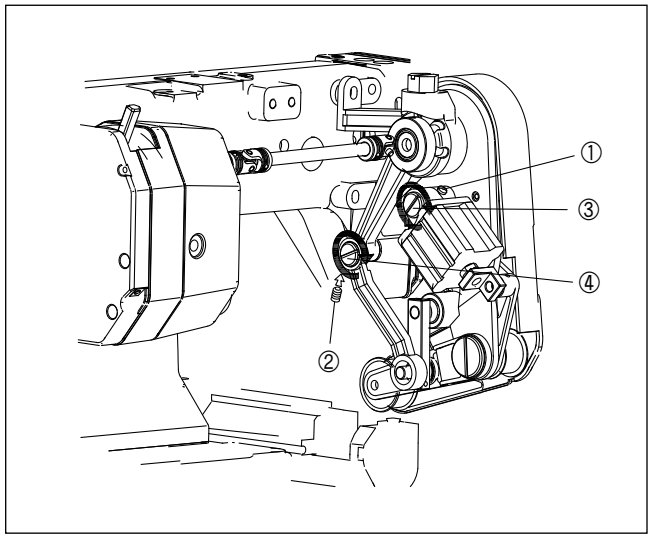
The belt puller is adjustable in four directions including up, down, left, and right.



When the needle is located below, the belt should closely contact the needle plate. Otherwise, smooth seaming is difficult to get.

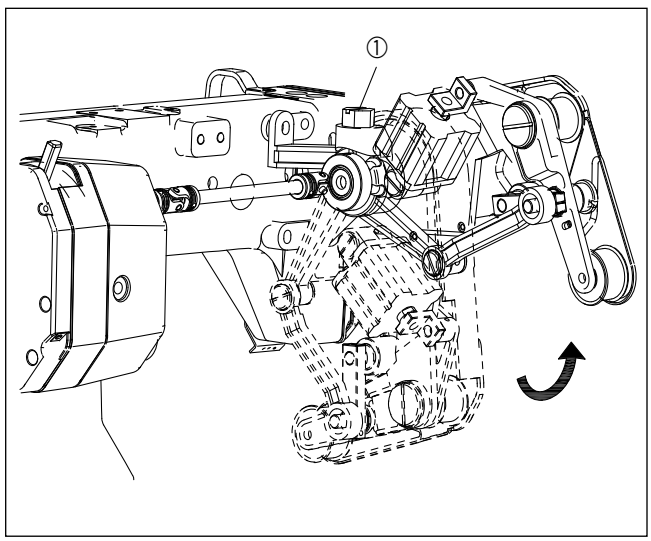


A. Unfasten the screws①, ②.
B. Turn the screws③, ④ with a driver to adjust the position of the belt puller. The belt should closely contact the sunken part of the needle plate without space, and it should not be contacted by the needle bar when the needle bar is at its lowest position.
C. After adjustment is completed, tightly fasten the screws①, ②.



13) Fixing without puller

The puller can be fixed while being pushed backward and it can be fixed either at the angle of 50°or 100°.
A. Loosen the screw ①.
B. Lift the belt puller while the screw ① is pulled up.
C. Fasten the screw ①.

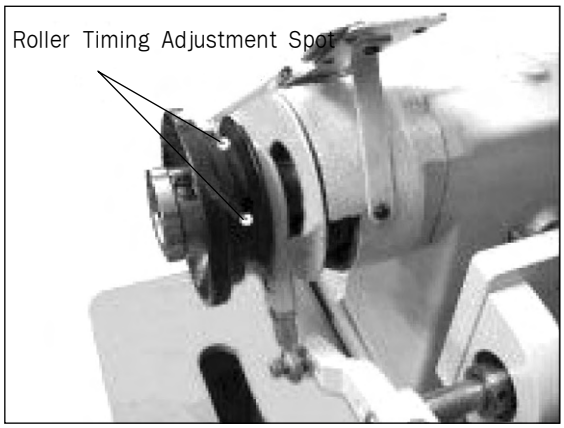


14) Decelerator Timing Adjustment

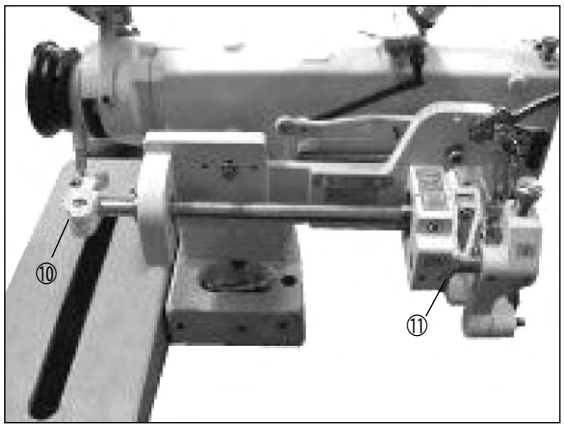
When a saw teeth of the machine starts to move up and pushes the stuff out, adjust the roller of decelerator to go around.

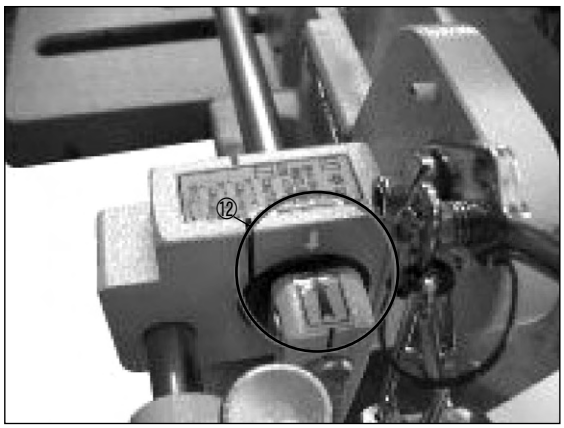
A. The decelerator is bearing type so if the angle is turning, part of the bearing can be damaged or be generated heat. After installation, therefore, check as follows

※ Checkpoints



B. Unfasten the no.⑩ bolt, shake no.⑪ stitch length lever back and forth more than 3 times leading to place no.⑩ shaft lever its position.
After that, match no.⑫ arrow to the other arrow and fix the no.⑩ bolt.

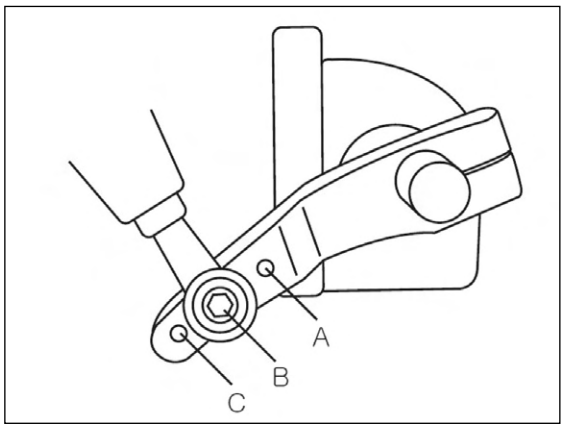




15) Adjustment of Puller Feeding Amount

- Shaft lever(PART NO.12) function can choose the feeding of roller(quantity of motion/the stitch role of sawing machine).

A(quantity of motion) : Large=5.2m/m, Small=2.3m/m
B(quantity of motion) : Large=4m/m, Small=2m/m
C(quantity of motion) : Large=3.3m/m, Small=1.3m/m



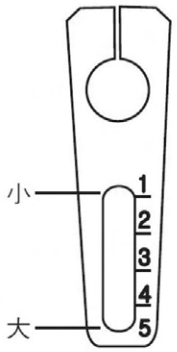
Caution

In case of moving the position of shaft lever(PART NO.12),
be sure that the power switch of M/C is in the OFF position and the power cord is unplugged.

16) Speed Lever Stitch Length Adjustment

- The shaft lever(PART NO.25) stitch is adjusted as the scale is widened and it can be adjusted by changing the setting position.

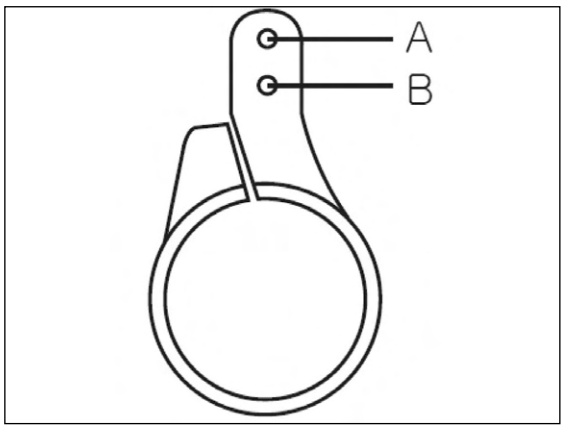
- Timing adjustment
  Unfasten part no.13, shake no.25 back and forth more than 5 times.
  After the position of bearing is settled, adjust to the place which the arrow direction is matched and fix the part no.13.
  (See Decelerator Timing Adjustment of the manuals)



Stitch Adjustment Method
Descending from no.1 toward no.5, the stitch is getting longer.

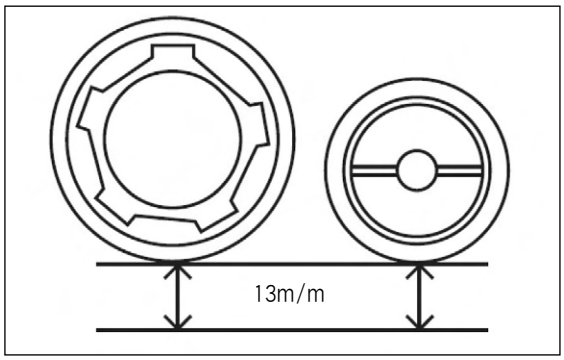
17) P.S.W-I Stitch Length Adjustment

* LRP Type(PART NO.66), SRP Type(PART NO.55)
  Generally use by fixing to the standard position (A) part but in case of using the stitch longer, position (B) can be used.

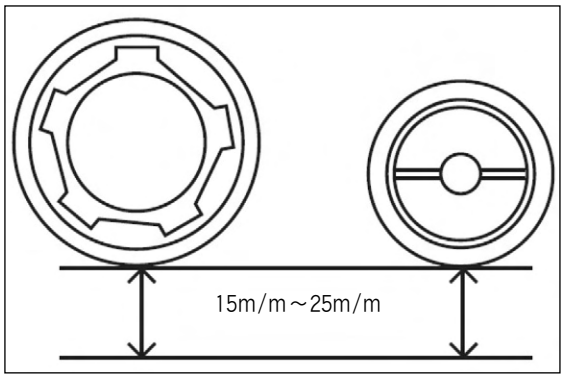


18) Ascending Momentum of the Ruller

* LRP Type(PART NO.77), SRP Type(PART NO.71)
  -> the quantity of motion in case of working with a machine (13m/m).



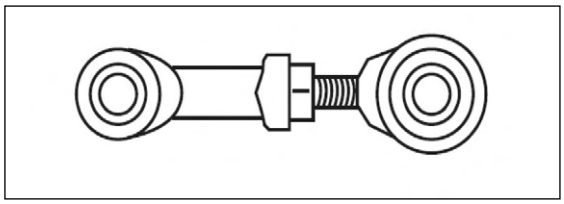
* The quantity of motion when part no.29(manual lever) is lifted by hand (15m/m~25m/m)



19) Bearing Replacement

- Parts Life [LRP Type (PART NO.54, NO.57), SRP Type (PART NO.91, NO.95) 5R BEARING]
  Parts can be used for 2.5 to 3.5 years although there are some gaps according to the workload.

-Replacement Time
Replace them when the machine stitch mismatches to the stitch of the puller due to the pulling malfunction with long use.



Caution

Need not use oil due to the oilless bearing. In case of refueling unnecessary oil, the stuff can be tainted so the use of oil is prohibited.

20) Breakdown of TENSION DISK & E-RING

LRP Type(PART NO.62~NO.76), SRP Type(PART NO.51~NO.65)
- Engine structure has the pulling function of piller and built-in grease, does not need oil.

Caution

If the thread winds around the engine structure or the parts are damaged by mistakes, the function of puller can be out of order so do work with care.
(The damage caused by a careless worker cannot be repaired for free.)