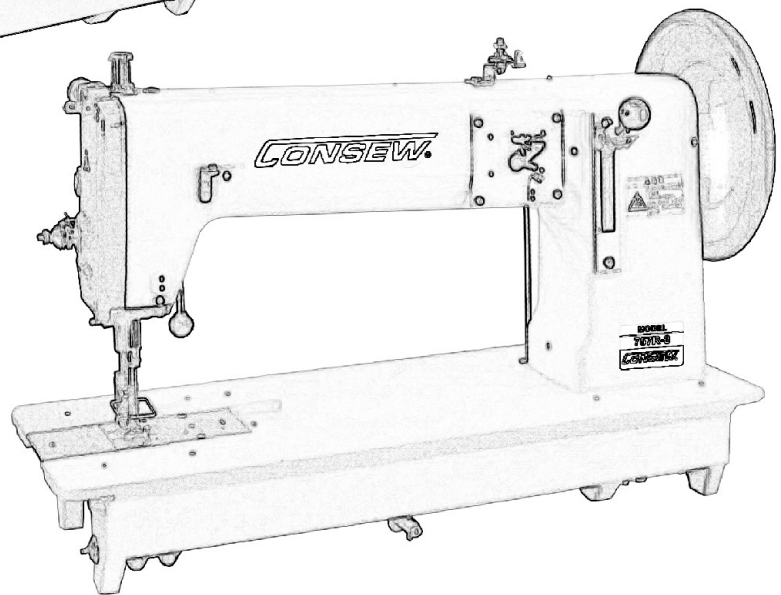
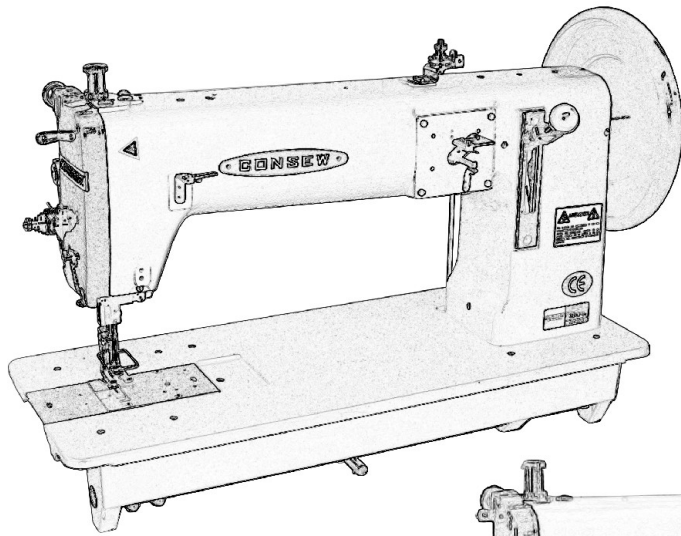


CONSEW P-SERIES[®]

757R 757R-3 Manual



Thank you very much for buying a **Consew** sewing machine. Before using your new machine, please read the safety instructions below and the explanations given in the instruction manual.

With industrial sewing machines, it is normal to carry out work while positioned directly in front of moving parts such as the needle and thread take-up lever, and consequently there is always a danger of injury that can be caused by these parts.

Follow the instructions from training personnel and instructors regarding safe and correct operation before operating the machine so that you will know how to use it correctly.


SAFETY INSTRUCTIONS

1. Safety indications and their meanings


This instruction manual and indications and symbols that are used on the machine itself are provided in order to ensure safe operation of this machine and to prevent accidents and injury to yourself or other people.


The meanings of these indications and symbols are given below.


Indications

 CAUTION	<p>The instructions which follow this term indicate situations where failure to follow the instructions could cause injury when using the machine or physical damage to equipment and surroundings.</p>
--	---










Symbols

 This symbol(Δ) indicates something that should be careful of. The picture inside the triangle indicates the nature of the caution that must be taken.
(For example, the symbol at left means, "beware of injury".)

 This symbol($\text{\textcircled{/}}$) indicates something that you must not do.

 This symbol($\text{\textcircled{|}}$) indicates something that you must do. The picture inside the circle indicates the nature of the thing that must be done.
(For example, the symbol at left means, "You must make the ground connection".)

2. Notes on safety

 CAUTION	
Environmental requirements	
<ul style="list-style-type: none">  • Use the sewing machine in an area, which is free from sources of strong electrical noise such as high-frequency welders. Sources of strong electrical noise may cause problems with correct operation.  • Any fluctuations in the power supply voltage should be within $\pm 10\%$ of the rated voltage for the machine. Voltage fluctuations that are greater than this may cause problems with correct operation.  • The power supply capacity should be greater than the requirements for the sewing machine's electrical consumption. Insufficient power supply capacity may cause problems with correct operation.  • The pneumatic delivery capability should be greater than the requirements for the sewing machine's total air consumption. Insufficient pneumatic delivery capability may cause problems with correct operation. 	<ul style="list-style-type: none">  • The ambient temperature should be within the range of 5°C to 35°C during use. Temperatures that are lower or higher than this may cause problems with correct operation.  • The relative humidity should be within the range 45% to 85% during use, and no dew formation should occur in any devices. Excessively dry or humid environments and dew formation may cause problems with correct operation.  • Avoid exposure to direct sunlight during use. Exposure to direct sunlight may cause problems with correct operation.  • In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet. Lighting may cause problems with correct operation.



CAUTION

Installation

- Machine installation should only be carried out by a qualified technician.
- Contact your **Consew** dealer or a qualified electrician for any electrical work that may need to be done.
- The installation should be carried out by two or more people.
- Do not connect the power cord until installation is complete, otherwise the machine may operate if the treadle is pressed by mistake, which could result in injury.
- Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.
- All cords should be secured at least 25mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly with staples, otherwise there is the danger that fire or electrical shocks could occur.
-

- Be sure to install the belt guards to the machine head and motor.
- If using a work table that has casters, the casters should be secured in such a way so that they cannot move.
- Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.
- Be sure to wear protective goggles and gloves when handling the lubricating oil, so that no oil gets into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil under any circumstances, as it can cause vomiting and diarrhea. Keep the oil out of the reach of children.

Sewing

- This sewing machine should only be used by operators who have received the necessary training in safe use beforehand.
- The sewing machine should not be used for any applications other than sewing.
- Be sure to wear protective goggles when using the machine. If goggles are not worn, there is the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result.
- Turn off the power switch at the following times, otherwise the machine may operate if the treadle is pressed by mistake, which could result in injury.
 1. When threading the needle
 2. When replacing the needle and bobbin
 3. When not using the machine and when leaving the machine unattended
 * When using a clutch motor, the motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.
- If using a worktable that has casters, the casters should be secured in such a way so that they cannot move.

- Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.
- Do not touch any of moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.
- Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.
- If an error occurs in machine operation, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest **Consew** dealer or a qualified technician.
- If the machine develops a problem, contact your nearest **Consew** dealer or a qualified technician.



CAUTION

Cleaning



- Turn off the power switch before carrying out cleaning, otherwise the machine may operate if the treadle is pressed by mistake, which could result in injury.

- * When using a clutch motor, the motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.



- Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.



- Be sure to wear protective goggles and gloves when handling the lubricating oil, so that no oil gets into your eyes or onto your skin, otherwise inflammation can result.

- Furthermore, do not drink the oil under any circumstances, as they can cause vomiting and diarrhea.

- Keep the oil out of the reach of children.

Maintenance and inspection



- Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.



- Ask your **CONSEW** dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.



- Turn off the power switch and disconnect the power cord from the wall outlet at the following times, otherwise the machine may operate if the treadle is pressed by mistake, which could result in injury.

1. When carrying out inspection, adjustment and maintenance
2. When replacing consumable parts such as the rotary hook

- * When using a clutch motor, the motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.



- If the power switch and air need to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.



- Disconnect the air hoses from the air supply and wait for the needle on the pressure gauge to drop to "0" before carrying out inspection, adjustment and repair of any parts which use the pneumatic equipment.



- Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.



- When checking the rotary hook lubrication, do not touch moving parts such as the rotary hook, needle and needle bar with your finger or paper nor push them with other objects, otherwise injury or damage to the machine may result.



- Use only the proper replacement parts as specified by **CONSEW**



- If any safety devices have been removed, be absolutely sure to re-install them to their original positions and check those they operate correctly before using the machine.



- Any problems in machine operation, which result from unauthorized modifications to the machine, will not be covered by the warranty.

3. Warning labels

* The following warning labels appear on the sewing machine.
 Please follow the instructions on the labels at all times when using the machine.
 If the labels have been removed or are difficult to read, please contact your nearest Consew dealer.

1

Caution
 Moving parts may cause injury.

Attach all safety devices before using the sewing machine.

Turn off the power switch at the following times.

- When threading the needle.
- When replacing the bobbin, needle, knife, rotary hook.
- When lubrication, cleaning, adjustment and maintenance.

2

Be sure to connect the ground.
 If the ground connection is not secure, you run the risk of receiving a serious electric shock.

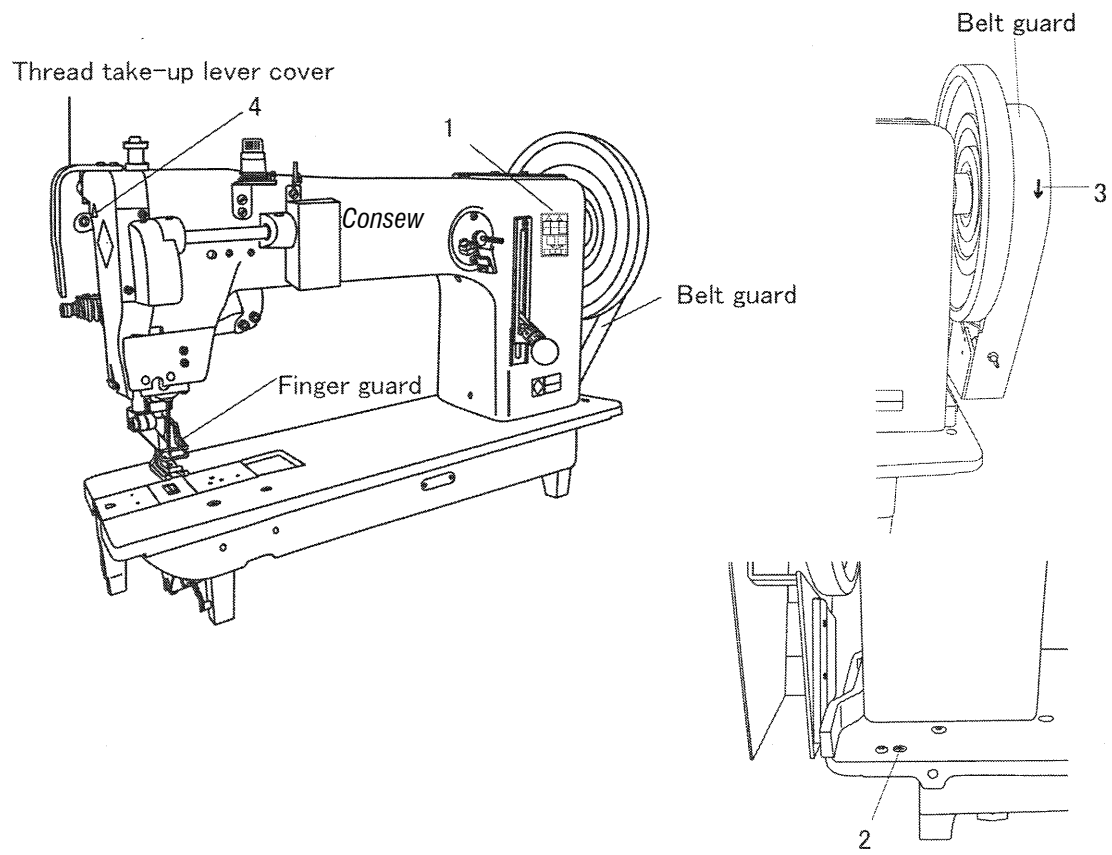
3

Direction of operation

- Safety devices
- Finger guard
 - Thread take-up lever cover
 - Belt guard, etc.

4

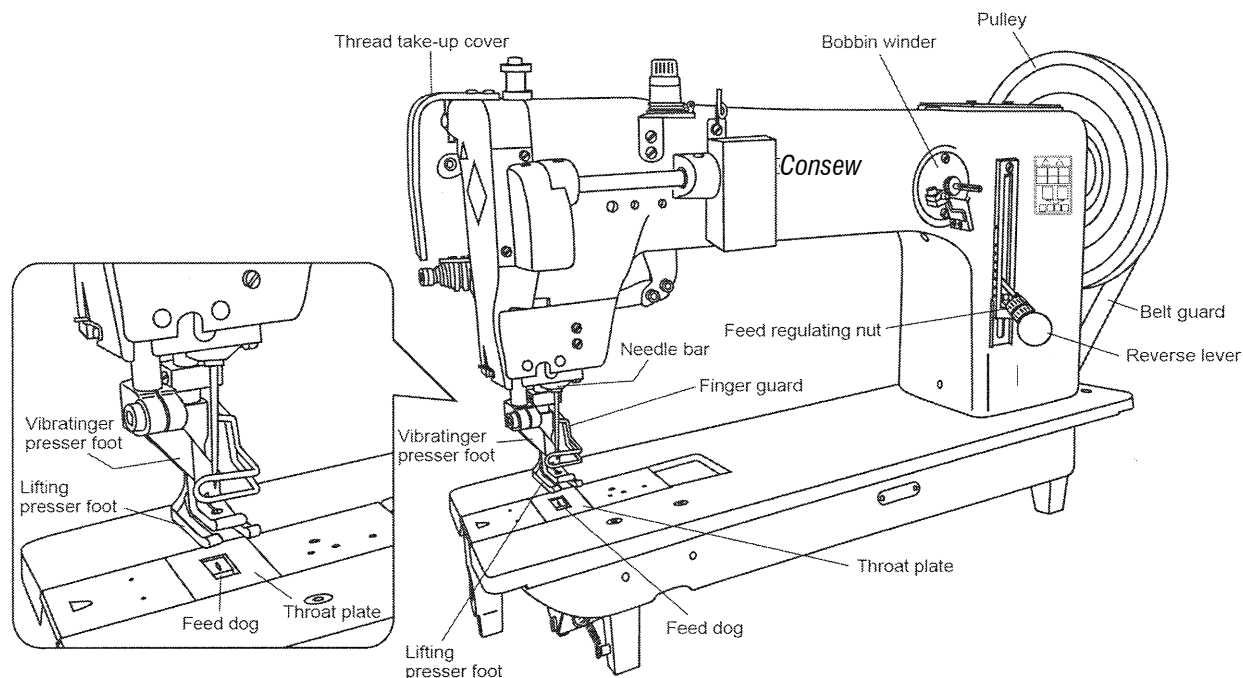
Moving parts may cause injury.



CONTENTS

1. MAIN PARTS NAMES	1
2. SPECIFICATIONS	1
3. WORK TABLE AND MOTOR	2
4. INSTALLATION	3
4-1. Installing the pedal	3
4-2. Installing the machine hinge, corner supports, machine head	3
4-3. Installing the oil pan	4
4-4. Installing the belt guard and belt	4,5
4-5. Installing the presser lifter pedal	6
4-6. Installing the thread stand	6
4-7. Checking the machine pulley rotating direction	7
4-8. Lubrication	7
5. PREPARATION BEFORE SEWING	8
5-1. Installing the needle	8
5-2. Thread	8
5-3. Removal and insertion of bobbin	9
5-4. Winding the lower thread	10
5-5. Threading the upper thread	10
5-6. Adjusting the stitch length	11
5-7. How to adjust amount of advance-feed and reverse -feed	11
6. SEWING	12
6-1. Sewing	12
6-2. Adjusting the thread tension	12
■ Upper thread tension	13
■ Lower thread tension	13
6-3. Adjusting the presser foot pressure	13
7. STANDARD ADJUSTMENTS	14
7-1. Adjustment to loosen upper thread	14
7-2. How to remove and install shuttle hook	15
7-3. Adjusting the feed dog movement amount	15
■ Positions of the needle and needle hole of the feed dog	15
■ Adjusting the height of the feed dog	16
■ Timing of feed lifting cam	16
■ Adjusting the forward and backward position of needle bar	16
7-4. Adjusting the timing between the needle and the shuttle hook	17
■ Positioning of needle and tip of the hook	17
■ Adjusting the height of the needle bar	17
■ Adjusting the position of the tip shuttle hook	17
■ Adjusting the clearance between needle and tip of hook	18
7-5. Adjusting the presser foot movement amount	19
7-6. Adjusting the timing of the vibrating presser foot	19

1. MAIN PARTS NAMES



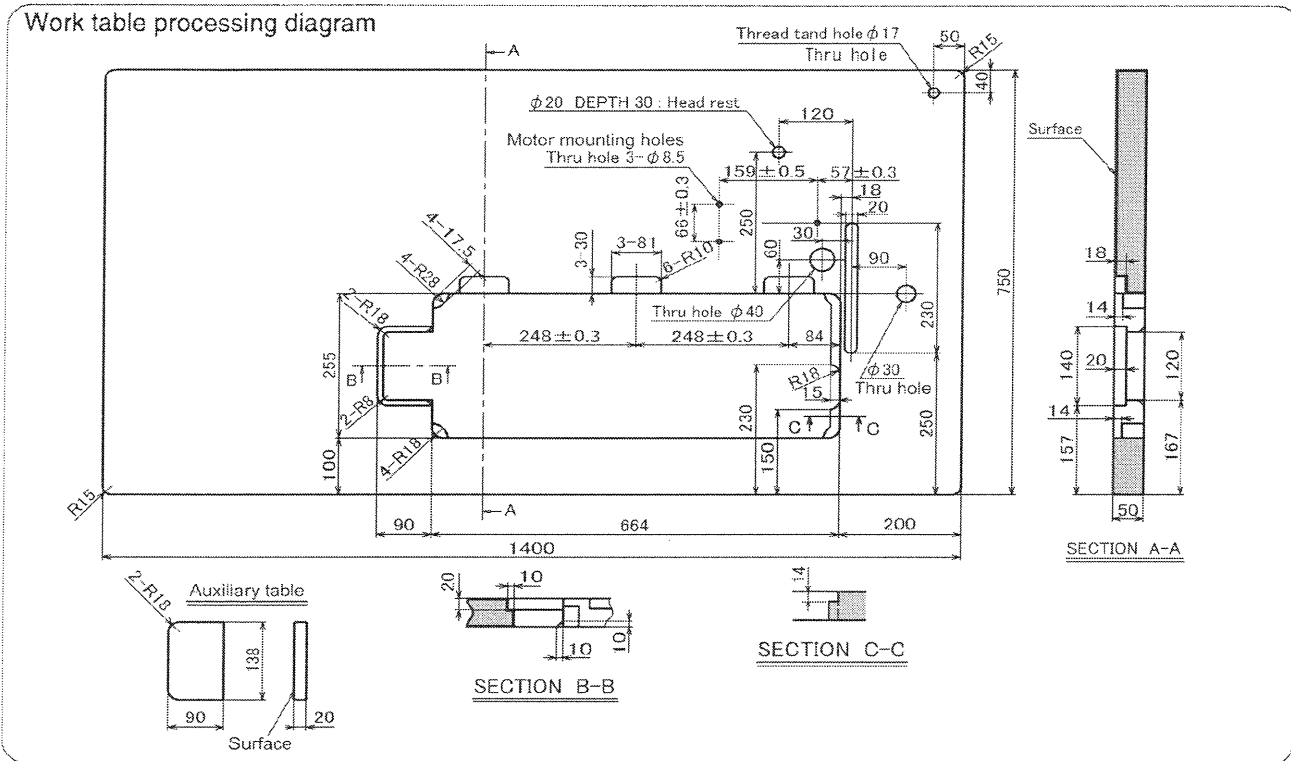
2. SPECIFICATIONS

Model	757R
Max. sewing speed	800 s.p.m
Needles	DY x 3 standard #24
Thread	#8 ~ #0 (standard #5)
Hook	Large oscillating shuttle hook
Max.stitch length	15/32" (12 mm)
Presser foot typ	Compound feed and walking foot
Amount of lift of walking foot	1/8" - 15/64" standard 5/32" 3 - 6 mm (standard 4mm)
Presser foot height	10 mm (by hand) 25mm(by pedal)
Needle bar stroke	2-13/64" (56 mm)
Thread take up lever	Cam type
Working space	15-3/4" x 7" (400 x 180mm)
Net weight(Head only)	75 kg
Motor	Clutch motor 4pole,400w
Motor pulley	φ 75(50HZ) φ 65(60HZ)
V-belt	M53(50HZ) M52(60HZ)

3. WORK TABLE AND MOTOR

■ Work Table

- When using a table made by another manufacturer, drill holes in the table as shown in the figure below.
- The top of the table should be 50 mm in thickness and should be strong enough to hold the weight and withstand the vibration of the sewing machine.



■ Motor

⚠ CAUTION

- ⚠ All cords which are connected to the motor should be secured at least 25 mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly with staples, otherwise there is the danger that fire or electric shocks could occur.
- ⚠ Install the correct belt guard which corresponds to the motor being used.

<Motor>

- Select the correct motor from those listed in the table.
- Refer to the instruction manual for the motor for details on installing and using the motor.

Power	Motor
Single-phase	4 pole, 400W motor
Three-phase	4 pole, 400W motor







<Motor pulley and V-belt>

- Select the correct motor pulley and V-belt by referring to the table to suit the power frequency of your area.

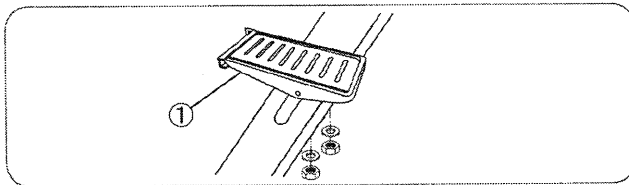
Sewing speed	Frequency	Motor pulley	V-belt
670 spm	50 Hz	Motor pulley 75	53 inches
700 spm	60 Hz	Motor pulley 65	52 inches

4. INSTALLATION

CAUTION

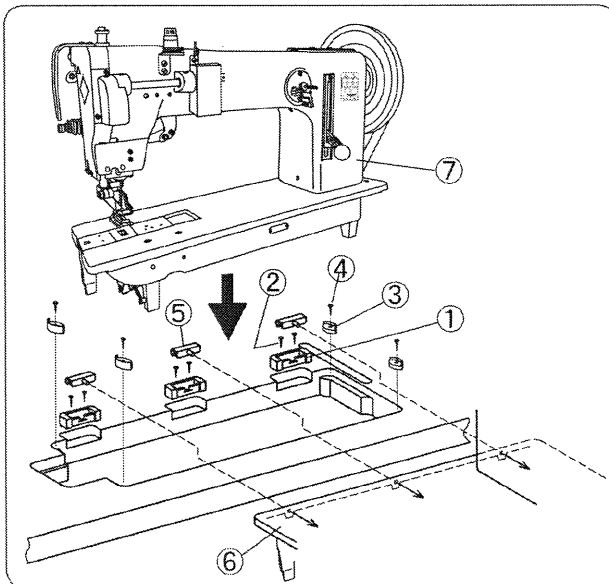
-  The sewing machine should only be installed by a qualified technician.
-  Ask your Consew dealer or a qualified electrician for any electrical work that may need to be done.
-  The sewing machine weights more than 75 kg. The installation should be carried out by two or more people.
-  Do not connect the power cord until installation is complete, otherwise the machine will operate if the treadle is pressed by mistake, which could result in injury.
-  Be sure to connect the ground. If the ground connection is not secure, serious electric shocks will result.
-  Install the belt guard to the machine head.

4-1. Installing the pedal



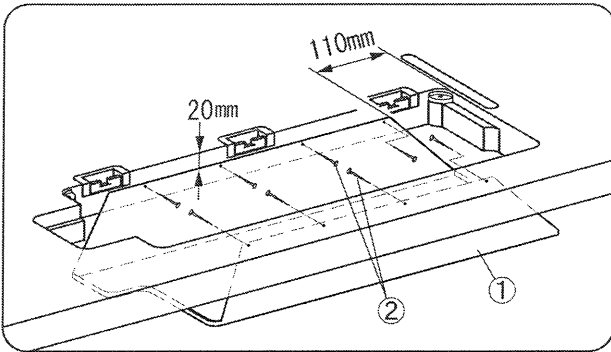
1. Provisionally install the presser lifter pedal ① with washer and nut to the stand of the work table before installing the machine head.

4-2. Installing the machine hinge, corner supports, machine head



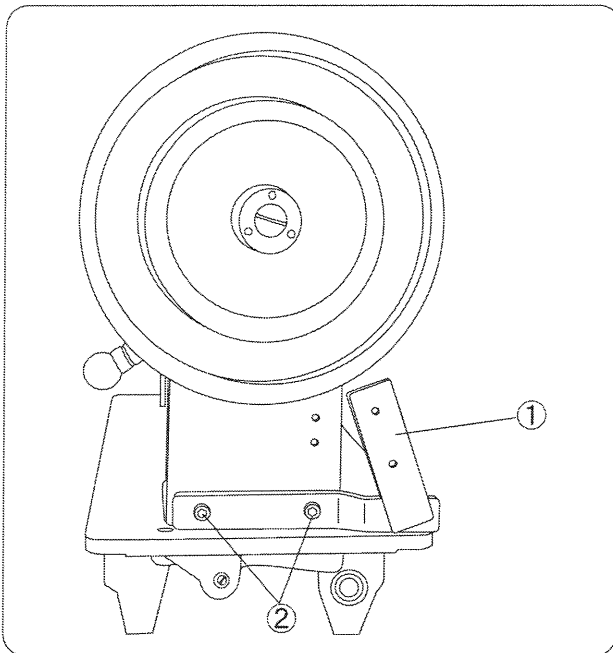
1. Insert the machine hinge connection cushions ① into the cut-away sections of the work table (three places), and secure each of them with two nails ②.
2. Installing machine rest
Install the machine rest ③ at the four corners of the table with nails ④.
3. Insert the machine hinge ⑤ into the holes in the machine bed ⑥.
4. Fit the hinge ⑤ to the rubber hinge ① and then place the machine head ⑦ on the table.

4-3. Installing the oil pan

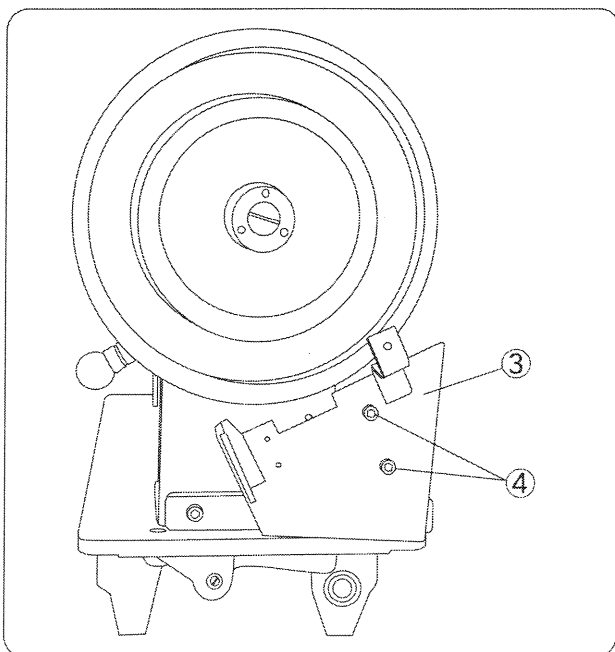


Fit the oil pan ① into the opening in the table ,
and secure it with 8 nails ②.

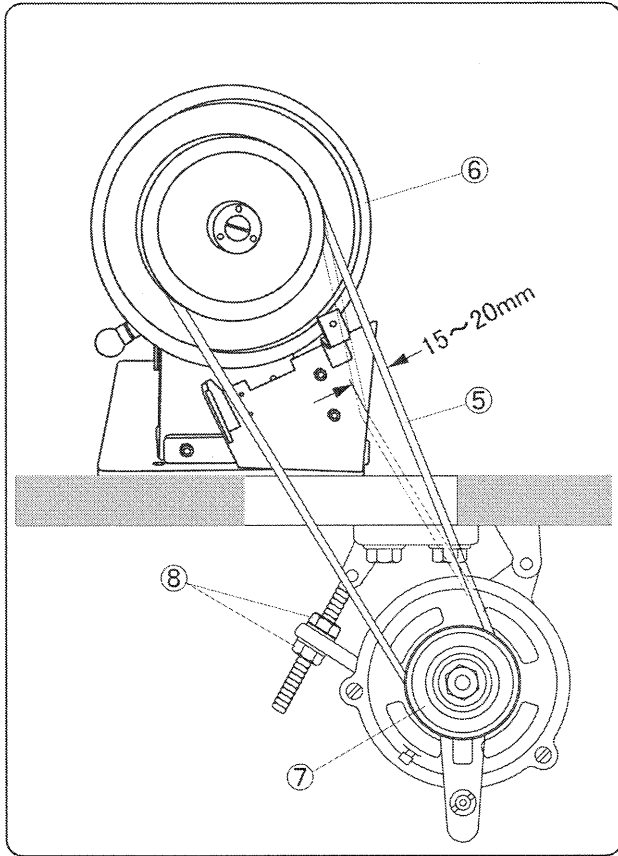
4-4. Installing the belt guard and belt



1. Install the machine head to the belt guard
bar ① with the two screws ②.

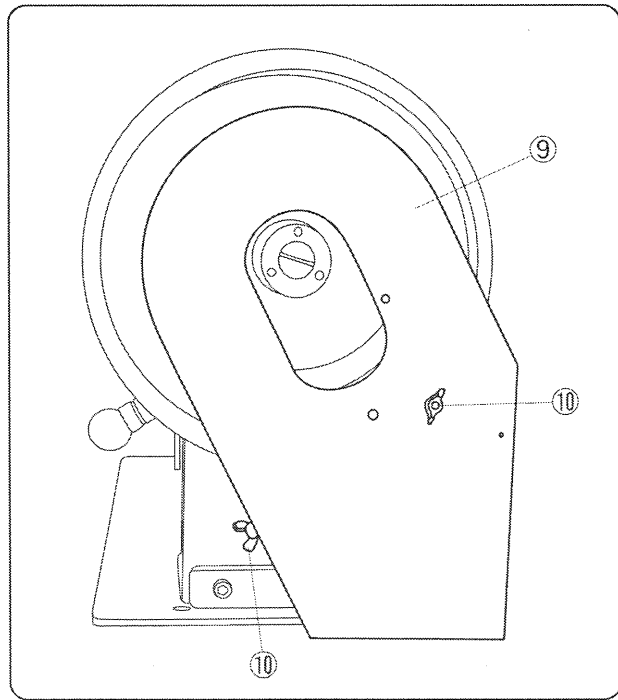


2. Install the belt guard plate ③ with the two
screws ④.



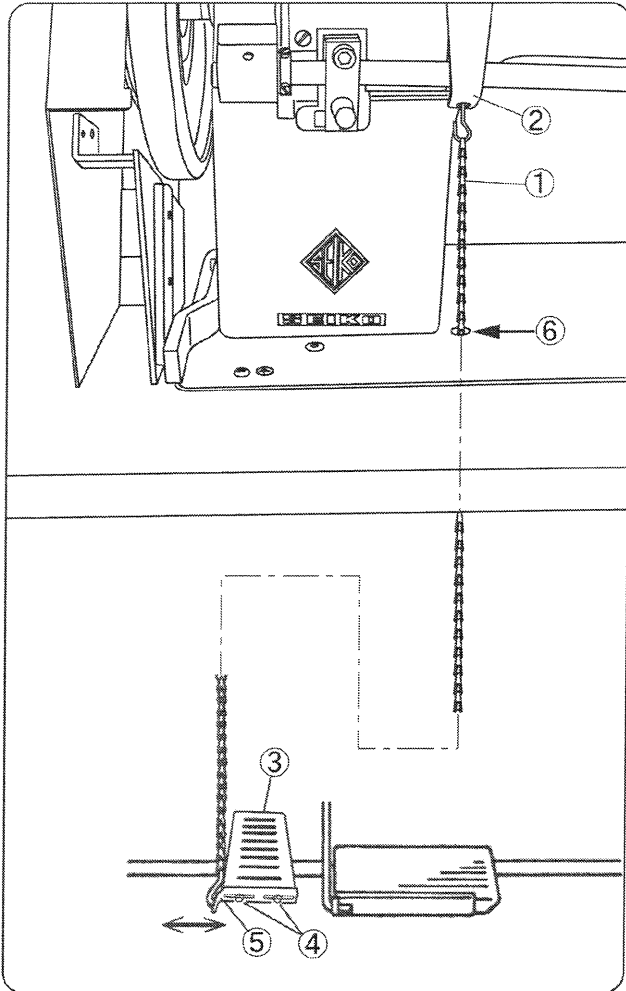
3. Place the belt (5) onto the machine pulley (6) and motor pulley (7).

4. Turn the nut (8) to adjust so that there is 15-20mm of deflection in the belt (5) when it is pressed with a finger with a force of 9.8N(1kgf).



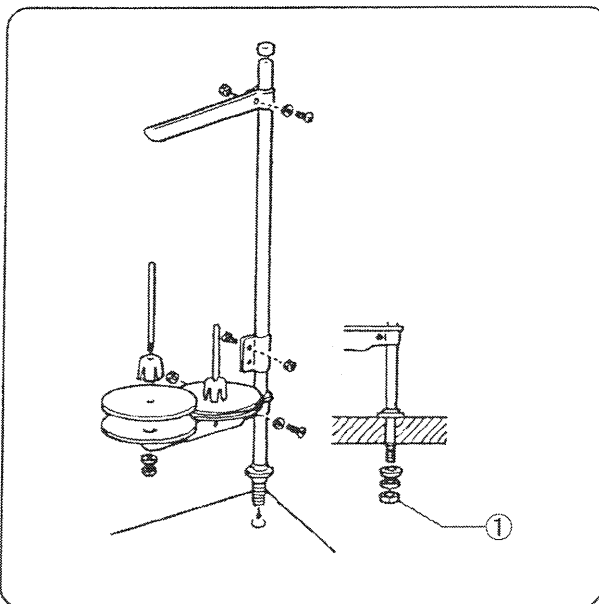
5. Install the belt guard body (9) with the two screws (10).

4-5. Installing the presser lifter pedal



1. Install the foot lifting lever ② and presser lifter pedal ③ with the chain ①.
2. Fix the position of the presser lifter pedal ③ with the pedal blocks ⑤ so that the chain ① is straight and place the chain ① at center of the hole ⑥ of work table by adjusting bolts ④.

4-6. Installing the thread stand



Assemble the thread stand as shown in the illustration, and then install it to the work table.

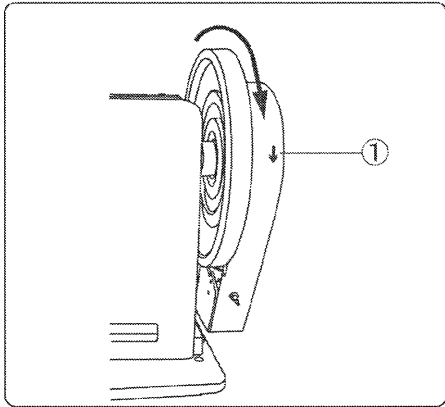
* Securely tighten the nut ① so that the thread stand does not move.

4-7. Checking the machine pulley rotating direction

CAUTION



- Do not touch any of the moving parts or place any objects against the machine while sewing, as this may result in personal injury or damage to the machine.



1. Insert the power cord plug into the wall outlet, and then turn on the power switch.
 2. Depress the treadle and check that the direction of rotation of the machine pulley matches the direction of the arrow ①.
- * If the direction of rotation is reversed, change the direction of rotation to the correct direction while referring to the instruction manual for the motor.

4-8. Lubrication

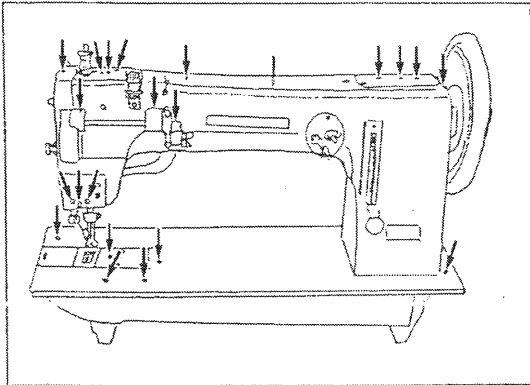
CAUTION



- Do not connect the power cord until lubrication has been completed, otherwise the machine may operate if the treadle is pressed by mistake, which could result in injury.

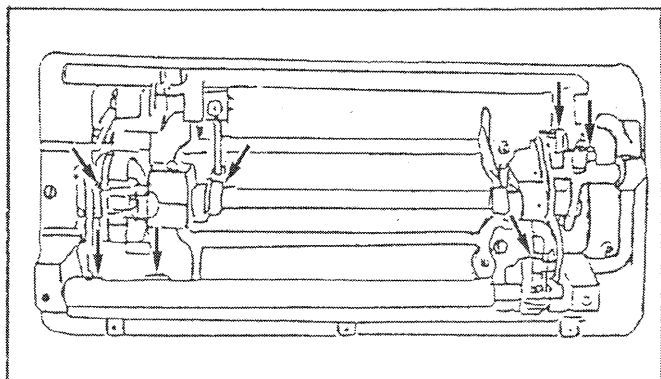
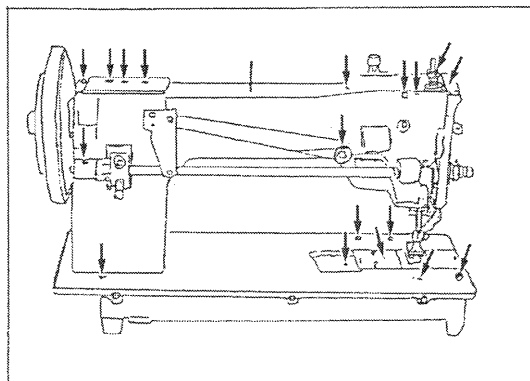


- Be sure to wear protective goggles and gloves when handling the lubricating oil, so that no oil gets into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil under any circumstances, as it can cause vomiting and diarrhoea. Keep the oil out of the reach of children.



- The sewing machine should always be lubricated and the oil supply replenished before it is used for the first time, and also after long periods of non-use.
- Oiling must be done at least once daily in continuous use.

- Add 1-2 drops of oil in the places indicated by the arrows. Add oil to other sliding parts also, while being careful to avoid oil leaks.



5. PREPARATION BEFORE SEWING

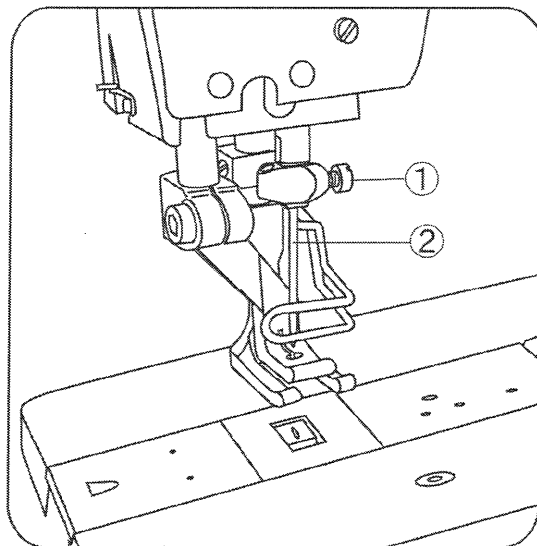
5-1. Installing the needle

CAUTION



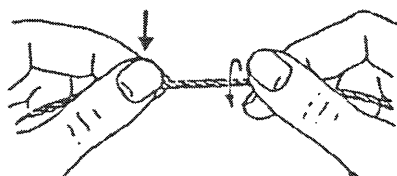
- Turn off the power switch before installing the needle. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work. The machine may operate if the treadle is pressed by mistake, which could result in injury.

Turn the balance wheel over toward you until the needle bar reaches its highest point. Loosen the needle clamp screw ①. Hold and insert the needle ② into the needle bar hole up as deeply as it will go, keeping the long groove of the needle to the left and eye of the needle in line with machine arm directly. Securely tighten it with needle clamp screw ①.



5-2. Thread

For needle (Upper thread) use left-twisted thread only, and for bobbin (Lower thread) use either left or right twisted thread. To find out thread twist, hold the thread as shown by illustration, and turn the thread over toward you between the thumb and forefinger of right hand, and then left-twisted thread will wind tighter strands, and right-twisted thread will unwind.



5-3. Removal and insertion of bobbin

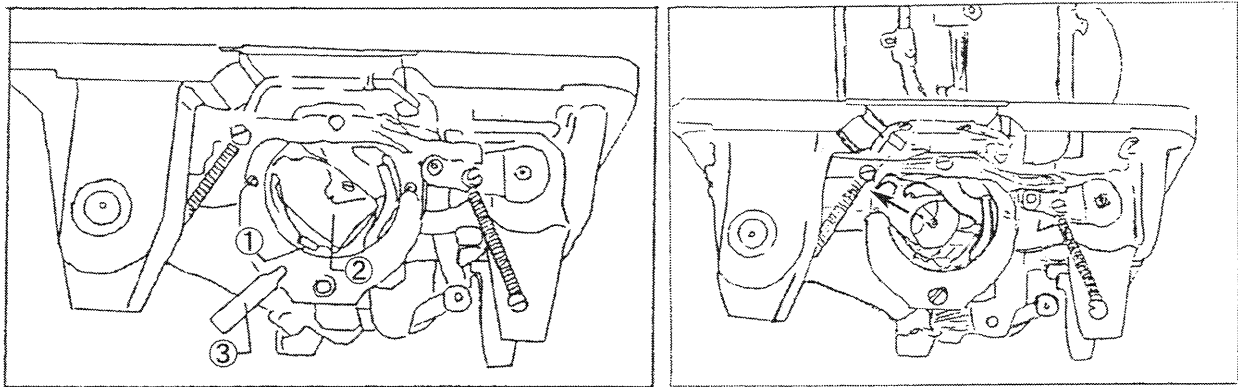
CAUTION



- Turn off the power supply before removing the bobbin. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work. The machine may operate if the treadle is pressed by mistake, which could result in injury.

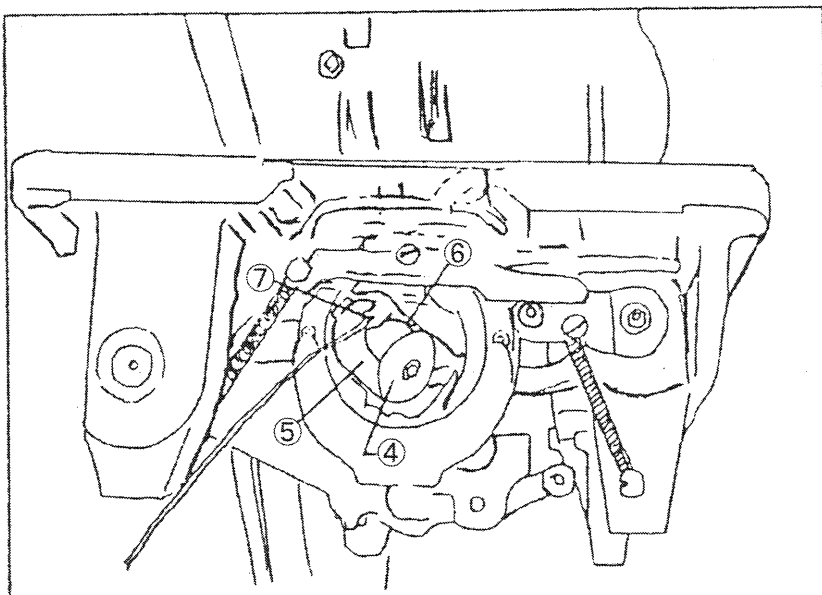
■ Removal of bobbin

Open the hook cover and drop-down the needle bar at lowest point, then insert the opener ③ between the snap spring ① and bobbin case ② and depress the snap spring and pull up the bobbin case outward, then take the bobbin out of the bobbin case.




■ Insertion of bobbin

When inserting, pull out the thread and depress it, then insert the bobbin ④ in the bobbin case ⑤. Pull the thread upward passing through the thread slit ⑦ of the bobbin case. You can pull out the thread through the thread passing hole through underneath the tension spring ⑥. Make sure that the snap spring in the shuttle is clicked after pressing bobbin case into the shuttle.



5-4. Winding the lower thread

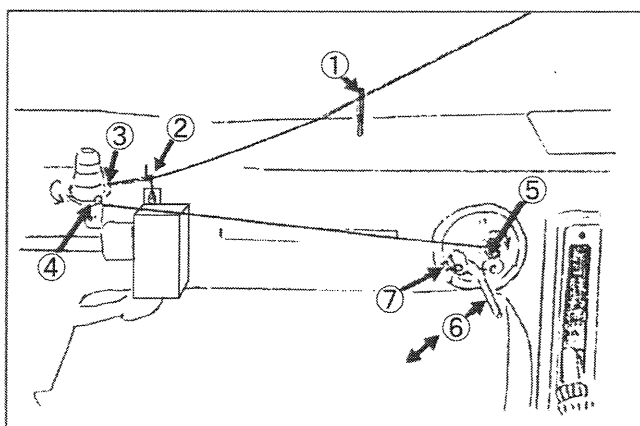
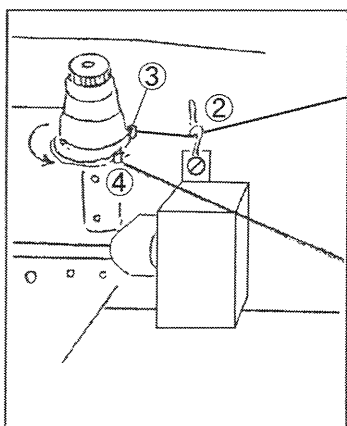
CAUTION

-  Do not touch any of the moving parts or place any objects against the machine while winding the lower thread, as this may result in personal injury or damage to the machine.

1. Turn on the power supply.
2. Push the bobbin ⑤ on the bobbin winder shaft .
3. Bobbin winding should be made by the following order.
4. Wind the thread end several times around the bobbin ⑤ in the direction indicated by the arrow.
5. Push the bobbin winder lever ⑥ toward the bobbin.
6. Depress the treadle. Lower thread winding will then start.
7. Once winding of the lower thread is completed, the bobbin winder lever ⑥ will return automatically.


NOTE: The amount of thread wound onto the bobbin should be a maximum of 80% of the bobbin capacity.

- * Loosen the screw ⑦ and adjust the amount of thread wound onto the bobbin approximately by moving the bobbin winder lever ⑥ .



5-5. Threading the upper thread

CAUTION

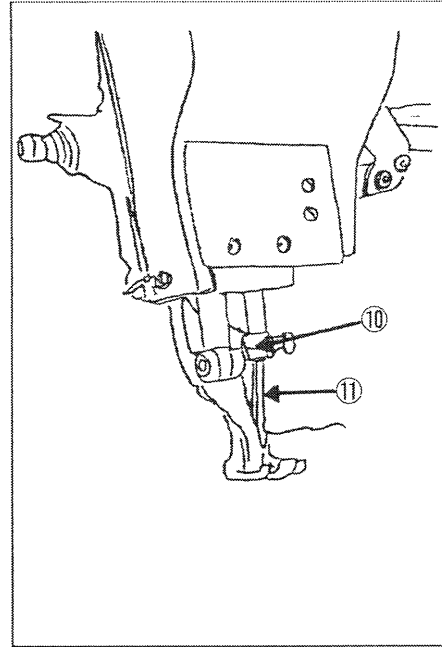
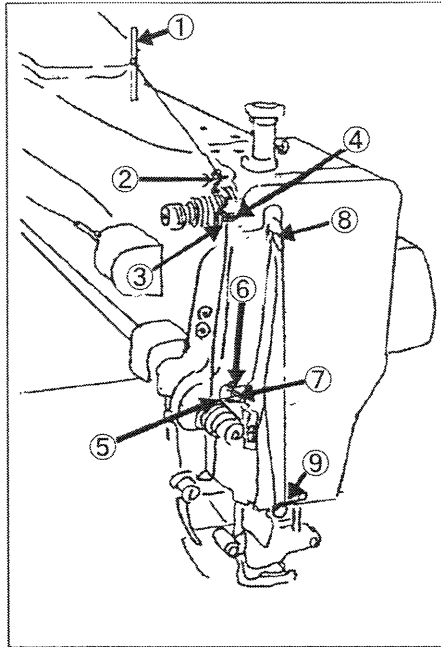
-  Turn off the power switch before threading the upper thread. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work. The machine may operate if the treadle is pressed by mistake, which could result in injury.

- Turn the machine pulley and raise the thread take-up lever ⑧ to its highest point before threading the upper thread. This will make threading easier and it will prevent the thread from coming out at the sewing start.

Upper threading should be made by the following order.

- ① Spool pin — ② Thread guide of thread tension — ③ Clearance of two tension discs — ④ thread guide of thread tension — ⑤ Thread controller — disc wind a time — ⑥ Thread guide
- ⑦ Tension spring — ⑧ Thread take-up — ⑨ Thread guide, face plat — ⑩ Needle clamp
- ⑪ Needle

Put the upper thread through needle hole from left hand side, then pull out it approx.

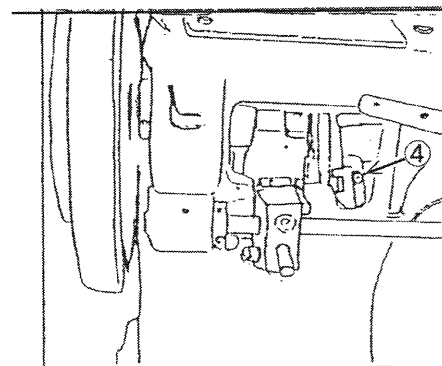
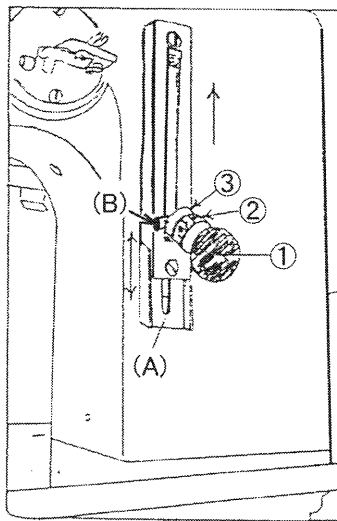


5-6. Adjusting the stitch length

By pull-up ↑ feed regulating lever ①, reverse stitch is performed, and push-down ↓ feed regulating lever ①, forward stitch is performed.

By turning knurling nut ② & ③ clockwise ↻, feed length decreases, and turning knurling nut ② & ③ counter-clockwise ↻, feed length increases.

Knurling nut ② & ③ should be tightened each other after desired stitch length was determined.



(Note)




When upward & downward moving of the feed regulating lever is loosened, feed adjusting screw ④ should be tightened.

5-7. How to adjust amount of advance-feed and reverse-feed

In order to make amount of advance-feed and reverse-feed equal, move Feed Length Stop Plate (A) up and down, and adjust by pressing Feed Length Stop Plate (A) to Feed Regulator Collar (B) of Reverse Lever.

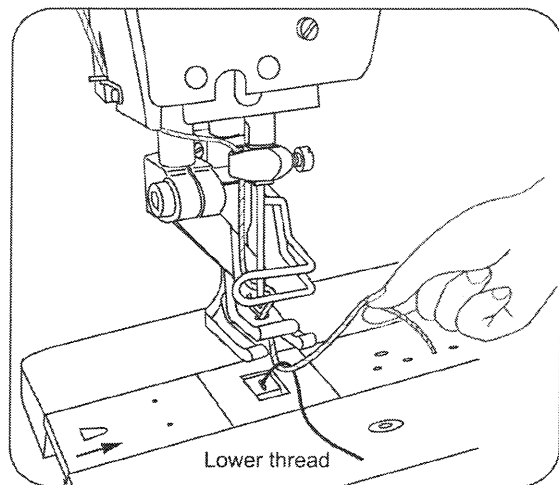
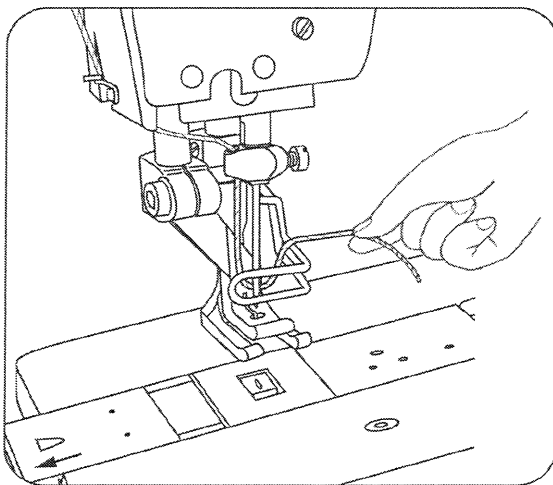
6. SEWING

CAUTION

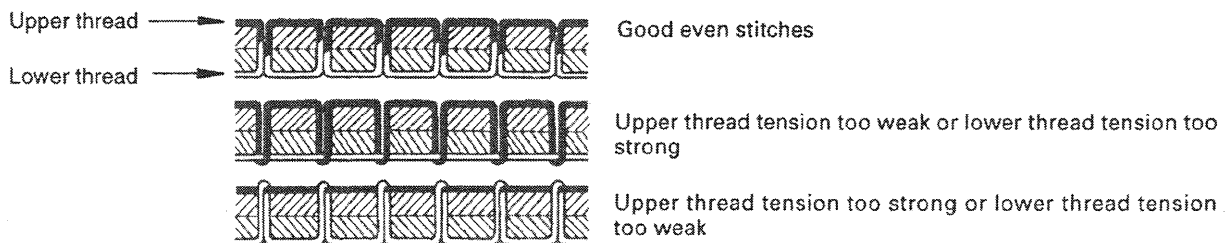
-  • Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.
-  • Turn off the power switch at the following times. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work. The machine may operate if the treadle is pressed by mistake, which could result in injury.
 - When threading the needle
 - When replacing the needle and bobbin
 - When not using the machine and when leaving the machine unattended
-  • Do not touch any of the moving parts or place any objects against the machine while sewing, as this may result personal injury or damage to the machine.

6-1. Sewing

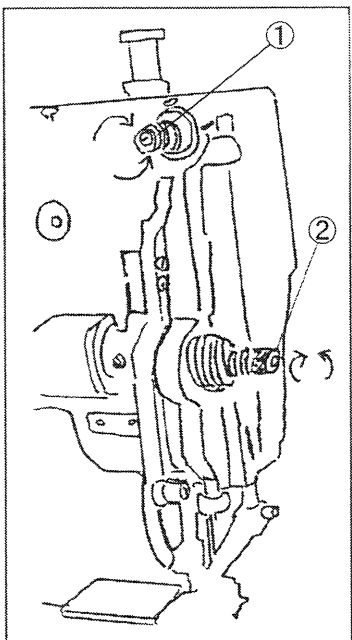
1. While holding the upper thread with your fingers, turn the machine pulley by hand toward you until the lower thread comes out onto the feed dog.
2. Pull the lower thread toward you and check that it pulls out smoothly.
3. Turn on the power switch.
4. Depress the treadle to start sewing.



6-2. Adjusting the thread tension



■ Upper thread tension



The tension of the upper thread is adjusted using the tension thumb nut ① · ②.

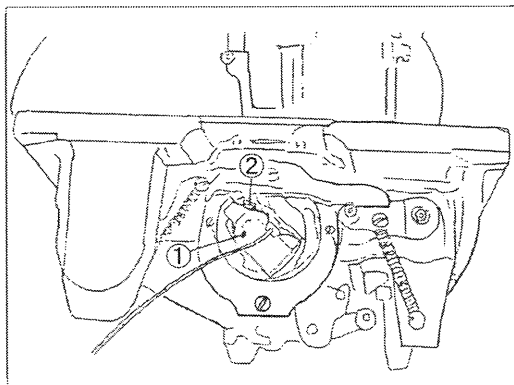
To increase the tension of the upper thread, turn the tension thumb nut ① · ② to the right. To decrease tension, turn the tension thumb nut ① · ② to the left.

⚠ CAUTION



- Turn off the power supply before adjusting the lower thread tension. The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work. The machine may operate if the treadle is pressed by mistake, which could result in injury.

■ Lower thread tension

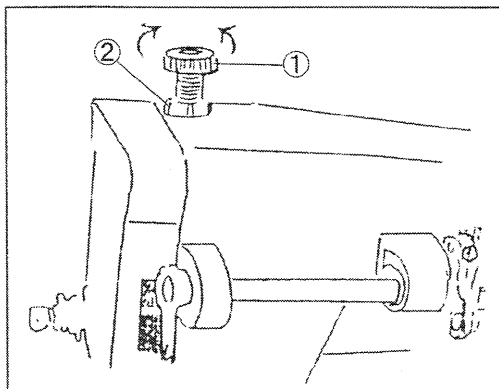


To adjust tension of the bobbin thread, turn Tension Regulating Screw.

By loosen set screw ① and adjusting tension regulating screw ②. The set screw ① should exactly be tightened after tension of the bobbin thread was adjusted.

By turning the set screw clockwise ↻, bobbin thread tension increases, and turning the set screw counter-clockwise ↻, bobbin thread tension decreases.

6-3. Adjusting the presser foot pressure



The presser foot pressure should be as weak as possible, but strong enough so that the material does not slip.

1. Loosen the nut ②.
2. Adjust by turning the thumb screw ①.

If the thumb screw ① is turned clockwise, the presser foot pressure will become stronger, and if it is turned counter-clockwise, the presser foot pressure will become weaker.

3. Tighten the nut ②.

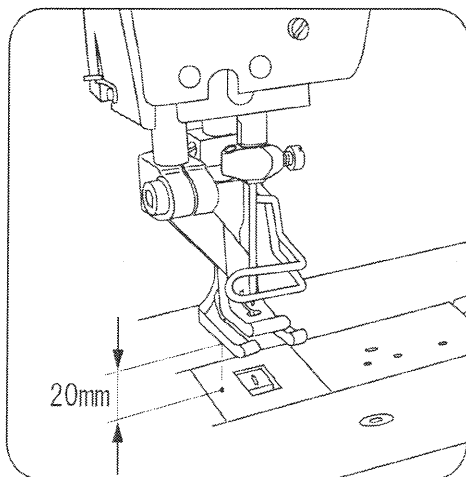
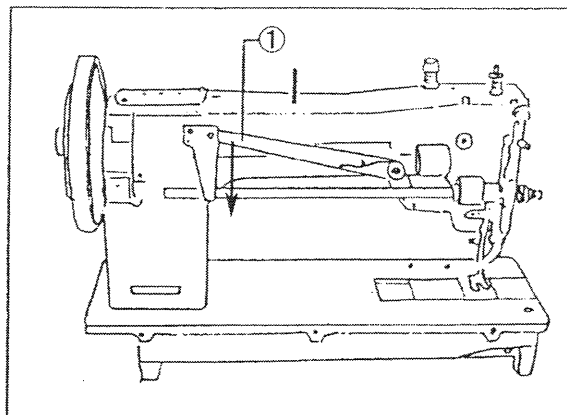
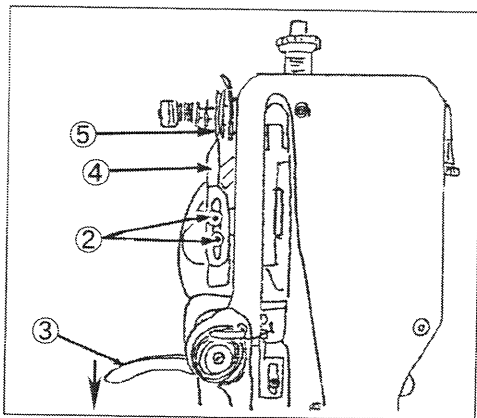
7. STANDARD ADJUSTMENTS

⚠ CAUTION

- ⊘ Maintenance and inspection of the sewing machine should only be carried out by qualified personnel.
- ! Ask your Consew dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.
- ! If any safety devices have been removed, be absolutely sure to re-install them to their original positions and check that they operate correctly before using the machine.
- ⚠ Turn off the power switch and disconnect the power cord from the wall outlet at the following times, otherwise the machine may operate if the treadle is pressed by mistake, which could result in injury. However, the motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.
 - When carrying out inspection, adjustment and maintenance
 - When replacing consumable parts such as the rotary hook
- ⚠ If the power switch needs to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.

7-1. Adjustment to loosen upper thread

1. Lower the presser bar lifter lever ③.
2. Open Tension disc ⑤ and adjust it to loosen upper thread when lowering Foot Lifting Lever ①.
3. Set height of Presser Foot at 20mm by lowering Foot Lifting Lever ①.
4. Loosen Screw ② 2 pieces.
5. Put the tip of Tension Release Lever ④ into Tension Disc ⑤, and make a space of about 5mm.
6. Tighten Screw ② to fix Tension Release Lever ④.



7-2. How to remove and install shuttle hook

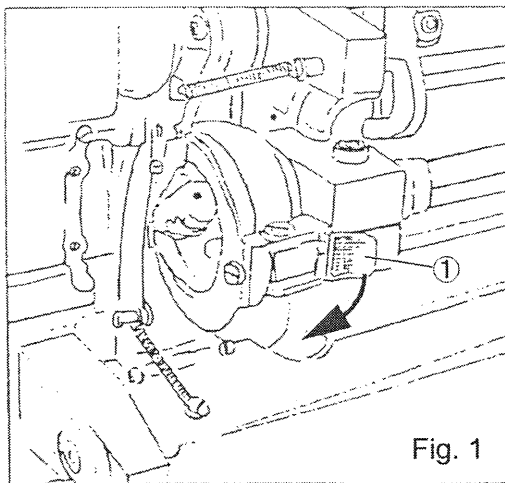


Fig. 1

1. Lower the opening/closing lever (1) in a direction of arrow, as per figure-1.
2. Pull the opening/closing lever (1) in the lower right direction, and lower the spring (2), as per figure-2.
3. Turn pulley, and raise a feed bar (3) position. Then, pull out hook ring (4).
4. Remove shuttle hook (5), as per figure-3.
5. Installation of shuttle hook must be done in reverse order of the above,

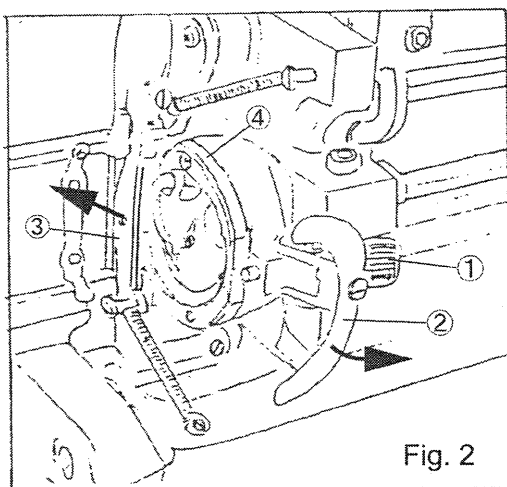


Fig. 2

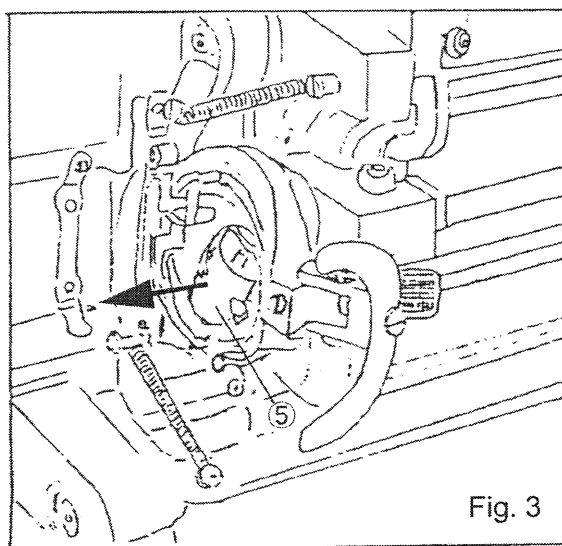


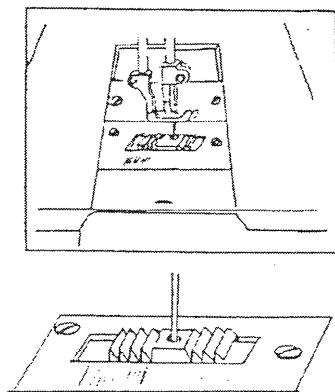
Fig. 3

7-3. Adjusting the feed dog movement amount

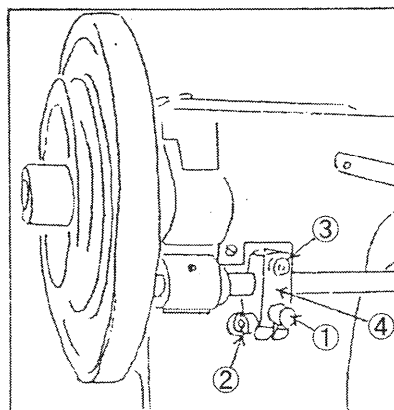
■ Positions of the needle and needle hole of the feed dog

Needle should be positioned at the center of needle hole of feed dog and moved together with the feed dog.

- (a) Loosen feed (upper) shaft connecting screw (2), upper feed length will differ by the moving (push-in or pull out) of feed (upper) shaft connector (1).
- (b) Loosen feed (upper) shaft connector screw (3), and needle set at the center of needle hole of feed dog, then tighten the screw (3).

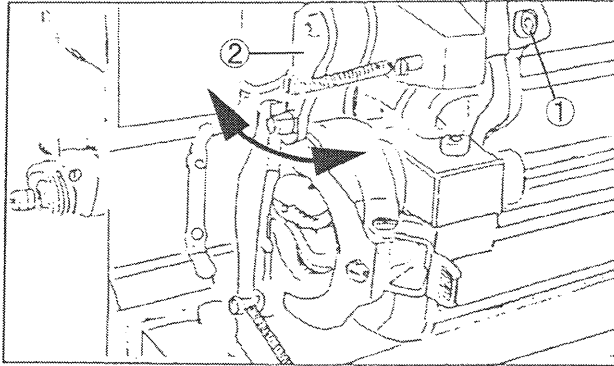


(Needle dropping point is to be set at the center of needle hole of the feed dog.)

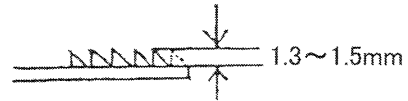


Feed (upper) shaft connector (4) is fixed and the screw (3) is tightened for the prevention of the moving of leftward and rightward.

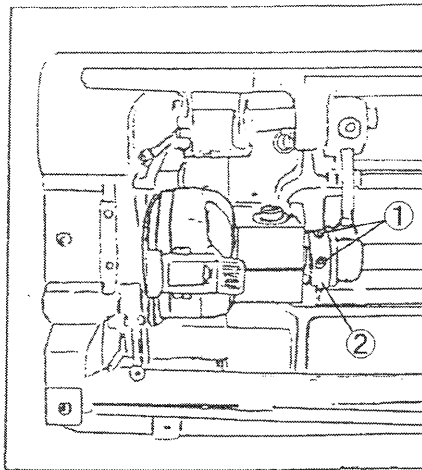
■ Adjusting the height of the feed dog



1. When the needle bar is at its lowest position.
2. Loosen screw ① on feed lifting shaft connection.
3. Move feed lifting shaft ② up and down, and make the height of feed dog 1.3mm to 1.5mm upper than need plate top surface.
4. Tighten screw ①.



■ Timing of feed lifting cam



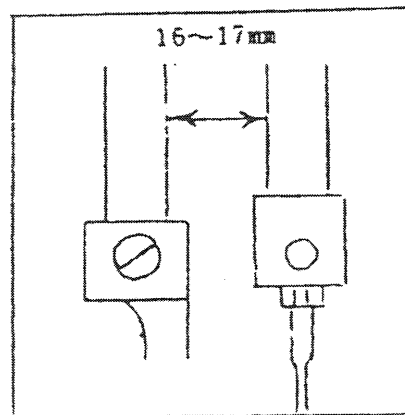
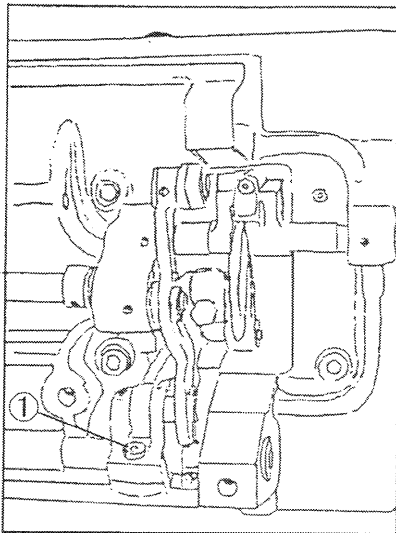
Feed dog must be matched with position of throat plate upper face when needle tip comes by turning pulley in forward direction onto throat plate upper face.

Adjust timing as follows.

1. Make feed length maximum.
2. Loosen screw ① 2 pieces.
3. Adjust feed lifting cam ②, and fix position.
4. Fix screw ① 2 pieces.

■ Adjusting the forward and backward position of needle bar

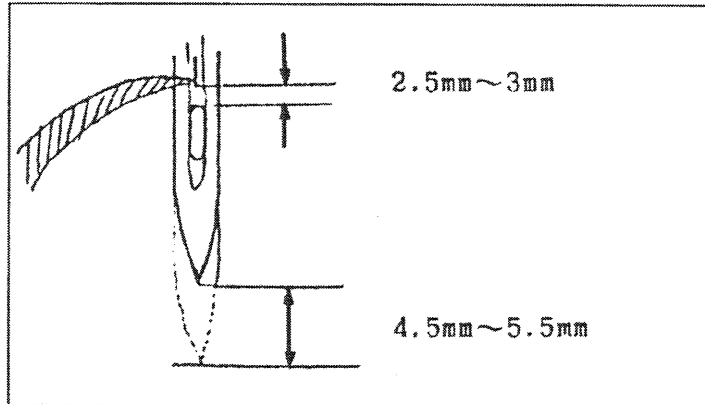
1. Stitch length being "0" mm.
2. Loosen the screws ①.
3. Determined by the distance between presser bar and needle bar 16~17mm.
4. Tighten the screws ①.



7-4. Adjusting the timing between the needle and the shuttle hook

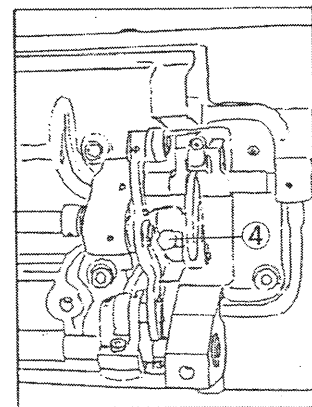
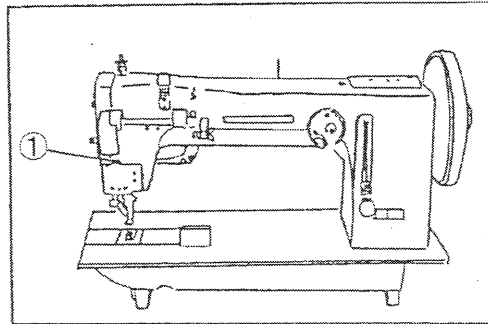
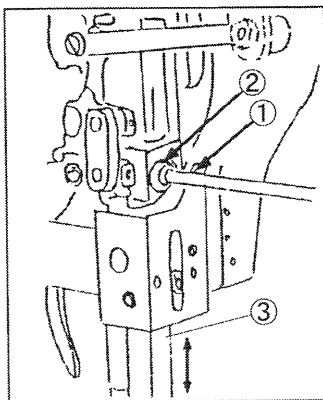
■ Positioning of needle and tip of the hook

1. Stitch length being "0" mm.
2. Turn the machine pulley toward you until the needle bar reaches its lowest point.
3. Continue turning and allow the needle bar to raise about 4.5mm-5.5mm while on its upward stroke.
4. At this time, and make hook tip contacting at needle center.



■ Adjusting the height of the needle bar

1. Stitch length being "0" mm.
2. Turn pulley toward you, and make hook tip contacting at needle center.
3. Loosen needle bar set screws ② by wren which inserts to the hole ① of arm move needle bar ③ up and down to bring an upper end of needle hole at approx 2.5mm-3.0mm lower than hook tip.



■ Adjusting the position of the tip shuttle hook

1. Loosen the screw ④ of the shaft crank by the spanner.
2. then determine the forwardness or backwardness of the tip of hook.
3. Tighten the screw ④ after adjustment.

■ Adjusting the clearance between needle and tip of hook

How to adjust a gap left and right between Needle and Shuttle Hook tip.

First, decide position of Needle Bar Rock Frame ①.

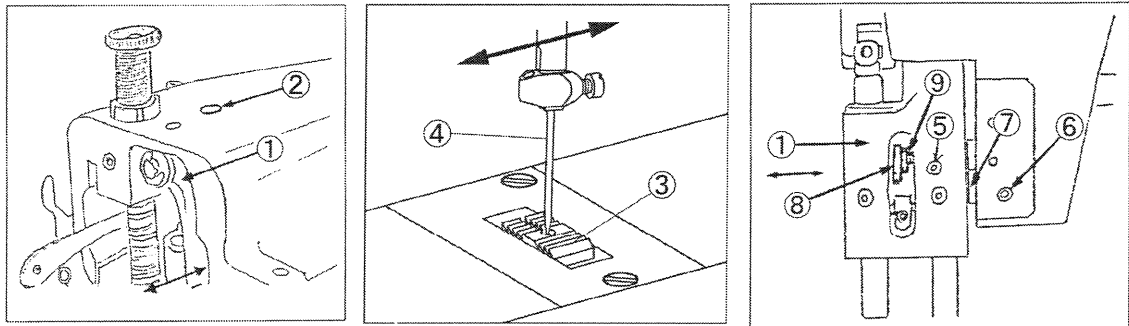
Second, adjust a gap by Hook Base.

[I] How to adjust Needle Bar Rock Frame

Determine a position as Needle enters in needle hole center of Feed Dog ③.

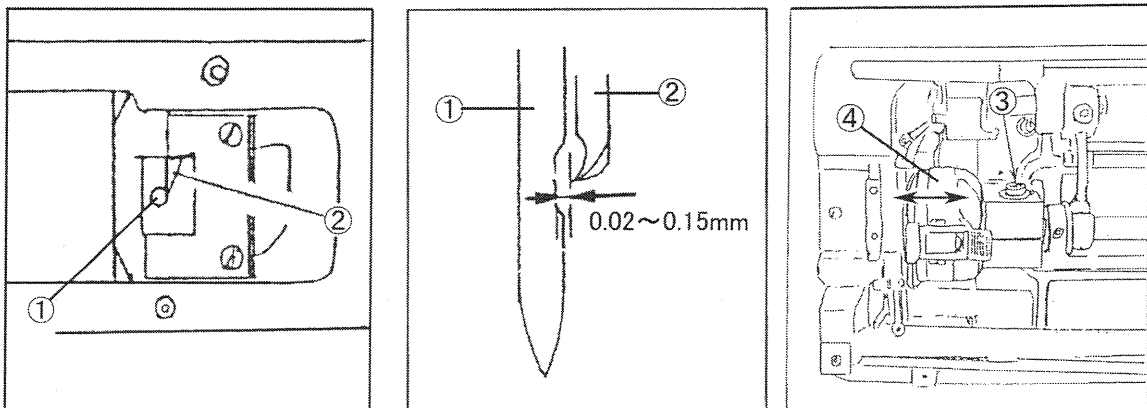
1. Loosen Set Screws ②, ⑤ and ⑥ of Needle Bar Rock Frame ①.
2. Move Needle Bar Rock Frame ① to left and right, and adjust a position as Needle ④ enters in needle hole center of Feed Dog ③. after letting all parts to move smoothly.
3. After determination of Needle Bar Rock Frame position, tighten Set Screw ②.
4. Fix Set Screw ⑥ under condition that Needle Bar Rock Frame Hinge Stud ⑦ slightly contacts with side face of Needle Bar Rock Frame ①.
5. Make Stud Pin ⑨ in slight contact with Needle Bar Rock Frame Support Plate ⑧, and fix Screw ⑤ setting Needle bar Rock Frame ① to move lightly without playing.

- If the looseness of the leftward & rightward of the needle bar should happen, it will be resulted in the breaking of needle, stitch skipping.

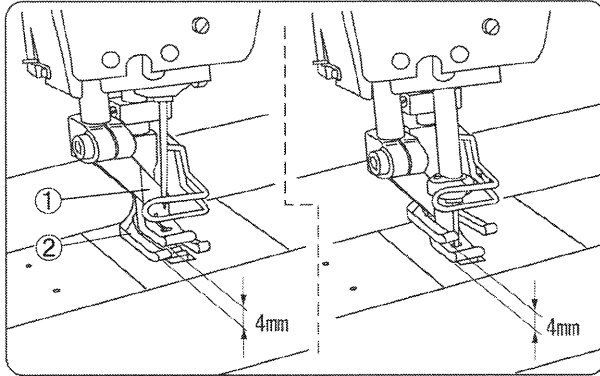


[II] How to adjust Hook Base

1. Match a position of Needle ① and Shuttle Hook ② tip by turning Pulley.
2. Loosen Screw ③ on Hook Base.
3. Move Hook body ④ left and right and make a gap between Needle ① and Shuttle Hook ② tip 0.02mm~0.15mm.
4. Fix Screw ③ on Hook Base.

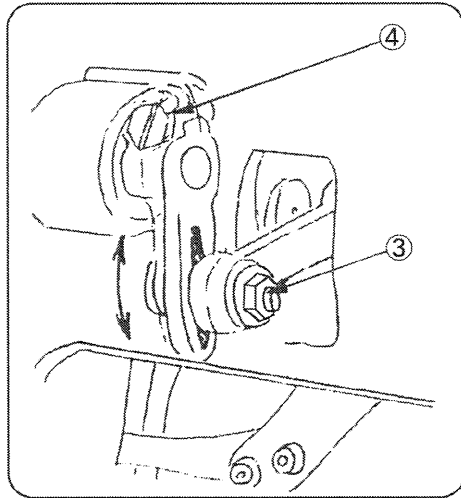


7-5. Adjusting the presser foot movement amount



- Vibrating presser foot ① and lifting presser foot ② move up and down alternately.
- Normally, vibrating presser foot ① and lifting presser foot ② operate to the same height in their vertical motions. (Standard height 4.0mm)
- The maximum height of vibrating presser foot ① and lifting presser foot ② is 8.0 mm.

If changing the movement amounts of both the lifting presser foot and vibrating presser foot simultaneously, use method (A); if increasing the movement amount for only one (thereby decreasing the movement of the other), use method (B).



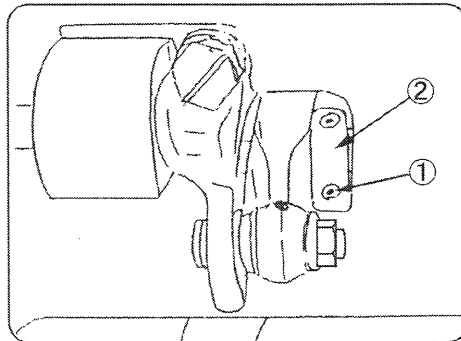
Method (A): Simultaneous adjustment of the movement amount for both the lifting presser foot and vibrating presser foot

1. Loosen nut ③.
2. Move nut ③ up or down as suitable to the work. (Raise the nut ③ for increasing motion; or lower it for decreasing motion.)
3. Tighten the nut ③.

Method (B): Adjustment of the movement amount for the vibrating presser foot

1. Remove the cover.
2. While holding the vibrating presser foot ①, loosen the bolt ④ and then move the presser foot ① up or down as necessary.
3. After positioning the vibrating presser foot ①, tighten the bolt ④.
4. Replace the cover

7-6. Adjusting the timing of the vibrating presser foot



Normal timing of Vibrating Presser Foot is as follows.

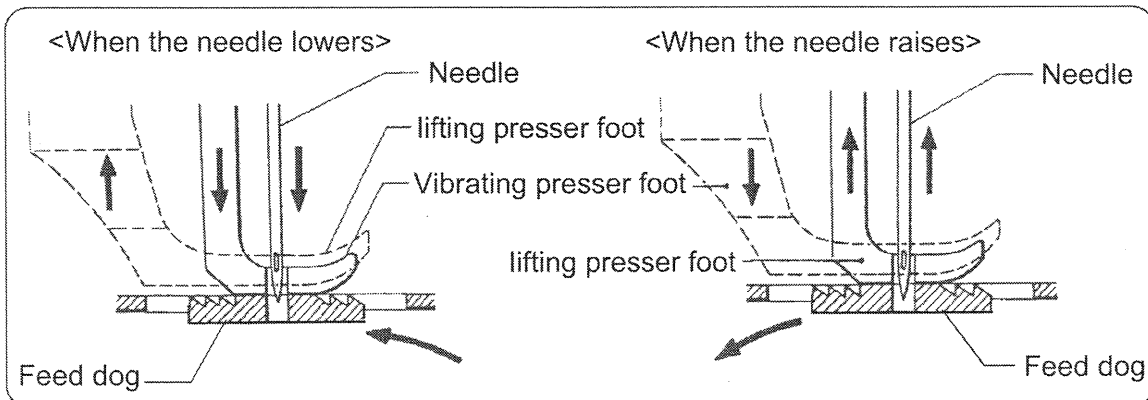
1. Lower Presser bar lifting lever. Then, turn Pulley toward you. At this time, Needle moves downward, and Vibrating presser foot reaches to Feed dog before Needle eye does.
2. When Needle moves upward by further turning Pully, Vibrating presser foot leaves from Feed dog after Needle eye comes out from Feed dog.

* Make sure that Vibrating presser foot is holding materials firmly while Needle is penetrating in materials.

It may cause skipped stitches and etc if Vibrating presser foot rises while Needle is still penetrating in materials.

■ To synchronize timing, adjust as follows

1. Loosen the two screws ①.
2. Synchronize timing of Vibrating presser foot by turning Cam ②.
3. Tighten the two screws ①.





web: www.consew.com