CONTENTS

1 - Installation

1.1 Table dimensions

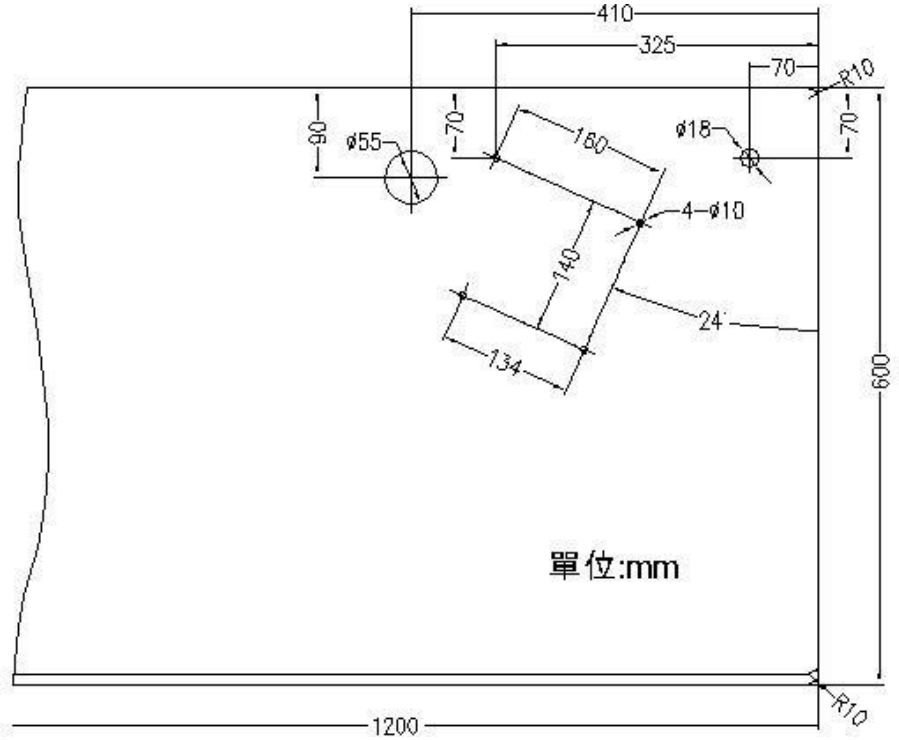
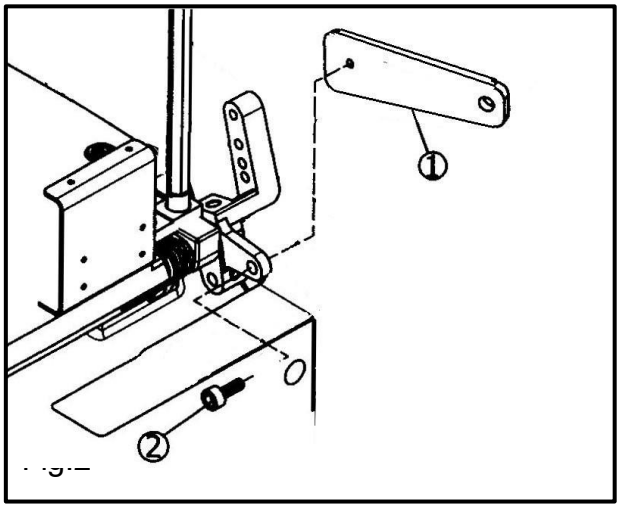


Fig.1

1.2 Adjusting presser foot lift

1.2.1 Presser foot connecting lever

Set the presser foot connecting lever ① with the screw ②.(Fig.2)



1.2.2 Presser foot lift

1. As standard, makethe clearance between the presser bar lifter lever ① and the presser bar connecting bracket ② to 1 mm when the presser foot touches the stitch plate closely.(Fig. 3,4)

Note: The clearance between the body of the presser foot and presser foot spring plate has 0.3mm

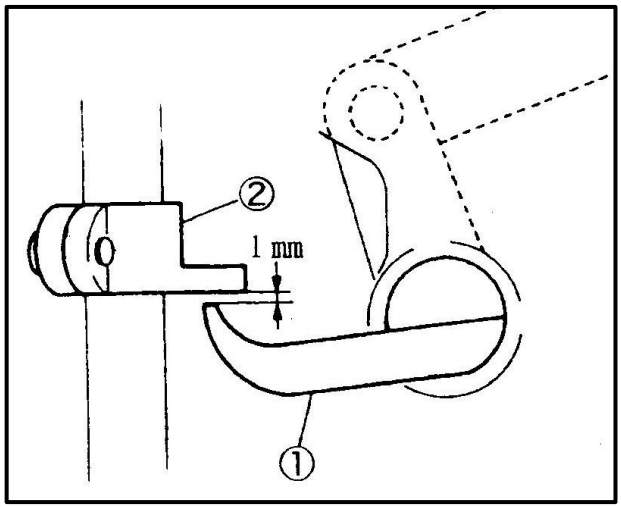


Fig.3

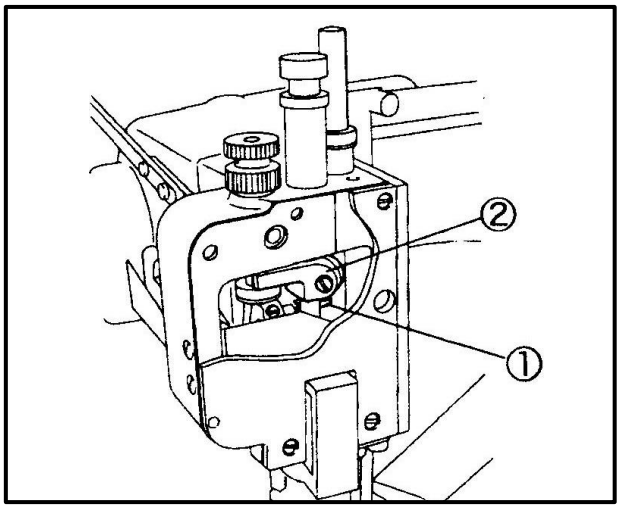


Fig.4

Adjusting :

(1) Remove the seal plugs ③ ④to check the clearance.(Fig. 5)

(2) Loosen the screw ⑤ of the presser foot lifter lever link (long). (Fig. 6)

(3) Move the presser foot lifter lever link (short) ⑥right or left to adjust the clearance.

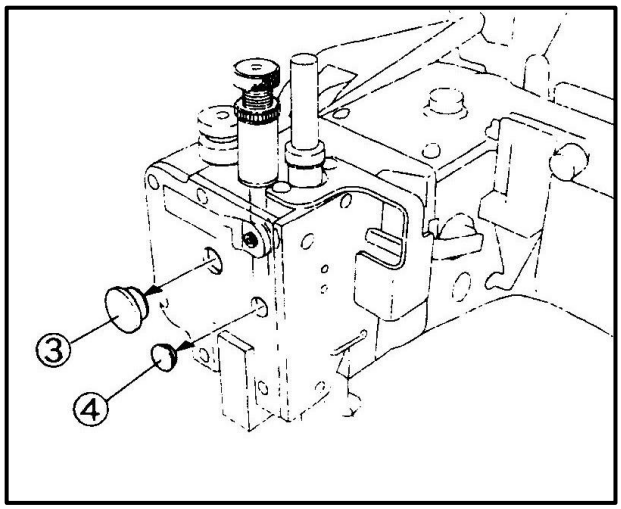


Fig.5

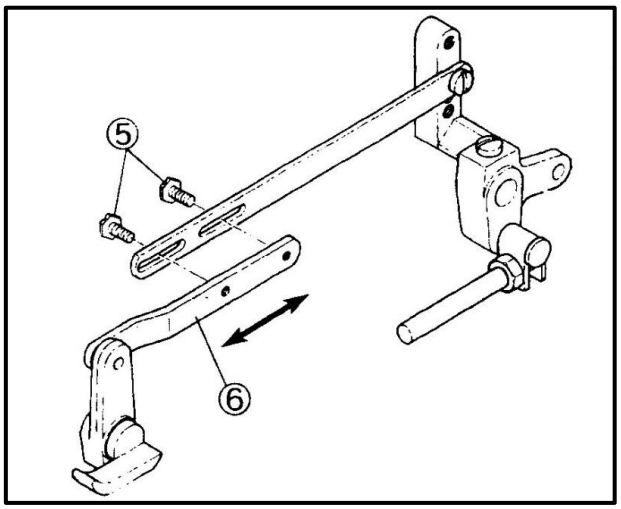


Fig.6

WARNING

After adjusting the clearance of the presser bar lifter lever ⑤ , adjust the presser foot lift at the lower point of the presser bar. If not adjusted, it can cause damage to the top cover thread hook.

1. As standard , make the clearance between the notch of the needle clamp ① and the top cover thread hook ② to 0.3mm when the needle bar is at the lowest point and the presser foot is raised by pressing the presser foot pedal fully. (Fig. 7)

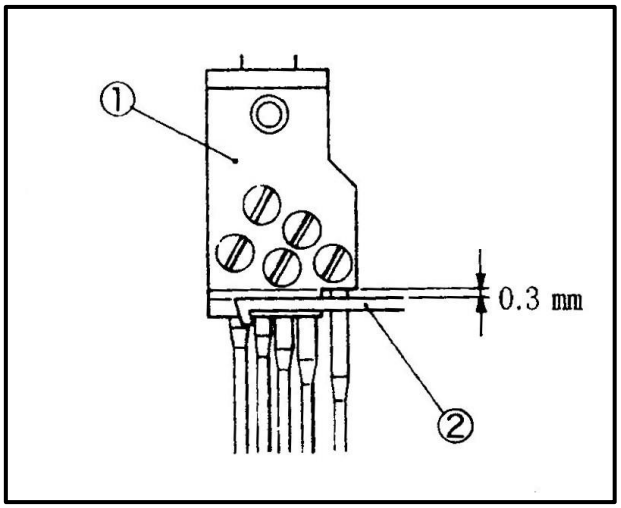


Fig.7

Adjusting :

1. Loosen the lock nut ③ . (Fig.8)
2. Move the presser foot lifter stop plunger plunger ④ in or out to adjust the clearance.

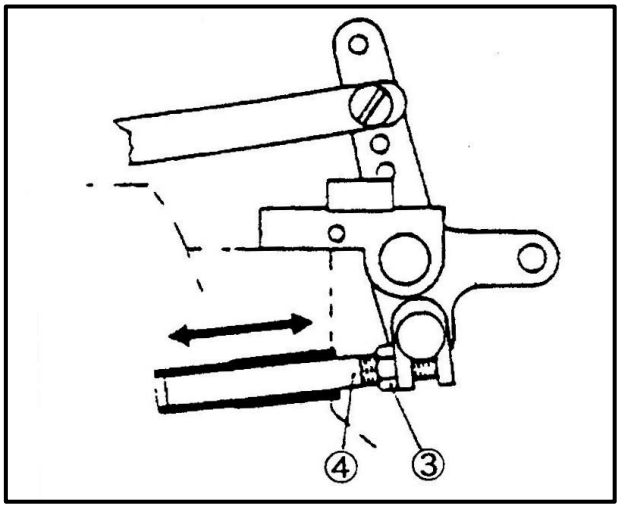


Fig.8

1.2.3 Tension release unit

As standard, make the clearance between the tension release pins ① and the tension release shaft ③ to 0.5mm when six tension release pins ① are pushed up slightly and the upper thread tension disc without pressing the presser foot pedal. (Fig.9)

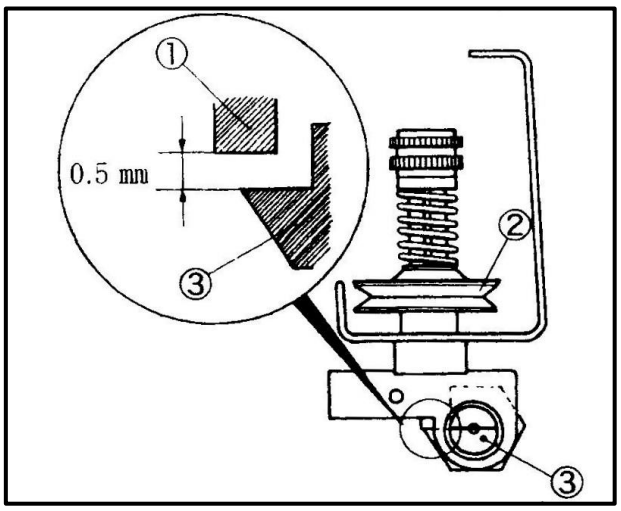


Fig.9

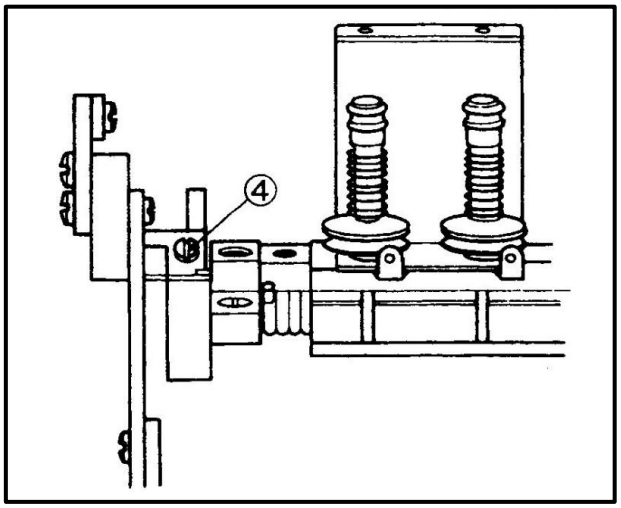


Fig.10

Adjusting:

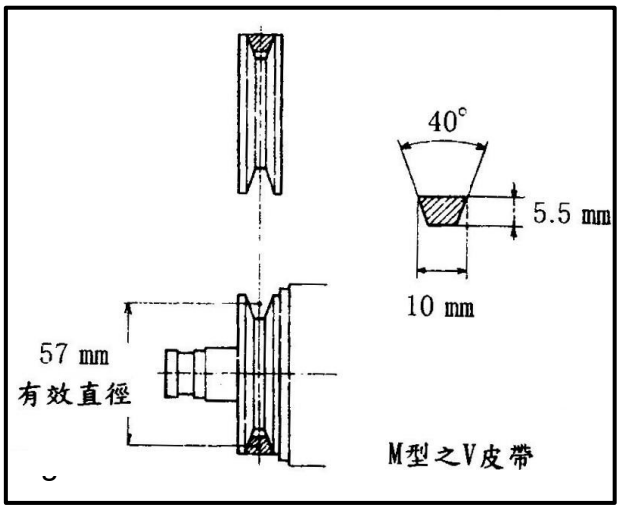
(1) Loosen the screw ④ of the presser bar lifter lever (large).(Fig. 10)

(2) Turn the tension release shaft ③ with a screwdriver.(Fig. 9)

- To decrease the clearance, turn it clockwise.
- To increase the clearance, turn it counterclockwise.

1.3 Motor and belt

To install the clutch motor, align the center of the machine pulley with that of the motor pulley when the motor pulley shifts to the left with toeing down the pedal.(Fig. 11)



Note: Table 1 shows the outside diameter of the motor pulley, rpm of the machine, and size of the belt when using the clutch motor of 3-phase, 2-pole, 400W(1/2HP).

The outside diameter on the table shows the nearest size to the calculated values based on the commercial pulleys at intervals of 5 mm.

Diâmetro externo da polia	Velocidade da máquina		Tamanho do cinto
	50Hz	60Hz	Motor de embreagem
45		2600	M21
50		2900	M21
55	2700	3200	M21
60	2900	3500	M21
65	3150	3800	M21
70	3400	4100	M21
75	3650		M22
80	3900		M22
85	7500		M22

表格一

CAUTION

Use only those motor pulleys applicable to the machine. If not, the sewing speed will be over maximum and it can cause the machine damage.

1.4 Other parts

Setting thread eyelets:

Stand the thread guide plate supports ③ on the thread tension support ⑦ and fix the thread guide plate ④ on the supports ③ with the screws ⑤. Adjust the thread pipes ⑥ to thread smoothly without entangling. (Fig. 12)

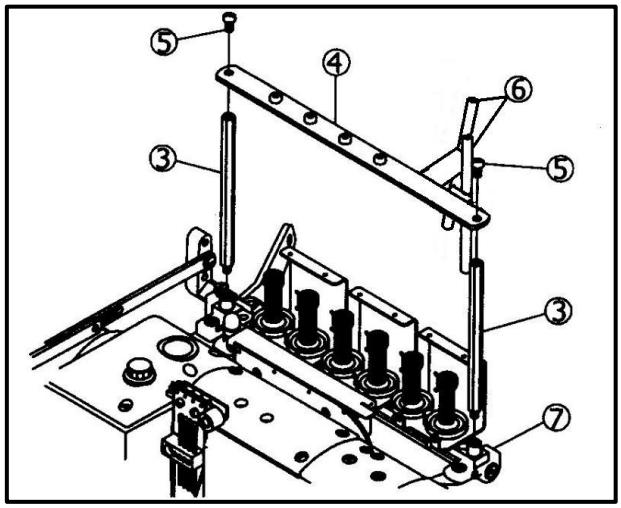


Fig.12

2 · Sewing speed and rotating direction of pulley

The sewing speed is 4200 rpm at the maximum and3800rpm is usual.
Run a new machine at a speed of 15-20% lower than maximum sewing speed during the first 200 hours(for about one month) so that the machine can offer
a long service life in good condition.

CAUTION

If rotaing in reverse direction, oil can not be supplied properly. It can cause the machine damage.

3・Lubrication

3.1 Lubricating oil

CAUTION

Never add additives to the oil.

If added, it can cause the deterioration of the oil and the machine damage.

3.2 Lubricating

(1) Remove the plug screws ①and ②indicated " OIL" and supply oil.

(2) From the plug screw ①,supply oil until the oil level indicator top reaches the upper line in the oil sight gauge ③.From the plug screw ②,supply oil to the upper line in the oil sight gauge ④.(Fig.14)

(3) Check the oil level between the lines in the oil sight gauge ③ and ④ before running a machine. If it is under the lines, supply oil.

(4) Check the oil splashes from the nozzle inside the oil sight top windows○5 and○6 when starting to run a machine.

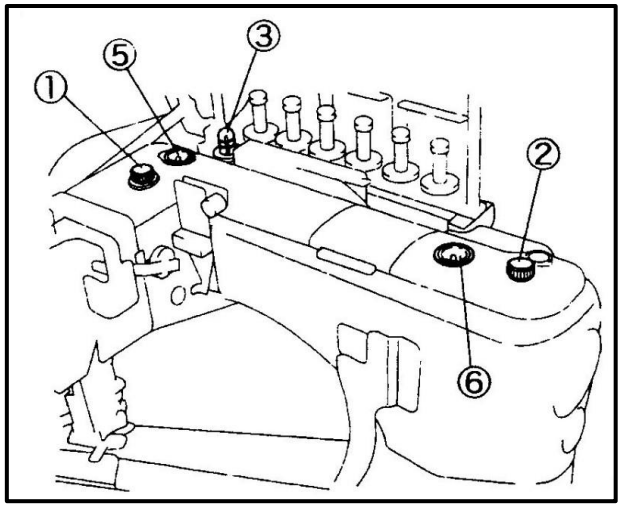


Fig.13

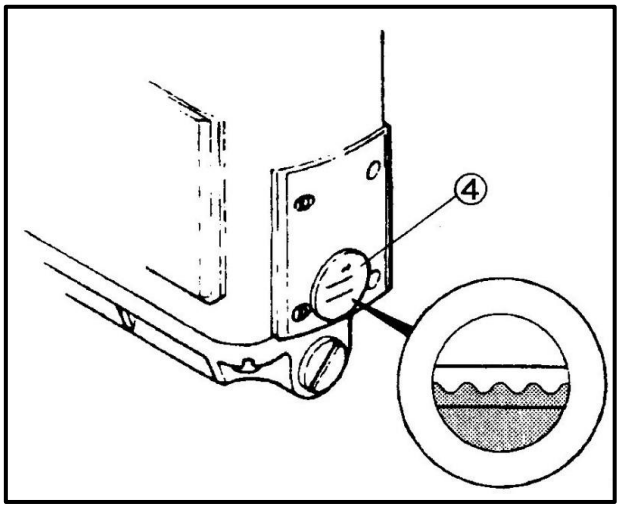


Fig.14

CAUTION

Too much oil or not enough oil can cause oil leakage and machine trouble. Be sure to keep the oil level between the lines.

3.3 Priming oil

Prime oil if oil does not circulate completely when installing a new machine or running a machine which has not been used for a while.

Remove the plug screws ① of the pump driven gear to prime oil. Run a machine after reseting them ①. (Fig.15)

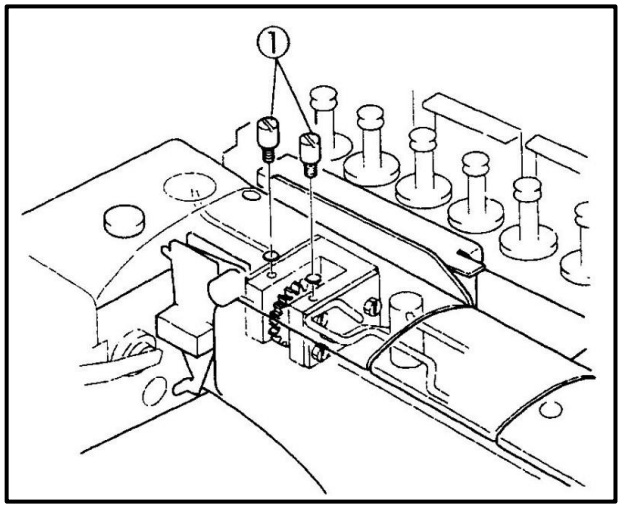


Fig.15

3.4 Replenishing oil

Replenish a drop of oil from the points indicated arrowswith an oiler (accessories) if needed.
If oil leaks around the presser foot and the upper knife, it can cause oil stain on the material. Be sure to wipe it completely. (Fig.16,17,18)

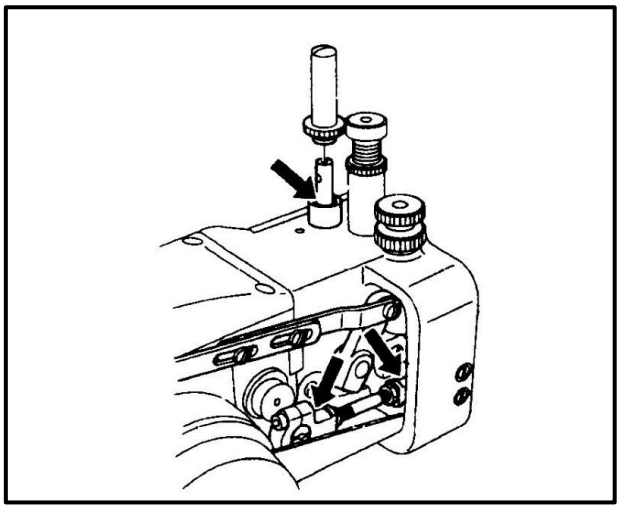


Fig.16

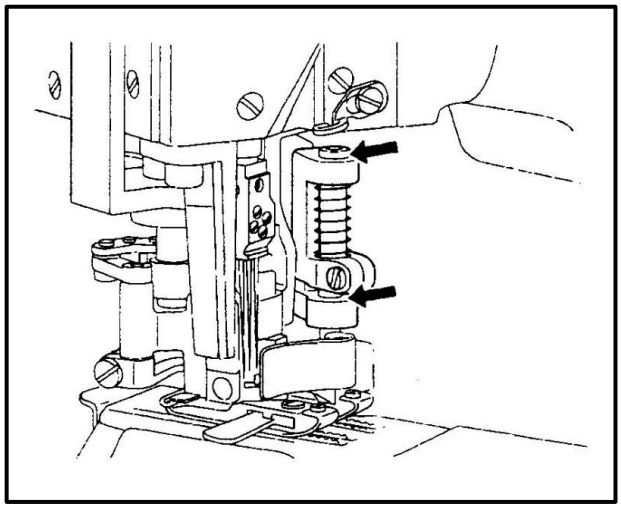


Fig.17

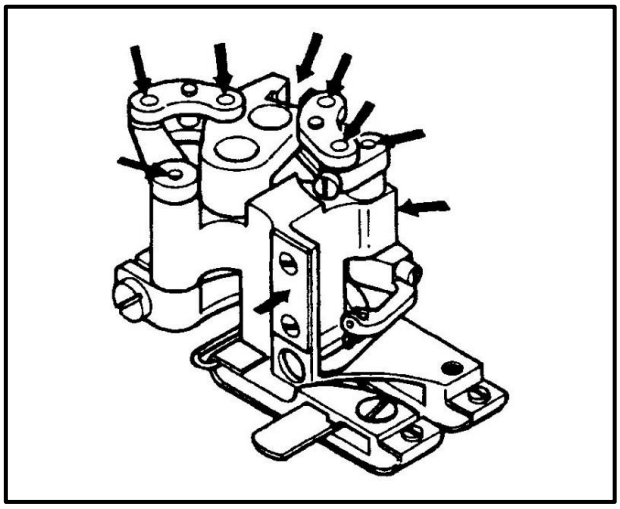


Fig.18

3.5 Changing oil

3.5.1 Period of changing:

When using a new machine, change the lubricating oil after running for 200 hours (for about one month). After that, change the oil once or twice a year.

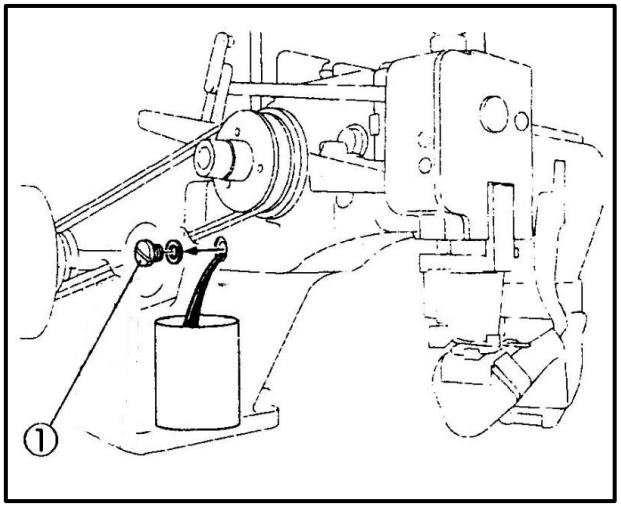


Fig.19

3.5.2 Procedrue for changing :

(1) Set containers received the oil under the screws ① and ② respectively.

(2) After removing screws ① and ② ,the oil is drained.

(3) Reset the screws ① and ②.

(4) Fill the new oil.

(5) Reset the belt cover.

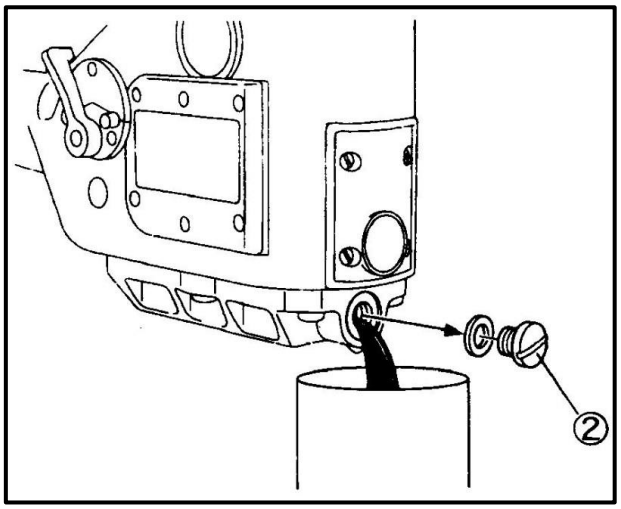


Fig.20

NOTE

Be careful not to soil the V-belt and the machine pulley with the oil.

4 - Proper operation

4.1 Needle system

4.1.1 Sewing needle:

(Groz-Beckert) UY118GKS

(Organ) FLX118GCS

Japanese standard	8	9	10	11	12	14
Metric Standard	60	65	70	75	80	90

4.1.2 Retainer needle:

One retainer needle is used with four sewing needles.

(Groz-Beckert) 36211 , 36211A

(Organ) FLG-1 , FLG-8

Japanese standard	8	9	10	11	12
Metric Standard	60	65	70	75	80

Note:

Select the proper sewing needle in size depending on thickness and type of material.

4.2 Installing needle

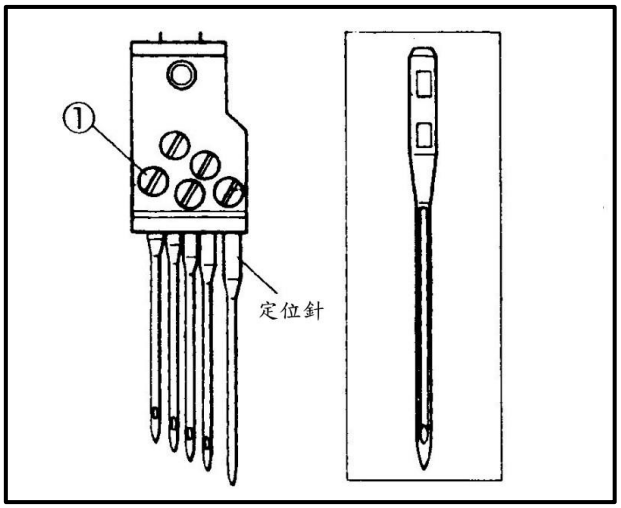


Fig.21

(1) Rotate the handwheel to raise the needles at the highest point.
(2) Loosen the screws ① and pull the needles down.
(3) Face the flat parts front, insert new needles into the needle clampas far as they will go. Tighten them with the screws ① securely.

WARNING

Before installing the needles, always turn the motor switch OFF and check that the motor has already stopped.

4.3 Threading

When threaded, pull the thread out until it is in front of the needles. Then cut off the knot before needle eye to rethread. When threaded, pull the thread out until the knot is out. Then cut off the knot.

A, B, C, D : Needle thread

E : Top cover thread

F : Lower looper thread

Note:

When raising presser foot, thread tension will be released to take up smoothly.

Improper threading can cause thread breakage, skip stitch, and uneven stitch.

WARNING

Before threading, always turn the motor switch OFF and check that the motor has already stopped.

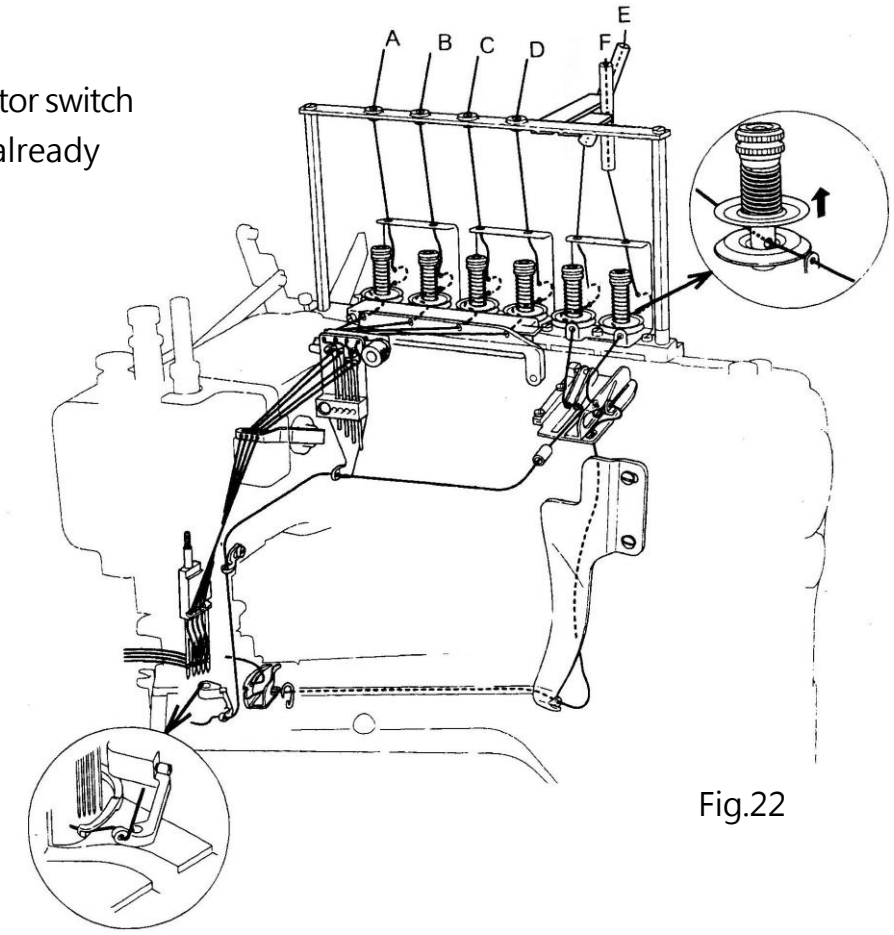


Fig.22

4.4 Thread tension

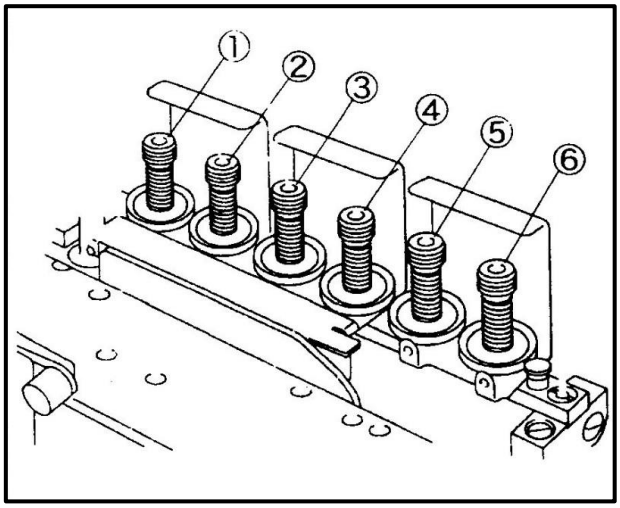


Fig.23

Adjust the thread tension with the tension adjusting nuts ①-⑥ depending on fabric type, thread type, seam width, stitch length, and other sewing conditions.

①-④: needle threads (①: right needle, ④: left needle)

⑤ : top cover thread

⑥ : looper thread

- To tighten the thread tension, turn the nuts clockwise.
- To loosen the thread tension, turn nuts counter-clockwise.

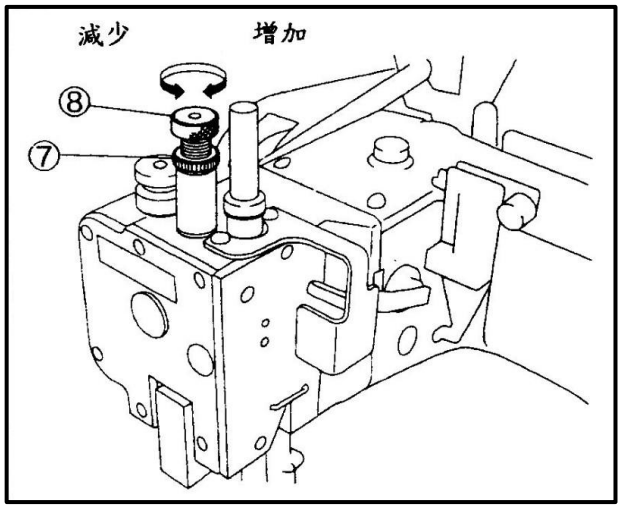


Fig.24

4.5 Pressure of presser foot

Loosen the lock nut ⑦ and turn the adjusting screw ⑧ to adjust the pressure.

- To increase the pressure, turn the adjusting screw ⑧ clockwise.
- To decrease the pressure, turn the adjusting screw ⑧ counterclockwise.

Note:

Keep the pressure as low as possible for stable stitches.

4.6 Up-and-down poition of presser foot

Following effective points will be obtained by slightly raising the presser foot.

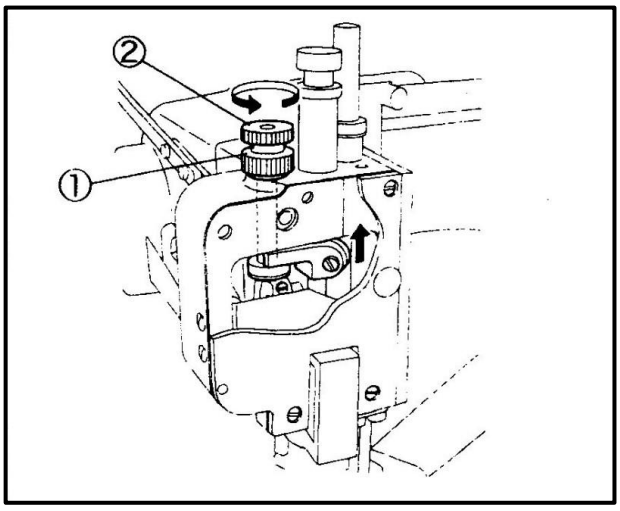


Fig.25

- Prevention of fabric jam
- Prevention of feed scratch mark
- Improvement of durability of presser foot spring plate
- Reduction of vibration and noise
- Available for fine adjustment of lapped fabric width

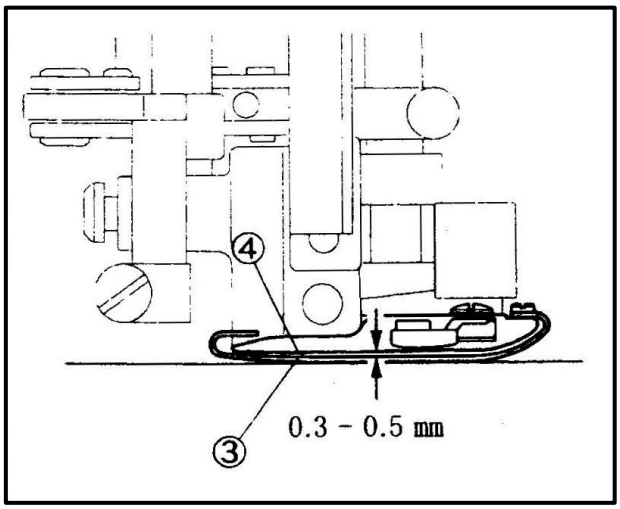


Fig.26

(1) Position the needle at the lowest point.
(2) Loosen the lock nut ① and run the adjusting nut ② counterclockwise to raise the resser foot
(3) Adjust the clearance between the botton ④ of the presser foot and the presser foot spring plate ③ to 0.3-0.5 mm
(4) Tighten the lock nut ① securely.

4.7 Adjusting differential feed dog

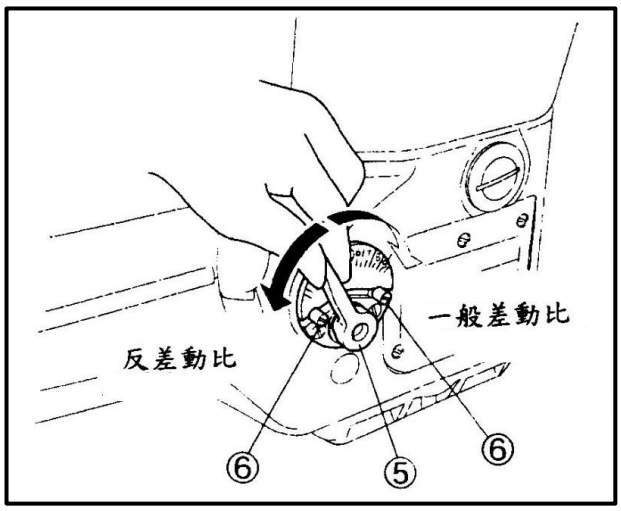


Fig.27

(1) Move the differential feed operating lever ⑤ right or left to adjust differential feed dog.
The lever ⑤ between the graduations" 4" and "5" makes the equal movement of the main and the differential feed dogs.

(2) The screw ⑥ is for fixing the lever ⑤ and keeping the differential movement adjusted.

- To make normal differential, move the lever ⑤ to "9".
- To make reverse differential, move the lever ⑤ to "1"

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

4.8 Adjusting stitch length

Stitch length ranges 1.6-2.5 ㎜ as standard and can be adjustable infinitely.

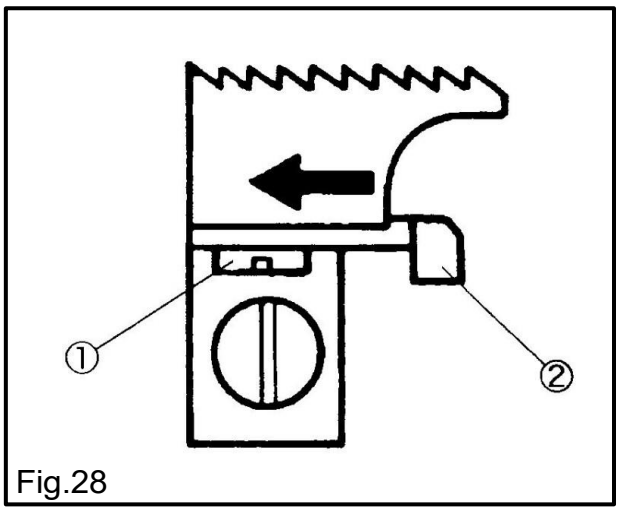


Fig.28

Adjusting :

(1) Loosen the screw ① and move the needle guard (rear) ② most rearward. Then tighten it slightly.
* This is skipped when decreased the stitch length.

(2) Remove the plug screw ③ .

(3) Lossen the screw ④ to adjust the stitch length.

(4) Tighten the screw ④ securely and reset the plug screw ① .

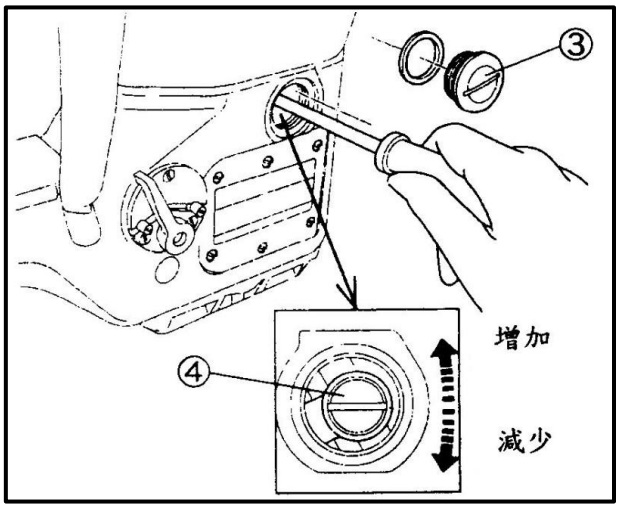


Fig.29

- To increase stitch length, move the screw ④ upward.
- To decrease stitch length, move the screw ④ downward.

CAUTION

Tighten the plug screw ③ securely to prevent oil leakage.

Table 4 shows the number of stitches per inch (25.4 ㎜) and 30 ㎜ converted stitch length.

針距(mm)	1 英吋針數	30mm 針數
2.5	10	12
2.1	12	14
1.8	14	16.5
1.6	16	19
1.2	21	25
1	25	30

CAUTION

Be sure to adjust needle guard(rear) after changing stitch length to prevent breakage of the parts.

Advice adjustment

Always adjust stitch length after changing differential feed dog.

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

4.9 Adjusting lapped width of upper fabric

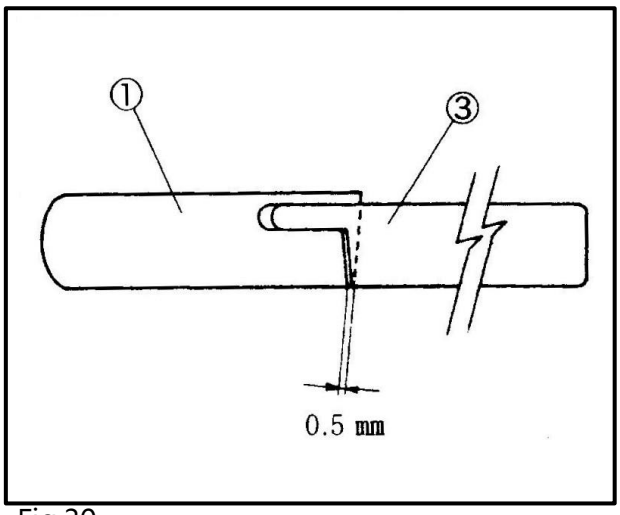


Fig.30

(1) For the standard position of the lower knife ①, make the distance between the lower knife ① tip and the lower knife clamp ② to 0-0.5 mm。

(2) For the standard position of the upper knife ③, engage between the upper knife ③ and lower knife ① to 0.5 mm when the upper knife ③ is at the extreme left.

(3) Loosen the screws ④ and ⑤ to adjust the lower and upper knives respectrively.(Fig.31 , 32)

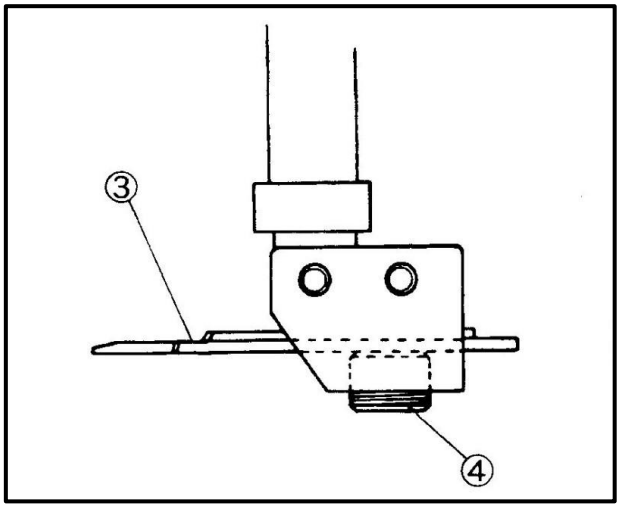


Fig.31

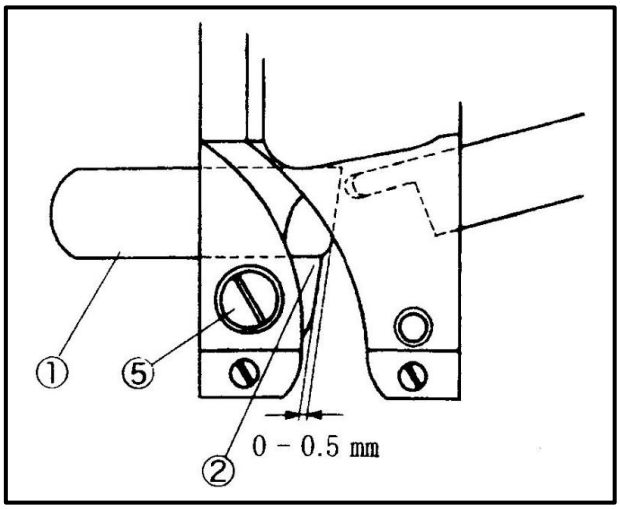


Fig.32

4.10 SP device

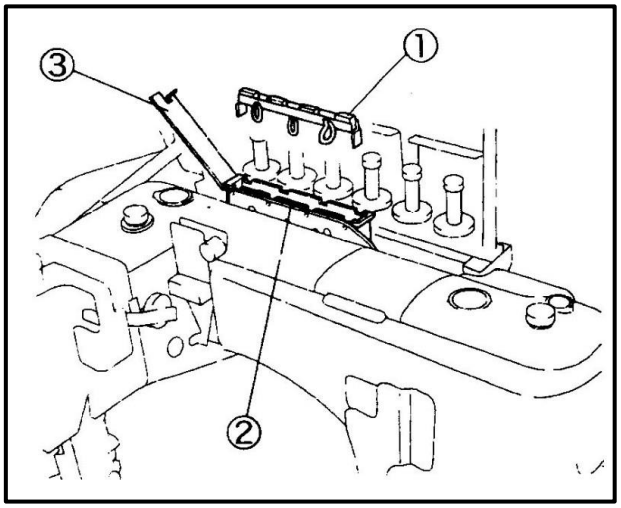


Fig.33

SP device (needle thread oiling) is equipped as standard to prevent thread breakage and skip stitch when running a machine at high speed or using synthetic thread and/or synthetic fabric.

Fix the felts ① included accessories into the SP tank ② when using.

CAUTION

1. When not using SP device, remove the felts ①. If not, it may occur irregular condition during sewing.
2. If the silicone oil sticked to the parts other than SP device, it can cause the machine damage. Be sure to wipe it away.

Use dimethy 1 silicone oil

Open the oil cup lid ③ and check the oil amount.If not enough, supply oil into the SP tank ② .

4.11 Use of lap former

4.11.1 Standard left-and-right position

Align the point A of the lap former ① with the center of four needles.

Depending on lapped edges of the fabrics or fabric feeding, loosen the screws ④ and adjust the position.

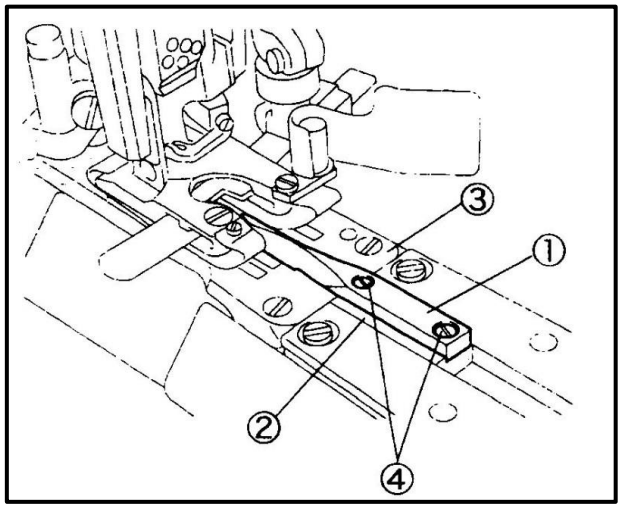


Fig.34

4.11.2 Standard front-and-rear position

Set the position where the lap former slide block ② touches and stops in the front of the stitch plate ③ .

Depending on fabric thickness, adjust the position slightly toward the operator.

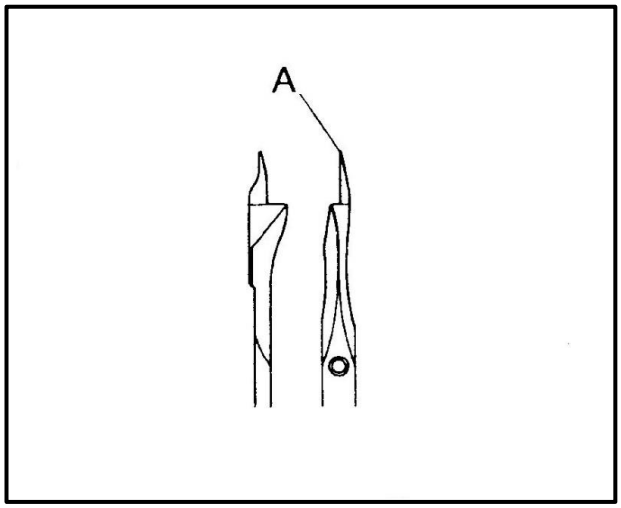


Fig.35

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

5.1 Needle thread tension

5.1.1 Needle thread strike-off pin

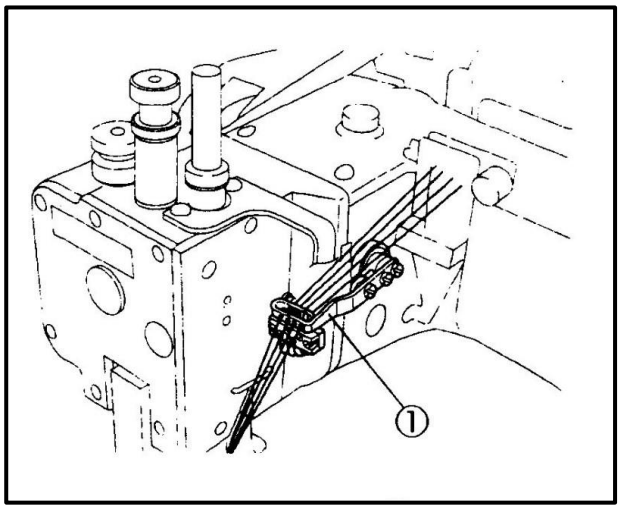


Fig.36

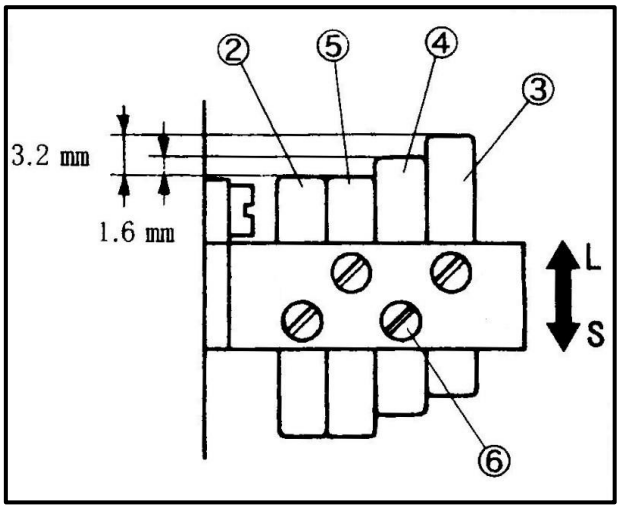


Fig.37

Each of four needles has the needle thread strike-off pin which adjusts the thread tension respectively.

(1) Position the needle thread take-up ① at the lowest point. (Fig.36)

(2) Set the top of pin ② even with the needle thread as the fourth right needle. (Fig.37)

(3) Set the pin ③ 3.2 mm higher than the pin ② .

(4) Set the pin ④ 1.6 mm higher than the pin ② .

(5) Set the pin ⑤ even with or 0.8 mm higher tan the pin ② .

(6) Tighten the screws ⑥ securely.

Note: Check the tops of the pins are horizontally.

- To make the loop larger, move the pins in the direction "L".
- To make the loop smaller, move the pins in the direction "S".

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

5.1.2 Needle thread eyelet

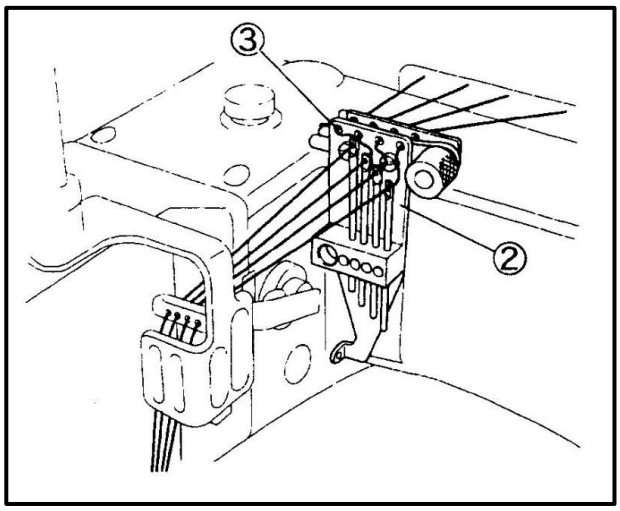


Fig.38

(1) Make the height of the right needle thread eyelets ① to align their eyes with the eyes ③ of the needle thread eyelet holder.

(2) Set the eyelet ④ 5 mm lower than the eyelet ①.

(3) Set the eyelet ⑤ 9 mm lower than the eyelet ①.

(4) Set the eyelet ⑥ 15 mm lower than the eyelet ①.

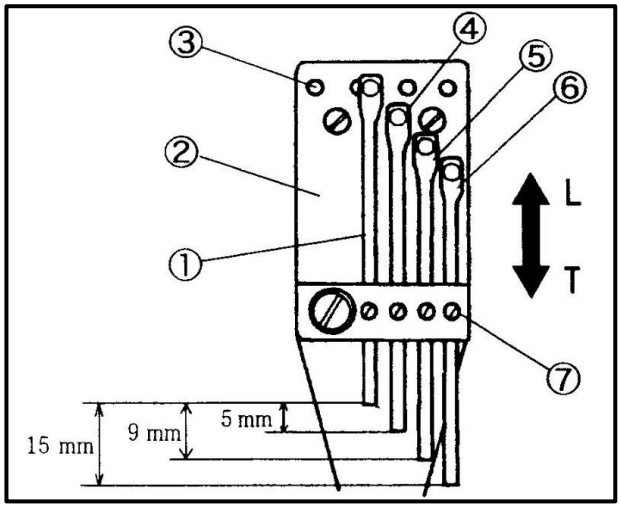


Fig.39

- To tighten needle thread, move the eyelets in the direction "T".
- To loosen needle thread, move the eyelets in the direction "L".

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

5.2 Looper thread tension

Align the right of the looper thread take-up guide ① with that of the eyelet supporting plate ②.

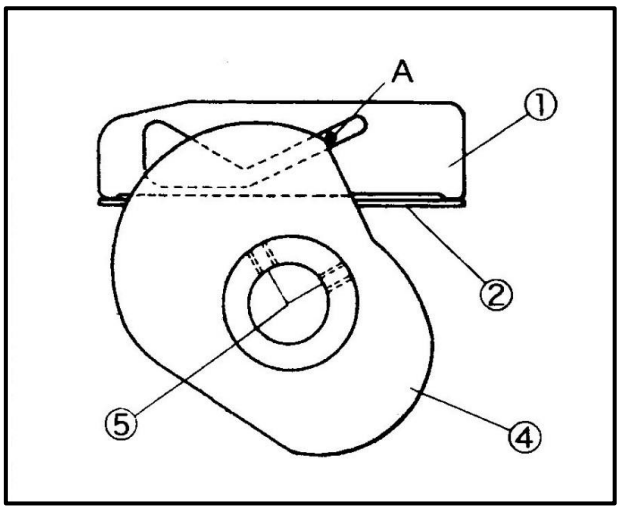


Fig.40

5.2.1 Timing of looper thread take-up

Position the looper thread take-up ④ as standard so that looper thread passes at the point A when the needle bar ③ is lowered 2.8 mm from the highest point. Lossen the screws ⑤ to adjust it.

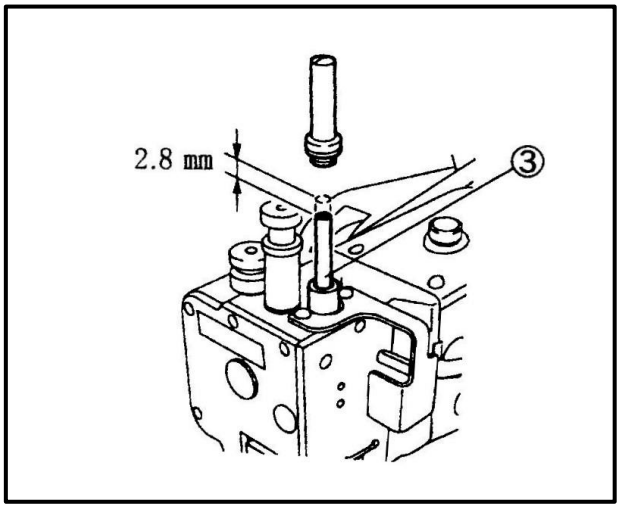


Fig.41

- To increase the looper thread take-up amount, hasten the timing.
- To decrease the looper thread take-up amount, delay the timing.

Note : When adjusting take-up ④, face both bosses of the take-up ④ and the top cover thread take-up without shifting the front-and-rear position.

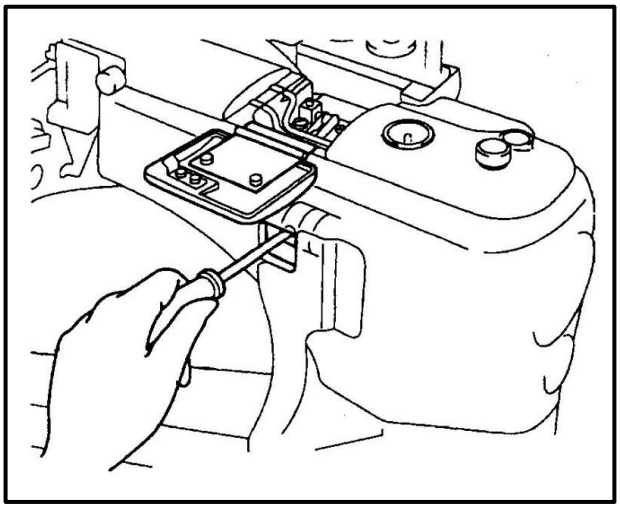


Fig.42

CAUTION

If the timing of the looper thread take-up exceeds the adjustable range, it may occur skip stitch.

5.2.2 Position of looper thread take-up eyelet

Set the looper thread take-up eyelets ⑥ and ⑦ at the extreme right as standard.
Loosen the screws ⑧ and ⑨ , and move them right or left to adjust ti.

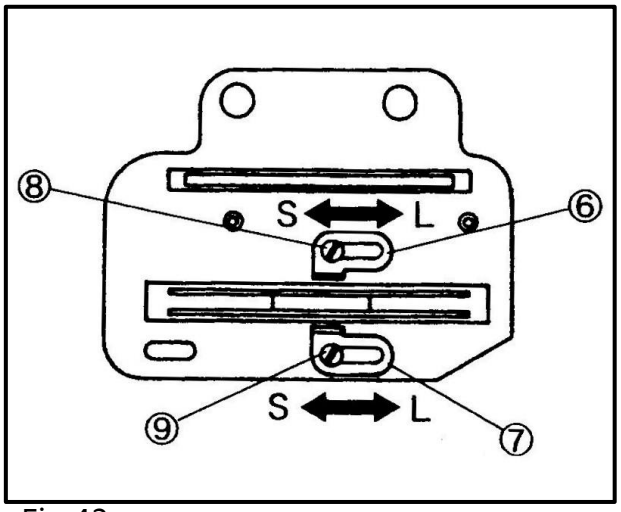


Fig.43

- To increase the looper thread take-up amount, move them in the direction "L".
- To decrease the looper thread take-up amount, move them in the direction "S".

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

5.3 Top cover thread tension

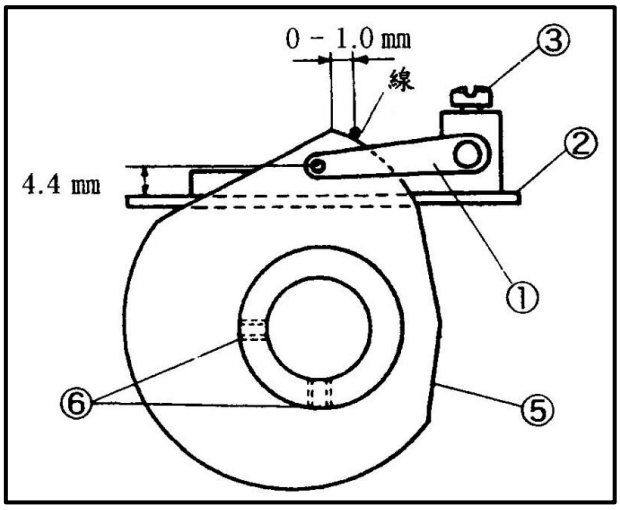


Fig.44

5.3.1 Position of thread take-up eyelet

Make the standard distance from the top the eyelet supporting plate ② to the thread take-up eyelet ① eye to 4.4 mm.
Loosen the screw ③ and move the eyelet ① up or down to adjust it.

- To increase the top cover thread take-up amount, move the eyelet ① downward.
- To decrease the top cover thread take-up amount, move the eyelet ① upward.

5.3.2 Timing of top cover thread take-up

The moment the top cover thread is hooked with the top cover thread hook ④(Fig. 45), the thread is held at the point 0-1.0 mm apart from the top of the take-up ⑤. Loosen the screws ⑥ to adjust it. (Fig.44)

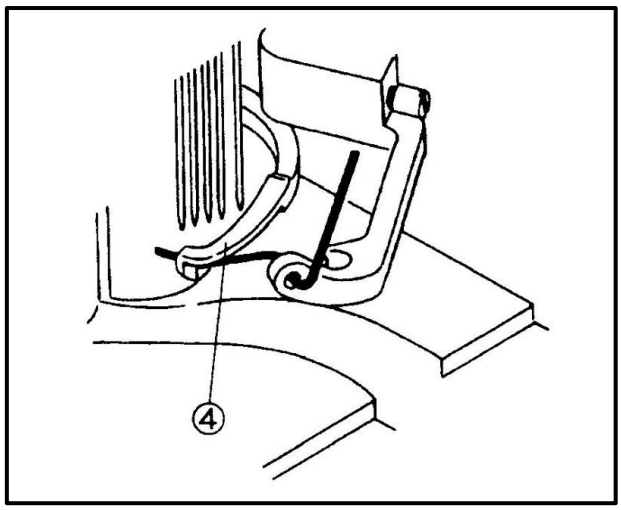


Fig.45

Note : When adjusting take-up ⑤, face both bosses of the take-up ⑤ and the looper thread take-up without shifting the front-and-rear position.

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

5.4 Height of needle

Make height "N" of the needle from the top of the stitch plate to the tip of the fourth needle from the left when the needle is at the highest point.

Needle distance	Height(N)
R : 5.2mm	13.5mm
S : 6.0mm	12.7mm

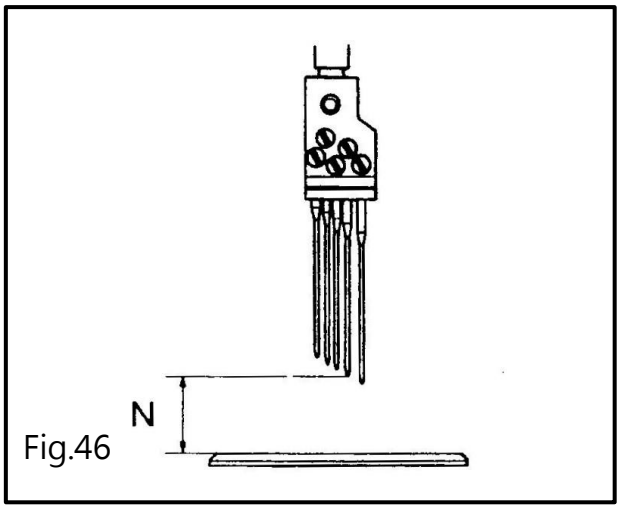


Fig.46

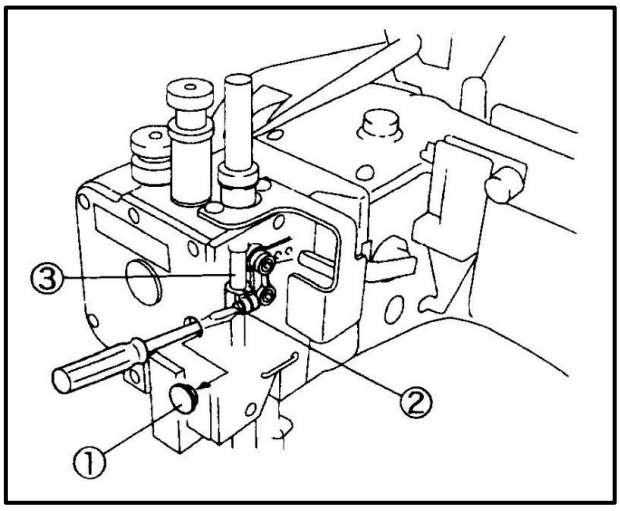


Fig.47

Adjusting height :

(1) Remove the seal plug ① .(Fig.47)
(2) Loosen the screw ② .
(3) Move the needle bar ③ up or down to adjust the height. Check the alignment in Fig. 48.
(4) Tighten the screw ② scecruely.
(5) Reset the seal plug ① .

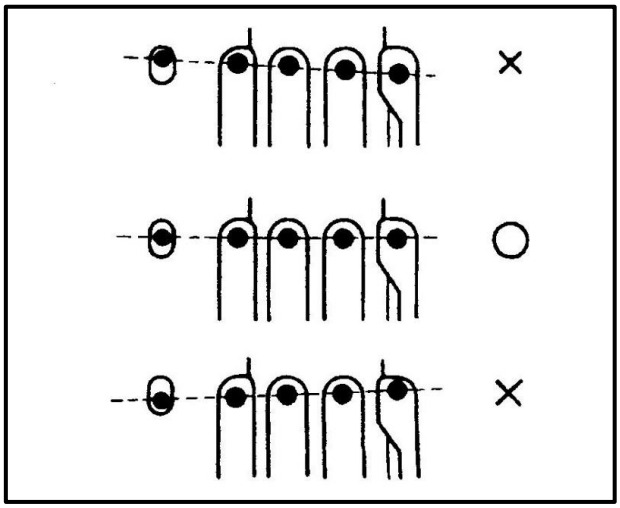


Fig.48

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

5.5 Top cover thread carrier and hook

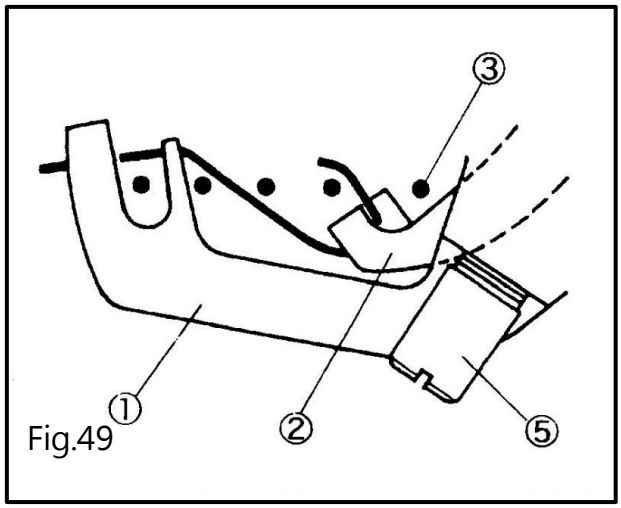


Fig.49

Top cover thread carrier :
Position the top cover thread carrier ① so that top cover thread loop formed with the hook behind the first and the second needles from the left when the carrier ① comes most nearly to the needle.
Loosen the screw ⑤ to adjust it.

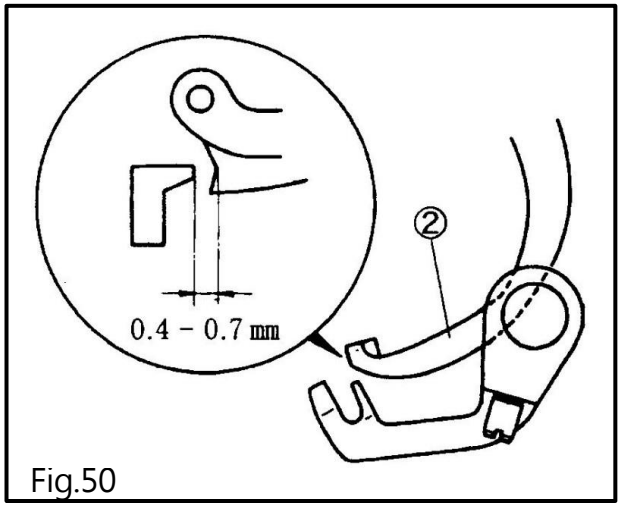


Fig.50

Top cover thread hook :
When the top cover thread hook ② comes most nearly to the top cover thread carrier ③, make the clearance between them to 0.4-0.7 mm during one rotation. (Fig.50)
When the hook ② moves at the etreme right,make the clearance between the hook ② and the retainer ③ to 0.5 mm. (Fig.52)
Loosen the screw ⑥ to adjust them. (Fig.51)

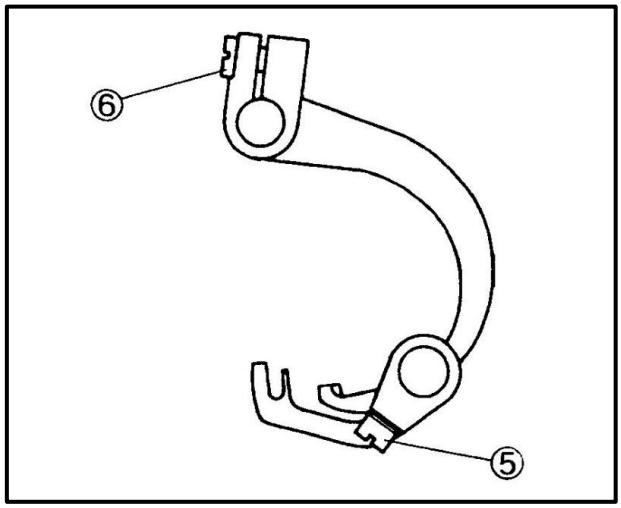


Fig.51

Note : Be sure adjust them without play up and down.

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

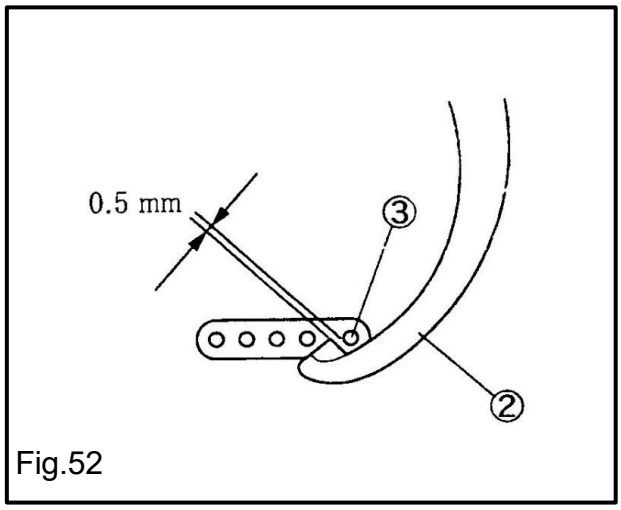


Fig.52

5.6 Looper

Height :

Insert the looper ① into the hole of the looper holder ⑥ and tighten the screw ② securely.

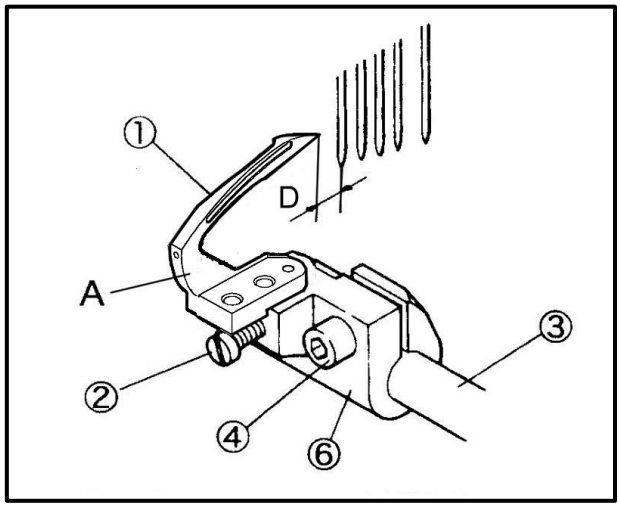


Fig.53

Angle :

Fix the surface A of the looper at 90° to the looper rocker shaft. Loosen the screw ② to adjust it.

Distance between looper and needle :

Make standard distance between the looper tip and the center of the left needle to 4.2-4.8 mm when the looper ① is at the extreme left.

Loosen the screw ④ to adjust it.

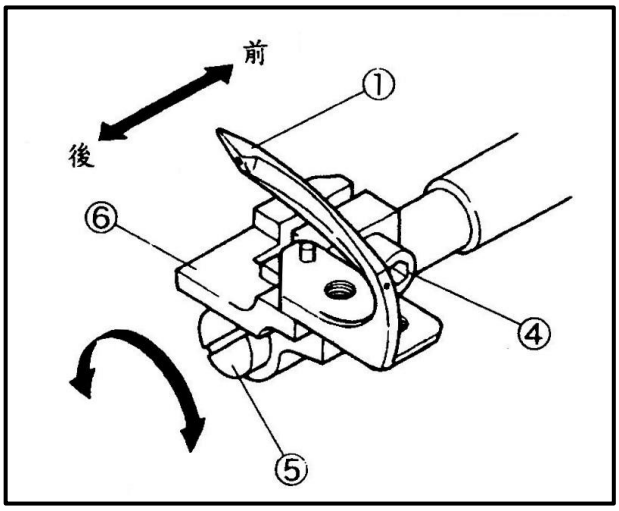


Fig.54

Front-and-rear position of looper and needle:
When the looper ① moves from the left to the right, it passes behind the needle. Adjust the position so that the looper comes closely to the needle with the clearance of 0-0.05 mm but without touching them when the looper tip comes at the center of the left needle. Loosen the screw ④ and turn the adjusting screw ⑤ to adjust it. After adjusting, check the distance and tighten the screw ④securely. (Fig.54,55)

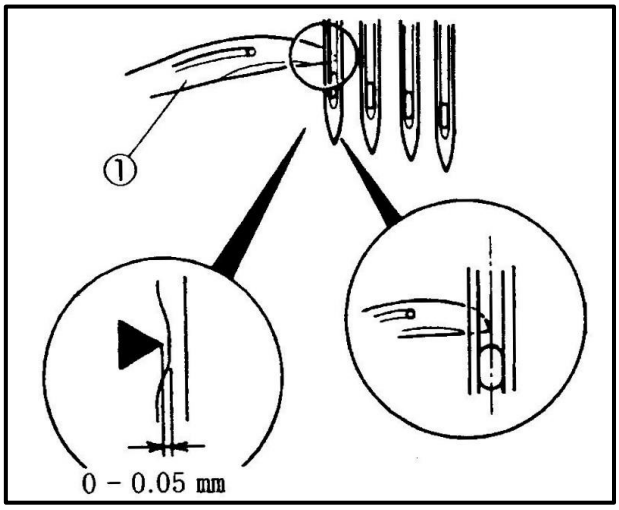


Fig.55

- To move forward, turn the screw ⑤ clockwise.
- To move backward, turn the screw ⑤ counterclockwise.

WARNING

Before adjusting, always turn the motor switch OFF and check that the motor has already stopped.

5.7 Needle guard (front)

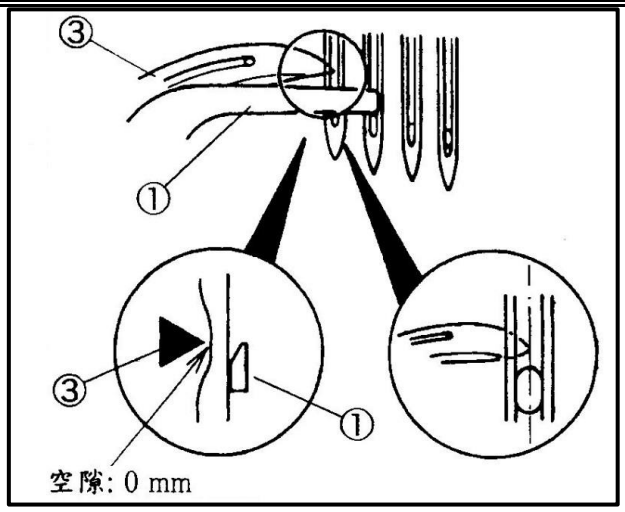


Fig.56

Push the needle guard(front) ① so that the clearance between the needle and the looper is 0 ㎜ when the looper tip comes at the center of the left needle. Loosen the screw ② to adjust it.
Check the looper tip touches the back of the needle and the does not swing to the right when the looper ③ moves from the left to the right while rotating the handwheel. (Fig.56,57)

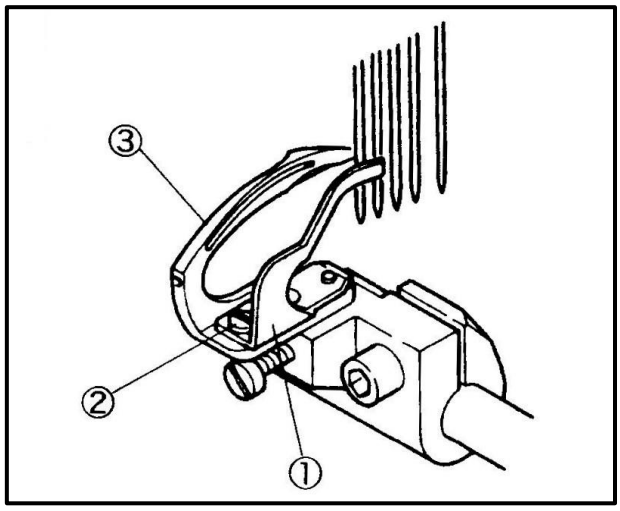


Fig.57

5.8 Needle guard(rear)

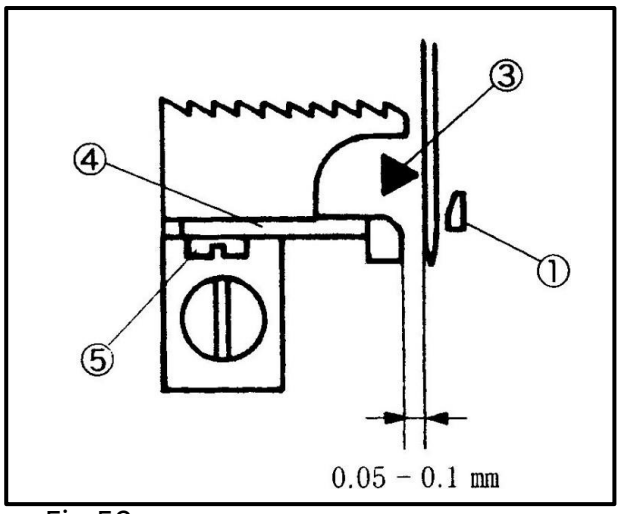


Fig.58

Make the standard clearance between the needle guard (rear) ④ and the left needle to 0.05-0.1 ㎜ when they meet most closely. Open the looper cover and loosen the screw ⑤ to adjust it. (Fig.58)
Check the needle does not swing to the right while rotating the handwheel.

CAUTION

After changing stitch length, the clearance changes between the needle guard(rear) set on the main feed doh and the needle.

Readjust the position of the needle guard(rear) after changing stitch length.

WARNING

Before adjusting, always turn the motor stitch OFF and check that the motor has already stopped.

5.9 Height of feed dog

Fixing :

Fix the differential feed dog ① and main feed dog ③ with the screw ② and ④ respectively.

Fix the needle guard(rear) ⑤ on the main feed dog and tighten it at the most rear position with the screw ⑥ slightly. (Fig.59)

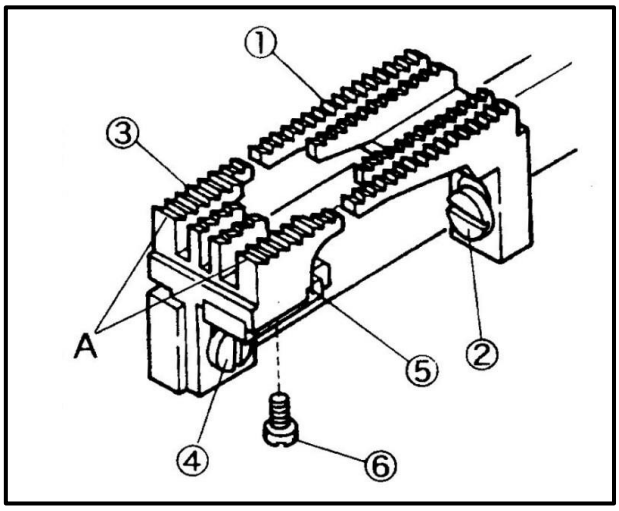


Fig.59

Height :

Adjust the height from the top of the stitch plate to the part A of the main feed dog ③ to 1.2-1.5 mm when the feed dog is at the highest point.

Align the differential feed dog even with the main feed dog. (Fig.60)

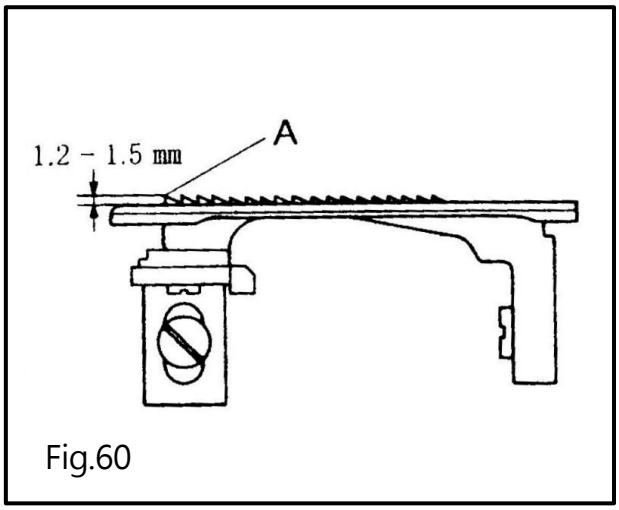


Fig.60

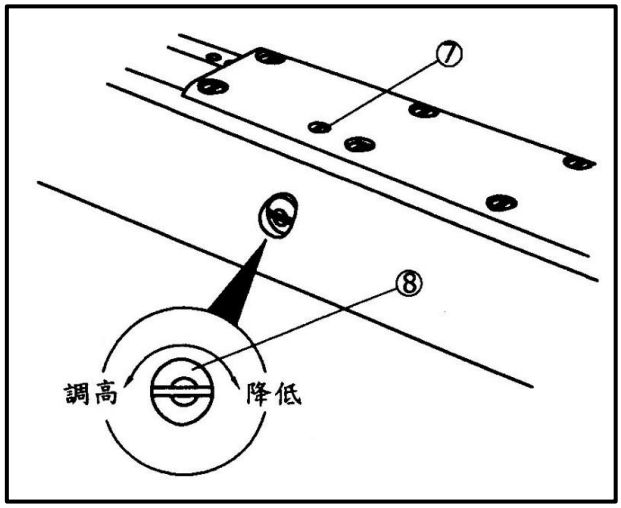


Fig.61

Fine adjustment of height :

Make fine adjustment of height of the main and differential feed dogs with the feed bar eccentric pin ⑧ near the center of the cylinder.

Loosen the screw ⑦ and move the pin ⑧ to adjust it.

- To lower the feed dog, turn the pin ⑧ clockwise.
- To raise the feed dog, turn the pin ⑧ counterclockwise.

WARNING

Before adjusting, always turn the motor stitch OFF and check that the motor has already stopped.

5.10 Replacing presser foot

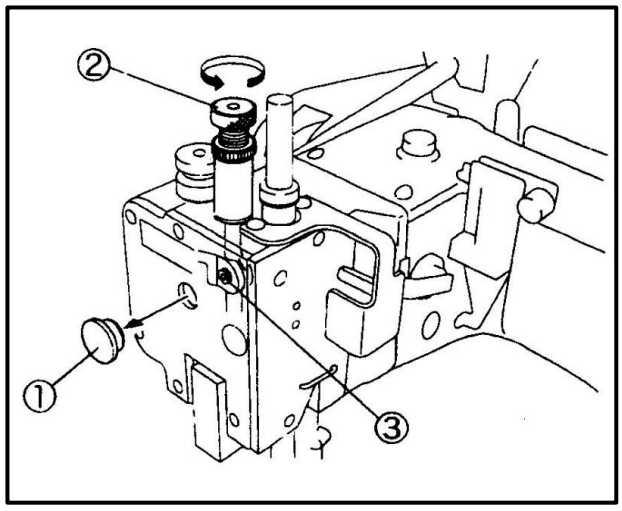


Fig.62

5.10.1 Removing :

(1) Remove all needles and the seal plug ①.
(2) Loosen the adjusting screw ② and then the screw ③ of the presser bar connecting bracket.
(3) Loosen the screws ④ of the knife holder guide collar to be free the complete set including the upper knife, the knife holder, and the knife holder shank.
(4) Loosen two screws ⑦ of the knife holder bracket ⑥ to remove the knife holder guide collar, c.set ⑤ and the upper knife.
(5) Loosen the screw ⑧ on the back of the presser Food.
(6) Rotate the handwheel to raise the needle at the hightest point. Remove the adjusting screw ② and keep the presser bar ⑨ and the presser spring ⑩ upward as they come off from the presser foot.
(7) Remove the carrier/hook driving segment ⑪ from the lever ⑫ on the carrier/hook driving sleeve.
(8) Turn the presser foot, c.set to the left and remove it through the presser foot guides(left)and(right).

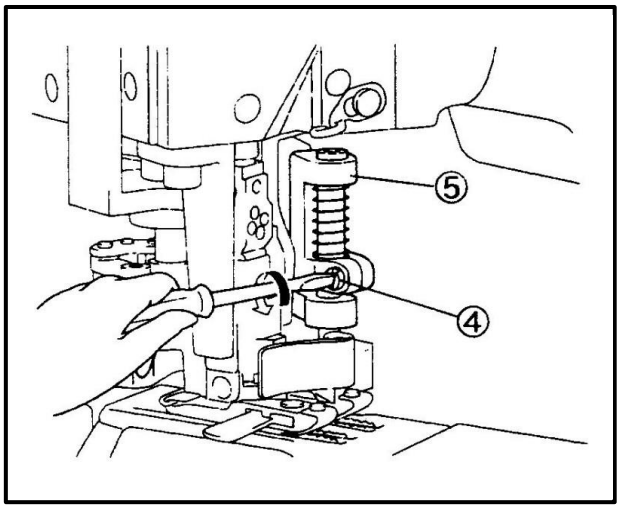


Fig.63

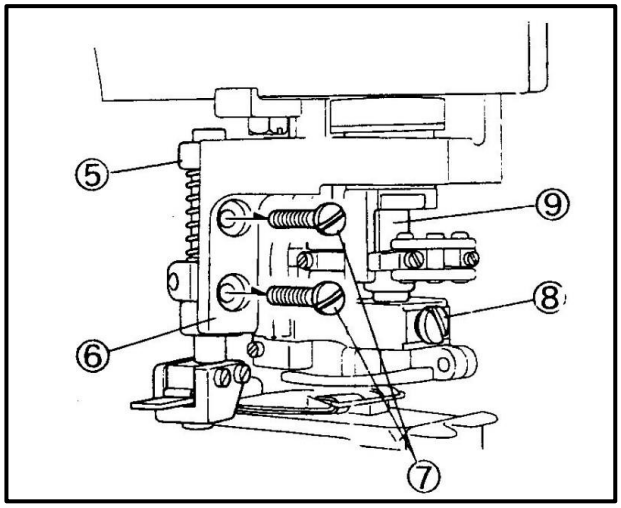


Fig.64

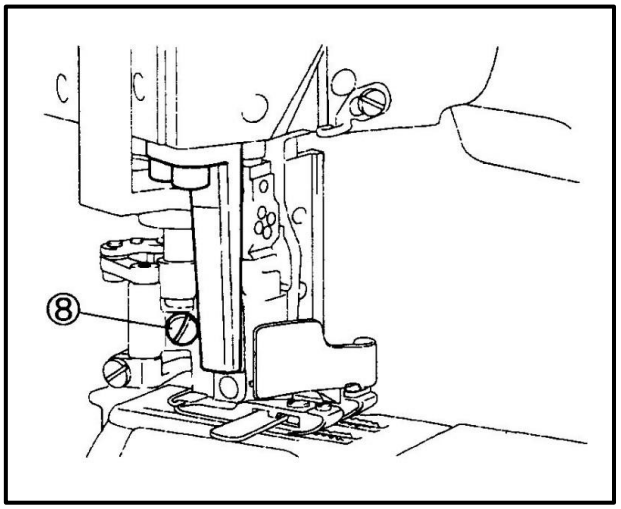


Fig.65

WARNING

Before adjusting, always turn the motor stitch OFF and check that the motor has already stopped.

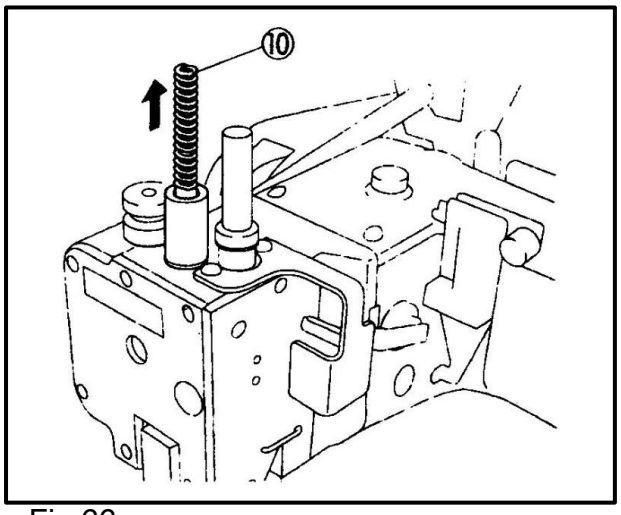


Fig.66

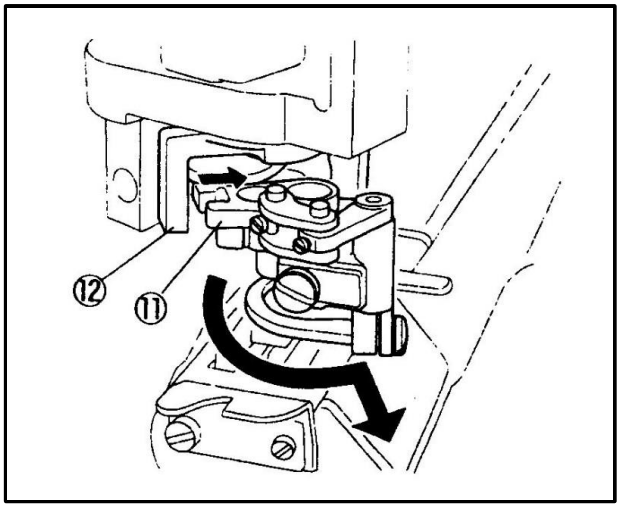


Fig.67

5.10.2 Reseting :

(1) Remove all needles, Reset the presser foot, c.set between the presser foot guides(left)and (right) while turning ti to the right diagonally from the back.

(2) Reset the carrier/hook driving segment ⑪ on the lever ⑫ on the carrier/hook driving sleeve.

(3) Insert the presser bar into the carrier/hook driving segment ⑪ and tighten the screw on the back of the presser foot.

(4) Check the presser foot moves smoothly without play right and left. If not, loosen the screw ⑭ of the presser foot guide(left) ⑬to adjust it.

(5) Reset the knife holder guide collar,c.set ⑤ and the upper knife on the knife holder bracket ⑥ with two screws.

(6) Adjust the positions of the knife holder guide collar and the upper knife when the needle is at the lowest point.

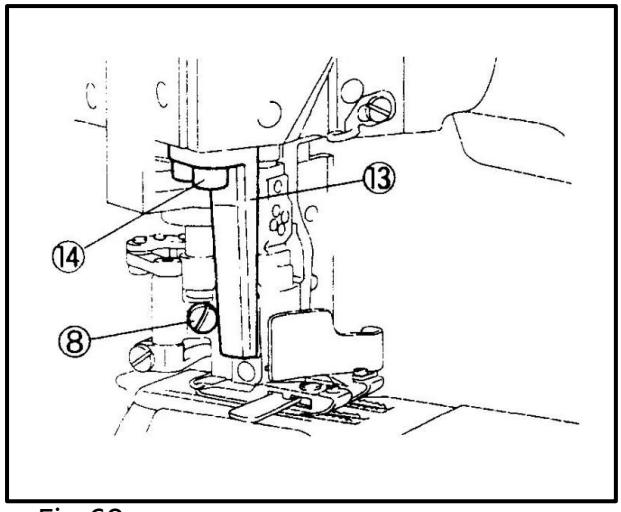


Fig.68

(7) Reset the adjusting screw ② when the needle is at the lowest point and the presser foot touches closely on the stitch plate. Then tighten the screw ③ of the presser bar connecting bracket while pushing slightly down.

(8) Reset the seal plug ①.

(9) Reset all needles.

WARNING

Before adjusting, always turn the motor stitch OFF and check that the motor has already stopped.

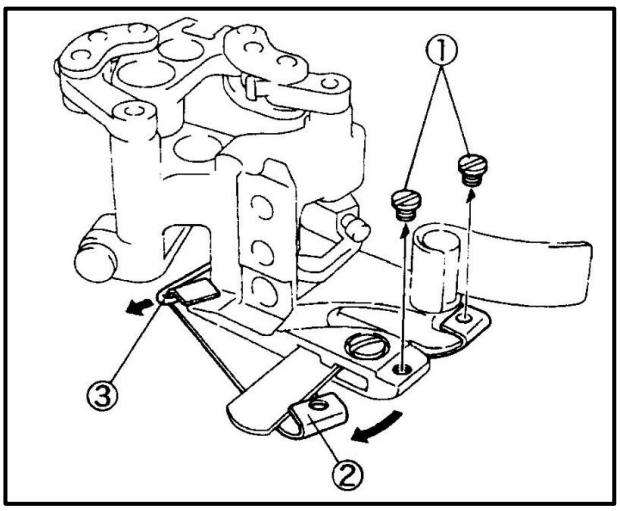


Fig.69

5.11 Replacing presser foot spring plate

5.11.1 Removing:

(1) Remove the screw ①.

(2) Remove the presser foot sprint plates ② from the presser foot.

(3) Remove each plate ② from the spring plate holder ③.

5.11.1 Reseting :

(1) Reset each presser foot spring plate ② with the spring plate holder ③.

(2) Reset the plates ② parallel each other on the presser foot ② .

(3) Tighten the screws ① securely.

WARNING

Before adjusting, always turn the motor stitch OFF and check that the motor has already stopped.

5.12 Replacing and adjusting knives

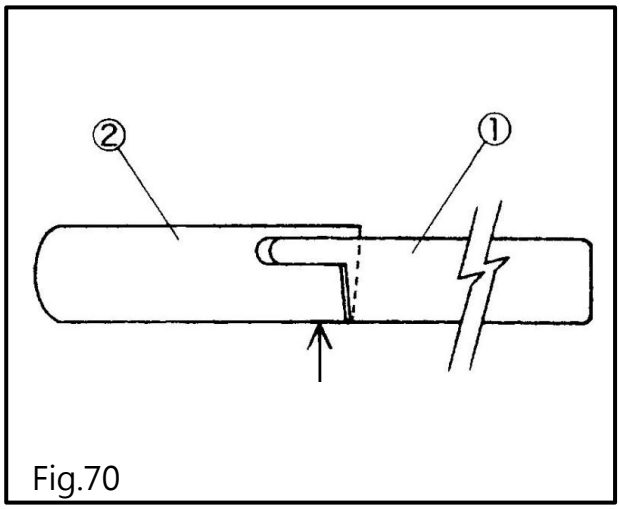


Fig.70

5.12.1 Pressure of upper knife:

(1) When the needle is at the highest point and the upper knife ① is at the extreme left, the presser foot touches the stitch plate, and the upper knife ① touches the lower knife ② closely.

(2) The standard clearance between the bearing of the knife holder shank support ③ and the knife holder guide collar ④ is 1.0 ㎜.

(3) Loosen the screw ⑤ and move the knife holder huide collar ④ to adjust the pressure.

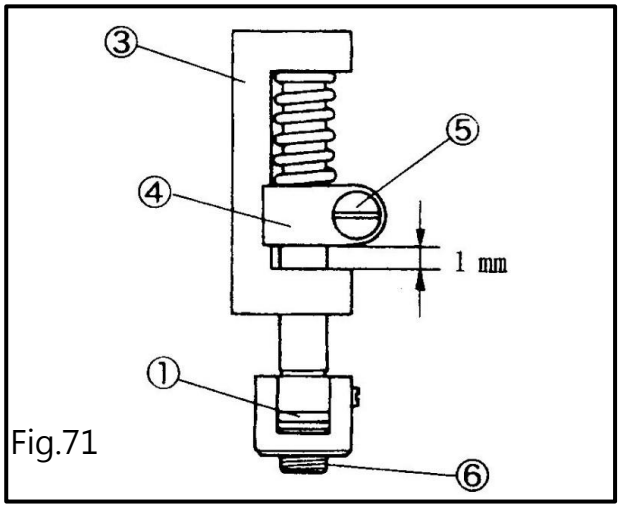


Fig.71

- To increase the pressure, move the collar ④ upward.
- To decrease the pressure, move the collar ④ downward.

Note: Align the front sides of the upper ① and lower ② knives without touching the upper knife to the presser foot. After check them, fix the knife holder guide collar ④ with the screw.

5.12.2 Removing :

(1) Loosen the screws ⑤ and ⑥ to remove the upper knife ① .

(2) Loosen the screw ⑦ to remove the lower knife ② .

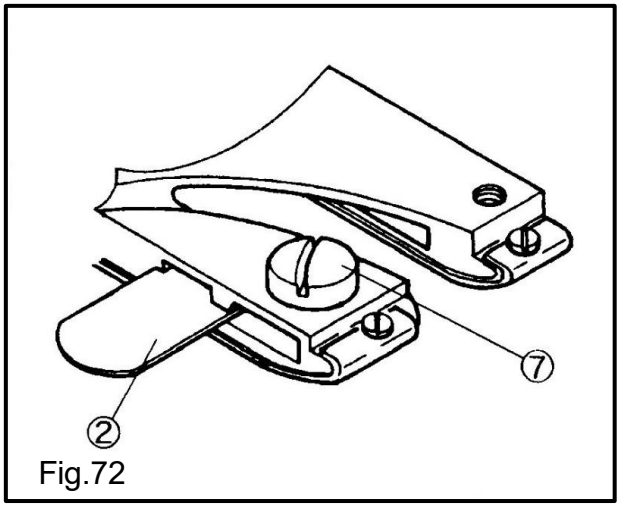


Fig.72

5.12.3 Resetting :

(1) Reset the lower knife ② with the screw ⑦ .

(2) Reset the upper knife ① with the screw ⑥ . See "5.9 Adjusting lapped width of upper fabric" for engagement of the knives.

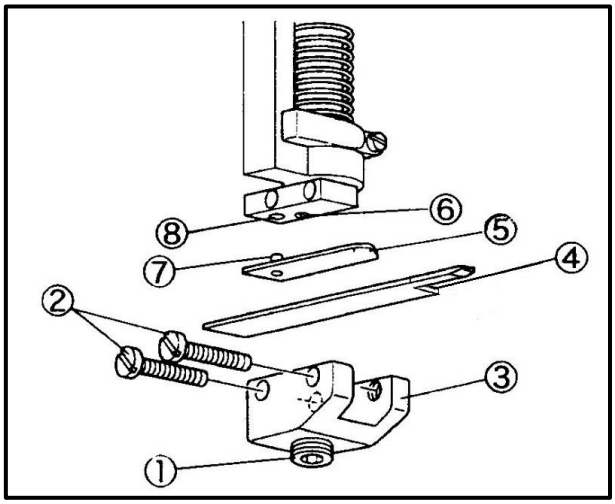


Fig.73

5.12.4 Engaging angle of upper knife to lower knife

(1) Remove the parts ① - ⑤ in the order and turn the screw ⑥ to adjust it.

(2) When resetting, check the screw ⑦ is not out from the bottom of the knife support ⑤ . Then insert it into the bracket hole ⑧ to tighten.

model	LC62D
illustrate	Cylinder-bed four-needle six-thread interlock sewing machine
體積	長 420mm x 寬 300mm x 高 410mm
圓週	針棒下線最小圓週 148mm
工作空間	圓週 210mm
重量	23 公斤（頭部）
車縫速度	最高 3800 R.P.M. ； 普通 2800 R.P.M.
縫距	1.6-2.5mm 每英吋 10-16 針；每 30mm 12-19 針
針型	車針：Organ FLX118GCS ； Groz-Beckert UY118GKS 假針：Organ FLG-1 , FLF-8；Groz-Beckert 36211 , 36211A
針距	R：5.2mm S：6.0mm
抬壓腳	01（單切）: 最大 8mm 12（雙切）: 最大 6mm
送料方式	桿槓原理
差動比	一般差動比：1.0：1.5 反差動比：1.0：0.7
差動送料規則	轉盤
切布刀	特殊鋼材製造
lubricating	Automatic gear pump
lubricating oil	TELLUS 46
Oil tank capacity	框：約 100cc 筒：約 100cc